

Version 4 Release 4

*IBM DB2 Table Editor for z/OS  
User's Guide*





Version 4 Release 4

*IBM DB2 Table Editor for z/OS  
User's Guide*

**IBM**

**Note:**

Before using this information and the product it supports, read the "Notices" topic at the end of this information.

**Sixth Edition (July 2016)**

This edition applies to Version 4 Release 4 of IBM DB2 Table Editor for z/OS (product number 5697-G65) and to all subsequent releases and modifications until otherwise indicated in new editions.

This edition replaces SC19-3781-04.

© Copyright Rocket Software Inc. 1996, 2016.

US Government Users Restricted Rights – Use, duplication or disclosure restricted by GSA ADP Schedule Contract with IBM Corp.

---

# Contents

## About this information . . . . . v

## Chapter 1. DB2 Table Editor overview . . . 1

What's new in DB2 Table Editor . . . . .	1
DB2 Table Editor terminology . . . . .	2
DB2 Table Editor features and benefits. . . . .	4
DB2 Table Editor components. . . . .	4
Database administration and change management solutions. . . . .	5
Service updates and support information. . . . .	6
Product documentation and updates . . . . .	6
Accessibility features . . . . .	7
Keyboard shortcuts . . . . .	7

## Chapter 2. Preparing to customize DB2 Table Editor . . . . . 11

Set up your environment prior to customization . . . . .	12
Hardware requirements for DB2 Table Editor Console, Developer, and User components . . . . .	13
Software requirements for DB2 Table Editor Console, Developer, and User components . . . . .	14
Software requirements for the DB2 Table Editor ISPF component . . . . .	14
Licensing . . . . .	14
DB2 Table Editor connectivity . . . . .	14
Network environment configuration . . . . .	15
Worksheets: Gathering required data set names . . . . .	16
Customization reference . . . . .	17
Data type support . . . . .	21
APF authorizing load libraries . . . . .	21
Worksheets: Gathering parameter values for Tools Customizer . . . . .	22
Customizing the DB2 Table Editor ISPF component . . . . .	31
Tools Customizer overview . . . . .	32
Advanced customization options . . . . .	32
Adding TSO commands to Command Limiting table. . . . .	33
Optional: Integrating DB2 Table Editor into DB2 Tools Launchpad . . . . .	33
Optional: Integrating DB2 Table Editor into DB2 Administration Tool . . . . .	34
Starting and preparing Tools Customizer for use . . . . .	35
Starting Tools Customizer . . . . .	35
Modifying Tools Customizer user settings . . . . .	36
DB2 Version Migration and Fallback . . . . .	38
Using the DB2 Table Editor Console and User components after upgrading to a new version of DB2 . . . . .	38
Using the DB2 Table Editor ISPF interface after migration or fallback of a DB2 version . . . . .	38
Using the DB2 Table Editor Console and User components after migration or fallback of a DB2 version . . . . .	39
Using DB2 Table Editor after migrating to a new version of DB2 . . . . .	39

## Chapter 3. Customizing DB2 Table Editor . . . . . 41

Roadmap: Customizing DB2 Table Editor for the first time . . . . .	41
Roadmap: Customizing a new version of DB2 Table Editor from a previous customization. . . . .	42
Roadmap: Recustomizing DB2 Table Editor. . . . .	43
Specifying the metadata library for the product to customize . . . . .	44
Discovering DB2 Table Editor information automatically. . . . .	46
Creating and associating DB2 entries . . . . .	48
Defining parameters . . . . .	51
Defining DB2 Table Editor parameters . . . . .	51
Defining LPAR parameters . . . . .	53
Defining DB2 parameters. . . . .	55
Generating customization jobs . . . . .	57
Submitting customization jobs . . . . .	57
Browsing parameters . . . . .	59
Copying DB2 entries . . . . .	60
Removing DB2 entries. . . . .	61
Deleting DB2 entries . . . . .	62
Displaying customization jobs . . . . .	62
Maintaining customization jobs. . . . .	63
Using Tools Customizer in a multiple-LPAR environment . . . . .	63

## Chapter 4. Installing DB2 Table Editor Components . . . . . 65

Installing the DB2 Table Editor Console, Developer, and User components . . . . .	65
Configuring for unattended installation . . . . .	65
DB2 Table Editor component configuration. . . . .	67

## Chapter 5. The DB2 Table Editor ISPF Interface . . . . . 69

Working with the DB2 Table Editor ISPF interface . . . . .	69
Starting DB2 Table Editor on ISPF. . . . .	69
Starting DB2 Table Editor from the Administration Tool Launchpad . . . . .	69
The DB2 Table Editor ISPF main panel . . . . .	70
Opening a table . . . . .	75
Specifying how to display a table for viewing or editing in DB2 Table Editor . . . . .	79
Editing a table . . . . .	84
Gathering diagnostic information with the DISPLAY MEPL command . . . . .	100
Column display functions . . . . .	101
Accessing the CSETUP primary option menu . . . . .	101
Fixing a column . . . . .	102
Repositioning columns . . . . .	103
Resizing columns . . . . .	105
Sort rows and columns . . . . .	106
Resetting CSET customizations . . . . .	109

Removing CSET customizations . . . . .	109
Restrictions . . . . .	109
The use of color in DB2 Table Editor ISPF interface	110
Data type abbreviations that are used in the DB2	
Table Editor ISPF interface . . . . .	110
DB2 Table Editor ISPF interface line commands . . . . .	111
Viewing the DB2 Table Editor activity log . . . . .	115

**Chapter 6. The DB2 Table Editor Console component . . . . . 119**

Servers . . . . .	119
Package maintenance. . . . .	120
Governing . . . . .	120
Sample tables . . . . .	123
Starting the DB2 Table Editor Console component	123
Authorities and privileges required for DB2 Table	
Editor tables. . . . .	124
DB2 Table Editor Console component configuration	125
Server definition files (SDFs) . . . . .	125
Sample tables . . . . .	136
Setting up governing. . . . .	137
Setting up Governing. . . . .	137
Setting connectivity options . . . . .	144
Enabling dynamic definition of ODBC servers . . . . .	144
Activating tracing . . . . .	145
Changing your password in DB2 Table Editor . . . . .	146
Specifying advanced DSN settings . . . . .	147
Specifying driver-specific keywords . . . . .	147
Deleting a Server from the server definition file	147
Creating an extended catalog . . . . .	148
Editing an extended catalog . . . . .	148
DB2 Table Editor Console window . . . . .	148
Parameters window . . . . .	149
Concepts . . . . .	149

**Chapter 7. The DB2 Table Editor Developer component. . . . . 159**

DB2 Table Editor Developer component	
configuration . . . . .	160
Command line parameters . . . . .	160
Forms . . . . .	160
Creating a new form using the Forms wizard	161
Creating a new form by importing a panel from	
DBEDIT . . . . .	162
Creating a form manually . . . . .	162
Controls on forms . . . . .	164
Opening a form . . . . .	187
Saving a form . . . . .	188
Printing a form. . . . .	189
Closing a form . . . . .	189
Deleting a form . . . . .	189
Validation rules. . . . .	190
Creating a validation rule . . . . .	190
Creating a validation group . . . . .	190

Deleting a validation rule . . . . .	190
Deleting a validation group . . . . .	191
Locking in DB2 Table Editor . . . . .	191
Migrating Forms to a Different Environment . . . . .	191

**Chapter 8. The DB2 Table Editor User component . . . . . 193**

Starting the User component . . . . .	193
LOBs (Large Objects) . . . . .	193
Specifying the application to be used to open	
Large Objects (LOBs) . . . . .	194
Edit Table feature . . . . .	194
Creating a new form using the Edit Table	
feature . . . . .	195
Primary keys . . . . .	196
Rows . . . . .	197
Columns . . . . .	198
Cells . . . . .	199
Committing changes to the database . . . . .	199
Opening a form . . . . .	200
Viewing change history . . . . .	200

**Chapter 9. Troubleshooting . . . . . 201**

Recovery procedures . . . . .	201
Recovering from disk failure . . . . .	201
Recovering from subsystem termination . . . . .	202
Determining the trace data set name . . . . .	203
DB2 Table Editor Components and GUI	
troubleshooting. . . . .	204
Messages . . . . .	206
DB2 Table Editor ISPF interface messages . . . . .	207
DB2 Table Editor Console, Developer, and User	
components messages . . . . .	288
Gathering diagnostic information. . . . .	305

**Chapter 10. Tools Customizer reference . . . . . 307**

Tools Customizer terminology . . . . .	307
Data sets that Tools Customizer uses during	
customization . . . . .	309

**Chapter 11. Reference. . . . . 313**

Sample library members. . . . .	313
Keyboard shortcuts . . . . .	313
How to read syntax diagrams . . . . .	314

**Notices . . . . . 317**

Trademarks . . . . .	319
Terms and conditions for product documentation	319
Privacy policy considerations . . . . .	320

**Index . . . . . 323**

---

## About this information

IBM® DB2® Table Editor for z/OS® (also referred to as DB2 Table Editor) is a product that makes it easy to view and modify your DB2 table data.

These topics are designed to help database administrators, system programmers, application programmers, and system operators perform these tasks:

- Plan for the installation of DB2 Table Editor
- Install and operate DB2 Table Editor
- Customize the DB2 Table Editor environment
- Diagnose and recover from DB2 Table Editor problems

Always check the DB2 Tools Product Documentation page for the most current version of this information:

<http://www.ibm.com/software/data/db2imstools/db2tools-library.html>





---

## Chapter 1. DB2 Table Editor overview

IBM DB2 Table Editor for z/OS (also referred to as DB2 Table Editor) is a product that makes it easy to view and modify your DB2 table data. The primary function of DB2 Table Editor is to modify data stored in one of the DB2 family of databases.

DB2 Table Editor consists of several components that serve different purposes. For more information about these components, see “DB2 Table Editor components” on page 4.

---

### What's new in DB2 Table Editor

This topic summarizes the technical changes for this edition.

New and changed information is indicated by a vertical bar (|) to the left of a change. Editorial changes that have no technical significance are not noted.

#### SC19-3781-05

##### | Value of -1 now available for tablespace and index primary and secondary quantity

| During the installation of DB2 Table Editor, you can now specify -1 as the  
| value for primary and secondary quantity of tablespaces and indexes.

#### SC19-3781-03

##### | Viewing the DB2 Table Editor activity log

| You can now view DB2 Table Editor activity logs, which display all activity  
| that takes place within the ISPF interface. For more information, see  
| “Viewing the DB2 Table Editor activity log” on page 115. Administrators  
| can set logging preferences on a subsystem by subsystem basis with the  
| **Enable user activity log** parameter on the DB2 Parameters panel within  
| Tools Customizer.

##### | Exporting data

| You can now use the **EXPORT (EXP)** command to write a table’s committed  
| data to a flat file, which can then be used as input into programs such as  
| Microsoft Excel or Microsoft Access that parse delimited files as input. For  
| more information, see “Exporting data” on page 91.

##### | Deprecation of Java™ Player (Java applet)

| The Java Player (Java applet) component is no longer supported.

#### SC19-3781-02

##### | DISPLAY MEPL ISPF command

| DB2 Table Editor supports the ‘DISPLAY MEPL’ ISPF command, which  
| provides diagnostic information to the IBM programming team when  
| software errors arise. For more information, see “Gathering diagnostic  
| information with the DISPLAY MEPL command” on page 100.

#### SC19-3781-00

##### | Streamlined customization using IBM Tools Customizer for z/OS

| IBM Tools Customizer for z/OS provides a single interface and process for

customizing products that belong to the IBM DB2 Tools family. For more information, see “Tools Customizer overview” on page 32.

---

## DB2 Table Editor terminology

DB2 Table Editor includes several unique terms that you should understand before you begin to use DB2 Table Editor.

### Attributes

An attribute in DB2 Table Editor Developer defines the data values and behaviors that are associated with a form or control. Attributes are used to define the data that is linked to a form and its controls; when and how the data is presented; as well as the function of each control in the form.

For example, form attributes can define which database tables are linked to a form, and how multiple tables are joined. Similarly, control attributes can define which data values are displayed in a list box, and how often those values are refreshed.

### Controls

A control in DB2 Table Editor Developer is an individual component of a form. Controls allow users to view and edit data. Examples of controls include edit boxes, list boxes, and buttons.

**Data** Data is the smallest unit in a database, but the most important. Examples of data might be the names, addresses, phone numbers, and social security numbers for all of the employees of a company. All this data can be stored in a table.

### Database

A database is a software application that stores sets of electronically organized information on a computer. It contains a collection of tables, which contain data. DB2 is a database product built by IBM.

**Forms** A form is a vehicle through which you view and change table data. In DB2 Table Editor, forms play different roles depending on the component of DB2 Table Editor that you are using.

- In DB2 Table Editor Developer, you create forms for use in the DB2 Table Editor component. These forms can allow the user to access, search, and edit tables in DB2 databases to which the form is linked.
- In the DB2 Table Editor component, a form is the object that you work with to view and change table data. It is similar to a paper form, in that it contains blank spaces, or fields, for you to fill in. Using the form, you can fill in some of the fields and retrieve information, or enter new information and update the database.

**Note:** The forms are built by a developer in DB2 Table Editor Developer. These forms will be highly customized to your organization, your data, and your needs.

### Full-screen editor

A full-screen editor is a special form that presents data from the database as a grid or in a spreadsheet format. This type of form allows edits directly in the grid itself and includes the ability to insert and delete rows; sort columns; and find and replace values.

**Join** A join is a connection between two tables, using a field common to both tables. For example, there could be a table that contains personal information for all the employees of a company (employee numbers,

names, addresses, and social security numbers for each employee). In the same database there could be another table containing employee numbers and department numbers. In order to avoid repeating the employee personal information in the table containing department numbers, there is a join from the employee number in the personal information table, to the employee number in the department table; this allows the information to be linked, but not repeated.

### **Primary Table**

The primary table is the table that is designated by the form developer as the updatable table. For each form there is only one primary table, but there can be any number of secondary tables, which are usually related to the primary table by join conditions. Insert, update and delete buttons on a form operate only on the primary table and perform the appropriate database modifications for the action (insert, update and delete) using the current form values for all controls that are bound to a primary table column.

### **Properties**

A property in DB2 Table Editor Developer defines the appearance of a form or its controls. The developer uses properties to define the layout of the form, as well as the physical characteristics of controls.

Examples of form properties are background color and form dimensions. Examples of control properties are text font, text color, and control dimensions.

### **Resource Limits Groups**

Resource limits groups are set up by the system administrator and are designed to provide users with sufficient access to database servers without adversely affecting database or network performance. Each DB2 Table Editor user is a member of a resource limits group. Once the system administration defines and assigns a resource limits group to a DB2 Table Editor user, that user is limited to resource usage as defined by that resource limits group. If a system administrator does not assign explicit limits, users are limited to resource usage as defined in the default resource limits group.

### **Server Definition File (SDF)**

The DB2 Table Editor server definition file (SDF) is an initialization (.ini) file that contains the technical information that DB2 Table Editor needs to connect end users to database servers.

**Tables** A table in DB2 Table Editor refers to a table that is contained in a DB2 database. A DB2 database contains data that is organized into smaller collections, or tables. Each form created with DB2 Table Editor Developer is linked to one or more tables, providing the data source for the form. The DB2 Table Editor User component is used to access data stored in tables.

### **Validation rules**

A validation rule in DB2 Table Editor Developer defines allowable values for the contents of a control. The developer uses validation rules to establish limits which govern what value a user can enter into a control, as well as the format of the value entered.

For example, a validation rule can require a user to enter a valid date format in a control. Validation rules can work individually or in groups.

---

## DB2 Table Editor features and benefits

DB2 Table Editor quickly and easily accesses, updates, and deletes data across multiple DB2 database platforms.

DB2 Table Editor offers several unique and significant features.

### Quick and easy manipulation of data

DB2 Table Editor helps you make the best use of your time. It reduces staff training time; enhances database administrator (DBA) productivity; increases the ability to respond to workforce's need for high-performance business applications; and enables the IT team to institute proactive database maintenance.

DB2 Table Editor makes quick and easy work of navigating IBM DB2 databases, tables, and views; finding related data; and updating, deleting, or creating data with full support for your existing DB2 security and logon IDs. It provides drag-and-drop functionality and wizards to rapidly create versatile, task-specific Windows-based table editing forms that contain built-in data validation and business rules.

### Easy access to data

You can edit DB2 tables on the Microsoft Windows interface or the ISPF interface. These user interfaces allow users of all skill levels to interact with their database.

Administrators can browse database tables and views (even with no prior understanding of the database structure), or search-and-replace, filter data, and open tables that are related to selected data. Users at the front lines of your business, such as customer service personnel, can access your database through forms that contain business rules and command buttons that make it easy to call up data and quickly perform specific, important tasks with virtually no training. DB2 Table Editor offers all your users an environment that meets their needs. Employees who do not know SQL can perform inserts, updates and deletes, thus freeing up your SQL experts for more demanding tasks.

### Control of data integrity

In today's competitive environment data integrity is more important than ever. Whether your concern is as basic as accurate customer records or as complex as running applications that depend on hundreds of interdependent tables, DB2 Table Editor makes preserving data integrity easy to accomplish, no matter the level of experience of your employees. With DB2 Table Editor, all of your knowledge workers, both novice and expert, can use this single, powerful tool, to manipulate your data while maintaining tight control over data editing privileges.

---

## DB2 Table Editor components

DB2 Table Editor consists of four components: Console, User, Developer, and ISPF.

### Console

The DB2 Table Editor Console component allows you to configure your connection to DB2

**User** The DB2 Table Editor User component allows you to edit DB2 tables using custom made forms (created in the DB2 Table Editor Developer component or through creating a form as you go along).

**Developer**

The DB2 Table Editor Developer component allows you to create and use custom forms to edit DB2 tables.

**ISPF**

The DB2 Table Editor ISPF component allows you to view and edit DB2 tables using an ISPF interface.

---

## Database administration and change management solutions

IBM solutions help IT organizations maximize their investment in DB2 and IMS™ databases while staying on top of some of today's toughest IT challenges. Database administration and change management are the core responsibilities of the DBA. If not managed correctly, these tasks can monopolize data center resources, waste valuable time, and can result in the generation of unwanted errors.

IBM solutions can help you manage many of the tasks that are associated with database administration and the change management process, including:

- Navigating the DB2 catalog quickly and easily
- Ensuring that all of the necessary steps are completed when making a change
- Managing and tracking the changes to database object definitions
- Propagating changes to other database environments
- Managing corrupt databases
- Keeping software versions current

DB2 Table Editor is one of several DB2 and IMS tools that help you efficiently administer and manage your database while maintaining data integrity.

Other DB2 and IMS tools that can help you administer and manage your database are:

**DB2 Tools for Linux, UNIX, and Windows**

- DB2 Change Management Expert
- DB2 Table Editor
- Optim™ Test Data Management

**DB2 Tools for z/OS**

- DB2 Administration Tool
- DB2 Object Comparison Tool
- DB2 Storage Management Utility
- DB2 Table Editor
- Optim Test Data Management

**IMS Tools**

- IMS Database Repair Facility
- IMS HALDB Conversion and Maintenance Aid
- IMS HD Compression- Extended
- IMS Library Integrity Utilities
- IMS Online Reorganization Facility
- IMS Parameter Manager
- IMS Sequential Randomizer Generator
- IMS Sysplex Manager
- IMS Tools Knowledge Base

---

## Service updates and support information

Service updates and support information for this product, including software fix packs, PTFs, frequently asked questions (FAQs), technical notes, troubleshooting information, and downloads, are available from the web.

To find service updates and support information, see the following website:

[http://www.ibm.com/support/entry/portal/Overview/Software/Information\\_Management/DB2\\_Tools\\_for\\_z~OS](http://www.ibm.com/support/entry/portal/Overview/Software/Information_Management/DB2_Tools_for_z~OS)

---

## Product documentation and updates

DB2 Tools information is available at multiple places on the web. You can receive updates to DB2 Tools information automatically by registering with the IBM My Notifications service.

### Information on the web

The DB2 Tools Product Documentation web page provides current product documentation that you can view, print, and download. To locate publications with the most up-to-date information, refer to the following web page:

<http://www.ibm.com/software/data/db2imstools/db2tools-library.html>

You can also access documentation for many DB2 Tools from IBM Knowledge Center:

<http://www.ibm.com/support/knowledgecenter>

Search for a specific DB2 Tool product or browse the **Information Management > DB2 for z/OS family**.

IBM Redbooks® publications that cover DB2 Tools are available from the following web page:

<http://www.redbooks.ibm.com>

The Data Management Tools Solutions website shows how IBM solutions can help IT organizations maximize their investment in DB2 databases while staying ahead of today's top data management challenges:

<http://www.ibm.com/software/data/db2imstools/solutions/index.html>

### Receiving documentation updates automatically

To automatically receive emails that notify you when new technote documents are released, when existing product documentation is updated, and when new product documentation is available, you can register with the IBM My Notifications service. You can customize the service so that you receive information about only those IBM products that you specify.

To register with the My Notifications service:

1. Go to <http://www.ibm.com/support/mysupport>
2. Enter your IBM ID and password, or create one by clicking **register now**.

3. When the My Notifications page is displayed, click **Subscribe** to select those products that you want to receive information updates about. The DB2 Tools option is located under **Software > Information Management**.
4. Click **Continue** to specify the types of updates that you want to receive.
5. Click **Submit** to save your profile.

## How to send your comments

Your feedback is important in helping to provide the most accurate and high-quality information. If you have any comments about this book or any other IBM product documentation, use one of the following options:

- Use the online reader comment form, which is located at <http://www.ibm.com/software/data/rcf/>.
- Send your comments by email to [comments@us.ibm.com](mailto:comments@us.ibm.com). Include the name of the book, the part number of the book, the version of the product that you are using, and, if applicable, the specific location of the text you are commenting on, for example, a page number or table number.

---

## Accessibility features

Accessibility features help a user who has a physical disability, such as restricted mobility or limited vision, to use a software product successfully.

The major accessibility features in this product enable users to perform the following activities:

- Use assistive technologies such as screen readers and screen magnifier software. Consult the assistive technology documentation for specific information when using it to access z/OS interfaces.
- Customize display attributes such as color, contrast, and font size.
- Operate specific or equivalent features by using only the keyboard. Refer to the following publications for information about accessing ISPF interfaces:
  - *z/OS ISPF User's Guide, Volume 1*
  - *z/OS TSO/E Primer*
  - *z/OS TSO/E User's Guide*

These guides describe how to use the ISPF interface, including the use of keyboard shortcuts or function keys (PF keys), include the default settings for the PF keys, and explain how to modify their functions.

## Keyboard shortcuts

When using DB2 Table Editor, you can use the keyboard in place of the mouse. Using keys or key combinations, you can perform operations that can also be accomplished through mouse actions. All menu items can be accessed from the keyboard. In the case of, the keyboard equivalent appears to the right of the menu item, or the shortcut letter is underlined. Some keyboard items also have shortcuts. The keyboard shortcuts that can be used to navigate through a window or dialog are listed in the following table (Navigating through a window or dialog using the keyboard):

*Table 1. Navigating through a window or dialog using the keyboard*

Action	Shortcut
Access the menu bar in a window	Alt + underlined letter or F10

*Table 1. Navigating through a window or dialog using the keyboard (continued)*

<b>Action</b>	<b>Shortcut</b>
Activate a menu item in the menu bar	Enter
Access controls in a dialog	Alt + underlined letter
Navigate through the menu bar	Right arrow, left arrow, down arrow, up arrow
Move to the next set of controls	Tab or Ctrl + Tab
Move to the previous set of controls	Shift-Tab
Move within tables	Tab or right arrow, Shift-Tab or left arrow, down arrow, up arrow
Move within trees	Up arrow, down arrow
Expand a tree node	Right arrow
Collapse a tree node	Left arrow
Move within list boxes	Up arrow, down arrow
Move within combo boxes	Up arrow, down arrow

To perform main tasks in windows by using the keyboard instead of the mouse, use the keyboard shortcuts that are listed in the following table (Keyboard shortcuts for Windows):

*Table 2. Keyboard shortcuts for Windows*

<b>Action</b>	<b>Shortcut</b>
Display Help	F1
Close the active window	Ctrl + W or Alt + F4
Refresh displayed data	F5
Cut	Ctrl + X
Copy	Ctrl + C
Paste	Ctrl + V
Print	Ctrl + P

To perform main tasks in dialogs by using the keyboard instead of the mouse, use the keyboard shortcuts that are listed in the following table (Keyboard shortcuts for dialogs):

*Table 3. Keyboard shortcuts for dialogs*

<b>Action</b>	<b>Shortcut</b>
Confirm a dialog	Enter
Cancel a dialog	Esc
Activate a button that has the focus	Spacebar or Enter
Select and deselect check boxes and radio buttons	Spacebar
Navigate within check box and radio button groups	Arrow keys
Open combination box menu	Alt + down arrows
Close combination box menu	Esc
Move up and down in combination box menu	Up arrow, down arrow



*Table 3. Keyboard shortcuts for dialogs (continued)*

<b>Action</b>	<b>Shortcut</b>
Activate combination box menu item	Enter
Move within a list box	Up arrow, down arrow
Activate a list box entry	Enter
Move between the pages of a window containing tabs if the tab has the focus	Right arrow, left arrow



## Chapter 2. Preparing to customize DB2 Table Editor

Before you start to customize DB2 Table Editor for the first time, determine all of the customization values that you need to specify during the customization process, and familiarize yourself with all of the customization tasks.

The following checklist lists and describes each significant customization step. Use this checklist to guide you through the entire customization process.

**Tip:** Print the following checklist and the data set names and parameter values worksheets. Use the worksheets to record your values, and refer to them during the customization process.

Task	Link to detailed instructions	Status
<b>Tools Customizer basics</b>		
Before you begin the customization process, familiarize yourself with Tools Customizer terminology, data sets, and other basic information about Tools Customizer.	"Tools Customizer terminology" on page 307 and "Data sets that Tools Customizer uses during customization" on page 309 and	
<b>Software requirements</b>		
Verify that your environment meets the minimum software requirements. To install and use DB2 Table Editor, your environment must be running a supported version of the z/OS operating system and of DB2 for z/OS. Additionally, certain levels of maintenance must be applied.	"Verify that your environment meets hardware and software requirements" on page 12	
<b>SMP/E installation</b>		
Verify that DB2 Table Editor was installed correctly. DB2 Table Editor is installed by using standard SMP/E processing.	"Verify that DB2 Table Editor has been installed successfully" on page 12	
Verify that Tools Customizer for z/OS was installed correctly. Tools Customizer for z/OS is installed by using standard SMP/E processing.	"Verify that Tools Customizer for z/OS has been installed successfully" on page 13	
<b>Security requirements</b>		
Confirm that you have the required authorizations to use DB2 Table Editor.	"Verify that your environment meets security requirements" on page 13	
<b>Gather data set names</b>		
During the customization process, you must specify data set names for Tools Customizer, DB2 Table Editor, and several other items.	"Worksheets: Gathering required data set names" on page 16	
<b>APF authorization</b>		
APF authorize the following data sets: <ul style="list-style-type: none"> <li>• SETILOAD</li> <li>• SFECLOAD</li> </ul>	"APF authorizing load libraries" on page 21	
<b>Gather parameter values</b>		
During the customization process, you must specify parameter values for DB2 Table Editor, for DB2, and for your LPAR.	"Worksheets: Gathering parameter values for Tools Customizer" on page 22	
<b>Customize DB2 Table Editor</b>		

Task	Link to detailed instructions	Status
Start Tools Customizer by running a REXX EXEC from the ISPF Command Shell panel.	"Starting Tools Customizer" on page 35	
Set up Tools Customizer user settings. If you are running Tools Customizer for the first time, you must modify several user settings for your environment. Otherwise, if the user settings that you have already established are still appropriate, skip this step.	"Modifying Tools Customizer user settings" on page 36	
Complete the steps in the appropriate customization roadmap based on the type of customization that you are performing.		
<b>Customizing DB2 Table Editor for the first time</b> Follow this roadmap if you do not have a customized version of DB2 Table Editor, and you need to customize it for the first time.	"Roadmap: Customizing DB2 Table Editor for the first time" on page 41	
<b>Customizing a different version of DB2 Table Editor</b> Follow this roadmap if you previously customized a version of DB2 Table Editor and want to use the same parameter values to customize a different version.	"Roadmap: Customizing a new version of DB2 Table Editor from a previous customization" on page 42	
<b>Recustomizing DB2 Table Editor</b> Follow this roadmap if you already customized DB2 Table Editor but want to change one or more parameter values.	"Roadmap: Recustomizing DB2 Table Editor" on page 43	

---

## Set up your environment prior to customization

Prior to beginning the customization process, ensure that your environment meets all requirements, that you have installed all prerequisite software, and that you have considered how you want to customize optional features.

### Verify that your environment meets hardware and software requirements

Ensure that your environment meets hardware and software requirements by reviewing the following topics:

- "Hardware requirements for DB2 Table Editor Console, Developer, and User components" on page 13
- "Software requirements for DB2 Table Editor Console, Developer, and User components" on page 14
- "Software requirements for the DB2 Table Editor ISPF component" on page 14

### Verify that DB2 Table Editor has been installed successfully

See the Program Directory for IBM DB2 Table Editor for z/OS, GI10-8401 for installation instructions.

## Verify that Tools Customizer for z/OS has been installed successfully

Tools Customizer for z/OS is a component of IBM Tools Base for z/OS (5655-V93), which is available free of charge. Tools Customizer for z/OS provides a standard approach to customizing IBM DB2 for z/OS Tools.

See the Program Directory for IBM Tools Base for z/OS, GI10-8819 for installation instructions.

## Verify that your environment meets security requirements

DB2 Table Editor requires no extra security measures outside of standard DB2 security. If a user does not have authority to view a table within a DB2 subsystem, DB2 Table Editor will not allow the user to see data changes made to that table. Similarly, undo and redo SQL that generated from the product can be run through products such as SPUFI or QMF™, and therefore also adheres to normal DB2 security for the user who runs this SQL.

You must have authorization to run the SELECT statement on the following tables:

- SYSIBM.SYSAUXRELS
- SYSIBM.SYSCOLUMNS
- SYSIBM.SYSCOPY
- SYSIBM.SYSFIELDS
- SYSIBM.SYSINDEXES
- SYSIBM.SYSKEYS
- SYSIBM.SYSKEYTARGETS
- SYSIBM.SYSTABLEPART
- SYSIBM.SYSTABLES
- SYSIBM.SYSTABLESPACE
- SYSIBM.SYSXMLRELS
- SYSIBM.SYSXMLSTRINGS

By default, DB2 Table Editor can run the REPORT utility against filtered objects. This activity is transparent to the user and can be disabled by setting the Misc Flags value on the general report panel to a value of X. If you do not disable this feature for any given run, you must have one of the following authorizations to access the REPORT utility through DB2 Table Editor:

- RECOVERDB privilege for the database
- DBADM or DBCTRL authority for the database
- SYSCTRL or SYSADM authority

## Hardware requirements for DB2 Table Editor Console, Developer, and User components

The hardware requirements specified here are those that are needed to run the DB2 Table Editor in a Windows environment.

The DB2 Table Editor Console, Developer, and User components have the following hardware requirements:

- Approximately 16 MB of free disk space on a Windows machine.
- A minimum of 32 MB memory.

**Tip:** Additional memory improves performance.

## Software requirements for DB2 Table Editor Console, Developer, and User components

To work with DB2 Table Editor Console, Developer, and User components on Windows, you must have the following software installed.

The DB2 Table Editor Console, Developer, and User components support the following operating systems:

- Microsoft Windows XP
- Microsoft Windows Vista
- Microsoft Windows 7

The DB2 Table Editor Console, Developer, and User components support the following database levels:

- DB2 10 for z/OS
- DB2 for z/OS Version 9

## Software requirements for the DB2 Table Editor ISPF component

The DB2 Table Editor ISPF interface supports the following versions of DB2:

- DB2 for z/OS Version 9
- DB2 10 for z/OS

DB2 Table Editor supports z/OS V1.12 and higher.

To integrate the DB2 Table Editor ISPF interface with the DB2 Administration Tool Launchpad, you must first install and configure the DB2 Administration Tool Launchpad.

## Licensing

The DB2 Table Editor license is enforced based on the platform to which IBM DB2 Table Editor is connecting (the platform where DB2 resides). You can access data on z/OS or OS/390® using the User or ISPF components.

When working with the DB2 Table Editor ISPF component, the license allows you to install the DB2 Table Editor ISPF component on z/OS machines and to connect to other z/OS machines using Aliases.

For information about the licensing required to connect to other DB2 subsystems, contact your IBM representative.

## DB2 Table Editor connectivity

To access data stored in a DB2 database, DB2 Table Editor must connect to that database.

### Distributed Relational Database Architecture™ (DRDA®)

DB2 Table Editor and DB2 are both distributed relational database applications that operate together in a client/server relationship. Each component plays a separate role in this relationship: DB2 Table Editor as the client or requester, and DB2 Universal Database™ as the server. DB2 Table Editor and DB2 for Linux, UNIX and

Windows implement and adhere to a common architecture, the Open Group's Distributed Relational Database Architecture (DRDA). This architecture is a comprehensive and detailed blueprint that specifies the layers and functions required in a client/server distributed database application.

Because DB2 Table Editor implements the DRDA requester specification, it is capable of connecting to any database that adheres to and implements the DRDA server architecture.

## Communications

One component of DRDA describes the communications protocol that participants in the architecture must use. It specifies that requesters and servers must communicate using either the SNA LU 6.2 architecture, or TCP/IP protocols.

**Tip:** When using CLI to connect to a database, you must perform similar network configuration; however, this configuration is performed as part of the DB2 client configuration, rather than as part of the DB2 Table Editor configuration. The following discussion on configuring your SNA and TCP/IP environments applies only to DRDA connections.

## TCP/IP and WinSock

TCP/IP is a collection of protocols. WinSock (Windows Sockets) is a standard, common programming interface that implements the TCP protocol. Applications that require the use of the TCP/IP protocols can be written using WinSock to achieve TCP/IP vendor independence. DB2 Table Editor is an application that is written using WinSock.

## LU 6.2 and CPI-C

LU 6.2 is an SNA communications architecture. APPC (Advanced Program-to-Program Communication) is a language based on the LU 6.2 architecture. A developer of SNA transaction programs has many different implementations of APPC from which to choose. Even though each implementation of APPC adheres to the LU 6.2 architecture, two implementations of APPC might not be the same. Therefore, programs that rely on one vendor's APPC implementation might not work with another vendor's implementation. CPI-C (Common Programming Interface-Communications) is a common programming interface that solves this problem.

CPI-C is a programming interface that implements the APPC verb set. Therefore, applications that require the use of the APPC verb set can instead be written using CPI-C in order to achieve SNA vendor independence. DB2 Table Editor is an application that is written using CPI-C.

## Network environment configuration

Before you install DB2 Table Editor's non-ISPF components, you must configure the required network infrastructure. DB2 Table Editor technical support cannot provide support for configuring your network infrastructure.

## SNA environment configuration

In an SNA network, DB2 Table Editor must be able to establish an LU 6.2 session with DB2, using the CPI-C interface. This connectivity is not provided with DB2 Table Editor. The third-party product that you use to provide connectivity must be installed, configured, and working before you install or use DB2 Table Editor's GUI

components. The process of implementing LU 6.2 connectivity between Microsoft Windows and DB2 can be a complex task, depending on your SNA network environment. The Windows-based SNA products that can be used, and the different ways those products can be used, are far too numerous and complex for this book to describe in detail. You must rely on your SNA networking staff and your SNA software vendor's technical support services to implement and support your network configuration. DB2 Table Editor technical support cannot provide support for these issues.

DB2 Table Editor works with products that provide a Win CPIC-C interface.

**Note:** Ensure that you have the latest corrective service or maintenance for your SNA product. Contact your SNA software vendor's technical support services personnel for this information.

### **TCP/IP environment configuration**

To access a DB2 server using TCP/IP, DB2 Table Editor must be able to establish a TCP/IP connection from the local host (the system on which DB2 Table Editor is running) to the remote port (the port on which DB2 is listening). DB2 Table Editor requires a WinSock 1.1 interface or later to the installed TCP protocol stack.

**Note:** Work with your TCP/IP networking staff and your TCP/IP software vendor's technical support services to implement and support your network configuration. DB2 Table Editor cannot provide support for these networking issues.

Because DB2 has been added to different platforms at different release points, check your DB2 database product documentation to see if its DRDA application server component supports TCP/IP.

### **CLI environment configuration**

To access a DB2 server using CLI, the 32-bit version of DB2 Table Editor must be able to establish a CLI connection from the local host (the system on which DB2 Table Editor is running) to the remote host (the system on which DB2 for Linux, UNIX and Windows is running) using the DB2 Universal Database for Linux, UNIX, and Windows client.

The process of implementing CLI connectivity between Microsoft Windows and DB2 is generally the most simple form of connectivity to implement. All of the connectivity information is defined in the DB2 Universal Database for Linux, UNIX, and Windows client. You must still rely on your networking staff to implement and support your network configuration. DB2 Table Editor technical support cannot provide support for these issues. DB2 Table Editor can access databases through the DB2 for Linux, UNIX and Windows.

**Note:** Although DB2 Table Editor supports CLI connectivity to DB2 for z/OS and OS/390, you are strongly urged to use a DRDA connection for your DB2 for z/OS and OS/390 databases.

---

## **Worksheets: Gathering required data set names**

Identify and record the data set names that will be used during the customization process and make sure that requirements for certain data sets are met.



## Data set names for Tools Customizer

Identify and record the following Tools Customizer data set names:

Data set name	Description	Special requirements
SCCQDENU	Metadata library for Tools Customizer	
SCCQLOAD	Executable load module library for Tools Customizer	
SCCQMENU	ISPF messages for Tools Customizer	
SCCQPENU	ISPF panels for Tools Customizer	
SCCQSAMP	Sample members for Tools Customizer	
SCCQTENU	Table library for Tools Customizer	You must have write access to this data set.

## Customization reference

Refer to information about DB2 Table Editor parameters, dsnames, and templates during the customization process.

- “Customization jobs generated by Tools Customizer” on page 20
- “DB2 Table Editor customization parameters”

### DB2 Table Editor customization parameters

The following table shows the parameters for DB2 Table Editor that you can specify by using Tools Customizer. These parameters are displayed on the Product Parameters panel.

Table 4. DB2 Table Editor customization parameters

Parameter name	Parameter description
Previous control file	The control file that was used with DB2 Table Editor. The name of the control file can be up to 46 characters in length and must not be enclosed in quotation marks.
Previous startup CLIST data set	The name of the library in which the startup CLIST for the previous version of DB2 Table Editor is stored. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks.
Previous startup CLIST member (ETI)	Specify the name of the startup CLIST member that was used for the previous version of DB2 Table Editor. The startup CLIST member is shipped as ETI, however it is possible that the name was changed.
DB2 Table Editor V4.4 HLQ	The library name for the current version of DB2 Table Editor. The name of the library can be up to 38 characters in length and must not be enclosed in quotation marks.
DB2 Table Editor V4.4 package owner	The owner of the packages for the current version of DB2 Table Editor. This value is used in the DB2 BIND job and can be up to 128 characters in length. This value is required. There is no default value.
DB2 Table Editor V4.4 load library	The load library for the current version of DB2 Table Editor. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks.

Table 4. DB2 Table Editor customization parameters (continued)

Parameter name	Parameter description
Startup CLIST library	The library for the ETIV44 and ETIV44B CLISTs. These CLISTs are used to invoke the ISPF interface for DB2 Table Editor V4.4. This value is required. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value for this parameter.
DB2 Table Editor startup CLIST 1	The name of the first DB2 Table Editor startup CLIST. This value is required. The name can be up to 8 characters in length. The default value is <i>ETIV44</i> .  CLIST 1: <ul style="list-style-type: none"> <li>creates the application environment</li> <li>executes CLIST 2.</li> </ul>
DB2 Table Editor startup CLIST 2	The name of the second DB2 Table Editor startup CLIST. This value is required. The name can be up to 8 characters in length. The default value is <i>ETIV44B</i> .  When specifying a value for CLIST 2, ensure that you also specify: <ul style="list-style-type: none"> <li>the location of the control file.</li> <li>the locations of the libraries that are used at your site.</li> <li>the high-level qualifier. Change the PROC 0 statement to match your installation's high-level qualifiers for the DB2 Table Editor libraries by replacing ETILVL with the high-level qualifier of the DB2 Table Editor libraries.</li> </ul>
Warn when excluding columns	Use this option to issue a warning when a column is excluded in an edit session. Valid values are NO and YES. The default value is NO. The CLIST parameter is WARNA.
Warn when exclusively locking	Use this option to issue a warning when a user attempts to exclusively lock a table. Valid values are NO and YES. The default value is NO. The CLIST parameter is WARNB.
Warn when entering setup	Use this option to issue a warning when a user attempts to enter the Setup panel. Valid values are NO and YES. The default value is NO. The CLIST parameter is WARNC.
Lock in browse mode	Use this option to specify that tables can be locked while in browse mode. Valid values are YES and NO. The default value is YES. The CLIST parameter is LOCKBRSE.
Show locking options	Use this option to prevent the Lock Table option from being displayed. Valid values are NO and YES. The default value is NO. The CLIST parameter is DISPLOCK.
High-level qualifier of the SQL data set	The high-level qualifier of the library where you want to save your SQL. This value is optional and defaults to your TSO user ID if no value is specified. The high-level qualified can be up to 38 characters in length.
DB2 Table Editor V4.4 DBRM library	The DBRM library name for the current version of DB2 Table Editor. The DBRM modules are used as input to the BIND job. This value is required. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value.
DB2 Table Editor V4.4 control file	The name of the control file for the current version of DB2 Table Editor. If you have already fun the Discover EXEC this value is displayed here for your information. This value is required. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value.

Table 4. DB2 Table Editor customization parameters (continued)

Parameter name	Parameter description
Volume serial number for control file	The volume serial number for the VSAM control file. This value can be up to 6 characters in length and is used only when you are creating a new control file. To let SMS select the volume, leave this field blank. This value is optional. There is no default value.
DB2 Admin high-level qualifier	The high-level qualifier of the DB2 Administration Tool data sets. If the task is selected, this value is required. The high-level qualifier can be up to 38 characters in length. There is no default value.
ADBDMTI EXEC data set	The library that contains the ADBDMTI EXEC that adds DB2 Table Editor to the DB2 Tools Launchpad. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks.
DB2 Admin version	The version of DB2 Administration Tool that is installed in your environment.
DB2 ZPARMs member	The ZPARM load module member that was created for the DB2 subsystem. This value is required. There is no default value.
DB2 execution libraries	The names of the data sets that comprise the current load library concatenation for DB2. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value.
DB2 Table Editor plan name	The plan name for the current version of DB2 Table Editor. This value is required. The plan name can be up to 8 characters in length. The default value is ETI044P1.
DB2 Table Editor package name	The package name to use for the current version of DB2 Table Editor. The package name can be up to 18 characters in length. This value is required. The default value is ETIV44PK.
Work file device type	The work file unit device that you want to use when generating JCL. Sample values are SYSALLDA, SYSDA, and DISK. This value is required. There is no default value.
Sort work file device type	The sort work unit device that you want to use when generating JCL. Sample values are SYSALLDA, SYSDA, and DISK. This value is required. There is no default value.
ISPF link list library	The library name of the ISPF link list library. This value is optional. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value.
ISPF message library	The library name for the ISPF messages. This value is optional. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value.
ISPF table input library	The library name for the ISPF table data. This value is optional. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value.
ISPF skeleton library	The library name for the ISPF skeleton lib. This value is optional. The name of the library can be up to 46 characters in length and must not be enclosed in quotation marks. There is no default value.
Repository table space primary quantity	This parameter specifies the primary quantity in kilobytes to allocate to the table space. This value is required. Valid values are -1 or a value from 1 to 4194304. The default value is 4194304.
Repository table space secondary quantity	This parameter specifies the secondary quantity in kilobytes to allocate to the table space. This value is optional. If you do not specify a secondary quantity, DB2 uses a formula to determine a value. Valid values are -1 or value from 1 to 4194304. The default value is 4194304.

Table 4. DB2 Table Editor customization parameters (continued)

Parameter name	Parameter description
Repository index primary quantity	This parameter specifies the primary quantity in kilobytes to allocate to the index. This value is required. Valid values are -1 or a value from 1 to 2097152. The default value is 2097152.
Repository index secondary quantity	This parameter specifies the secondary quantity in kilobytes to allocate to the index. This value is optional. If you do not specify a secondary quantity, DB2 uses a formula to determine a value. Valid values are -1 or a value from 1 to 2097152. The default value is 2097152. <b>Note:</b> If row count information is unavailable, the value in the Row Count column will be -1. To make it available, you can use the RUNSTATS command, or use the C line command.

### Customization jobs generated by Tools Customizer

Tools Customizer generates customization jobs based on the tasks and steps that you select.

The following table shows the relationship between the tasks and steps that you select, and the customization job that Tools Customizer generates.

Table 5. List of customization jobs that Tools Customizer can generate for DB2 Table Editor

Tasks	Steps	Template name	Template type	Member
Required: Configure EXECs	Required: Configure startup CLISTs	ETIV44	perhlq	A0V44
Required: Configure EXECs	Required: Configure startup CLISTs	ETIV44B	perhlq	A1V44B
Required: Bind plans and packages	Required: Bind plans and packages	ETI#BIND	perdb2dsg	A2#BINAB, A2#BINAC
Required: Create control file	Required: Create control file	ETICNTFL	perhlq	A3CNTFL
Optional: Update control file  This is required only when you are upgrading from a previous version of DB2 Table Editor.	Required: Update control file	ETICF2UP	jperdb2dsg	A4CF2UAB, A4CF2UAB

Table 5. List of customization jobs that Tools Customizer can generate for DB2 Table Editor (continued)

Tasks	Steps	Template name	Template type	Member
<p>Optional: Add Table Editor to the DB2 Admin Launchpad</p> <p>This is required only when you want to access DB2 Table Editor from the DB2 Administration Tool.</p>	<p>Required: Add Table Editor to the Launchpad</p>	ETIADBI	perhlq	A5ADBI
<p>Optional: Add Table Editor to the DB2 Admin Launchpad</p> <p>This is required only when you want to access DB2 Table Editor from the DB2 Administration Tool.</p>	<p>Required: Add Table Editor to the Launchpad</p>	ETIADBI2	perhlq	A6ADBI2

---

## Data type support

DB2 Table Editor supports many DB2 data types. The data types that are supported vary depending on the DB2 Table Editor component that you are using. DB2 Table Editor supports all DB2 data types except those listed.

### DB2 data types that are not supported by the ISPF component

- BLOB
- CLOB
- DBCLOB
- BINARY
- VARBINARY
- ROWID
- DISTINCT

### DB2 data types that are not supported by the Windows User and Developer components

- ROWID
- DISTINCT

---

## APF authorizing load libraries

Some of the programs in DB2 Table Editor load libraries must be APF-authorized to run.

## About this task

### Procedure

Include the following load libraries as part of your authorized list:

- SETILOAD
- SFECLOAD

---

## Worksheets: Gathering parameter values for Tools Customizer

During the customization process, you must provide parameter values for DB2 Table Editor, for DB2, and for your LPAR.

### Customization values for the Discover EXEC

#### Description

Use the following worksheet to identify and record the customization values for the Tools Customizer Discover EXEC. The values in this worksheet are for extracting information from a product that has already been customized. During the customization process, you will enter these values on panel CCQPDSC.

**Note:** Complete this worksheet only if you are recustomizing a product that has previously been customized by using Tools Customizer.

Parameter	Sample or default value	Your value
<b>Discover EXEC for Extracting Information from an Already Customized product</b>		
<b>Discover EXEC library</b> The fully qualified data set name that contains the product Discover EXEC.	The name of the Discover EXEC Library that you entered on the settings panel.	
<b>Discover EXEC name</b> The name of the Discover EXEC.	ETIDISC	
<b>Discover output data set</b> The name of the data set for the output from the product Discover EXEC.	The name of the discover output library that you entered on the settings panel.	
<b>New ETI load library</b> The load library name for the new release of DB2 Table Editor.  For example, if this release is V4.4, the library name might be ETI.ETILOAD or ETI.LOADLIB (using a generic message library name) or ETI.V440.ETILOAD or ETI.V440.LOADLIB (using a release specific library name).	ETI.V440.ETILOAD	
<b>Information for Discover EXEC section</b>		

Parameter	Sample or default value	Your value
<b>New ETI ISPM library</b> The message library name for the new release of DB2 Table Editor.  For example, if this release is V4.4, the library name might be ETI.ETIMENU or ETI.ISPMLIB (using a generic message library name) or ETI.V440.ETIMENU or ETI.V440.ISPMLIB (using a release specific library name).	ETI.V440.ETIMENU	
<b>Discover from previous ETI control file</b> ETI control file name to discover from.	ETI.V430.CONTROL	
<b>Discover from previous ETI CLIST library</b> ETI CLIST library to discover from.	ETI.V430.ETICLST	
<b>Discover from previous ETI SAMPLIB library</b> ETI SAMPLIB library to discover from.	ETI.V430.ETISAMP (ETIBIND)	

## Product to Customize section

### Description

The parameters that are listed in the Product to Customize section are read-only. They contain information that was provided on other panels, by Tools Customizer, or by the DB2 Table Editor metadata data set.

Parameter	Discovered?	Source of this value
<b>Product metadata library</b> This value is the library that you specified on the Specify the Product to Customize panel. This field is scrollable. Place your cursor anywhere on the field and press PF11 to view its full contents.	No	This value is specified on the Specify the Product to Customize panel (CCQPHLQ)
<b>LPAR</b> The <b>LPAR</b> field displays the LPAR on which you are customizing DB2 Table Editor.	No	This value is supplied by Tools Customizer.
<b>Product name</b> This value displays the product that is being customized. In this example, IBM DB2 Table Editor should be displayed in this field. This field is scrollable. Place your cursor anywhere on the field and press PF11 to view its full contents.	No	This value is provided by the product metadata file.
<b>Version</b> The <b>Version</b> field displays the version, release and maintenance of the product you are customizing in the format <i>Vn.Rn.mm</i> .	No	This value is provided by the product metadata file.
<b>Product customization library</b> This value displays the name of the data set in which the generated library customization jobs will be stored.	No	This value is derived from the user-specified customization library qualifier on the Tools Customizer Settings panel (CCQPSET).

## Required parameters section

### Description

The parameters in this task are required for all customizations. During the customization process, you will enter these values on panel CCQPPRD.

Parameter	Required?	Discovered?	Default value	Your value
<b>Control file name</b> The name of the control file that will be used for this installation or release of DB2 Table Editor. The control file contains configuration information for each DB2 subsystem against which the product can run.	Yes	No	ETI.CONTROL	
<b>Qualifier for unqualified tables</b> The qualifier for unqualified tables. This qualifier is used in the bind of DB2 Table Editor SQL within the QUALIFIER parameter.	Yes	No	SYSTOOLS	
<b>CLIST for ETI</b> The CLIST library name for DB2 Table Editor.	Yes	No	ETI.ETICLST	
<b>ETI load library</b> The name of the DB2 Table Editor load library.	Yes	No	ETI.ETILOAD	
<b>FEC load library</b> The name of the FEC load library.	Yes	Yes	FEC.ETILOAD	
<b>ETI ISPLLIB</b> The name of the DB2 Table Editor ISPLLIB.	Yes	No	ETI.ETIISPP	
<b>ETI ISPMLIB</b> The name of the DB2 Table Editor ISPMLIB.	Yes	Yes	ETI.ETIISPM	
<b>ETI ISPSLIB</b> The name of the DB2 Table Editor ISPSLIB.	Yes	No	ETI.ETIISPS	

### Task: ETI control file

#### Description

This task creates the control file if it does not exist or if you are creating a new control file for a new release. The control file contains specific information about each DB2 subsystem where DB2 Table Editor might run. During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

#### Jobs generated

This task generates the A0CNTL1 job. This job is based on the ETICNTL1 template.

#### Required authority

TBD



Step or parameter	Required?	Discovered?	Default value	Your value
<b>ETI control file creation</b> This step creates the control file if it does not exist or if you are creating a new control file for a new release. The control file contains specific information about each DB2 subsystem where DB2 Table Editor might run.	No	TBD	Selected	
<b>Volume serial number for the control file</b> The volume serial number (VOLSER) to be used for the control file creation. May be left as blanks for SMS shops.	No	No	blank	

## Task: ETI Fast Apply DDL

### Description

This task creates the objects that are required to run Fast Apply on a DB2 subsystem only if those objects were not previously created in this installation or a previous installation. During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

### Jobs generated

This task generates the A1FAS1*nn* job. This job is based on the ETIFAS1 template.

### Required authority

The user ID that runs the A1FAS1*nn* job must have TBD authority.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>ETI Fast Apply DDL</b> This step creates the objects that are required to run Fast Apply on a DB2 subsystem only if those objects were not previously created in this installation or a previous installation.	No	Yes/No	Selected	
<b>ETI database name</b> This parameter indicates the database name that is used to store DB2 Table Editor objects.	Yes	No	ETIDB01	
<b>ETI table space name</b> This parameter indicates the table space name that is used to store DB2 Table Editor objects.	Yes	No	ETITS01	

## Task: ETI profiles DDL

### Description

This task creates the objects that are required to use profiles on a DB2 subsystem only if those objects were not previously created in this installation or a previous installation. Before this DDL can be run, the DB2 Table Editor Fast Apply DDL must have been run, in this installation or a previous installation. During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

### Jobs generated

This task generates the A2PROF $nn$  job. This job is based on the ETIPROF1 template.

### Required authority

The user ID that runs the A2PROF $nn$  job must have TBD authority.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>ETI Fast Apply DDL</b> This step creates the objects that are required to run Fast Apply on a DB2 subsystem only if those objects were not previously created in this installation or a previous installation.	No	-	Selected	
<b>ETI database name</b> This parameter indicates the database name that is used to store DB2 Table Editor objects.	Yes	No	ETIDB01	
<b>ETI table space name</b> This parameter indicates the tablespace name that is used to store DB2 Table Editor objects.	Yes	No	ETITS01	

### Task: ETI bind SQL

#### Description

This task binds the ETI SQL. During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

### Jobs generated

This task generates the A3BIND $nn$  job. This job is based on the ETIABIND1 template.

### Required authority

The user ID that runs the A3BIND $nn$  job must have TBD authority.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>ETI bind</b> This step binds the ETI SQL.	Yes	-	Selected	
<b>DBRMLIB for ETI</b> This parameter indicates the DBRM library name for DB2 Table Editor.	Yes	Yes	ETI.ETIDBRM	
<b>User ID for ETI Bind</b> This parameter indicates the user ID for the owner of the plan. The user ID value is used during the bind on the OWNER(userid) parameter.	Yes	Yes	USERID	
<b>Collection name for ETI bind</b> This parameter indicates the collection name to be used within the DB2 Table Editor bind.	Yes	Yes	ETICOLL	

## Task: Edit startup CLIST

### Description

This task binds the ETI SQL. During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

### Jobs generated

This task generates the A4CLST1 job. This job is based on the ETICLST1 template.

### Required authority

The user ID that runs the A4CLST1 job must have TBD authority.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Edit startup CLIST</b> This step edits the startup CLIST to provide proper dsnames for your site.	Yes	-	Selected	
<b>ETI ISPPLIB</b> This parameter indicates the name of the DB2 Table Editor ISPPLIB.	Yes	No	ETI.ETIISPP	
<b>FEC ISPPLIB</b> This parameter indicates the name of the FEC ISPPLIB.	Yes	No	FEC.ETIISPP	
<b>FEC ISPLIB</b> This parameter indicates the name of the FEC ISPLIB.	Yes	No	FEC.ETIISPM	
<b>ETI ISPSLIB</b> This parameter indicates the name of the DB2 Table Editor ISPSLIB.	Yes	No	ETI.ETIISPS	

## Task: ETI configure DB2

### Description

This task configures each DB2 subsystem within the control file.

This task is optional in the sense that you can either perform this task for all your DB2 subsystems (or any subset of them), or you can perform this same task using option #11 ("Setup") from the DB2 Table Editor main menu to configure each DB2 subsystem individually, as needed. A DB2 subsystem must be configured using one of these methods before it can be used with DB2 Table Editor.

During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

### Jobs generated

This task generates the A5LOAD $nn$  job. This job is based on the ETILOAD1 template.

### Required authority

The user ID that runs the A5LOAD $nn$  job must have TBD authority.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>ETI configure DB2</b> This step configures each DB2 subsystem within the control file. It is optional in the sense that you can either perform this task here for all your DB2 subsystems (or any subset thereof), or you can perform this same task using option #11 ("Setup") from the DB2 Table Editor main menu to configure each DB2 subsystem individually, as needed. A DB2 subsystem must be configured using one of these methods before it can be used within DB2 Table Editor.	No	-	Not selected	
<b>ETI ISPLLIB</b> This parameter indicates the model data set name for creating generation data groups. If a GDG model is not needed, do not change the default value (""). Otherwise, specify a model data set name at your site for creating GDGs.	Yes	No	""	

## Task: ETI ALTER DDL

### Description

This task alters tables that were created in previous releases as part of the 'Load data into DB2'. During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

### Jobs generated

This task generates the A6LT1*mm* job. This job is based on the ETILT1 template.

### Required authority

The user ID that runs the A6LT1*mm* job must have TBD authority.

Step	Required?	Discovered?	Default value	Your value
<b>ETI ALTER DDL</b> This step alters tables that were created in previous releases as part of the 'Load data into DB2'.	No	-	Not selected	

## Task: Launchpad

### Description

This two-part task adds DB2 Table Editor to the DB2 Administration Tool Launchpad. During the customization process, you will enter these values on panel CCQPPRD.

This task is *required / optional*.

### Jobs generated

This task generates the A7ADBI job, which is based on the ETIADBI template, and the A8ADBI2 job, which is based on the ETIADBI2 template.

### Required authority

The user ID that runs the A7ADBI job and the A8ADBI2 job must have TBD authority.

Step or parameter	Required?	Discovered?	Default value	Your value
<b>Launchpad</b> Part 1 modifies the REXX EXEC to add DB2 Table Editor to the DB2 Administration Tool Launchpad.  Part 2 runs that REXX EXEC and adds DB2 Table Editor to that Launchpad.	No	-	Not selected	

## DB2 Parameters section

### Description

This section contains DB2 parameters. All parameters are required. During the customization process, you will enter these values on panel CCQPDB2.

Parameter	Required?	Discovered?	Default value	Your value
<b>Mode</b> This parameter indicates the mode in which the DB2 subsystem is running. The following values are valid: <ul style="list-style-type: none"> <li>• CM is compatibility mode on all listed DB2 versions except DB2 10.</li> <li>• CM8 is conversion mode from DB2 V8 on DB2 10.</li> <li>• CM9 is conversion mode from DB2 Version 9.1 on DB2 10.</li> <li>• NFM is new-function mode on all listed DB2 versions.</li> </ul>	Yes	No	NFM	
<b>Level number</b> This parameter indicates the version, release, and modification level of the DB2 subsystem. The following values are valid: <ul style="list-style-type: none"> <li>• 810 is valid only for CM or NFM.</li> <li>• 910 is valid only for CM or NFM.</li> <li>• 101 is valid only for CM8, CM9 or NFM.</li> <li>• 111 is valid only for CM or NFM.</li> </ul>	Yes	No	blank	
<b>Load library</b> This parameter indicates the data set name of the DB2 load library.	Yes	Yes	DSN.SDSNLOAD	
<b>Run library</b> This parameter indicates the data set name of the DB2 run library.	Yes	Yes	DSN.RUNLIB. LOAD	
<b>Exit library</b> This parameter indicates the data set name of the DB2 exit library.	Yes	Yes	DSN.SDSNEXIT	
<b>Bootstrap data set</b> This parameter indicates the name of the DB2 bootstrap data set.	Yes	Yes	DSN.SDSNBSDS	

Parameter	Required?	Discovered?	Default value	Your value
<b>Name of the 4 KB bufferpool</b> This parameter indicates the name of the 4 KB bufferpool to be used for customization. The value must be 8 characters or less.	Yes	No	BP0	
<b>Plan name for the DSNTEP2 utility</b> This parameter indicates the plan name for the DSNTEP2 utility. The value must be 8 characters or less.	Yes	No	DSNTEP2	
<b>Storage group name</b> This parameter indicates the name of the storage group that will be used for creating DB2 objects for customization. The value must be 128 characters or less.	Yes	No	SYSTOOLS	
<b>Plan name for ETI bind</b> This parameter indicates the plan name to be used on the DB2 Table Editor bind.	Yes	Yes	ETISQLP	
<b>ZPARM module name</b> This parameter indicates the name of the ZPARM module for this specific DB2 subsystem. This module typically resides in the DB2 SDSNEXIT library, and the name is typically in ssidPARM format. For example, if your DB2 SSID is D91A, the name of the ZPARM module might be D91APARM.	Yes	Yes	ZPARM	
<b>Use of archive logs 1 and 2</b> This parameter determines how you want DB2 Table Editor to process your archive logs. The field combines the settings for both ARCHLOG1 and ARCHLOG2. The first character is for ARCHLOG1, and the second character is for ARCHLOG2. The following values are permissible:  <b>YN</b> Use ARCHLOG1 only; ARCHLOG2 is ignored.  <b>NY</b> Use ARCHLOG2 only; ARCHLOG1 is ignored.  <b>PN</b> ARCHLOG1 has priority over ARCHLOG2.  <b>NP</b> ARCHLOG2 has priority over ARCHLOG1.  <b>NN</b> No special considerations are made for either ARCHLOG1 or ARCHLOG2.	Yes	Yes	NN	
<b>Repository table space primary quantity</b> This parameter specifies the primary quantity in kilobytes to allocate to the table space. Valid values are -1 or value from 1 to 4194304.	Yes	No	4194304	

Parameter	Required?	Discovered?	Default value	Your value
<b>Repository table space secondary quantity</b> This parameter specifies the secondary quantity in kilobytes to allocate to the table space. If you do not specify a secondary quantity, DB2 uses a formula to determine a value. Valid values are -1 or value from 1 to 4194304.	No	No	4194304	
<b>Repository index primary quantity</b> This parameter specifies the primary quantity in kilobytes to allocate to the index. Valid values are -1 or value from 1 to 2097152.	Yes	No	2097152	
<b>Repository index secondary quantity</b> This parameter specifies the secondary quantity in kilobytes to allocate to the index. If you do not specify a secondary quantity, DB2 uses a formula to determine a value. Valid values are -1 or value from 1 to 2097152.	No	No	2097152	
<b>Active log priority</b> Specify Y to indicate that DB2 Table Editor will process the active log when data resides on both active and archive logs.	Yes	Yes	Y	

## LPAR Parameters section

### Description

This section contains LPAR parameters. All parameters are required. During the customization process, you will enter these values on panel CCQPLPR.

Parameter	Required?	Discovered?	Default value	Your value
<b>Message library</b> Description	Yes	No	ISPF.SISPMLIB	
<b>ISPF table input library</b> T	Yes	No	ISPF.SISPTLIB	

## Customizing the DB2 Table Editor ISPF component

In order to use the DB2 Table Editor ISPF component you must first install the SMP/E installation package. After you have installed it you must customize.

To install DB2 Table Editor, complete the installation instructions that are found in the program directory. In order to install DB2 Table Editor, you must have DBADM authority.

### Customization summary

After you install DB2 Table Editor, you must use Tools Customizer to customize DB2 Table Editor for ISPF.

## Tools Customizer overview

IBM Tools Customizer for z/OS (also referred to as Tools Customizer) standardizes many of the customization processes that are required to customize IBM Tools that run on z/OS. Tools Customizer is a component of IBM Tools Base for z/OS.

Tools Customizer provides a consistent ISPF interface to ensure that the customization process is the same for all IBM Tools products and solution pack components. It also provides the ability to "discover" parameter values from products or solution pack components that you previously customized manually or by using Tools Customizer.

### Features and benefits

Tools Customizer provides the following features:

- A single, consistent ISPF interface ensures that the customization process is the same for all IBM Tools products and solution pack components.
- A Discover EXEC discovers values for common product, LPAR, and DB2 parameters from a product or solution pack component that you previously customized manually or by using Tools Customizer. Each IBM Tools product and solution pack component has a unique Discover EXEC. The discovered parameters are stored in the data store. If the product or solution pack component that you want to customize exists in the Tools Customizer data store, Tools Customizer issues a warning before it overwrites existing values. Use the Discover EXEC by issuing the DISCOVER command on the Customizer Workplace panel.
- The data store retains discovered and manually specified parameter values. Because the parameter information is persistently stored, you have to manually specify or discover parameter values only once. Tools Customizer uses these parameter values where they are applicable.
- A metadata repository contains the members that define the following customization attributes for products and solution pack components:
  - Parameters, tasks, and steps for the product or solution pack component to be customized. Some product or solution pack parameters, tasks, and steps are required.
  - LPAR parameters for the local LPAR. All of the LPAR parameters are required.
  - DB2 parameters for the DB2 subsystem or DB2 data sharing member on which you will customize the product or solution pack component. All of the DB2 parameters are required.
- Default values are provided for product parameters and solution pack component parameters, LPAR parameters, and DB2 parameters. The default values show examples of how to complete fields.

### Advanced customization options

Use the LOCKBRSE and DISPLOCK options to set table locking preferences.

From the DB2 Table Editor Main Menu (ETI\$MAIN panel), set your preferences using these options:

#### LOCKBRSE

Set this option to YES if you want the ability to lock a table while in browse mode. Set this option to NO to restrict the ability to lock a table from browse mode.



## DISPLOCK

Set this option to YES if you want the "Lock Table" option (on the ETI\$MAIN panel) to appear on the screen. If you do not want the option to appear, set this option to NO. Locking will default to share locks. If you want locking to default to no locks, enter NON. For exclusive locks (not recommended), enter NOE.

## Adding TSO commands to Command Limiting table

If your site uses ACF2 to restrict TSO command use, you might need to add the TSO commands that DB2 Table Editor uses to the ACF2 Command Limiting table.

### About this task

The TSO commands that DB2 Table Editor uses are: ETI\$MAIN, ETI, ETICLIST, ETIADBI, ETIDB21T, and ADB21A.

## Optional: Integrating DB2 Table Editor into DB2 Tools Launchpad

Optionally, you can integrate DB2 Table Editor into DB2 Tools Launchpad. Tools Customizer will create the necessary JCL, but you must manually complete some steps after you submit the customization job.

### Before you begin

Before you complete these steps, ensure that the following prerequisites have been met:

- The DB2 Tools Launchpad is installed.
- Tools Customizer generated the job from the ETIADBI template, and you submitted the job.
- DB2 Admin is installed and that the ADBDMT member exists in the Admin Tool TLIB data set.
- You have write access to the Admin Tool TLIB data set.

### About this task

The DB2 Tools Launchpad is a centralized panel from which you can launch integrated DB2 Tools. After you integrate DB2 Table Editor, you can launch DB2 Table Editor from the DB2 Tools Launchpad.

### Procedure

1. Run the CLIST ETIADBI in SETISAMP. The CLIST uses the high-level qualifier that you specify for the DB2 Admin data sets and the name of the library that contains the ADBDMTI EXEC. The DB2 Tools Table – ADD An Entry panel is displayed, as shown in the following figure:

```

----- DB2 Tools Table - ADD An Entry -----
Command ==>

Library :

Tool Name : DB2 Table Editor
Code      : ETI          (User-defined code, for shortcut tool identifier)
Prog No.  : 5697-G65     (IBM program product number or equivalent)
Release   : 440         (Product release number)
Group     : 1           (Tool category, as follows:
                        1 - Administration Tools
                        2 - Application Management Tools
                        3 - Performance Management Tools
                        4 - Recovery and Replication Management)
Installed : YES         (Y - yes, N - no)

Command   : SELECT MODE(FSCR) CMD(EX ETI.IBMTAPE.SETISAMP(ETI)')
           : SNAME(DMTSSID)

```

Figure 1. Adding an entry to the DB2 Tools Launchpad panel

2. Press Enter to confirm the new DB2 Table Editor command.

## Results

When the ETIADBI CLIST completes successfully, a new line, ETI, is added to the DB2 Tools Launchpad.

## Optional: Integrating DB2 Table Editor into DB2 Administration Tool

Optionally, you can integrate DB2 Table Editor into DB2 Administration Tool (DB2 Admin).

### Before you begin

Before you complete these steps, ensure that:

- DB2 Admin is installed and that the ADBDMT member exists in the Admin Tool TLIB data set
- You have write access to the Admin Tool TLIB data set

### About this task

DB2 Admin helps you manage DB2 environments efficiently and effectively. After you have integrated DB2 Table Editor, you can run DB2 Table Editor operations by using DB2 Admin.

If you are using DB2 Admin Tool V11.1, then you can enable access to DB2 Table Editor from within Tools Customizer when customizing DB2 Admin Tool, and skip the following steps. If you are using DB2 Admin Tool v10.1 or older, then you must follow the steps below to enable access to DB2 Table Editor.

**Note:** DB2 Admin Tool V11.1 only supports a DB2 Table Editor connection to DB2 Subsystems that are V9 NFM or higher. You must use DB2 Admin Tool V10.1 for a DB2 Table Editor connection to DB2 Subsystems that are older than V9 NFM.

### Procedure

1. Follow the instructions that are described in ETIDB21T in the SETISAMP library. You can customize these instructions by changing the name of the

library which contains DB2 Admin commands tables and the name of the library which contains the ADBDMTI EXEC.

**Requirement:** Before you can use the ETIDB21T member, you must generate it with Tools Customizer whenever you change the library names.

2. Run the ETIDB21T member that you have modified. This re-creates the DB2 Admin Tool command tables.

## Results

When ETIDB21T complete successfully, you can start DB2 Table Editor interactively by using the DB2 Admin.

---

## Starting and preparing Tools Customizer for use

Use the provided REXX EXEC to start Tools Customizer. The first time that you use Tools Customizer, you must modify the settings that Tools Customizer uses to customize DB2 Table Editor.

### Starting Tools Customizer

Start Tools Customizer by running a REXX EXEC from the ISPF Command Shell panel.

#### Before you begin

Tools Customizer must be SMP/E installed. You must know the high-level qualifier of where the Tools Customizer libraries reside. The high-level qualifier is considered to be all the segments of the data set name except the lowest-level qualifier, which is SCCQEXEC.

#### About this task

To run the REXX EXEC, you must either change the placeholder in the EXEC for the high-level qualifier of the Tools Customizer EXEC library or pass the high-level qualifier as a parameter when you run the EXEC. The REXX EXEC is in the CCQTCZ member of the EXEC library.

#### Procedure

1. Optional: Change the placeholder for the high-level qualifier in the REXX EXEC:
  - a. Find the EXEC library data set for Tools Customizer. The name of the data set is *high\_level\_qualifier.SCCQEXEC*.
  - b. Edit data set member CCQTCZ and replace the <TCZ HLQ> string with the high-level qualifier of the EXEC library data set. For example, if the name of the Tools Customizer EXEC library is CCQTCZ.USABSAND.SCCQEXEC, replace <TCZ HLQ> with CCQTCZ.USABSAND.

You have to change the placeholder for the high-level qualifier only once. When you run the REXX EXEC, you do not have to pass the high-level qualifier as a parameter.

2. Run the REXX EXEC (CCQTCZ):
  - a. From the ISPF Primary Option Menu, select option 6. The ISPF Command Shell panel is displayed.

- b. Specify the EX command to run the REXX EXEC. For example, if the Tools Customizer EXEC library is CCQTCZ.USABSAND.SCCQEXEC and you changed the placeholder for the high-level qualifier in the REXX EXEC, specify: EX 'CCQTCZ.USABSAND.SCCQEXEC(CCQTCZ)'
- If you did not change the placeholder for the high-level qualifier in the REXX EXEC, specify: EX 'CCQTCZ.USABSAND.SCCQEXEC(CCQTCZ)'  
'CCQTCZ.USABSAND'

## Results

The IBM Customizer Tools for z/OS main menu panel is displayed.

## What to do next

If you are running Tools Customizer for the first time, you must modify the Tools Customizer user settings. If you have already set the Tools Customizer user settings, either customize or recustomize DB2 Table Editor.

## Modifying Tools Customizer user settings

Before you can customize DB2 Table Editor with Tools Customizer, you must review the settings that Tools Customizer uses. You might have to change the default values to suit your environment. In most cases, you can change the Tools Customizer values at any time. For example, after you have customized DB2 Table Editor and are customizing a different product or solution pack, you might have to change the settings.

### Procedure

1. On the IBM Tools Customizer for z/OS main panel (CCQPHME), specify option 0, **User settings for Tools Customizer**. The Tools Customizer Settings panel (CCQPSET) is displayed, as shown in the following figure:

```

CCQPSET          Tools Customizer Settings          14:03:51
Command ==>>>
Enter the settings for customizing a product or press End to save and exit.

Commands: SAVE - Save user settings

Product Customization Settings
Customization library qualifier . .DB2TOOL.PRODUCT.CUST
Use DB2 group attach . . . . .YES (YES/NO)

Tools Customizer Library Settings
Metadata library . . . .DB2TOOL.CCQ110.SCCQDENU
Discover output data set .DB2TOOL.CCQ110.DISCOVER
Data store data set . . .DB2TOOL.CCQ110.DATASTOR

User Job Card Settings for Customization Jobs
==>> //          JOB
==>>
==>>
==>>
==>>

```

Figure 2. The Tools Customizer Settings panel (CCQPSET)

2. Review the values for the following required fields. Use the default value or specify your own value. You must have appropriate READ and WRITE access to the data sets that are specified.

### **Customization library qualifier**

The high-level qualifier that is used as the prefix for the customization library. The customization library is a data set in which the generated jobs to customize DB2 Table Editor are stored. WRITE access to this qualifier is required.

For each product to be customized, the first value that is specified for the qualifier is always used, even if you change it after you have generated the customization jobs. For example, if you customize a product and then specify a new qualifier for recustomization, although the new qualifier is saved and displayed, the original value is used.

To maintain multiple instances of Tools Customizer, specify a unique customization library qualifier for each instance of Tools Customizer. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### **Use DB2 group attach**

DB2 Table Editor does not support DB2 group attach names. You must specify NO in the **Use DB2 group attach** field.

### **Tools Customizer metadata library**

The name of the data set that contains the metadata that is used to display the DB2 and LPAR parameters. The parameters that are displayed on the LPAR Parameters panel and the DB2 Parameters panel depend on the parameters that you define and the tasks and steps that you select on the Product Parameters panel for the product that you are customizing. For example, the DB2 parameters that are required, based on the selected tasks and steps, are displayed on the DB2 Parameters panel, and you can edit them. If they are not required, they are not displayed. READ access to this data set is required. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### **Discover output data set**

The name of the data set in which the output from the DB2 Table Editor Discover EXEC is stored. Each product has its own Discover EXEC. The Discover EXEC retrieves the product, LPAR, and DB2 parameters from a previously customized product. WRITE access to this data set is required. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### **Data store data set**

The name of the data set where Tools Customizer stores information about product, LPAR, and DB2 parameter values. Information about which products are associated with which DB2 entries (DB2 subsystems, DB2 group attach names, and DB2 data sharing members) is also stored in this data set. Data set names that exceed 42 characters must be enclosed in single quotation marks ('). The specified data store data set can be used with only one invocation of Tools Customizer at a time. Data set names that exceed 42 characters must be enclosed in single quotation marks (').

### **User job card settings for customization jobs**

The job card information to be inserted into the generated jobs for customizing a product. The default value is the job statement information from the ISPF Batch Selection panel.

The first line of the job card automatically begins with the following information:

```
//          JOB
```

where characters 3 - 10 are reserved by Tools Customizer for the job name and includes a blank space after JOB. This name cannot be edited. Information that you specify on the first line of the job card cannot exceed 57 characters. This character limit includes a continuation character. All other lines of the job card cannot exceed 72 characters.

3. Press End to save and exit. If the Discover output data set and the data store data set that you specified do not exist, Tools Customizer creates them.

**Important:** If the ISPF sessions unexpectedly ends before you exit Tools Customizer, the fields on the Tools Customizer Settings panel (CCQPSET) will be repopulated with default values, and you will be required to review them or specify new values again.

## Results

The values are saved, and the IBM Tools Customizer for z/OS main menu panel (CCQPHME) is displayed again.

## What to do next

You are ready to customize or recustomize DB2 Table Editor or to change parameter settings.

---

## DB2 Version Migration and Fallback

When a DB2 subsystem that is being used with DB2 Table Editor is migrated to a later version, or must be reverted to a prior version, follow the steps in this section.

### Using the DB2 Table Editor Console and User components after upgrading to a new version of DB2

After upgrading to a new version of DB2, you must make changes to DB2 Table Editor before using DB2 Table Editor to access the updated version of DB2.

#### Procedure

Use the Table Editor Console component to define and configure the new database server that you want to access with Table Editor. This includes:

- Creating the Server Definition File entries
- Creating the DB2 Table Editor database tables
- Binding the DB2 Table Editor packages
- Configuring grant authorities

### Using the DB2 Table Editor ISPF interface after migration or fallback of a DB2 version

After migration or fallback of a DB2 version, follow these steps to use the DB2 Table Editor ISPF interface:

#### Procedure

1. Start Tools Customizer.

2. Run the **Discover** command to ensure that the Tools Customizer datastore is up to date.
3. For each DB2 subsystem that has been customized, complete the following tasks:
  - a. On the Customizer Workplace panel, edit the DB2 entry.
  - b. On the DB2 Parameters panel, change the Mode and Level number fields to the new DB2 mode and level. Change other DB2 specific fields, such as library or BSDS names, as required. Save and exit the DB2 Parameters panel.
  - a. On the Customizer Workplace panel, regenerate the customization jobs for the subsystem.
  - b. Submit the SSID-specific update control file job.
  - c. For DB2 migrations only, submit jobs to update the repository. Skip this step when falling back.
  - d. For fallback only, submit the job to free previously bound plans and packages from the fallback subsystem.
  - e. Submit the bind job.

## Using the DB2 Table Editor Console and User components after migration or fallback of a DB2 version

Use the Table Editor Console component to define and configure the new database server that you want to access with the Table Editor Console and User components. This includes the following tasks:

### Procedure

1. Create the Server Definition File entries to access the DB2 subsystem after it has been upgraded, or after it has fallen back to the previous version.
2. Bind the DB2 Table Editor packages when migrating to a new version, or when falling back.
3. Configure and grant authorities.

---

## Using DB2 Table Editor after migrating to a new version of DB2

After migrating your DB2 database to a new version of DB2, you must re-bind the DB2 Table Editor packages using the DB2 Table Editor Console component.





---

## Chapter 3. Customizing DB2 Table Editor

Using Tools Customizer to customize DB2 Table Editor consists of identifying the product to customize; defining any required DB2 Table Editor, LPAR, and DB2 parameters; generating the customization jobs; and submitting the jobs.

Customization roadmaps describe the steps that you must complete to customize DB2 Table Editor. Separate roadmaps are provided for the three most common types of customizations.

Use the following table to determine which roadmap corresponds to your environment.

*Table 6. Customization roadmaps*

Environment description	Roadmap
You do not have a customized version of DB2 Table Editor, and you need to customize it for the first time.	"Roadmap: Customizing DB2 Table Editor for the first time"
You have already customized a version of DB2 Table Editor, and you want to use the same parameter values to customize a different version.	"Roadmap: Customizing a new version of DB2 Table Editor from a previous customization" on page 42
You have a customized version of of DB2 Table Editor, but you want to change one or more parameter values.	"Roadmap: Recustomizing DB2 Table Editor" on page 43

---

### Roadmap: Customizing DB2 Table Editor for the first time

This roadmap lists and describes the steps that are required to customize DB2 Table Editor for the first time.

Before you complete these steps, ensure that the following prerequisites have been met:

- All of the product customization steps that must be done before Tools Customizer is started are complete.
- The LPAR ISPF libraries that are required to submit the jobs are known.
- Tools Customizer is started.
- The Tools Customizer settings have been reviewed or modified, and saved.

Complete the steps in the following table to customize DB2 Table Editor for the first time.

*Table 7. Steps for customizing DB2 Table Editor for the first time*

Step	Description	Instructions
1	Specify the metadata library for the product that you want to customize.	"Specifying the metadata library for the product to customize" on page 44
2	Create new DB2 entries and associate them with DB2 Table Editor.	"Creating and associating DB2 entries" on page 48
3	Define the required parameters.	"Defining parameters" on page 51

*Table 7. Steps for customizing DB2 Table Editor for the first time (continued)*

Step	Description	Instructions
4	Generate the customization jobs for the product or for the DB2 entries on which DB2 Table Editor is ready to be customized.	"Generating customization jobs" on page 57
5	Submit the generated customization jobs.	"Submitting customization jobs" on page 57

The following table lists some of the common administrative tasks that you might need to do during the customization process.

*Table 8. Administrative tasks*

Description	Instructions
Browse the different types of parameters.	"Browsing parameters" on page 59
Copy an existing DB2 entry to the list of DB2 entries on which DB2 Table Editor can be customized.	"Copying DB2 entries" on page 60
Remove one or more DB2 entries from the associated list.	"Removing DB2 entries" on page 61
Delete one or more DB2 entries from the master list.	"Deleting DB2 entries" on page 62
Display a list of customization jobs that have been previously generated.	"Displaying customization jobs" on page 62
Maintain the customization jobs in the customization library.	"Maintaining customization jobs" on page 63

## Roadmap: Customizing a new version of DB2 Table Editor from a previous customization

This roadmap lists and describes the steps for customizing a new version of DB2 Table Editor based on the existing customization values of a previous version of the same product.

Before you complete these steps, ensure that the following prerequisites have been met:

- All of the product customization steps that must be done before Tools Customizer is started are complete.
- Tools Customizer is started.
- The Tools Customizer settings have been reviewed or modified, and saved.

Complete the steps in the following table to customize a new version of DB2 Table Editor from a previous customization.

*Table 9. Steps for customizing a new version of DB2 Table Editor from a previous customization*

Step	Description	Instructions
1	Specify the metadata library for the product that you want to customize.	"Specifying the metadata library for the product to customize" on page 44

*Table 9. Steps for customizing a new version of DB2 Table Editor from a previous customization (continued)*

Step	Description	Instructions
2	Use the DB2 Table Editor Discover EXEC to discover information about the version of DB2 Table Editor that you previously customized manually.	"Discovering DB2 Table Editor information automatically" on page 46
3	Define the required parameters.	"Defining parameters" on page 51
4	Generate the customization jobs for the product or for the DB2 entries on which DB2 Table Editor is ready to be customized.	"Generating customization jobs" on page 57
5	Submit the generated customization jobs.	"Submitting customization jobs" on page 57

The following table lists some of the common administrative tasks that you might need to do during the customization process.

*Table 10. Administrative tasks*

Description	Instructions
Browse the different types of parameters.	"Browsing parameters" on page 59
Copy an existing DB2 entry to the list of DB2 entries on which DB2 Table Editor can be customized.	"Copying DB2 entries" on page 60
Remove one or more DB2 entries from the associated list.	"Removing DB2 entries" on page 61
Delete one or more DB2 entries from the master list.	"Deleting DB2 entries" on page 62
Display a list of customization jobs that have been previously generated.	"Displaying customization jobs" on page 62
Maintain the customization jobs in the customization library.	"Maintaining customization jobs" on page 63

## Roadmap: Recustomizing DB2 Table Editor

This roadmap lists and describes the steps to change parameter values and regenerate customization jobs for DB2 Table Editor after you have customized it for the first time.

The new customization jobs will replace the customization jobs that were previously generated and stored in the customization library. Part of the recustomization process includes selecting or deselecting optional tasks or steps, changing the definitions of parameters that have already been defined, or both. Use the method in this roadmap instead of deleting customization jobs from the customization library.

Before you complete these steps, ensure that the following prerequisites have been met:

- All of the product customization steps that must be done before Tools Customizer is started are complete.
- Tools Customizer is started.

Complete the steps in the following table to recustomize DB2 Table Editor.

*Table 11. Required steps for recustomizing DB2 Table Editor*

Step	Description	Instructions
1	Specify the metadata library for the product that you want to recustomize.	"Specifying the metadata library for the product to customize"
2	Edit the specific tasks, steps, or parameters that need to be changed.	<ul style="list-style-type: none"> <li>• "Defining DB2 Table Editor parameters" on page 51</li> <li>• "Defining LPAR parameters" on page 53</li> <li>• "Defining DB2 parameters" on page 55</li> </ul>
3	Generate the customization jobs for the product or for the DB2 entries on which DB2 Table Editor is ready to be customized.	"Generating customization jobs" on page 57
4	Submit the new generated customization jobs.	"Submitting customization jobs" on page 57

The following table lists some of the common administrative tasks that you might need to do during the customization process.

*Table 12. Administrative tasks*

Description	Instructions
Browse the different types of parameters.	"Browsing parameters" on page 59
Copy an existing DB2 entry to the list of DB2 entries on which DB2 Table Editor can be customized.	"Copying DB2 entries" on page 60
Remove one or more DB2 entries from the associated list.	"Removing DB2 entries" on page 61
Delete one or more DB2 entries from the master list.	"Deleting DB2 entries" on page 62
Display a list of customization jobs that have been previously generated.	"Displaying customization jobs" on page 62
Maintain the customization jobs in the customization library.	"Maintaining customization jobs" on page 63

## Specifying the metadata library for the product to customize

You must specify a metadata library for the product that you want to customize.

### About this task

The metadata library contains the information that determines which tasks, steps, and parameters are required to customize DB2 Table Editor. This information controls what is displayed on the Product Parameters panel, the LPAR Parameters panel, and the DB2 Parameters panel.

After DB2 Table Editor has been SMP/E installed, the default name of the product metadata library is *high\_level\_qualifier*.SETIDENU, where *high\_level\_qualifier* is all of the segments of the data set name except the lowest-level qualifier.

## Procedure

1. Specify option 1 on the Tools Customizer for z/OS panel. The Specify the Metadata Library panel is displayed. This panel contains a list of the metadata libraries that you specified most recently. If you are using Tools Customizer for the first time, this list is empty, as shown in the following figure:

```
CCQPHLQ          Specify the Metadata Library          13:09:50
Command ==>>>          Scroll ==>> PAGE

Type the name of the metadata library for the pack or the product in the
Metadata library field, or select the library in the list of previous
libraries and press Enter to populate the field. Press Enter to continue.

The default name of the metadata library after the pack or product has been
SMP/E installed is <hlq>.SxxxDENU, where <hlq> is the high-level qualifier for
the pack or the product, and xxx is the 3-character prefix for the pack or
the product.

Metadata library . ETI.WRK0440.SETIDENU

Previously Used Metadata Library:

=>
=>
=>
=>
=>
```

Figure 3. The Specify the Metadata Library panel

2. Use one of the following methods to specify the product metadata library:
  - Type the name of a fully qualified partitioned data set (PDS) or an extended partitioned data set (PDSE) in the **Metadata library** field. Double quotation marks (") cannot be used around the name. Single quotation marks (') can be used but are not required. If you are customizing DB2 Table Editor for the first time, you must use this method.
  - Place the cursor on the library name in the Recent Metadata Libraries list, and press Enter.

## Results

If you are customizing DB2 Table Editor for the first time, the Run Discover EXEC panel is displayed. Otherwise, the Customizer Workplace panel is displayed.

## What to do next

- Complete the steps that correspond to your environment:

### Customizing DB2 Table Editor for the first time

Do not run the DB2 Table Editor Discover EXEC. Press End. The Customizer Workplace panel is displayed. If your environment requires associated DB2 entries, ensure that they are created and associated. If your environment does not require associated DB2 entries, skip this step, and edit DB2 Table Editor parameters.

### Customizing DB2 Table Editor from a previous or current customization

Press Enter to run the DB2 Table Editor Discover EXEC. The Discover Customized Product Information panel is displayed. Specify the required information for running the EXEC.

---

## Discovering DB2 Table Editor information automatically

You can use the DB2 Table Editor Discover EXEC to discover information from a previous or current customization of DB2 Table Editor.

### About this task

**Tip:** Using the DB2 Table Editor Discover EXEC to discover information from a previous or current customization saves time and reduces errors that can occur when parameters are specified manually.

DB2 Table Editor provides the Discover EXEC that you will run. Therefore, the information that can be discovered depends on DB2 Table Editor.

Parameter values that are discovered and parameter values that are specified manually are saved in the data store. If parameter values for the product that you want to customize exist in the data store, Tools Customizer issues a warning before existing values are replaced.

### Procedure

1. On the Customizer Workplace panel, issue the DISCOVER command. If you chose to run the DB2 Table Editor Discover EXEC on the pop-up panel after you specified the product to customize, skip this step.

**Tip:** You can run any Tools Customizer primary command by using either of the following methods:

- Place the cursor on the name of the primary command, and press Enter.
- Type the primary command name in the command line, and press Enter.

The Discover Customized Product Information panel is displayed, as shown in the following figure:

```

CCQPDC          Discover Customized Product Information          14:11:22
Command ==>>>          Scroll ==>> PAGE

For the product you are customizing, the Discover EXEC retrieves product
information from an already customized product. Specify the required
information. To save your information and run the Discover EXEC, issue the RUN
command. To save your information and stay on this panel, issue the SAVE
command. To verify the syntax of your information without saving it, press
Enter. To save and exit, press End.

Commands: RUN  SAVE

Product to Customize
  Product metadata library : ETI.WRK0440.SETIDENU          > LPAR. . . : RS25
  Product name . . . . . : IBM DB2 Table Editor for z > Version . : 4.4.0

                                                                    More:  +
Discover EXEC for Extracting Information from an Already Customized Product
Discover EXEC library . . . ETI.WRK0440.SETIDENU
Discover EXEC name . . . . : ETIDISC
Discover output data set . . CSJENN.ETITEST.DISCOVER

Information for Discover EXEC
New Table Editor load library . . . . . DB2TOOL.ETI440.LOADLIB          >
New Table Editor ISPF panels library . . . DB2TOOL.ETI440.SETIPENU          >
New Table Editor ISPF messages library . . DB2TOOL.ETI440.SETIMENU          >
Previous control file . . . . . ETI.V430.CONTROL                          >
Previous startup CLIST data set . . . . . DB2TOOL.ETI430.SETISAMP          >
Previous startup CLIST member (ETI) . . . . ETIV43

```

Figure 4. The Discover Customized Product Information panel

2. Either accept the default values for the following input fields that Tools Customizer generates, or replace the default values with your own values:

**Discover EXEC library**

The fully qualified data set name that contains the DB2 Table Editor Discover EXEC.

**Discover EXEC name**

The name of the DB2 Table Editor Discover EXEC.

**Discover output data set**

The fully qualified data set where output from the DB2 Table Editor Discover EXEC is stored.

3. Either accept or change the default values in the **Information for Discover EXEC** fields. These fields are generated by DB2 Table Editor. They show the information that is required to run the DB2 Table Editor Discover EXEC.
4. Issue the RUN command to run the DB2 Table Editor Discover EXEC. Alternatively, save your information without running the DB2 Table Editor Discover EXEC by issuing the SAVE command. If you issue the RUN command to run the DB2 Table Editor Discover EXEC, the parameter information is discovered for DB2 Table Editor, and the Customizer Workplace panel is displayed.

**Results**

The discovered parameter values for DB2 Table Editor replace any existing values.

**What to do next**

The next step depends on your environment:

- If DB2 entries were not discovered, or if you need to customize DB2 Table Editor on new DB2 entries, create and associate the entries.

- If DB2 entries were discovered and you want to customize DB2 Table Editor on only these entries, define the parameters.

**Related tasks:**

“Creating and associating DB2 entries”

You can create new DB2 entries and associate them with DB2 Table Editor.

“Defining parameters” on page 51

To customize DB2 Table Editor, you must define DB2 Table Editor parameters, LPAR parameters, and DB2 parameters, if your customization requires DB2 entries.

## Creating and associating DB2 entries

You can create new DB2 entries and associate them with DB2 Table Editor.

### About this task

The list of associated DB2 entries is on the Customizer Workplace panel.

### Procedure

1. Issue the ASSOCIATE command on the Customizer Workplace panel. The Associate DB2 Entry for Product panel is displayed, as shown in the following figure:

```

CCQPDAD          Associate DB2 Entry for Product          14:24:38
Command ==>>>          Scroll ==>> CSR

Select any of the following DB2 entries to add them to the Customizer
Workplace panel. You use the Customizer Workplace panel to choose the DB2
subsystems, data sharing members, and group attach names on which to
customize the product.

Commands: CREATE - Create a new DB2 entry

Product to Customize
Product metadata library : ETI.WRK0440.SETIDENU          > LPAR . . : RS25
Product name . . . . . : IBM DB2 Table Editor for z/OS
Product version . . . . : 4.4.0

Line commands: A - Associate C - Copy

Cmd SSID GrpAtch
----- End of DB2 entries -----

```

*Figure 5. The Associate DB2 Entry for Product panel*

2. Create DB2 entries. If you need to associate DB2 entries that are already in the master list, skip this step and go to step 3.
  - a. Issue the CREATE command. The Create DB2 Entries panel is displayed, as shown in the following figure:



```

CCQPDCR          Create a DB2 Entry
Command ===>

Specify a DB2 subsystem ID, a DB2 group attach name, or both for the
new DB2 entry. Press Enter to continue or End to cancel.

New DB2 Entry Information
DB2 subsystem ID . . . . .
DB2 group attach name . .

```

Figure 6. The Create a DB2 Entry panel

- b. In the appropriate columns, specify a DB2 subsystem ID or DB2 data sharing member name for the DB2 entry that you want to create, and press Enter. Valid values are 1 - 4 characters. You can use symbolic characters. You cannot use blanks.

**Tips:**

- To insert multiple DB2 entries, specify the *Inm* line command, where *nm* is the number of DB2 entries to be inserted.
- You will define specific parameters for these new DB2 entries on the DB2 Parameters panel. This panel is displayed after you select these new DB2 entries and issue the line command to generate the jobs, after you issue the primary command to generate the jobs for all associated DB2 entries, or when you manually edit the DB2 parameters.

The Associate DB2 Entry for Product panel is displayed, and the new DB2 entry is displayed in the master list, as shown in the following figure:

```

CCQPDAD          Associate DB2 Entry for Product      DB2 entry created
Command ==>>>                               Scroll ==>> CSR

Select any of the following DB2 entries to add them to the Customizer
Workplace panel. You use the Customizer Workplace panel to choose the DB2
subsystems, data sharing members, and group attach names on which to
customize the product.

Commands: CREATE - Create new DB2 entries

DB2 Entries
Line commands: A - Associate C - Copy D - Delete
Cmd SSID GrpAttch
  DB02  --
----- End of DB2 entries -----

```

```

CCQPDAD          Associate DB2 Entry for Product      DB2 entry created
Command ==>>>                               Scroll ==>> CSR

Select any of the following DB2 entries to add them to the Customizer
Workplace panel. You use the Customizer Workplace panel to choose the DB2
subsystems, data sharing members, and group attach names on which to
customize the product.

Commands: CREATE - Create a new DB2 entry

Product to Customize
Product metadata library : ETI.WRK0440.SETIDENU      > LPAR . . : RS25
Product name . . . . . : IBM DB2 Table Editor for z/OS
Product version . . . . . : 4.4.0

Line commands: A - Associate C - Copy

Cmd SSID GrpAttch
  D91A  --

```

Figure 7. The Associate DB2 Entry for Product panel with a new DB2 entry in the master list

- c. Repeat steps b and c for each DB2 entry that you want to create.
  - d. When you have created all the DB2 entries, associate them with DB2 Table Editor, or press End to display the Customizer Workplace panel.
3. Associate DB2 entries.
- a. Specify A against one or more DB2 entries in the master list, and press Enter to associate them with DB2 Table Editor.

**Results**

The Customizer Workplace panel is displayed with the associated DB2 entries displayed in the associated list.

**What to do next**

Define the parameters.

**Related concepts:**

“Tools Customizer terminology” on page 307  
 Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

---

## Defining parameters

To customize DB2 Table Editor, you must define DB2 Table Editor parameters, LPAR parameters, and DB2 parameters, if your customization requires DB2 entries.

### About this task

You must define the DB2 Table Editor parameters first for the following reasons:

- If you ran the DB2 Table Editor Discover EXEC, you must review the values that were discovered.
- If you select optional tasks and steps on the Product Parameters panel that affect the DB2 entry on which you will customize DB2 Table Editor, additional parameters might be displayed on the DB2 Parameters panel.
- If other steps must be completed in a specific sequence, customization notes on the Product Parameters panel will display the correct sequence.

## Defining DB2 Table Editor parameters

DB2 Table Editor parameters are specific to DB2 Table Editor.

### About this task

If you ran the DB2 Table Editor Discover EXEC, you must review the parameters that were discovered.

### Procedure

1. Specify E next to the **Product parameters** field on the Customizer Workplace panel, and press Enter. The Product Parameters panel is displayed, as shown in the following figure. If other steps must be completed in a specific sequence before you define the DB2 Table Editor parameters, a note labeled **Important** will display the correct sequence on this panel.

```

CCQPPRD                               Product Parameters                               14:18:31
Command ==>>>                               Scroll ==>> PAGE

Complete the following tasks to customize the products. The required tasks and
steps are preselected. Ensure that all parameters are specified for each
selected step within a task. Press End to save and exit.

Commands: SAVE - Save parameter values
Line Commands: / - Select

Product to Customize
  Product metadata library : ETI.WRK0440.SETIDENU      > LPAR. . . : RS25
  Product name . . . . . : IBM DB2 Table Editor for z > Version . : 4.4.0

Product customization library : CSJENN.ETI.TEST.$RS25$.ETI440
                                                                    More:      +

Required parameters
Startup CLIST library . . . . . ETI.WRK0440.SETISAMP      >
DB2 Table Editor v4.4 HLQ . . . . . ETI.WRK0440          >
DB2 Table Editor v4.4 Control file . . . . . ETI.DB2.CONTROL      >

/ Configure EXECs

/ Configure startup CLISTs
DB2 Table Editor Startup CLIST 1 . . . . . ETIV44
Warn when excluding columns . . . . . NO
Warn when exclusively locking . . . . . NO
Warn when entering setup . . . . . NO
Lock in Browse Mode . . . . . YES
Show locking options . . . . . NO
DB2 Table Editor Startup CLIST 2 . . . . . ETIV44B
High level qualifier of the SQL dataset DB2USER          >

/ Bind plans and packages
/ Bind plans and packages
DB2 Table Editor v4.4 DBRM library . . DB2T00L.ETI440.SETIDBRM      >
DB2 Table Editor v4.4 Package Owner . . ETIUSER          >

/ Create control file

/ Create control file
Volume serial number for control file .

/ Update control file

/ Update control file
DB2 Table Editor v4.4 Load Library . . . DB2T00L.ETI440.LOADLIB      >

/ Add Table Editor to the DB2 Tools Launchpad

/ Add Table Editor to the Launchpad
DB2 Admin Tool high-level qualifier . . ADBHILVL          >
ADBDMTI EXEC data set . . . . . ADBHILVL.SADBEXEC          >
DB2 Admin Tool version . . . . . 10

```

Figure 8. The Product Parameters panel

2. Select any required tasks and steps, and specify values for any parameters. After you select a task or step with a slash (/), put the cursor in the selected field and press Enter. If tasks, steps, and parameters are required, they are preselected with a slash (/). Otherwise, they are not preselected. All of the required parameters have default values, which you can either accept or change.

**Tips:**

- In the command line, specify the KEYS command, and map EXPAND to one of the function keys.

- For a detailed description of all input fields, put the cursor in the field, and press F1 or the key that is mapped to Help.
- The following elements apply to specific fields:
  - **Add...** is displayed when parameters can have multiple values but currently have only one value. To specify multiple values in these fields, place the cursor on **Add...**, and press Enter. Use the displayed panel to add or delete additional values.
  - **List...** is displayed when the complete list of valid values for the fields is too long to be displayed on the panel. To see the complete list of values, place the cursor on **List...**, and press F1 or the key that is mapped to Help.
  - **More...** is displayed when input fields contains multiple values. To see all of the values in the field, place the cursor on **More...**, and press Enter.
- 3. Optional: Select other tasks and steps with a slash (/) and press Enter to activate the input fields. Either accept or change the default values that are displayed.
- 4. Press End to save your changes and exit, or issue the SAVE command to save your changes and stay on the Product Parameters panel.

## Results

The Customizer Workplace panel is displayed, and the status of the product parameters is Ready to Customize.

## What to do next

If the status of other parameters on the Customizer Workplace panel is Incomplete or Discovered, edit these parameters.

### Related tasks:

“Defining LPAR parameters”

LPAR parameters are parameters on the local LPAR that are required to customize DB2 Table Editor.

“Defining DB2 parameters” on page 55

DB2 parameters are parameters for a DB2 entry.

## Defining LPAR parameters

LPAR parameters are parameters on the local LPAR that are required to customize DB2 Table Editor.

### Procedure

1. Specify E next to the **LPAR parameters** field, and press Enter. The LPAR Parameters panel is displayed, as shown in the following figure:

```

CCQPLPR                               LPAR Parameters                               14:22:04
Command ==>>                           Scroll ==>> CSR

Enter values for all of the LPAR parameters. Press End to save and exit.

Commands: SAVE - Save parameter values

Product to Customize
Product metadata library : ETI.WRK0440.SETIDENU      > LPAR. . . : RS25
Product name . . . . . : IBM DB2 Table Editor for z > Version . : 4.4.0

ETI LPAR Parameters
ISPF message library . . . . . ISP.ISPPLIB          > Add...
ISPF table input library . . . . . ISP.ISPTLIB       > Add...

```

Figure 9. The LPAR Parameters panel

- Specify values for all required parameters that are displayed. Many parameters have default values, which you can either accept or change.

**Tips:**

- In the command line, specify the KEYS command, and map EXPAND to one of the function keys.
- For a detailed description of all input fields, put the cursor in the field, and press F1 or the key that is mapped to Help.
- The following elements apply to specific fields:
  - Add...** is displayed when parameters can have multiple values but currently have only one value. To specify multiple values in these fields, place the cursor on **Add...**, and press Enter. Use the displayed panel to add or delete additional values.
  - List...** is displayed when the complete list of valid values for the fields is too long to be displayed on the panel. To see the complete list of values, place the cursor on **List...**, and press F1 or the key that is mapped to Help.
  - More...** is displayed when input fields contains multiple values. To see all of the values in the field, place the cursor on **More...**, and press Enter.

The following LPAR parameters can contain 1 - 64 values:

- LPAR macro library
- Message library
- Panel library
- Skeleton library
- ISPF table input library
- ISPF user profile library
- File tailoring output library
- Link list library
- Command procedures library
- Macro library
- Link-edit library
- Load library
- Started task library name

- Press End to save your changes and exit, or issue the SAVE command to save your changes and stay on the same panel.

## Results

The Customizer Workplace panel is displayed, and the status of the LPAR parameters is Ready to Customize.

## What to do next

If the status of other parameters on the Customizer Workplace panel is Incomplete or Discovered, edit these parameters.

### Related tasks:

“Defining DB2 Table Editor parameters” on page 51

DB2 Table Editor parameters are specific to DB2 Table Editor.

“Defining DB2 parameters”

DB2 parameters are parameters for a DB2 entry.

## Defining DB2 parameters

DB2 parameters are parameters for a DB2 entry.

### About this task

If you did not run the DB2 Table Editor Discover EXEC, you must create and associate one or more DB2 entries before you can define the DB2 parameters. For more information, see “Creating and associating DB2 entries” on page 48.

### Procedure

1. Specify E next to one or more DB2 entries in the associated list, which is in the Associated DB2 Entries and Parameter Status section on the Customizer Workplace panel, and press Enter. The DB2 Parameters panel is displayed, as shown in the following figure:

```

CCQPDB2                DB2 Parameters                14:22:59
Command ==>>>                Scroll ==>> CSR

Enter values for all of the DB2 parameters. Press End to save and exit.

Commands: SAVE - Save parameter values

Product to Customize
Product metadata library : ETI.WRK0440.SETIDENU      > LPAR. . . : RS25
Product name . . . . . : IBM DB2 Table Editor for z > Version . : 4.4.0

                                                                More:    +

DB2 subsystem ID . . . . . : DA1A
Group attach name . . . . . :

General DB2 Information
Mode . . . . . NFM (CM,CM8,CM9,NFM)
Level Number . . . . . 910 (810,910,101)

DB2 Libraries
Load Library . . . . . DSN.SDSNLOAD      > Add...
Exit Library . . . . . DSN.SDSNEXIT     > Add...
Bootstrap data set . . . . . DSN.SDSNBSDS > Add...

ETI DB2 Parameters
DB2 ZPARMs member . . . . . DSNZPARM
DB2 Table Editor Plan name . . . . . ETI044P1

ETI Shared Profile Packages
DB2 Table Editor Package name . . . . . ETIV44PK

ETI Shared Profile Devices
Work file device type . . . . . SYSALLDA

```

Figure 10. The DB2 Parameters panel

2. Specify values for all parameters that are displayed.

**Tips:**

- In the command line, specify the KEYS command, and map EXPAND to one of the function keys.
- For a detailed description of all input fields, put the cursor in the field, and press F1 or the key that is mapped to Help.
- The following elements apply to specific fields:
  - **Add...** is displayed when parameters can have multiple values but currently have only one value. To specify multiple values in these fields, place the cursor on **Add...**, and press Enter. Use the displayed panel to add or delete additional values.
  - **List...** is displayed when the complete list of valid values for the fields is too long to be displayed on the panel. To see the complete list of values, place the cursor on **List...**, and press F1 or the key that is mapped to Help.
  - **More...** is displayed when input fields contains multiple values. To see all of the values in the field, place the cursor on **More...**, and press Enter.

Many parameters have default values, which you can either accept or change.

3. Press End to save your changes and exit, or issue the SAVE command to save your changes and stay on the same panel.

**Results**

The status of the DB2 entries that you selected on the Customizer Workplace panel is Ready to Customize.



## What to do next

If the status of other parameters on the Customizer Workplace panel is Incomplete or Discovered, edit these parameters.

### Related tasks:

“Defining DB2 Table Editor parameters” on page 51

DB2 Table Editor parameters are specific to DB2 Table Editor.

“Defining LPAR parameters” on page 53

LPAR parameters are parameters on the local LPAR that are required to customize DB2 Table Editor.

---

## Generating customization jobs

To generate customization jobs for DB2 Table Editor and any associated DB2 entries, issue the GENERATEALL command, or select one or more DB2 entries on which to customize DB2 Table Editor.

### Procedure

Generate the customization jobs by using one of the following methods.

- If you want to generate customization jobs at the product level and for any associated DB2 entries, issue the GENERATEALL command, and press Enter.
- If you want to generate customization jobs for specific DB2 entries, select the DB2 entries by specifying the G line command against them, and press Enter. The available DB2 entries are in the associated list in the Associated DB2 Entries and Parameter Status section.

**Important:** Regenerating customization jobs will replace any existing jobs, including jobs that you might have manually modified after they were generated.

### Results

If the status is Incomplete or Discovered for DB2 Table Editor parameters, LPAR parameters, or DB2 parameters, Tools Customizer automatically starts an editing session for the types of parameters that are required. The session continues until the panel for each type of required parameter has been displayed.

## What to do next

If an automatic editing session is started, accept the displayed parameter values or define values for the required types of parameters, select optional parameters, tasks, or steps for your environment, and save the parameter values. Otherwise, the customization jobs are generated, and you can submit them.

**Tip:** If the customization jobs are generated, but you are not ready to submit them, you can see them later by issuing the JOBLIST command on the Customizer Workplace panel. The JOBLIST command displays the Finish Product Customization panel, which you can use to submit the jobs.

---

## Submitting customization jobs

Submit the customization jobs to customize DB2 Table Editor.

## Before you begin

Ensure that the correct jobs are generated.

## About this task

The following figure shows part of the Finish Product Customization panel. The table on this panel shows the customization jobs that are generated by Tools Customizer. They are grouped by job sequence number.

```
CCQPCST                               Finish Product Customization           Row 1 to 9 of 9
Command ==>>>                         Scroll ==>> CSR

Submit the members in the order in which they apply to all DB2 entries. To
submit the job, browse the member and issue the TSO SUBMIT command, or browse
the customized library and submit the jobs from there.

Product to Customize
  Product metadata library : ETI.WRK0440.SETIDENU           > LPAR . . : RS25
  Product name . . . . . : IBM DB2 Table Editor for z > Version . : 4.4.0

Line Commands: E - Edit  B - Browse

  Product customization library . : CSJENN.ETI.TEST.$RS25$.ETI440           >

Cmd Member  SSID GrpAttch Template Date      Description
-----
A0V44      -- --      ETIV44  2012/04/17  Configure startup CLIST 1
A1V44B     -- --      ETIV44B 2012/04/17  Configure startup CLIST 2
A2#BINAA  DA1A --      ETI#BIND 2012/04/17  DB2 bind jobs
A2#BINAB  D91A --      ETI#BIND 2012/04/17  DB2 bind jobs
A3CNTFL   -- --      ETICNTFL 2012/04/17  Create Control File
A4CF2UAA  DA1A --      ETICF2UP 2012/04/17  Update ETI control file
A4CF2UAB  D91A --      ETICF2UP 2012/04/17  Update ETI control file
A5ADBI    -- --      ETIADBI  2012/04/17  Add to DB2 Admin Launchpad: cre
A6ADBI2   -- --      ETIADBI2 2012/04/17  Add to Admin Tool Launchpad: ex
-----
End of customized jobs -----
```

Figure 11. The Finish Product Customization panel

The member-naming conventions depend on whether the customization jobs are for DB2 entries, and LPAR, or the product.

### Customization jobs for DB2 entries

The members use the following naming convention:

`<job_sequence_number><job_ID><DB2_entry_ID>`

where

#### *job\_sequence\_number*

Two alphanumeric characters, A0 - Z9, that Tools Customizer assigns to a customization job. The number for the first template in the sequence is A0, the number for the second template is A1, and so on.

#### *job\_ID*

Characters 4 - 7 of the template name, if the template name contains five or more characters. Otherwise, only character 4 is used. DB2 Table Editor assigns the template name.

#### *DB2\_entry\_ID*

Two alphanumeric characters, AA - 99, that Tools Customizer assigns to a DB2 entry.

For example, the XYZBNDDDB2\_entry\_ID\_1 and XYZBNDDDB2\_entry\_ID\_2 jobs are generated from the XYZBNDGR template, and the XYZ4DB2\_entry\_ID\_1 and XYZ4DB2\_entry\_ID\_2 jobs are generated from the XYZ4 template. If the jobs are generated on two DB2 entries, the following member names are listed sequentially: A0BNDGAA, A0BNDGAB, A14AA, A14AB.

### Customization jobs for an LPAR or the product

The members use the following naming convention:

*<job\_sequence\_number><job\_ID>*

where

#### *job\_sequence\_number*

Two alphanumeric characters, A0 - Z9, that Tools Customizer assigns to a customization job. The number for the first template in the sequence is A0, the number for the second template is A1, and so on.

#### *job\_ID*

Characters 4 - 8 of the template name, if the template name contains five or more characters. Otherwise, only character 4 is used. For example, for the XYZMAKE template, the job ID is MAKE. For the XYZM template, the job ID is M. DB2 Table Editor assigns the template name, and it is displayed in the Template column.

For example, the XYZBNDGR job is generated from the XYZBNDGR template, and the XYZ4 job is generated from the XYZ4 template. The following member names are listed sequentially: A0BNDGR, A14.

## Procedure

1. Submit the generated customization jobs by following the process that you use in your environment or by using the following method:
  - a. Specify B against a customization job or the product customization library, and press Enter. An ISPF browsing session is started.
  - b. Browse the customization job or each member in the library to ensure that the information is correct.
  - c. Run the TSO SUBMIT command.
2. Press End.

## Results

DB2 Table Editor is customized, and the Customizer Workplace panel is displayed. The status is Customized for the DB2 entries on which DB2 Table Editor was customized.

## What to do next

You can generate more customization jobs for other DB2 entries, view a list of customization jobs that you previously generated, or recustomize DB2 Table Editor.

---

## Browsing parameters

You can browse the product parameters, the LPAR parameters, and the DB2 parameters in read-only mode.

## Procedure

1. On the Customizer Workplace panel, specify B next to the **Product parameters** field, the **LPAR parameters** field, or the DB2 entry that you want to browse, and press Enter. The panel that corresponds to your specification is displayed.
2. Press End to exit.

---

## Copying DB2 entries

You can copy associated and not associated DB2 entries to other DB2 entries or to new DB2 entries.

### About this task

Go to the step that applies to your environment:

- To copy an associated DB2 entry to another associated DB2 entry or to an entry that is not associated, go to step 1.
- To copy an associated DB2 entry to a new entry, go to step 2.
- To copy a DB2 entry that is not associated to a new entry, go to step 3.

### Procedure

1. To copy an associated DB2 entry to another associated DB2 entry or to an entry that is not associated, complete the following steps:
  - a. Specify C against a DB2 entry in the associated list of DB2 entries on the Customizer Workplace panel, and press Enter. The Copy Associated DB2 Entry panel is displayed.
  - b. Select one or more DB2 entries to which information will be copied by specifying the / line command, and press Enter. The Associated column indicates whether the DB2 entry is associated.

**Tip:** To copy information into all of the DB2 Entries in the list, issue the SELECTALL primary command, and press Enter. The Copy DB2 Parameter Values panel is displayed.

- c. Specify an option for copying common and product-specific DB2 parameter values. Common DB2 parameter values apply to all DB2 entries for all products that you have customized by using Tools Customizer. Product-specific DB2 parameter values apply only to the product that you are currently customizing.
  - To copy the common DB2 parameter values and the product-specific DB2 parameter values, specify option 1, and press Enter.
  - To copy only the product-specified DB2 parameter values, specify option 2, and press Enter.

In some cases, the DB2 parameter values might contain the DB2 subsystem ID as an isolated qualifier in data set names. For example, in the DB01.DB01TEST.DB01.SANLLOAD, data set name, the DB01 subsystem ID is isolated in the first and third qualifiers but is not isolated in the second qualifier. When the DB2 subsystem ID is an isolated qualifier in data set names, the Change DB2 Subsystem ID in DB2 Parameter Values panel is displayed. Otherwise, the Customizer Workplace panel is displayed.

- d. If the Change DB2 Subsystem ID in DB2 Parameter Values panel is displayed, specify an option for changing the subsystem IDs. Otherwise, skip this step.

- To change the subsystem ID in isolated qualifiers in data set names, specify option 1, and press Enter.
- To use the same subsystem ID in all values, specify option 2, and press Enter.

The Customizer Workplace panel is displayed with the copied associated entry in the list.

2. To copy an associated DB2 entry to a new entry, complete the following steps:
  - a. Specify C against a DB2 entry in the associated list of DB2 entries on the Customizer Workplace panel, and press Enter. The Copy Associated DB2 Entry panel is displayed.
  - b. Issue the CREATE command. The Create DB2 Entries panel is displayed.
  - c. Specify the SSID, the group attach name, or both in the appropriate columns for each new DB2 entry, and press Enter.

**Tip:** To add rows for additional entries, specify the *Imm* line command, where *mm* is the number of entries to be created, and press Enter. The Copy Associated DB2 Entry panel is displayed with the new entries in the list. The new entries are preselected.

- d. Press Enter to complete the copy process. The Customizer Workplace panel is displayed with the copied entries in the list.
3. To copy a DB2 entry that is not associated to a new entry, complete the following steps:
  - a. Issue the ASSOCIATE command on the Customizer Workplace panel. The Associate DB2 Entry for Product panel is displayed.
  - b. Select one or more DB2 entries by specifying the / line command, and press Enter. The Copy a DB2 Entry panel is displayed.
  - c. Specify the SSID, the group attach name, or both in the appropriate columns for the new DB2 entry, and press Enter. The Associate DB2 Entry for product panel is displayed with the copied entry in the list.
  - d. If you want to associate the copied entry, specify A against it, and press Enter. The Customizer Workplace panel is displayed with the copied entries in the list.

## What to do next

Edit any of the parameters or generate the jobs.

### Related concepts:

“Tools Customizer terminology” on page 307

Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

---

## Removing DB2 entries

You can remove DB2 entries from the associated list.

### About this task

When you remove DB2 entries from the associated list, any customization jobs for the entries are removed from the list of jobs on the Finish Product Customization panel, and they are deleted.

## Procedure

On the Customizer Workplace panel, specify R next to one or more DB2 entries that you want to remove, and press Enter. The selected DB2 entries are removed from the associated list and added to the master list on the Associate DB2 Entry for Product panel, and the customization jobs are deleted.

### Related concepts:

“Tools Customizer terminology” on page 307

Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

---

## Deleting DB2 entries

You can delete DB2 entries from the master list.

### About this task

When you delete DB2 entries from the master list, any associations and all customization jobs for products that are customized on the entries will be deleted.

### Procedure

1. On the Customizer Workplace panel, issue the ASSOCIATE command. The Associate DB2 Entry for Product panel is displayed.
2. Specify D next to one or more DB2 entries that you want to delete, and press Enter. If the entry is associated with any products, the Delete Associated DB2 Entry panel for the first DB2 entry that you selected is displayed. Otherwise, the Delete DB2 Entry panel is displayed.
3. To delete the DB2 entries, press Enter. If the DB2 entries are associated with any products in the table on the Delete Associated DB2 Entry panel, any associations and all customization jobs for the products that are customized on it are deleted. Otherwise, only the DB2 entries are deleted. If you selected multiple DB2 entries to delete, the next DB2 entry that you selected is displayed on either the Delete Associated DB2 Entry panel or the Delete DB2 Entry panel. Otherwise, the Associate DB2 Entry for Product panel is displayed.

### What to do next

If you selected multiple DB2 entries to delete, repeat step 3 until all selected entries are deleted. Then, continue the customization process.

---

## Displaying customization jobs

You can view a list of the members that contain the customization jobs before or after you submit the jobs.

### About this task

The customization jobs that you generate for one DB2 entry are also displayed when you customize DB2 Table Editor for another DB2 entry later.

### Procedure

On the Customizer Workplace panel, issue the JOBLIST command. The Finish Product Customization panel is displayed. This panel shows the list of jobs that you have previously generated. They are grouped by job sequence number. Use

this panel to browse or edit the generated jobs before you submit them.

---

## Maintaining customization jobs

Instead of deleting customization jobs outside of Tools Customizer, you can maintain the correct jobs for DB2 Table Editor by completing the steps for recustomization.

### About this task

You cannot delete or rename customization jobs from the customization library by starting an ISPF browse or edit session from the Finish Product Customization panel. If you try to delete customization jobs by using this method, the CCQC034S message is issued. If you try to rename customization jobs, the CCQC035S message is issued.

If you delete or rename customization jobs from the customization library by using ISPF outside of Tools Customizer, Tools Customizer will not recognize that the jobs were deleted, and the Finish Product Customization panel will still display them. If you browse or edit jobs that were deleted from the library outside of Tools Customizer, the CCQC027S message is issued.

### Procedure

To maintain the correct customization jobs in the customization library, complete the steps for recustomization.

---

## Using Tools Customizer in a multiple-LPAR environment

Currently, Tools Customizer supports only the local LPAR; however, you can propagate customizations to additional LPARs by using either of two different methods.

### About this task

In a multiple-LPAR environment, Tools Customizer identifies the LPAR to which you are logged on. Tools Customizer uses this LPAR name for several different parameter settings, one of which is the data store. When you use the data store during the customization of DB2 Table Editor that is on a different LPAR, Tools Customizer issues message CCQD586S, which indicates that the product has already been customized based on values from the data store on the first LPAR. This message is issued to prevent the data store from becoming corrupted.

This behavior occurs in the following conditions:

- Tools Customizer is installed on a DASD device that is shared by multiple LPARs.
- After a product is customized by using Tools Customizer, the data store is copied to another LPAR.

### Procedure

To customize products running against a DB2 subsystem on an LPAR where Tools Customizer is not installed, consider using one of the following methods:

**Install one instance of Tools Customizer on one LPAR**

If you intend to reuse the customization values for all the instances of your products on all LPARs, use this method.

1. Associate all the DB2 entries in this one instance of Tools Customizer. The LPARs on which the DB2 subsystems reside do not matter.
2. Generate the customization jobs for each DB2 entry.
3. Copy the generated customization jobs to the LPAR to run against the specific DB2 entries. Some LPAR-specific edits might be required. You can make these edits in the customized jobs that you copied. Note that this situation is one of the few situations where you might need to make manual changes to the jobs that are customized by Tools Customizer.

**Install one instance of Tools Customizer on each LPAR**

If you do not want to reuse previous customization values and you want to start new customizations, use this method.

**Important:** This method will likely not be the preferred approach for most organizations because most organizations tend to use similar or identical customization values for each product instance on all LPARs.



---

## Chapter 4. Installing DB2 Table Editor Components

DB2 Table Editor consists of four components that serve different purposes. Install the components that you want to use. All of the components are shipped in an SMP/E package.

### Topics:

- “Installing the DB2 Table Editor Console, Developer, and User components”
- “Customizing the DB2 Table Editor ISPF component” on page 31

---

### Installing the DB2 Table Editor Console, Developer, and User components

The installation files for the Console component, User component, and Developer components are found in the SETICLNT data set that is included in the SMP/E package.

#### Procedure

1. Locate the SETICLNT data set from the SMP/E installation.
2. Locate member ETIWIN
3. Use FTP to transfer member ETIWIN (in binary) to your workstation, renaming the member with a local file name of ETIWIN.zip.
4. Create a folder called Disk1 on your computer.
5. Open ETIWIN.zip and unzip it the Disk1 folder.
6. Browse to the Disk1 folder and right-click setup.exe; then, select **Run as Administrator**. The DB2 Table Editor installation starts.
7. Follow the steps in the DB2 Table Editor Installation wizard. For specific information on items in the install wizard, click the Help button to access the online help.
8. When the installation is complete, start the DB2 Table Editor Console and create a server definition file for each server that you want to access using DB2 Table Editor.

**Note:** You must set up server definition files for the servers that you want to access using before you can access these servers using DB2 Table Editor Developer or Windows User. Use the DB2 Table Editor Console to set up server definition files.

9. Bind the DB2 Table Editor packages.

### Configuring for unattended installation

You can setup an unattended installation of DB2 Table Editor Console, Developer, and User components with predefined user options. An unattended installation allows you to select the installation options for your DB2 Table Editor users before beginning the installation process. This will prevent you from needing to install and configure each instance of DB2 Table Editor individually.

#### Procedure

1. Define the user options for DB2 Table Editor. There are two common options that you can predefine for your users:

- Database Servers - you can define the database servers that users will access when they are using DB2 Table Editor. For more information on Database Servers, see Defining a DB2 Database Server in an SDF.
- SNA product - you can specify which SNA Product you are using. If you are using a CLI or TCP/IP connection, you do not need to define this setting. For more information on SNA networks, see Using SNA networks.

To define the Database Servers and SNA product user options:

- Open the file named DB2Forms.reg, located in the Disk1 directory in the DB2 Table Editor installation directories.
- Navigate to the following section of the file: [HKEY\_CURRENT\_USER\Software\IBM\RDBI\Options].
- Specify values for the server definition file and the CPICDLL (which is used to specify the type of SNA product that you are using) options in this file. Ensure that all back slashes (\) are doubled. For example, specify c:\dir (not c:\dir) and that both the option name and value are enclosed in double quotes.

Example:

```
"ServerDefinitionsFile"="f:\windows\sdf.ini"
"CPICDLL"="c:\windows\system\wincpic.dll"
```

- Save options file on Disk1.** After you edit and save the appropriate predefinition file, copy it to Disk1 of the DB2 Table Editor installation diskettes or installation media.
- Open the file named setup.ini, located in the Disk1 directory in the DB2 Table Editor installation directories.
  - Edit setup.ini to set the configuration options as desired. The variables that can be set are listed in Table 13:

Table 13. Variables

[Options]	Possible Settings	Effect
AutoInstall=	0,1	Specify 1 to perform an unattended installation. All other settings in setup.ini are ignored if this parameter is set to 0.
FileServerInstall=	0,1	Specifies whether DB2 Table Editor is already installed on a file server. If the setting is 0, all DB2 Table Editor files are installed to the directory specified in the <i>InstallPath</i> variable. If the setting is 1, DB2 Table Editor must be previously installed into the directory specified in the <i>InstallPath</i> variable.
SetupType=	0,1,2	Specifies the type of installation to perform. <ul style="list-style-type: none"> <li>• 0 indicates a typical installation</li> <li>• 1 indicates a compact installation</li> <li>• 2 indicates a custom installation If you select 2, you must indicate which components to install.</li> </ul> <p><b>Note:</b> Option 2, the custom installation, is strongly recommended. Most users do not require the Console and Developer components, and the custom installation lets the system administrator give the user the most efficient installation possible.</p>

Table 13. Variables (continued)

[Options]	Possible Settings	Effect
InstallPath=	<directory>	Specifies the directory that will receive the DB2 Table Editor installation (if FileServerInstall=0) or the file server directory that already contains the installation (if FileServerInstall=1).
ProgramGroup=	<program group name>	Specifies the name of the program group that will be created (under Program Manager) or the program folder that will be created (for the Windows, XP Start menu).
Admin=	0,1	Specifies whether to install the DB2 Table Editor Console component program files. If FileServerInstall=1, files are not copied to the local machine, but program group icons are still created. Always set this option to 0 for user installations.
Developer=	0,1	Specifies whether to install the main DB2 Table Editor Developer component program files. If FileServerInstall=1, files are not copied to the local machine, but program group icons are still created.

For Example:

```
[Options]
AutoInstall=1
FileServerInstall=0
SetupType=0
InstallPath=C:\Program Files\DB2 Table Editor
ProgramGroup=DB2 Table Editor
```

This sample setup.ini file specifies an unattended installation. This sample file would produce a typical installation with files copied to the C:\Program Files\DB2 Table Editor directory, and a program group or program folder created named DB2 Table Editor.

4. Save setup.ini to Disk1 in the DB2 Table Editor installation directories.
5. Run the installation from the server. The installation proceeds automatically.

## DB2 Table Editor component configuration

After you have installed DB2 Table Editor components, you must configure them using the DB2 Table Editor Console component. Using the DB2 Table Editor Console component, you create a Server Definition File (SDF) where you specify the technical information that DB2 Table Editor needs to connect end users to database servers. A SDF created by the DB2 Table Editor administrator must be available to all who use any of the DB2 Table Editor interfaces.

### Specifying the SDF to be used by the DB2 Table Editor Developer or User components

In order to use the DB2 Table Editor Developer and User components, you must specify a server definition file (SDF).

#### Procedure

1. In the DB2 Table Editor Developer or User components, select **View --> Options**.

2. In the Options notebook, click the **General** tab.
3. On the General page, in the **Server definition file** field, type the SDF name, or navigate to the location of the SDF that you want to use and select the file using the ... button.
4. Click **OK**. The Options notebook closes. The server definition file that you selected will be used for the Developer component and any other components of DB2 Table Editor on your machine.

## **Changing the SDF to be used by the DB2 Table Editor Developer or User components**

### **Procedure**

1. In the DB2 Table Editor Developer or User components, select **View --> Options**. The Options notebook opens.
2. In the Options notebook, click the **General** tab.
3. On the General page, in the **Server definition file** field, type the SDF name, or navigate to the location of the SDF that you want to use and select the file using the ... button.
4. Click **OK**. The Options window closes.
5. The servers that are defined in the SDF that you selected now appear in your server list.

---

## Chapter 5. The DB2 Table Editor ISPF Interface

DB2 Table Editor for z/OS has both a Windows interface and an ISPF interface that can be used to access z/OS or OS/390 servers. The ISPF interface is intended for database administrators and developers who want to use DB2 Table Editor to edit table data in an ISPF environment without setting up a server. DB2 Table Editor for ISPF allows you to work with DB2 tables in an ISPF environment using a quick and easy interface. You can access, edit, and search data stored on databases through DB2 Table Editor. You can also perform Inserts, Updates, and Deletes without writing SQL. This documentation assumes that you are familiar with ISPF and basic DB2 concepts.

### Topics:

- “Working with the DB2 Table Editor ISPF interface”
- “Column display functions” on page 101
- “The use of color in DB2 Table Editor ISPF interface” on page 110
- “Data type abbreviations that are used in the DB2 Table Editor ISPF interface” on page 110
- “DB2 Table Editor ISPF interface line commands” on page 111

---

### Working with the DB2 Table Editor ISPF interface

To use the DB2 Table Editor ISPF interface, first invoke DB2 Table Editor. Then, specify the table name that you want to view or edit, and make choices about the way that you want to view or edit it.

#### Starting DB2 Table Editor on ISPF

You can invoke the DB2 Table Editor ISPF interface by running the CLIST ETIV44.

#### About this task

For example, from the ISPF TSO command panel, issue the following command:  
EX &CLIST(ETIV44)

where *&CLIST* is the name that was specified in the Startup CLIST library panel (CCQPPRD).

This will open the DB2 Table Editor Main Menu panel (ETI\$MAIN).

#### Starting DB2 Table Editor from the Administration Tool Launchpad

##### Before you begin

You can invoke the DB2 Table Editor ISPF interface from the Administration Tool Launchpad if you added DB2 Table Editor to the DB2 Administration Tool Launchpad during installation and configuration.

##### Procedure

1. From the DB2 Administration Tool menu panel (ADB2), select **1 (DB2 system catalog)**.

- From the System Catalog panel (ADB21), fill in the **Standard Selection Criteria** near the bottom of the panel to specify the tables that you want to see, then select **T (Tables, views, and aliases)**.
- From the Tables, Views, and Aliases panel (ADB21T), place a "?" in the **Sel** column and press Enter. The list of available commands is displayed. Select the option from the list that indicates that you can edit the table.

## The DB2 Table Editor ISPF main panel

The DB2 Table Editor ISPF main panel is the primary menu from which you navigate through DB2 Table Editor. Use this panel (shown in the following figure DB2 Table Editor main panel) to make choices about the tables that you want to view or edit.

```

ETI$MAIN V4R4 ----- IBM DB2 Table Editor ----- 2015/05/27 17:01:18
Option ==>                                     Scroll ==> PAGE

DB2 Subsystem ID DA1A      Current SQLID PDMONA      User: PDMONA
-----
Table Location           *
Table Creator Like      *      > (DB2 Like Criteria for Selection List)
Table Name Like         *      >

Fetch Limit              0      (Zero has no limit)
Max Char Display        30      (1-32768)
Lock Table              N      (Shared / Exclusive / No)
Skip Locked Data        N      (Yes / No) (DB2 V9 and up)
NULL default value      N      (Yes / No)
Use default values      Y      (Yes / No)
Show separator          Y      (Yes / No)
Separator character     ,
Decimal character       .
Disp Hidden Columns    Y      (Yes / No)
Show Column Labels     Y      (Yes / No)
Always use unique index N      (Yes / No)
Save options            Y      (Yes / No)
Print to file options
  Data set name        SQLID.ETI1234.OUTPUT
  Delimiter            ,
  Column headers      Y      (Yes / No)
  Allocation          M      (Automatic / Manual)

Enter END command to return to ISPF, S to go to the setup screen,
or L to go to the Log Display screen.

```

Figure 12. DB2 Table Editor main panel

The fields on the DB2 Table Editor ISPF main panel are listed and described in the following table:

Table 14. Fields on the DB2 Table Editor main panel and their descriptions.

Field	Description
<b>DB2 Subsystem ID</b>	Type the four character DB2 Subsystem ID (SSID) for the subsystem that contains the table you want to edit or view.
<b>Current SQLID</b>	Type the SQLID for the user under whom you want to run all SQL.
<b>User</b>	Displays the current user.
<b>Table Location</b>	Type the location of the table in this field.
<b>Table Creator Like</b>	Type the table creator name for which you want to search. You can use wildcards in your search. Use the * character or the % character as the wildcard character. Typing an * returns all table creators. You can also type a LIKE clause here, if desired.

Table 14. Fields on the DB2 Table Editor main panel and their descriptions. (continued)

Field	Description
<b>Table Name Like</b>	Type the table name for which you want to search. You can use wildcards in your search. Use the * character or the % character as the wildcard character. Typing an * returns all table names.
<b>Fetch Limit</b>	Type the maximum number of rows that you want the query to return. Type <b>0</b> to indicate no limit.
<b>Max Char Display</b>	Type the maximum number of characters that you want to be displayed in each column. The default is 30 characters. If a field exceeds this maximum it will appear in white and you must use the <b>zoom</b> command to see all of the data. For more information of using the <b>zoom</b> command, see the section: Editing a long cell.
<b>Lock Table</b>	Type <b>N</b> (No) to edit the table without locking it. Type <b>S</b> (Shared) to prevent other applications from performing anything but read-only operations on the table while you edit it. Type <b>E</b> (Exclusive) to prevent concurrent applications from performing any operations on the table while you edit it.
<b>Skip Locked Data</b>	Type <b>Y</b> to specify that all SELECT, INSERT, DELETE and UPDATES will append 'SKIP LOCKED DATA' to the end of their clauses. This allows you to skip rows that are locked by another process. Type <b>N</b> to specify that locked data that is encountered during SELECT, INSERT, DELETE and UPDATES will not be skipped.
<b>NULL default value</b>	Type <b>Y</b> to have empty cells filled with nulls when you insert a blank row. Type <b>N</b> to have empty cells left empty when you insert a blank row. <b>Note:</b> Rows that are marked as not null will not be filled with nulls, even if <b>Y</b> is selected. If you have selected <b>N</b> , but later edit a cell to insert a null value, DB2 Table Editor will change your selection from <b>N</b> to <b>Y</b>
<b>Use default values</b>	Type <b>Y</b> if you want NOT NULL columns (with no default value) automatically populated with values depending on the data types of the columns. Columns defined as NOT NULL WITH DEFAULT are not affected by the value in this field. The default value is <b>N</b> .
<b>Show separator</b>	Type <b>Y</b> to have thousands separated by a specified character when numbers greater than 999 are shown. Type <b>N</b> to show no thousands separator character when numbers greater than 999 are shown.
<b>Separator character</b>	Type the character to be used to separate the thousands when numbers greater than 999 are shown.
<b>Decimal character</b>	Type the character to be used to represent a decimal when numbers are shown.
<b>Disp Hidden Columns</b>	Type <b>Y</b> to specify that columns that are defined as hidden in the catalog will be displayed. Type <b>N</b> to specify that columns that are defined as hidden in the catalog will not be displayed.
<b>Show Column Labels</b>	Type <b>Y</b> to specify that column labels, where present, will be displayed. Type <b>N</b> to specify that column labels will not be displayed.
<b>Always use unique index</b>	Type <b>Y</b> to use a unique index to uniquely identify the data row to edit when performing an update or a delete without the table being locked. Type <b>N</b> if you do not want to use a unique index if the table is not locked; all columns within the table will be used to uniquely identify the data row to edit when performing an update or delete. This ensures uniqueness when more than one user is editing data simultaneously when the table is not locked. The default value is <b>N</b> . This value is required.

Table 14. Fields on the DB2 Table Editor main panel and their descriptions. (continued)

Field	Description
<b>Save options</b>	Type <b>Y</b> to save the options that you have specified in this panel. Type <b>N</b> if you do not want to save these options.
<b>Data set name</b>	This value is the name of the physical sequential data set to write committed data rows to when using the <b>EXPORT (EXP)</b> command. DB2 Table Editor will create this data set if it does not exist. This field can also be a fully qualified HFS directory. This value is required.
<b>Delimiter</b>	This value is the separator character to use between column data when writing committed table data to a file using the <b>EXPORT (EXP)</b> command. The default value is a comma (','), This value is required.
<b>Column headers</b>	When this parameter is set to <b>Y</b> , the <b>EXPORT (EXP)</b> command will include column name and column data types as the first record in the print file. When this value is set to <b>N</b> , no column headers are included in the print file. The default value is <b>Y</b> . This value is required.
<b>Allocation</b>	When this parameter is set to <b>A</b> , DB2 Table Editor will automatically create the data set with the following DCB parameters: DSORG PS, RECFM V, and LRECL 32756. When this parameter is set to <b>M</b> , you can manually provide the data set allocation parameters. The default value is <b>A</b> . This value is required.

Specify the **END** command to return to ISPF, **S** to go to the setup screen, or **L** to go to the Log Display screen. For more information about logging ISPF interface activity, see “Viewing the DB2 Table Editor activity log” on page 115.

## Locking

Locking is implemented as follows in the Edit table feature.

The **LOCK TABLE** statement is used to control locking. The options for locking mode are either **SHARE MODE** or **EXCLUSIVE MODE**.

- In share mode, concurrent application processes are prevented from executing all but read-only operations on the table.
- In exclusive mode, concurrent application processes are prevented from executing any operations on the table. Exclusive mode does not prevent concurrent application processes that are running at the Uncommitted Read (UR) isolation level from executing read-only operations on the table.

If you select **no lock**, then DB2 Table Editor does not issue the **LOCK TABLE** statement, but only obtains locks as needed to perform updates, inserts, or deletes. Note that if a table contains a large number of rows, and no row conditions are specified, then not all of data is automatically loaded into the grid until requested. In this case a read cursor will remain open until all of the data is loaded.

## Sort rows and columns

You can sort the rows and columns that appear in DB2 Table Editor. There are two commands that can be used to sort rows and columns.

### **Sort**

Using the **Sort** command, you can sort the data on any report panel. You can sort on single or multiple columns and specify sort order (ascending or descending) for each column in the sort.



## CSORT

Using the **CSORT** command, you can select one or more columns for sorting and thus modify the order of the rows that are displayed on many of DB2 Table Editor's product panels. Columns are selected by sort priority and direction. Direction is either ascending (default) or descending. When more than one column is selected for sorting, the second column only differentiates when rows have matching data in the first column. Similarly, a third column only impacts the sort when data in both the first two columns are identical. A maximum of nine columns can be selected for sorting at one time. Internal requirements may create a smaller maximum. A message is issued if the maximum number of columns selected for sorting is exceeded.

### **SORT command:**

The SORT command is a primary (fastpath) command. You can sort on a single or multiple columns. You can also specify sort order (ascending or descending) for each column in the sort.

You can sort by typing the appropriate SORT syntax in the **Option** line of any report panel and pressing Enter.

### **Single-column sorting**

The syntax for single-column sorting is as follows:

```
SORT column_identifier dir
```

Where:

- *column\_identifier* is either the column name or the relative column number
- *dir* is the direction in which to sort the column data. Valid values for *dir* are:
  - asc - (default) sorts data in ascending order; note, asc can be abbreviated as a
  - desc – sorts data in descending order; note, desc can be abbreviated as d

When you are working with the sort command:

- There must be a space between the *column\_identifier* and its *dir* (if used).
- The relative column number for a column is determined based on the column's placement when visible on the screen. Thus, relative column numbers are only available for columns currently visible on the screen. Relative column numbers are determined by counting the displayed columns from left to right, with the leftmost visible column being assigned the number '1' and each successive column (reading left to right) being assigned a relative column number that is incremented by 1.
- You can sort on a column that is not displayed if you use the column name (instead of the relative column number) as the *column\_identifier* in the SORT syntax.

### **Multicolumn sorting**

The syntax for multi-column sorting is as follows:

```
SORT column_identifier dir column_identifier dir
```

Where:

- *column\_identifier* is either the column name or the relative column number

- *dir* is the direction in which to sort the column data. Valid values for *dir* are:
  - asc - (default) sorts data in ascending order; note, asc can be abbreviated as a
  - desc – sorts data in descending order; note, desc can be abbreviated as d

When you are sorting on multiple columns, *column\_identifier* and *dir* values must all be separated by spaces. The maximum number of columns that can be sorted at once is 9.

### Sorting using the CSORT command:

CSORT functionality enables you to modify the order of the rows displayed on many of DB2 Table Editor's product panels by selecting one or more columns for sorting.

#### Procedure

1. Type CSORT in the option line on any display panel and press Enter. The Define Sort Columns panel displays:

```

SORT ----- Define Sort Columns ----- YYYY/MM/DD HH:MM:SS
Option ==>                               Scroll ==> PAGE
----->
                                           ROW 1 OF 9

Column Function ==> 4 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> N (Y-Perm, N-Temp) Reset View ==> N (Y,N)
Stop Sorting    ==> N (Y,N)

Cmd Dir New Old Column_Name
- - - - -
- - - - -      CMD
- - - - -      NAME
- - - - -      CREATOR
- - - - -      UPDT
- - - - -      DESCRIPTION
- - - - -      LAST_USER
- - - - -      LAST_UPDATED
- - - - -      CRTD_USER
- - - - -      CREATED_USER

Enter: Process selections PF3: Exit and save CAN: Exit without save
Ord: 1-9 Dir: A Asc D Desc

```

Figure 13. Define Sort Columns panel

### Define Sort Columns field descriptions

#### Column Function

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field. Valid options are:

- 1: Provides access to the CFIX option.
- 2: Provides access to the CORDER option.
- 3: Provides access to the CSIZE option.
- 4: Provides access to the CSORT option.

#### Permanent View

Indicate whether or not the view you define is permanent or temporary. Valid values are:

- Y: View customizations are permanent.
- N: View customizations are temporary.

**Stop Sorting**

Indicates whether or not to stop sorting as specified. Valid values are:

- Y: Stop sorting.
- N: Continue sorting.

**Cmd** Field where you specify the sort order.

**Dir** Specifies the lexicographic order for the column. Valid values are:

- A (Default): Values are listed in ascending order, smallest to largest.
- D: Values are listed in descending order, largest to smallest.

**New** Displays the new view settings.

**Old** Displays the previous view settings.

**Column\_Name**

Shows the name of the column.

2. Type A or D in the **Cmd** field next to the columns on which you want to base your sort.
3. Press Enter. The new sort preferences are displayed in the **New** column.
4. Press PF3 to return to the display panel.

## Opening a table

### About this task

From the DB2 Table Editor ISPF main panel, you can view or edit table data.

### Procedure

1. From the DB2 Table Editor ISPF main panel, in the **DB2 Subsystem ID** field, type the ID for the DB2 Subsystem where the table that you want to open is located.
2. In the **Table Creator Like** field, type the name of the creator of the table that you want to open. You can use wildcard characters or a LIKE clause to search for a table. To see a list of all tables, type \* in the **Table Creator Like** field.
3. In the **Fetch Limit** field, type the maximum number of rows that you want the query to return. Type 0 to indicate no limit.
4. In the **Max Char Display** field, type the maximum number of characters that you want to be displayed in each column. If a field exceeds this maximum it will appear in white and you must use the **zoom** command to see all of the data.
5. In the **Lock Table** field, type N (No) to edit the table without locking it. Type S (Shared) to prevent other applications from performing anything but read-only operations on the table while you edit it. Type E (Exclusive) to prevent concurrent applications from performing any operations on the table while you edit it.
6. In the **NULL default value** field, type Y to have empty cells filled with your specified null value when you insert a blank row. Type N to have empty cells left empty when you insert a blank row.

**Note:** Rows that have the not null attribute associated with them will not be filled with nulls, even if Y is selected.

If you have selected N, but later edit a cell to insert a null value, DB2 Table Editor will change your selection from N to Y.

7. In the **Use default values** field, type **Y** if you want NOT NULL columns (with no default value) automatically populated with values depending on the data types of the columns. Columns defined as NOT NULL WITH DEFAULT are not affected by the value in this field. The default value is **N**.
8. In the **Always use unique index** field, type **Y** to use a unique index to uniquely identify the data row to edit when performing an update or a delete without the table being locked. Type **N** (default) to indicate that you do not want to use a unique index if the table is not locked; all columns within the table will be used to uniquely identify the data row to edit when performing an update or delete. Specifying **N** for this option ensures uniqueness when more than one user is editing data simultaneously when the table is not locked.
9. In the **Save Options** field, type **Y** to save the options that you have entered on this panel, or, type **N** if you do not want to save these options.
10. Press the Enter key. A list of tables that match the criteria that you entered is displayed in the Table Selection panel. The Table Selection panel is shown in the following figure (Table Selection Panel)

```

ETI$DPTB V4R4 ----- Table Selection ----- 2013/06/28 14:28:05
Option ==>                                     Scroll ==> PAGE
----->
Location                                         Row 1 of 6
Creator Like USERID                            >          DB2 Subsystem: SYS1
Tables Like *                                  >
-----
Cmd Table Name      Creator  Database  Tablespace  Row Count
TABLE1              USERID   DBNAME1   TSNAME1     3
TABLE2              USERID   DBNAME2   TSNAME2    -1
TABLE3              USERID   DBNAME3   TSNAME1     3
TABLE4              USERID   DBNAME4   TSNAME2    -1
TABLE5              USERID   DBNAME5   TSNAME1    -1
TABLE6              USERID   DBNAME6   TSNAME2     3
***** Bottom of Data *****
Valid Line Commands: (Select table, Count rows)

```

Figure 14. Table Selection Panel

11. If the table the you want to open is not listed you can search further as follows:
  - In the **Table Name Like** field, type the name of the table that you want to open.
  - You can use wildcard characters or a LIKE clause to search for a table. To see a list of all tables, type **\*** in the **Table Name Like** field.

**Note:** If row count information is unavailable, the value in the **Row Count** column will be **-1**.
12. Type **S** in the command **Cmd** column next to the table that you want to open. Press the Enter key.  
The Select Columns panel opens.

```

ETI$DPSC V4R4 ----- Select Columns ----- 2013/06/28 15:38:01
Option ==>                                     Scroll ==> PAGE
----->
Saved Table Profile exists N (Y or N)   Location ==>
And/Or on Where Clause      A           Creator ==> USERID      >
Long or Short Data Types   L (L or S)   Table   ==> TBL         >
----->

Select Ord Srt Frz Type           Column Name   Where Clause
   1     A   N CHAR(2)           COL_01
   2     A   N CHAR(9)           COL_02
   3     A   N DECIMAL(5,0)      COL_03
   4     A   N SMALLINT          COL_04
***** Bottom of Data *****
Valid Commands: Edit, Browse, SQL, Count, CAnCel, SAve, Load, ENd/PF3

```

Figure 15. Select Columns panel

The fields on the Select Columns panel are listed and described in the following table.

Table 15. Fields in the Select Columns panel and their descriptions

Field	Description
<b>Saved Table Profile exists</b>	Type <b>Y</b> if a saved Table profile already exists, or <b>N</b> if it does not.
<b>Location</b>	Lists the location of the database to which you are connected.
<b>And/Or on Where Clause</b>	Type <b>A</b> to connect all WHERE clause statements with AND. Type <b>O</b> to connect all WHERE clause statements with OR.
<b>Long or Short Data Types</b>	Type <b>L</b> to specify that you want to have the long name for data type shown in the table (as shown in Figure 15). Type <b>S</b> to have abbreviated data type names shown in the table.
<b>Table</b>	Displays the name of the current table.
<b>Creator</b>	Displays the creator of the current table.
<b>Select</b>	The <b>Select</b> column contains a number that indicates the order in which the corresponding column will be selected. You can change the numbering in the columns if desired. Type <b>N</b> , or leave the <b>Select</b> column blank to exclude the corresponding column from the generated table. <b>Note:</b> To mark all rows to be included in the generated table, (rows with a number in the <b>Select</b> column will be included) type <b>Include all</b> on the command line, this will renumber all rows. To mark all rows to be excluded from the generated table, (marked <b>N</b> in the <b>Select</b> column) type <b>Exclude all</b> on the command line.
<b>Ord</b>	Use this option to indicate the columns that will be used to order the data. Type <b>1</b> next to the column that you want to order by first. To order by additional columns, type numbers next to the desired columns in the order that you want them to be sorted.
<b>Srt</b>	Type <b>A</b> to sort the corresponding column in ascending order. Type <b>D</b> to sort the column in descending order.
<b>Frz</b>	Type <b>Y</b> in the <b>Frz</b> column to freeze the associated column when the table is being edited. When the table is open in the Edit Table Rows panel, the column appears in the table, it will be left justified. When you scroll through the table, the frozen column will always be on the screen. <b>Tip:</b> You can also use the CSET command to freeze columns while you are editing data.

Table 15. Fields in the Select Columns panel and their descriptions (continued)

Field	Description
Type	Displays the data type of the corresponding column.
Column Name	Displays the column name of each column in the selected table.
Where Clause	Displays the WHERE clause either saved in a table profile, or added to the table through the SQL command.

Table 16. Line Commands in the Select Columns panel and their descriptions

Line Command	Description
E	Type E on the command line to edit the rows in the table on the ETI\$EDIT (Edit Table Rows) panel.
B	Type B on the command line to browse the rows in the table on the ETI\$EDIT (Browse Table Rows) panel.
S	Type S on the command line to view the SQL statement that DB2 Table Editor uses to display table data using the ETI\$DSQL panel.
COUNT	Type COUNT on the command line to count the number rows in the table.
CAN	Type CAN on the command line to cancel any changes that you have made on the panel and exit the panel.
SAVE	Type SAVE on the command line of the Select Columns panel or the Generated Select Statement panel to save your SQL for future use.
LOAD	Type LOAD on the command line of the Select Columns panel to load SQL that you have previously saved.

13. *Optional:* In the **And/Or on Where Clause** column, type **A** to connect all WHERE clause statements with AND. Type **O** to connect all Where Clause statements with OR.
14. *Optional:* In the **Select** column, you can modify the number that is associated with the row in the table. The number in the **Select** column indicates the order in which the corresponding column will be selected. To exclude the corresponding column from the generated table, type **N**, or leave the **Select** column blank.
 

**Note:** To mark all rows to be included in the generated table, (rows with a number in the **Select** column will be included) type **Include all** on the command line, this will renumber all rows. To mark all rows to be excluded from the generated table, (marked **N** in the **Select** column) type **Exclude all** on the command line.
15. *Optional:* In the **Ord** field, type **1** next to the column that you want to order by first. To order by additional columns, type numbers next to the desired columns in the order that you want them to be sorted.
16. *Optional:* In the **Srt** field, type **A** to sort the corresponding column in ascending order. Type **D** to sort the column in descending order.
17. *Optional:* In the **Frz** column type **Y** to freeze a column, so that when it appears on the Edit Table Rows panel, it will remain on the screen when you scroll left and right through the table. Frozen columns are left justified on the Edit Table Rows panel.

**Tip:** You can also use the CSET command to freeze columns while you are editing data.

18. *Optional:* If you want to edit or view the generated SQL for your table or add a WHERE clause, type **SQL** on the command line and press the Enter key. The Generate Select Statement panel opens. Make the changes that you want to make to the SQL and press PF3. You can save the SQL that you add or modify using the SAVE command. You can also LOAD SQL that you have previously saved using the LOAD command. For more information on SAVE and LOAD, see DB2 Table Editor ISPF Component Commands.
19. *Optional:* Type **COUNT** on the command line. A pop-up box is displayed indicating the number of rows that will be returned by the your SQL statement.
20. *Optional:* Type E on the command line to edit the table.

**Note:** When you attempt to edit UNICODE data or FOR MIXED DATA columns that contain characters that do not convert properly, a popup message informs you that one or more columns contain unprintable substitution characters. For more information about editing UNICODE data or FOR MIXED DATA columns, see “Editing UNICODE data or columns defined as FOR MIXED DATA” on page 83.

21. *Optional:* Type B on the command line to browse the contents of the table.
22. Press the Enter key. The table will be displayed according to your specifications.

## Specifying how to display a table for viewing or editing in DB2 Table Editor

### About this task

When viewing or editing a table in the DB2 Table Editor ISPF interface, you can specify that you want to view or edit all or part of a table using the ETI\$DPSC panel. You can specify the columns that you want to view or edit from the selected table. You can also use the options on this panel to customize the way that the table data is organized and displayed in DB2 Table Editor for viewing or editing.

### Procedure

1. From the ETI\$DPTB panel, select the table that you want to edit by typing S in the **Select** column next to the desired table. The ETI\$DPSC panel opens.

```

ETI$DPSC V4R4 ----- Select Columns ----- 2013/06/28 15:38:01
Option ==>                               Scroll ==> PAGE
----->
Saved Table Profile exists N (Y or N)      Location ==>
And/Or on Where Clause    A              Creator ==> USERID      >
Long or Short Data Types  L (L or S)      Table ==> TBL           >
----->

Select Ord Srt Frz Type          Column Name      Where Clause
-----
  1     A  N  CHAR(2)           COL_01
  2     A  N  CHAR(9)           COL_02
  3     A  N  DECIMAL(5,0)      COL_03
  4     A  N  SMALLINT          COL_04
***** Bottom of Data *****
Valid Commands: Edit, Browse, SQL, Count, CANcel, SAve, Load, END/PF3

```

Figure 16. The ETI\$DPSC panel

Table 17. Panel fields and their descriptions for the ETI\$DPSC panel

Field	Description
Saved Table Profile exists	Type Y if a saved Table profile already exists, or N if it does not.
And/Or on Where Clause	Type A (AND) to connect all WHERE clause statements with AND. Type O to connect all WHERE clause statements with OR.
Long or Short Data Types	Type L to specify that long data types will be used or type S to specify short data types. A long data type is the full name of the data type while a short data type is the first three letters of the data type name. Short data types have the advantage for a longer WHERE clause.
Select	The <b>Select</b> column contains a number that indicates the order in which the corresponding column will be selected. You can change the numbering in the columns if desired. Type N, or leave the <b>Select</b> column blank to exclude the corresponding column from the generated table. <b>Tip:</b> To mark all rows to be included in the generated table, (rows with a number in the <b>Select</b> column will be included) type <b>include all</b> on the command line, this will renumber all rows. To mark all rows to be excluded from the generated table, (marked N in the <b>Select</b> column) type <b>exclude all</b> on the command line.
Ord	Use this option to indicate by which columns to order the data. Type 1 next to the column that you want to order by first. To order by additional columns, type numbers next to the desired columns in the order that you want them to be sorted.
Sort	Type A to sort the corresponding column in ascending order. Type D to sort the column in descending order.
Frz	Type Y in the <b>Frz</b> column to freeze the associated column when the table is being edited. When the table is open in the Edit Table Rows panel (ETI\$EDIT), the column appears in the table, it will be left justified. When you scroll through the table, the frozen column will always be on the screen. <b>Tip:</b> You can also use the CSET command to freeze columns while you are editing data.
Column Name	Displays the column name of each column in the selected table.
Where Clause	Displays the WHERE clause either saved in a table profile, or added to the table through the SQL command.

Table 18. Commands and their descriptions for the ETI\$DPSC panel.

Command	Description
E	Type E on the command line to edit the rows in the table on the ETI\$EDIT (Edit Table Rows) panel. <b>Note:</b> For more information about editing UNICODE data or FOR MIXED DATA columns that contain characters that do not convert properly, see "Editing UNICODE data or columns defined as FOR MIXED DATA" on page 83.
B	Type B on the command line to browse the rows in the table on the ETI\$EDIT (Browse Table Rows) panel.
S	Type S on the command line to view the SQL statement that DB2 Table Editor uses to display table data using the ETI\$DSQL panel.



Table 18. Commands and their descriptions for the ETI\$DPSC panel. (continued)

Command	Description
COUNT	Type COUNT on the command line to count the number rows in the table.
CAN	Type CAN on the command line to cancel any changes that you have made on the panel and exit the panel.
SAVE	Type SAVE on the command line of the Select Columns panel or the Generated Select Statement panel to save your SQL for future use.
LOAD	Type LOAD on the command line of the Select Columns panel to load SQL that you have previously saved.
END/PF3	Press END/PF3 to exit.

2. On the ETI\$DPSC panel, specify:

- Whether WHERE clauses in the SQL statement that is used to display the table data for viewing or editing will be connected with an AND or an OR.

**Tip:** You can specify WHERE clauses on the ETI\$DSQL panel which is accessible by typing S on the command line.

- Whether long data type names or short data type names will be used.

**Information:** Type L to specify that long data types will be used, or type S to specify short data types. A long data type is the full name of the data type while a short data type is the first three letters of the data type name. Short data types have the advantage for a longer WHERE clause.

- The columns that you want to edit or view using DB2 Table Editor.
- The order in which you want the columns to be displayed.
- Which columns, if any, you want to freeze.

**Information:** Type Y in the Frz column to freeze the associated column when the table is being edited. When the table is open in the Edit Table Rows panel (ETI\$EDIT), the column appears in the table, it will be left justified. When you scroll through the table, the frozen column will always be on the screen.

### Viewing or editing the generated SQL statement that is used to display table data

You can view and edit the SQL statement that DB2 Table Editor uses to display table data and you can edit parts of the SQL statement. The SQL statement is generated based on the criteria that you specify on the ETI\$DPSC panel. You can edit or add a WHERE clause to your SQL statement.

#### Procedure

1. From the ETI\$DPSC panel, type S on the command line. The ETI\$DSQL panel opens.

```

ETI$DSQL V4R4 ----- Generated Select Stmt ----- 2013/06/28 15:58:39
Option ==>                                           Scroll ==> PAGE
-----+>

Creator ==> PDDAB          >      Table ==> CUSTOMER          >

Freeform SQL Edit (Browse Mode Only) N (Y or N)
-----

      SELECT
      "COL_02"
      , "COL_03"
      , "COL_04"
      , "COL_05"
      , "COL_06"
      , "COL_08"
      , "COL_09"
      , "COL_10"

Valid Commands: Edit, Browse, Count, CAncel, END/PF3
Valid Line Commands: Insert, Repeat, Delete, Copy, Before, After

```

Figure 17. The ETI\$DSQL panel

Table 19. Fields and their descriptions for the ETI\$DSQL panel.

Field	Description
Creator	Lists the current creator ID.
Table	Lists the current table.

Table 20. Commands and their descriptions for the ETI\$DSQL panel.

Command	Description
<b>B</b>	Type <b>B</b> on the command line to browse the rows in the table on the ETI\$EDIT (Browse Table Rows) panel.
<b>CAN</b>	Type <b>CAN</b> on the command line to cancel any changes that you have made on the panel and exit the panel.
<b>COUNT</b>	Type <b>COUNT</b> on the command line to count the number rows in the table.
<b>E</b>	Type <b>E</b> on the command line to edit the rows in the table on the ETI\$EDIT (Edit Table Rows) panel.

Table 21. Line commands and their descriptions for the ETI\$DSQL panel.

Line Command	Description
<b>C</b>	<p>To copy a row, type <b>C</b> in the <b>Command</b> column of the row that you want to copy, type <b>A</b> in the <b>Command</b> column of the row above which you want the row to be inserted, or, type <b>B</b> in the <b>Command</b> column of the row below which you want the row to be inserted.</p> <p>To copy more than one row at a time, type <b>C</b> in the <b>Command</b> column of the row that you want to copy, followed by the number of rows that you want to copy, then type <b>A</b> in the <b>Command</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Command</b> column of the rows below which you want the row to be inserted.</p>

Table 21. Line commands and their descriptions for the ETI\$DSQL panel. (continued)

Line Command	Description
<b>CC</b>	To copy all rows between two specified rows, type <b>CC</b> in the <b>Command</b> columns of two different rows, then type <b>A</b> in the <b>Command</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Command</b> column of the row below which you want the rows to be inserted.
<b>D</b>	To delete a row, type <b>D</b> in the command column of the line that you want to delete. To delete more than one row, type <b>D</b> in the <b>Command</b> column of the row that you want to delete, followed by the number of rows that you want to delete.
<b>DD</b>	To delete all rows between two specified rows, type <b>DD</b> in the <b>Command</b> columns of two different rows to delete the range of rows in between those two rows.
<b>I</b>	To insert a row, type <b>I</b> in the <b>Command</b> column of the line that you want to insert.  To insert more than one row at a time, type <b>I</b> in the <b>Command</b> column of the row that you want to copy, followed by the number of rows that you want to insert, then type <b>A</b> in the <b>Command</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Command</b> column of the rows below which you want the row to be inserted.
<b>R</b>	To repeat a row, type <b>R</b> in the <b>Command</b> column of the line that you want to repeat.  To repeat more than one row at a time, type <b>R</b> in the <b>Command</b> column of the row that you want to copy, followed by the number of rows that you want to repeat, then type <b>A</b> in the <b>Command</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Command</b> column of the rows below which you want the row to be inserted.
<b>RR</b>	To repeat all rows between two specified rows, type <b>RR</b> in the <b>Command</b> columns of two different rows to repeat the range of rows in between those two rows.

2. On the ETI\$DSQL panel you can view and make any necessary changes to the SQL statement.
3. When you are finished viewing or editing the SQL, run the SQL by typing **E** to edit or **B** to browse on the command line. The specified table opens in the ETI\$EDIT panel.

## Editing UNICODE data or columns defined as FOR MIXED DATA

### About this task

You can edit UNICODE data or FOR MIXED DATA columns that contain characters that do not convert properly. When you specify **E** (Edit) on the Select Columns panel (ETI\$DPSC), if one or more columns contain unprintable substitution characters, the following informational message appears:

```
You are about to edit a table with UNICODE
data that could not be correctly displayed.
Editing converted UNICODE data may result
in data corruption.
```

Are you sure you want to proceed? (Yes/No)

To continue to edit converted data, specify **Y** in the confirmation field. If you do not want to edit converted data, specify **N** in the confirmation field. If you specify **Y**, the Edit Table Rows panel is displayed and all column data is editable, including those columns with data that could not be converted to displayable characters in EBCDIC.

The Edit Table Rows panel also displays an informational message to inform you that some data within the table contains non-displayable characters; you can still edit these data types. If you specify **N**, the Edit Table Rows panel is displayed, and only those columns with data that could be converted to displayable characters in EBCDIC are editable. Columns with data that could not be converted in EBCDIC are displayed in white, indicating that they are not editable because they contain non-displayable characters. Columns with data that could be converted to displayable characters in EBCDIC appear in turquoise, indicating that they can be edited.

## Editing a table

You can use DB2 Table Editor ISPF interface to perform inserts, updates, and deletes to your DB2 tables. DB2 Table Editor will commit the changes that you make automatically when you finish editing the table.

### Editing a row

You can use the Edit Table Rows panel to edit a row in a table. When editing a row you can choose to view the row alone (one row is shown at a time) in form mode or you can view the row in tabular mode where you will see more than one row displayed at once.

### Procedure

1. In an open table, move the cursor to the cell in the row that you want to edit and type the necessary changes. If the data in the cell is too long to appear on the screen the cell will appear in white. If the data in the cell is XML data, `<xml data>` will appear instead of the cell contents. To view or edit the contents of the cell, use the **Zoom** command.

To edit rows one row at a time, select the row that you want to edit and type **F** on the **Cmd** column corresponding to that row. Press **Enter**. The row appears in form mode. In form mode, you can browse through the rows in a table using PF10 to go to the previous row and PF11 to go to the next row. To return to tabular format press **PF3**.

2. When you have completed your changes, press the **Enter** key. DB2 Table Editor marks the row as updated and highlights the changes in yellow. The changes that you have made will be committed in DB2 when you exit the table that you are editing.

**Note:** The changes made when editing cells that contain XML data are committed to DB2 when you exit the XML Parser ISPF Interface panel.

### Editing a row that contains XML data:

You can use the Edit Table Rows panel and the XML Parser ISPF Interface panel to edit a row in a table that contains XML data.

### Procedure

1. In an open table, move the cursor to the cell in the row that you want to edit. Rows that contain XML data will show `<xml data>` instead of the cell contents.

2. Issue the **Zoom** command. The XML Parser ISPF Interface panel opens.
3. Edit the XML data as necessary on the XML Parser ISPF Interface panel.

```

ETI$XML ==>
***** XML PARSER ISPF INTERFACE *****
CMD CONTENTS
<GRI>
<LOCATIONS>
  <LOCATION name="DB2F (db2zos)" user="" password="" vendor="db2zos" driver=
  <LOCATION name="DB2T (db2zos)" user="" password="" vendor="" driver="COM.i
</LOCATIONS>
<SOURCES encoding="UTF-8">
  <SOURCE name="ADM.LPR_EDITEUR" type="SQL" seed="5">
  <CONTENT type="embed" location="DB2F (db2zos)">
--
--
123
  </CONTENT>
  <ROWS start="-1" end="-1" skip="1"/>
</SOURCE>
</SOURCES>
</GRI>
.***** Bottom of Data *****

Valid Line Commands: Collapse, eXpand, Delete, Add text

```

Figure 18. The XML Parser ISPF Interface panel

### Line commands

#### C (Collapse)

Allows a specific XML tag to be collapsed to its parent tag.

```

_ <TAG>
C contents
_ <TAG2>
_ contents2
_ </TAG2>
_ </TAG>

```

Will be collapsed to:

```

_ +<TAG></TAG>

```

#### X (Expand)

Allows a specific XML tag to be expanded.

For example:

```

X +<TAG></TAG>

```

Will be expanded to:

```

_ <TAG>
_ contents_
_ <TAG2>
_ contents2
_ </TAG2>
_ </TAG>

```

#### D (Delete)

Allows a specific XML tag to be deleted from the display.

For example:

```

- <TAG>
- contents
D <TAG2>
- contents2
- </TAG2>
- </TAG>

```

TAG2 will be deleted:

```

- <TAG>
- contents
- </TAG>

```

#### A (Add)

Allows you to insert a blank line to the editor.

For example:

```

- <TAG>
- contents
A <TAG2>
- contents2
- </TAG2>
- </TAG>

```

A blank line is added. You can type new content on the newly added line.

```

- <TAG>
- contents
-
A <TAG2>
- contents2
- </TAG2>
- </TAG>

```

4. When you have completed your changes, press PF3 to exit the ETI\$XML panel and save your changes when prompted. The changes that you have made are committed in DB2.

## Editing a long cell

### About this task

Cells that are too long to be displayed on the screen appear in white. You can view or edit the entire contents of a long cell by using the **Zoom** command. The **Zoom** command can be used in two ways:

- In an open table, type **Zoom** on the command line, then move the cursor to the cell that you want to edit.
- Place the cursor on the cell that you want to edit and press PF4.

When making changes to VARCHAR columns, DB2 Table Editor will automatically calculate the length of the column based on the input value and trailing pad characters.

### Procedure

1. In an open table, place the cursor on the cell that you want to edit.
2. Press PF4. The Column Editor panel opens. The following figure (Column Editor panel) shows the Column Editor panel.

```

ETI$EXPL V4R4 ----- Column Editor ----- 2015/06/28 16:27:29
Option ==>                                           Scroll ==> PAGE
-----
Table ==> TABLENAME >      Creator ==> USERID      >
Column ==> COLNAME >      Type ==> DATATYPE
Length ==> 00000009      Max ==> 00000016
Pad ==> 40              Null ==> N
-----

SEL
***** ***** Top of Data *****
***** ----+----1----+----2----+----3----+----4----+----5----+----6----+----7--
000001 COLUMN CONTENTS
***** ***** Bottom of Data *****

```

Figure 19. Column Editor panel

**Note:** The fields that appear in this panel vary based on the data type of the selected cell.

The fields on the Column Editor panel are listed and described in the following table (Fields on the Column Editor panel and their descriptions).

Table 22. Fields on the Column Editor panel and their descriptions

Field	Description
<b>Table</b>	The name of the table in which the selected cell exists.
<b>Creator</b>	The creator of the table in which the selected cell exists.
<b>Column</b>	The name of the column in which the selected cell exists.
<b>Type</b>	The data type of the column in which the selected cell exists.
<b>Length</b>	The length in characters of the data in the selected cell.
<b>Max</b>	The maximum length in characters of the data in the selected cell.
<b>Pad</b>	Contains the character that the contents of the cell will be padded with when the contents of the selected cell are shorter than the value in the <b>Max</b> field.
<b>Null</b>	This value is N if the selected cell does not have a value of null. The Value is Y if the selected cell does have a value of null.

3. View or edit the data.

**Note:** When you are editing a VARCHAR column in zoom mode, the length is determined automatically by removing the PAD character. This means that when you are editing a column of a specified length, if you type a value that is longer than the specified length, the length of the column will be changed by DB2 Table Editor by removing the necessary number of PAD characters. The length cannot exceed the maximum length specified by the data type.

4. When you are finished viewing or editing the data, press PF3. If you have made changes to the cell, DB2 Table Editor updates the cell with the information that you entered and returns to the Edit Table Rows panel.

**Viewing and editing the contents of a cell with a hexadecimal editor:  
About this task**

You can view the contents of a cell with hex values in the Zoom panel.

### Procedure

- In the Zoom panel, type **HEX ON** on the command line and press the Enter key. The hex editor is turned on.
- To turn the hex editor off, type **hex off**. The hex editor is turned off.

## Getting information about a column heading

You can get information about a column heading in the Edit Table Rows panel.

### Procedure

Place the cursor over a column heading and press the PF4 key. Information about that column will appear.

## Capitalizing the contents of a table

You can use the Edit Table Rows panel to capitalize the contents of an entire table or a column in a table.

### Procedure

1. In an open table, type the following command on the command line:
  - To capitalize the entire contents of a table:  
CAPS ON
  - To capitalize the contents of a column in a table:  
CAPS ON *column name*

Where:

- *column name* is the name of the column the contents of which you want to capitalize.

2. Commit the changes to the table.

## Updating a row

### About this task

When DB2 Table Editor is updating a row, it looks for the row in one of two ways:

- If the table is locked, DB2 Table Editor uses a unique index (if one exists) to find the row that is to be updated.
  - If the table is not locked, or it does not have a unique index, DB2 Table Editor examines all columns in the row, with the exception of some types of columns, to determine whether it has found the correct row. The following columns are not examined:
    - LOB columns
    - A string that is too long for a LIKE clause. Strings up to 4000 characters in length can be used in a LIKE clause in z/OS.
- Note:** If a string is greater than 4000, and no duplicate rows exist it can be used, if duplicate rows exist, then the long string must be replaced with a short string. If a string is less than 255 characters in length, an equal (=) operator is used.
- User-defined data type (UDT) columns.

After DB2 Table Editor has completed an update, it checks to see whether more than one row has been updated. If so, DB2 Table Editor rolls back the transaction, opens a cursor to the first occurrence of the row, and updates that row.



**Note:** A duplicate row that contains mixed data columns cannot be updated.

## Inserting a blank row

### About this task

You can insert a blank row into a table using the Edit Table Rows panel or the Form View panel. You can insert a row into a table that contains data or into an empty table.

### Procedure

1. In the Select Columns panel, ensure that there is a number in the **Select** column specifying the rows that you want to edit. If you do not want to have a particular column selected, type N in the **Select** column or leave it blank.
2. Type E on the command line and press Enter. The Edit Table Rows panel opens.

```
ETI$EDIT V4R4 ----- Edit Table Rows ----- 2013/11/25 16:49:17
Option ==>> Scroll ==>> PAGE
----->
Table ==> TABLENAME Creator ==> USERID Row 1 of 4
-----
Cmd S N ONE N COLNAME N COLNAME2
--- N 1 N CONTENT N CONTENT2
--- N 2 N DATA N DATA2
--- N 3 N INFO N INFO2
--- Y N NAME N NAME2

***** Bottom of Data *****

Valid Option Commands: Export
Valid Line Commands: Browse, Delete, Insert, Repeat, Undo, Copy,
Before, After, Form, History
```

Figure 20. Edit Table Rows panel

3. In the Edit Table Rows panel, type I in the **Cmd** column of the row below which you want the new row to appear.

**Note:** To remove the row that you inserted and exit the Edit Table Rows panel without committing your changes, type CANCEL on the command line.

To insert a row in the Form View Panel, type Form on the command line to open the Form View panel, then type Insert on the command line. For more information, see “Viewing and editing rows in form mode” on page 90.

4. Press Enter. A blank row appears below the row that you selected.
5. Type data in any fields that are required in that row. For example, if one of the cells must have a value that is not null, you must specify a value in that cell. The changes that you have made will be committed in DB2 when you exit the table that you are editing.
6. To cancel the action that you have taken before you exit the table, specify the command to cancel (CANCEL) on the command line and press Enter. You will exit the panel without committing the changes.

### What to do next

**Notes:**

- To insert more than one row into the table that you are editing, type I, followed by the number of new rows that you want to insert in the **Cmd** column of the row below which you want the new rows to appear. You can only insert multiple rows on the Edit Table Rows panel.
- You can insert a blank row into an empty table by opening an empty table from the DB2 Table Editor ISPF main panel, then in the Edit Table Rows panel, type Insert in the **Cmd** column. A blank row is inserted into the table.
- To see all changes that have been made for a specified cell in the table, set the cursor in that cell and type HISTORY on the **Cmd** line. Press Enter. The ETI\$HIST panel displays versions of data (in the Data column) and the date these changes were made (in the Date Changed column). Data is sorted by the Date Changed column in descending order.
- To write committed data to a flat file, use the **EXPORT (EXP)** command. For more information, see “Exporting data” on page 91.

### Viewing and editing rows in form mode:

To view or edit a row in vertical format:

#### About this task

#### Procedure

1. On the Edit Table Rows panel (ETI\$EDIT), type FORM on the command line and press Enter.

```

ETI$FORM V4R4 ----- Form View ----- 2014/06/09 15:38:01
Option ==>                               Scroll ==> PAGE
-----
row      1 OF 693                          Creator ==>CNAME    >
                                           Table  ==>TNAME    >
-----

Column Name      N  Data
.EMP_NO          000
FIRSTNAME        Name
MIDINIT          A
LASTNAME         Name
WORKDEPT         N  00
PHONENO          0000
HIREDATE         2013-06-09
TERMDATE         2014-06-09
JOB              N  TITLE
MANAGER          N
EDLEVEL         5
SEX              N  M

Valid Commands: CANcel, END/PF3, ZOOM, NROW, PROW, Insert

```

Figure 21. Form View panel (ETI\$FORM)

2. On the Form View panel (ETI\$FORM), you can use the following commands:
  - Type FIND or CHANGE within the row that you are browsing or editing. FIND and CHANGE cannot be used to specify a column. For more information about these options, see “FIND command” on page 96.
  - To change the current table row, use the PF10 (NROW command) to go up a row, or the PF11 key (PROW command) to go down a row.
  - To view or edit the contents of a cell, use the ZOOM command. To view column data, use PF4 on column names. You can use PF4 directly on data.

The N column is the NULL indicator column. Y is a NULL value. If N is present, the field must contain a value.

- To insert a row, use the **Insert** command.

3. To save changes, press END/PF3. To discard changes, use the CANCEL command.

**Note:** While editing data in Form Mode, your changes will be sent to the Edit Table Rows panel unless you use the CANCEL command.

### Exporting data:

Use the **EXPORT (EXP)** command to write a table's committed data to a flat file, which can then be used as input into programs such as Microsoft Excel or Microsoft Access that parse delimited files as input.

### Before you begin

Before you use the **EXPORT (EXP)** command on the ETI\$EDIT panel, ensure that you specify **Print to file options** on the DB2 Table Editor main panel (ETI\$MAIN). For more information, see "The DB2 Table Editor ISPF main panel" on page 70.

### About this task

To export table data:

### Procedure

1. On the ETI\$EDIT panel, specify EXPORT (or EXP) on the **Option** line and press Enter.

If you specified **A** as an **Allocation** option on the DB2 Table Editor main panel (ETI\$MAIN) to allow DB2 Table Editor to allocate the print file automatically (rather than manually providing the parameters), then data is written to the print file and a message appears to confirm that the data has been successfully exported to the specified data set. If you specified **M** to manually allocate your own print file (rather than allowing DB2 Table Editor to allocate it automatically), then the Data set allocation parameters panel (ETI\$DSAP) is displayed.

```
ETI$DSAP ----- Data set allocation parameters ----- 2014/10/20 17:34:35
Option ==>
```

```
The data set specified for an EXPORT command does not exist. Table Editor
will create it for you. Use the allocation parameters on this panel to define
how DB2 Table Editor should create a data set.
```

```
Management class . . . . . (Blank for default management class)
Storage class . . . . . (Blank for default storage class)
Volume serial . . . . . (Blank for system default volume)
Device type . . . . . (Generic unit or device address)
Data class . . . . . (Blank for default data class)
Space units . . . . . TRKS (TRKS or CYLS)
Primary quantity . . . 15 (In above units)
Secondary quantity . . 30 (In above units)
Record format . . . . . FB
Record length . . . . . 133
Block size . . . . . 266
```

2. On the Data set allocation parameters panel, define the following data set parameters with which you want to allocate the print data set.

**Management class**

The SMS management class for the output data set created by DB2 Table Editor.

**Storage class**

The SMS storage class for the output data set created by DB2 Table Editor.

**Volume serial**

The volume serial number to use for the output data set created by DB2 Table Editor. To let SMS select the volume on which to allocate the output data set, leave this field blank.

**Device type**

The device type to use for the output data set created by DB2 Table Editor. To let SMS select the device type on which to allocate the output data set, leave this field blank.

**Data class**

The SMS data class (up to 8 alphanumeric characters) to use for the output data set created by DB2 Table Editor.

**Space units**

The allocation unit to be used when allocating the output data set.

**Primary quantity**

The primary allocation quantity of space to use when allocating the output data set. The unit of measure that you specify in the **Space units** field is used.

**Secondary quantity**

The primary allocation quantity of space to use when allocating the output data set. The unit of measure that you specify in the **Space units** field is used.

**Record format**

Any valid combination of the following codes:

- **F**: Fixed length records.
- **V**: Variable length records.
- **U**: Undefined format records.
- **B**: Blocked records.
- **A**: ASA printer control characters.
- **M**: Machine code printer control characters.
- **S**: Standard (for F) or spanned (for V).
- **T**: Track-overflow feature.

**Record length**

The logical record length, in bytes, of the records to be stored in the output data set.

**Block size**

The block size (physical record length), in bytes, of the blocks to be stored in the output data set.

3. When you are finished, press Enter.

Data is written to the print file and a message appears to confirm that the data has been successfully exported to the specified data set.

When you view data in the output file, the column header information is contained in the first row of the file, as shown below. If you choose not to include column header information, then the table data begins at row 1.

```

Menu Utilities Compilers Help
BROWSE      SYSID.ETI1234.OUTPUT                      Line 00000000 Col 001 080
Command ==>                                     Scroll ==> CSR
*****
INSERTED(TIMESTAMP),ABPID(CHAR),USERID(CHAR),ENVIRONMENT(CHAR),SESSION(INTEGER),
2010-11-30-09.15.26.152068,DB2A,SYSID ,M,1,SIGNON ,SUCC
2010-11-30-09.15.26.214946,DB2A,SYSID ,M,1,SIGNOFF ,SUCC
2010-11-30-09.15.31.198670,DB2A,SYSID ,U,2,SIGNON ,SUCC
2010-11-30-09.15.40.470779,DB2A,SYSID ,U,2,SIGNOFF ,SUCC
2010-11-30-09.22.34.988635,DB2A,SYSID ,M,3,SIGNON ,SUCC
2010-11-30-09.22.34.995850,DB2A,SYSID ,M,3,SIGNOFF ,SUCC
2010-11-30-09.22.37.090469,DB2A,SYSID ,U,4,SIGNON ,SUCC
2010-11-30-09.22.43.982567,DB2A,SYSID ,U,4,SIGNOFF ,SUCC
***** Bottom of Data *****

```

After this file has been created, it can be used as input to other applications that can accept and parse delimited format data, such as Microsoft Excel or Microsoft Access.

### Repeating rows

You can repeat one row or a range of rows using the Edit Table Rows panel.

#### To repeat a row more than once

In an open table, type **R** followed by the number of times that you want the row repeated, in the **Cmd** column of the row that you want to repeat. Press the Enter key. For example **R5** would repeat a row five times.

The changes that you have made will be committed in DB2 when you exit the table that you are editing.

#### To repeat a range of rows

In an open table, type **RR** in the **Cmd** columns of 2 rows, the row at the beginning and the row at the end of the range of rows that you want to repeat. Press the Enter key.

The changes that you have made will be committed in DB2 when you exit the table that you are editing.

#### To delete more than one row

In an open table, type **D** followed by the number of rows that you want to delete in the **Cmd** column of the first row that you want to delete. For Example **D5** would delete the row next to which you typed the command and the four following rows. Press the Enter key.

DB2 Table Editor marks the selected rows for deletion. The rows will appear in green. The deletes will be committed to the database when you exit the table.

### Copying rows

You can copy rows using the copy command from the Edit Table Rows panel.

**To copy a row:**

1. Type **C** in the **Cmd** column of the row that you want to copy.
2. Type **A** in the **Cmd** column of the row above which you want the row to be inserted, or, type **B** in the **Cmd** column of the row below which you want the row to be inserted.
3. Press the Enter key.

**To copy more than one row:**

1. Type **C**, followed by the number of rows that you would like to copy in the **Cmd** column of the first row that you want to copy.  
For Example, to copy five rows, type **C5** in the **Cmd** column of the first row in the sequence of rows that you want to copy. This will result in that row and the four rows below it being copied.
2. Type **A** in the **Cmd** column of the row above which you want the rows to be inserted, or, type **B** in the **Command** column of the row below which you want the rows to be inserted.
3. Press the Enter key.

**To copy a range of rows:**

1. In an open table, type **CC** in the **Cmd** column of two rows, the row at the beginning and the row at the end of the range of rows that you want to copy.
2. Type **A** in the **Cmd** column of the row above which you want the rows to be inserted, or, type **B** in the **Cmd** column of the row below which you want the rows to be inserted.
3. Press the Enter key.

**Deleting rows**

You can delete a row or many rows using the Edit Table Rows panel.

**To delete a row:**

In an open table, type **D** in the Command (Cmd) column of the row that you want to delete. Press the Enter key.

DB2 Table Editor marks the selected row for deletion. The row will appear in green. The delete will be committed to the database when you exit the table.

**To delete a range of rows**

In an open table, type **DD** in the **Command** (Cmd) column of two rows, the row at the beginning and the row at the end of the range of rows that you want to delete. Press the Enter key.

DB2 Table Editor marks the selected rows for deletion. The rows will appear in green. The deletes will be committed to the database when you exit the table.

**Deleting Duplicate rows**

After DB2 Table Editor has completed a delete, it checks to see whether more than one row has been updated or deleted. If so, DB2 Table Editor rolls back the transaction, opens a cursor to the first occurrence of the row, and deletes that row.

## Undoing an action

You can undo an action before it is committed. You can undo the deletion of a row before committing the delete to the database, remove an inserted row before the insert has been committed to the database, and undo changes that have been made.

### To undo an action:

In an open table, type **U** in the **Cmd** column of the row that contains the result of the action that you want to undo. For example, if you wanted to undo an insert, you would type **U** in the **Cmd** column of the row that was inserted. Press the **Enter** key.

### To undo an action in more than one consecutive row

In an open table, type **U** followed by the number of rows that you want to undo in the **Cmd** column of the first row. For Example **U5** would undo the actions done to the row next to which you typed the command and the four following rows. Press the Enter key.

### To undo actions in a range of rows

In an open table, type **UU** in the **Cmd** column of two rows, the row at the beginning and the row at the end of the range of rows where you want to undo actions. Press the Enter key.

## Saving changes to DB2

### About this task

You can commit the changes that you have made during your edit session in DB2 Table Editor in two ways.

- Changes are automatically committed when you exit a table.
- You can manually commit changes at any time by specifying **SAVE** on the Command line of the Edit Table Rows panel (ETI\$EDIT).

When you exit a table to which you have made changes, or when you use the **SAVE** command to save your changes, a confirmation panel appears.

```
1 1 Save changes
   2 Discard changes

2 1 Abort on error
   2 Return to edit on error

COMMIT every 1____ (0-32767) rows
```

Figure 22. Confirmation panel

Specify information in the following fields on this panel:

Field	Description
Save changes	Specify <b>1</b> to commit the changes that you have made to DB2.
Discard changes	Specify <b>2</b> to prevent the changes that you have made from being committed to DB2.
Abort on error	The DB2 transaction will be aborted if an error is encountered.

Field	Description
<b>Return to edit on error</b>	If an error is encountered, the editor will open and all uncommitted rows that contain a change will be displayed.
<b>Commit every x rows</b>	Specify the number of rows after which you would like DB2 to commit your changes. For example, if you specify 5 in the <b>Commit every x rows</b> field, your changes will be committed every 5 rows. If you specify 0, your changes will be committed at the end of the table.

**Note:** To update a table that contains a long varchar that is over 4000 bytes long using DB2 Table Editor, you must have a unique index on that table or locking set to Shared or Exclusive on the table.

## FIND command

You can search a table using the **FIND** command.

### FIND Command

▶—**FIND**—*text string*—*keyword*—▶

The following keywords can be used with the FIND command:

- NEXT** Use this to find the next instance of the string that you are searching for.
- PREV** Use this to find the previous instance of the string that you are searching for.
- FIRST** Use this to find the first instance of the string that you are searching for.
- LAST** Use this to find the last instance of the string that you are searching for.
- ALL** Use this to find all of the instances of the string that you are searching for. The total number of occurrences of the found string appears in the upper right-hand corner of the panel when using the **FIND ALL** command.

The results of the find command are highlighted in white. If no keyword is specified, the next occurrence of the find string will be found. You can search for strings with spaces or multiple words by enclosing the string in single quotes.

**Tip:** Searching is case sensitive, so be sure to use the correct case when typing the text string that you want to search for.

### Sample

If the text that you are searching for is the same as one of the keywords, issue the find command as follows:

```
FIND 'first' FIRST
```

This command will find the first instance of the word "first".

### Searching a table using the FIND command:

You can search a table using the **FIND** command.



### Procedure

1. On the command line, in an open table, type **FIND** followed by the text string that you want to find. If you are searching for a text string that includes spaces, enclose the string in single quotes.

**Note:** To search for a text string that contains spaces, enclose the text string in single quote marks. (See example).

2. Press the Enter key. DB2 Table Editor moves the cursor to the first occurrence of the text you typed and highlights the text in white.

**Tip:** To find the next occurrence of the text that you specified press PF5 or type **RFND** on the command line.

**Important:** Searching is case sensitive, so be sure to use the correct case when typing the text string that you want to search for.

*Searching a column in a table:*

#### About this task

#### Find command

►►—F—*text string*—'*column name or number*'—————►►

**Note:** To search for a text string that contains spaces, enclose the text string in single quote marks.

### Procedure

1. On the command line, type **F** followed by the text string that you want to find followed by the name or number of the column in which you want to search. If you are searching for a text string that includes spaces, enclose the string in single quotes. For example, if you want to find the text "JENNIFER SMITH" in the employee column, type F 'JENNIFER SMITH' employee on the command line.

**Tip:** Searching is case sensitive, so be sure to use the correct case when typing the text string that you want to search for.

2. Press the Enter key. DB2 Table Editor moves the cursor to the first occurrence of the text that you typed and highlights the text in white.

### What to do next

**Note:** To find the next occurrence of the text that you specified press **PF5** or type **RFND** on the command line.

*Searching a table and changing the contents of cells in the table:* You can search a table and replace the contents of a cell using the **change** command.

### Change

►►—C—'*text string A*'<sup>(1)</sup>—'*text string B*'<sup>(2)</sup>—————►►

#### Notes:

- 1 Where text string A is the text that you are searching for.

- 2 Where text string B is the text that will replace text string A.

You can change all occurrences of one text string to another text string with the **Change all** command.

### Change all

►►—C—'text string A'<sup>(1)</sup>——'text string B'<sup>(2)</sup>——ALL—————▶▶

#### Notes:

- 1 Where text string A is the text that you are searching for.
- 2 Where text string B is the text that will replace text string A.

#### To search a table and change the contents of a cell:

1. On the command line, type **C**, followed by the text that you want to change, followed by the text that you want to change it to. If either text string contains spaces, enclose the text string in single quotes.

For example, if you want to find the text "JENNIFER SMITH" and change it to "JENNIFER JONES", type C 'JENNIFER SMITH' 'JENNIFER JONES' on the command line.

**Tip:** Searching is case sensitive, so be sure to use the correct case when typing the text string that you want to search for.

2. Press the Enter key.

DB2 Table Editor changes the first occurrence of the text that you specified and highlights the changed row in yellow.

**Note:** To find and change the next occurrence of the text that you specified, press PF6.

*Searching a table and changing the contents of cells in the table:* You can search a table and replace the contents of a cell using the **change** command.

### Change

►►—C—'text string A'<sup>(1)</sup>——'text string B'<sup>(2)</sup>—————▶▶

#### Notes:

- 1 Where text string A is the text that you are searching for.
- 2 Where text string B is the text that will replace text string A.

You can change all occurrences of one text string to another text string with the **change all** command.

### Change all

►►—C—'text string A'<sup>(1)</sup>——'text string B'<sup>(2)</sup>——ALL—————▶▶

**Notes:**

- 1 Where text string A is the text that you are searching for.
- 2 Where text string B is the text that will replace text string A.

*Searching a table and changing the contents of all cells that match the search criteria:*

**Procedure**

1. On the command line, type **C** followed by the text that you want to change, followed by the text that you want to change it to, followed by ALL. If either text string contains spaces, enclose the text string in single quotes.

For example, if you want to find all of the instances of the text "4500" and change them to "5600", type `C '4500' '5600' ALL` on the command line.

**Tip:** Searching is case sensitive, so be sure to use the correct case when typing the text string that you want to search for.

2. Press the Enter key. DB2 Table Editor changes all of the occurrences of the first text string that you specified to the second text string that you specified and highlights the changed rows in yellow.

**Results**

**Note:** If a match is found in a truncated cell (a cell that contains data that is too long to appear on the screen), the row will be highlighted and the cursor will be positioned at the beginning of the row. You can edit the cell by using the **Zoom** command.

*Searching a table and changing the contents of all cells within a column that match the search criteria:*

**About this task**

You can search for and replace the text that matches your search criteria within a specified column using the **change all in column** command.

**Change all**

►►—C—'text string A'<sup>(1)</sup>——'text string B'<sup>(2)</sup>——ALL—'column name or number'——►►

**Notes:**

- 1 Where text string A is the text that you are searching for.
- 2 Where text string B is the text that will replace text string A.

**Procedure**

1. On the command line, type **C** followed by the text that you want to change, followed by the text that you want to change it to, followed by ALL, followed by the name or number of the column in which you want the changes to be made. If either text string contains spaces, enclose the text string in single quotes.

For example, if you want to find all of the instances of the text "4500" and change them to "5600" that occur in column 14, type `C '4500' '5600' ALL 14` on the command line.

2. Press the Enter key. DB2 Table Editor changes all of the occurrences of the first text string that you specified to the second text string that you specified in the specified column and highlights the changed rows in yellow.

### What to do next

**Note:** If a match is found in a truncated cell (a cell that contains data that is too long to appear on the screen), the row will be highlighted and the cursor will be positioned at the beginning of the row. You can edit the cell by using the **Zoom** command.

## Gathering diagnostic information with the DISPLAY MEPL command

The DISPLAY MEPL ISPF command allows you to provide diagnostic information to the IBM programming team when software errors arise.

### About this task

When you enter the DISPLAY MEPL command on the DB2 Table Editor Main Menu (ETI\$MAIN panel), a job is generated and displayed on the screen. This job can be submitted and its output can be attached with any correspondence with IBM. The output of the job contains compilation, level, and APAR information that is useful to the programming staff for diagnosing software problems.

For all DB2 Table Editor software problems, you must provide the number of the last program temporary fix (PTF) and any relevant authorized program analysis reports (APARs) that were applied. APARs can be determined by using the DISPLAY MEPL command as follows:

### Procedure

1. On the DB2 Table Editor Main Menu (ETI\$MAIN panel), enter DISPLAY MEPL in the Option line and press Enter.
2. Provide a data set member name and job cards, and press Enter. The job is submitted to the internal reader. When the job completes, the job's SYSOUT DD will contain a list of each DB2 Table Editor module and its current maintenance level.

### Sample JCL

The following example displays the JCL that is generated when you use the DISPLAY MEPL command:

```
//JOB CARD JOB PDDAB,CLASS=A,NOTIFY=&SYSUID
//*
//*
//*
//*
//DISPMEPL EXEC PGM=ETI@MEPL,REGION=0M
//STEPLIB DD DISP=SHR,DSN=RSQA.ETI440.IBMTAPE.SETILOAD
//SYSLIB1 DD DISP=SHR,DSN=RSQA.ETI440.IBMTAPE.SETILOAD
//SYSOUT DD SYSOUT=*
//MEPLDATA DD *
PRODUCT 'DB2 TABLE EDITOR          YESNONNOE30  NO ADM'
PREFIX1  ETI
EYE      'ROCKET'
```

```

EYELEN      7
NUMPRE      9
NUMPOST     84
/*

```

## Column display functions

DB2 Table Editor's CSETUP functionality enables you to:

- Rearrange report columns horizontally using the CFIX and CORDER options.
- Change the width of individual columns using the CSIZE option.
- Control the vertical ordering of columns using the CSORT option.

The customizations, or "views", you configure using CFIX, CORDER, CSIZE, and CSORT can be saved across sessions.

**Tip:** DB2 Table Editor displays Column labels when they are available, otherwise column names are displayed.

## Accessing the CSETUP primary option menu

### Procedure

1. On any dynamic display (for example, the Objects Profile Display panel, the Utilities Profile Display panel, or the Jobs Profile Display panel), type CSETUP (or CSET) in the option line and press Enter. On any dynamic display (for example, the Objects Profile Display panel, the Utilities Profile Display panel, or the Jobs Profile Display panel), type CSETUP (or CSET) in the option line and press Enter. The Setup Primary Option Menu displays:

```

SETUP ----- Setup Primary Option Menu ----- YYYY/MM/DD HH:MM:SS
Command ==>
                                         Temporary View

1 CFIX      Select columns to be fixed on the left side of the report
2 CORDER    Modify the horizontal placement of unfixed columns
3 CSIZE     Customize the size of columns
4 CSORT     Select columns to sort
5 CRESET    Reset column values
6 CREMOVE   Remove all customizations, including original defaults
7 PVIEW     Permanent View (toggle between temporary and permanent)

HELP          Setup Tutorial

```

Figure 23. The Setup Primary Option Menu

### The CSET options are:

#### 1-CFIX

Enables you to fix and unfix columns.

#### 2-CORDER

Enables you to reposition columns.

#### 3-CSIZE

Enables you to change the displayed width of columns.

#### 4-CSORT

Enables you to select one or more columns for sorting and thus modify the order of the rows displayed.

#### 5-CRESET

Enables you to reset all customizations.

## 6-CREMOVE

Enables you to remove all customizations.

## 7-PVIEW

Enables you to toggle between permanent view and temporary view.

2. Type the number corresponding to the option you want to access in the command line and press Enter.

**Note:** You can also directly invoke each CSETUP option by typing the corresponding command (for example, CFIX, CORDER, CSIZE, CSORT, CRESET, CREMOVE, or PVIEW) in the option line on any dynamic display and pressing Enter.

## Fixing a column

The CFIX option enables you to fix and unfix columns. A fixed column is always located at the far left side of the display. It does not shift horizontally (as unfixed columns do) when scrolling to the left or right. INNER COLUMN SCROLLING and CEXPAND may be used on a fixed column if the column is narrower than its maximum width. Certain columns may be permanently fixed in the report and cannot be unfixed by the user. Such a column has a fix status of P (permanently fixed). A column cannot be fixed if it is larger than the available display area. There are also restrictions for fixing columns related to the size requirements of other columns.

### Procedure

1. Type CFIX in the option line on any display panel and press Enter. The Define Fixed Columns panel displays.

```
CFIX ----- Define Fixed Columns ----- YYYY/MM/DD HH:MM:SS
Option ==>                               Scroll ==> PAGE
-----+>
                                         ROW 1 OF 9

Column Function ==> 1 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> Y (Y-Perm, N-Temp) Reset View ==> N (Y,N)

Device_Width : 80
Old_Fixed_Width: 37      Old_Unfixed_Width: 43
New_Fixed_Width:         New_Unfixed_Width:

-----

Cmd New Old Len Column_Name
P  P  P   5  CMD
P  P  P  32  NAME
-             10  CREATOR
-             5   UPDT
-             32  DESCRIPTION
-             10  LAST_USER

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Line Cmds: F Fix U Unfix
```

Figure 24. Define Fixed Columns panel

### Fields and descriptions for the Define Fixed Columns pane

#### Column Function

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field. Valid options are:

- 1-Provides access to the CFIX option.

- 2—Provides access to the CORDER option.
- 3—Provides access to the CSIZE option.
- 4—Provides access to the CSORT option.

**Permanent View**

Indicate whether or not the view you define is permanent or temporary. Valid values are:

- Y—View customizations are permanent.
- N—View customizations are temporary.

**Reset View**

Resets all customizations.

**Device\_Width**

Shows the current display device size (panel width).

**Old\_Fixed\_Width**

Shows the sum of the FIXED column widths prior to any changes in the current CFIX panel.

**Old\_Unfixed\_Width**

Shows the sum of the UNFIXED column widths prior to any changes in the current CFIX panel.

**Old\_Unfixed\_Width**

Shows the UNFIXED area prior to any changes in the current CFIX panel.  $Old\_Unfixed\_Width = Device\_Width - Old\_Fixed\_Width$ .

**New\_Fixed\_Width**

Shows the sum of the FIXED column widths that will result if the FIX/UNIFIX changes are saved.

**New\_Unfixed\_Width**

Shows the UNFIXED area that will result if the FIX/UNIFIX changes are saved.  $New\_Unfixed\_Width = Device\_Width - New\_Fixed\_Width$ .

**Cmd** Field where you specify line commands. Valid line commands are F (fix) and U (unfix).

**New** Displays the new view settings.

**Old** Displays the previous view settings.

**Len** Shows the length of the column.

**Column\_Name**

Shows the name of the column.

2. Type F in the **Cmd** field next to column(s) you want to fix.
3. Type U in the **Cmd** field next to column(s) you want to unfix.
4. Press Enter. The changed values display in the **New** column next to the corresponding column(s).
5. Press PF3 to save changes and return to the display panel.

## Repositioning columns

### About this task

The CORDER option enables you to reposition report columns. If any columns are fixed, they are grouped together as the leftmost report columns. The unfixed columns are grouped together to the right of any fixed columns.

CORDER does not move a column out of its group. A fixed column cannot be relocated to the right of an unfixed column. Likewise, an unfixed column cannot be relocated to the left of a fixed column.

## Procedure

1. Type CORDER in the option line on any display panel and press Enter. The Define Column Display Order panel displays.

```
CTCORD ----- Define Column Display Order ----- YYYY/MM/DD HH:MM:SS
Option ==>                               Scroll ==> PAGE
----->
                                           ROW 1 OF 9

Column Function ==> 2 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> N (Y-Perm, N-Temp) Reset View ==> N (Y,N)

Cmd Fix New Old Column_Name
___ P      1 CMD
___ P      2 NAME
___        3 CREATOR
___        4 UPDT
___        5 DESCRIPTION
___        6 LAST_USER
___        7 LAST_UPDATED
___        8 CRTD_USER
___        9 CREATED_USER
***** Bottom of Data *****

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Line Cmds: Specify number for column position
```

Figure 25. Define Column Display Order panel

### Define Column Display Order field descriptions

#### Column Function

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field. Valid options are:

- 1–Provides access to the CFIX option.
- 2–Provides access to the CORDER option.
- 3–Provides access to the CSIZE option.
- 4–Provides access to the CSORT option.

#### Permanent View

Indicate whether or not the view you define is permanent or temporary. Valid values are:

- Y–View customizations are permanent.
- N–View customizations are temporary.

#### Reset View

Resets all customizations.

**Cmd** Field where you specify the number for column position.

**Fix** Displays fixed columns. Valid values are:

- F–Indicates the column is fixed.
- P–Indicates the column is permanently fixed.

**New** Displays the new view settings.

**Old** Displays the previous view settings.



### Column\_Name

Shows the name of the column.

2. Type a number next to a column to specify its order.
3. Press Enter. The new column order numbers display in the **New** column next to each column.
4. Press PF3 to return to the display panel.

## Resizing columns

### About this task

The CSIZE option enables you to change the displayed width of columns. This function is primarily intended for nonnumeric data where there are large blank areas in all (or most) rows in a given column. Although the displayed width may change, the underlying data does not change.

If a column's size is less than the column maximum, it is possible that some data is not displayed. INNER COLUMN SCROLLING and CEXPAND can be used to see data outside the display range of the resized column.

### Procedure

1. Type CSIZE in the option line on any display panel and press Enter. The Define Column Size panel displays:

```
CSIZE ----- Define Column Size ----- YYYY/MM/DD HH:MM:SS
Option ==>                               Scro11 ==> PAGE
-----+>
                                           ROW 1 OF 9

Column Function ==> 3 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> N (Y-Perm, N-Temp) Reset View ==> N (Y,N)

Device_Width   : 80
Old_Fixed_Width: 37      Old_Unfixed_Width: 43
New_Fixed_Width:         New_Unfixed_Width:

-----

Cmd New Old Min Max Fix Column_Name
  5  5  5  5  5 P  CMD
 32 32 32 32 P  NAME
 10 10 10 10   CREATOR
  5  5  5  5   UPDT
 32 32 32 32   DESCRIPTION
 10 10 10 10   LAST_USER

Enter: Process selections; PF3: Exit and save; CAN: Exit without save
Line Cmds: Column size, between MIN and MAX
```

Figure 26. Define Column size panel

### Define Sort Columns field descriptions

#### Column Function

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field. Valid options are:

- 1–Provides access to the CFIX option.
- 2–Provides access to the CORDER option.
- 3–Provides access to the CSIZE option.
- 4–Provides access to the CSORT option.

**Permanent View**

Indicate whether or not the view you define is permanent or temporary. Valid values are:

- Y–View customizations are permanent.
- N–View customizations are temporary.

**Reset View**

Resets all customizations.

**Device\_Width**

Shows the current display device size (panel width).

**Old\_Fixed\_Width**

Shows the sum of the FIXED column widths.

**Old\_Unfixed\_Width**

Shows the UNFIXED area.

**New\_Fixed\_Width**

Shows the sum of the FIXED column widths.

**New\_Unfixed\_Width**

Shows the UNFIXED area.

**Cmd** Field where you specify the desired size of the column.

**New** Displays the new view settings.

**Old** Displays the previous view settings.

**Min** Displays the minimum column length.

**Max** Displays the maximum column length.

**Fix** Displays fixed columns. Valid values are:

- F–Indicates the column is fixed.
- P–Indicates the column is permanently fixed.

**Column\_Name**

Shows the name of the column.

2. Type the desired column size in the **Cmd** field next to the column you want to resize.

**Note:** The column size you specify must be between the **Min** and **Max** values shown for that column.

3. Press Enter. The new view criteria display in the **New** column.
4. Press PF3 to return to the display panel.

## Sort rows and columns

You can sort the rows and columns that appear in DB2 Table Editor. There are two commands that can be used to sort rows and columns.

**SORT**

Using the **SORT** command, you can sort the data on any report panel. You can sort on single or multiple columns and specify sort order (ascending or descending) for each column in the sort.

**CSORT**

Using the **CSORT** command, you can select one or more columns for sorting and thus modify the order of the rows that are displayed on many of DB2

Table Editor's product panels. Columns are selected by sort priority and direction. Direction is either ascending (default) or descending. When more than one column is selected for sorting, the second column only differentiates when rows have matching data in the first column. Similarly, a third column only impacts the sort when data in both the first two columns are identical. A maximum of nine columns can be selected for sorting at one time. Internal requirements may create a smaller maximum. A message is issued if the maximum number of columns selected for sorting is exceeded.

## **SORT command**

The SORT command is a primary (fastpath) command. You can sort on a single or multiple columns. You can also specify sort order (ascending or descending) for each column in the sort.

You can sort by typing the appropriate SORT syntax in the **Option** line of any report panel and pressing Enter.

### **Single-column sorting**

The syntax for single-column sorting is as follows:

```
SORT column_identifier dir
```

Where:

- *column\_identifier* is either the column name or the relative column number
- *dir* is the direction in which to sort the column data. Valid values for *dir* are:
  - asc - (default) sorts data in ascending order; note, asc can be abbreviated as a
  - desc – sorts data in descending order; note, desc can be abbreviated as d

When you are working with the sort command:

- There must be a space between the *column\_identifier* and its *dir* (if used).
- The relative column number for a column is determined based on the column's placement when visible on the screen. Thus, relative column numbers are only available for columns currently visible on the screen. Relative column numbers are determined by counting the displayed columns from left to right, with the leftmost visible column being assigned the number '1' and each successive column (reading left to right) being assigned a relative column number that is incremented by 1.
- You can sort on a column that is not displayed if you use the column name (instead of the relative column number) as the *column\_identifier* in the SORT syntax.

### **Multicolumn sorting**

The syntax for multi-column sorting is as follows:

```
SORT column_identifier dir column_identifier dir
```

Where:

- *column\_identifier* is either the column name or the relative column number
- *dir* is the direction in which to sort the column data. Valid values for *dir* are:
  - asc - (default) sorts data in ascending order; note, asc can be abbreviated as a
  - desc – sorts data in descending order; note, desc can be abbreviated as d

When you are sorting on multiple columns, *column\_identifier* and *dir* values must all be separated by spaces. The maximum number of columns that can be sorted at once is 9.

## Sorting using the CSORT command

CSORT functionality enables you to modify the order of the rows displayed on many of DB2 Table Editor's product panels by selecting one or more columns for sorting.

### Procedure

1. Type CSORT in the option line on any display panel and press Enter. The Define Sort Columns panel displays:

```

SORT ----- Define Sort Columns ----- YYYY/MM/DD HH:MM:SS
Option ==>                               Scroll ==> PAGE
----->
                                                    ROW 1 OF 9

Column Function ==> 4 (1-Fix/Unfix, 2-Order, 3-Size, 4-Sort)
Permanent View ==> N (Y-Perm, N-Temp) Reset View ==> N (Y,N)
Stop Sorting    ==> N (Y,N)

  Cmd Dir New Old Column_Name
  --- -- --- -- ----
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -
  -  -  -  -  -  -  -

Enter: Process selections PF3: Exit and save CAN: Exit without save
Ord: 1-9 Dir: A Asc D Desc

```

Figure 27. Define Sort Columns panel

### Define Sort Columns field descriptions

#### Column Function

Enables you to jump to any of the CSET functions by typing in the appropriate number. The number corresponding to the current option displays in this field. Valid options are:

- 1: Provides access to the CFIX option.
- 2: Provides access to the CORDER option.
- 3: Provides access to the CSIZE option.
- 4: Provides access to the CSORT option.

#### Permanent View

Indicate whether or not the view you define is permanent or temporary. Valid values are:

- Y: View customizations are permanent.
- N: View customizations are temporary.

#### Stop Sorting

Indicates whether or not to stop sorting as specified. Valid values are:

- Y: Stop sorting.
- N: Continue sorting.

- Cmd** Field where you specify the sort order.
- Dir** Specifies the lexicographic order for the column. Valid values are:
  - A (Default): Values are listed in ascending order, smallest to largest.
  - D: Values are listed in descending order, largest to smallest.
- New** Displays the new view settings.
- Old** Displays the previous view settings.
- Column\_Name** Shows the name of the column.

2. Type A or D in the **Cmd** field next to the columns on which you want to base your sort.
3. Press Enter. The new sort preferences are displayed in the **New** column.
4. Press PF3 to return to the display panel.

## Resetting CSET customizations

The CRESET option enables you to reset all customizations. After CRESET is issued, all fixed columns are unfixed (except for any permanently fixed columns); all selected sort columns are deselected and sorting is disabled; all column sizes are set to the initial values or maximum values if no suggested value previously existed; and original column locations are restored. The CRESET option can be selected from the Setup Primary menu (option 5) or issued as a primary command.

**Note:** CRESET differs from CREMOVE in that CREMOVE sets all column sizes to their maximum values ignoring any initial, suggested sizes.

## Removing CSET customizations

The CREMOVE option enables you to remove all customizations. After CREMOVE is issued, all fixed columns are unfixed (except for any permanently fixed columns); all selected sort columns are deselected and sorting is disabled; all column sizes are set to their maximum values; and original column locations are restored. The CREMOVE option can be selected from the Setup Primary menu (option 6) or issued as a primary command.

**Note:** CREMOVE differs from CRESET in that CREMOVE sets all column sizes to their maximum values ignoring any initial, suggested sizes.

## Restrictions

The following restrictions apply to CSET options:

- Total fixed column sizes cannot exceed panel width.
- Total fixed column sizes must leave enough unfixed space for the minimum allowed size for all unfixed columns. If a column is not eligible for resizing, the column's minimum size requirement is the same as its maximum size. Minimum and maximum sizes for all columns are shown in the CSIZE display.
- If a column has been resized, then its current width is treated as its smallest allowable size. When a column is resized its current size must fit on the panel completely. For example, on an 80-byte panel with no fixed columns, a 128-byte column can only be resized to 80 bytes or less (assuming no conflicting minimum size is associated with the column). If there were two 10-byte fixed columns, for a total fixed area size of 20-bytes, the 128-byte column would be limited to 60 bytes or its minimum allowed size, whichever was smaller.

---

## The use of color in DB2 Table Editor ISPF interface

Color is used in DB2 Table Editor to indicate the state of rows and columns as outlined in the following table (called The use of color in DB2 Table Editor):

*Table 23. The use of color in DB2 Table Editor*

Color	Meaning
Red	Indicates an error.
Red underlined	Indicates a primary key column header.
Yellow	Indicates one of two things: <ul style="list-style-type: none"><li>• The value has been updated.</li><li>• The row has been inserted.</li></ul>
Green	The row is marked for deletion.
White	The column is truncated. Truncated columns can be edited using the <b>Zoom</b> command or pressing by PF4.
Highlighted in white	Indicates that the highlighted text has been found by the Find or Find all command.

---

## Data type abbreviations that are used in the DB2 Table Editor ISPF interface

To save space in DB2 Table Editor, abbreviations are used to represent data types.

The following table (Data types and their corresponding abbreviations as used in DB2 Table Editor) contains the abbreviations and the long names for all of the data types used in DB2 Table Editor.

*Table 24. Data types and their corresponding abbreviations as used in DB2 Table Editor*

Data Type	Abbreviation
INTEGER	INT
SMALLINT	SMA
CHAR	CHR
DECIMAL	DEC
FLOAT	FLT
VARCHAR	VCH
LONGVAR	LVC
GRAPHIC	GRA
VARGRAPHIC	VGR
LONGVARG	LVG
DATE	DTE
TIME	TME
TIMESTAMP	TST
BLOB	BLB
CLOB	CLB
DBCLOB	DBC
ROWID	ROW

Table 24. Data types and their corresponding abbreviations as used in DB2 Table Editor (continued)

Data Type	Abbreviation
DISTINCT	DST

## DB2 Table Editor ISPF interface line commands

The following table (DB2 Table Editor Commands) lists and describes all of the line commands that can be used in the DB2 Table Editor ISPF interface.

Table 25. DB2 Table Editor Commands

Command	Function	Panel where available
<b>EX &amp;CLIST (ETIV44)</b>	To start DB2 Table Editor, run CLIST ETIV44.	N/A
<b>S</b>	To set up the configuration file, type <b>S</b> on the command line.	Main panel (ETI\$MAIN)
<b>ABOUT</b>	To display the IBM copyright notice, type <b>ABOUT</b> on the command line. This information is also displayed when you start the product the first time.	Main panel (ETI\$MAIN)
<b>PF3</b>	To return to the previous screen, press the <b>PF3</b> key.	Main panel (ETI\$MAIN)
<b>INCLUDE ALL</b>	To select and renumber all columns type <b>INCLUDE ALL</b> on the command line and the <b>Select</b> column will be renumbered. If two or more columns have the same number, the order in which they appear on the screen will prevail.	Select Columns panel (ETI\$DPSC)
<b>EXCLUDE ALL</b>	To have all columns excluded from the generated table, type <b>EXCLUDE ALL</b> on the command line and an <b>N</b> will appear in the <b>Select</b> column next to all rows.	Select Columns panel (ETI\$DPSC)
<b>E</b>	Type <b>E</b> on the command line to edit the table in the Edit Table Rows panel.	Select Columns panel (ETI\$DPSC) and Generated Select Statement panel (ETI\$DSQL)
<b>B</b>	Type <b>B</b> on the command line to browse the table in the Edit Table Rows panel.	Select Columns panel (ETI\$DPSC) and Generated Select Statement panel (ETI\$DSQL)
<b>F</b>	Type <b>F</b> on the command line of the row that you want to edit in the Edit Table Rows panel to edit the row in form format.	Edit Table Rows panel (ETI\$EDIT)
<b>FORM</b>	Type <b>FORM</b> on the command line of the Edit Table Rows panel to edit the first row listed on the panel in form format. This allows you to edit rows one at a time.	Edit Table Rows panel (ETI\$EDIT)
<b>SQL</b>	Type <b>SQL</b> on the command line of the Select Columns panel to open the Generated Select Statement panel. From this panel you can edit the SQL.	Select Columns panel (ETI\$DPSC)

Table 25. DB2 Table Editor Commands (continued)

Command	Function	Panel where available
<b>SAVE</b>	<ul style="list-style-type: none"> <li>Type <b>SAVE</b> on the command line of the Select Columns panel or the Generated Select Statement panel to save your SQL for future use.</li> <li>Type <b>SAVE</b> on the command line of the Edit Table Rows panel to save the changes that you have made to the table that you are editing.</li> </ul>	Select Columns panel (ETI\$DPSC), and Edit Table Rows panel (ETI\$EDIT)
<b>LOAD</b>	Type <b>LOAD</b> on the command line of the Select Columns panel or the Generated Select Statement panel to load SQL that you have previously saved.	Select Columns panel (ETI\$DPSC)
<b>COUNT</b>	Type <b>COUNT</b> on the command line to display a pop-up box indicating the number of rows that will be returned by your SQL statement.	Select Columns panel (ETI\$DPSC) and Generated Select Statement panel (ETI\$DSQL)
<b>ZOOM, PF4, or HEX</b>	<p>To view or edit the entire contents of a long cell, and additional information about the cell, type <b>ZOOM</b> or <b>HEX</b> on the command line or press the <b>PF4</b> key. For more information on using this command see Editing a long cell.</p> <p>You can change the command name of this command on the Update Parameters for DB2 Subsystem panel accessible by typing S, then 2 on the command line. For more information on changing the command name for the Zoom command, see Step 3. Set the DB2 subsystem parameters.</p>	Edit Table Rows panel (ETI\$EDIT)
<b>HEX ON</b>	In the Zoom Panel, to edit a row with a hex editor, type <b>HEX ON</b> on the command line.	ZOOM panel (ETI\$EXPL)
<b>HEX OFF</b>	In the Zoom Panel, to turn the hex editor off, type <b>HEX OFF</b> on the command line.	ZOOM panel (ETI\$EXPL)
<b>CAPS ON</b>	To force all changes to capital letters, type <b>CAPS ON</b> on the command line.	Edit Table Rows panel (ETI\$EDIT) and ZOOM panel (ETI\$EXPL)
<b>CAPS OFF</b>	To resume entering data using uppercase and lowercase letters, type <b>CAPS OFF</b> on the command line.	Edit Table Rows panel (ETI\$EDIT) and ZOOM panel (ETI\$EXPL)
<b>CHECK ON</b>	To turn on checking (checking checks the screen for edit errors), type <b>CHECK ON</b> on the command line.	Edit Table Rows panel (ETI\$EDIT)
<b>CHECK OFF</b>	To turn off checking (checking checks the screen for edit errors), type <b>CHECK OFF</b> on the command line.	Edit Table Rows panel (ETI\$EDIT)



Table 25. DB2 Table Editor Commands (continued)

Command	Function	Panel where available
<b>I</b>	<p>To insert a new row into the table that you are editing, type <b>I</b> in the <b>Cmd</b> column of the row below which you want to insert a new row. For more information on using this command, see Inserting a blank row.</p> <p>To insert more than one row at a time, type <b>I</b> in the <b>Cmd</b> column of the row that you want to copy, followed by the number of rows that you want to insert, then type <b>A</b> in the <b>Cmd</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Cmd</b> column of the rows below which you want the row to be inserted.</p>	Edit Table Rows panel (ETI\$EDIT), Form View panel, and Generated Select Statement panel (ETI\$DSQL)
<b>I&lt;nn&gt;</b>	To insert more than one row into the table that you are editing, type <b>I</b> , followed by the number of new rows that you want to insert in the <b>Cmd</b> column of the row below which you want the new rows to appear.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>R</b>	<p>To repeat a row, type <b>R</b> in the <b>Cmd</b> column of the row that you want to repeat.</p> <p>To repeat more than one row at a time, type <b>R</b> in the <b>Cmd</b> column of the row that you want to copy, followed by the number of rows that you want to repeat, then type <b>A</b> in the <b>Cmd</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Cmd</b> column of the rows below which you want the row to be inserted.</p>	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>R&lt;nn&gt;</b>	To insert a repeated row more than once, type <b>R</b> in the <b>Cmd</b> column of the row that you want to repeat, followed by the number of times that you want to repeat that row.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>RR</b>	To repeat a range of rows between two specified rows, type <b>RR</b> in the <b>Cmd</b> columns of two different rows.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>C</b>	To copy a row, type <b>C</b> in the <b>Cmd</b> column of the row that you want to copy, then type <b>A</b> in the <b>Cmd</b> column of the row above which you want the row to be inserted, or, type <b>B</b> in the <b>Cmd</b> column of the row below which you want the row to be inserted.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>C&lt;nn&gt;</b>	To copy more than one row at a time, type <b>C</b> in the <b>Cmd</b> column of the row that you want to copy, followed by the number of rows that you want to copy, then type <b>A</b> in the <b>Cmd</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Cmd</b> column of the rows below which you want the row to be inserted.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)

Table 25. DB2 Table Editor Commands (continued)

Command	Function	Panel where available
<b>CC</b>	To copy all rows between two specified rows, type <b>CC</b> in the <b>Cmd</b> columns of two different rows, then type <b>A</b> in the <b>Cmd</b> column of the row above which you want the rows to be inserted, or, type <b>B</b> in the <b>Cmd</b> column of the row below which you want the rows to be inserted.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>D</b>	To delete a row, type <b>D</b> in the <b>Cmd</b> column of the row that you want to delete. For more information on using this command, see Deleting rows.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>D&lt;nn&gt;</b>	To delete more than one row, type <b>D</b> in the <b>Cmd</b> column of the row that you want to delete, followed by the number of rows that you want to delete.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>DD</b>	To delete all rows between two specified rows, type <b>DD</b> in the <b>Cmd</b> columns of two different rows to delete the range of rows in between those two rows.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)
<b>U</b>	To undo an action previously performed on a row, type <b>U</b> in the <b>Cmd</b> column. For more information on using this command, see Undoing an action.	Edit Table Rows panel (ETI\$EDIT)
<b>U&lt;nn&gt;</b>	Type <b>U</b> in the <b>Cmd</b> column of the row for which you want to undo an action, followed by the number of rows for which you want to undo actions.	Edit Table Rows panel (ETI\$EDIT)
<b>UU</b>	Type <b>UU</b> in the <b>Cmd</b> columns of two different rows to undo the previous actions for the range of rows in between those two rows.	Edit Table Rows panel (ETI\$EDIT)
<b>FIND &lt;text string&gt;</b> <keyword>	Type <b>F</b> followed by the text that you want to search for, enclosed in quotes followed by a keyword. The FIND command supports the NEXT, PREV, FIRST, LAST, and ALL keywords. For more information on using this command, see Searching a table using the FIND command.	All panels
<b>F &lt;text string&gt;</b> <column name or number>	To search for a text string within a specified column, type <b>F</b> , followed by the text string for which you want to search, followed by the column name or number in which you want to search.	Edit Table Rows panel (ETI\$EDIT)
<b>PF5</b>	To find the next occurrence of the text string that you were searching for using the <b>Find</b> command, press the <b>PF5</b> key.	Edit Table Rows panel (ETI\$EDIT)
<b>C &lt;text string&gt;</b> <new text string>	To change one text string to a new value, type <b>C</b> followed by the text string that you want to replace, followed by the text string that you want to replace it with. For more information on using this command, see Searching a table and changing the contents of cells in the table.	Edit Table Rows panel (ETI\$EDIT) and Generated Select Statement panel (ETI\$DSQL)

Table 25. DB2 Table Editor Commands (continued)

Command	Function	Panel where available
<b>PF6</b>	To change the next occurrence of the text string that you were searching for using the <b>Change</b> command, press the <b>PF6</b> key.	Edit Table Rows panel (ETI\$EDIT)
<b>C &lt;text string&gt; &lt;new text string&gt; ALL</b>	To change all matching text strings to a new value, type <b>C</b> , followed by the text string that you want to replace, followed by the text string that you want to replace it with. For more information on using this command, see To search a table and change the contents of all cells that match.	Edit Table Rows panel (ETI\$EDIT)
<b>C &lt;text string&gt; &lt;new text string&gt; ALL &lt;column name or number&gt;</b>	To change all matching text strings that are found in a specified column to a new value, type <b>C</b> followed by the text string that you want to replace, followed by the text string that you want to replace it with followed by ALL followed by the name or number of the column in which you want the changes to be made.	Edit Table Rows panel (ETI\$EDIT)
<b>CANce1</b>	Type <b>CANce1</b> on the command line to exit the Edit Table Rows panel without committing the changes that were made.	Edit Table Rows panel (ETI\$EDIT)
<b>PRINTX</b>	Print the contents of any scrollable area of the screen that displays tabular data. The contents of the current view are sent to a SYSOUT file allocated to your user ID. The name of the SYSOUT file is dynamically created by the system in the format SYSnnnnn, where nnnnn is a decimal between 1 and 99999. To view the output of a <b>PRINTX</b> command, choose the SDSF option on the ISPF main menu and select your active TSO ID. The attached SYSOUT file contains the information that <b>PRINTX</b> captured.	All scrollable panels.
<b>EXPORT (EXP)</b>	Type EXPORT (or EXP) on the Option line of the Edit Table Rows panel to write a table's committed data to a flat file, which can then be used as input into programs such as Microsoft Excel or Microsoft Access that parse delimited files as input.	Edit Table Rows panel (ETI\$EDIT)

## Viewing the DB2 Table Editor activity log

DB2 Table Editor logs all activity that takes place within the ISPF interface.

### Procedure

1. To view the DB2 Table Editor activity log, specify L on the **Option** line of the DB2 Table Editor main menu panel (ETI\$MAIN) and press Enter.

```

ETI$LOG V4R4 ----- Log Display - SSID: AA1F ----- 2014/06/10 09:48:46
Option ==> Scroll ==> CSR
-----+
Creator Like * > Row 1 of 15
Table Like * >
Timestamp (YYYY/MM/DD hh:mm:ss)
Row count (EQ, NE, GT, LT)
Action (Update, Delete, Insert, Edit, Browse)
User ID

Action Name Timestamp Row Count Creator User ID
----->----->
EDIT ETI_RT_ORG 2014/04/22 16:40:56 ETITST CSLIVI
UPDATE ETI_RT_ORG 2014/04/22 16:41:56 3 ETITST CSLIVI
DELETE ETI_RT_ORG 2014/04/22 16:41:56 2 ETITST CSLIVI
INSERT ETI_RT_ORG 2014/04/22 16:41:56 2 ETITST CSLIVI
EDIT ETI_RT_DECFLOAT 2014/04/22 16:42:35 ETITST CSLIVI
UPDATE ETI_RT_DECFLOAT 2014/04/22 16:43:00 2 ETITST CSLIVI
DELETE ETI_RT_DECFLOAT 2014/04/22 16:43:00 1 ETITST CSLIVI

Valid Commands: ENTER to process search criteria, CLEAR to clear search
criteria, END/PF3 to Exit.

```

Figure 28. The Log Display panel (ETI\$LOG)

On the Log Display panel (ETI\$LOG), the most recent records from the repository table are displayed first. If logging is not enabled, then you will receive an informational message instructing you to reconfigure DB2 Table Editor for use with logging.

2. To filter data, specify search criteria in the following fields, which appear at the top of the panel, and press Enter to view the filtered data.

**Creator Like**

To search for data in the log table by the object’s creator, specify a name of up to 128 characters. This field is scrollable, which enables you to specify longer creator names. You can also specify wildcard characters (\* or %) in this field to return all creator names.

**Table Like**

To search for data in the log table by the object’s name, specify a name of up to 128 characters. This field is scrollable, which enables you to specify longer object names. You can also specify wildcard characters (\* or %) in this field to return all table names.

**Timestamp**

To search for data in the log table by the timestamp when the object’s data was affected by an insert, update, or delete action, specify a timestamp in the following format: YYYY/MM/DD hh:mm:ss. To view all timestamps, leave this field blank.

**Row count**

To search for data in the log table by the number of rows affected by an insert, update, or delete action, specify one of the following conditional operators: EQ (equal), NE (not equal), GT (greater than), or LT (less than) followed by the number of rows. To view all data, leave this field blank.

**Action**

To search for data in the log table by the action performed (update, delete, insert, edit, or browse), specify one of the following actions: Update, Delete, Insert, Edit, or Browse. To view all actions, leave this field blank.

|  
| **User ID**

| To search for data in the log table by the user who made the change,  
| specify their user ID. To view all users, leave this field blank.

| When you specify multiple search criteria, each entry is joined together by  
| "AND" and searched together. To clear criteria and begin a new search, use the  
| CLEAR command. This clears all criteria in the search criteria fields so that you  
| can specify new search criteria.

| When you specify search criteria and press Enter, information is displayed in  
| the following fields:

| **Action**

| The action that occurred on the object. Valid values are Update, Browse,  
| Insert, Delete, or Edit (which indicates that a user entered EDIT mode  
| on a table, but took no action).

| **Row Count**

| The number of affected data rows as a result of an update, insert, or  
| delete.

| **Timestamp**

| The recorded timestamp when the corresponding action was performed  
| on the data. This is the system timestamp.

| **Creator**

| The creator of the DB2 object. If the object is a table, then this is the  
| creator of the table. If the object is a view, then this is the creator of the  
| view. This value can be up to 128 characters. This field is scrollable if  
| the content is longer than 8 characters.

| **Name** The name of the DB2 object. If the object is a table, then this is the  
| name of the table. If the object is a view, then this is the name of the  
| view. This value can be up to 128 characters. This field is scrollable if  
| the content is longer than 16 characters.

| **User ID**

| The user ID associated with the corresponding action.

| Data within columns can be sorted using the standard ISPF panel command  
| CSORT. The CSORT function will sort data in ascending or descending order.  
| For more information about sorting data, see "Sort rows and columns" on page  
| 72.

| **Results**

| **Note:** DB2 Table Editor does not currently record changes to XML data.  
|



---

## Chapter 6. The DB2 Table Editor Console component

The DB2 Table Editor Console is used to set up and manage Server Definition Files (SDFs). SDFs contain the technical information that DB2 Table Editor needs in order to connect end users to database servers.

There are four basic tasks that you perform with DB2 Table Editor Console:

- Define and configure the database servers that are accessed by the DB2 Table Editor User component
- Create database tables, bind database packages, and grant authority on user packages
- Set up governing
- Create sample database tables

### Topics:

- “Servers”
- “Package maintenance” on page 120
- “Governing” on page 120
- “Sample tables” on page 123
- “Starting the DB2 Table Editor Console component” on page 123
- “Authorities and privileges required for DB2 Table Editor tables” on page 124
- “DB2 Table Editor Console component configuration” on page 125
- “Using the DB2 Table Editor Console and User components after upgrading to a new version of DB2” on page 38
- “Enabling dynamic definition of ODBC servers” on page 144
- “Activating tracing” on page 145
- “Changing your password in DB2 Table Editor” on page 146
- “Specifying advanced DSN settings” on page 147
- “Specifying driver-specific keywords” on page 147
- “Deleting a Server from the server definition file” on page 147
- “Creating an extended catalog” on page 148
- “Editing an extended catalog” on page 148
- “DB2 Table Editor Console window” on page 148
- “Parameters window” on page 149

---

### Servers

Each database server that you or your users access with DB2 Table Editor must be defined with DB2 Table Editor Console. When you define a database, you give the database server a server name. There are no restrictions on what this name can be, it is intended to be a descriptive label for the server, used only in DB2 Table Editor. This name is all that a user of the DB2 Table Editor component needs to know to access that server. DB2 Table Editor Console is used to define each server, giving it a name and also specifying the technical information that DB2 Table Editor needs to access it. This is similar to defining a data source in ODBC. The parameters that you must specify include:

- The RDB name for the server (also known as the location name in DB2 for z/OS or OS/390 terminology, or the database name in DB2 for Linux, UNIX, and Windows), or the database alias if connecting through CLI.
- The appropriate network connection information if connecting via DRDA. This can be either the CPI-C symbolic destination name or TCP/IP host name and port number.

---

## Package maintenance

To run distributed SQL at any DB2 database, you must bind a package at the database that contains the SQL that you want to run (excluding dynamic SQL). You use DB2 Table Editor Console to choose the collection name and options for the packages that it requires, and to automatically bind the packages at a server. The DB2 Table Editor packages refer to the set of DB2 tables that DB2 Table Editor uses, which might not exist at a server. If so, you must create these tables before binding the packages. DB2 Table Editor Console can automatically determine which tables need to be created, and it allows you to automatically create them. Finally, after you bind the DB2 Table Editor packages, you must grant authority to your end users to run the user packages. Again, DB2 Table Editor Console can automatically grant or revoke this authority to the users that you specify.

---

## Governing

DB2 Table Editor incorporates a comprehensive resource governor that restricts the actions that a user can perform in DB2 Table Editor and places limits on the resources that a user can consume. This governing feature allows you to provide distributed access to DB2 to your users with the confidence that this will not have a negative impact on your overall database or network performance. Using the DB2 Table Editor Console, you can define sets of limits and restrictions, which are called resource limits groups. You can then assign users to a resource limits group, according to the governing that you want performed for those users.

### Overview: Setting up DB2 Table Editor governing

To set up DB2 Table Editor governing you must create a resource limits group and assign DB2 Table Editor users to that group. The resource usage of the user that you assigned to the resource limits group is limited as defined by that group.

### Governed resources

These resources are governed:

- Amount of time to wait for a response from a database server
- Amount of time a connection to a database server can remain unused
- Maximum number of rows returned from the database server for a query
- Maximum number of bytes returned from the database server for a query
- Maximum number of simultaneous connections to a database server
- Whether a database can be accessed from the DB2 Table Editor user interface
- The accounting string to pass to the database server
- Whether to fetch all rows immediately or only as-needed

### Resource limits groups

A resource limits group is a collection of limits and controls on the resources that are governed by DB2 Table Editor. You can control resource consumption by user,



day of the week, and by time of day. For example, a resource limits group can contain one set of limits that is effect weekdays between 8:00 a.m. and 6:00 p.m. and another that is in effect on weekends and off-hours.

### Resource limits groups storage

To prevent users from circumventing limits that you establish, resource limits groups are securely stored in a database table at the database server. Specifically, resource limits groups are stored in the table named, RDBI.RESOURCE\_TABLE. A view named RDBI.RESOURCE\_VIEW must be defined on this table because DB2 Table Editor accesses that view, not the table.

DB2 Table Editor Console is used to maintain resource limits groups. To use DB2 Table Editor Console to maintain resource limits groups, you must have the authorization to run the DB2 Table Editor Console package. This prevents unauthorized users from changing the limits that are established by the administrator.

### Default resource limits group

Users who are not explicitly assigned to a resource limits group are governed by the limits that are defined in the default resource limits group. The system administrator is responsible for creating and maintaining the default resource limits group, which is named: <Default>.

### The relationship of a resource limits group to a user

The relationship between a DB2 Table Editor user and a resource limits group is stored in a table at the database server, specifically, the table named RDBI.PROFILES\_VIEW. DB2 Table Editor Console is used to maintain user and resource limits group relationships in this table.

## Profile use

When DB2 Table Editor connects to a database server, you provide user information (user ID and password), which is validated by the database server. If the user information that you provided is valid, DB2 Table Editor determines which resource limits group to use by first locating the correct profile for the user. This is done by searching the CREATOR, ENVIRONMENT, and TRANSLATION columns in the RDBI.PROFILES\_VIEW table. The following table (profile value search order ) lists the profile values in the order in which they are searched:

Table 26. Profile value search order

CREATOR	ENVIRONMENT	TRANSLATION
User ID	WINDOWS	from current national language of DB2 Table Editor
User ID	NULL	from current national language of DB2 Table Editor
SYSTEM	WINDOWS	from current national language of DB2 Table Editor
SYSTEM	NULL	from current national language of DB2 Table Editor

## Open and restricted enrollment

Every user must have a user profile. Under restricted enrollment, if a user profile with a matching creator does not exist, the user is denied access to the server. With open enrollment, if a user profile with a matching creator does not exist, DB2 Table

Editor will look for a user profile with a creator that is equal to SYSTEM. Access to the server will be granted only if a profile is found in one of these ways. With open enrollment in effect, every user has access to the SYSTEM profile, giving every user potential access to the server.

You can create unique profiles for some users and allow other users to use the SYSTEM default profile; you can also delete the SYSTEM profile, thus preventing those who do not have unique profiles from accessing the server.

## Resource limits group use

DB2 Table Editor determines the resource limits group that is in effect for each user. The RESOURCE\_GROUP column in the RDBI.PROFILES\_VIEW table contains the name of the resource limits group that is in effect for users that are identified by the profile entry. If this field is null or blank, DB2 Table Editor will assume a default value of the user ID.

DB2 Table Editor then searches the RESOURCE\_GROUP and RESOURCE\_OPTION columns in the RDBI.RESOURCE\_VIEW view, looking for the rows listed in the following table:

*Table 27. Rows searched for in the RESOURCE\_GROUP and RESOURCE\_OPTION columns in the RDBI.RESOURCE\_VIEW view*

RESOURCE_GROUP	RESOURCE_OPTION
RESOURCE_GROUP from RDBI.PROFILES_VIEW	SHUTTLE_MAIN
RESOURCE_GROUP from RDBI.PROFILES_VIEW	SHUTTLE_SCHED1
RESOURCE_GROUP from RDBI.PROFILES_VIEW	SHUTTLE_SCHED2
RESOURCE_GROUP from RDBI.PROFILES_VIEW	SHUTTLE_SCHED3
RESOURCE_GROUP from RDBI.PROFILES_VIEW	SHUTTLE_SCHED4

If no matches are found, the user is governed by the default resource limits group. Otherwise, the user is covered based on the limits and controls found in these rows.

## Schedule use

After the resource limits group is determined DB2 Table Editor determines the schedule in the group that is in effect.

Each schedule for the group is uniquely identified by a schedule number. In addition to specifying a unique number, you must also specify an effective day of the week and time of day range. The from- and to time and the from- and to day for the schedule define when the limits and controls are in effect.

If more than one schedule is defined to be in effect at the same time, the DB2 Table Editor governor will use the one with the lowest schedule number.

**Note:** All ranges are inclusive, so that if the from time is 08:00, the schedule is in effect exactly at 08:00:00. If the to time is 17:00, the schedule is in effect at 17:00:59 but not in effect at 17:01:00.

If the from- and to times wrap around midnight (for example 5 p.m through 8 a.m.), this creates, in effect, two separate blocks of time each day that the schedule becomes active. Consider the following as an example:

**From Day**  
Monday

**To Day**  
Friday

**From Time**  
17:00 (5 PM)

**To Time**  
08:00 (8 AM)

This schedule is in effect only on weekdays. For each weekday, this schedule is in effect for the hours 5 p.m. to midnight, and midnight to 8 a.m. For example, this schedule is in effect each Monday morning from midnight to 8 a.m. as well as each Monday evening from 5 p.m. to midnight.

---

## Sample tables

DB2 Table Editor provides nine sample tables that you can use while learning DB2 Table Editor before you begin working with your own tables.

Sample tables are used throughout the DB2 Table Editor Getting Started Guide and online help as examples. They contain information about a fictitious electrical parts company. The following table (Sample Tables) lists the name of the sample table and the type of data contained in it.

*Table 28. Sample Tables*

Sample table name	Contains information about
DBE.APPLICANT	The prospective employees of the company.
DBE.INTERVIEW	The interview schedule for prospective employees.
DBE.ORG	Organization of the company by department (within division).
DBE.PARTS	Materials supplied to the company.
DBE.PRODUCTS	Products produced by the company.
DBE.PROJECT	Company projects.
DBE.SALES	Sales information for the company.
DBE.STAFF	The employees of the company.
DBE.SUPPLIER	Other companies who supply materials to the company.

---

## Starting the DB2 Table Editor Console component

When you install DB2 Table Editor, you can also install DB2 Table Editor Console.

### Before you begin

If you are connecting to any database servers using an SNA network, specify the SNA software that you are using before proceeding in DB2 Table Editor Console. From the main window in DB2 Table Editor Console, select **Edit > Options**. On the Options dialog in the **CPI-C Options** group, specify the name of the DLL that your SNA software provides for CPI-C applications.

## Procedure

Select **Start > All Programs > DB2 Table Editor > DB2 Table Editor Console**  
Alternately, you can start DB2 Table Editor by starting the program DBADMIN.EXE.

**Tip:** If the DBADMIN.EXE file does not exist, you can reinstall DB2 Table Editor to copy it from the installation disks. Be sure to specify the **Complete install** option, or specify **Custom** and then choose to install DB2 Table Editor Console. Using DB2 Table Editor Console is an administrator task. An end user will not need to run DB2 Table Editor Console. However, there is no security risk if an end user runs DB2 Table Editor Console. These users are restricted in what they can do by existing database and file-sharing security mechanisms.

---

## Authorities and privileges required for DB2 Table Editor tables

Table	Authorities
Q.OBJECT_DATA	Select, Insert, Delete
Q.OBJECT_DIRECTORY	Select, Insert, Update, Delete
Q.OBJECT_REMARKS	Select, Insert, Update, Delete
Q.OBJ_ACTIVITY_DTL	Select, Insert, Update, Delete
Q.OBJ.ACTIVITY_SUMM	Select, Insert, Update, Delete
Q.RAA_OA_DTL_X	Select, Insert, Update, Delete
Q.RAA_OA_SUMM_X	Select, Insert, Update, Delete
Q.RAA_OBJECT_VIEW	Select
Q.RAA_OBJECT_VIEW_X	Select
Q.RAA_OBJ_DATA_X	Select, Insert, Update, Delete
Q.RAA_OBJ_DIR_X	Select, Insert, Update, Delete
Q.RAA_OBJ_REM_X	Select, Insert, Update, Delete
Q.RAA_SUBTYPE	Select, Insert, Update, Delete
Q.RC_NODES	Select, Insert, Update, Delete
Q.RC_NODE_AUTH	Select, Insert, Update, Delete
RDBI.AUTHID_VIEW	Select
RDBI.CATALOG_DIR_X	Select, Insert, Update, Delete
RDBI.PROFILE_VIEW	Select, Insert, Update, Delete
RDBI.PROFILE_VIEW_X	Select, Insert, Update, Delete
RDBI.RESERVED	Select
RDBI.RESOURCE_VIEW	Select, Insert, Update, Delete
RDBI.RESOURCE_VIEW_X	Select, Insert, Update, Delete
RDBI.TABLE_VIEW2	Select
RDBI.USER_ADMIN_VIEW	Select
RDBI.USER_AUTHID_VIEW	Select
SYSCAT.PROCPARMS	Select
SYSCAT.TABAUTH	Select
SYSCAT.TABLES	Select

Table	Authorities
SYSIBM.SYSPARMS	Select (DB2 for MVS™, DB2 for OS/390 Version 6, DB2 for OS/390 Version 5)
SYSIBM.SYSPROCEDURES	Select (DB2 for MVS Version 4, DB2 for OS/390 Version 5)
SYSIBM.SYSTABAUTH	Select (DB2 for MVS Version 4, DB2 for OS/390, DB2 UDB for OS/390 and z/OS, DB2 UDB for Workstation Platforms)
SYSIBM.SYSTABLES	Select (DB2 for MVS, DB2 for OS/390, DB2 UDB for OS/390, DB2 UDB for OS/390 and z/OS)
SYSTEM.SYSCATALOG	Select (SQL/DS, DB2 Server for VSE & VM)
SYSTEM.SYSTABAUTH	Select (SQL/DS, DB2 Server for VSE & VM)

---

## DB2 Table Editor Console component configuration

Configuration information for all graphical user interface components of DB2 Table Editor is stored in a Server Definition File (SDF).

In order to configure DB2 Table Editor's components for use by developers and end users, you must create at least one SDF. SDFs are created and managed using the DB2 Table Editor Console component.

### Server definition files (SDFs)

The DB2 Table Editor server definition file (SDF) is an initialization (.ini) file that contains the technical information that DB2 Table Editor needs to connect end users to database servers. When you are using the DB2 Table Editor Console, you are always editing a particular server definition file.

In a SDF you define:

- DB2 server name
- Set security parameters
- Specify server connectivity
- Specify user profiles
- Define resource limits
- Create catalog objects and bind packages
- Select the DB2 Table Editor catalog

SDFs are usually created and managed by one administrator, not each end user. The administrator is the only person who needs to install the DB2 Table Editor Console component. They create one or more SDFs and save them to a location that is accessible by all users of the DB2 Table Editor components including the Developer component. Whenever any updates are made to a SDF (such as adding a new server), the administrator must save the changes to that shared location in order for all users to use the updated SDF.

**Information:** If more than one person is acting as the DB2 Table Editor administrator, it is possible for one administrator to overwrite the bound packages that are created by another administrator if the same catalog name is used.

DB2 Table Editor requires at least one SDF. You can create multiple SDFs. After they are configured, one or more SDFs are distributed to DB2 Table Editor end users, based on how you choose to manage your query environment.

If you use a single SDF, you define all physical servers that every DB2 Table Editor user would need to access in the one file. All users share the SDF over a file sharing network. A single SDF file is advantageous because it minimizes and centralizes administrative tasks. If you use multiple SDFs, you define a select set of physical servers in several different SDF files. End users and developers will access one or more SDFs depending on their requirements.

There are two basic ways that you can use SDFs. You can allow each DB2 Table Editor user to have their own SDF, or you can create a single SDF that is shared by multiple users over a file-sharing network. The advantage of the "sharing" approach is that it centralizes the administration of the SDF (you only need to create and maintain a single file, and your users need only to point to that file when they run DB2 Table Editor). With either approach, you specify the SDF to use on the Options window in the DB2 Table Editor Console. (To access the options window in the DB2 Table Editor Console), select **View --> Options**.)

From within DB2 Table Editor Console, you can create a new SDF for a user or group of users by selecting **File > New** or **File > Save As**. To open and work with a different SDF, select **File > Open**.

### **Creating a server definition file**

The DB2 Table Editor server definition file (SDF) is an initialization (.ini) file that contains the technical information DB2 Table Editor needs to connect end users to database servers. The DB2 Table Editor administrator is responsible for creating, configuring and maintaining SDFs for DB2 Table Editor end users.

### **About this task**

You must supply DB2 Table Editor with at least one SDF to use. A default SDF is installed with DB2 Table Editor called db2sdf.ini. You can use and configure this SDF for your environment. If you choose to use this file, you do not need to create a new SDF. Create a new SDF if you want to distribute multiple SDF files.

**Note:** Editing the DB2 Table Editor SDF using any method or application other than DB2 Table Editor Console is not recommended and may cause the file to be corrupted.

### **Procedure**

1. Open the DB2 Table Editor Console window.
2. Select **File > New**.
3. In the **File Name** field on the New window, type the name of the SDF that you want to create and click **Save**. Upon saving, the DB2 Table Editor Console is set to use the new SDF. The new SDF is displayed in the Console window file menu.

### **What to do next**

You must now configure each database server that you or your users will access using the new SDF using the Parameters notebook.

### **Creating a new server definition file based on an existing server definition file: About this task**

Use **Save As** from the **File** menu to create a new SDF. DB2 Table Editor creates a new SDF that is modeled on the currently open SDF. The new SDF contains the

same server definitions as the model SDF. You create a new SDF if you plan to distribute multiple SDF files or a SDF other than the default.

### Procedure

1. Open the DB2 Table Editor Console window.
2. Click **File > Save As**. A **Save As** file window opens.
3. In the **Save in** field specify where to save the new SDF.
4. In the **File Name** field, type the name of the new DB2 Table Editor SDF.
5. Click **Save**. The **Save As** window closes. DB2 Table Editor creates the new SDF using the currently opened SDF as a model. The new SDF includes all the configured servers and their parameters of the model SDF. Control returns to the Console window. Upon saving, DB2 Table Editor Console points to the new SDF. The new SDF displays in the Console window menu bar. You can make changes to the new SDF using the Parameters notebook.

## Defining a DB2 Database Server in an SDF

### About this task

Use the General page of the Parameters notebook to assign the database server a name in the DB2 Table Editor SDF. Assigning a name to the database server in the SDF is part of the overall task of configuring the DB2 Table Editor SDF.

DB2 Table Editor users access the database server that you are defining in the SDF using a descriptive name. The configuration parameters that you will specify for the database server are added to the SDF under the descriptive name.

You must configure in a DB2 Table Editor SDF each licensed database server that you or your users will access. You can define multiple entries in a SDF for one physical database server. Although accessing the same database server, each entry usually has different configuration parameters. Each database server entry in the SDF must have a unique descriptive name. To assign a database server a name:

### Procedure

1. From the DB2 Table Editor Console, click **New**. The General page of the Parameters notebook opens.
2. In the **Name** field, specify a unique, descriptive name for the database server that you are defining in the DB2 Table Editor SDF. This can be any name that you choose. It is the name by which users refer to this server throughout DB2 Table Editor and DB2 Table Editor Console. It does not necessarily need to be the name the server is known by on the network.  
DB2 Table Editor uses the configuration parameters of the database server that you selected from the **Servers** list in the DB2 Table Editor Console window for the new entry in the SDF.
3. Click **Next**. The Security page opens.
4. On the Security page, specify the security options for your server. For more information on the security options that are available, see the fields and controls information for the Parameters notebook.
5. Click **Next**. The Connection page opens.
6. On the Connection page, specify the type of connectivity that you are using to connect to your server and the connectivity parameters associated with your database. For more information on the types of connectivity that can be used and the associated parameters, see the fields and controls information for the Parameters notebook.

7. Click **Next**. The Set User Information window opens.
8. From the Set User Information window, specify the user ID, password, and account to be used to connect to the database that you are defining.
9. Click **OK**. The Packages page opens if you are working with DB2.
10. From the Packages page, either specify the collection ID for existing DB2 Table Editor packages, or click the **Wizard** button to launch the Packages wizard to create and bind DB2 Table Editor packages.
11. Click **Next**. The Catalog page opens.
12. On the Catalog page, specify the desired catalog options. For more information on the catalog options, see the fields and controls information for the Parameters notebook.
13. Click **Finish**. The server is defined in the SDF.

**Defining a Server that has bound packages associated with it:** To configure a server that already has bound packages associated with it, you must follow slightly different steps than when you configure a server that does not have bound packages already associated with it.

To create a new entry in the SDF, you must either bind the packages with a different Collection ID, or add the information about the packages that you want to use to the existing SDF. It is necessary to go through these steps because information is not written to the SDF otherwise. If you do not go through the steps, DB2 Table Editor will have no Collection ID specified for this database server and it will attempt to use the default 'NULLID'.

**To define a server that has packages associated with it:**

The steps for defining a server to an SDF for which the packages have already been bound are the same as the steps for defining a server to an SDF with no bound packages with one exception. On the Bind Packages page of the wizard, select the **Do not bind the packages** radio button if you do not want the packages for the SDF to be bound again. For more information on the steps for defining a server to an SDF for which the packages have not been bound, see: Defining a DB2 Database Server in an SDF.

## Setting security parameters

### About this task

Use the Security page of the Parameters notebook to set the DB2 Table Editor security parameters for the database server that you are configuring in the DB2 Table Editor SDF. Setting security parameters is part of configuring the DB2 Table Editor SDF. DB2 Table Editor security parameters control how DB2 Table Editor interacts with your database server. They do not override your database server's security requirements.

### Procedure

1. Open the Security page of the Parameters notebook.
2. Check the **User ID and password are required** check box to require DB2 Table Editor users to specify a user ID and password when connecting to the database server. By default, DB2 Table Editor always requires users to specify a user ID and password regardless of whether or not a database server requires them. For every connection to the database server, DB2 Table Editor opens the Set User Information window where users specify their user ID and password.



3. *Optional:* Check the **Encrypt Passwords** check box to specify that all user IDs and passwords be encrypted before they are sent over the network. This option is only available if the **User ID and password are required** check box is checked.
4. *Optional:* Check the **Allow users to change passwords** check box to allow users to remotely change their passwords without logging on to the database server. The database server that is being configured in the SDF must support this capability and the user ID must have the required authority. This option is only available for DB2 servers that are connected to using TCP/IP, SNA and CLI; and the **User ID and password are required** check box is checked.
5. *Optional:* Check the **Allow users to save passwords** check box to allow users to save their passwords. Password are saved in encrypted format. When checked, DB2 Table Editor does not require the user to enter a password in the Set User Information window each time a connection is made to the database server. Instead, DB2 Table Editor retrieves the saved password. The saved password is used across multiple sessions until a new password is saved or specified. This option is only available if the **User ID and password are required** check box is checked.
6. Close the Security page of the Parameters notebook:
  - Click **Next** to close the Security page of the Parameters notebook. If you are defining a new database server in the DB2 Table Editor SDF, the Connections page of the Parameters notebook opens.
  - Click **OK** to close the Security page of the Parameters notebook. If you are editing a database server's configuration parameters, the Parameters notebook closes, saving any changes that you have made to the database server's configuration parameters.
  - Click **Apply** to apply any changes that you have made to the database server's configuration parameters. The Security page of the Parameters notebook stays open.

## **Specifying server connectivity**

### **About this task**

Use the Connections page of the Parameters notebook to specify how DB2 Table Editor will connect to a database server. Specifying database server connectivity parameters is part of configuring the DB2 Table Editor SDF.

When you specify a database server's connectivity parameters, information specific to the type of connectivity that you will use is added to the SDF and used by DB2 Table Editor to find and connect to the database server. DB2 Table Editor supports the following connection options:

- DRDA over TCP/IP
- DRDA over SNA
- DB2 for Windows CLI
- ODBC

To specify the connectivity parameters:

### **Procedure**

1. Open the Connections page of the Parameters notebook.
2. Select the radio button corresponding to the type of connectivity that you want to use to connect to the database server:

- Select **Connect using DRDA over TCP/IP** to specify that DRDA over TCP/IP connectivity will be used. If you select **Connect using DRDA over TCP/IP** the lower half of the Connections page changes and presents fields that are specific to the TCP/IP network connection, including **Host name**, **Port number**, **RDB name**, **ANSI and Unicode client CCSIDs**, and **Enable load balancing**.
  - Select **Connect using DRDA over SNA** to specify that DRDA over SNA connectivity will be used. If you select **Connect using DRDA over SNA** the lower half of the Connections page changes and presents fields that are specific to the SNA network connection, including **Symbolic destination name**, **RDB name**, **ANSI and Unicode client CCSIDs**, and **Enable load balancing**.
  - Select **Connect to other data sources using ODBC** to specify that ODBC connectivity will be used. If you select **Connect using other**, the lower half of the Connections page changes and presents fields that are specific to the ODBC network connection, including the **Machine data source name** and **File data source name** fields, and the **Advanced** button to specify advanced DSN settings for ODBC data source drivers.
3. Click **Set User Information** to specify the user ID and password to be used to connect to the database server.
  4. Click **Test** to establish a connection to the database server. You must test the connection to any new database server that you are configuring in the SDF before proceeding to the remaining steps of configuring the database server in the DB2 Table Editor SDF.
  5. Close the Connections page of the Parameters notebook:
    - Click **Next** to close the Connections page of the Parameters notebook. If you are configuring a new database server in the DB2 Table Editor SDF, the Packages page of the Parameters notebook opens.
    - Click **OK** to close the Connections page of the Parameters notebook. If you are editing a database server's configuration parameters, the Parameters notebook closes, saving any changes that you have made to the database server's configuration parameters.
    - Click **Apply** to apply any changes that you have made to the database server's configuration parameters. The Connections page of the Parameters notebook stays open.

## Creating catalog objects and binding packages

### About this task

Use the Packages page of the Parameters notebook to create the DB2 Table Editor objects and bind the DB2 Table Editor packages. Creating the catalog objects and binding the packages is part of the overall task of configuring the DB2 Table Editor SDF.

You create a set of catalog objects and bind a set of packages on each database server that you configure in the SDF with the exception of ODBC data servers. The DB2 Table Editor catalog objects consist of database tables, indexes and other objects that contain information used by DB2 Table Editor. The DB2 Table Editor packages contain the SQL that DB2 Table Editor needs to run and access tables, indexes, objects, lists, views, and other miscellaneous information.

### Procedure

1. Open the Packages page of the Parameters notebook.

2. In the **Collection ID** field, specify a unique name that will be used to bind the DB2 Table Editor packages. The name you specify will identify the group of packages as belonging to DB2 Table Editor. In most instances, this name refers to the version of DB2 Table Editor that you are running on this database server.
3. Select a decimal delimiter by clicking the **Period** radio button or the **Comma** radio button. You select the decimal delimiter based on what has been defined for your database server. DB2 Table Editor uses the selected decimal delimiter in the text of its SQL statements that will be run on this database server.
4. Select a string delimiter by clicking the **Apostrophe** radio button or the **Quote** radio button. You select the string delimiter based on what has been defined for your database server. DB2 Table Editor uses the selected string delimiter in the text of its SQL statements that will be run on this database server.
5. Click **Wizard** to create the DB2 Table Editor catalog objects and bind DB2 Table Editor packages. The Packages Wizard opens.
6. When you have finished creating DB2 Table Editor objects and binding the packages, close the Packages page of the Parameters notebook:
  - Click **Next** to close the Packages page of the Parameters notebook. If you are configuring a new database server in the DB2 Table Editor SDF, the Catalog page of the Parameters notebook opens.
  - Click **OK** to close the Packages page of the Parameters notebook. If you are editing a database server's configuration parameters, the Parameters notebook closes, saving any changes that you have made to the database server's configuration parameters.

#### **Creating catalog objects and binding packages using the Packages wizard:**

Use the Packages Wizard to create the DB2 Table Editor catalog objects and bind the DB2 Table Editor packages for the database server.

#### **About this task**

The Packages Wizard is not available when configuring an ODBC database server. ODBC database servers cannot host a DB2 Table Editor catalog. Instead, ODBC servers use a DB2 Table Editor catalog that resides on a DB2 database server. Use the Catalog page of the Parameters notebook to point to a catalog for the ODBC server. In addition, because dynamic SQL is used, ODBC database servers do not require that you bind a set of packages.

#### **Procedure**

1. Open the Packages Wizard.
2. From the Catalog Option page specify whether or not you will create a DB2 Table Editor catalog on the database server that you are configuring in the SDF. Select one of the following options:
  - **Create catalog tables to support short names** - to create a set of DB2 Table Editor catalog tables that support short names.
  - **Create catalog tables to support long names** - to create a set of DB2 Table Editor catalog tables that support long names.
  - **Catalog tables have already been created** - to bind one or more packages or configure a different flavor of a database server in the SDF when DB2 Table Editor catalog tables already exist.

- **Do not create catalog tables** - to skip creating DB2 Table Editor catalog tables when the database server that you are configuring will not host a DB2 Table Editor catalog but use one that resides on a different database server

If you are configuring a database server for the first time and it does not have a set of DB2 Table Editor catalog tables, then you must create the catalog tables. To do so, select either **Create catalog tables to support short names** or **Create catalog tables to support long names**.

3. Click the **Next** button to open the next page of the Packages Wizard.
4. From the Package Properties page you specify the bind options that should be used when binding the DB2 Table Editor packages. Type the collection ID that you want to use in the **Collection ID** field. Enter a user ID in **Owner ID** field if you want to use a user ID other than your primary authorization ID to bind the packages. Click the **Advanced** button to open the Bind Options notebook where you can specify additional database-specific parameters to use to bind the packages.
5. Click the **Next** button to open the next page of the Packages Wizard.
6. From the Check Objects page specify whether or not you will be creating a new set of DB2 Table Editor database objects. If you are defining a database server to the DB2 Table Editor SDF for the first time, select the **Assume that none of the objects exist** button to create a new set of DB2 Table Editor database objects. If you have previously bound DB2 Table Editor packages for the database server, select the **Automatically check which objects already exist** button to only create database objects that don't already exist. If you are sure that all the database objects exist, select the **Assume that all of the objects already exist** button. If you select the **Assume that all of the objects already exist** option, the Packages Wizard skips the Object Listing and the Create Objects steps.
7. Click the **Next** button to open the next page of the Packages Wizard.
8. From the Object Listing Option page specify the level of filtering that will apply when producing lists of objects for DB2 Table Editor users. To impose the least amount of filtering and present all objects stored on the database server to a user regardless of user ID, click the **Include all objects without respect to whether or not the user is authorized to access them** button. To specify that only the database objects that a user's primary ID or current authorization ID is allowed to access, click the **Include only those objects that either the user's primary or current authorization ID is authorized to access** button. If a user is part of multiple groups that require different authorization IDs and you want to specify that all the database objects that can be accessed by the primary user ID, the current authorization ID, and all other authorization IDs that the primary user ID is associated with, click the **Include only those objects that any of the user's primary or secondary authorization IDs are authorized to access**.
9. Click the **Next** button to open the next page of the Packages Wizard.
10. From the Create Objects page you can view and edit the SQL statements that DB2 Table Editor will use to create the required database tables.
11. Click the **Next** button to open the next page of the Packages Wizard.
12. From the Bind Packages page specify whether or not the Packages Wizard will bind the packages using the parameters and information you have specified. Click the **Do not bind the packages** button to skip this step. You may skip this step if you have previously bound packages on this database server for the current version of DB2 Table Editor. Click the **Bind the packages** button to bind the DB2 Table Editor packages. Check the **Replace existing packages**

check box to ensure that packages from previous versions of DB2 Table Editor do not remain on the database server. Check the **Keep existing authorizations** check boxes to use the same authorizations for the current packages that were in place for any packages that were previously installed.

**Note:** Binding packages opens a connection to the database server. The status line of the Bind Packages dialog window indicates the progress of the bind operation. If errors are encountered, correct the error, then repeat the bind. Upon completion, the DB2 Table Editor packages will be bound and stored with the collection name.

13. Click the **Next** button to open the next page of the Packages Wizard.
14. From the Permissions page you grant permission to the user IDs that can run DB2 Table Editor on this database server. To grant permission to all user IDs, select the default user ID **PUBLIC** from the **User IDs** list box and click the **Grant** button. To grant permission to a specific user ID, type the user ID in the **User IDs** list box and click the **Grant** button. To revoke permission from a user ID, type the user ID in the **User IDs** list box and click the **Revoke** button.

**Note:** If you are choosing to use the default user ID **PUBLIC** to grant all DB2 Table Editor users permission to run queries on this database server, you must actually grant the permission to the **PUBLIC** user ID by selecting the user ID and clicking the **Grant** button.

15. Close the Packages Wizard.
  - Click **Finish** to close the Packages Wizard. The DB2 Table Editor packages are installed on the database server. The Packages page of the Parameters notebook remains open.
  - Click **Next** to close the Packages Page. The Catalog page of the Parameters notebook opens.

*Specifying database-specific bind options:*

#### **About this task**

Use the Bind Options notebook to specify additional bind options that will be used by the Packages Wizard to bind the DB2 Table Editor packages. All of the bind options are optional. They apply to very specific requirements that may be needed by your database.

#### **Procedure**

1. Open the Bind Options notebook.
2. *Optional:* Click the **Identification** page of the notebook to specify identification options such as the collection ID, owner ID, qualifier, and comments; and specify what to do with existing packages and authorizations.
3. *Optional:* Click the **Formats** page of the notebook to specify the decimal and string delimiters, and the date and time formats that are to be used on this database server.
4. *Optional:* Click the **Statement Performance** page of the notebook to specify isolation level, query blocking, data release, degree of parallelism, and query optimization options.
5. *Optional:* Click the **Statements** page of the notebook to specify explain, time validation, and SQL warnings options.
6. *Optional:* Click the **Miscellaneous** page of the notebook to specify dynamic rules, character sub-types, and generic options.

7. Click **OK**. The Bind Options notebook closes. All bind options are saved and will be applied when the Packages Wizard binds the packages. The Package Properties page of the Packages Wizard stays open.

## Selecting the DB2 Table Editor catalog

### About this task

Use the Catalog page of the Parameters notebook to select the DB2 Table Editor catalog for the database server that you are configuring in the SDF. Selecting the DB2 Table Editor catalog for the database server is part of the overall task of configuring the DB2 Table Editor SDF.

You can specify that the database server you are configuring in the SDF use the default DB2 Table Editor catalog that resides on the same database server or a DB2 Table Editor catalog that resides on a different database server. You can also specify where the objects from the database server you are configuring are stored in the DB2 Table Editor catalog. They can be stored in the DB2 Table Editor catalog server's main catalog or they can be stored in an extended catalog that also resides on the DB2 Table Editor catalog server.

### Procedure

1. Open the Catalog page of the Parameters notebook
2. From the **Server** list, select the server that hosts the DB2 Table Editor catalog that you want the database server that you are currently configuring in the SDF to use. This could be the same server as the one you are currently configuring, if the current server is hosting a DB2 Table Editor catalog. It will be a different server name if the database server that you are configuring in the SDF will not be hosting a catalog.
3. *Optional:* DB2 Table Editor catalogs support long names. If the catalog that you want to use is a short name catalog then you can convert the catalog to a long name catalog. The existing catalog is examined and DB2 Table Editor automatically detects if it is a short name catalog and whether or not the database version supports long names. If both these requirements are met, this option is available and the catalog is converted. If the requirements are not met then this option is not available. There is no requirement to use long names in the DB2 Table Editor catalog. If the database uses long names, the DB2 Table Editor catalog can still use short names.
4. From the **Catalog** list, select the catalog that you want the database server that you are configuring in the SDF to use. You can select the Default catalog to have all objects from all users stored in the DB2 Table Editor catalog server's main catalog or select one of the available extended catalogs to have the objects stored in an extended catalog.
5. *Optional:* Click the **Add** icon to create a new extended catalog that will reside on the DB2 Table Editor catalog server. The Add Catalog window opens.
6. *Optional:* Click the **Edit** icon to change an existing extended catalog that resides on the DB2 Table Editor catalog server. The Add Catalog window opens.
7. *Optional:* Click the **Delete** icon to delete an extended catalog from the DB2 Table Editor catalog server. Use caution when deleting extended catalogs as DB2 Table Editor removes the extended catalog and all of its contents.
8. *Optional:* Check the **Require the use of this catalog when accessing the current server** check box to require all users of the database server that you are configuring in the SDF to use the specific catalog that you have selected.

By checking this check box you can ensure that users will only have access to the server based on the resource limits that you have specified.

9. Click **Finish**. The database server that you are configuring in the SDF will use the catalog that you selected. This button is only available when creating a new entry in the SDF. The Catalog page closes saving any changes you have made to any of the server parameters.
10. Click **OK**. The database server that you are configuring in the SDF will use the catalog that you selected. The Catalog page closes saving any changes you have made to any of the server parameters.

## Setting user information

### About this task

Use the Set User Information window to specify a user ID and password that DB2 Table Editor will use for the current connection to the database server. You must specify a user ID and password in the **Set User Information** window at least once during the DB2 Table Editor session. Once specified, the same user ID and password is used for all subsequent database server connections made during the current session. To change the user ID and password that DB2 Table Editor uses, you must open the Set User Information window and specify a new user ID and password.

If you do not open the **Set User Information** window and specify a user ID and password, DB2 Table Editor will open the **Set User Information** window the first time it tries to connect to a database server.

### Procedure

1. Open the Set User Information window.
2. In the **User ID** field, type the user ID that you want DB2 Table Editor to use to connect to the database server.
3. In the **Password** field, specify the password associated with the User ID that you typed in the **User ID** field.
4. *Optional:* In the **Account** field, enter an accounting information string that the database server uses to track system usage.
5. *Optional:* Click **Change** to specify a new password for this **User ID**. The Change Password window opens where you can specify a new password for the user ID that you entered in the **User ID** field.
6. *Optional:* Check the **Remember Password** check box to have DB2 Table Editor use the password specified in the **Password** or **New Password** fields across multiple DB2 Table Editor sessions. If unchecked, DB2 Table Editor uses the password only for the duration of the current session.
7. *Optional:* Check the **Use this information for every server I connect to** check box to use the same user ID and password entered in the **User ID** and **Password** fields for connecting to all database servers. If checked DB2 Table Editor will use the same user ID and password for all connections unless you open the Set User Information window and make a change.
8. Click **OK** to set the user information that you have specified. If you specified a new password, it has been changed at the database server.

## Specifying the SDF to be used by the Developer or User component

### About this task

After you have created a SDF, each user must specify which SDF they want to use in the Developer and User components. Both the Developer and User components use the same SDF.

### Procedure

1. In either the Developer or User component, select **View > Options**.
2. In the Options notebook, click the **General** tab.
3. On the General page, in the **Server definition file** field, type the SDF name, or navigate to the location of the SDF that you want to use and select the file using the ... button.
4. Click **OK**. The server definition file that you selected will be used for both the Developer and User components of DB2 Table Editor on your machine.

## Changing the default SDF to be used by the Developer or User component

### Procedure

1. Select **View > Options**. The Options notebook opens.
2. In the Options notebook, click the **General** tab.
3. On the General page, in the **Server definition file** field, type the SDF name, or navigate to the location of the SDF that you want to use and select the file using the ... button.
4. Click **OK**. The Options window closes.
5. The servers that are defined in the SDF that you selected now appear in your server list.

## Managing SDFs

After an SDF has been created, it must be managed. SDFs are usually managed by one administrator, not each end user. Whenever any updates are made to an SDF (such as adding a new server), the administrator must save the changes to that location in order for all users to use the updated SDF. The next time each user starts their DB2 Table Editor component or Developer component session, the changes the updates to the SDF will be available.

Some common SDF management tasks are:

- Adding a new database server
- Changing a database server's configuration parameters
- Changing a database server's security parameters
- Changing user profiles
- Changing resource limits

## Sample tables

DB2 Table Editor provides nine sample tables that you can use while learning DB2 Table Editor before you begin working with your own tables. The sample tables are used throughout the documentation as examples. They contain information about a fictitious electrical parts manufacturing company.



## Creating sample tables

### About this task

Use the Sample Tables page of the Parameters notebook to create the DB2 Table Editor sample tables.

DB2 Table Editor supplies nine sample tables that you and your end users can use while learning DB2 Table Editor. Creating the sample tables on each database server is optional. Sample tables cannot be created on database servers using ODBC connectivity.

### Procedure

1. Open the Sample Tables page of the Parameters notebook: On the DB2 Table Editor Console window, select the server at which you want to create the sample tables and click **Edit**. The Parameters notebook opens.
2. Click the **Sample Tables** tab. The Sample Tables page opens.
3. Click **Create** to create the sample tables. The sample tables are created.
4. Click **OK** to close the Parameters notebook. The Parameters notebook closes, saving any changes you have made to any of the server parameters.

## Setting up governing

DB2 Table Editor incorporates a resource governor that limits and controls the use of database and communications resources. Use the DB2 Table Editor Console to set up the resource limits groups that manage, control, and restrict this resource usage.

### About this task

The governing function of DB2 Table Editor is always active. If no explicit limits are in effect, governing is performed based on the limits in the default resource limits group. There are three basic steps to establishing explicit governing or resource limits:

### Procedure

1. Create the resource limits group.
2. Create schedules in the resource limits group.
3. Assign users to the resource limits group.

## Setting up Governing

DB2 Table Editor incorporates a resource governor that limits and controls the use of database and communications resources. Use the DB2 Table Editor Console to set up the resource limits groups that manage, control, and restrict this resource usage.

### About this task

Through governing you can control the actions a user can perform and implement limits on the resources a user can consume when using DB2 Table Editor.

There are three parts to setting up governing:

- Create a resource limits group.
- Create the schedules for the resource limits group.

- Assign users to one or more resource limits groups.

Once your resource limits group is created, you can modify the schedule and assign users at any time.

Setting up resource limits groups with specific schedules and assigned users is optional. If you do not set up specific resource limits groups, all users fall into a default resource limits group that has no restrictions.

## Procedure

1. Open the Resource Limits page of the Parameters notebook.
2. Create the resource limits groups for the database server that you selected from the **Servers** list in the DB2 Table Editor Console window.

Create the resource limits groups for the database server that you selected from the **Servers** list in the DB2 Table Editor Console window. To create a resource limits group click the **New** icon. The New Resource Limits Group window opens.

**Note:** All resource limits groups that exist are listed in the **Matching groups** list box. Every database server has a resource limits group called <default>. The <default> resource limits group includes all users and has no resource limitations. Use the **Show resource limits groups whose names match** field and the **Refresh List** button to search for specific resource limits groups that exist on the database server. Use a % sign in the **Show resource limits groups whose names match** field to list all resource limits groups that exist on the database server.

3. Create one or more schedules for the resource limits group.  
Create one or more schedules for the resource limits group. To create a schedule, select the resource limits group from **Matching groups** list box and click the **Edit** icon. The Edit Resource Limits Group window opens.

**Note:** All resource limits groups that exist are listed in the **Matching groups** list box. Every database server has a resource limits group called <default>. The <default> resource limits group includes all users and has no resource limitations. Use the **Show resource limits groups whose names match** field and the **Refresh List** button to search for specific resource limits groups that exist on the database server. Use a % sign in the **Show resource limits groups whose names match** field to list all resource limits groups that exist on the database server.

4. Assign users to a resource limits group. Select a resource limits group from the **Matching Groups** list box. Click the **Assign** button. The Assign User Profiles to Group window opens.

**Note:** You can also assign users to a resource limits group by using the User Profiles page of the parameters notebook.

5. Click **OK** to close the Resource Limits page of the Parameters notebook. The Parameters notebook closes, saving any changes you have made to any of the server parameter. The Parameters are saved.

## Creating resource limits groups

### About this task

Use the New Resource Limits Group window to create a new resource limits group for the current database server. Creating a resource limits groups is part of setting up DB2 Table Editor governing.

All DB2 Table Editor users automatically belong to a default resource limits group called <default>. The default resource limits group has no restrictions on when users can access the database server or what resources they can use. By assigning users to resource limits groups with specific schedules you can control their control database access and resource consumption. You can create multiple resource limits groups for a database server.

### Procedure

1. Open the New Resource Limits Group window.
2. In the **Group name** field specify the name for the new resource limits group.
3. *Optional:* In the **Comments** field specify up to 80 characters of comments describing the resource limits group.
4. *Optional:* Check the **Create this group using schedules from model group** check box to create the resource limits group with the same schedules as the model group. The model group is the resource limits group you selected in the **Matching Groups** list box from the Resource Limits page of the Parameters notebook.

If this check box is unchecked, the new resource limits group has no schedules other than the default schedule. You create or modify a resource limits groups schedule using the Edit Resource Limits Group window.

5. Click **OK**. The New Resource Limits Group window closes and the new resource limits group is created. The Edit Resource Limits Group window opens. From the Edit Resource Limits Group window you can create or modify the resource limits groups schedule.

## Creating a resource limits group schedule

### About this task

Use the Edit Resource Limits Group window to create and edit resource limits group's schedules. Creating and editing resource limits group schedules is part of setting up DB2 Table Editor governing.

A resource limits group can have one or more schedules, each with different set of resource limits. The schedule defines when the associated set of resource limits are in effect. The set of resource limits specify what actions and resource usage is allowed while the schedule is in effect.

### Procedure

1. Open the Edit Resource Limits Group window
2. From the **Schedule List**, select a schedule. If you are creating a new resource limits group schedule, the schedule you select will be used as a model for the new resource limits schedule. The new schedule will include the same resource limits as the model schedule. If no other schedule exists, the default schedule will be highlighted. If you are editing an existing resource limits schedule, select the schedule that you want to edit.
3. *Optional:* Click **New** to create a new resource limits group schedule. The Main page of the Edit Resource Limits Group Schedule notebook opens.

4. Optional: Click **Edit** to edit the resource limits group schedule you selected from the **Schedule List**. The Timeouts page of the Edit Resource Limits Group Schedule notebook opens.
5. Optional: You can use the **Status** radio buttons to collectively activate or deactivate all the schedules that have been defined for a resource Limits group. To activate all the schedules listed in the **Schedule List**, click the **Activate** radio button. All of the schedules as they were originally defined are effective. To deactivate all the schedules listed in the **Schedule List**, click the **Deactivate** radio button. None of the schedules are in effect except the default schedule. The schedules are saved and can be activated at any time.
6. Click **OK**. The Edit Resource Limits Group window closes. The new resource limits group schedule is created and any changes that you have made to the resource limits parameters are saved.

### **Specifying parameters for a resource limits group schedule: About this task**

Use the Edit Resource Limits Group Schedule notebook to specify the parameters for a resource limits groups schedule. Specifying the parameters for a resource limits group schedules is part of setting up DB2 Table Editor governing.

Each resource limits group can have one or more schedules that dictates what an end user can do and when they can do it. When a user submits a query, DB2 Table Editor first determines the resource limits group a user belongs to and then what schedule for that resource limits group is in effect.

Most resource limits specified in the schedule are checked before a query leaves the workstation. The query never reaches DB2 for evaluation if one of these resource limits is violated. Other resource limits are evaluated after DB2 has started to run the query. In this case, any DB2 limiting rules take precedence over DB2 Table Editor resource limits.

### **Procedure**

1. Open the Edit Resource Limits Group Schedule notebook.
2. Using the following pages of the Edit Resource Limits Group Schedule notebook specify the parameters that will set up the resource limits for the selected resource limits group schedule:
  - Select the **Main** page to assign the schedule a priority and specify the time of day and day of the week the schedule is in effect. You must specify these parameters when you are creating a new schedule.
  - Select the **Timeouts** page to specify warning and cancellation limits for idle queries, idle connections, and server response time.
  - Select the **Limits** page to specify warning and cancellation limits for the maximum number of rows and bytes of data DB2 Table Editor can retrieve. In addition, select this page to specify the maximum number of simultaneous connections DB2 Table Editor can establish to the database server.
  - Select the **SQL Verbs** page to limit the SQL verbs that users assigned to this resource limits group are allowed to use when this schedule is in effect.
  - Select the **Options** page to specify server access options including: database access using DB2 Table Editor's user interface and programming interface; database update confirmation; isolation levels for user queries; mandatory account information; and the ability to fetch all rows automatically, export data, edit tables, and only run saved queries.

- Select the **Save Data** page to allow users assigned to this resource limits group and using this schedule to save data at the database server.
  - Select the **Binding** page to allow users assigned to this resource limits group and using this schedule to bind or drop static packages for their queries.
  - Select the **LOB Options** page to control users who are assigned to this resource limits group and using this schedule access to and retrieval of data from tables containing large object data (LOB).
  - Select the **Report Center** page to grant users of the DB2 Table Editor Report Center application who are assigned to this resource limits group and using this schedule the authority to create reports, control access to reports, and take ownership of any other user's reports.
3. Click **OK**. The Edit Resource Limits Group Schedule notebook closes. All the changes that you have made to the resource limits parameters are saved. The Edit Resource Limits Group window stays open.

### Assigning users to a resource limits group

Use the Assign User Profiles window to assign users to a resource limits group. Assigning users to a resource limits group is part of setting up DB2 Table Editor governing. In order to assign users to a resource limits group you must first create the resource limits group.

#### About this task

You must specifically assign users to a resource limits group. Once assigned, what they can do using DB2 Table Editor is dictated by the resource limits group schedule. You can create a resource limits group schedule before or after you assign users. All users who are not assigned to a resource limits group are automatically included in the default resource limits group called System. The System resource limits group schedule has no restrictions.

Users who will be assigned to a resource limits group must have a user profile. You can create a user profile at any time using the User Profile page of the Parameters notebook. If you have not created a user profile for a user ID, you can create a user profile when you are assigning the user to a resource limits group.

#### Procedure

1. Open the Assign User Profiles window
2. List the user profiles that have been assigned to the resource limits group and the user profiles on the database server that are available to be assigned.  
Enter your search criteria in the **Show User Profiles with creator matching** field. You can specify the user ID of a specific user profile or a wildcard character. A % sign will generate a list of all user profiles that have been created on the database. Click the **Refresh List** button to initiate the search.  
The **Not Assigned** list shows all the user profiles that match the search criteria and are not assigned to this resource limits group. The **Assigned** list shows all the user profiles that match the search criteria and are assigned to this resource limits group.
3. *Optional:* If you have not created a user profile for the user you want to assign to the resource limits group, it will not be included in the **Not Assigned** or **Assigned** lists. You must create a new user profile. Click **Create New** to create a new user profile.
4. Select the user profile that you want to assign to the resource limits group from the **Not Assigned** list. Click **Assign**. The user profile is moved to the **Assigned** list.

5. *Optional:* To move all the user profiles in the **Not Assigned** list to the **Assigned** list, click **Assign All**.
6. *Optional:* To remove a user profile from the list of resource limits group assigned users, select the user profile from the **Assigned** list. Click **Unassign**. The user profile is moved to **Not Assigned** list.
7. *Optional:* To remove all the user profiles from the **Assigned** list and move them to the **Not Assigned** list. click **Unassign All**.
8. Click **OK**. The Assign User Profiles window closes and your changes to the resource limits group user assignments are saved. The Resource Limits page of the Parameters notebook opens.

#### **Assigning users without a user profile to a resource limits group:**

Use the New Profile window to create a user profile for a user ID that you want to assign to a resource limits group.

#### **Procedure**

1. Open the New Profile window.
2. In the **Creator** field specify the user ID for the user profile that you want to create. The new user profile is created with your systems default language and operating environment values. The new user profile is assigned to the resource limits group that you selected in the **Matching groups** list from the Resource Limits page of the Parameters notebook.

**Note:** You may not change the default values for the user profile from the New Profile window. To edit the user profile, use the User Profiles page of the Parameters notebook. You can change resource limits assignments using the Assign User Profiles window.

3. Click **OK**. The New Profile window closes. The new user profile is created and assigned to the resource limits group. The Assign User Profiles window stays open.

#### **Creating user profiles**

Use the User Profile window to add a User Profile in the DB2 Table Editor profile table. Adding and editing User Profiles is part of setting up governing.

#### **About this task**

When you create a user profile using the User Profile Window, you can also assign the user profile to a Resource Limits group. If you are editing a User Profile you can change the Resource Limits group assignment to a different group. In either case, the Resource Limits group you select must already have been created.

#### **Procedure**

1. Open the User Profile window.
2. In the **Creator** field, specify a valid user ID for the user.
3. *Optional:* Use the **Resource Group** field to specify a resource limits group to which the user profile will become a member. Unless otherwise specified all new user profiles are automatically assigned to the default resource limits group SYSTEM group.
4. *Optional:* Use the **Space** field to specify the name of a table space that will be used when this user saves data using the SAVE DATA command. The resource limits group schedule for this user must allow users to save data in order for

this table space name to be used. Reference editing resource limits groups schedules for how to allow users to save data and specify unique table space names.

5. Click **OK** to close the User Profile window. DB2 Table Editor adds the User Profile to the profile table and returns to User Profile page of the server parameters dialog window.

### Managing user profiles

Use the User Profiles page of the Parameters notebook to manage DB2 Table Editor users and their user profiles. All users that will be assigned to a resource limits group must have a user profile. Creating user profiles is part of setting up DB2 Table Editor governing. Users that do not have a user profile are automatically assigned to the default resource limits group SYSTEM.

#### Procedure

1. Open the User Profiles page of Parameters notebook
2. Optional: Search for a specific user profile or list all of the user profiles that have been created on the database server.  
  
Enter your search criteria in the **Show User Profiles whose names match** field. You can specify the user ID of a specific user profile or a wildcard character. A % sign will generate a list of all user profiles that have been created on the database. Click the **Refresh List** button to initiate the search.  
  
The **Matching Profiles** list includes all the user profiles from the profile table that match the value specified in the **Show User Profiles whose names match** field.
3. Click the **Add** icon to add a new user profile to the profile table. The User Profile window opens.
4. Optional: To edit a user profile, select the user profile you want to change from the **Show User Profiles whose names match** list. Click the **Edit** icon. The User Profile window opens.
5. Optional: To delete a user profile from the profile table on the database server, select the user profile that you want to delete from the **Show User Profiles whose names match** list. Click the **Delete** icon. The user profile is deleted from the profile table on this database server.
6. Click **OK** to close the User Profiles page of the Parameters notebook. The Parameters notebook closes, saving any changes you have made to any of the server parameter.

### Selecting a resource limits group for a user profile

Use the Resource Limits Group at Server window to view a list of the resource limits groups that have been defined for the database server. You can select from this list the resource limits group to which you will assign the user profile that you are creating.

#### Procedure

1. Open the Resource Limits Groups at Server window.
2. From the **Resource limits group** list, select the resource limits group to which you want to assign the user profile.
3. Click **OK** to close the resource limits groups at server window. The resource limits group selected in the **Resource limits group** list is inserted in the **Resource Group** field of the User Profile window. The User Profile window stays open.

## Setting connectivity options

### About this task

Use the Options notebook to specify connectivity options that will apply to all database servers configured in the SDF with the same type of connectivity. The options include the CPI-C DLL for SNA connectivity and timeout limits for all network connections made by DB2 Table Editor.

The timeout limits specified in the Options notebook do not apply when DB2 Table Editor is receiving data. Timeout limits for network connections when DB2 Table Editor is receiving or waiting for data to be sent across the network, are specified using the Timeouts page of the Edit Resource Limits Group Schedule notebook.

### Procedure

1. Open the Options notebook.
2. *Optional:* Use the CPI-C page of the Options notebook to specify the timeout limits for all servers using DRDA over SNA connectivity. You must also specify the DLL DB2 Table Editor will use to access CPI-C services. If any database server will be accessed by DB2 Table Editor using DRDA over SNA connectivity, you must specify the CPI-C services DLL in the **Provider DLL** field.
3. *Optional:* Use the TCP page of the Options notebook to specify timeout limits for all database servers using DRDA over TCP/IP connectivity.
4. *Optional:* Use the CLI page to specify timeout limits for all database servers using CLI connectivity.
5. *Optional:* Use the ODBC page to specify timeout limits for all database servers using ODBC connectivity.
6. Click **OK**. The Options notebook closes and all changes made to the connectivity options are applied.

---

## Enabling dynamic definition of ODBC servers

Use the **Enable dynamic definition of ODBC servers** option to dynamically configure in the SDF every local ODBC data source for each of your DB2 Table Editor users.

### About this task

To dynamically define ODBC data sources, you first must configure a model ODBC database server in the SDF. When DB2 Table Editor runs on the local machine using this SDF, it dynamically creates an entry in the SDF for each ODBC data source known to the local machine's ODBC Data Source Manager. Each entry in the SDF uses the model ODBC database server's configuration parameters. The SDF entries for the local ODBC data sources are in effect for the length of the current DB2 Table Editor session. The next time DB2 Table Editor starts, the entries for the ODBC data sources in the SDF are rebuilt.

### Procedure

1. Open the DB2 Table Editor Console window
2. Check the **Enable dynamic definition of ODBC servers** check box to configure in the SDF every local ODBC data source for each of your DB2 Table Editor users. If you do not use the **Enable dynamic definition of ODBC**



**servers** option, you must individually configure in the SDF every local ODBC data source that each of your users needs to access.

3. Click the **Properties** button to configure the model ODBC database server. The Parameters notebook opens.
4. The name of the ODBC model database server, listed on the General page of the Parameters notebook, is automatically inserted as **Dynamic ODBC Servers**. You cannot change this name. When DB2 Table Editor dynamically configures each local ODBC data source it will use the local data source name as the dynamic entry database server name in the SDF. This ensures that each dynamic entry in the SDF has a unique name. DB2 Table Editor will not create a dynamic entry in the SDF for local data source names that exceed 64 characters. DB2 Table Editor will not create a dynamic entry in the SDF for any local data source name that already exists in the SDF. This ensures that any individual ODBC database server's parameters already configured in the SDF will not be overridden.
5. Optional: Use the Security page of the Parameters notebook to specify the security information for the model ODBC database server. The security parameters that you specify will apply to all the local ODBC data sources that are dynamically defined based on the model ODBC database server entry.
6. You must specify whether the model ODBC database server and all the local ODBC data sources that are dynamically defined will use a DB2 Table Editor catalog. You use the Catalog page of the Parameters window to specify whether or not the model ODBC database server will use a DB2 Table Editor catalog. If you choose to specify that the model ODBC server will not use a DB2 Table Editor catalog, then all of the data sources that are dynamically defined based on that model will not use a DB2 Table Editor catalog. Likewise, if you choose to specify that the model ODBC server will use a specific DB2 Table Editor catalog, then all of the data sources that are dynamically defined based on that model will use that DB2 Table Editor catalog.
7. Optional: Use the Resource Limits page of the Parameters notebook to set up governing for the model ODBC database server. The governing parameters specified will apply to all the local ODBC data sources that are dynamically defined based on the model ODBC database server entry.
8. Optional: Use the User Profiles page of the Parameters notebook to create a new user profile. User Profiles are used to assign users to resource limits groups. All users not assigned to a specific group are included in the default resource limits group.
9. The Connections, Packages, and Sample Tables pages of the Parameters notebook are not available when configuring the model ODBC database server. This is because the type of connectivity is assumed to be ODBC and you cannot create objects, bind packages or create sample tables on any ODBC database server.
10. Click **OK** to save the model ODBC database server configuration parameters. The Parameters notebook closes.

---

## Activating tracing

It is useful to activate tracing when you are diagnosing a problem.

## About this task

Use the Options notebook to activate tracing. By selecting the Traces option you tell DB2 Table Editor to start recording data about one or more of the components it might use during processing.

**Important:** The amount of data that is recorded during tracing can be significant. It is recommended that tracing be used cautiously as it will impact performance.

## Procedure

1. Open the Options notebook.
2. *Optional:* Use the Tracing page to activate tracing.
3. In the Trace file field specify the name of the trace file that DB2 Table Editor can use to write trace data. To search for a file, click the **Browse** icon.
4. From the **Components** list box select one or more of the components for tracing.
5. Click **OK**. The Options notebook closes and all changes made to the connectivity options are applied. Tracing starts as soon as any user activates DB2 Table Editor using the selected SDF.

---

## Changing your password in DB2 Table Editor

### About this task

You can change your password at the database server from DB2 Table Editor's user component on some DB2 platforms.

Use the **Change Password** window to specify a new password for your user ID. The user ID must have permission at the database server and in DB2 Table Editor, as specified by the DB2 Table Editor security parameters set by your DB2 Table Editor Administrator, to change a password at the database server. The new password is permanently changed at the database server.

### Procedure

1. On the DB2 Table Editor Console window, select the server at which you want to change your password and click the **Edit** button. The Parameters dialog opens.
2. Click the **Connections** tab. The Connections page opens.
3. On the Connections page, click **Set User Info**. The Set User Information window opens.
4. On the Set User Information window, click **Change**. The Change Password window opens.
5. Type your new password in the **New password** field and type it again in the **Confirm new password** fields.
6. Click **OK**. The Change Password window closes.
7. Click **OK**. The Set User Information window closes. Your database server password is changed.

---

## Specifying advanced DSN settings

### About this task

Use the Advanced DSN Settings window to specify driver-specific connection string keywords and their values for CLI database servers and ODBC data source servers. For information on any keywords that are required by a selected driver, consult the specific driver's documentation.

### Procedure

1. Open the Advanced DSN Settings window.
2. Click the **Add** icon to add a Keyword to the Keywords and Values list. The Keyword and Value window opens. Using this window specify the keyword and its associated value. Upon closing, the specified keyword and value are listed in the Advanced DSN Settings window.
3. *Optional:* To edit an existing keyword or value, select the keyword or value from the Keywords and Values list. Click the **Edit** icon. The Keyword and Value window opens. Using this window change the keyword or its associated value. Upon closing, the changed keyword and value are listed in the Advanced DSN Settings window.
4. Click **OK**. The Advanced DSN settings window closes. The new or changed keywords and values are saved. The Connection page of the parameters notebook stays open.

---

## Specifying driver-specific keywords

### About this task

Use the Keywords and Values window to specify the driver-specific connection string keywords and their values for advanced DSN settings. For information on any keywords that are required by a selected driver, consult the specific driver's documentation.

### Procedure

1. Open the Keywords and Values window.
2. Type the new driver-specific keyword to be included in the connection string for this ODBC, CLI or JDBC network connection in the **Keyword** field. You can add any number of driver-specific keywords. Information on keywords for the specific driver can be found in your driver's documentation.
3. Type a value in the **Value** field that will correspond to the keyword you entered in the **Keyword** field. Information on values for keywords can be found in your driver's documentation.
4. *Optional:* To change a keyword, type the change in the **Keyword** field or the **Value** field.
5. Click **OK**. The Keyword and Values window closes. The new or changed keywords and values are saved. You return to the Advanced DSN settings window where you can add additional keywords or edit existing keywords.

---

## Deleting a Server from the server definition file

Use the **Delete** button on the Console window to delete a server from the SDF. DB2 Table Editor removes the server and all of its parameters from the selected open SDF.

## Procedure

1. Open the DB2 Table Editor Console window.
2. From the **Server** list, select the server from the open SDF to be deleted.
3. Click **Delete**. A Confirmation message window opens.
4. Click **Yes**. The Confirmation window closes. DB2 Table Editor deletes the selected server and all of its parameters from the open SDF. Control returns to the Console window.

---

## Creating an extended catalog

### About this task

Use the Add Catalog window to create an extended catalog on a DB2 Table Editor catalog server. Creating an extended catalog is part of setting up shared catalogs.

### Procedure

1. Open the Add Catalog window
2. In the **Catalog Name** field, specify a unique name for the extended catalog.
3. In the **CCSID** field, select a CCSID codepage for the extended catalog.
4. Check the **Create system profile entry** check box to create an entry in the System Profile table located on the DB2 Table Editor catalog server.
5. Click **OK** to close the Add Catalog page. The new extended catalog name is created.

---

## Editing an extended catalog

### About this task

Use the Edit Catalog window to change the name or attributes of an extended catalog on a DB2 Table Editor catalog server. Making changes to the name or attributes of an extended catalog is part of setting up DB2 Table Editor catalogs.

### Procedure

1. Open the Edit Catalog window.
2. In the **Catalog Name** field, type the changes that you want to make to the extended catalog name.
3. In the **CCSID** field, select a different CCSID codepage for the extended catalog.
4. Check the **Create system profile entry** check box to create an entry in the System Profile table located on the DB2 Table Editor catalog server.
5. Click **OK** to close the Edit Catalog page. Any changes that you have made to the extended catalog name are saved.

---

## DB2 Table Editor Console window

DB2 Table Editor Console application is used to configure the DB2 Table Editor environment and perform the administrative tasks necessary for end users to access DB2 and Informix<sup>®</sup> data using the DB2 Table Editor user component.

In most instances, there is only a single copy of the DB2 Table Editor Console application installed and a single user responsible for performing the necessary administrative tasks. The DB2 Table Editor administrator must have the authority to update tables.

## Use the DB2 Table Editor Console window to initiate the following tasks:

- Creating a new Server Definition File
- Creating a new Server Definition File based on an existing Server Definition File
- Configuring the Server Definition File
- Assigning the server a name in the Server Definition File
- Defining a Database Server in the Server Definition File
- Defining a database in the server definition file
- Parameters Notebook Overview
- Deleting a Server from the Server Definition File
- Importing DB2 for Windows databases
- Enabling dynamic definition of ODBC servers
- Publishing the SDF
- Setting connectivity options
- Activating Tracing

---

## Parameters window

Use the Parameters notebook to initiate the tasks that are required to administer DB2 Table Editor.

The tasks include:

- Configuring a database server in the DB2 Table Editor SDF
- Creating the objects and packages on the database server that DB2 Table Editor needs in order to run
- Setting up governing in order to control resource usage by users
- Assigning the server a name in the SDF
- Defining a database in the server definition file
- Setting security parameters
- Specifying server connectivity
- Creating catalog objects and binding packages
- Selecting the DB2 Table Editor catalog
- Managing user profiles
- Creating sample tables

---

## Concepts

### Correct format for identifiers

Object owners and object names, including column names. The maximum length of table owners and table names depends on the version and platform of DB2. Normal characters include uppercase letters, digits, or the following characters: \_ @ # and \$. You must enclose any special characters in quotes. For example the identifier pro\_ject would be "pro"\_ject" If the identifier includes a quote character, you must double each occurrence of the quote character and then enclose the entire identifier in quote characters. For example, you enter the identifier pro"ject as "pro""ject". If you use lowercase letters and do not enclose the identifier in quotes, any lowercase letters are changed to uppercase.

## Matching Patterns

When entering queries, forms, and table names for searching you can use the percent % and underscore \_ characters to match patterns.

Use the percent character % to match a string of any length containing any characters. For example, to list all items beginning with the letter A, you enter %A. To list all items, enter just the % character.

Use the underscore character \_ to match a single character. For example, to list all items that have the letter A in the second position, enter \_A%.

If the pattern you enter contains **special characters**, you must enclose the entire pattern in quotation marks. For example, to include a space as part of a pattern, you enter "A B%".

## Special characters

Special characters include any characters other than:

- A through Z (uppercase only)
- 0 through 9
- # \$ @ and \_

## Default DB2 Table Editor Server Definition File (SDF)

Upon installation, DB2 Table Editor Console opens pointing to the default SDF called db2sdf.ini. You can choose to add your server definitions to this file or create a new SDF file with another name. You can also choose to have a single SDF file or multiple SDF files. On subsequent openings, DB2 Table Editor Console points to the last SDF used. The SDF in effect is named in the title menu bar.

Depending on how you want to manage SDFs at your site, you must create at least one SDF or you can create multiple SDF files. DB2 Table Editor supplies a default SDF called db2sdf.ini which you can use as a model. Editing the DB2 Table Editor SDF using any method or application other than DB2 Table Editor Console is not recommended and may cause the file to be corrupted.

## Multiple DB2 Table Editor Server Definition Files (SDF)

With a single SDF file, you would define all physical servers that every DB2 Table Editor user would need to access in the one file. All users would share the SDF file over a file sharing network. A single SDF file is advantageous because it minimizes and centralizes administrative tasks.

For multiple SDF files, you would define a select set of physical servers in several different SDF files. Users would access one or more SDFs depending on their requirements. Multiple SDF files increase your administrative tasks since you must make all changes to the SDF files using the DB2 Table Editor Console application.

## Wildcards

When typing query or form or table names for searching, you can use the percent % and underscore \_ characters as wildcards.

Use the percent character % to match a string of any length containing any characters. For example, to list all items beginning with the letter A, enter A%. To list all items, enter only the % character.

Use the underscore character \_ to match a single character. For example, to list all items that match a specific naming pattern but whose second character varies, enter X\_Z123.

If the pattern you enter contains special characters, you must enclose the entire pattern in quotation marks. For example, to include a space as part of a pattern, enter "A B%".

## What Resource Limits Group Schedule is in effect

The Resource Limits group schedule specifies the limits that have been set up for a group of users. For each resource Limits group, there might be more than one schedule. Usually each schedule has different limits specified and is effective at different times. However, some schedules can have different limits but overlapping times where they are effective. In the cases of overlapping times, DB2 Table Editor uses the unique schedule number to determine which schedule is in effect. The schedule with the lowest number takes precedence.

For example, if a resource group has following four schedules:

*Table 29. Resource limits group schedules example 1*

Schedule #	1	2	3	4
From Day	Sunday	Monday	Wednesday	Monday
To Day	Saturday	Friday	Wednesday	Friday
From Time	00:00	09:00	10:30	17:00
To Time	24:00	17:00	11:30	00:00

Schedule #1, because it has the lowest number, is always in effect. The numbering of these schedules as presented in Table 29 does not make sense. As defined, schedule #3 will never be in effect because its time frame always falls within schedules #1, and schedule #1 will always take precedence. This is a major consideration when assigning numbers to the schedules.

When you create a schedule, you as the administrator can choose to assign any number from 1 to 99 to that schedule. It is recommended that for the schedule with the most selective time constraints, you assign the lowest number, and for the schedule with the broadest time expanse, you assign the higher number.

Following this logic, the more appropriate way of numbering in Table 29 schedules would be:

*Table 30. Resource limits group schedules example 2*

Schedule #	1	2	3	4
From Day	Wednesday	Monday	Monday	Saturday
To Day	Wednesday	Friday	Friday	Sunday
From Time	10:30	09:00	17:00	00:00
To Time	11:30	17:00	00:00	24:00

Now, on Wednesday at 10:30 a.m. Schedule #1 is in effect. On Monday at 10:30 a.m., schedule #2 in effect, and on Sunday at 10:30 a.m. schedule #4 is in effect.

Additional considerations when creating schedules:

- Schedules do not have to be numbered sequentially. Once a schedule is assigned a number it cannot be changed, so it is recommended that you stagger your numbering so additional schedules can be inserted where appropriate or deleted without impact.
- All time and day ranges of the schedules are inclusive. That means if the from time is 08:00, the schedule is in effect exactly at 08:00:00. If the to time is 17:00, the schedule is in effect until 17:00:59.
- The from and to times can wrap around midnight and the from and to days can wrap around weeks.
- When users are accessing servers in different time zones, the clock used to determine time resides on the server being accessed. For example, if an end user in New York is accessing a server at 9 a.m. on a Monday and the server resides in California, the server clock is set off to 6 a.m. because it is located in California. Based on the example schedule in Table 30 on page 151, schedule #3 is in effect because according to the server it is 6 a.m. California time.

## Extended catalogs

On each database server that is a DB2 Table Editor catalog server, the main DB2 Table Editor catalog is called Default. All DB2 Table Editor objects and user objects from the DB2 Table Editor catalog server are stored in the main DB2 Table Editor catalog Default. All user objects from a database server that is sharing the catalog are also, by default, stored in the main catalog on the DB2 Table Editor catalog server.

You can isolate the objects from a database server that is sharing a DB2 Table Editor catalog by creating an extended catalog. The extended catalog will contain only those objects from a specific database server. You can also specify that multiple database servers can share extended catalogs. That means, an extended catalog can contain objects from several database servers. The ability to have multiple extended catalogs residing on different database servers can effect performance, user's views of objects and overall maintenance of your query environment.

## TCP/IP Connectivity Requirements

To access a DB2 server using DRDA over TCP/IP, DB2 Table Editor must be able to establish a TCP/IP connection from the local host to the remote host and remote port. DB2 Table Editor requires a WinSock 1.1 (or later) interface for the installed TCP protocol stack. It is the responsibility of your TCP/IP networking staff and your TCP/IP software vendor's technical support services to implement and support your network configuration.

**Note:** DB2 has been added to different platforms at different release points. Check your DB2 database product documentation to see if its DRDA application server component supports TCP/IP.



## SNA Connectivity Requirements

SNA connectivity is not provided with DB2 Table Editor. A third party product that implements SNA connectivity is required. Whatever product you use to provide connectivity must be installed, configured and working before you install or use DB2 Table Editor.

In an SNA network, DB2 Table Editor must establish an LU 6.2 session between itself and DB2 using a CPI-C or WinCPIC interface. The ease in which LU 6.2 implements connectivity between Microsoft Windows and DB2 depends on your SNA network environment. It is important that you have the latest corrective service or maintenance for your SNA product as there are known problems with several SNA products.

The number of Windows-based SNA products and the different ways they can be used are numerous and complex. Rely on your SNA networking staff and your SNA software vendor's technical support services to implement and support your network configuration.

## CLI Connectivity Requirements

To access a DB2 UDB server using CLI connectivity, the 32-bit version of DB2 Table Editor must be able to establish a CLI connection from the local host to the remote host using the DB2 for Linux, UNIX and Windows client.

DB2 Connect™, the personal edition installed locally or the enterprise edition installed on a gateway, is required for to connect to databases installed on some platforms.

All of the CLI connectivity information is defined in the DB2 for Linux, UNIX and Windows client. You must rely on your networking staff to implement and support your network configuration.

## ODBC Connectivity Requirements

ODBC connectivity provides applications the ability to access different database management systems (DBMSs) with the same source code. Database applications call functions in the ODBC interface are implemented in database-specific modules called drivers. The use of drivers isolates applications from database-specific calls in the same way that printer drivers isolate word-processing programs from printer-specific commands. ODBC drivers are loaded at run time. A user only has to add a new driver to access a new DBMS. It is not necessary to recompile or re-link the application.

ODBC enables DB2 Table Editor to access both DB2 and Informix. To set up ODBC connectivity, you must have the following:

- ODBC Driver Manager
- ODBC Data Sources
- ODBC Drivers
- ODBC Support in DB2 Table Editor
- Optional: A Shared DB2 Table Editor Catalog

### **ODBC Driver Manager**

DB2 Table Editor requires an ODBC Driver Manager. Microsoft's ODBC Driver Manager 3.0 (or later) is recommended. The following files are included:

- odbccp32.dll
- odbccp32.cpl
- odbccr32.dll
- odbc32.dll
- odbcint.dll
- odbccu32.dll
- odbcad32.dll

### **ODBC Data Sources**

DB2 Table Editor references ODBC data sources by their Data Set Name (DSN). Most data sources can be accessed by DB2 Table Editor as long as the particular ODBC data source drivers are available. A user ID and password are required to make the connection if it is required by the ODBC data source. The following data sources have been tested using an ODBC connection:

- Informix

### **ODBC Drivers Tested for Use with DB2 Table Editor**

The following ODBC driver has been tested for use with DB2 Table Editor:

- INFORMIX Driver 3.81.00.11267

### **ODBC Support in DB2 Table Editor**

When connecting to data sources using ODBC the following DB2 Table Editor support features should be considered:

- Support for most ODBC standard object types including long, variable length binary and character values up to 32,700 bytes. Support excludes interval data types.
- Support for stored procedures is limited depending on data source, data types and input parameters.
- ODBC bookmarks are not supported.
- Data within ODBC data sources can only be updated through direct SQL statements, provided that both the data source and the ODBC driver permit update operations.
- When a catalog is not used with ODBC connectivity, features of DB2 Table Editor that require the use of the catalog are not available.

### **A Shared DB2 Table Editor Catalog**

All database servers that are configured in the SDF require the use of a DB2 Table Editor catalog except ODBC servers. When you are configuring ODBC database servers, you can choose whether a catalog will be used. You can configure an ODBC database server so that it does not require a catalog. Some features of DB2 Table Editor are not available to users when ODBC database servers do not have access to a catalog.

If you configure an ODBC database server so that it will use a catalog, you must choose a catalog that resides on a DB2 database server that is connected to using TCP/IP, SNA or CLI. ODBC database servers cannot host their own catalogs.

## DB2 Table Editor Packages

The following packages are bound for servers with DRDA using TCP/IP or SNA connectivity:

- RAARDBII: Package includes the dynamic SQL used during installation to check for database object existence.
- RAARDBX1: Package includes the dynamic user SQL run with RR isolation level. End users require EXECUTE authority to run the package.
- RAARDBX2: Package includes the dynamic user SQL run with RS isolation level. End users require EXECUTE authority to run the package.
- RAARDBX3: Package includes the dynamic user SQL run with CS isolation level. End users require EXECUTE authority to run the package.
- RAARDBX4: Package includes the dynamic user SQL run with UR isolation level. End users require EXECUTE authority to run the package.
- RAARDBX5: Package includes the dynamic user SQL run with NC isolation level. End users require EXECUTE authority to run the package.
- RAARDBI1: Package includes internal SQL for DB2 Table Editor. End users require EXECUTE authority to run the package.
- RAARDBI2: Package includes internal SQL for DB2 Table Editor. End users require EXECUTE authority to run the package. This package is bound only if this server hosts a DB2 Table Editor catalog.
- RAARDBIA: Package includes internal SQL for DB2 Table Editor administrative functions. This package is bound only if this server hosts a DB2 Table Editor catalog.
- RAARDBIL: Package includes internal SQL for retrieving LOB values. End users require EXECUTE authority to run the package.
- RAASHUT1: Package includes internal SQL for DB2 Table Editor. End users require EXECUTE authority to run the package. This package is bound only if this server hosts a DB2 Table Editor catalog.
- RAARC1: Package includes internal SQL for Report Center. End users require EXECUTE authority to run the package. This package is bound only if this server hosts a DB2 Table Editor catalog.

The following packages are bound for servers with CLI connectivity:

- RAARDBC1: Package includes internal SQL for DB2 Table Editor. End users require EXECUTE authority to run the package.
- RAARDBC2: Package includes internal SQL for DB2 Table Editor. End users require EXECUTE authority to run the package. This package is bound only if this server hosts a DB2 Table Editor catalog.
- RAARDBCA: Package includes internal SQL for DB2 Table Editor administrative functions. This package is bound only if this server hosts a DB2 Table Editor catalog.
- RAARDBCL: Package includes internal SQL for retrieving LOB values. End users require EXECUTE authority to run the package.
- RAASHTC1: Package includes internal SQL for DB2 Table Editor. End users require EXECUTE authority to run the package. This package is bound only if this server hosts a DB2 Table Editor catalog.
- RAARC1C: Package includes internal SQL for Report Center. End users require EXECUTE authority to run the package. This package is bound only if this server hosts a DB2 Table Editor catalog.

## Retrieving Data

When retrieving large amounts of data, the factor that typically limits performance is communication over the network. Because of this, DB2 Table Editor keeps the delay between requests to the database server as short as possible, in order to maximize performance. In particular, when DB2 Table Editor receives a buffer of data from the database server, it immediately requests more data, then, while waiting for the new data, it processes the data that has already been received. Whenever DB2 Table Editor requests more data, it first checks how many rows have already been retrieved, and compares this against the row limit in effect. If the row limit has been exceeded, it does not issue any more requests. When it performs this check, it has not yet processed all of the data that has been received in order to see how many rows it contains. That is, an accurate count of how many rows of data have been received is not available when the decision whether or not to retrieve more data is made. As a result, DB2 Table Editor can fetch a large amount of data before determining that the row limit has been exceeded, much more data than the row limit specifies. This problem does not occur with byte limits. The number of bytes of data that have been received is always available, even without actually processing the data. Therefore, in contrast to row limits, the evaluation of byte limits by DB2 Table Editor is always accurate. It is recommended that byte limits be used instead of row limits to effectively control the amount of data fetched.

### Row Limits in Data Retrieval

Because DB2 Table Editor uses buffering, end users might see more rows of data than the row limit specifies. A database server will continue to retrieve data and fill a buffer until the buffer is full or there is no more data. It does not have access to DB2 Table Editor row limit. So if the row limit is 500 and the buffer can hold 1000 rows, then all 1000 rows are sent and available to the end user for display. This overshooting of rows occurs because DB2 Table Editor never discards data that is already received in order to exactly meet row limit. However, DB2 Table Editor will not request more data once the buffer that contains the 500th row is processed.

### Byte Limits in Data Retrieval

In order to more tightly govern database and network activity, DB2 Table Editor supports the ability to limit the number of bytes that are retrieved from the database server. Because DB2 Table Editor uses buffering, Consider the difference in network and database performance when you fetch 10,000 50-byte rows and when you fetch 10,000 5,000-byte rows. In the first case, the database server sends 500,000 bytes of data over the network. In the second case, the database server sends 50,000,000 bytes of data over the network. There is obviously a significant performance difference between these two cases. In order to more tightly govern database and network activity, DB2 Table Editor supports the ability to limit the number of bytes that are retrieved from the database server. Because of the way buffering works in DB2 Table Editor, the same kind of overshooting that occurs with rows also occurs with bytes.

### DB2 Table Editor Data Retrieval Using Buffers

DB2 Table Editor retrieves data from a server using buffering, where each buffer contains blocks of data consisting of multiple rows or portions of rows. Using buffering, bringing larger chunks of data from the server to the application minimizes the number of network transmissions while maximizing network

performance. However, overall data retrieval performance is also influenced by how long it takes for the server to fill the buffers with data. Smaller buffers fill with data more quickly than larger buffers.

In order to meet individual performance considerations, DB2 Table Editor allows you to control the size of the buffers using the `QueryBlockSize` parameter in the SDF. To set the query block size, edit the Server Definition File (SDF) with Notepad or a comparable text editor. Find the section for the server you are accessing. Add a line in this section that contains `QueryBlockSize=nnn` where *nnn* is the desired block size in bytes.

If the query block size is set to a small value, the response time for receiving each block of data is quicker. However, the amount of time required to retrieve all of the data is higher, because a larger total number of blocks must be transmitted.

If the query block size is set to a large value, the response time for receiving each block of data is longer. However, the amount of time required to retrieve all of the data is reduced, because a smaller total number of blocks must be transmitted.

The smallest allowable query block size is 512. The largest allowable query block size is 32767. If you do not specify a query block size, the default 32,500 is used.

For example: to set the query block size for a server named "Server1" to 16384, find the section that is labeled Server1 in the SDF:

```
Server1
```

Replace or add a line as follows:

```
QueryBlockSize=16384
```



---

## Chapter 7. The DB2 Table Editor Developer component

### Topics:

- “DB2 Table Editor Developer component configuration” on page 160
- “Command line parameters” on page 160
- “Forms” on page 160
- “Validation rules” on page 190
- “Locking in DB2 Table Editor” on page 191
- “Migrating Forms to a Different Environment” on page 191

DB2 Table Editor Developer is a development environment in which you can build table editing applications. Using the DB2 Table Editor Developer drag-and-drop interface, you can build forms that provide a simple, graphical interface to IBM's DB2 database, without programming. The forms you design with DB2 Table Editor Developer allow users to access, search and edit data. Although DB2 Table Editor Developer is designed to interact with DB2 and Informix, you can also use IBM's DB2 DataJoiner to connect your forms to virtually any other database application.

The forms that you create using DB2 Table Editor Developer are platform-independent. When you build a form, DB2 Table Editor Developer automatically translates your work into XML.

Using DB2 Table Editor Developer, you can build custom table-editing applications that provide users a simple, form-based interface to DB2 database tables and Informix tables. DB2 Table Editor Developer helps you create forms that perform query-by-example table editing and many other tasks. Your forms can join tables, include validation rules, run SQL (including DB2-specific SQL), and access multiple DB2 platforms.

With DB2 Table Editor Developer's intuitive, drag-and-drop development environment, you can build custom forms quickly, without programming. You can store your forms centrally on a DB2 server, for easy modification and distribution. Users can access forms over standard Internet, intranet, or LAN connections.

Before working with DB2 Table Editor Developer, you must define and configure the database servers to which you want to connect using DB2 Table Editor Console.

### Topics:

- “DB2 Table Editor Developer component configuration” on page 160
- “Command line parameters” on page 160
- “Forms” on page 160
- “Validation rules” on page 190
- “Locking in DB2 Table Editor” on page 191
- “Migrating Forms to a Different Environment” on page 191

---

## DB2 Table Editor Developer component configuration

In order to access databases using the Developer component, you must configure the Developer component by specifying the Server Definition File (SDF) that you will access.

The SDF that you specify here will also be the one that is used in the DB2 Table Editor User component on your machine. An SDF is created by the DB2 Table Editor Administrator and stores information on the databases to which you can connect using DB2 Table Editor User component.

---

## Command line parameters

You can define settings and actions to take effect when DB2 Table Editor User is started. These parameters are defined on the DB2 Table Editor User command line. They can be used to preset settings, or to run unattended sessions. For help on adding command line parameters to an icon or start menu, refer to your operating system's help facility.

The following parameters can be used to achieve the corresponding results.

**/IServer:servername**

The **/IServer** parameter defines the server where the form specified on the **/IFormName** parameter is stored.

**/IFormName:formname**

The **/IFormName** parameter defines the owner and name of a form stored at a database server to run after starting DB2 Table Editor User. The format for the form name is owner.formname. To use the **/IFormName** parameter, you must also specify the **/IServer** parameter.

**/IFormFile:formfile**

The **/IFormFile** parameter defines the location and name of a locally stored form to run after starting DB2 Table Editor User.

**/IUserID:userID**

The **/IUserID** parameter defines the user ID to use when running a procedure specified with the **/IFormName** parameter. It is used in conjunction with the **/IPassword** parameter.

**/IPassword:password**

The **/IPassword** parameter defines the password of the user specified with the **/IUserID** parameter. The **/IPassword** parameter includes the user's password in plain text.

---

## Forms

A form is a DB2 Table Editor document that is used to input and update information in your database.

You can use the DB2 Table Editor Developer component to design a form. There are three methods of creating new forms:

- Using the Forms wizard
- Importing a panel from DBEdit
- Manually



You can use DB2 Table Editor to create custom forms. You can also automatically create forms from tables with the DB2 Table Editor Form Wizard feature, or by importing panels from the mainframe application, DBEdit.

When creating a form you specify the **primary table** that the form will be used to access and modify. A primary table is the table that is designated by the form developer as the updateable table. For each form there is only one primary table, but there can be several secondary tables, which are usually related to the primary table by join conditions. **Insert**, **Update** and **Delete** buttons on a form operate only on the primary table and perform the appropriate database modifications for the action (insert, update and delete) using the current form values for all controls that are bound to a primary table column.

## Creating a new form using the Forms wizard

### About this task

You can create a form automatically using the Forms Wizard. Forms created in this way initially interact with one table.

**Note:** Forms created using the Form Wizard are initially linked to one table in the database.

### Procedure

1. From the DB2 Table Editor Developer main window, select **File --> Form Wizard**. The Server dialog opens.
2. Select the server that stores the database that you want the form to use, and click **Next**. The Tables window opens.
3. From the Tables window, in the **Owner** field, type the owner of the table that you want the form to use. This field is case sensitive. Use the % character as a wildcard character.
4. In the **Name** field, type the name of the table that you want the form to use. This field is case sensitive. Use the % character as a wildcard character.
5. *Optional:* If you are accessing a z/OS system, you can specify the database, table space, and type of the table.
6. Click **Search**. A list of tables matching those criteria is returned in the lower portion of the Tables dialog.

**Note:** You can choose from a list of tables stored at a database server. In the Tables dialog, type the special command character "%" in the Owner and Name fields (and in the Type Database Name, and Table Space Name field, which are available if you are accessing a z/OS or OS/390 system), and click **Search**. A list of all tables on the server is returned. You can also specify an owner, to list only that owner's tables.

7. From the list in the Tables window, select the table that you want the form to access, and click **Next**. The Columns dialog opens, displaying a list of all of the columns in the table. When creating a form you specify the primary table that the form will be used to access and modify. A primary table is the table that is designated by the form developer as the updateable table. For each form there is only one primary table, but there can be a number of secondary tables, which are usually related to the primary table by join conditions. **Insert**, **Update** and **Delete** buttons on a form operate only on the primary table and perform the appropriate database modifications for the action (insert, update and delete) using the current form values for all controls that are bound to a primary table column.

8. Ensure that all of the columns that you want to use on your form are checked.
9. Click **Next**. The Actions dialog opens, displaying a list of actions that the form can run. These actions are represented on the form as buttons.
10. Ensure that the actions that you want the form that you are creating to use, are checked, and click **Finish**. The new form opens in the main window. You can now save or run the form.

## Creating a new form by importing a panel from DBEDIT

You can import a panel that was created for the DBEDIT application to create a new form.

### About this task

**Note:** After a form is imported to DB2 Table Editor, it can no longer be opened in DBEDIT. Also, when importing forms from DBEDIT, be aware that some DBEDIT functionality is not available or is not directly transferable to DB2 Table Editor and will be implemented in a different way or will need to be manually implemented in the DB2 Table Editor form.

**Important:** When you import a form that contains a foreign key, the attributes on the field that contains the foreign key will automatically be set as follows:

- **Ignore on update** is set to True
- **Replace contents with** is set to **Current Row Value**

### Procedure

1. From DB2 Table Editor Developer main window, select **File > Import from DBEDIT**. The Import Panel from DBEDIT window opens.
2. From the **Server** list, select the server where the DBEDIT panel is stored.
3. In the **Catalog Owner** field, type the user ID for the catalog owner.
4. In the **Panel Owner** field, type the user ID for the panel owner.
5. In the **Panel ID** field, type the panel ID.
6. Click **OK**. The Import Panel from DBEDIT window closes and DB2 Table Editor Developer imports and opens the DBEDIT panel that you have imported.

## Creating a form manually

### About this task

When creating a form manually (without using the Forms Wizard), you complete two major tasks: drawing the form, then attaching the form to a database, a table, and columns.

### Procedure

1. From the DB2 Table Editor Developer main window, select **File --> New**. A blank form opens.
2. Add the necessary controls and text to the form. To add controls to the form, drag and drop the controls from the Object Bar window to the area where you want the control to be on the form. For information on working with controls on forms, including information on available controls and their attributes, see Controls on forms.
3. When you have finished adding controls and text to the form, save the form by selecting **File --> Save As**.

4. Set the server to be used by the form:
  - a. Select **Form** --> **Set Server**. The Server window opens.
  - b. From the Server window, select the server that you want the form to access, and click **OK**. The name of the server appears in the title bar on the window.
5. Set the user information for the form:
  - a. Select **Form** --> **Set User Information**. The Set User Information dialog opens.
  - b. In the **User ID** field, type your user ID for the server that you specified in step 4.
  - c. In the **Password** field, type your password.
  - d. *Optional*: If your server uses accounts, specify your account in the **Account** field.
  - e. Click **OK**. You are connected to the database.
6. Specify the form attributes: ensure that no control has the focus (is selected) on your form. Select **Form** --> **Attributes**. The Form Attributes window opens.
7. Click the **Tables** tab. The Tables page opens.
8. Specify the table or tables to be accessed by your form:
  - a. Click **Add**. The Add Table dialog opens.
  - b. In the Add Table dialog, type the table owner in the **Owner** field.
  - c. Type the Table name in the **Name** field.

**Tip:** You can choose from a list of tables stored at the database server that you specified for your form. On the Add Table dialog, leave the **Owner** and **Name** fields blank, and click **List**. A list of all tables on the server is returned. You can also specify an owner, and list only that owner's tables. To select the tables you want to use, choose each table and click **Add**. Click **Close** when you have finished selecting tables.

- d. Click **OK**. The Add Table window closes.
- e. Repeat steps 6 through 8d to add as many tables as necessary.
- f. *Optional*: To join two tables:
  - 1) Click the **Join Conditions** tab. The Join Conditions page opens.
  - 2) Click **Add**. The Join window opens.
  - 3) From the two table drop-down lists, select the tables you want to join.
  - 4) From the columns lists, select the column from each table on which you want perform the join.

**Note:** You must choose columns with matching data types to join columns with matching data. For example, join columns that both contain "Last\_Name" or "Product\_ID\_Number" data.

  - 5) Click **OK**. The Join window closes.
9. Click the **Sort Conditions** tab. The Sort Conditions page opens.
10. Set the sort conditions for your form:
  - a. Click **Add**. The Sort window opens.
  - b. Select each column that you want to sort, and click the **Ascending** radio button or the **Descending** radio button to specify whether the data will be sorted in ascending or descending order.

- c. When you have specified all of the necessary sort conditions, click **Close**. The Sort window closes and your form displays the data in the order that you specified.
11. Select the **General** tab. The General page opens.
  12. Set the General form attributes:
    - a. Specify an initial action. You can specify an initial action for a form. An initial action is an automatic event that occurs each time the form is opened. An example would be to automatically display online help when the form is opened. To specify an initial action:
      - 1) Check the **Initial Action** check box, and click **Actions**. The Attributes window opens.
      - 2) From the Attributes window, select an initial action, and click **OK**. The initial action is set. When the form is opened by the user, it will automatically run the specified action. The Attributes window closes.
    - b. Specify an initial focus. You can specify an initial cursor focus for a form. When the user first opens the form, the control with initial focus is the active control. To specify an initial focus:
      - 1) From the **Control with initial focus** list, select the control that you want to have the initial focus.
      - 2) Click **OK**. The Form Attributes dialog closes. When opened by the user, the form will automatically set the cursor focus to the specified control.
    - c. Specify a commit scope. The commit scope is the number of actions that must take place before a unit of work is completed and the data is committed to the DB2 database. Specify the commit scope in the **Commit scope** field, by typing the maximum number of rows to insert before committing changes to the database.
 

**Note:** If this value is omitted or zero, all of the rows are inserted before a commit occurs. Otherwise, this value specifies the maximum number of rows to insert before committing changes to the database. All SAVE actions are subject to the commit scope.
  13. Click **OK**. The Form Attributes window closes.
  14. Save the form by selecting **File --> Save**.

## Controls on forms

There are many controls that can be used when creating a form using DB2 Table Editor Developer.

Controls in DB2 Table Editor Developer are the individual elements in a form. Controls allow users to view and edit data. Examples of controls include edit boxes, list boxes, and buttons.

### DB2 Table Editor Form Controls

#### Border

You can use the **Border** control to place borders on the form. Borders have no DB2 Table Editor attributes and have no effect on the function of the form. Borders are used only to enhance the appearance of the form.

#### Button

You can use the **Button** control to execute an event, such as launching a search. The event procedure assigned to the button determines what the button does. Buttons can contain a title caption and an image.

**Combo Box**

You can use the **Combo Box** control to either choose an item from a list, or to specify a new value. A combo box takes up the same form space as an edit box, but can expand as a drop down list when the user clicks on it.

**Connector**

You can use the **Connector** control to draw connecting lines between the snap points on two controls. Connecting lines have no DB2 Table Editor attributes and have no effect on the function on the form. Connectors are used only to enhance the appearance of the form.

**Note:** The **Connector** control is only available if snap points are displayed on the form. To display the snap points on a form, select snap points from the **View** menu.

**Edit Box**

You can use the **Edit Box** control to create one-line, editable text boxes. Edit boxes cannot exceed one line of text, or 32,000 characters.

**Ellipse**

You can use the **Ellipse** control to place an ellipse on the form. Ellipses have no DB2 Table Editor attributes and have no effect on the function on the form. Ellipses are used only to enhance the appearance of the form.

**Frame** You can use the **Frame** control to place a frame on the form. You can also add descriptive text to the frame border. Frames have no DB2 Table Editor attributes and have no effect on the function on the form. Frames are used only to enhance the appearance of the form.

**Freehand**

You can use the **Freehand** control to draw freehand lines on the form. Freehand lines have no DB2 Table Editor attributes and have no effect on the function on the form. Freehand lines are used only to enhance the appearance of the form.

**Hilite** You can use the **Hilite** control to place areas of highlighted color on the form. Hilite areas have no DB2 Table Editor attributes and have no effect on the function on the form. Hilite areas are used only to enhance the appearance of the form.

**Image** You can use the **Image** control to display a picture on the form. Images have no DB2 Table Editor attributes and have no effect on the function on the form. Images are used only to enhance the appearance of the form. The following formats are supported by the image control:

- \*.jpg
- \*.bmp
- \*.dib
- \*.ico

**Label** You can use **Label** controls to place descriptive text on the form. The text has no DB2 Table Editor attributes and has no effect on the function on the form. Labels are used only to enhance the appearance of the form.

**Line** You can use the **Line** control to draw lines on the form. Lines have no DB2 Table Editor attributes and have no effect on the function on the form. Lines are used only to enhance the appearance of the form.

### List Box

You can use the **List Box** control to create one-column, editable lists. These lists can be populated by user-defined values, or populated with values from a table.

**List** You can use the **List** control to create multiple-column, editable lists. Use an SQL SELECT or CALL statement in the Source attribute of the list control to display multiple columns. The list control displays columns of data in a tabular format. The list control can be populated by user-defined values, or populated with values from a table.

When you are writing SQL that refers to a list control, you can refer to a cell in the list control table. You can use the following syntax in your SQL to refer to the data in the list control.

- [ListCtrl] - Returns the first column from the row selected.
- [ListCtrl:2] - Return the second column from the row selected.
- [ListCtrl:2.1] - Return the second column from the first row.

For example: Update owner.table set column3 = [listctrl:2] Where Column2 = [listctrl:3]

**LOB** Use the **LOB** control icon to create a LOB control. LOB controls can be used to display graphic, multimedia, and text LOB data. You set the properties for your LOB control using the LOB Control Properties window.

### Multi Edit Box

You can use the **Multi Edit Box** control to create multiple-line, editable text boxes. The **Multi Edit Box** contains a string of text or numbers displayed on multiple lines, not a list of data. Multi edit boxes cannot contain more than 32,000 characters.

**Select** The **Select** control lets you select, move, and edit other controls. It has no attributes or properties of its own.

### Spinner

You can use the **Spinner** control to change values in the control associated to it, such as an edit box. Use the spinner control's EditBuddy property to associate it to another control. The control being changed by the spinner control must immediately precede the spinner control in the tab order.

**Note:** The spinner control works only with numeric values.

### DB2 Table Editor form control attributes:

#### General Attributes

Use general attributes to specify the control name, default value, and whether control contents should be ignored when a specified event occurs. General attributes include these options:

#### Object

Specify the name of the control.

#### Default value

Specify the default value, if any, for the control.

#### Ignore on SELECT

Check this option to ignore the contents of the control when running queries using the SQL statement SELECT.

**Ignore on UPDATE (Where)**

Check this option to ignore the contents of the control while processing the WHERE component of an SQL UPDATE statement.

**Ignore on UPDATE (Set)**

Check this option to ignore the contents of the control while processing the SET component of an SQL UPDATE statement.

**Allow Edit Contents**

Check this option to allow the user to edit the contents of a list control. Users can edit all other controls by default.

**Column Attribute**

Use the column attribute to choose the column of data you want to bind to a control. The column attribute tab displays a list of each column in the table or tables associated with a form. Click on a column to bind it to a control.

The column attribute determines which table and column the selected control will search, update, or delete, it is also called the bound column. This can be different from the table and column the selected control will display, also called the source column. You can specify the source column in the source attribute of a list, list box, or combo box control.

**Format Attributes**

Use format attributes to determine how the contents of a control are displayed. Some format attributes only affect numeric data types; others affect only character data. There are also unique format attributes for list controls.

**Character Data Types**

Format attributes for character data types include:

**Display contents using hexadecimal format**

Use this option to display the contents of the control as a series of hexadecimal characters.

**Display hexadecimal characters in lower case**

Use this option to display the hexadecimal contents of the control in lower case characters.

**Numeric Data Types**

Format attributes for numeric data types include:

**Negative number format**

Select a format for representing negative numbers from the drop-down list.

**Decimal places**

Select the number of decimal places to display.

**Thousands separator**

Check this option to display number values with a comma as a thousands separator.

**Percentage**

Check this option to display number values as a percentage.

**Scientific**

Check this option to display number values in scientific notation.

**Currency**

Check this option to display number values as currency.

**Symbol**

Use this in conjunction with the currency option to specify the currency symbol used with currency values.

**Position**

Use this in conjunction with the currency option to specify the position of the currency symbol used with currency values.

**List Controls**

Format attributes for all controls containing numeric data, including list boxes, are described in Character Data Types and Numeric Data Types. Format attributes for list boxes also include the following unique options. Select the column for which you want to adjust the formatting, and click **Change**.

**Header**

Specify the header name for each column displayed in the control.

**Width** Specify the width of each column displayed in the list control.

**Alignment**

Select an alignment from the drop-down list to specify how the data should appear within each column.

**Locked Position**

Check the **Locked Position** check box to lock the column in position. When a column is locked in position, the locked column will not move when you scroll through the grid in your list control. You cannot have a locked column that has an unlocked column to the left of it. If you want to lock more than one column, start locking the columns with the left most column.

**Replace Values Attribute**

Use the replace values attribute to replace the contents of a control with new values, upon user action. To set the replace values attribute, click Add and set these options:

**On action**

Choose the user action that will prompt the control values to be replaced. Make sure the form includes a way for the user to perform the action you choose.

**Replace contents with**

Choose the source of the values that you want to display upon replacement.

**Enter a literal, select statement or special register**

Enter the values you want to display upon replacement. Enter literal values, an SQL SELECT statement, or a special register such as current time or current date. The special registers available to you depend on the database platform you are using. Refer to your DB2 documentation to find out which special registers you can use.

**Refresh Frequency Attribute**

Use the refresh frequency attribute to specify when to automatically refresh the contents of a control. The refresh frequency attribute includes these options:



**Once (fill when the form is opened)**

Use this option to fill the control when the user opens the form.

**On Search for matching rows (refresh every time a search is started)**

Use this option to refresh the control whenever the user starts a search.

**On Retrieve the next row (refresh every time a row is fetched)**

Use this option to refresh the control whenever the user retrieves a row.

**On Selection change (refresh when the selected value of controls change)**

Use this option to automatically refresh the control when the contents of one or more associated controls change. To choose one or more associated controls, click List, then select one or more controls from the list. When the user changes the contents of an associated control, the control that is set to refresh on selection change is automatically updated.

**Name Attributes**

Use name attributes to specify the name and caption of a button control. Name attributes include these options:

**Object**

Specify the name of the button control.

**Caption**

Specify the caption you want to appear on the button.

**Button Action Attribute**

Use the button action attribute to specify the action to perform when the user clicks the button. The button action attribute includes these options:

**Clear all displayed values**

Clears all displayed values on the form. For controls that contain lists, this will remove the current selection. This does not close any open result sets, does not commit or rollback data, and does not terminate database connections.

**Close the form**

Closes the form. This action closes any open result sets and commits pending database modifications but does not close the database connection.

**Commit pending transactions**

Commits pending transactions for the form. Selecting **Commit pending transactions** overrides the **Commit Scope** setting.

**Delete the current row from the table**

Deletes the current row from the table. This action deletes the current row from the primary table only. If any rules have been specified for the delete action, then they are evaluated before doing the delete. If a rule criteria is not met then a message is displayed and the delete is not completed. If the **Confirm on Delete** option is checked, then a message box will appear asking you to confirm the delete. If the number of pending database modifications exceeds the commit scope (the default commit scope is 1) then a commit is issued.

**Display help**

Displays DB2 Table Editor online help.

**Execute command**

Executes the specified command, including Refer-Back conditions. When this is run using the User component, the command is sent to the operating system to be executed.

**Exit the application**

Closes the application. This action closes any open result sets, commits pending database modifications, closes all open database connections, and exits DB2 Table Editor.

**Insert a row into the table**

Inserts a row into the primary table. This action takes the current values for all controls that are bound to the primary table in the form and inserts a row into the primary table for the form. If a replacement value has been specified for a control then it is used instead of the current control value. If **Enter default values as value** has been specified, then the column is not included in the insert and DB2 supplies the default value. If **Enter null values as value** has been specified, then a null value is used for the bound column. If any rules have been specified for the insert action, they are evaluated before doing the insert. If a rule criteria is not met then a message is displayed and the insert is not completed. If the **Confirm on Insert** option is checked, then a message box will be produced for the user to confirm the insert. If the number of pending database modifications exceeds the commit scope (the default commit scope is 1) then a commit is issued.

**Launch control**

Launches the application that is associated with the contents of the specified control. For example, you can use this button action to launch an MP3 file displayed in a control. Select **Launch control** from the list, then select the desired control.

**Multiple Actions**

The **Multiple actions** button action allows you to specify more than one action for a button. When the button is clicked, the button actions will be run in the order that they are listed in the Multiple Actions window. This functionality is only available in forms that are accessed using the User component.

**Open form**

Opens another form. When you create the button, you specify the form that you want the button to open. If the form that is being opened has linked controls, then the current values of the linked controls on the current form are used to populate linked controls on the form that is being opened, and a search is performed. If the specified form is already opened, it is reused. If the **Close master form after opening linked form** option was specified, then the master form is closed. If the **Refresh form contents whenever the values for the linked controls change** option was specified then the child form is synchronized with the values from the master form's linked controls.

**Refresh the selected controls**

Refreshes the contents of any selected controls. To use this option, select **Refresh the selected controls** from the list, then select one or more controls. This action will refresh the contents of any selected controls when the button with this attribute is clicked.

**Retrieve the next row**

Retrieves the next row in the table. If there are no more rows in the current

result set, the current form values are cleared and a message is displayed indicating this. This action does not close any open result sets, commit pending database modifications, or close open database connections.

**Retrieve the previous row**

Retrieves the previous row in the table. If you are at the beginning of the current result set, the current form values are cleared and a message is displayed indicating this. This action does not close any open result sets, commit pending database modifications, or close open database connections.

**Retrieve the last row**

Retrieves the last row in the table or search results (in the case of forms that have a search feature). This action does not close any open result sets, commit pending database modifications, or close open database connections.

**Revert to the original values of this row**

Reverts to the original values of this row. This action sets the form control values to the original database values. This action does not close any open result sets, commit pending database modifications, or close open database connections.

**Run an SQL Statement**

Runs the specified SQL statement, including Refer-Back conditions. This can be an SQL statement to update, insert, or delete data from tables that are not the primary table. Stored procedures are also supported. After an SQL statement is successfully run, a message box is displayed (if this option has been set for the action), allowing you to confirm or cancel the actions of the SQL statement. If cancel is chosen then a rollback is performed, otherwise a commit is issued.

**Search for matching rows**

Searches the table for matching rows. This action uses the current values for all bound controls to create a select statement. It will look for special character commands in all bound controls and will use them in building the search (for more information, see Using Special Command Characters in a Control). The first row that is returned is displayed in the form. A message will appear if no search results are returned. If sort conditions have been used, then the results are returned in that order. If there was already a result set opened, it is closed before performing the new search, however, any pending database modifications are not committed. If a replace value has been specified for a control, it is used instead of the current control value. If the **Ignore on select** option has been set for a control then the selected column is not included in the search. If the **Enter null values as** option is used then a null value is used for the bound column. If any rules have been specified for the search action, they are evaluated before doing the select. If a rule criteria is not met then a message is displayed and the search is not completed. If there are any LOB columns bound to controls, they are not automatically retrieved by the search.

**Update the current row in the table**

Updates the current row in the table. This action updates the primary table values for the current row. It includes only values that have been changed in the update. If a replace value has been specified for a control then it is used instead of the current control value. There is special handling for updates of primary key values (any foreign keys in associated tables are automatically changed in order to retain the correct relationships to the

primary key). If possible, the update is done by using a positioned update (current position of the cursor). If this is not possible, then a searched update is done using the current values for all controls that are bound to the primary table in the form. If the **Enter null values as** option was specified, then a null value is used for the bound column. If any rules have been specified for the update action, then they are evaluated before doing the update. If a rule criteria is not met, then a message is displayed and the update is not done. If the **Confirm on Update** option is checked, then a message box will be produced for the user to confirm the update. If the number of pending database modifications exceeds the commit scope (the default value is 1) then a commit is issued.

### Source Attribute

Use the source attribute to specify the column or columns you want to display in a list, list box, or combo box control. The source attribute determines which column the selected control displays, also called the source column. The column attribute determines which table and column the selected control will search, update, and delete, also called the bound column. You can specify the source column to be the same as the bound column by choosing **Existing Values** on the source attribute tab on the *Control Attributes* window. You can specify the source column to be different from the bound column by choosing **Select Statement** on the source attribute tab on the *Control Attributes* window, and specifying the desired table and column to display. The source attribute includes these options:

#### Get values from...

Choose the source column for the control:

##### Existing Values

Choose this option from the drop-down list to display the column you specified on the Column attribute tab. You use Existing Values to specify that the source column is the same as the bound column for this control.

##### Explicit List

Choose this option from the drop-down list to display the specific values you enter.

##### Select Statement

Choose this option from the drop-down list to display the column or columns specified in an SQL SELECT statement, or enter a CALL statement to generate the column or columns that are specified in a stored procedure. You can use an SQL statement to specify a source column that is different from the bound column for this control. You can also use an SQL SELECT or CALL statement to display multiple columns in a list control.

For a list box or combo box control, the first column specified in the SQL statement is used to populate a control.

For example, in the SQL SELECT statement:

```
SELECT name, address FROM dba.staff
```

the "name" column is used to populate a list box or combo box control. For a list control, that can display multiple columns, both the "name" and the "address" columns are used to populate the control.

### **Link Column**

If you use an SQL SELECT statement to specify a source column different from the bound column for a control, you must create a link between the two. Choose a source column, specified in the SELECT statement, which contains values matching those in the bound column for the control.

**DB2 Table Editor form control properties:** Properties in the DB2 Table Editor Developer component define the appearance of controls. The developer uses form control properties to define the physical characteristics of controls.

### **Accelerator**

Use the **Accelerator** property to set the accelerator key for a control. You can choose a letter, number, or symbol from the drop-down list.

### **Alignment**

Use the **Alignment** control to specify whether the control's contents align left, center, or right.

### **AllowEditTable**

Use the **AllowEditTable** property to specify whether or not a user can edit the values displayed in a list control.

### **AnchorSnaps**

Use the **AnchorSnaps** property to specify the number and position of anchor snap points on a control.

### **Arrowhead**

Use the **Arrowhead** property to add one or more arrow heads to a line or freehand control. You can add arrowheads to either end of a line, or to both ends.

### **ArrowheadHeight**

Use the **ArrowheadHeight** property to specify the height of the arrowhead.

### **AsURL**

Use the **AsURL** property to specify whether an image will be embedded in a form or appear as a link on the form.

- Set the **AsURL** property to true to link to the image on your form.
- Set the **AsURL** property to false to have the image embedded on your form.

### **BackColor**

Use the **BackColor** property to specify the background color of a control.

### **Bitmap**

Use the **Bitmap** property to add a bitmap or JPEG image to the form body or to a button control.

### **BorderColor**

Use the **BorderColor** property to specify the color of a frame control border.

### **BorderDrawn**

Use the **BorderDrawn** property to specify whether or not to display a border around a control.

### **BorderStyle**

Use the **BorderStyle** property to determine the appearance of a frame control border. The **BorderStyle** property includes these options:

**Normal**

Display a single black line border.

**3D**

Display a 3-dimensional border.

**Sunken**

Display a sunken border.

**BorderWidth**

Use the **BorderWidth** property to specify the width in pixels of a frame control border.

**Bottom**

Use the **Bottom** property to specify the location in pixels of the bottom edge of a control, relative to the dimensions of the form.

**ButtonShape**

Use the **ButtonShape** property to specify the shape of a button control. The ButtonShape Property includes these options:

**Normal**

Display a 3-dimensional button.

**Property Tab (Inactive)**

Display an unselected, 3-dimensional tab.

**Property Tab (Active)**

Display a selected, 3-dimensional tab.

**CaseOrPassword**

Use the **CaseOrPassword** property to control the format of the contents of a control. The CaseOrPassword property includes these options:

**None**

Display the contents of a control as they are returned from the database.

**Lower Case**

Display the contents of a control in lower case text.

**Upper Case**

Display the contents of a control in upper case text.

**Password**

Display the contents of a control as asterisks.

**ComboType**

Use the **ComboType** property to specify the style of combo box you want to use. In DB2 Table Editor Developer, only the drop-down style combo box is available.

**CursorPointer**

Use the **CursorPointer** property to specify the shape of the pointer when it is moved over a control. The CursorPointer property includes these options:

**Default**

Display an I-Beam when the cursor is over a control.

**Arrow**

Display a standard arrow when the cursor is over a control.

**IBeam**

Display an I-Beam when the cursor is over a control.

**Cross**

Display a cross when the cursor is over a control.

**UpArrow**

Display an up-arrow when the cursor is over a control.

**NoDrop**

Display a no-drop symbol when the cursor is over a control.

**Help** Display a "What's This?" symbol when the cursor is over a control.

**HotSpot**

Display a standard arrow with a starburst when the cursor is over a control.

**DecimalBase**

Use the **DecimalBase** property to specify whether the control uses a decimal or hexadecimal base.

**Default**

Use the **Default** property to specify whether the control is the default control for the form.

**EditBuddy**

Use the **EditBuddy** property to specify whether a spinner control edits the control immediately preceding it in the tab order.

**Enable**

Use the **Enable** control to specify whether a control can be used. Controls not enabled are visible to the user, but not usable.

**FlexHorizontal**

Use the **FlexHorizontal** control to determine how a control reacts to horizontal resizing of the form. The options for this property are:

**None** When the form is resized horizontally, do not adjust the position or size of the control.

**Shift** When the form is resized horizontally, shift the control to maintain its relative position on the form.

**Expand**

When the form is resized horizontally, expand the control to maintain its relative size on the form.

**Proportional**

When the form is resized horizontally, shift and resize the control proportionally to keep the control centered on the form.

**FlexVertical**

Use the **FlexVertical** control to determine how a control reacts to vertical resizing of the form. The options for this property are:

**None** When the form is resized vertically, do not adjust the position or size of the control.

**Shift** When the form is resized vertically, shift the control to maintain its relative position on the form.

**Expand**

When the form is resized vertically, expand the control to maintain its relative size on the form.

**Proportional**

When the form is resized vertically, shift and resize the control proportionally to keep the control centered on the form.

**FileName**

Use the **FileName** property to specify the name of the image file that you want to add to your form. This property is available when using the Image control.

**Font** Use the **Font** property to specify the font type, style, and size for the text displayed in a control.

**ForeColor**

Use the **ForeColor** to specify the color of the text displayed in a control.

**Group** Use the **Group** property to specify whether a control is the first in a tab order.

**HatchStyle**

Use the **HatchStyle** property to fill a label, box, ellipse, or closed freehand control with hatch lines. The options for this property are:

**None** Display the control without hatch lines.

**Horizontal**

Fill the control with horizontal hatch lines.

**Vertical**

Fill the control with vertical hatch lines.

**Diagonal**

Fill the control with left-to-right diagonal hatch lines.

**DiagRev**

Fill the control with right-to-left diagonal hatch lines.

**Cross** Fill the control with crossed vertical and horizontal lines.

**DiagCross**

Fill the control with crossed diagonal lines.

**Height or FormHeight**

Use the **Height** property to specify the height of the form in pixels. If the user resizes the form to a height less than the **FormHeight** or **FormWidth** properties, scroll bars appear.

**HiliteColor**

Use the **HiliteColor** property to specify the color of any highlighting in a control.

**HorizontalScroll**

Use the **HorizontalScroll** property to specify the presence and style of any horizontal scroll bars in the control.

**IconView**

Use the **IconView** to specify the style of icon to display when the **ShowIcon** property is selected for a list control. The options for this property are:

**IconChecked**

Display the Checked icon next to each list item.

**IconEmptyDoc**

Display the EmptyDoc icon next to each list item.

**IconFillDoc**

Display the FillDoc icon next to each list item.



**IconInfo**

Display the Info icon next to each list item.

**IconPlus**

Display the Plus icon next to each list item.

**IncrAccelerator**

Use the **IncrAccelerator** to specify the increment displayed by the spin control.

**Layout**

Use the **Layout** property to specify the placement of a bitmap on a button control or form. You can align a bitmap to the center, left, right, top, or bottom of a button control. You can align a bitmap to the center, left or right, stretch the bitmap, or size it to fit in relation to a specified area on the form body.

**Left** Use the **Left** property to specify the location in pixels of the left edge of a control, relative to the dimensions of the form.

**ListStyle**

Use the **ListStyle** property to specify how the contents of a list control are displayed. The **ListStyle** property includes these options:

**List** Display the contents of a list control in a list that continues horizontally.

**Report**

Display the contents of a list control in tabular format.

**Large Icon**

Display the contents of a list control in separated icon format.

**Small Icon**

Display the contents of a list control in a list that continues vertically.

**MaximizeBox**

Use the **MaximizeBox** property to specify whether the user can maximize the form.

**MaximumEq**

Use the **MaximumEq** property to specify the maximum value for a spin control.

**MinimizeBox**

Use the **MinimizeBox** property to specify whether the user can minimize the form.

**MinimumEq**

Use the **MinimumEq** property to specify the minimum value for a spin control.

**NumDropped**

Use the **NumDropped** property to specify the number of list items to display in the drop-down list of a combo box control.

**Object**

Use the **Object** property to specify the name of the selected object.

**Orientation**

Use the **Orientation** property to specify either a horizontal or a vertical orientation for a spinner control.

**PenStyle**

Use the **PenStyle** property to specify the line style for a connector, line, freehand, border or ellipse control. The options for this property are:

**Solid** Display a solid line style.

**Dash** Display a dashed line style.

**Dot** Display a dotted line style.

**Dash-Dot**

Display an alternated dash and dot line style.

**Dash-Dot-Dot**

Display an alternated dash and two dot line style.

**PenWidth**

Use the **PenWidth** property to specify the line thickness in pixels for a connector, line, freehand, border, or ellipse control. You can also use the **PenWidth** property to add a border of the specified thickness around an area of text.

**PrintScale**

Use the **PrintScale** property to specify the scale to be used in printing the form. For example, a **PrintScale** of 2 prints the form at a 2:1 size ratio.

**ReadOnly**

Use the **ReadOnly** property to specify an edit box or **Multi Edit Box** control as read only. Controls set to read only can display values, but cannot be edited by the end user.

**RemoveSelection**

Use the **RemoveSelection** property to specify whether or not to clear the user's selection upon update of a list box control.

**Right** Use the **Right** property to specify the location in pixels of the right edge of a control, relative to the dimensions of the form.

**RotateAngle**

Use the **RotateAngle** property to specify the number of degrees by which to rotate a text, line, freehand, border, or ellipse control on a form.

**ScrollBars**

Use the **ScrollBars** property to specify whether to always display scroll bars on the form. Specify:

**Yes** Always display scroll bars on the form.

**No** Display scroll bars on the form only when the user resizes the form to a height or width less than the **FormHeight** or **FormWidth** properties.

**ShadowStyle**

Use the **ShadowStyle** property to specify the presence and position of a shadow for a border or ellipse control. The options for this property are:

**None** Display the control without a shadow.

**Top/Left**

Display a shadow above and to the left of the control.

**Bottom/Right**

Display a shadow below and to the right of the control.

**Bottom/Left**

Display a shadow below and to the left of the control.

**Top/Right**

Display a shadow above and to the right of the control.

**ShowCheckBoxes**

Use the **ShowCheckBoxes** property to display a check box next to each list item in a list control.

**ShowGrid**

Use the **ShowGrid** property to display grid lines between rows and columns in a list control.

**ShowIcon**

Use the **ShowIcon** property to display an icon next to each item in a list control. Use the **IconView** property to specify the style of icon you want to display.

**Sort**

Use the **Sort** property to specify whether or not to sort the contents of the control.

**Tabstop**

Use the **Tabstop** property to specify whether or not to include the selected control in the tab order.

**Tag**

Use the **Tag** property to assign a developer-assigned value to a control.

**Text**

Use the **Text** property to specify the text to display in an edit box, **Multi Edit Box**, or list box control when the form opens. This text will be replaced if and when the control is subsequently populated, for example through a default value or user-initiated search.

**ToolTipText**

Use the **ToolTipText** property to specify the text to display when the cursor moves over a control. You can add multi-lined tool tip text that is accessible by clicking an arrow in the tool tip. To create multi-lined tool tip text, use the following syntax. Type the text that you want to appear on the first line of your tool tip, then type `\r` then type the rest of the tool tip. To create another line break, type `\n` where you want the line to break. When you hover over a control, everything to the left of the `\r` will be visible followed by an arrow. When you click on the arrow, all of the tool tip will be visible.

**Top**

Use the **Top** property to specify the location in pixels of the top edge of a control, relative to the dimensions of the form.

**UseColors**

Use the **UseColors** property to specify whether or not to display colors in a control.

**UseTabStops**

Use the **UseTabStops** property to specify whether or not to allow the user to tab through the list items in a list box control.

**VerticalScroll**

Use the **VerticalScroll** property to specify the presence and style of any vertical scroll bars in the control.

**Visible**

Use the **Visible** property to specify whether or not to display the selected control on the form.

### **Width or FormWidth**

Use the **Width** property to specify the width of the form in pixels. If the user resizes the form to a width less than the **FormHeight** or **FormWidth** properties, scroll bars appear.

### **WrapAround**

Use the **WrapAround** property to specify whether or not a spinner control, after reaching its maximum value in a series, returns to its minimum value at the next increment and displays the series again.

## **Adding a control to a form**

### **About this task**

You can add a control to a form with a simple drag-and-drop procedure.

**Tip:** For a complete list of the name and function of each control, see DB2 Table Editor Form Controls.

### **Procedure**

1. From the DB2 Table Editor Object tool bar select the control that you want to add to the form.
2. Position the pointer on the form where you want the control to appear. The pointer changes to a hatch mark.
3. Click-and-drag the pointer to create and size the control. The control is drawn on the form.

## **Deleting a control from a form**

### **About this task**

To delete a control from a form, select the control and press the delete key on your keyboard.

## **Filtering data that appears in list controls**

You can use controls on a form to filter the data that appears in a list control on the same form.

### **Procedure**

1. On a form, select a list control.
2. Select **Form > Attributes**. The List Control Attributes dialog opens.
3. Click the **Source** tab.
4. On the Source page, select **Select Statement** from the **Get values from** list.
5. In the field on the Source page, type the Select statement that you want to use in the field on the List Control Attributes dialog.
6. Click **Bind Controls**. If two or more tables are used on the form, the Form Attributes dialog opens.
7. If two or more tables are used on the form, you must join the tables. Specify a Join Condition on the Form Attributes dialog and click **OK**. The Bind controls dialog opens.
8. In the Bind Controls dialog, check the columns that you want use to modify the data that is displayed in the list control.
9. Click **OK**. The Bind controls dialog closes.

10. Click **OK** on the List Control Attributes dialog. Now, when a user types search parameters in the controls that you specified, the data that is displayed in the list control will change.

## Setting control properties

### About this task

You can set properties to adjust the appearance of each control on a form. For more information on the form control properties in DB2 Table Editor see DB2 Table Editor form control properties.

### Procedure

1. Select a control.
2. Select **Form --> Properties**. The Property Sheet window opens.
3. From the table displayed, select and adjust the properties. The appearance of the selected control changes in response to the properties that you set.

**Tip:** For a complete list of the names and functions of each form property, see DB2 Table Editor form control properties.

To change the properties for a different control, select the control from the drop-down box at the top of the Property sheet window. Change the properties as desired and close the window when you are finished.

## Creating a LOB control on a form

Once you have created a LOB control on a form, use the LOB Control Attributes window to set the attributes for your LOB control. You can create LOB controls that display or play text, image, or multimedia LOB data.

### Procedure

1. From an open form, create a LOB control on your form using the LOB icon from the Object Bar.
2. Double click the newly created LOB. The LOB Control Attributes window opens.
3. On the General page, type the name of the LOB control in the **Object** field.
4. Select the format of the LOB object that will be displayed in your control from the **Display** menu. The choices are as follows:
  - **Show images always** - Specifies that objects displayed in the field will always be images.
  - **Show multimedia always** - Specifies that objects displayed in the field will always be in multimedia format.
  - **Show text always** - Specifies that objects displayed in the field will always be in text format.
  - **Auto Recognize (or show text when format not recognized)** - Specifies that DB2 Table Editor will determine the format of the LOB object and display it accordingly. When the format of the object to be displayed is not recognized by DB2 Table Editor, the object will be displayed as text. If you select Auto Recognize (or show text when format not recognized), you must set format options for each LOB format on the Format page by scrolling through the Format pages for each LOB format using the arrows on the top right of the Format page.
5. *Optional:* Check the **Allow external viewing and editing** check box to enable viewing and editing of LOB objects using an external program such as Microsoft Paint. When this check box is checked, in the DB2 form that you are

creating you can double click the LOB control and the LOB will be displayed in an external viewer. Some LOB types can be edited using the external viewer then saved back to the database if desired.

6. *Optional:* Check the **Allow menu tools** check box to allow editing of text or multimedia LOB objects using the editing tools present on your machine. When editing a text object, you can select the portion of the text that you want to edit, then right click and select the appropriate editing tool from the pop-up menu.
7. On the Column page, select the LOB column that you want to have displayed in the LOB control from the list.
8. On the Format page, specify the options corresponding to the type of LOB that you selected from the **Display** menu on the General page.
  - If you selected **Show images always**, you must specify the options for image LOBs.
  - If you selected **Show multimedia always**, you must specify the options for multimedia LOBs.
  - If you selected **Show text always**, you must specify the options for text LOBs.
  - If you selected **Auto Recognize** (or show text when format not recognized) you must specify the options for image, multimedia, and text LOBs, by scrolling through the format pages for each LOB type using the arrow buttons on the top right of the format screen.
9. Click **OK**.

### **Refer-back conditions in form controls**

In a list, list box, or combo box control, you can display values that are based on the current value in a different control by setting up a refer-back condition.

This architecture is called a refer-back condition. For example, a form can be configured so that when a user types the name of an employee in a control named "Employee", all of the colleagues of that employee are listed in a different control named "Colleagues". This is accomplished by configuring a refer-back condition in the "Colleagues" control that "targets" the value of "Employee".

A refer-back condition can target a control that displays only one column of data, such as an edit box or combo box control. Although this type of control displays only one visible column of data, it can contain hidden columns that the form user does not see. You can use refer-back syntax to target both visible and hidden data columns.

A refer-back condition can also target a control that displays multiple columns of data, as in a list control. You can use refer-back syntax to specify the column and row that the refer-back condition targets. In a list, list box, or combo box control, you can create a refer-back condition that displays values from one table, and targets a control containing values from the same table. You can also create a refer-back condition that displays values from one table, and targets a control containing values from a different table. To do this, you must create a look-up condition. Then, add a refer-back condition.

#### **Creating a refer-back condition for a control:**

To create a refer-back condition in a control, you specify an SQL statement containing refer-back syntax in the controls Source attribute.

## Before you begin

To create a refer-back targeting a single-column or multi-columned control, you must first create a form and create the control on the form for which you want to configure the refer-back condition.

### Procedure

1. Select the desired control.
2. Select **Form > Attributes**. The Control Attributes dialog opens.
3. On the **Source** tab, select **Select Statement** from the drop-down list.
4. Type an SQL statement using one of the following syntax conventions:

- To target a control that contains only one column of data:

```
SELECT column1, column2, ... columnN FROM owner.tablename  
WHERE columnN = [ControlName]
```

For Example:

```
SELECT name, job FROM db.staff WHERE job = [Position]
```

In this example, the "Department" control targets the "Position" control, and selects only those rows from the db.staff table where the value of the column "job" is equal to the value of the control "Position".

- To target a control that contains more than one column of data:

This can be a control that contains one visible column and one or more hidden columns, such as a combo box. This can also be a control that contains more than one visible column, such as a list control.

```
SELECT column1, column2, ... columnN FROM owner.tablename  
WHERE columnN = [ControlName:ColumnNumber.RowNumber]
```

For Example for a control named "Department", type the following SQL statement:

```
SELECT name, job FROM db.staff WHERE job = [Position:2]
```

In this example the "Department" control targets the "Position" control, and selects only those rows from the db.staff table where the value of the column "job" is equal to the value of the second column, in the control "Position".

- To target a specific row in a control that contains more than one column of data:

This can be a control that contains one visible column and one or more hidden columns, such as a combo box. This can also be a control that contains more than one visible column, such as a list control.

```
SELECT column1, column2, ... columnN FROM owner.tablename  
WHERE columnN = [ControlName:ColumnNumber.RowNumber]
```

For example, for a control named "Department", type the following SQL statement:

```
SELECT name, job FROM db.staff WHERE job = [Position:2.3]
```

In this example, the "Department" control targets the "Position" control, and selects only those rows from the db.staff table where the value of the column "job" is equal to the value of the second column, third row in the control "Position".

5. Click **OK**. The control displays values based on the contents of a different control.

### **Look-up conditions in form controls**

In a list, list box, or combo box control, you can display values in one table column, while updating, searching, and deleting values in a different table column.

When a form has a look-up condition, the form user sees and selects values from a source column, while DB2 Table Editor updates, searches, and deletes values in a bound column. To create a look-up condition, DB2 Table Editor must be able to link the values in the visible source column to corresponding values in the bound column. This link is achieved through a link column. The source columns and bound column for a control in a look-up condition can reside in the same table, or in different tables. This means that the user can select values in one table, while DB2 Table Editor updates, searches, and deletes values in a different table. However, the link column and visible source column must reside in the same table.

#### **Bound columns**

In a look-up condition, DB2 Table Editor updates, searches, and deletes values in the control's bound column. There is only one bound column for a control.

#### **Source columns**

There are two types of source columns: visible and hidden. You use an SQL `SELECT` statement to specify both types of source columns.

##### **Visible source column**

A source column that is actually displayed in a control. The form user selects values from the visible source column. In a list box or combo box control, there is only one visible source column, since those types of controls can only display one column at a time. In a list control, there can be multiple visible source columns, since a list control can display multiple columns at once.

##### **Hidden source column**

A source column that is not displayed in a control, but is included in the SQL `SELECT` statement that specifies the source columns for a control. There can be one or more hidden source columns in a list box or combo box control. You can use a hidden source as a link column, connecting the visible source column and bound column in a look-up condition.

#### **Link columns**

When you have specified a bound column and one or more source columns for a look-up condition, you can select a link column. A link column connects the visible source column and the bound column in a control, creating a complete look-up condition. The link column must be one of the visible or hidden source columns that you specified for the control. The link column must contain values that both correspond to those in the visible source column and match those in the bound column.

You can create a form to update a database table that stores employee contact information. The table, called "employee.contact", only lists contact information by employee number. However, you want your form to display contact information by employee name. You have a second database table, called "employee.name", that lists the name and employee number of each employee. In the form, you can use a look-up condition to create a control that displays employee names from the "employee.name" table, and searches, updates, and deletes contact information in the "employee.contact" table.



## Creating a look-up condition:

You can create a look-up condition in a control on a form.

### Before you begin

You must first create a form and controls on that form and have it open in the DB2 Table Editor Developer component.

### Procedure

1. Select the desired control on your form.
2. Select **Form > Attributes**. The Control Attributes dialog opens.
3. On the **Column** tab, select the bound column for this control. DB2 Table Editor updates, searches, and deletes values in this column. In a look-up condition, there is only one bound column for a control.
4. On the **Source** tab, select **Select Statement** from the drop-down list.
5. Type an SQL SELECT statement that specifies one or more source columns for this control. There are two types of source columns: visible and hidden. The types of source columns available varies depending on the type of control for which you are creating a look-up condition.

#### For list box and combo box controls

You can specify one or more source columns in your select statement. If you specify more than one source column in the SELECT statement, the first column will be the visible source column. If you specify only one source column in the SELECT statement, that is the visible source column.

For example, in the following SQL SELECT statement:

```
SELECT NAME, ADDRESS FROM DBE.STAFF
```

The "name" column is the visible source column and the "address" column is the hidden source column.

#### For list controls

You can specify one or more source columns in your select statement. All specified source columns are visible source columns.

For example, in the following SQL SELECT statement:

```
SELECT NAME, ADDRESS FROM DBE.STAFF
```

Both the "name" and "address" columns are visible source columns.

**Tip:** If you set a column width for a list control to 0, the column does not display in the control. This column is now a hidden source column.

6. Click **Link Column**, and select the link column for this control. The link column:
  - must be one of the visible or hidden source columns that you specified for the control.
  - must reside in the same table as the visible source column.
  - must contain values that:
    - correspond to those in the visible source column you specified for the control.
    - match those in the bound column that you specified for the control.

For example, if you specify the bound column for a combo box control as "staff.ID" and the source columns for the combo box control in the SQL SELECT statement as:

```
SELECT NAME, ADDRESS, IDENTIFICATION FROM DBE.ORG
```

The columns "staff.ID" and "org.identification" contain the same data. In this example, the bound column is "ID" from the table "staff", and the visible source column is "name" from the table "org". There are two hidden source columns: "address" and "identification" from the table "org". The link column is "identification", because its values satisfy both of the following conditions:

- The values correspond to those in the visible source column "name".
- The values match those in the bound column "ID". The link column is not "address", because its values do not match those in the bound column "ID".

7. Click **OK**. DB2 Table Editor uses the values in this column to link the visible source column to the bound column.
8. On the Control Attributes dialog, click **OK**. When the form is used, the control displays the values in the visible source column and DB2 Table Editor updates, searches, or deletes the values in the bound column.

### **Adding a .jpg image to a form Procedure**

1. Open the form to which you want to add a .jpg image.
2. Create an image control on the form using the "Bitmap" control option.
3. Right click the new image control and select "Properties". The Property sheet opens.
4. Go to the FileName property and browse to the .jpg that you want to add.
5. Go to the AsURL property. Set the AsURL property to true to link to the .jpg on your form. Set the AsURL property to false to have the .jpg image embedded on your form.

### **Adding an accelerator key to a button control Procedure**

1. Select a button control on your form.
2. Select **Form --> Attributes**. The Action Button Attributes window opens.
3. In the **Caption** field, type the caption that you want to appear on the button.
4. To define a letter as the accelerator key for that control, type an ampersand (&) in front of the letter. For example, the caption for the commonly used **Close** button would be &Close.
5. Click **OK**. The letter that you specified is now underlined in the button caption. The user can now perform the button action by holding down the ALT key and typing the corresponding letter.

### **Using special command characters**

DB2 Table Editor users can use special command characters in a text box or combo box control to limit the results of a search. All forms created using DB2 Table Editor Developer automatically recognize the search parameters that are associated with the special command characters listed in the following table (Special Command Characters).

Table 31. Special Command Characters

Type:	Result:
<X	Limits the search results to those rows which are less than the value of X.
>X	Limits the search results to those rows which are greater than the value of X.
[X	Limits the search results to those rows which start with the value of X.
]X	Limits the search results to those rows which end with the value of X.
^X	Limits the search results to those rows which are not equal to the value of X.
~X	Limits the search results to those rows which match the pattern of X. For example, to search for the pattern XYZ, you would type ~%XYZ%.
%X	Performs a wildcard search. For example, %ABC returns values that end with ABC, ABC% returns values that begin with ABC, and %ABC% returns values that contain ABC.
*X	Performs a wildcard search. For example, *ABC returns values that end with ABC, ABC* returns values that begin with ABC, and *ABC* returns values that contain ABC.
=X	Does not substitute for special characters in a search. For example, to search for the string 4*5, type =4*5.

## Excluding a key field when updating the database

You can configure a form so that a key field is excluded when updating the database.

### Procedure

1. Open the form that contains the key field that you want to exclude.
2. Right-click the key field that you want to exclude and select **Attributes**. The Control Attributes dialog opens.
3. Click the **Replace Values** tab.
4. Click the **Add** button. The Replace Values dialog opens.
5. Select **Insert** from the **On action** menu.
6. From the **Replace contents with** menu, select **Current Row Value**. On update, the contents of the field will be replaced with the value of the current row. This means that any modifications that are made to the field by the user will not be applied when the database is updated.

## Opening a form

You can open a DB2 Table Editor form that is saved on a local file or from a database server. If you are opening a form created using an earlier version of DB2 Table Editor Developer, you will be asked if you want to migrate that form to the current version of DB2 Table Editor Developer.

### Opening a form saved locally

You can open a form previously saved to a location on your hard drive.

1. From the main window of DB2 Table Editor Developer, select **File > Open**. The Windows Open dialog opens.
2. Navigate to the form you want to open and click **Open**. The form opens in the DB2 Table Editor Developer main window.

## Opening a form that is stored on a database server

You can open a form that is stored on a database server.

1. From the main window of DB2 Table Editor Developer, select **File > Open From Server**. The Open From Server window opens.
2. From the **Server** list, select the server where the form is stored.
3. In the **Owner** field, type the user ID for the catalog owner.
4. In the **Name** field, type the name of the form that you want to open.

**Tip:** You can choose from a list of forms stored at a database server. On the **Open From Server** dialog, leave the **Owner** and **Name** fields blank, and click **List**. A list of all forms on the server is returned. You can also specify an owner and list only that owner's forms.

5. Click **OK**. The form opens in the main window.

On the form, in each field or control that is bound, the name of the column to which that control is bound is displayed. If the control runs a select statement, a select statement will be shown in the control. If the control is an explicit list, an explicit list will be shown in the control.

If you are opening a form that uses an Informix database, the URL pointing to the Informix server that is used by the form must have been specified by the form developer when they created the form using DB2 Table Editor Developer. The URL should have been specified on the General Page of the Form Attributes window in the JDBC URL field.

## Saving a form

You can save a DB2 Table Editor form to a local file or to a database server.

### Saving a form locally

You can save a form to a file on your local hard drive. Once a form has been saved to a file or database it can be distributed to users for use in searching and editing tables.

1. From the main window of DB2 Table Editor Developer, select **File > Save As**. The Save As window opens.
2. Navigate to the location where you want the form to be saved.
3. Type the name for the form, and click **Save**. Table Editor Developer saves the active form to a local file.

### Saving a form to a database server

You can save a form at a database server. Once a form has been saved to a file or database it can be distributed to other users for use in searching and editing tables.

1. From the main window of DB2 Table Editor Developer, select **File > Save at Server**. The Save Form window opens.
2. In the **Owner** field, type the user ID for the catalog owner.
3. In the **Name** field, type the name of the form that you want to open.
4. *Optional:* In the **Comment** field, type any comments about the form.

5. *Optional:* To share the form with other users check the **Share the object with other users** check box.

**Note:** When you check the **Share the object with other users** check box, other DB2 Table Editor Developer users, who are authorized on that server, will be able to access and edit your form.

6. Click **OK**. DB2 Table Editor Developer saves the active form to the database server.

## Printing a form

You can print a DB2 Table Editor form.

### Procedure

1. Select **File > Print**. The Windows Print dialog opens.
2. Select the desired print options, and click **OK**. The active form prints.

## Closing a form

Remember to save your work before closing a DB2 Table Editor form.

### Procedure

To close a form, select **File --> Close**.

## Deleting a form

You can delete a DB2 Table Editor form that is stored in a local directory or on a database server.

### Deleting a form that is stored locally

To delete a form stored on your local hard drive, use your system's local file management application. For example, you can use Windows Explorer to delete a DB2 Table Editor form stored on your local hard drive.

### Deleting a form that is stored on a database server

You can delete a DB2 Table Editor form from a database server.

1. Select **File --> Open From Server**. The Open From Server Window opens.
2. From the **Server** list, select the database server that stores the form that you want to delete.
3. In the **Owner** field, type the name of the owner of the form, and click **List**. The Object List window opens and it contains a list of all of the forms that are on the specified database server and are owned by the specified owner.
4. From the Object list window, select the form that you want to delete, and click **Delete**. A confirmation dialog will open.
5. Click **Yes** to confirm the deletion. DB2 Table Editor Developer deletes the selected form from the database server.

---

## Validation rules

A validation rule verifies that the data a user specifies in a control fits within the guidelines that you have established for your form.

Validation rules can work individually or in groups.

### Creating a validation rule

You can create a new validation rule and add it to a control.

#### Procedure

1. Select **Form --> Validation Rules**. The Validation Rules window opens.
2. Click the **New Rule** button. The Control window opens.
3. Select the control to which you want to apply the rule.
4. Click **Next**. The Rule Type window opens.
5. Select the rule type that you want to apply to the control and click **Next**. A dialog opens asking for additional validation rule parameters.
6. Type any additional parameters the validation rule requires and click **Next**. The Action window opens.
7. Specify when to apply the validation rule by checking any appropriate check box on the window, and click **Next**. The Error Message dialog opens.
8. In the Error message field, type the error message that you want to display upon violation of the validation rule. If custom help is available, type the name and context number of the help file to associate with the error message. Click **Next**. A summary of the validation rule opens.
9. Click **Finish** to create the validation rule.

### Creating a validation group

#### About this task

You can create a group of validation rules to validate the contents of a control. Validation groups are based on AND conditions. All of the validation groups must evaluate to true for the form contents to pass validation. The validation rules contained within groups are based on OR conditions. At least one of the rules in a group must evaluate to true for the group to pass validation. For example:

```
Rule: F_Name field must not have a null value
AND
Rule: L_Name field must not have a null value
AND
Group: Rule: SSN field must have a 9 character entry
OR
Rule: Tax_ID field must have a 9 character entry
```

#### Procedure

1. Select **Form --> Validation Rules**. The Validation Rules window opens.
2. Click **New Group**. A new validation group is created.
3. Click **New Rule**, and create new validation rules for the group. To create new rule, follow the steps in the section: Creating a validation rule.

### Deleting a validation rule

You can delete a validation rule from a form.

### Procedure

1. Select **Form --> Validation Rules**. The Validation Rules window opens.
2. Select the rule you want to delete and click **Delete**. The validation rule is deleted.

## Deleting a validation group

You can delete a validation group from a form.

### Procedure

1. Select **Form --> Validation Rules**. The Validation Rules window opens.
2. Select the group that you want to delete and click **Delete**. The validation group is deleted.

---

## Locking in DB2 Table Editor

DB2 Table Editor locks tables when they are being edited.

The LOCK TABLE statement is used to control locking in the Edit table feature. The options for locking mode are either SHARE MODE or EXCLUSIVE MODE.

- In share mode, concurrent application processes are prevented from executing all but read-only operations on the table.
- In exclusive mode, concurrent application processes are prevented from executing any operations on the table. Note that exclusive mode does not prevent concurrent application processes that are running at the Uncommitted Read (UR) isolation level from executing read-only operations on the table.

If you select **no lock**, then DB2 Table Editor does not issue the LOCK TABLE statement, but only obtains locks as needed to perform updates, inserts, or deletes. Note that if a table contains a large number of rows, and no row conditions are specified, then not all of the data is automatically loaded into the grid until requested. In this case a read cursor will remain open until all of the data is loaded.

The DISPLOCK CLIST option allows administrators to control whether or not the locking option is displayed. The following values can be set:

- DISPLOCK(YES): This is the default value. When this value is set, the locking option is available to users.
- DISPLOCK(NO): This value hides the locking option from users. When this value is set, DB2 Table Editor will use shared locks.
- DISPLOCK(NON): This value hides the locking option from users. When this value is set, DB2 Table Editor will not use locking.
- DISPLOCK(NOE): This value hides the locking option from users. When this value is set, DB2 Table Editor will use exclusive locks.

---

## Migrating Forms to a Different Environment

Use the Forms, Servers and Tables windows to migrate forms from one environment to another. For instance, you can migrate a form from a test environment to a production environment.

### Procedure

1. Open the Forms window by selecting **File --> Migrate Forms**. The Forms window opens.

2. From the Forms window, select the form or forms that you want to migrate.
3. Click **Next**. The Servers window opens.
4. From the Servers window, select the server from which you want to migrate the forms, from the **Origin server** drop-down list.
5. From the **Destination server** drop-down list, select the server to which you want to migrate the forms.
6. Click **Add**.
7. Click **Next**. If you are migrating a form that contains select statements, the Statements window opens. If your form does not contain select statements, the Tables window opens.
8. For forms that contain select statements:
  - a. Select the origin and destination server pair for the form that you are migrating from the **Server Link** drop down list.
  - b. Select the control that contains the SQL statement from the **Controls** drop-down list.
  - c. Modify the tables in the select statement in the **Select Statement** field. The tables referenced in the select statement should be changed to tables in the database to which you are migrating the form.
  - d. Click **Apply** to apply the changes that you made to your select statement in the **Select Statement** field. (To undo your changes to the SQL statement, click **Rollback**.)
  - e. Click **Next** to move to the next step in the migration process. The Tables window opens.
9. From the Tables window, select the origin and destination server combination from the **Server link** drop-down menu.
10. From the **Origin** table drop-down menu, select the table in the origin database to which your form connects.
11. From the **Destination** table drop-down menu, select the table in the destination database to which your form will connect. You can click the browse button to browse for a table using the Object List window.
12. Click **Add**. The origin and destination tables appear in the Table Links list.
13. Click **Finish**. Your form is migrated.



---

## Chapter 8. The DB2 Table Editor User component

Use the DB2 Table Editor User component, a Windows based interface, to work with DB2 Table Editor forms that were created in the DB2 Table Editor Developer component, or to create forms as you go.

Before working with the DB2 Table Editor User component, you must specify the server definition file (SDF) that you want to use.

DB2 Table Editor provides robust table editing operations, including the ability to:

- Edit tables on multiple DB2 database platforms
- Maintain referential integrity while performing inserts, updates, and deletes
- Quickly search for, and locate specific rows, filter the rows that are displayed, or immediately jump to tables of related data
- Update primary keys
- Commit accumulated data changes at the end of a session, and use find-and-replace for large-scale changes
- Save the specifications of a table editing session (such as row filtering) and call up the same table-editing layout in the future
- Edit with the standard DB2 Table Editor interface, or create prototype forms in seconds with the form building wizard
- Easily locate and launch previously saved DB2-based forms, including from links in web pages or e-mail messages (using `<keyword conref="..../etacc.dita#etacc/name"></keyword>` player)
- Launch the standard DB2 Table Editor interface from the DB2 Export Facility
- Access large objects in DB2 databases

### Topics:

- “Starting the User component”
- “LOBs (Large Objects)”
- “Edit Table feature” on page 194
- “Committing changes to the database” on page 199
- “Opening a form” on page 200
- “Viewing change history” on page 200

---

### Starting the User component

After the DB2 Table Editor User component has been installed on your computer, you can access it through the Windows **Start** menu.

#### Procedure

To open the application, select **Start > Programs > DB2 Table Editor**.

---

### LOBs (Large Objects)

You can work with LOBs using the DB2 Table Editor User component.

When editing a table with LOB values, DB2 Table Editor first retrieves information about the LOB in the form of a LOB Locator that the user defines to indicate what application should be used to open it. After you have indicated the appropriate application, you can double click the LOB in order to view it.

## Specifying the application to be used to open Large Objects (LOBs)

You can view and edit large objects (LOBs) directly from an open form. You can also automatically launch an appropriate application to work with the LOB that you have selected.

### Procedure

1. From an open form, right click the cell that contains the reference to the LOB that you want to work with. A drop-down menu opens.
2. Click **View/Edit LOB**. The Column LOB Type Associations dialog opens.
3. There are two ways to indicate which application will be used to view and edit the LOB.
  - To indicate which application will be used to view and edit the LOB via its file extension, select the File Extension radio button. Type the file extension of the LOB in the File Extension field and click the Browse button and browse until you find the executable file for the application with which you want to view and edit the LOB.
  - To indicate the application that will be used to view and edit the LOB via the mapping column, select the Mapping Column radio button. Select the desired mapping column from the drop-down list then click the Mapping button. The File Extension Mapping dialog opens. Select the file extensions for the formats listed in the column from the LOB Type Associations window. This option is only available for forms that contain a mapping column.
4. *Optional:* Save the options on the form by selecting File --> Save at Server.

**Note:** The column LOB associations information, including mapping if it has been used, is saved when the form is saved. The next time the form is opened this information will be used.

5. Click **OK**. The appropriate application launches with the selected LOB open for viewing or editing.

**Note:** Once you have indicated the appropriate application, on subsequent attempts to view the LOB you can simply double click the LOB in order to view it. If you want to change the application that is used to open the LOB, hold down the shift key, then right click the LOB that you want to view, and select **View/Edit LOB**. The Column LOB Type Associations dialog opens and you can change your selection.

---

## Edit Table feature

The Edit table feature is one of the most powerful features in DB2 Table Editor. It provides the ability to create forms that can be used to edit tables in the database.

When you use the Edit Table feature, you create a form to insert, update, and delete records from a table in a database (based on your particular privileges). These forms include the ability to update primary keys. When you create a form, you specify a primary table. The primary table for each form is the table that will

be updated with insert, update and delete actions. The specifications for these forms can be saved using the DB2 Table Editor Developer component application for reuse. You can use the wizard to automatically create a new form for a table. You can then use this form to search and edit the table.

You can edit tables in form mode and in table layout mode. Both modes use a wizard to give you full access to the data within one table. Both traditional forms and full-screen edit forms can be saved locally and at a database server. Once saved, these forms can be opened and edited at a later time.

### Form mode

Form mode uses a wizard to create a form that is designed to edit the table that you select. The wizard dynamically builds the controls and columns that are displayed in the form based on the selections that you make. Changes are committed when you click the **Update**, **Insert**, or **Delete** button.

### Table Layout mode

Table Layout mode uses a wizard to create a tabular representation of the table that you select. You can make edits within the table grid itself. You can choose whether changes are committed when you are finished editing the table, or any time that you select another row in the editing grid.

Navigate the table layout by using the cursor keys, the Tab key, and the mouse. Edit a row by selecting the cell that you want to edit and typing directly in the cell. You can also use the options that are available in the **Edit** Menu and the Edit pop-up in table layout mode.

## Creating a new form using the Edit Table feature Procedure

1. Select **File > Edit Table**. The Edit Table window opens.
2. Select the server on which the table that you want to edit is stored and click **Next**.
3. In the **Owner** field, type the user ID of the owner of the table that you want to edit.
4. In the **Name** field, type the name of the table that you want to edit and click **Search**.

**Tip:** You can choose from a list of tables that are stored at a database server. From the Edit Table window, enter the wildcard character % in the **Owner** and **Name** fields (and in the **Database Name**, and **Tablespace name** fields, which are available if you are accessing a z/OS or OS/390 system).

5. Select the table that you want to edit, and click **Next**. The table that you select here is the Primary table for the form.
6. Select the method of viewing data view you that you prefer.
  - Form layout: The form layout is similar to any Windows dialog, displaying edit fields and buttons.
  - Table layout: The table layout is tabular in appearance, displaying data in a grid of rows and columns.
7. If your table contains Business Time data, specify whether or not to omit the Business Time Data using the **Omit Business Time Columns** check box.
8. In the **Available columns** list, check all of the columns that you want to appear in the form.

9. In the **Available buttons** list, check all of the buttons that you want to appear in the form.

**Note:** No buttons are used if you edit the form in table layout mode.

10. Click **Next**.
11. Click the **Add** button that is adjacent to the **Row Conditions** field. The Row Condition window opens.
12. Use the fields in the Row Condition window to specify a row limit. Click **Add**. The Row Condition window closes.
13. Click the **Add** button that is adjacent to the **Sort Conditions** field. The Sort Condition window opens. Select the column or columns from the list, on which you want your data sorted.
14. Select the column or columns from the list, on which you want your data sorted.
15. In the **Sort Direction** box, specify whether you want your data to be sorted in ascending or descending order.
16. Click **Add**. The Sort Condition window closes.
17. If you selected the Table Layout format, select a Save Mode from the **Save Mode** field.

**Note:** The **On Leave Row** save mode sends changes you make to DB2 every time you click outside a row you have made changes to. The **At End** save mode sends changes you make to DB2 when you are finished with all edits to the form.

18. If you selected the **At End** save mode, select a Lock Table option from the **Lock Table** field. The options are:
  - Select **No** to edit the table without locking it.
  - Select **Shared** to prevent other applications from performing any but read-only operations on the table while you are editing it.
  - Select **Exclusive** to prevent concurrent applications from performing any operations on the table.
19. If you have included Business Time columns you can specify a date or timestamp in the **Retrieve Data As Of** field and check the **Retrieve Data As Of** check box to determine which data will be displayed for editing.

**Tip:** Business Time is a new way for DB2 to support temporal data. Business Time, allows DB2 users to define business specific time intervals to view table history within a table. For more Information on Business Time, see the DB2 10 documentation..

20. Click **Finish**. The form or table appears in the DB2 Table Editor component main window. You can now use the form to search and edit the table.

## Primary keys

If the table that you are editing contains a primary key column, that column is represented by the addition of a key icon to the column header. Any changes that you make to primary key columns are automatically cascaded to all matching key columns throughout the database.

## Primary keys and the Edit Related option for full-screen edit forms

Edit Related is an option for full-screen edit forms when there is a primary key included on the form that has dependent tables. If this is the case, using the full-screen edit pop-up menu produces a menu that includes the Edit Related option.

When Edit Related is selected, DB2 Table Editor first checks to see if there is more than one related table. If so, it produces a list of tables to choose from. You can select the related table that you want to edit. This dialog is not shown if there is only one related table. The Edit Table wizard is then displayed for the selected related table and a new form for the related table will be produced when the **Finish** button is clicked. If the Edit Related option was invoked when either a cell or row was selected, then the Edit wizard dialog for the related table is automatically populated with row conditions for the row/cell values that were selected.

## Rows

You can use DB2 Table Editor to perform actions on rows in tables.

To perform an action on a row in a table, right click the row, then select one of the following options:

- **Insert Row** - insert a new row into the table directly above the current row.
- **Insert Duplicate Row** - insert a new row into the table directly above the current row, with values identical to those in the current row.
- **Delete Row** - remove the current row from the table.
- **Copy Row** - copy the selected row and place it on the clipboard, replacing the current contents of the clipboard.
- **Find in Row** - search the table for the specified information.
- **Replace in Row** - replace the specified value in the table with a new value.
- **Update Row** - update the current row with new information.
- **Undo Row** - undo the changes you have made.
- **Edit Related** - open the Edit Table wizard with the data filled in to generate a table layout form for the table related to the primary key you have selected.

### Inserting a row

Using the Edit Table feature, you can insert a new row into a table.

**Note:** The primary table for the form will be updated.

### To insert a row in Form layout mode

In an open form, enter the information that you want to appear in the new row and click **Insert**. The new row is inserted at the end of the table.

### To insert a row in Table Layout mode

1. From an open form, right-click on the gray blocks to the left of the table and select **Insert Row**. A new blank row is created directly below the row where you clicked.
2. Type the information that you want to appear in the new row into each cell in the table and click outside the new row. The new row is inserted into the table.

### **To insert a row by duplicating an existing row in table layout mode**

1. From an open form in table layout, right click the gray block to the left of the row that you want to duplicate and select **Insert Duplicate Row** from the pop-up menu. A new row is created directly below the row where you clicked, identical to the selected row.
2. Make any desired changes to the duplicate row and click outside the new row. The new row is inserted into the table.

### **Updating a row**

Using the Edit table feature you can update a row in a DB2 table.

**Note:** The primary table for the form will be updated.

### **To update a row in Form layout mode**

1. Use the **Search** button to locate the row that you want to update.
2. Update information in that row using the form.
3. Click **Update**. The row is updated with the new information.

### **To update a row in Table Layout mode**

1. In an open form, select the cell that you want to edit.
2. Type the information that you want to appear in the row and click outside the row. The row is updated with the new information.

### **Deleting a row**

Using the Edit table feature you can delete a row from a DB2 table.

**Note:** The primary table for the form will be updated.

### **To delete a row in Form layout mode**

Use the **Search** button to locate the row that you want to delete and click **Delete**. The row is deleted from the table.

### **To delete a row in Table Layout mode**

From an open form, right-click on the gray blocks to the left of the table and select **Delete Row** from the pop-up menu. The row is deleted from the table.

## **Columns**

You can use DB2 Table Editor to perform actions on columns in tables.

You can perform actions on a column in a table by right clicking the column, then selecting one of the following options:

- **Sort Ascending** - sort the contents of the column in ascending order.
- **Sort Descending** - sort the contents of the column in descending order.
- **Copy Column** - copy the selected column and place it on the clipboard, replacing the current contents of the clipboard.
- **Find in Column** - search the column for the specified information.
- **Replace in Column** - replace the specified value in the column with a new value.
- **Columns** - open the Columns dialog.

- **Edit Related** - open the Edit Table wizard with the data filled in to generate a table layout form for the table related to the primary key you have selected.

## Finding and changing hexadecimal values in a column

You can find and change hexadecimal values in the DB2 Table Editor User component.

### About this task

In the table layout editor, the Column dialog includes a checkbox to display the column values in hexadecimal format.

### Procedure

1. In the table layout editor right click the column that contains the hexadecimal data that you want to find or change.
2. Select **Columns**. The Columns dialog opens.
3. In the Columns dialog, ensure that the **Hexadecimal Format** check box is checked and click **OK**. When the **Hexadecimal Format** checkbox is checked, find and replace commands can be used with hexadecimal input values.
4. Use the DB2 Table Editor find and replace commands to find and replace hexadecimal values.

## Cells

You can use DB2 Table Editor to perform actions on cells in tables.

You can perform actions on a cell in a table by right clicking the cell, then selecting one of the following options:

- **Cut Value** - remove the selected value from the cell and place it on the clipboard, replacing the current contents of the clipboard.
- **Copy Value** - copy the selected value and place it on the clipboard, replacing the current contents of the clipboard.
- **Paste Value** - insert the contents of the clipboard at the insertion point, replacing any selection.
- **Zoom** - open the Zoom dialog. From the Zoom dialog you can view the values in a column in HEX. The values that are shown are the HEX bytes for the value as they are stored in your program, in the Windows ANSI CCSID. This is not necessarily the bytes as a value is stored in the database.
- **Find** - search the table for the specified information.
- **Replace** - replace the specified value in the table with a new value.
- **Launch** - run the value of the selected cell, if the value is a valid file or application name.
- **View/Edit LOB** - open the Column LOB Type Associations dialog in order to view or edit the selected LOB.
- **Edit Related** - open the Edit Table wizard with the data filled in to generate a table layout form for the table related to the primary key that you have selected.

---

## Committing changes to the database

Changes and updates are automatically sent in batches to the database.

## About this task

There are two ways to commit changes to the database.

### Procedure

To commit changes to the database:

- Close DB2 Table Editor. Any changes that you have made since the last commit to the database are automatically saved.
- If a **Commit** button has been included on the form, you can select the button to commit any changes to the database immediately.

---

## Opening a form

You need to open a form in order to use DB2 Table Editor. Forms can be saved on your computer or on a server.

### To open a form that is stored locally:

1. Select **File --> Open**. The Open window opens.
2. Locate and select the file you want to open, and click **Open**. The form opens within the main window.

### To open a form that is stored on a server using DB2 Table Editor User component:

1. Select **File --> Open from server**. The Open From Server window opens.
2. From the **Server** list, select the server name where your form is stored.
3. If you know the owner name, enter it in the **Owner** field.
4. If you know the name of the form, enter it in the **Name** field.
5. Click the **List** button. A list of forms, that match the criteria that you specified, opens in the Object List window.

**Note:** The percent sign (%) acts as a wildcard symbol. Enter the percent sign in the **Owner** and **Name** fields to return forms with any owner, or with any name.

6. From the Object List window, select the form that you want to use. Click **OK**. The selected form opens.

---

## Viewing change history

You can use the **History** menu item to view the past values of a piece of data. This information is available for data that is stored in DB2 10 or higher.

### Procedure

1. Select a cell in the table layout editor.
2. Right click the cell. The table layout edit pop-up menu opens.
3. Select **History**. The History dialog opens displaying the history of the data that is currently selected, including the date that the data was changed. The data that is displayed in the History dialog is read-only.



---

## Chapter 9. Troubleshooting

Use these topics to diagnose and correct problems that you experience with DB2 Table Editor and with Tools Customizer.

---

### Recovery procedures

Recovery procedures have been developed for a few common DB2 Table Editor problems.

**Topics:**

- “Recovering from disk failure”
- “Recovering from subsystem termination” on page 202

### Recovering from disk failure

You can recover from a disk hardware failure that results in the loss of an entire unit.

#### Symptoms

No I/O activity occurs for the affected disk address. Databases and tables that reside on the affected unit are unavailable.

#### Resolving the problem

**Operator response:**

1. Ensure that no incomplete I/O requests exist for the failing device. One way to do this is to force the volume offline by issuing the following z/OS command, where *xxx* is the unit address:

```
VARY xxx,OFFLINE,FORCE
```

To check disk status, issue the following command:

```
D U,DASD,ONLINE
```

The following console message is displayed after you force a volume offline:

```
UNIT TYPE STATUS VOLSER VOLSTATE
4B1 3390 O-BOX XTRA02 PRIV/RSDNT
```

The disk unit is now available for service.

If you previously set the I/O timing interval for the device class, the I/O timing facility terminates all requests that are incomplete at the end of the specified time interval, and you can proceed to the next step without varying the volume offline. You can set the I/O timing interval either through the IECIOSxx z/OS parameter library member or by issuing the following z/OS command:

```
SETIOS MIH,DEV=devnum,IOTIMING=mm:ss.
```

2. Issue (or request that an authorized operator issue) the following DB2 command to stop all databases and table spaces that reside on the affected volume:

```
-STOP DATABASE(database-name) SPACENAM(space-name)
```

If the disk unit must be disconnected for repair, stop all databases and table spaces on all volumes in the disk unit.

3. Select a spare disk pack, and use ICKDSF to initialize from scratch a disk unit with a different unit address (*yyy*) and the same volume serial number (VOLSER).

```
// Job
//ICKDSF EXEC PGM=ICKDSF
//SYSPRINT DD SYSOUT=*
//SYSIN DD *
        REVAL UNITADDRESS(yyy) VERIFY(volser)
```

If you initialize a 3380 or 3390 volume, use REVAL with the VERIFY parameter to ensure that you initialize the intended volume, or to revalidate the home address of the volume and record 0. Alternatively, use ISMF to initialize the disk unit.

4. Issue the following z/OS console command, where *yyy* is the new unit address:

```
VARY yyy,ONLINE
```

5. To check disk status, issue the following command:

```
D U,DASD,ONLINE
```

The following console message is displayed:

```
UNIT TYPE STATUS VOLSER VOLSTATE
7D4 3390 0 XTRA02 PRIV/RSDNT
```

6. Issue the following DB2 command to start all the appropriate databases and table spaces that were previously stopped:
 

```
-START DATABASE(database-name) SPACENAM(space-name)
```
7. Delete all table spaces (VSAM linear data sets) from the ICF catalog by issuing the following access method services command for each one of them, where *y* is either I or J:
 

```
DELETE catnam.DSNDBC.dbname.tsname.y0001.A00x CLUSTER NOSCRATCH
```
8. For user-managed table spaces, define the VSAM cluster and data components for the new volume by issuing the access method services DEFINE CLUSTER command with the same data set name as in the previous step, in the following format: *catnam*.DSNDBC.*dbname*.*tsname*.y0001.A00x. The *y* is I or J, and the *x* is C (for VSAM clusters) or D (for VSAM data components).
9. For a user-defined table space, define the new data set before an attempt to recover it. You can recover table spaces that are defined in storage groups without prior definition.
10. Recover the table spaces by using the DB2 RECOVER utility.

## Recovering from subsystem termination

You can recover DB2 Table Editor after DB2 Table Editor or an operator-issued cancel causes the subsystem to terminate.

### Symptoms

When an DB2 Table Editor subsystem terminates, the specific failure is identified in one or more messages. The following messages might be issued at the z/OS console:

```
DSNV086E - DB2 ABNORMAL TERMINATION REASON=XXXXXXXX
DSN3104I - DSN3EC00 -TERMINATION COMPLETE
DSN3100I - DSN3EC00 - SUBSYSTEM ssnm READY FOR -START COMMAND
```

The following message might be issued to the IMS master terminal:

```
DSNM002I IMS/TM xxxx DISCONNECTED FROM SUBSYSTEM
        yyyy RC=rc
```

The following message might be issued to the CICS® transient data error destination, which is defined in the RDO:

```
DSNC2025I - THE ATTACHMENT FACILITY IS INACTIVE
```

## Environment

- IMS and CICS continue.
- In-process IMS and CICS applications receive SQLCODE -923 (SQLSTATE '57015') when accessing DB2.

In most cases, if an IMS or CICS application program is running when a -923 SQLCODE is returned, an abend occurs. This is because the application program generally terminates when it receives a -923 SQLCODE. To terminate, some synchronization processing occurs (such as a commit). If DB2 is not operational when synchronization processing is attempted by an application program, the application program abends. In-process applications can abend with an abend code X'04F'.

- IMS applications that begin to run after subsystem termination begins are handled according to the error options.
  - For option R, SQL return code -923 is sent to the application, and IMS pseudo abends.
  - For option Q, the message is enqueued again, and the transaction abends.
  - For option A, the message is discarded, and the transaction abends.
- CICS applications that begin to run after subsystem termination begins are handled as follows:
  - If the CICS attachment facility has not terminated, the application receives a -923 SQLCODE.
  - If the CICS attachment facility has terminated, the application abends (code AEY9).

## Resolving the problem

### Operator response:

1. Restart DB2 Table Editor by issuing the START command.
2. For IMS environments, reestablish the IMS connection by issuing the IMS command /START SUBSYS DB2.
3. For CICS environments, reestablish the CICS connection by issuing the CICS attachment facility command DSNC STRT.

## Determining the trace data set name

You will need to identify the name of the trace data set if you cannot allocate the trace data set, the trace data set runs out of space, or IBM Software Support asks for it.

The name of the trace data set depends on the prefix setting in the TSO profile. To identify the name of the trace data set, you must know the prefix setting.

- If PREFIX is set, the name of the trace data set is *prefix*.CCQ.TRACE, where *prefix* is the TSO prefix that you specified in the profile.
- If NOPREFIX is set, the name of the trace data set is *user\_ID*.CCQ.TRACE, where *user\_ID* is your TSO user ID.

---

## DB2 Table Editor Components and GUI troubleshooting

This section contains information on problems that can occur while using the DB2 Table Editor Administrative Console Component, Developer Component, and DB2 Table Editor User Component, and their solutions.

This section also contains information on frequently asked questions and common problems when using the DB2 Table Editor graphical user interface.

### Server does not appear in Server List

If your server does not appear in your server list, ensure that the correct .ini file is set as the default.

To change the default server definition file:

1. From the User component main page, select **View --> Options**. The Options page opens.
2. From the Options page, click the **Advanced** button. The advanced version of the options page opens.
3. From the General page on the Options window, type the file name and location for the desired .ini file, or browse to the file by clicking the **Browse (...)** button.
4. Click **OK**. The advanced version of the Options window closes.
5. Click **OK**. The Options window closes.
6. The server defined in the .ini file now appears in your server list.

### Cannot find saved forms

#### Symptom

You selected **File > Open** in DB2 Table Editor and the file that you are looking for does not appear in the Open window.

**Cause** The **Files of type** format that is selected by default when the Open window opens is **Form files (\*.fse)**. If the file that you are looking for uses a different extension it will not be shown. DB2 Table Editor forms can also use \*.dbe or \*.dbj extensions.

#### Action

Select the desired file type from the **Files of type** list.

### A DB2 Table Editor component is not pointing to the expected SDF

#### Symptom

You have made changes to the Server Definition File (SDF), or updated the SDF (using the DB2 Table Editor Console component), and your changes are not reflected when you use either the DB2 Table Editor Developer or User components.

**Cause** The changes to the SDF were made while either the DB2 Table Editor Developer or User components were open.

#### Action

1. Close the DB2 Table Editor Developer or User components.
2. Open the User or Developer component.

## Working with date format data in the DB2 Table Editor User component

When inserting or updating timestamps, the following format should be used:  
yyyy-mm-dd-hh.mm.ss.ffffff

## Working with date and time formats in Informix

In order to work with ISO date and time formats in Informix, you must set the following environment variables in Informix as your system variables to enable Informix to use ISO format:

```
GL_DATE=%Y-%m-%d
```

```
GL_TIME=%H:%M:%S
```

For more information on these variables, see: <http://www.dbcenter.cise.ufl.edu/triggerman/InfoShelf/gls/01.fm4.html#153039>

## Char and Varchar in refer-back conditions

When input parameters of a stored procedure consist of Char or Varchar data and that data is passed to DB2 using the refer-back syntax, you must enclose the Char and Varchar data in single quotes.

```
call <StoredProcedureName>(' ') </StoredProcedureName>
```

## Double quotes around column and field names in DB2 Table Editor forms

### Symptom

When designing a form using the DB2 Table Editor application tools, certain field labels or column names might contain double-quotes, while others might not.

**Cause** The presence of double-quotes in a column or field indicates that the column or field has the same name as a DB2 reserved word or keyword. Double quotes are applied to column names that are the same as DB2 reserved words or keywords by DB2 Table Editor.

### Action

Double-quotes are used as a visual indicator by the DB2 Table Editor application to show that these labels or columns are named the same name as a DB2 Reserved Word. The DB2 database allows any such keywords to be used as ordinary identifiers, except in a context where they could also be interpreted as SQL keywords. In such cases, the word must be specified as a delimited identifier, with double-quotes used as the delimiter. DB2 Table Editor automatically supplies these delimiters within the wizards and screens used to build forms, and in the SQL and other code it generates when communicating with the DB2 database server.

For a list of DB2 Reserved words or keywords, refer to the DB2 Information Center.

## Correcting the error: ETI008E

### Symptom

When working with DB2 Table Editor for ISPF, message "ETI008E No entries match the entered like criteria" is returned.

**Cause** This error is caused when no matches are found to the criteria that are

specified in the **Creator** or **Table** fields. These fields are scrollable and, therefore, can contain characters that are not displayed on the panel.

#### **Action**

To resolve this issue, enter a valid criteria in the **Creator** or **Table** fields. It is recommended that you check to be sure that only the characters that you enter exist in the field by scrolling or expanding the field to view the entire contents of the field.

To view all characters in a scrollable field:

1. On the **Option** line, type expand.
2. Place the cursor in the scrollable field that you want to expand and press enter. The entry field is expanded.

---

## **Messages**

Use the information in these messages to help you diagnose and solve DB2 Table Editor problems.

### **Message format**

DB2 Table Editor messages adhere to the following format:

ETI $nnn$ x

where:

<b>ETI</b>	Indicates that the message was issued by DB2 Table Editor
$nnn$	Indicates the message identification number
$x$	Indicates the severity of the message: <ul style="list-style-type: none"><li><b>A</b> Indicates that operator intervention is required before processing can continue.</li><li><b>B</b> Indicates that the message relates to user activity logging</li><li><b>E</b> Indicates that an error occurred, which might or might not require operator intervention.</li><li><b>I</b> Indicates that the message is informational only.</li><li><b>W</b> Indicates that the message is a warning to alert you to a possible error condition.</li></ul>

Each message also includes the following information:

#### **Explanation:**

The Explanation section explains what the message text means, why it occurred, and what its variables represent.

#### **System action:**

The System action section explains what the system will do in response to the event that triggered this message.

#### **User response:**

The User response section describes whether a response is necessary, what the appropriate response is, and how the response will affect the system or program.

#### **Module**

The Module section indicates which module or modules are affected.

## DB2 Table Editor ISPF interface messages

These topics provide the messages and error codes that DB2 Table Editor issues for ISPF.

---

**ETI001** IBM\* Rocket\*\* Licensed materials - Property of IBM 5697-G65 © Copyright IBM Corp. 2001, 20010 All Rights Reserved. © Copyright Rocket Software, Inc. 2001-2010 All Rights Reserved. \*Trademark of International Business Machines \*\*Trademark of Rocket Software, Inc.

**Explanation:** This is an informational message detailing the copyrights for DB2 Table Editor.

**User response:** None required.

---

**ETI002E** A valid DB2 subsystem is required. Enter a valid DB2 subsystem

**Explanation:** The DB2 Subsystem that was specified is not valid.

**User response:** Specify a valid DB2 subsystem.

---

**ETI003E** Invalid value - Enter a "Y" to display commas in large numbers. Enter a "N" to not display commas in large numbers.

**Explanation:** A value other than 'Y' or 'N' was specified. Only a value of 'Y' or 'N' is valid.

**User response:** Specify 'Y' to indicate that you want commas to be shown or 'N' to indicate that you do not want commas to be shown.

---

**ETI004E** Invalid value - Enter an "S" to lock the table in shared mode, "E" to lock the table in exclusive mode, or "N" to bypass locking the table during edit session

**Explanation:** A value other than 'S', 'E', or 'N' was specified. Only a value of 'S', 'E', or 'N' is valid.

**User response:** Specify 'S' to indicate that the table should be locked in share mode during editing, specify 'E' to indicate that the table should be locked in exclusive mode during editing or specify 'N' to indicate that the table should not be locked during editing.

---

**ETI005E** Invalid value - Enter a "Y" for deleted rows to remain displayed on the screen after a delete command has been issued

**Explanation:** The value that you specified is not valid. The valid values are:

- Y - indicates that deleted rows will be displayed on the screen after the delete command is issued.

**User response:** Specify a valid value.

---

**ETI006E** Invalid value - Enter the maximum number of rows to fetch for your browse/edit session

**Explanation:** The value specified was not valid.

**User response:** Type the number of rows that you would like to fetch at a time for browsing or editing.

---

**ETI007E** Invalid value - Enter a "Y" to save options on this screen in your ISPF profile or "N" to bypass saving options

**Explanation:** A value other than 'Y' or 'N' was specified. Only a value of 'Y' or 'N' is valid.

**User response:** Specify 'Y' to have the options that you specified on this screen saved in your ISPF profile. Specify 'N' if you do not want to save the specified options.

---

**ETI008E** No entries match the entered like criteria. Please enter valid like criteria for the table creator and table name.

**Explanation:** The specified criteria were not found or were invalid.

**User response:** Specify valid like criteria. For more information on resolving this error, see "Correcting the error: ETI008E" on page 205.

---

**ETI009E** It is not possible to perform a lock operation on a view. Turn off locking or select a table.

**Explanation:** LOCK operations can only be performed on tables, not on views.

**User response:** To perform a LOCK, select a table to lock.

---

**ETI010E** Invalid value - The order by number must be numeric. Enter a valid number to sort the column

**Explanation:** The order by number that was specified is not numeric.

**User response:** Specify a numeric value in the order by field.

---

**ETI011E** Invalid value - Enter an "A" to sort the column in ascending order or "D" to sort the column in descending order

**Explanation:** A value other than 'A' or 'D' was specified. Only a value of 'A' or 'D' is valid.

**User response:** Specify 'A' to have the column sorted in ascending order. Specify 'D' to have the column sorted in descending order.

---

**ETI012E      This row is not updatable because it is a duplicate row and contains mixed data columns.**

**Explanation:** The row that you edited is not updatable. A duplicate row that contains mixed data columns cannot be updated. Your edits will not be committed. Only updatable rows can be edited.

**User response:** Select an updatable row to edit.

---

**ETI013E      Invalid value - Enter an "A" to use the AND operand between columns in the where clause. Enter an "O" to use the OR operand**

**Explanation:** A value other than 'A' or 'O' was specified. Only a value of 'A' or 'O' is valid.

**User response:** Specify 'A' to indicate that the WHERE clause will use the AND operand between the specified columns. Specify 'O' to indicate that the WHERE clause will use the OR operand between the specified columns.

---

**ETI014I      Fetch limit reached - Processing has halted because the number of rows fetched exceeded the fetch limit you entered on the main menu**

**Explanation:** Processing has stopped because the fetch limit that was specified from the DB2 Table Editor main menu has been reached. The fetch limit specifies the maximum number of rows that will be returned by DB2 Table Editor.

**User response:** No action is required, however, if you want to retrieve more rows, you can change the fetch limit from the DB2 Table Editor main menu.

---

**ETI015E      Invalid value - Enter a value from 1 to 32768. Character and variable character data types cannot exceed 32,768 characters**

**Explanation:** The value specified for the number of characters to be displayed for character and Varchar data types is invalid. Values from 1 to 32768 are valid.

**User response:** Specify a value from 1 to 32768.

---

**ETI016E      Invalid command - The command you entered is not valid for this screen. Reenter a valid command**

**Explanation:** The command that you specified is not valid on this screen.

**User response:** Specify a valid command. For information on valid commands, see the online help for this screen.

---

**ETI017E      Invalid line command - The command you entered is not valid for this line. Reenter a valid command**

**Explanation:** The command that you specified is not valid on this line.

**User response:** Specify a valid command. For information on valid commands, see the online help for this screen.

---

**ETI018E      The cursor must be on a column or column heading in the display to perform this command.**

**Explanation:** The cursor was not on a column or column heading in the display when you attempted to perform this command.

**User response:** Place the cursor on a column or column heading and attempt the command again.

---

**ETI019E      Invalid reply - Enter a "Y" to continue fetching rows or enter "N" to display the rows that have been fetched so far. Enter "C" to return without working with data.**

**Explanation:** An invalid reply was specified. Valid replies are 'Y', 'N', or 'C'.

**User response:** Specify 'Y' to indicate that you want to continue fetching rows. Specify 'N' to indicate that you want the rows that have been fetched to be displayed. Specify 'C' to indicate that you want to return without working with the fetched data.

---

**ETI020E      Invalid hexadecimal character entered**

**Explanation:** The hexadecimal character that was specified is not valid.

**User response:** Specify a valid hexadecimal character.

---

**ETI021E      Valid commands are CANCEL, COLS, END, FIND, HEX, and SAVE**

**Explanation:** An invalid command was specified. The following commands are valid:

- CANCEL
- COLS



- END
- FIND
- HEX
- SAVE

**User response:** Specify a valid command.

---

**ETI022E Unrecognized parameter Valid parameters are OFF/ON**

**Explanation:** The parameter that was specified is not recognized.

**User response:** Specify a valid parameter. Valid parameters are 'OFF' and 'ON'.

---

**ETI023I Data saved - Column data saved for update**

**Explanation:** The column data has been saved. The column will be updated.

**User response:** No action required.

---

**ETI024E Length exceeded - Length specified exceeds column definition**

**Explanation:** The length of the column exceeds the specified column definition length.

**User response:** Shorten the length of the column or extend the length in the column definition.

---

**ETI025I Null column - Column currently null. Reset null indicator on panel to override**

**Explanation:** The null column has a null value.

**User response:** Reset the null indicator on the panel to override this message.

---

**ETI026E Invalid Primary Command - Valid Primary Commands are Zoom, Browse, Edit, Find, Change, Form, Caps, Save, and Export**

**Explanation:** The primary command that you specified is not valid. The valid primary commands are:

- Zoom
- Browse
- Edit
- Find
- Change
- Form
- Caps
- Save
- Export

**User response:** Specify a valid command.

---

**ETI027E Invalid parameter Invalid parameter passed to Locate**

**Explanation:** The parameter that you specified is not valid.

**User response:** Specify a decimal number.

---

**ETI028E Insufficient Storage - Your TSO session does not contain enough storage to display the data you selected. Lower the fetch limit on the main menu and try your request again.**

**Explanation:** Your TSO session does not contain enough storage to display the data that you selected.

**User response:** Lower the fetch limit on the DB2 Table Editor main menu and try your request again.

---

**ETI029E Invalid decimal point character - Enter a character that is not a number, "E", "+", ".", "\_" and not equal to the separator character.**

**Explanation:** The character that you specified as the decimal point character is not a valid decimal point character. The following characters are not valid as a decimal point character:

- a number
- "E"
- "+"
- "."
- "\_"
- the separator character

**User response:** Specify a valid decimal character.

---

**ETI030E Invalid subsystem - The plan name for Table Editor could not be fetched from the control file. Make sure the plan name and subsystem are correct**

**Explanation:** The plan name for DB2 Table Editor could not be fetched from the control file.

**User response:** Check the control file to be sure that the DB2 Table Editor plan name and subsystem are correct.

---

**ETI031E Invalid value - Enter either a "Y" or "N" for the null indicator value**

**Explanation:** The specified null indicator value is invalid.

**User response:** Specify 'Y' to indicate that the column can have a null value. Specify 'N' to indicate that the column cannot have a null value.

---

**ETI032E Invalid length - Enter a valid numeric value for the column length**

**Explanation:** The specified column length is invalid.

**User response:** Specify a valid column length. Column lengths must be numeric.

---

**ETI033E Invalid length - Invalid value entered for null indicated column**

**Explanation:** The specified length is invalid for this null indicated column.

**User response:** Specify a valid column length.

---

**ETI034E Invalid separator character - Enter a character that is not a number, "E", "+", "-" and not equal to the decimal point character.**

**Explanation:** The character that you specified as the separator character is not a valid separator character. The following characters are not valid as a separator character:

- a number
- "E"
- "+"
- "-"
- " \_ "
- the decimal point character

**User response:** Specify a valid separator character.

---

**ETI035E The Range of a Datatype of INTEGER is -2147483648 through 2147483647**

**Explanation:** The value specified for the integer is out of range. The valid range for an INTEGER is -2147483648 through 2147483647.

**User response:** Specify a valid value for the INTEGER.

---

**ETI036E The Range of a Datatype of SMALLINT is -32768 through 32767**

**Explanation:** The value specified for the SMALLINT is out of range. The valid range for an SMALLINT is -32768 through 32767.

**User response:** Specify a valid value for the SMALLINT.

---

**ETI037E An Overflow has Occurred - Re-Enter a Valid Floating Point Number**

**Explanation:** An overflow has occurred.

**User response:** Specify a valid floating point number.

---

**ETI038E Invalid data entered for a numeric data type**

**Explanation:** The specified data is not valid numeric data.

**User response:** Specify valid numeric data.

---

**ETI039I Expand not available for floating point numbers**

**Explanation:** The expand function is not available for floating point numbers.

**User response:** Select an alternative function.

---

**ETI040E Invalid null value entered**

**Explanation:** The null value that was specified is invalid.

**User response:** Specify a valid null value.

---

**ETI041I Your query did not return data. Use the INSERT command to insert a new row.**

**Explanation:** The query that you ran did not return any data. If no data is returned, there is nothing to edit.

**User response:** If you want to insert data, use the INSERT command to insert a new row.

---

**ETI042E Unable to save data in browse mode**

**Explanation:** Data cannot be saved when browsing. Data can only be saved when editing.

**User response:** Switch to edit mode in order to save your data.

---

**ETI043I SQLID has been changed successfully**

**Explanation:** You have successfully switched to a different SQLID.

**User response:** None required.

---

**ETI044E An error occurred while updating the SQLID**

**Explanation:** Your SQLID has not been updated. An error occurred while attempting the update.

**User response:** Check your update request and attempt the update again.

---

**ETI045E You have entered an invalid commit scope**

**Explanation:** The value that you specified for the commit scope is invalid. The commit scope is the number of actions that must take place before a unit of work is completed and the data is committed to the DB2 database.

**User response:** Specify a valid commit scope. In the **Commit scope** field, type the maximum number of rows to insert before committing changes to the database.

---

**ETI046E**     **A row that you have modified is not updatable.**

**Explanation:** At least one of the rows that you modified is not updatable.

**User response:** Select an updatable row to modify.

---

**ETI047I**     **Your changes were not saved.**

**Explanation:** The changes that you made were not saved.

**User response:** None required.

---

**ETI048E**     **You must choose to edit at least one column.**

**Explanation:** A column must be selected in order to edit data.

**User response:** Select column to edit.

---

**ETI050E**     **Enter a valid find command.**

**Explanation:** The specified find command was not valid.

**User response:** Specify a valid find command. The following formats are valid:

- F PARM1
- F PARM1 COLX
- F PARM1 KEYWORD
- F PARM1 COLX KEYWORD

Keywords (NEXT, PREV, FIRST, LAST or ALL) can be inserted before or after any parameters.

---

**ETI051E**     **The insert command is disabled. You have chosen to exclude at least one column of data that is necessary to allow insert.**

**Explanation:** The insert command is currently disabled because one or more columns of data that is necessary in order to perform an insert has been excluded.

**User response:** Ensure that no necessary data columns are excluded.

---

**ETI052I**     **Bottom of data reached.**

**Explanation:** You have reached the bottom of the data.

**User response:** None required.

---

**ETI053I**     **No changes were made.**

**Explanation:** No changes were made to the data.

**User response:** None required.

---

**ETI054I**     **A match was found in truncated data.**

**Explanation:** A match to your search criteria was found in truncated data.

**User response:** Use the ZOOM command to see the entire record.

---

**ETI055E**     **Enter a valid change command.**

**Explanation:** The change command that you specified is not valid.

**User response:** Specify a valid change command. The following formats are valid:

- CH PARM1 PARM2
- CH PARM1 PARM2 COLX
- CH PARM1 PARM2 KEYWORD
- CH PARM1 PARM2 COLX KEYWORD

Keywords (NEXT, PREV, FIRST, LAST or ALL) can be inserted before or after any parameters.

---

**ETI056E**     **You must insert at least one column of data.**

**Explanation:** In order to use the insert command you must specify at least one column of data to be inserted. When inserting a row you can leave it blank and DB2 Table Editor will insert the default for the row (if there is a default) by leaving the column out of the insert statement. However, you cannot leave out all columns, you must insert at least 1 column.

**User response:** Specify a column for insertion.

---

**ETI057E**     **Invalid Value - Enter either "Y" or "N".**

**Explanation:** An invalid value was specified. Valid values are either 'Y' or 'N'.

**User response:** Specify a valid value.

---

**ETI058E**     **Enter a valid option.**

**Explanation:** An invalid option was specified.

**User response:** specify a valid option from the list.

---

**ETI059E**     **Invalid value - The select number must be numeric.**

**Explanation:** The value specified for the select number is invalid. The select number must be a numeric value.

**User response:** Specify a numeric select number.

---

**ETI060E**      **Invalid value - The frozen value must be Y or N.**

**Explanation:** Valid values for the frozen value are 'Y' or 'N'.

**User response:** Specify a valid value for the frozen value.

---

**ETI061I**      **Caps is on.**

**Explanation:** The caps on functionality is active. All changes will be changed to capital letters.

**User response:** None required.

---

**ETI062I**      **Caps is off.**

**Explanation:** Caps lock is off, data can now be entered using uppercase and lowercase letters.

**User response:** None required.

---

**ETI063I**      **Check is on.**

**Explanation:** Checking has been turned on. Checking checks the screen for edit errors.

**User response:** None required.

---

**ETI064I**      **Check is off.**

**Explanation:** Checking has been turned off. Checking checks the screen for edit errors.

**User response:** None required.

---

**ETI065E**      **Check must be on before exiting. Use the check on command first.**

**Explanation:** Checking must be on before you can exit this screen. Checking checks the screen for edit errors.

**User response:** Turn checking on using the CHECK ON command.

---

**ETI066E**      **Invalid value - The values must be either 1 or 2.**

**Explanation:** Valid values are either 1 or 2.

**User response:** Specify a value of 1 or 2. Select the number corresponding to the desired option.

---

**ETI067E**      **There is not enough room to perform this change.**

**Explanation:** There is insufficient space to perform the requested change.

**User response:** Ensure that there is sufficient space to run your command.

---



---

**ETI068E**      **Command conflict.**

**Explanation:** The specified command cannot be run at this time.

**User response:** Specify a different command or attempt your command at another time.

---

**ETI069E**      **Incomplete block command.**

**Explanation:** The specified command is incomplete.

**User response:** Specify a matching block command to complete the block command pair.

---

**ETI070E**      **It is not possible to enter browse mode after making changes.**

**Explanation:** Once changes have been made, you cannot switch from Edit mode to browse mode.

**User response:** None required.

---

**ETI071E**      **It is not possible to perform a lock operation on a system table. Turn off locking or select a different table.**

**Explanation:** DB2 Table Editor cannot lock a system table.

**User response:** Turn off locking or select a non-system table to edit while locking is turned on.

---

**ETI072I**      **Copy is pending**

**Explanation:** The requested copy is pending.

**User response:** None required.

---

**ETI073E**      **Commit scope must be 1 to delete or update a duplicate row.**

**Explanation:** The commit scope is not set to 1.

**User response:** To delete or update a duplicate row, set the commit scope to 1.

---

**ETI074E**      **The range of the decimal exceeds the table's decimal definition**

**Explanation:** The range of the specified decimal is greater than the decimal definition of the table.

**User response:** Specify a decimal range that is within the decimal definition of the table.

---

**ETI075E**      **It is not possible to perform a lock operation on a temporary table. Turn off locking or select a different table.**

**Explanation:** The selected table is a temporary table and therefore, cannot be locked.

---

**User response:** Turn off locking, or select a table that is not temporary.

---

**ETI076E**      **There was an error allocating the DB2 parameters control file *file*. DB2 Table Editor cannot run without allocating a valid control file. Verify that the control file in your execution CLIST is correct.**

**Explanation:** The DB2 parameters control file that was specified in the message text cannot be allocated. You must allocate a DB2 parameters control file to run DB2 Table Editor.

**User response:** Ensure that the control file specified in your CLIST is correct.

---

**ETI077E**      **Valid commands are CANCEL, END, FIND, and HEX ON/OFF**

**Explanation:** The specified command is invalid. Valid commands are:

- CANCEL
- END
- FIND
- HEX ON
- HEX OFF

**User response:** Specify a valid command.

---

**ETI078E**      **You have chosen over 65 characters of frozen table space**

**Explanation:** Over 65 characters of frozen table space has been chosen. A maximum of 65 characters of frozen table space can be selected.

**User response:** Select less than 65 characters of frozen table space.

---

**ETI079E**      **You have entered an invalid column name or number.**

**Explanation:** The column name or column number that you specified is not valid.

**User response:** Ensure that the column name and number that you specified is valid.

---

**ETI080E**      **Sort is not supported for the specified column.**

**Explanation:** The column that you specified cannot be used to sort.

**User response:** Select another column to sort.

---

**ETI081I**      **At least one default value will be used.**

**Explanation:** Not all values were specified. At least one default value will be used.

**User response:** None required.

---

**ETI082I**      **Your query returned no data. Browse data must have at least one row.**

**Explanation:** The specified query did not return any data.

**User response:** None required.

---

**ETI083E**      **Invalid primary command - Valid primary commands are Zoom, Browse, Edit, Find, Form, and Export**

**Explanation:** The specified primary command was not valid. Valid primary commands are:

- ZOOM
- B (browse)
- E (edit)
- FIND
- FORM
- EXPORT

**User response:** Specify a valid command.

---

**ETI084E**      **The sign byte (the first bit) can only be a space or a negative sign.**

**Explanation:** The specified sign byte is invalid. A sign byte (the first bit) can be either a space (' ') or a negative sign ('-').

**User response:** Specify a valid sign byte.

---

**ETI085E**      **This is an invalid timestamp**

**Explanation:** The specified timestamp is invalid. The valid timestamp format is dependent on the default that is set for your subsystem.

**User response:** Specify a valid timestamp.

---

**ETI086E**      **This is an invalid date**

**Explanation:** The specified date is invalid. The valid date format is dependent on the default that is set for your subsystem.

**User response:** Specify a valid date.

---

**ETI087E**      **This is an invalid time**

**Explanation:** The specified time is invalid. The valid time format is dependent on the default that is set for your subsystem.

**User response:** Specify a valid time.

---

**ETI088E**      **Time column contains seconds and can not be updated**

**Explanation:** When the time format on a DB2 subsystem is set to USA, the seconds values cannot be updated.

**User response:** Contact your DB2 system administrator.

---

**ETI089I**      **Undo for updated rows is not yet enabled**

**Explanation:** Undo for update rows is not yet enabled.

**User response:** None required.

---

**ETI090E**      **This is an invalid decimal value**

**Explanation:** The specified decimal value is not valid.

**User response:** Specify a valid decimal value.

---

**ETI091I**      **The end of the data has been reached**

**Explanation:** You have reached the end of the data.

**User response:** None required.

---

**ETI092I**      **The beginning of the data has been reached**

**Explanation:** You have reached the beginning of the data.

**User response:** None required.

---

**ETI093E**      **This is an invalid zoom area**

**Explanation:** The ZOOM command cannot be used in the area of the screen where you have placed your cursor.

**User response:** Move your cursor to a valid location and attempt the ZOOM command again.

---

**ETI094E**      **Enter either an L or S for the long or short data type**

**Explanation:** Valid values are 'L' or 'S'.

**User response:** Specify 'L' to indicate a long data type. Specify 'S' to indicate a short data type.

---

**ETI095E**      **A row has either been changed or deleted by another user and cannot be deleted.**

**Explanation:** One of the rows that you are attempting to delete cannot be deleted because it has been changed or deleted by another user.

**User response:** None required.

---



---

**ETI096E**      **It is not possible to view a deleted row in form mode.**

**Explanation:** You cannot view a deleted row in form mode.

**User response:** Use an existing row to view it in form mode.

---

**ETI097E**      **A row has either been changed or deleted by another user and cannot be updated.**

**Explanation:** The row that you are attempting to update or delete cannot be found. It is possible that the row is being changed by another user.

**User response:** Ensure that the row that you are attempting to update or delete exists. Also, you can change your DB2 Table Editor preferences so that table locking is used. This can prevent rows from being updated by more than one user at a time. Adding a primary key to the table that you are editing can also prevent this error from occurring.

---

**ETI098E**      **This table contains an unknown column type. The table definition must be complete before continuing.**

**Explanation:** The specified table contains an unknown column type.

**User response:** Ensure that the table definition, including all column types, is complete before continuing.

---

**ETI099E**      **The WHERE clause was truncated**

**Explanation:** The specified WHERE clause was truncated. There is insufficient space to display the entire WHERE clause on the screen.

**User response:** None required.

---

**ETI120I**      **Table profile was loaded successfully with WHERE clause - use SQL command to view.**

**Explanation:** The WHERE clause has been successfully loaded to ETI\$DSQL. Use the SQL command to view it.

**User response:** Use the SQL command.

---

**ETI121I**      **Logging is not in effect.**

**Explanation:** The ability to log table activity is not enabled.

**User response:** Reconfigure DB2 Table Editor for use with logging.

---

---

**ETI122E**      **Invalid value - Enter a "Y" to always use unique index, or "N" to use unique index only if table is locked.**

**Explanation:** The value you specified is not valid.

**User response:** Specify Y to always use unique index, or N to use unique index only if table is locked.

---

**ETI130I**      **This table resides on a subsystem where the time format is set to USA. Consequently, some time values in this table can not be updated.**

**Explanation:** When the time format on a DB2 subsystem is set to USA, the seconds values cannot be updated.

**User response:** None required.

---

**ETI132I**      **Table profile was loaded successfully with WHERE clause.**

**Explanation:** The WHERE clause was successfully loaded to both the ETI\$DPSC and the ETI\$DSQL panels.

**User response:** This message is informational. No action is required.

---

**ETI133E**      **The data set could not be allocated.**

**Explanation:** DB2 Table Editor could not allocate the data set that is required to save SQL.

**User response:** Check the generated SQL data set name that is specified in the CLIST to ensure that it is valid.

---

**ETI134E**      **The member name is not allowed on a non-partitioned data set.**

**Explanation:** The specified member name is not allowed on a non-partitioned data set.

**User response:** None required.

---

**ETI135E**      **Please enter a valid data set member name.**

**Explanation:** The data set member name that you specified is not valid.

**User response:** Specify a valid member name.

---

**ETI136E**      **No saved profile exists for this Table.**

**Explanation:** The profile that you tried to load does not exist.

**User response:** In order to load a profile one must first be saved. Save a profile, then load it.

---



---

**ETI137I**      **Table profile was saved successfully.**

**Explanation:** The table profile was saved successfully.

**User response:** None required.

---

**ETI138I**      **Table profile was loaded successfully with no WHERE clause found.**

**Explanation:** The table profile was successfully loaded without a WHERE clause. No WHERE clause was found.

**User response:** None required.

---

**ETI139E**      **Line commands can not be performed until data is corrected.**

**Explanation:** The row on which you are attempting to perform a line command contains invalid data.

**User response:** Correct the data and attempt the line command again.

---

**ETI140I**      **Top of data reached**

**Explanation:** The find operation has reached the top of the data.

**User response:** None required.

---

**ETI141I**      **No pattern found**

**Explanation:** The text string that you searched for was not found.

**User response:** None required.

---

**ETI142E**      **Incomplete string**

**Explanation:** The text string that you specified for the find command did not start and end with a single quotation mark.

**User response:** When working with the find command and using quotation marks enclose the text that you want to find in single quotation marks. Ensure that both quotation marks are present.

---

**ETI143E**      **Invalid character string**

**Explanation:** The text string that you specified in the find command contains invalid characters. Invalid characters include characters that are not printable and single quotation marks that have not been specified with an escape character.

**User response:** Specify a find string with valid characters.

---

---

**ETI144E Put string in quotes**

**Explanation:** The text string that you are searching for contains spaces. When searching for a text string that contains spaces you must enclose it in single quotation marks.

**User response:** Enclose the text string that you are searching for in single quotation marks.

---

**ETI145E Parameter is not recognized**

**Explanation:** An invalid parameter was specified. Valid parameters are **NEXT**, **PREV**, **FIRST**, **LAST** or **ALL**.

**User response:** Specify a valid parameter.

---

**ETI146E Too many parameters**

**Explanation:** You have specified too many parameters in the find or change command.

**User response:** Enter a valid find or change command.

Valid syntax for the find command is one of the following:

```
F PARM1
F PARM1 COLX
F PARM1 KEYWORD
F PARM1 COLX KEYWORD
```

Valid syntax for the change command is one of the following:

```
CH PARM1 PARM2
CH PARM1 PARM2 COLX
CH PARM1 PARM2 KEYWORD
CH PARM1 PARM2 COLX KEYWORD
```

---

**ETI147I Pattern was not found**

**Explanation:** The text string that you searched for was not found.

**User response:** None required.

---

**ETI148I No pattern found in the data column**

**Explanation:** The text string that you searched for was not found in the specified column.

**User response:** None required.

---

**ETI149I *n* patterns are found**

**Explanation:** The text string that you were searching for was found *n* times.

**User response:** None required.

---

**ETI150I Some data in this table contain non-displayable characters**

**Explanation:** The data in the table that you are viewing or editing contains characters that cannot be displayed. One or more columns contain characters that did not convert properly and contain unprintable substitution characters.

**User response:** None required.

---

**ETI151I Table Editor where clause not supported from Test Database Generator RI Visualization panels.**

**Explanation:** WHERE CLAUSES that were created using DB2 Table Editor cannot be used in the DB2 Test Database Generator visualization user interface panels.

**User response:** To use a WHERE CLAUSE, create the WHERE CLAUSE using the DB2 Test Database Generator visualization user interface panels.

---

**ETI152E Invalid value - Please enter a "Y" to freely edit the entire SQL statement. Enter "N" to edit the WHERE clause**

**Explanation:** You can edit the entire SQL statement or edit only the WHERE clause.

**User response:** Type "Y" or if you want to edit the entire SQL statement, or type "N" if you want to edit only the WHERE clause portion of the SQL statement.

---

**ETI153I Browse substituted due to manual SQL editing**

**Explanation:** After you have edited the SQL statement, you can only browse, not edit a table using DB2 Table Editor.

**User response:** None required.

---

**ETI154I XML data saved successfully**

**Explanation:** The XML data has been successfully saved.

**User response:** None required.

---

**ETI156E Skip locked data is not available in DB2 compatibility mode.**

**Explanation:** When you are working in DB2 compatibility mode, the skip locked data functionality is not available.

**User response:** To use the skip locked data functionality, do not work in DB2 compatibility mode.

---



---

**ETI157E**      **Invalid value - Enter a "Y" if you would like to display hidden columns, or "N" to hide hidden columns.**

**Explanation:** The display option for hidden columns was not specified. You must specify whether or not hidden columns should be displayed.

**User response:** Specify whether you want hidden columns to be displayed. To have hidden columns displayed, type "Y". To specify that hidden columns will not be displayed, type "N".

---

**ETI158E**      **The range of a data type of bigint is -9223372036854775808 through 9223372036854775807.**

**Explanation:** A value outside of the acceptable range for BIGINT has been specified.

**User response:** Specify a value within the acceptable range. The acceptable range for BIGINT is -9223372036854775808 through 9223372036854775807.

---

**ETI159E**      **Invalid value - Enter a "Y" if you would like to enable the ability to skip locked rows when encountered, or "N" to wait on locked rows.**

**Explanation:** The skip locked rows option was not specified. You must specify whether or not locked rows should be skipped.

**User response:** Specify whether or not you want to skip locked rows. To skip locked rows, type "Y". To specify that locked rows will not be skipped, type "N".

---

**ETI160I**      **History function only enabled for DB2 Version 10 and above**

**Explanation:** The history function is only available when working with DB2 Version 10 and above. You attempted to retrieve the history of a piece of data and that data resides in a database using a version of DB2 prior to Version 10.

**User response:** None required.

---

**ETI161I**      **History not available**

**Explanation:** No history data was found for the data that you selected. This can be caused by a missing DB2 versioning table, or because no matching data is found in the DB2 versioning table.

**User response:** If one does not already exist, create a versioning table for the DB2 table that is being browsed or edited.

---

**ETI164E**      **An error occurred while retrieving data**

**Explanation:** DB2 Table Editor was unable to retrieve the requested data from DB2. This message is accompanied by a DB2 error message.

**User response:** Consult the DB2 error message that accompanies this message.

---

**ETI162E**      **You have entered an invalid timestamp with time zone value**

**Explanation:** You have specified a timestamp with time zone value that is not valid. A timestamp is a seven-part value representing a date and time by year, month, day, hour, minute, second, and microsecond, in the range of 0001-01-01-00.00.00.000000000 to 9999-12-31-24.00.00.000000000 with nanosecond precision. Timestamps can also hold timezone information.

**User response:** Specify a valid timestamp with time zone value.

---

**ETI163E**      **Invalid value - Enter a "Y" to omit business time columns or "N" to display business time columns**

**Explanation:** The value that you specified for **Omit Business Time Columns** is not valid. The following values are valid:

- Y - specifies that business time columns will be omitted
- N - specifies that business time columns will be displayed

**User response:** Specify a valid value for **Omit Business Time Columns**.

---

**ETI170I**      **Data has been successfully exported to the specified data set.**

**Explanation:** DB2 Table Editor has successfully exported the data to the output file.

**User response:** None required.

---

**ETI171E**      *<Dynamic error message>*

**Explanation:** DB2 Table Editor has failed to export the data to the output file.

**User response:** Research the code of the error message that was emitted.

---

**ETI801E**      **An error was found in the application program input parameters for the SQL statement.**

**Explanation:** The product encountered an SQL error with the specified code.

**User response:** See DB2 for z/OS Messages for information about the code.

---

**ETI801I**     *SQL\_ERROR*

**Explanation:** An invalid SQLCODE was returned. The applicable SQLCODE and supporting diagnostics data are returned in the error message.

**User response:** Refer to DB2 Messages and Codes to resolve this issue.

---

**ETI802E**     **An invalid return code of *return code* reason code was encountered on *function* function. The error message text follows: *messages***

**Explanation:** An invalid return code was encountered.

**User response:** The return code, reason code, function and associated messages are listed in the message text. Use this information to diagnose the problem. If you cannot resolve this issue using the messages displayed, contact customer support.

---

**ETI803E**     **The first character of the command is not a dash. Correct the syntax of the DB2 command and resubmit.**

**Explanation:** You entered a command without using a dash as the first character.

**User response:** Correct the syntax of the DB2 command and resubmit.

---

**ETI901E**     **The default load library could not be located.**

**Explanation:** The default load library could not be located.

**User response:** Contact customer support.

---

**ETI902E**     **A DB2 subsystem ID has to be entered for processing.**

**Explanation:** In order to process, you must specify a DB2 subsystem ID.

**User response:** Specify a DB2 subsystem ID.

---

**ETI903E**     **The default GDG base dataset name could not be located.**

**Explanation:** The default GDG base data set name could not be located.

**User response:** Ensure that GDG base data set name is correct and that it exists.

---

**ETI904E**     **The specified dataset could not be opened for I/O.**

**Explanation:** The specified data set could not be opened for I/O.

**User response:** Contact customer support.

---

**ETI905E**     **An unexpected return code from VSAM was encountered while doing a read of the control file. RC= *code*.**

**Explanation:** An unexpected return code from VSAM was encountered while doing a read of the control file. The return code is specified in the message where the *code* variable appears.

**User response:** Contact customer support.

---

**ETI906I**     **The control file record for DB2 subsystem *subsystem* has been successfully updated.**

**Explanation:** The control file for the specified DB2 subsystem has been updated.

**User response:** None required.

---

**ETI907E**     **An unexpected return code from VSAM was encountered while doing an update operation of the control file. *return code 1* *return code 2***

**Explanation:** The specified VSAM return codes were received when updating the control file.

**User response:** Refer to the z/OS DFSMS Macro Instructions for Data Sets (SC26-7408-03) documentation to resolve and then continue.

---

**ETI908I**     **The control file record for DB2 subsystem *ssid* has been successfully added.**

**Explanation:** The control file record for DB2 subsystem SSID has been successfully added.

**User response:** None required.

---

**ETI909E**     **Invalid value. The valid values are 1 and 2.**

**Explanation:** You entered an invalid value.

**User response:** Enter a valid value.

---

**ETI910E**     **An unexpected return code from VSAM was encountered while doing an add operation to the control file. *return code 1* *return code 2***

**Explanation:** The specified VSAM return codes were

received when performing an add operation to the control file.

**User response:**

**ETI911E**      **No Find string specified - The FIND command requires specification of a target string.**

**Explanation:** The (F)IND command was specified, but no parameters were specified.

**User response:** Specify a FIND parameter.

**ETI912E**      **The requested find string was not found on a FIND or Repeat FIND command. No string matching the specified FIND command criteria was found starting from the present location.**

**Explanation:** The requested find string was not found on a FIND or Repeat FIND command. No string matching the specified (F)ind command criteria was found starting from the present location.

**User response:** Issue IFIND or RFIND to continue the search by wrapping it in quotes. Press HELP for FIND, IFIND, and RFIND documentation.

**ETI912I**      **Find string not found - The requested find string was not found.**

**Explanation:** The string that you specified was not found. The syntax for FIND is:

```
{FIND,F} string keyword
{FIND,F} keyword string
```

*keyword* is optional and can be any one of the following: NEXT, PREV, FIRST, LAST, ALL. *string* is the target search string. *string* can optionally be enclosed in single or double quotes. Enclosing the search string in quotes is required in the following two situations:

1. If two keywords are issued, one as target string and the other as a keyword. For example: F 'all' first looks for the first instance of the string 'all'.
2. If the search string has an embedded blank. For example: F 'a b'

**User response:** Specify a valid find string and try again.

**ETI913E**      **An unknown (invalid) Primary Command has been entered.**

**Explanation:** The Primary Command you specified is not valid.

**User response:** Specify a valid Primary Command and continue. Refer to product documentation for a list of valid Primary Commands.

**ETI913I**      **The control file record has been successfully updated.**

**Explanation:** The control file record was updated successfully.

**User response:** None required.

**ETI914E**      **An unknown column was specified using the SORT command.**

**Explanation:** An unknown column was specified using the sort command.

**User response:** Verify that you correctly typed the name of the column or select another column.

**ETI915E**      **SORT is not supported for the specified column.**

**Explanation:** Sort is not supported for the specified column.

**User response:** You must select a different column.

**ETI916E**      **Sort column not entered. Column name or number must be specified.**

**Explanation:** A column was not entered. You must specify a column name or number in order to sort.

**User response:** Specify a column name or number.

**ETI917E**      **Incomplete string - Put an ending quote at the end of the string.**

**Explanation:** The string that you specified is incomplete. You must end the string with a quotation mark.

**User response:** Add a quotation mark to the end of the string and try again.

**ETI918E**      **\*Bottom of data reached\* - string not found. Press PF5 to continue from top.**

**Explanation:** The search function encountered the end of the data and the specified string was not found.

**User response:** Press PF5 to continue from the top.

**ETI919E**      **\*Top of data reached\* - string not found. Press PF5 to continue from bottom.**

**Explanation:** The search function encountered the top of the data and the specified string was not found.

**User response:** Press PF5 to continue from the bottom.

---

**ETI920E** File tailoring open returned a file tailoring already in progress condition.

**Explanation:** File tailoring open returned a file tailoring already in progress condition.

**User response:** Contact customer support.

---

**ETI921E** File tailoring open returned the output file already in use condition.

**Explanation:** The file tailoring output file is in use.

**User response:** Contact customer support.

---

**ETI922E** File tailoring open returned the skeletal file or output file not allocated condition.

**Explanation:** File tailoring open returned the skeletal file or output file not allocated condition.

**User response:** Contact customer support.

---

**ETI923E** File tailoring open returned a severe error condition.

**Explanation:** An attempt to perform file tailoring failed because a severe error condition was encountered on open.

**User response:** Verify that all required files are allocated and accessible prior to performing file tailoring. If you still receive an error message, contact IBM Support.

---

**ETI924E** File tailoring open returned an unknown code -- severe error.

**Explanation:** File tailoring open returned an unknown code -- severe error.

**User response:** Contact customer support.

---

**ETI925E** File tailoring close returned a file not open condition -- severe error.

**Explanation:** File tailoring close returned a file not open condition -- severe error.

**User response:** Contact customer support.

---

**ETI926E** File tailoring close returned an output file in use condition.

**Explanation:** File tailoring close returned an output file in use condition.

**User response:** Contact customer support.

---



---

**ETI927E** File tailoring close returned a skeletal file or output file not allocated condition.

**Explanation:** File tailoring close returned a skeletal file or output file not allocated condition.

**User response:** Contact customer support.

---

**ETI928E** File tailoring close returned a severe error.

**Explanation:** File tailoring close returned a severe error.

**User response:** Contact customer support.

---

**ETI929E** File tailoring close returned an unknown code -- severe error.

**Explanation:** File tailoring close returned an unknown code -- severe error.

**User response:** Contact customer support.

---

**ETI930E** File tailoring close returned an output member exists in the output library and NOREPL was specified.

**Explanation:** File tailoring close returned a output member exists in the output library and NOREPL was specified.

**User response:** Contact customer support.

---

**ETI931E** File tailoring include returned a skeleton does not exist condition.

**Explanation:** File tailoring include returned a skeleton does not exist condition.

**User response:** Contact customer support.

---

**ETI932E** File tailoring include returned a skeleton in use -- ENQ failed condition.

**Explanation:** File tailoring include returned a skeleton in use -- ENQ failed condition.

**User response:** Contact customer support.

---

**ETI933E** File tailoring include returned a data truncation or skeleton library or output file not allocated condition.

**Explanation:** File tailoring include returned a data truncation or skeleton library or output file not allocated condition.

**User response:** Contact customer support.

---

---

**ETI934E** File tailoring include returned a severe error condition.

**Explanation:** File tailoring include returned a severe error condition.

**User response:** Contact customer support.

---

**ETI935E** File tailoring include returned an unknown condition -- severe error.

**Explanation:** File tailoring include returned an unknown condition -- severe error.

**User response:** Contact customer support.

---

**ETI936E** Allocation Error - The ISPFDD DD is already allocated and can not be deallocated - Process not completed.

**Explanation:** Allocation Error - The ISPFDD DD is already allocated and can not be deallocated - Process not completed.

**User response:** Contact customer support.

---

**ETI937E** Allocation Error - An error was encountered allocating the ISPWRK1 or ISPWRK2 DD - Process not completed.

**Explanation:** Allocation Error - An error was encountered allocating the ISPWRK1 or ISPWRK2 DD - Process not completed.

**User response:** Contact customer support.

---

**ETI938E** Field Required -- The data set entered is a partitioned data set and the member name is required.

**Explanation:** The data set entered is a partitioned data set and the member name is required but was not specified.

**User response:** Enter a member name and retry.

---

**ETI939E** The only valid values are "T" for tracks and "C" for cylinders.

**Explanation:** The value that was specified is invalid. The valid values are "T" for tracks and "C" for cylinders.

**User response:** Specify a valid value.

---

**ETI940E** The specified data set could not be found in the MVS catalog.

**Explanation:** The specified data set could not be found in the MVS catalog.

**User response:** Ensure that the data set name is correct.

---



---

**ETI941E** Enter a FIND command - The RFIND key works only after a FIND character string is entered.

**Explanation:** You attempted to use the RFIND key. The RFIND key works only after a FIND character string is entered.

**User response:** Enter a FIND character string first and retry.

---

**ETI942E** Invalid sort number. Enter a valid digit.

**Explanation:** You entered an invalid sort number.

**User response:** Enter a valid digit.

---

**ETI943E** Same sort number entered twice.

**Explanation:** You entered the same sort number twice.

**User response:** Enter a different sort number and retry.

---

**ETI944E** Sort sequence skips a number.

**Explanation:** The sort sequence skips a number.

**User response:** Change the SORT sequence so that it does not skip a number.

---

**ETI945E** Invalid direction entered. Must be A or D (ascending/descending)

**Explanation:** You entered an invalid direction.

**User response:** Enter an A or a D and retry.

---

**ETI946E** Direction not valid without order.

**Explanation:** The direction value is not valid without the ORDER command.

**User response:** Specify the ORDER command and retry.

---

**ETI947E** Max sort columns exceeded. Sorting first 10 columns.

**Explanation:** You have exceeded the maximum number of columns for sorting. Sorting will be performed on the first 10 columns.

**User response:** No response required.

---

**ETI948E** Fix columns cannot exceed screen size.

**Explanation:** You have attempted to FIX more columns than can fit on the screen. Fix Columns cannot exceed screen size.

**User response:** Do not try to FIX columns greater than the screen size.

---

---

**ETI950E Invalid selection character. "F" and "U" are valid**

**Explanation:** An invalid character was entered. Valid characters are F (Fix) and U (Unfix). F (Fix) causes the column to move to the fixed area on the left side of the screen. FIXED columns do not scroll horizontally when LEFT or RIGHT scrolling commands are issued. U (Unfix) moves the column out of the FIXED area, and allows it to scroll horizontally when LEFT and RIGHT scroll commands are issued.

**User response:** Either remove the invalid character or enter a valid one.

---

**ETI951E Invalid entry. Must be numeric**

**Explanation:** An invalid Cmd value was entered. Cmd values must be numeric. If the column is FIXED, the number must be in the FIXED range. If the column is not FIXED, the number must be in the UNFIXED range.

**User response:** Either remove the invalid number or enter a valid one.

---

**ETI952E Invalid entry for fixed column**

**Explanation:** An invalid Cmd value was entered for a FIXED column. Valid selections for a FIXED column are 1 up to the number of fixed columns.

**User response:** Either remove the invalid number or enter a valid one.

---

**ETI953E Invalid entry for unfixed column**

**Explanation:** An invalid Cmd value was entered for an UNFIXED column. The number must be less than the number of columns, and greater than the number of FIXED columns.

**User response:** Either remove the invalid number or enter a valid one.

---

**ETI954E Invalid value entered for column size: non-numeric data**

**Explanation:** An invalid Cmd value was entered. This must be a number between the values in the MIN and MAX fields.

**User response:** Either remove the invalid number or enter a valid one.

---

**ETI955E Invalid value entered for column size: out of range**

**Explanation:** An invalid Cmd value was entered. This must be a number between the values in the MIN and MAX fields. MIN is the smallest acceptable value. MAX is the largest acceptable value.

**User response:** Either remove the invalid number or enter a valid one.

---

**ETI956E Total fixed column sizes cannot exceed screen size**

**Explanation:** The Cmd values entered would result in the sum of the FIXED column sizes to exceed the screen size. This is not allowed.

The FIXED columns are those with an F or P in the Fix column. FIXED columns are always displayed, and so must fit on the screen.

**User response:** Either change the FIXED column sizes so that the total is less than the screen size, or CANCEL to return to the previous panel.

---

**ETI957E New configuration makes column size invalid**

**Explanation:** The requested column sizes make at least one UNFIXED column undisplayable. The cursor is positioned on the value where the problem was detected.

The UNFIXED area on the screen would be too small to show the column where the cursor is placed.

**User response:** The following options are available:

- Make the column where the cursor is smaller so that it can fit in the available UNFIXED area.
- Set it to its maximum size (width).
- Make the FIXED area smaller.
- Type CANCEL to return to the previous panel.

---

**ETI958E Column does not fit in unfixed area in new configuration**

**Explanation:** The requested column sizes would make the UNFIXED column where the cursor is positioned not displayable. The UNFIXED area on the screen would be too small to show this column.

**User response:** You can shrink the FIXED area by either unfixing columns or making FIXED columns smaller. The column where the cursor is cannot be partially displayed (Min = Max), so its size cannot be changed.

---

**ETI957H A large column, defined as a column that does not fit entirely on the display screen, can be partially displayed in one of two ways.**

**Explanation:** A large column, defined as a column that does not fit entirely on the display screen, can be partially displayed in one of two ways:

1. You can shrink the effective column width (via the CSIZE command) so that it will fit on the screen. The display facility will treat this column as though it were a complete column. The display facility will

not scroll through this column except for Inner Column Scrolling (single column scrolling).

- If the column is NOT resized (MAX width), the display facility will scroll through the column when RIGHT or LEFT scrolling commands are issued.

**User response:** Use one of the above methods to display the column, and try again.

#### ETI959E      **New configuration makes this column size invalid**

**Explanation:** FIXing the requested columns would shrink the available area for UNFIXed columns so that one or more UNFIXed columns would not fit in the remaining UNFIXed area of the screen. The cursor is placed on a row that represents one such column.

An UNFIXed column will fit in the UNFIXed area if either:

- Its current size is less than or equal to the UNFIXed area
- Its size is its maximum size and it has a minimum allowable size that will fit in the UNFIXed area. In that case, a partial column can be displayed.

**User response:** To change column sizes, CANCEL out of the CFIX function and invoke the CSIZE function.

You can also blank out one or more FIX selections until an allowable FIXed size is reached.

#### ETI960E      **Invalid fixed selections. Would not leave enough space for this column**

**Explanation:** FIXing the columns requested would make at least one UNFIXed column undisplayable. The cursor is positioned on the row that represents one such UNFIXed column, whose minimum displayable size would not fit in the available screen area.

**User response:** Shrink the requested FIXed area by either:

- Requesting fewer FIXed columns.
- UNFIXing one or more FIXed columns.
- CANCEL out of CFIX and invoke CSIZE to shrink one or more FIXed columns enough so that all UNFIXed columns have the space they require.

#### ETI962E      **Duplicate Cmd values entered**

**Explanation:** Duplicate Cmd numbers were entered. The cursor points to the second instance of a Cmd value.

**User response:** Either change this value, clear it, or exit the CORDER function.

#### ETI963E      **Cursor not on data element**

**Explanation:** CEXPAND was issued and the cursor was not located on a valid (expandable) area. CEXPAND requires the cursor to be positioned on a data element (non-heading area) in the dynamic area of the display.

**User response:** Either place the cursor on a valid expandable area, or issue CEXPAND and specify the row and column of the data element to expand. The command format is:

```
CEXPAND R C
```

Where R is the row number (1 would be the first line after the heading line) and C is the column number (1 would be the leftmost visible column).

#### ETI964E      **Invalid scroll amount for CRIGHT. Must be numeric.**

**Explanation:** An invalid (non-numeric) parameter to CRIGHT was specified. CRIGHT accepts one numeric parameter: the number of columns to scroll right. If no parameter is entered, a value of 1 is assumed.

**User response:** Correct the invalid parameter.

#### ETI965E      **Invalid scroll amount for CLEFT. Must be numeric.**

**Explanation:** An invalid (non-numeric) parameter to CLEFT was specified. CLEFT accepts one numeric parameter: the number of columns to scroll left. If no parameter is entered, a value of 1 is assumed.

**User response:** Correct the invalid parameter.

#### ETI966E      **Invalid parameter to ICRIGHT; must be numeric**

**Explanation:** A parameter to ICRIGHT is not numeric. ICRIGHT (inner column scroll right) accepts either zero, one, or two numeric parameters. ICRIGHT can be abbreviated as ICR.

**User response:** Correct the invalid parameter. The command format is:

```
ICR
ICR scroll_amount
ICR column_number
ICR column_number scroll_amount
```

For the one parameter case, if the cursor is positioned on a column, the parameter is interpreted as *scroll\_amount*. Otherwise, it is interpreted as *column\_number*.

If *scroll\_amount* is not specified, a *scroll\_amount* of the column width is assumed.

---

**ETI967E Parameter to ICRIGHT too long. Invalid**

**Explanation:** A parameter to ICRIGHT is too long. ICRIGHT does not process more than eight digits in a parameter.

**User response:** Shorten the invalid parameter to eight digits or less.

---

**ETI968E Parameter to ICRIGHT is zero. Invalid**

**Explanation:** A parameter to ICRIGHT has the value zero. This is not supported.

**User response:** Enter a valid parameter to ICRIGHT. Refer to message ETI966E for the correct syntax.

---

**ETI969E ICRIGHT: unspecified column**

**Explanation:** ICRIGHT was invoked with no parameters and the cursor is not positioned in the dynamic panel area.

**User response:** Either put the cursor in the column that should be scrolled or specify the column by number. Column numbers can refer to visible columns (in the current display window) only. Numbering starts at 1, on the left side.

---

**ETI971E ICRIGHT: Column number specified is too big**

**Explanation:** A column number parameter to ICRIGHT must be between 1 and the number of columns currently on the display screen.

**User response:** To refer to a column by number, position the display window so that the desired column is visible.

---

**ETI972E Invalid parameter to ICLEFT; must be numeric**

**Explanation:** A parameter to ICLEFT is not numeric. ICLEFT (inner column scroll left) accepts either zero, one, or two numeric parameters. ICLEFT can be abbreviated as ICL.

**User response:** Correct the invalid parameter. The command syntax is:

ICL

ICL *scroll\_amount*

ICL *column\_number*

ICL *column\_number scroll\_amount*

For the one parameter case, if the cursor is positioned on a column, the parameter is interpreted as *scroll\_amount*. Otherwise, it is interpreted as *column\_number*.

If *scroll\_amount* is not specified, a *scroll\_amount* of the column width is assumed.

---

**ETI973E Parameter to ICLEFT too long. Invalid**

**Explanation:** A parameter to ICLEFT is too long. ICLEFT does not process more than eight digits in a parameter.

**User response:** Shorten the invalid parameter to eight digits or less.

---

**ETI974E Parameter to ICLEFT is zero. Invalid**

**Explanation:** A parameter to ICLEFT has the value zero. This is not supported.

**User response:** Enter a valid parameter to ICLEFT. Refer to message ETI972E for the correct syntax.

---

**ETI975E ICLEFT: unspecified column**

**Explanation:** ICLEFT was invoked with no parameters and the cursor is not positioned in the dynamic panel area.

**User response:** Either put the cursor in the column that should be scrolled or specify the column by number. Column numbers can refer to visible columns (in the current display window) only. Numbering starts at 1, on the left side.

---

**ETI976E Column selected not sortable. Sort selection list presented.**

**Explanation:** The column that you selected cannot be used to sort.

**User response:** Select a different column and try your sort operation again.

---

**ETI977E ICLEFT: Column number specified is too big**

**Explanation:** Column number parameters that are specified to ICLEFT must be between 1 and the number of columns that are currently on the display screen.

**User response:** To refer to a column by number, you must first position the display window so that the desired column is visible.

---

**ETI978E Invalid column number specified for SORT (not numeric)**

**Explanation:** A non-numeric column number parameter was specified to CSORT.

**User response:** Correct the invalid parameter. Column numbers must be between 1 and the number of columns currently on the display screen. This can be followed by a sort direction value A (ascending) or D (descending).



---

**ETI979E Invalid column number specified. Too many digits**

**Explanation:** A parameter that was specified to CSORT was invalid. More than eight digits were specified.

**User response:** Correct the invalid parameter. A column number parameter must be between 1 and the number of columns that are currently on the display screen. This can be followed by a sort direction value A or D (ascending/descending).

---

**ETI980E Invalid column number specified: zero**

**Explanation:** An invalid parameter was specified to CSORT.

**User response:** Correct the invalid parameter. A column number parameter for use with CSORT must be between 1 and the number of columns currently on the display screen. This can be followed by a sort direction value A or D (ascending/descending).

---

**ETI981E Invalid column number specified: out of range**

**Explanation:** An invalid parameter to CSORT was specified. The parameter is outside of the allowed range.

**User response:** Correct the invalid parameter. Column number parameters must be between 1 and the number of columns that are currently on the display screen. This can be followed by a sort direction value A (ascending) or D (descending).

---

**ETI982E Invalid view. View adjusted**

**Explanation:** The current view was adjusted but not deleted. The saved view did not match the report requirements. This could be caused by the report changing, or corruption of the view file.

**User response:** The (adjusted) view will be used. You can issue the CSET command to modify the view.

---

**ETI983E Invalid view. View deleted**

**Explanation:** Invalid data was found in a view for this report. The view was deleted and its contents ignored. This could have been caused by the report changing, or corruption of the view file.

**User response:** Issue the CSET command to create a view that will match the current report.

---

**ETI984E Unexpected return code from TBSTATS: *return\_code***

**Explanation:** An unexpected failure issuing TBSTATS was received.

---

**User response:** Refer to the *ISPF Services Guide* for information about the listed return code for TBSTATS. In addition, review the ISPTLIB and ISPTABLE allocations. For information about ISPTLIB and ISPTABL, refer to the ISPF user guides for your version of ISPF. Refer to the configuration chapter of this user guide for the recommended method of allocating ISPTLIB and ISPTABL.

---

**ETI985E View library not allocated**

**Explanation:** A view input library has not been allocated. Views are read from the ISPTLIB data set(s) and saved to the ISPTABL data set. To save and use report customizations that are created by the CSET command, ISPTABL and ISPTLIB must be allocated. The TBSTATS service has indicated that ISPTLIB is not allocated. Only temporary views will be available.

**User response:** Issue the CSET command and access online help for details on the online report customization options available through the CSET command. In addition, review the ISPTLIB and ISPTABLE allocations. For information about ISPTLIB and ISPTABL, refer to the ISPF user guides for your version of ISPF. Refer to the configuration chapter of this user guide for the recommended method of allocating ISPTLIB and ISPTABL.

---

**ETI986E TBCREATE failed. RC= *return\_code***

**Explanation:** TBCREATE was issued to create a view. It failed with a (hex) return code that is specified in the *return\_code* variable in the error message.

**User response:** Review the following and make necessary adjustments:

- See *ISPF Services Guide* under TBCREATE.
  - Confirm ISPTLIB allocation.
  - Confirm ISPTLIB data set characteristics.
  - Confirm security controlled access to ISPTLIB data sets.
- 

**ETI987E TBOPEN failed. RC= *return\_code***

**Explanation:** TBOPEN was issued to open an existing view. It failed with a (hex) return code that is specified in the *return\_code* variable in the error message text.

**User response:** Review the following and make necessary adjustments:

- See *ISPF Services Guide* under TBOPEN.
  - Confirm ISPTLIB allocation.
  - Confirm ISPTLIB data set characteristics.
  - Confirm security controlled access to ISPTLIB data sets.
-

---

**ETI988E**      **TBGET failed. RC=** *return\_code*

**Explanation:** An unexpected return code of (hex) occurred during TBGET. The return code is specified in the *return\_code* variable in the error message.

**User response:** Review the following and make necessary adjustments:

- See *ISPF Services Guide* under TBGET.
- Confirm ISPTLIB allocation.
- Confirm ISPTLIB data set characteristics.
- Confirm security controlled access to ISPTLIB data sets.

---

**ETI989E**      **TBMOD failed. RC=** *return\_code*

**Explanation:** An unexpected return code occurred during TBMOD. The (hex) return code is specified in the *return\_code* in the message text.

**User response:** Review the following and make necessary adjustments:

- See *ISPF Services Guide* under TBMOD.
- Confirm ISPTLIB allocation.
- Confirm ISPTLIB data set characteristics.
- Confirm security controlled access to ISPTLIB data sets.

---

**ETI990E**      **TBCLOSE failed. RC=** *return\_code*

**Explanation:** An unexpected return code occurred during TBCLOSE. The (hex) returncode is specified in the *return\_code* variable in the message text.

**User response:** Review the following and make necessary adjustments:

- See *ISPF Services Guide* under TBCLOSE.
- Confirm ISPTLIB allocation.
- Confirm ISPTLIB data set characteristics.
- Confirm ISPTLIB data set extents.
- Confirm ISPTLIB data set directory size.
- Confirm security controlled access to ISPTLIB data sets.

---

**ETI991E**      **TBDELETE failed. RC=** *return\_code*

**Explanation:** An unexpected return code occurred during TBDELETE. The (hexadecimal) return code is specified in the *return\_code* variable in the message text.

**User response:** Review the following and make necessary adjustments:

- See *ISPF Services Guide* under TBDELETE.
- Confirm ISPTLIB allocation.
- Confirm ISPTLIB data set characteristics.
- Confirm ISPTLIB data set extents.
- Confirm ISPTLIB data set directory size.

- Confirm security controlled access to ISPTLIB data sets.

---

**ETI992E**      **Invalid selection**

**Explanation:** A command that is not supported on this panel was selected.

**User response:** The following options are available:

- Enter one of the displayed options, by name or number.
- Issue HELP in the function for help on the available commands.
- Issue END/EXIT (PF3).
- Issue the HELP command for a general overview of CSETUP.

---

**ETI993I**      **Permanent view not supported**

**Explanation:** The “permanent view” flag cannot be set to Y.

**User response:** Ensure that ISPTLIB and ISPTABL have been allocated. For information about ISPTLIB and ISPTABL, refer to the ISPF user guides for your version of ISPF. Refer to the configuration chapter of this user guide for the recommended method of allocating ISPTLIB and ISPTABL.

---

**ETI994E**      **Invalid row number**

**Explanation:** The CEXPAND command was issued with an invalid row number.

**User response:** Issue CEXPAND with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (the heading is not counted). The column number is counted from left to right, starting with the leftmost column in the current display window.

---

**ETI995E**      **Invalid column number**

**Explanation:** The CEXPAND command was issued with an invalid column number.

**User response:** Issue CEXPAND with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (the heading is not counted). The column number is counted from left to right, starting with the leftmost column in the current display window.

---

---

**ETI996E Invalid digits**

**Explanation:** The CEXPAND command was issued with an invalid parameter.

**User response:** Issue CEXPAND with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (the heading is not counted). The column number is counted from left to right, starting with the leftmost column in the current display window.

---

**ETI997E Too many digits**

**Explanation:** The CEXPAND command was issued with too many digits in one of its parameters.

**User response:** Issue CEXPAND with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (the heading is not counted). The column number is counted from left to right, starting with the leftmost column in the current display window.

---

**ETI998E Zero parameter invalid**

**Explanation:** The CEXPAND command was issued with a zero for one of its parameters. Zero is not a valid parameter.

**User response:** Issue CEXPAND with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (the heading is not counted). The column number is counted from left to right, starting with the leftmost column in the current display window.

---

**ETI999E Invalid parameter count: must be either two or zero parameters**

**Explanation:** The CEXPAND command was issued with an invalid number of parameters.

**User response:** Issue CEXPAND with no parameters and the cursor on a data field, or with two parameters. The two parameters are the row number, followed by the column number of the data element to be expanded. The row number is counted down from the top, starting with the first scrollable row (the heading is not counted). The column number is counted from left to right, starting with the leftmost column in the current display window.

---

**ETIA900E Invalid Column Function value. Valid values: 1, 2, 3, 4**

**Explanation:** An invalid character was entered in the Column Function field.

**User response:** Specify a valid character (1, 2, 3, or 4).

---

**ETIA901E Invalid Permanent View value. Valid values: Y, N**

**Explanation:** An invalid value was entered in the Permanent View field.

**User response:** Correct the value or cancel. Valid values are Y and N. Valid values are:

- Y – View customizations are permanent.
- N – View customizations are temporary.

---

**ETIA902E Invalid Reset View value. Valid values are Y, N**

**Explanation:** An invalid character was entered in the Reset View field. Valid characters are Y and N.

**User response:** Specify a valid value or cancel. Valid values are:

- Y - resets all customizations.
- N - customizations are not reset.

---

**ETIA903E Invalid stop sorting value. Valid values: Y, N**

**Explanation:** The specified stop sorting value is not valid. Valid values are:

- Y - Indicates that sorting will be stopped.
- N - Indicates that sorting will continue.

**User response:** Specify Y or N.

---

**ETIA904E Invalid form parameter**

**Explanation:** The parameter that you specified is invalid.

**User response:** Specify a valid form parameter.

---

**ETIA906E Invalid parameter for NROW. Must be numeric.**

**Explanation:** The parameter you specified was not numeric and is therefore invalid.

**User response:** Specify a numeric value corresponding to the number of rows to advance. The default value for NROW is 1.

---

**ETIA905E**    **FORM was issued from a CSETUP function. FORM is not supported while in a CSETUP function. CSETUP functions include CFIX, CORDER, CSIZE, and CSORT.**

**Explanation:** The FORM command was issued from a CSETUP function. FORM is not supported while in a CSETUP function. CSETUP functions include: CFIX, CORDER, CSIZE, and CSORT.

**User response:** Exit the current CSETUP function before issuing FORM.

---

**ETIA907E**    **Invalid parameter for PROW. Must be numeric.**

**Explanation:** The parameter you specified was not numeric and is therefore invalid.

**User response:** Specify a numeric value corresponding to the number of rows to scroll back. The default value for PROW is 1.

---

**ETIA908E**    **Invalid parameter for NROW. Too many digits.**

**Explanation:** An invalid parameter for the NROW keyword was specified. More than eight digits were specified. Parsing stops at eight digits.

**User response:** A parameter of NROW must be between 1 and the number of rows in the current report display. If no parameter is specified, 1 is assumed.

---

**ETIA909E**    **Invalid parameter for PROW. Too many digits.**

**Explanation:** Invalid parameter to PROW specified. More than eight digits were specified. Parsing stops at eight digits.

**User response:** A parameter of PROW must be between 1 and the number of rows in the current report display. If no parameter is specified, 1 is assumed.

---

**ETIA910E**    **CSETUP command not supported from FORM function**

**Explanation:** CSETUP functions are not supported while in the FORM display. CSETUP functions include CFIX, CORDER, CSIZE, CSORT, and CSETUP (CSET).

**User response:** Exit the current FORM function before issuing a CSETUP function.

---

**ETIA911E**    **Invalid ICR command. Use RIGHT command.**

**Explanation:** ICR is only valid with columns that are not their maximum size. You can see the column's current and maximum sizes by issuing CSIZE.

**User response:** RIGHT and LEFT commands can be used to see all parts of this column.

---

**ETIA912E**    **Invalid ICL command. Use LEFT command.**

**Explanation:** ICL is only allowed with columns that are not their maximum size. You can see the column's current and maximum sizes by issuing CSIZE.

**User response:** RIGHT and LEFT commands can be used to see all parts of this column.

---

**ETIA913E**    **Format mix data element not updated.**

**Explanation:** Format mix data cannot be updated when only part of the data is displayed.

**User response:** None required.

---

**ETIA914E**    **FORM command not supported from FORM function**

**Explanation:** FORM was issued from within a FORM display. This is not supported.

**User response:** None required.

---

**ETIA915I**    **FORM PF keys set; NROW = nrow  
PROW = prow**

**Explanation:** The NROW (next row) and PROW (previous row) commands are used to move the FORM display window to another row. The UP, DOWN, LEFT, and RIGHT commands move the FORM display window within the current row.

Row, as mentioned above, refers to the row from the original report display, not any reformatted FORM display row.

By default, NROW advances the FORM display to the next row. If NROW n is issued, the FORM display will advance n rows.

Similarly, PROW moves the FORM display window to the immediately prior row. PROW n moves the current FORM display window to the nth prior row.

**User response:** None required.

---

**ETIA916E**    **Invalid CNUM parm. Valid parms are ON, OFF, or blank.**

**Explanation:** CNUM was issued with an invalid parameter. Issuing CNUM with no parameter acts as an ON/OFF toggle. ON and OFF are the only parameters

that are accepted. ON turns the CNUM display on. OFF turns the CNUM display off.

**User response:** Use a valid CNUM parameter (ON, OFF, or blank)

**ETIA917E Report width for print too large**

**Explanation:** The report width exceeds the maximum print width.

**User response:** The maximum report width that is currently supported is 32,760.

**ETIA918E FORM command not supported from CSET function.**

**Explanation:** FORM is not supported while in a CSETUP function. CSETUP functions include CFIX, CORDER, CSIZE, CSORT, and CSETUP (CSET).

**User response:** Specify a supported function.

**ETIA920I Chars *chars* found *n* times**

**Explanation:** Indicates that the specified character (represented by *chars* in the message text above) was found *n* times.

**User response:** None required.

**ETIA921I Chars *chars* not found on any lines**

**Explanation:** Indicates that the specified characters were not found on any of the lines.

**User response:** None required.

**ETIA922I Search for CHARS *chars* was successful.**

**Explanation:** Indicates the search for the specified characters produced matches.

**User response:** None required.

**ETIA923E Check for misspelled keywords or embedded blanks in search string.**

**Explanation:** Indicates there may be invalid keywords or blanks embedded within the search string.

**User response:** Verify and correct the search string to remove embedded blanks or to correct keywords.

**ETIA924E *string* and *string* cannot both be specified for FIND command.**

**Explanation:** You specified two strings for the FIND command.

**User response:** Specify one FIND string at a time.

**ETIA925E Put quotes (" ") around the string of characters to be displayed.**

**Explanation:** The string of characters is not enclosed in quotes.

**User response:** Place the string of characters in side quotes.

**ETIA926E Maximum parameter length is 80**

**Explanation:** The parameter that you specified is too long.

**User response:** Specify a parameter that is 80 characters or less.

**ETIA930I No columns eligible for resizing.**

**Explanation:** You cannot resize any columns.

**User response:** None required.

**ETIA931I No columns eligible for sorting**

**Explanation:** You cannot sort any columns.

**User response:** None required.

**ETIA933E Invalid column name: missing quote**

**Explanation:** Sort or CSort was issued with a parameter that had an initial quotation character, but not a second closing quotation character.

**User response:** Either clear the command line and select the desired sort column(s) from the displayed selection list or correct the command on the command line.

**ETIA934E More than 9 columns specified**

**Explanation:** Sort or CSort was issued with too many columns specified as sort columns. A maximum of 9 sort columns can be specified.

**User response:** Either clear the command line and select the desired sort column(s) from the displayed selection list or correct the command on the command line.

**ETIA935E Invalid column name**

**Explanation:** Sort or CSort was issued with a column parameter that does not match any column name. A list of the correct column names is seen in the SORT selection panel.

**User response:** Either clear the command line and select the desired sort column(s) from the displayed selection list or correct the command on the command line.

---

**ETIA967E**    **Data set not found.** Data set *data set name* was not found in the MVS catalog. Please enter a valid data set that is cataloged.

**Explanation:** The data set name that you specified in the **Build Job in Data set** field does not exist or has been omitted.

**User response:** Specify an existing cataloged data set name in this field.

---

**ETIA968E**    **Invalid data set/member/alias.** The data set, member name, or alias entered does not meet the MVS data set naming standards.

**Explanation:** The data set/member/alias that you specified is not a valid MVS data set name. The first character must be capitalized alphabetic and the remaining characters must be capitalized alphanumeric.

**User response:** Specify a valid MVS data set name.

---

**ETIA969E**    **A name of a valid partitioned data set and member 'name are required.**

**Explanation:** The data set to hold the generated utility JCL must be a partitioned data set.

**User response:** Specify a valid partitioned data set name and a valid member name.

---

**ETIA970E**    **A problem was encountered in allocating the files necessary for ISPF file tailoring. Please try again.**

**Explanation:** An error occurred when dynamically allocating the ISPF work files ISPFIL, ISPWK1, or ISPWK2.

**User response:** Retry the operation. Contact IBM Technical Support if the problem persists.

---

**ETIA971I**    **Display MEPL Job *JOBNAME* successfully submitted.**

**Explanation:** The generated utility JCL was successfully submitted to the internal reader.

**User response:** None required.

---

**ETIA972E**    **Command is not supported on this screen. Please enter a valid command or clear the primary command line.**

**Explanation:** The command that you specified is not supported on this screen.

**User response:** Specify a valid command or clear the primary command line.

---

**ETIA973E**    **Allocation error. An error was encountered allocating the ISPFIL DD. Attempting to continue.**

**Explanation:** An error occurred when dynamically allocating the ISPF work files ISPFIL. Attempting to continue.

**User response:** If the issue is not resolved, contact IBM Technical Support.

---

**ETIA974E**    **Display MEPL internal error - at least one DSN required.**

**Explanation:** Internal error. The Display MEPL program was invoked without specifying at least one data set.

**User response:** Contact IBM Technical Support.

---

**ETIA975E**    **Display MEPL internal error - Invalid eyecatcher length.**

**Explanation:** Internal error. The Display MEPL program was invoked with an eyecatcher length that is not valid.

**User response:** Contact IBM Technical Support.

---

**ETIB102E**    **Invalid Command - Enter a valid command.**

**Explanation:** The command you specified is not valid.

**User response:** Specify a valid command.

---

**ETIB103E**    **Invalid line command - Enter a valid line command.**

**Explanation:** The command you specified is not valid.

**User response:** Refer to the valid line commands listed on the panel, and specify a valid line command.

---

**ETIB104E**    **Invalid Selection - Enter a valid option.**

**Explanation:** The option you specified is not valid.

**User response:** Specify a valid option.

---

**ETIB105E**    **Invalid Value - Enter a valid Value.**

**Explanation:** The value you specified is not valid, or the input field is empty.

**User response:** Specify a valid value to continue.

---

**ETIB106I**    **Move is pending. Enter A(After) or B(Before).**

**Explanation:** The move operation has not completed.

**User response:** Specify A(After) or B(Before) to continue.

---

**ETIB107E Result not found.**

**Explanation:** The FIND operation has completed and the value specified was not found.

**User response:** Ensure that the value you specified is correct, and try again.

---

**ETIB108I Select an element.**

**Explanation:** No items were selected on the selection panel.

**User response:** Select one or more items to continue.

---

**ETIB110E Required program module cannot be loaded dynamically.**

**Explanation:** An error occurred when loading the program module through CEEPIPI.

**User response:** Retry the operation. Contact IBM Technical Support if the problem persists.

---

**ETIB111E SQL error occurred: SQL code = &HV1, SQL state = &HV2.**

**Explanation:** The product encountered an error with the specified codes.

**User response:** See DB2 for z/OS Codes for information about the codes. If you are unable to determine the cause of the error, contact IBM Technical Support and provide the listing that contains this message.

---

**ETIB112E Row count compare sign you specified in the search criteria is invalid. Valid values are EQ, NE, GT, LT, or blank.**

**Explanation:** A character in the **Row count compare sign** field in search criteria is not valid. Valid values are EQ, NE, GT, LT, or blank.

**User response:** Specify a valid value or issue CLEAR.

---

**ETIB113E Row count value in search criteria is invalid. Value must be numeric or blank.**

**Explanation:** A character in the **Row count** field in search criteria is not valid. Valid characters are numeric.

**User response:** Specify a valid numeric value or issue CLEAR.

---

**ETIB114E Action value in search criteria is invalid. Valid values are U, D, I, E, B, or blank.**

**Explanation:** A character in the **Action** field in search criteria is not valid. Valid characters are U, D, I, E, B, or blank.

---

**User response:** Specify a valid value or issue CLEAR.

---

**ETIB810E Invalid CNUM parameter. Valid parms are ON, OFF, or blank.**

**Explanation:** CNUM was issued with a parameter that is not valid. Issuing CNUM with no parameter acts as an ON/OFF toggle. ON and OFF are the only parameters accepted. ON turns the CNUM display on. OFF turns the CNUM display off.

**User response:** Reissue CNUM using a valid CNUM parameter (ON, OFF, or blank).

---

**ETIB811E Invalid COLS parameter. Valid parameters are ON, OFF, or blank.**

**Explanation:** COLS was issued with a parameter that is not valid.

**User response:** Reissue COLS using a valid COLS parameter (ON, OFF, or blank) as indicated in the message text.

---

**ETIB812I The FIND command requires a match string.**

**Explanation:** You specified the FIND command without specifying a target string.

**User response:** Reissue the FIND command with a target string.

---

**ETIB813E The RFIND key can only be used after a FIND character string is entered.**

**Explanation:** RFIND is not available for use until after a FIND command with specified criteria has been issued.

**User response:** Retry the RFIND after issuing a FIND command that has search criteria specified.

---

**ETIB814E An unknown column &RSCCOLNM was specified**

**Explanation:** The column specified on the line command is unknown.

**User response:** Specify a valid column name to continue.

---

**ETIB815E SORT is not supported for the specified column.**

**Explanation:** The SORT command is not supported for the specified column.

**User response:** Select another column to use the SORT command.

---

---

**ETIB816E**    **Max Sort Columns exceeded. Sorting first 9 columns.**

**Explanation:** More columns were selected for sorting than are supported. Nine columns can be selected. Under certain circumstances the limit is less than nine, due to internal constraints. For example, sorting a date field can be implemented by three sorts of partial column fields. In that case, the column would count as three toward the maximum of nine.

**User response:** Retry selecting an allowable number of sort columns.

---

**ETIB817E**    **Invalid column selection. Set cursor to valid column.**

**Explanation:** An invalid column selection was detected.

**User response:** Set the cursor to a valid column to continue.

---

**ETIB818E**    **Invalid command parameters.**

**Explanation:** The line command you specified is not valid.

**User response:** Specify a valid line command to continue.

---

**ETIB819E**    **Invalid location for moved column. The source column cannot be moved to the new position.**

**Explanation:** Unable to move the selected column to the new position.

**User response:** Choose a different location for the new position of the column.

---

**ETIB820E**    **Not enough space for scrolling unfixed columns.**

**Explanation:** Fixing the columns requested would cause at least one unfixed column to not be displayed.

**User response:** Shrink the requested fixed area by doing one of the following:

- Requesting fewer fixed columns.
  - Unfixing one or more fixed columns.
  - CANCEL out of CFIX and invoke CSIZE to shrink one or more fixed columns enough so that all unfixed columns have the space to display.
- 

**ETIB821E**    **Operation not valid for specified column.**

**Explanation:** The operation that was performed against a column is not allowed.

**User response:** Choose another operation.

---



---

**ETIB822E**    **Fixed columns cannot be hidden.**

**Explanation:** An attempt was made to hide a fixed column, but fixed columns cannot be hidden.

**User response:** Make a selected column unfixed or select another column to hide.

---

**ETIB823E**    **Invalid value entered for column size: non-numeric data.**

**Explanation:** A non-numeric value was specified for the column size. Column size must be a number between the values that are specified in the MIN and MAX fields.

**User response:** Specify a valid number for the column size.

---

**ETIB824E**    **Invalid value entered for column size: out of range.**

**Explanation:** A value was entered for the column size that is out of the minimum to maximum range. The value specified must be a number between the values that are specified in the MIN and MAX fields. MIN is the smallest acceptable value. MAX is the largest acceptable value.

**User response:** Specify a valid number that falls within the MIN and MAX range.

---

**ETIB825E**    **SIZE is not supported for the specified column.**

**Explanation:** The SIZE command cannot be used on the specified column.

**User response:** Choose another column to size with the SIZE command.

---

**ETIB940E**    **Invalid selection character. "F" and "U" are valid.**

**Explanation:** An invalid selection character was detected.

**User response:** Specify a valid value of F or U to continue.

---

**ETIB941E**    **Column move failed - invalid location.**

**Explanation:** An invalid location has been specified as the new location for a column that you are moving.

**User response:** You must specify a number that is not greater than the number of columns.

---



---

**ETIB942E Invalid column size. Column size must be numeric.**

**Explanation:** An invalid non-numeric value was specified for the column size.

**User response:** Specify a valid numeric value that falls within the range of values specified in the MIN and MAX fields.

---

**ETIB943E Invalid column size. The specified value is out of range.**

**Explanation:** The value specified for the column size is not valid; it is out of the MIN and MAX field range.

**User response:** Specify a valid numeric value that falls within the range of values specified in the MIN and MAX fields. MIN is the smallest acceptable value. MAX is the largest acceptable value.

---

**ETIB944E Total fixed column sizes cannot exceed screen size.**

**Explanation:** The specified values would result in the sum of the fixed column sizes to exceed the screen size. This is not allowed. Fixed columns are always displayed, and so they must fit on the screen.

**User response:** You must either change the fixed column sizes so that the total is less than the screen size, or cancel to return to the previous panel.

---

**ETIB945E Configuration request failed - at least one unfixed column would not be displayed.**

**Explanation:** The requested column sizes that have been specified make at least one unfixed column undisplayable. The cursor is positioned on the value where the problem was detected. The unfixed area on the screen would be too small to show the column where the cursor is placed.

**User response:** To correct the problem:

- Make the column where the cursor is pointing smaller so that it can fit in the available unfixed area
- Set the unfixed area to its maximum size (width)
- Set the fixed area smaller
- Cancel to return to the previous panel

---

**ETIB946E Configuration request failed - the unfixed area would be too small to display this column**

**Explanation:** The requested column sizes would make the unfixed column where the cursor is positioned undisplayable. The unfixed area on the screen would be too small to show this column.

**User response:** You must shrink the fixed area by either unfixing columns or making fixed columns

smaller. The column where the cursor is cannot be partially displayed (min-max) so its size cannot be changed.

---

**ETIB947E Configuration request failed - not all columns can be displayed**

**Explanation:** Fixing the requested columns would shrink the available area for unfixed columns so that some might not display. The cursor is placed on a row that represents one such column. Therefore, the requested configuration is not allowed.

**User response:** To change column sizes, cancel out of the CFIX function and invoke the CSIZE function. Either cancel to exit CFIX with no change or clear one or more FIX selections until an allowable fixed size is reached.

---

**ETIB948E Invalid FIXED selections. Operation would not leave enough space for this column.**

**Explanation:** Fixing the columns requested would make at least one unfixed column undisplayable. The cursor is positioned on the row that represents one such unfixed column, whose minimum displayable size would not fit in the available screen area.

**User response:** You must shrink the requested fixed area by doing one of the following:

- Requesting fewer fixed columns
- Unfixing one or more fixed columns
- Cancel out of CFIX and invoke CSIZE to shrink one or more fixed columns enough so that all unfixed columns have the space they require.

---

**ETIB949E Duplicate Cmd values entered.**

**Explanation:** Duplicate values have been specified in the Cmd line.

**User response:** Re-enter the Cmd values.

---

**ETIB950E Invalid sort number. Enter a valid numeric digit.**

**Explanation:** An invalid character was entered in the sort column. Valid characters are the digits 1, 2, 3, 4, 5, 6, 7, 8, and 9, or the number of sortable columns (whichever is less).

**User response:** Specify a valid sort number to continue.

---

**ETIB951E Duplicate sort sequence number.**

**Explanation:** The same sort number was specified for more than one column. The screen is positioned to the second instance. Sort sequence numbers must be unique.

**User response:** Specify a valid sort number.

**ETIB952E Sort sequence skips a number.**

**Explanation:** The selected sorting sequence skips a number. This is not allowed. The screen is positioned to a selection whose number is lacking an immediate predecessor. The sort sequence is completely rebuilt from the Cmd (and Dir) information. Any previously existing sort sequence is entirely replaced. It is not added to or extended by the new entries.

**User response:** You must specify a valid sort sequence that does not skip a number.

**ETIB953E Invalid Dir entered. Direction must be A (ascending) or D (descending).**

**Explanation:** The selected sorting direction is not valid. Valid values are A (ascending), D (descending), or blank (default) which indicates ascending.

**User response:** Specify a valid sorting direction before continuing.

**ETIB954E Dir not valid without Ord**

**Explanation:** The selected sorting direction is not valid. Valid values are A (ascending), D (descending), or blank (default) which indicates ascending.

**User response:** Specify a valid sorting direction before continuing.

**ETIB955E Fixed columns cannot exceed screen size.**

**Explanation:** More columns were selected to be fixed than will fit on the screen.

**User response:** Remove the (F) selection character from one or more columns.

**ETIB956E Invalid entry. Cmd values must be numeric.**

**Explanation:** The specified value is not valid.

**User response:** Specify a numeric value.

**ETIB957E Invalid entry for permanent column.**

**Explanation:** The specified entry for a permanent column is not valid.

**User response:** Specify a valid entry for a permanent column.

**ETIB958E Invalid entry for fixed column.**

**Explanation:** The specified entry for a fixed column is not valid.

**User response:** Specify a valid fixed column.

**ETIB959E Invalid entry for unfixed column.**

**Explanation:** The entry for an unfixed column is not valid.

**User response:** Specify a valid unfixed column.

**ETIB960E Invalid Column Function value. Valid values: 1, 2, 3, and 4.**

**Explanation:** The value you specified for the Column Function is not valid.

**User response:** Specify a value of 1, 2, 3 or 4.

**ETIB961E Invalid Permanent View value. Valid values: Y, N.**

**Explanation:** The value you specified in the Permanent View field is not valid.

**User response:** Specify Y or N.

**ETIB962E Invalid Reset View value. Valid values are Y, N.**

**Explanation:** The value you specified in the Reset View field is not valid.

**User response:** Specify Y or N.

**ETIB963E Invalid Stop Sorting value. Valid values: Y, N.**

**Explanation:** The value you specified in the Stop Sorting field is not valid.

**User response:** Specify Y or N.

**ETIB970E TBCREATE failed. RC=&RETURN.C.**

**Explanation:** TBCREATE was issued to create a view. It failed with a (hex) return code as indicated in the message. Review ISPTLIB allocation and data set characteristics.

**User response:** Review security controlled access to ISPTLIB data sets. For information about return codes, refer to the ISPF Services Guide.

**ETIB971E TBOPEN failed. RC=&RETURN.C.**

**Explanation:** TBOPEN was issued to open a view. It failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data

set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to the ISPF Services Guide.

---

**ETIB972E** **TBCLOSE failed. RC=&RETURN.**

**Explanation:** TBCLOSE failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to the ISPF Services Guide.

---

**ETIB973E** **TBDELETE failed. RC=&RETURN.**

**Explanation:** TBDELETE failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to the ISPF Services Guide.

---

**ETIB974E** **TBMOD failed. RC=&RETURN.**

**Explanation:** TBMOD failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes, refer to the ISPF Services Guide.

---

**ETIB975E** **TBGET failed. RC=&RETURN.**

**Explanation:** TBGET failed with a (hex) return code as indicated in the message.

**User response:** Review ISPTLIB allocation and data set characteristics. Review security controlled access to ISPTLIB data sets. For information about return codes,

refer to the ISPF Services Guide.

---

**ETIB976E** **View Table is in use.**

**Explanation:** A view input library is in use. Views are read from the ISPTLIB data set(s) and saved to the ISPTABL data set. To save and use report customizations that are created via the CSET command, ISPTABL and ISPTLIB must be allocated. The TBSTATS service has indicated that ISPTLIB is not allocated. Only temporary views will be available.

**User response:** Issue the CSET command and access online help for details on the online report customization options available through the CSET command. In addition, review the ISPTLIB and ISPTABL allocations. For information about ISPTLIB and ISPTABL, refer to the ISPF user guides for your version of ISPF. Refer to the configuration chapter of this user guide for the recommended method of allocating ISPTLIB and ISPTABL.

---

**ETIB977E** **View Library not allocated.**

**Explanation:** A view input library has not been allocated. Views are read from the ISPTLIB data set(s) and saved to the ISPTABL data set. To save and use report customizations that are created via the CSET command, ISPTABL and ISPTLIB must be allocated. The TBSTATS service has indicated that ISPTLIB is not allocated. Only temporary views will be available.

**User response:** Issue the CSET command and access online help for details on the online report customization options available through the CSET command. In addition, review the ISPTLIB and ISPTABL allocations. For information about ISPTLIB and ISPTABL, refer to the ISPF user guides for your version of ISPF. Refer to the configuration chapter of this user guide for the recommended method of allocating ISPTLIB and ISPTABL.

## Tools Customizer messages

Use the information in these messages to help you diagnose and solve Tools Customizer problems.

---

**CCQB000I** **The product parameter data was saved in the data store.**

**Explanation:** Changes that were made to the product parameters were saved in the data store.

**System action:** None.

**User response:** No action is required.

---

**CCQB001I** **The DB2 parameter data was saved in the data store.**

**Explanation:** Changes that were made to the DB2 parameters were saved in the data store.

**System action:** None.

**User response:** No action is required.

---

**CCQB002I** **The LPAR parameter data was saved in the data store.**

**Explanation:** Changes that were made to the LPAR parameters were saved in the data store.

**System action:** None.

**User response:** No action is required.

---

**CCQB003E** **At least one step must be selected in a selected task. The selected task is *task\_description*.**

**Explanation:** When a task is selected, at least one step

must be selected. A selected step is missing from the specified task.

**System action:** Processing stops.

**User response:** Select a step in the specified task or deselect the task.

**CCQB004I** The required information to run the Discover EXEC was saved in the data store.

**Explanation:** The data store contains all the information that is required to run the Discover EXEC.

**System action:** None.

**User response:** No action is required.

**CCQB005E** The conflicting values for the *parameter\_name* parameter must be resolved before the information can be saved.

**Explanation:** Two values for one parameter conflict with each other, and they must be resolved to save the information.

**System action:** Processing stops.

**User response:** Resolve the conflicting values for the parameter.

**CCQB006E** One row must be selected.

**Explanation:** One row in the table must be selected.

**System action:** Processing stops.

**User response:** Select one row.

**CCQB007E** Only one row can be selected.

**Explanation:** Multiple rows in the table are selected, but only one row is allowed to be selected.

**System action:** Processing stops.

**User response:** Select only one row.

**CCQC000I** The jobs have been customized on the selected DB2 entries.

**Explanation:** The jobs were customized on the DB2 entries that were selected.

**System action:** None.

**User response:** Press Enter to clear the message.

**CCQC001W** The jobs were not generated on one or more of the selected DB2 entries. Press PF3 to check the DB2 entries that were not customized.

**Explanation:** The product was not customized on one

or more of the DB2 entries that were selected.

**System action:** None.

**User response:** Press PF3 to see the DB2 entries on which the product was not customized. The status of these DB2 entries is Errors in Customization.

**CCQC002I** The edit session was started automatically because values for required parameters are missing or must be verified.

**Explanation:** If product, LPAR parameters, or DB2 parameters are not defined or if parameter definitions must be verified, an editing session for the undefined or unverified parameters starts automatically.

**System action:** None.

**User response:** Define values for all required product, LPAR parameters, or DB2 parameters.

**CCQC003W** The *template\_name* template in the *library\_name* metadata library does not contain any parameters.

**Explanation:** The specified template does not have parameters.

**System action:** None.

**User response:** No action is required.

**CCQC004S** The value of the "type" attribute for the *template\_name* template in the *library\_name* metadata library does not match the value that was previously specified. The value is *value\_name*, and the previously specified value is *value\_name*.

**Explanation:** The value of the "type" attribute must match the value that was previously specified.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC005S** The *template\_name* template exceeds the number of allowed templates for a customization sequence. The template is in the *library\_name* metadata library.

**Explanation:** The customization sequence can process only *number* templates. The specified template cannot be processed because the customization sequence already contains the maximum number of templates.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC006E** The jobs could not be generated for the *group\_attach\_name* DB2 group attach name.

**Explanation:** The customization jobs could not be generated for the specified DB2 group attach name.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC007E** The jobs could not be generated for the *subsystem\_ID* DB2 subsystem.

**Explanation:** The customization jobs could not be generated for the specified DB2 subsystem.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC008E** The jobs could not be generated for the *member\_name* DB2 member.

**Explanation:** The customization jobs could not be generated for the specified DB2 member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC009S** The jobs were not generated for the DB2 entries.

**Explanation:** One or more errors occurred while customization jobs were being generated for the selected DB2 entries.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC010S** The *template\_name* template could not be accessed in the *library\_name* metadata library.

**Explanation:** The specified template could not be accessed because the user does not have RACF® access to the data set, the data set has incorrect data characteristics, or the data set is not cataloged.

**System action:** Processing stops.

**User response:** Ensure that you have RACF access to the data set, that the characteristics are correct according to the specifications of the product that you are customizing, and that the data set is cataloged. If the problem persists, contact IBM Software Support.

---

**CCQC011S** The *template\_name* template could not be written to the *library\_name* customization library.

**Explanation:** The specified template could not be accessed because the user does not have RACF access

to the data set, the data set has incorrect data characteristics, or the data set is not cataloged.

**System action:** Processing stops.

**User response:** Ensure that you have RACF access to the data set, that the characteristics are correct according to the specifications of the product that you are customizing, and that the data set is cataloged. If the problem persists, contact IBM Software Support.

---

**CCQC012W** The job card was generated with default values because the JOB keyword was missing.

**Explanation:** Default values were used to generate the job card because the JOB keyword was not specified in the first line of the job card.

**System action:** The job card was generated with default values.

**User response:** No action is required. To generate the job card with your own values, add the JOB keyword in the first line of the job card.

---

**CCQC013W** The job card was generated with the default value for the programmer name because the specified programmer name exceeded 20 characters.

**Explanation:** Default values were used to generate the job card because the specified programmer name contained too many characters.

**System action:** The job card was generated with default values.

**User response:** No action is required. To generate the job card with your own values, add a valid programmer name in the job card. A valid programmer name is 1 - 20 characters.

---

**CCQC014W** The job card was generated with default values because the JOB keyword was not followed by a space.

**Explanation:** Default values were used to generate the job card because a space did not follow the JOB keyword.

**System action:** The job card was generated with default values.

**User response:** No action is required. To generate the job card with your own values, add a space after the JOB keyword in the job card.

---

**CCQC015S** The *template\_name* template in the *library\_name* metadata library contains the following file-tailoring control statement: *statement\_name*. This control statement is not valid in a *template\_type* template.

**Explanation:** The *template\_type* template cannot contain the specified type of file-tailoring control statement.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC016S** The )DOT file-tailoring control statement exceeded the number of allowed occurrences for the *template\_name* template in the *library\_name* metadata library.

**Explanation:** The )DOT file-tailoring control statement can occur only a limited number of times in the specified template.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC017S** The nested )DOT file-tailoring control statements exceeded the number of allowed occurrences in the *template\_name* template in the *library\_name* metadata library.

**Explanation:** Nested )DOT file-tailoring control statements can occur only *number* times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC018S** The *template\_name* template in the *library\_name* metadata library is not valid because it does not contain any data.

**Explanation:** The specified template is missing required data.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC019S** The *template\_name* template in the *library\_name* metadata library is not valid because an )ENDDOT file-tailoring control statement is missing.

**Explanation:** A )ENDDOT file-tailoring control statement is required in the specified template.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC021S** The *template\_name* template in the *library\_name* metadata library is not valid because the template must start with the *parameter\_name* job card parameter.

**Explanation:** The specified template must start with the specified job card parameter.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC022S** The parameters used in a )DOT file-tailoring control statement exceeded the number of allowed parameters in the *template\_name* template. The template is in the *library\_name* metadata library. The error occurs in )DOT section *section\_number*.

**Explanation:** A )DOT file-tailoring control statement can contain only a limited number of parameters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC023S** The )DOT file-tailoring control statement must include the *table-name* table name in the *template\_name* template. The template is in the *library\_name* metadata library. The error occurs in )DOT section *section\_number*.

**Explanation:** The )DOT file-tailoring control statement is missing a required table name.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC024S** ISPF file tailoring failed for the *template\_name* template in the *library\_name* metadata library.

**Explanation:** An error occurred during ISPF file tailoring for the specified template.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQC025I** Customized jobs do not exist because they have not been generated.

**Explanation:** The list of customized jobs cannot be displayed because the product has not been customized for any DB2 entries.

**System action:** None.

**User response:** Complete the steps to customize a product. Customized jobs are generated when all required product, LPAR parameters, and DB2 parameters are defined and at least one DB2 entry on which to customize the product has been selected.

---

**CCQC026S** The value of the "customized" attribute for the *parameter\_name* parameter in the *library\_name* metadata library template does not match the value that was previously specified. The value is *value\_name*, and the previously specified value is *value\_name*.

**Explanation:** The value for the "customized" attribute for a parameter must match the value that was previously specified.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC027S** The *job\_name* customization job was not found in the *library\_name* customization library.

**Explanation:** The selected customization job does not exist in the customization library.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC028S** The *library\_name* customization library was not found.

**Explanation:** The customization library does not exist.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQC029I** The customization jobs were generated for *Product\_name*.

**Explanation:** The customization jobs were generated for the specific product.

**System action:** None.

**User response:** No action is required.

---

**CCQC030S** The customization jobs cannot be generated because at least one DB2 entry must be associated with this product.

**Explanation:** The product that you are customizing requires at least one DB2 entry to be associated with it before customization jobs can be generated.

**System action:** None.

**User response:** Associate a DB2 entry with the product that you are customizing, and regenerate the jobs.

---

**CCQC031I** The jobs were generated for the associated DB2 entries.

**Explanation:** The customization jobs were generated for the DB2 entries that are associated with the product.

**System action:** None.

**User response:** No action is required.

---

**CCQC032S** The customization jobs were not generated for *Product\_name*.

**Explanation:** A severe error occurred while the jobs were being generated for the specified product.

**System action:** None.

**User response:** Contact IBM Software Support.

---

**CCQC033S** The *customization\_library\_name* has no customized jobs.

**Explanation:** The specified customization library cannot be browsed or edited because it is empty.

**System action:** None.

**User response:** Generate customization jobs for the specified library, and browse or edit the library again.

---

**CCQC034S** The specified operation is not allowed.

**Explanation:** Issuing commands against customization jobs from the customization library from an ISPF browse or edit session that was started on the Finish Product Customization panel is restricted.

**System action:** None.

**User response:** To make changes to customization jobs, follow the steps for recustomization.

---

**CCQC035E** Before you generate customization jobs, edit the product parameters to select one or more tasks or steps, and then issue the G line command or the GENERATEALL command again.

**Explanation:** One or more tasks or steps must be selected before customization jobs can be generated.

**System action:** None.

**User response:** Edit the product parameters to select one or more tasks or steps. Then, issue the G line command or the GENERATEALL command again.

---

**CCQC036E** Before you exit the Product Parameters panel, you must select one or more tasks or steps to generate customization jobs or issue the CANCEL command.

**Explanation:** One or more tasks or steps must be selected to generate customization jobs or the CANCEL

## CCQD000W • CCQD008S

command must be issued before you can exit the Product Parameters panel.

**System action:** None.

**User response:** Select one or more tasks or steps, or issue the CANCEL command.

---

**CCQD000W** The *member\_name* environment index member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the specified environment index member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

---

**CCQD001S** The *member\_name* environment index member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the specified environment index member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the error.

---

**CCQD002S** The XML structure of the *member\_name* environment index member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified environment index member contains an unknown element.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD003S** The XML structure of the *member\_name* environment index member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD004S** The XML structure of the *member\_name* environment index member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD005S** The XML structure of the *member\_name* environment index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD006S** The XML structure of the *member\_name* environment index member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the environment index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD007S** The XML structure of the *member\_name* environment index member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the environment index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD008S** The XML structure of the *member\_name* environment index member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times in the environment index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.



---

**CCQD009S** The XML structure of the *member\_name* environment index member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the environment index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD010S** The XML structure of the *member\_name* environment index member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** Content was found in an attribute that cannot contain content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD011S** The XML structure of the *member\_name* environment index member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** An attribute does not contain required content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD012S** The XML structure of the *member\_name* environment index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** An element contains too many characters. The name of the element and the maximum number of allowed characters are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD013S** The XML structure of the *member\_name* environment index member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The environment index member contains an unknown attribute. The name of the unknown attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD050S** The following LPAR serial number is duplicated in the environment index member: *serial\_number*.

**Explanation:** The environment index member contains duplicate LPAR serial numbers. The duplicate serial number is indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD051S** The following DB2 serial number is duplicated in the environment index member: *serial\_number*.

**Explanation:** The environment index member contains duplicate DB2 serial numbers. The duplicate serial number is indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD052S** The following DB2 group attach name is duplicated in the environment index member: *group\_attach\_name*.

**Explanation:** The environment index member contains duplicate group attach names.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD053S** The reference to the following DB2 subsystem for a DB2 group attach name is duplicated in the environment index member: *subsystem\_ID*.

**Explanation:** The environment index member contains duplicate references to a DB2 subsystem for a DB2 group attach name.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQD054S** The reference to the following DB2 subsystem for the *LPAR\_name* LPAR is duplicated in the environment index member: *subsystem\_ID*.

**Explanation:** The environment index member contains duplicate references to a DB2 subsystem for an LPAR. The duplicate subsystem ID is indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD055S** The following DB2 group attach name was not found in the environment index member: *group\_attach\_name*.

**Explanation:** A group attach name that is referenced by a DB2 member does not exist in the environment index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD056S** The following LPAR was not found in the environment index member: *LPAR\_name*.

**Explanation:** The LPAR does not exist in the environment index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD057S** The following LPAR is duplicated in the environment index member: *LPAR\_name*.

**Explanation:** The environment index member contains duplicate LPARs. The name of the duplicate LPAR name is indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD100W** The *member\_name* product index member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the product index member is valid, the PL/I XML parser issued the specified exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception warning code.

---

**CCQD101S** The *member\_name* product index member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the product index member is valid, the PL/I XML parser issued the specified exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception error code.

---

**CCQD102S** The XML structure of the *member\_name* product index member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified product index member contains an unknown element.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD103S** The XML structure of the *member\_name* product index member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found for an element that cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD104S** The XML structure of the *member\_name* product index member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD105S** The XML structure of the *member\_name* product index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQD106S** The XML structure of the *member\_name* product index member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the product index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD107S** The XML structure of the *member\_name* product index member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the product index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD108S** The XML structure of the *member\_name* product index member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** An attribute occurs too many times. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD109S** The XML structure of the *member\_name* product index member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the product index member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD110S** The XML structure of the *member\_name* product index member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** An attribute cannot contain content. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD111S** The XML structure of the *member\_name* product index member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** An attribute requires content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD112S** The XML structure of the *member\_name* product index member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD113S** The XML structure of the *member\_name* product index member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the product index member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD118S** The content of the *member\_name* product index member is not valid. The *configuration\_ID* configuration ID for the *configuration-name* configuration name is not unique.

**Explanation:**

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD120S** The content of the *member\_name* product index member is not valid. The pack ID *pack\_ID* that is referenced by product prefix *product\_prefix* in the metadata library *library\_name* could not be found.

**Explanation:** The specified pack ID could not be found in the metadata library.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQD121I** The specified pack contains the *component\_name*, which was previously specified as a stand-alone product.

**Explanation:** The specified component of the pack was previously specified as a stand-alone product.

**System action:** None.

**User response:** No action is required.

---

**CCQD122I** The specified component metadata library was previously specified as part of the *pack\_name*.

**Explanation:** The specified metadata library for the component was previously specified as part of a pack.

**System action:** None.

**User response:** No action is required.

---

**CCQD123E** The customization library name *library\_name* is being used by another product or component. Specify another customization library qualifier on the Tools Customizer Settings panel.

**Explanation:** A different product or component is using the specified customization library.

**System action:** None.

**User response:** Specify another customization library qualifier on the Tools Customizer Settings panel.

---

**CCQD300W** The *member\_name* product environment member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the product environment member is valid, the PL/I XML parser issued the specified exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception warning code.

---

**CCQD301S** The *member\_name* product environment member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the product environment member is valid, the PL/I XML parser issued the specified exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the specified exception error code.

---



---

**CCQD302S** The XML structure of the *member\_name* product environment member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified product environment member contains an unknown element.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD303S** The XML structure of the *member\_name* product environment member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found for an element that cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD304S** The XML structure of the *member\_name* product environment member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD305S** The XML structure of the *member\_name* product environment member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD306S** The XML structure of the *member\_name* product environment member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the product environment member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQD307S** The XML structure of the *member\_name* product environment member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the product environment member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD308S** The XML structure of the *member\_name* product environment member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD309S** The XML structure of the *member\_name* product environment member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the product environment member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD310S** The XML structure of the *member\_name* product environment member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot contain content. The name of the attribute and the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD311S** The XML structure of the *member\_name* product environment member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute requires content. The name of the attribute and the name of the element that contains it are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD312S** The XML structure of the *member\_name* product environment member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD313S** The XML structure of the *member\_name* product environment member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the product environment member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD350I** The *subsystem\_ID* DB2 subsystem is associated with this product.

**Explanation:** The specified DB2 subsystem was added and saved in the Tools Customizer data store for the product to be customized.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD351I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is associated with this product.

**Explanation:** The specified DB2 member for the group attach name was added and saved in the Tools Customizer data store for the product to be customized.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD352I** The *group\_attach\_name* DB2 group attach name is associated with this product.

**Explanation:** The specified DB2 group attach name was added and saved in the Tools Customizer data store for the product to be customized.

**System action:** Processing continues.

**User response:** No action is required.

---

---

**CCQD353E** The *subsystem\_ID* DB2 subsystem is already associated with this product.

**Explanation:** The specified DB2 subsystem cannot be added for the product to be customized because it already exists in the product environment in the data store.

**System action:** None.

**User response:** Ensure that the DB2 subsystem is specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQD354E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is already associated with this product.

**Explanation:** The specified DB2 member for the group attach name cannot be added for the product to be customized because it already exists in the product environment in the data store.

**System action:** None.

**User response:** Ensure that the DB2 group attach name is specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQD355E** The *group\_attach\_name* DB2 group attach name is already associated with this product.

**Explanation:** The specified DB2 group attach name cannot be added for the product to be customized because it already exists in the product environment in the data store.

**System action:** Processing stops.

**User response:** Ensure that the DB2 group attach name is specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQD356S** The *library\_name* metadata library is already associated with the maximum number of allowed DB2 entries for this product.

**Explanation:** The specified metadata library cannot be associated with more DB2 entries because it is already associated with the number of DB2 entries that are allowed.

**System action:** Processing stops.

**User response:** Delete an associated DB2 entry, and associate the specified library with another DB2 entry again.

---

**CCQD357I** The *subsystem\_ID* DB2 subsystem is unassociated with this product.

**Explanation:** The specified DB2 SSID was unassociated with the product that you are customizing.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD358I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is unassociated with this product.

**Explanation:** The specified DB2 member for the DB2 group attach name was unassociated with the product that you are customizing.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD359I** The *group\_attach\_name* DB2 group attach name is unassociated with this product.

**Explanation:** The specified DB2 group attach name was unassociated with the product that you are customizing.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQD360S** The *library\_name* metadata library is not associated with the specified DB2 subsystem *subsystem\_ID*.

**Explanation:** The specified DB2 subsystem and metadata library are not associated with each other.

**System action:** None.

**User response:** Ensure that the DB2 subsystem and the metadata library are associated. If the problem persists, contact IBM Software Support.

---

**CCQD361S** The *library\_name* metadata library is not associated with the specified DB2 data sharing group member *member\_name* for the *group\_attach\_name* DB2 group attach name.

**Explanation:** The specified DB2 data sharing group member for the group attach name and metadata library are not associated with each other.

**System action:** None.

**User response:** Ensure that the DB2 data sharing group member for the group attach name and the metadata library are associated. If the problem persists, contact IBM Software Support.

---

---

**CCQD362S** The *library\_name* metadata library is not associated with the specified *group\_attach\_name* DB2 group attach name.

**Explanation:** The specified DB2 group attach name and metadata library are not associated with each other.

**System action:** None.

**User response:** Ensure that the DB2 group attach name and the metadata library are associated. If the problem persists, contact IBM Software Support.

---

**CCQD400W** The customization parser issued the *code\_number* warning code while it parsed the product customization member *member\_name*. See the PL/I programming guide for more information about this XML parser continuable exception code.

**Explanation:** While determining if the specified member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

---

**CCQD401S** The customization parser issued the *code\_number* error code while it parsed the product customization member *member\_name*. See the PL/I programming guide for more information about this XML parser terminating exception code.

**Explanation:** While determining if the specified member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the error.

---

**CCQD500W** The *data\_set\_name* data store data set was not found.

**Explanation:** Tools Customizer could not find the specified data store data set.

**System action:** None.

**User response:** No action is required.

---

**CCQD501W** The *data\_set\_name* data store data set was not found, so it was created.

**Explanation:** Tools Customizer created the specified data set because it could not be found.

**System action:** None.

**User response:** No action is required.

---

**CCQD502E** The *data\_set\_name* data store data set is not writable.

**Explanation:** Tools Customizer cannot write to the specified data set.

**System action:** None.

**User response:** Ensure that the data set is writable.

---

**CCQD503E** The *data\_set\_name* data store data set could not be opened with the *disposition\_type* disposition.

**Explanation:** Tools Customizer could not open the data set with the specified disposition.

**System action:** Processing stops.

**User response:** Ensure that you have WRITE authority access to this data set.

---

**CCQD504E** The *data\_set\_name* data store data set could not be opened with the *option\_name* option.

**Explanation:** Tools Customizer could not open the data set with the specified option.

**System action:** Processing stops.

**User response:** Ensure that you have WRITE authority access to this data set.

---

**CCQD505E** The *data\_set\_name* data store data set could not be created.

**Explanation:** Tools Customizer could not create the specified data set.

**System action:** Processing stops.

**User response:** Ensure that you have the authority to create data sets and that the DASD is not full.

---

**CCQD510I** The DB2 SSID and DB2 group attach name were created.

**Explanation:** The DB2 SSID and DB2 group attach name were created and saved in the data store.

**System action:** None.

**User response:** No action is required.

---

---

**CCQD511E** The DB2 entry already exists in the list of DB2 entries to be associated.

**Explanation:** The DB2 entry cannot be added because it already exists in the list of DB2 entries to be associated.

**System action:** None.

**User response:** Specify a different DB2 entry.

---

**CCQD512S** An error occurred while a DB2 entry was being created.

**Explanation:** A severe error occurred while a DB2 entry was being created.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD513E** The specified DB2 entry already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The DB2 entry cannot be added because it already exists, and it is already associated with the product to be customized.

**System action:** None.

**User response:** Press F3 to go to the Customizer Workplace panel to see the DB2 entry, or specify a different DB2 entry.

---

**CCQD514E** A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be created.

**Explanation:** Required information is missing. A DB2 subsystem, a DB2 group attach name, or both must be specified.

**System action:** None.

**User response:** Specify a DB2 subsystem, a DB2 group attach name, or both.

---

**CCQD515E** The specified DB2 entry already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The DB2 entry has already been created and associated with the product that you want to customize.

**System action:** None.

**User response:** Specify a different DB2 entry.

---

**CCQD516E** The specified DB2 entry already exists in the list of DB2 entries on the Associate DB2 Entry with Product panel but is not associated with the current product.

**Explanation:** The DB2 entry exists, but it must be associated with the product to be customized.

**System action:** None.

**User response:** On the Customizer Workplace panel, issue the ASSOCIATE command to associate the DB2 entry with the product.

---

**CCQD517S** An error occurred while a DB2 entry was being copied.

**Explanation:** A severe error occurred while a DB2 entry was being copied

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD518E** A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be copied.

**Explanation:** Required information is missing. A DB2 subsystem, a DB2 group attach name, or both must be specified.

**System action:** None.

**User response:** Specify a DB2 subsystem, a DB2 group attach name, or both.

---

**CCQD519I** The DB2 entry was copied.

**Explanation:** The DB2 entry was copied and saved in the Tools Customizer data store.

**System action:** None.

**User response:** No action is required.

---

**CCQD520S** The DB2 entry was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The DB2 entry was not completely copied because a product can be associated with only 1200 DB2 entries.

**System action:** Processing stops.

**User response:** Remove a DB2 entry from the list, and copy the specified DB2 entry again.

---



---

**CCQD521E** *Line\_command* is not a valid line command.

**Explanation:** The specified line command is not valid. Valid line commands are on the panel.

**System action:** Processing stops.

**User response:** Specify a valid line command.

---

**CCQD522E** The *subsystem\_ID* DB2 subsystem ID occurs more than once in the list. Each row must be unique.

**Explanation:** The specified DB2 subsystem ID can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 subsystem ID.

---

**CCQD523E** The *group\_attach\_name* DB2 group attach name occurs more than once in the list. Each row must be unique.

**Explanation:** The specified DB2 group attach name can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 group attach name.

---

**CCQD524E** The *member\_name* DB2 member for the DB2 group attach name occurs more than once in the list. Each row must be unique.

**Explanation:** The specified DB2 member for the DB2 group attach name can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 member for the DB2 group attach name.

---

**CCQD525I** The DB2 entries were created.

**User response:** No action is required.

---

**CCQD526E** The *subsystem\_ID* DB2 subsystem ID occurs more than once in the list. Each DB2 subsystem ID must be unique.

**Explanation:** The specified DB2 subsystem ID can be used only once.

**System action:** Processing stops.

**User response:** Specify a different DB2 subsystem ID.

---



---

**CCQD527I** DB2 group attach names cannot be created during the copy process.

**Explanation:** The ability to create DB2 group attach names is not available during the copy process.

**System action:** None.

**User response:** Create DB2 group attach names by issuing the CREATE command on the Customizer Workplace panel.

---

**CCQD528E** The *metadata\_library* metadata library is already associated with *number* DB2 entries. The maximum number of associated DB2 entries for this &CCQMPOPL is 256.

**Explanation:**

**System action:** Processing stops.

**User response:**

---

**CCQD529I** At least one row is required.

---

**CCQD560E** The *subsystem\_ID* DB2 subsystem already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The specified DB2 subsystem exists and is associated with the product that you are customizing.

**System action:** None.

**User response:** Specify another DB2 subsystem.

---

**CCQD561E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The specified DB2 data sharing group for the DB2 group attach name exists and is associated with the product that you are customizing.

**System action:** None.

**User response:** Specify another DB2 subsystem.

---

**CCQD562E** The *group\_attach\_name* DB2 group attach name already exists and is associated with the current product on the Customizer Workplace panel.

**Explanation:** The specified DB2 group attach name exists and is associated with the product that you are customizing. The subsystem is in the table on the Customizer Workplace panel.

**System action:** None.

---

**User response:** Specify another DB2 group attach name.

---

**CCQD563E** A value is required for a DB2 subsystem, a DB2 group attach name, or both before they can be created.

**Explanation:** A DB2 subsystem, a DB2 group attach name, or both are not specified so one or both of them cannot be created.

**System action:** None.

**User response:** Specify a value for the DB2 subsystem, the DB2 group attach name, or both.

---

**CCQD565E** The *subsystem\_ID* DB2 subsystem already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The specified subsystem is already associated.

**System action:** None.

**User response:** Specify a different DB2 subsystem.

---

**CCQD566E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The specified DB2 member is already associated.

**System action:** None.

**User response:** Specify a different DB2 member.

---

**CCQD567E** The *group\_attach\_name* DB2 group attach name already exists in the list of DB2 entries and is already associated with the current product.

**Explanation:** The specified DB2 group attach name is already associated.

**System action:** None.

**User response:** Specify another DB2 group attach name.

---

**CCQD568I** To customize *product\_name*, at least one DB2 entry must be associated with this product.

**Explanation:** The specified product requires at least one associated DB2 entry.

**System action:** None.

**User response:** To continue the customization process

for the specified product, associate one or more DB2 entries with it.

---

**CCQD569I** To customize the *product\_name* product configuration, at least one DB2 entry must be associated with this configuration.

**Explanation:** The configuration for the specified product requires at least one associated DB2 entry.

**System action:** None.

**User response:** To continue the customization process for the configuration of the specified product, associate one or more DB2 entries with the configuration.

---

**CCQD577W** The *mode\_name* DB2 mode of the *subsystem\_ID* DB2 subsystem is not supported by the product.

**Explanation:** The product does not support the specified DB2 mode.

**System action:** None.

**User response:** Specify a supported DB2 mode.

---

**CCQD578W** The *mode\_name* DB2 mode of the *member\_name* DB2 member for the DB2 group is not supported by the product.

**Explanation:** The product does not support the specified DB2 mode.

**System action:** None.

**User response:** Specify a supported DB2 mode.

---

**CCQD579W** The *mode\_name* DB2 mode of the *group\_name* DB2 group attach name is not supported by the product.

**Explanation:** The product does not support the specified DB2 mode.

**System action:** None.

**User response:** Specify a supported DB2 mode.

---

**CCQD580S** The *subsystem\_ID* DB2 subsystem was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The copied DB2 subsystem was not associated with the product because the product is associated with the maximum number of DB2 entries.

**System action:** None.

**User response:** Remove an associated DB2 entry and associate the product with the copied DB2 subsystem.

---

**CCQD581S** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The copied DB2 member for the DB2 group attach name was not associated with the product because the product is associated with the maximum number of DB2 entries.

**System action:** None.

**User response:** Remove an associated DB2 entry and associate the product with the copied DB2 member.

---

**CCQD582S** The *group\_attach\_name* DB2 group attach name was copied to the list of DB2 entries but was not associated because the product is already associated with the allowed number of DB2 entries.

**Explanation:** The copied DB2 group attach name was not associated with the product because the product is associated with the maximum number of DB2 entries.

**System action:** None.

**User response:** Remove an associated DB2 entry and associate the product with the copied DB2 group attach name.

---

**CCQD584I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is copied to the *subsystem\_ID* DB2 subsystem.

**Explanation:** The specified DB2 member was copied.

**System action:** None.

**User response:** No action is required.

---

**CCQD585I** The *group\_attach\_name* DB2 group attach name cannot be copied because a DB2 member is required.

**Explanation:** The specified DB2 group attach name was not copied because a DB2 member was missing.

**System action:** None.

**User response:** No action is required.

---

**CCQD586S** The current LPAR is *LPAR\_name*, but the data store contains information about the *LPAR\_name* LPAR. You must use the *LPAR\_name* LPAR to customize the product.

**Explanation:** The LPAR that is stored in the data store data set must be used to customize the product.

**System action:** Processing stops.

**User response:** Use the LPAR that is stored in the data store data set.

---

**CCQD587W** The *level\_number* DB2 level of the *subsystem\_name* DB2 subsystem is not supported by the product.

**Explanation:** The product does not support the specified DB2 level.

**System action:** Processing continues.

**User response:** Specify a supported level of DB2.

---

**CCQD588W** The *level\_number* DB2 level of the *member\_name* DB2 member of the *group\_name* DB2 group is not supported by the product.

**Explanation:** The product does not support the specified DB2 level.

**System action:** Processing continues.

**User response:** Specify a supported level of DB2.

---

**CCQD589W** The *level\_number* DB2 level of the *group\_name* DB2 group attach name is not supported by the product.

**Explanation:** The product does not support the specified DB2 level.

**System action:** Processing continues.

**User response:** Specify a supported level of DB2.

---

**CCQD593I** The *subsystem\_ID* DB2 subsystem was deleted.

**User response:** No action is required.

---

**CCQD594I** The *member\_name* DB2 for the *group\_attach\_name* DB2 group attach name was deleted.

**User response:** No action is required.

---

**CCQD595I** The *group\_attach\_name* DB2 group attach name was deleted.

**User response:** No action is required.

---

**CCQD596E** The *subsystem\_ID* DB2 subsystem was not deleted.

**Explanation:** An internal error occurred while the specified DB2 subsystem was being deleted.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD597E** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was not deleted.

**Explanation:** An internal error occurred while the specified DB2 member was being deleted.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD598E** The *group\_attach\_name* DB2 group attach name was not deleted.

**Explanation:** An internal error occurred while the specified DB2 group attach name was being deleted.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD600W** The *member\_name* product customization member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the product customization member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD601S** The *member\_name* product customization member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the product customization member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code.

---

**CCQD602S** The XML structure of the *member\_name* product customization member is not valid. The *element\_name* element is unknown.

**Explanation:** The data store member contains an unknown element.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---



---

**CCQD603S** The XML structure of the *member\_name* product customization member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD604S** The XML structure of the *member\_name* product customization member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element is missing required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD605S** The XML structure of the *member\_name* product customization member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD606S** The XML structure of the *member\_name* product customization member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD607S** The XML structure of the *member\_name* product customization member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQD608S** The XML structure of the *member\_name* product customization member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD609S** The XML structure of the *member\_name* product customization member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD610S** The XML structure of the *member\_name* product customization member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD611S** The XML structure of the *member\_name* product customization member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute does not contain required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD612S** The XML structure of the *member\_name* product customization member is not valid. The content length for the *element\_name* element exceeds *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD613S** The XML structure of the *member\_name* product customization member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the data store member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD614S** The content of the *member\_name* product customization member is not valid. The value of the *element\_name* element is not valid. The value is *value\_name*.

**Explanation:** The specified value is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQD700W** The *member\_name* DB2 data member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the DB2 data member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD701S** The *member\_name* DB2 data member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the DB2 data member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code.

---

**CCQD750W** The *value\_number* value in the DB2 parameter *parameter\_name* was skipped because only *maximum\_number* values are allowed.

**Explanation:** The specified value was skipped because it exceeds the number of allowed values in the DB2 parameter.

**System action:** Processing continues.

**User response:** No action is required. To stop this message from being issued, remove the extra values from the DB2 parameter.

---

**CCQD800W** The *member\_name* LPAR data member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the LPAR data member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD801S** The *member\_name* LPAR data member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the LPAR data member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code.

---

**CCQD850W** The *value\_number* value in the LPAR parameter *parameter\_name* was skipped because only *maximum\_number* values are allowed.

**Explanation:** The specified value was skipped because it exceeds the number of allowed values in the LPAR parameter.

**System action:** Processing continues.

**User response:** No action is required. To stop this message from being issued, remove the extra values from the LPAR parameter.

---

**CCQD851I** The *subsystem\_ID* DB2 subsystem is copied to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD852I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name is copied to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD854I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group 'attach name is copied to multiple DB2 entries.

**User response:** No action is required.

---

**CCQD900W** The *member\_name* product data member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the XML structure of the product data member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD901S** The *member\_name* product data member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the XML structure of the product data member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQD950W** The *value\_number* value in the product parameter *parameter\_name* was skipped because only *maximum\_number* values are allowed.

**Explanation:** The specified value was skipped because it exceeds the number of allowed values in the product parameter.

**System action:** Processing continues.

**User response:** No action is required. To stop this message from being issued, remove the extra values from the product parameter.

---

**CCQD960I** The *subsystem\_ID* DB2 subsystem was changed to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD961I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was changed to the *subsystem\_ID* DB2 subsystem.

**User response:** No action is required.

---

**CCQD962I** The *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name was changed to the *member\_name* DB2 member for the *group\_attach\_name* DB2 group attach name.

**User response:** No action is required.

---

**CCQD963E** The DB2 group attach name cannot be blank when the DB2 subsystem ID is blank.

**Explanation:** A DB2 group attach name, DB2 subsystem ID, or both must be specified.

**System action:** Processing stops.

**User response:** Specify a DB2 group attach name, DB2 subsystem ID, or both.

---

**CCQE000S** The specified message field name or message *message\_ID* was not found.

**Explanation:** An error occurred while displaying a message field name or the specified message.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQE001E** An incorrect trace level was specified. Valid trace levels are 0 - 4.

**Explanation:** A wrong trace level was specified. Valid trace levels are 0 - 4.

**System action:** Processing stops.

**User response:** Specify a valid trace level 0 - 4.

---

**CCQH001W** The specified option *option\_name* is not valid.

**Explanation:** The option that was specified is not a valid option on the panel.

**System action:** Tools Customizer stops.

**User response:** Specify a valid option on the panel.

---

**CCQH006W** Before you customize a product, verify your user settings.

**Explanation:** The user settings must be verified before a product can be customized.

**System action:** Tools Customizer stops.

**User response:** Verify the user settings.

---

**CCQH007E** Check the user settings. One or more current values are not valid.

**Explanation:** One or more of the values in the user settings is not valid.

**System action:** Tools Customizer stops.

**User response:** Ensure that the specified values for the user settings are valid.

---

**CCQH008W** Before you use Tools Customizer, you must select option 0 to verify your user settings.

**Explanation:** The user settings must be changed before a product can be customized.

**System action:** Tools Customizer stops.

**User response:** Change the user settings.

---

**CCQH009E** You must select option 0 to change your user settings.

**Explanation:** User settings must be changed before a product can be customized.

**System action:** Tools Customizer stops.

**User response:** Change the user settings.

---

**CCQI000W** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the DB2 parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI001S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the DB2 parameter metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI002S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified element in the DB2 parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI003S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI004S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI005S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI006S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---



---

**CCQI007S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI008S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI009S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute did not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI010S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI011S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---



---

**CCQI012S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI013S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the DB2 parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI014S** The content of the *member\_name* DB2 parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value of the element is not a valid value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI015S** The content of the DB2 parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI016S** The content of the DB2 parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI017S** The content of the DB2 parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI050S** The *member\_name* DB2 parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the specified DB2 parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI051S** The *parameter\_name* LPAR parameter in the *template\_name* template does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** The specified template does not contain metadata for an LPAR parameter. The name of the LPAR parameter metadata member, the name of the LPAR parameter, and the name of the template are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI052S** The *parameter\_name* product parameter in the *template\_name* template does not have associated metadata in the *member\_name* product parameter metadata member.

**Explanation:** The specified template does not contain metadata for a product parameter. The name of the product parameter metadata member, the name of the product parameter, and the name of the template are indicated in the message text.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI053E** The following metadata data set was not found: *data\_set\_name*.

**Explanation:** Tools Customizer could not find the specified metadata data set.

**System action:** Processing stops.

**User response:** Ensure that the metadata data set is

specified correctly. If the problem persists, contact IBM Software Support.

---

**CCQI054E** The following metadata data set could not be opened: *data\_set\_name*.

**Explanation:** Tools Customizer could not open the specified LPAR metadata data set.

**System action:** Processing stops.

**User response:** Ensure the metadata data set was specified correctly.

---

**CCQI055S** The CCQ\$\$DB2 DB2 parameter metadata member was not found in the *data\_set\_name* Tools Customizer metadata data set.

**Explanation:** Tools Customizer could not find the DB2 parameter metadata member in the specified Tools Customizer metadata data set.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI056S** The CCQ\$\$LPR LPAR parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the specified LPAR parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI057S** The *member\_name* product parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** The product parameter metadata member was not found in the specified data set.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI058I** *Product\_name* does not have any DB2 parameters.

**Explanation:** DB2 parameters are not required to customize the specified product.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQI059I** *Product\_name* does not have any LPAR parameters.

**Explanation:** LPAR parameters are not required to customize the specified product.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQI060S** The *parameter\_name* DB2 parameter in the *task\_description* task condition does not have associated metadata in the *member\_name* DB2 parameter metadata member.

**Explanation:** Associated metadata is missing for the specified DB2 parameter in a task.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI061S** The *parameter\_name* LPAR parameter in the *task\_description* task condition does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** Associated metadata is missing for the specified LPAR parameter in a task.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI062S** The *parameter\_name* product parameter in the *task\_description* task condition does not have associated metadata in the *member\_name* product parameter metadata member.

**Explanation:** Associated metadata is missing for the specified product parameter in a task.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI063S** The *parameter\_name* DB2 parameter in the *task\_description* task and the *step\_description* step does not have associated metadata in the *member\_name* DB2 parameter metadata member.

**Explanation:** Associated metadata is missing for the specified DB2 parameter in a task and step.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI064S** The *parameter\_name* LPAR parameter in the *task\_description* task and the *step\_description* step does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** Associated metadata is missing for the specified LPAR parameter in a task and step.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI065S** The *parameter\_name* product parameter in the *task\_description* task and the *step\_description* step does not have associated metadata in the *member\_name* parameter metadata member.

**Explanation:** Associated metadata is missing for the specified parameter in a task and step.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI066S** The *parameter\_name* DB2 parameter in the *task\_description* task, *step\_description* step, and *template\_name* template condition does not have associated metadata in the *member\_name* DB2 parameter metadata member.

**Explanation:** Associated metadata is missing for the specified DB2 parameter in a task, step, and template.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI067S** The *parameter\_name* LPAR parameter in the *task\_description* task, *step\_description* step, and *template\_name* template condition does not have associated metadata in the *member\_name* LPAR parameter metadata member.

**Explanation:** Associated metadata is missing for the specified LPAR parameter in a task, step, and template.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI068S** The *parameter\_name* product parameter in the *task\_description* task, *step\_description* step, and *template\_name* template condition does not have associated metadata in the *member\_name* product parameter metadata member.

**Explanation:** Associated metadata is missing for the specified product parameter in a task, step, and template.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI069S** Product metadata does not support multiple configurations, but the *template\_name* product template contains the *parameter\_name* parameter. Enable multiple configurations support for this product, and try again.

**Explanation:** The specified template contains a parameter for multiple configurations, but the product is not enabled to support multiple configurations.

**System action:** Processing stops.

**User response:** Enable multiple configurations support, and try again.

---

**CCQI070E** The *parameter\_name* DB2 parameter metadata member is not valid. The default length for the *parameter-element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI071E** The *parameter\_name* LPAR parameter metadata member is not valid. The default length for the *parameter-element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI072E** The *parameter\_name* product parameter metadata member is not valid. The default length for the *parameter-element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI073S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI074S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI075S** The XML structure of the *member\_name* product parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI076S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *parameter\_name* parameter refers to the *section-name* section. This section was not found in the DB2 parameter metadata member.

**Explanation:** The specified value already exists for an attribute.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI077S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *parameter\_name* parameter refers to the *section-name* section. This section was not found in the LPAR parameter metadata member.

**Explanation:** The specified parameter refers to a

section that is not in the LPAR parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI078S** The XML structure of the *member\_name* product parameter metadata member is not valid. The *parameter\_name* parameter refers to the *section-name* section. This section was not found in the product parameter metadata member.

**Explanation:** The specified parameter refers to a section that is not in the product parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI080S** The content of the *member\_name* DB2 parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the DB2 parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI081S** The content of the *member\_name* LPAR parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI082S** The content of the *member\_name* product parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the product parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQI090S** The product-defined DB2 parameter *parameter\_name* in the *member\_name* parameter metadata member references the *section\_ID* section ID, but this ID does not exist in either the parameter metadata member or the DB2 parameter metadata member.

**Explanation:** A section that does not exist in the parameter metadata member or the DB2 parameter metadata member is referenced by the specified DB2 parameter.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI091S** The product-defined LPAR parameter in the *member\_name* parameter metadata member references the *section\_ID* section ID, but this ID does not exist in either the parameter metadata member or the LPAR parameter metadata member.

**Explanation:** A section that does not exist in the parameter metadata member or the LPAR parameter metadata member is being referenced by the specified LPAR parameter.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI092S** The overridden DB2 parameter *parameter\_name* in the *member\_name* parameter metadata member does not exist in the DB2 parameter metadata member.

**Explanation:** The specified parameter does not exist.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI093S** The overridden LPAR parameter *parameter\_name* in the *member\_name* parameter metadata member does not exist in the LPAR parameter metadata member.

**Explanation:** The specified parameter does not exist.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI094S** The CCQ\$\$PRD product customization parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** The specified data set must contain the CCQ\$\$PRD product customization parameter metadata member

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI100W** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the LPAR parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI101S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the LPAR parameter metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI102S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified element in the LPAR parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI103S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQI104S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI105S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI106S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI107S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI108S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI109S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute did not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI110S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI111S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI112S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI113S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the LPAR parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI114S** The content of the *member\_name* LPAR parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI115S** The content of the *member\_name* LPAR parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value for an attribute in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI116S** The content of the *member\_name* LPAR parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI117S** The content of the *member\_name* LPAR parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the LPAR parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI120S** The XML structure of the *member\_name* DB2 parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI121S** The XML structure of the *member\_name* LPAR parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI122S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI123S** The XML structure of the *member\_name* discover metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI124S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element in the *parameter\_name* parameter contains duplicate values for the *element\_name* element. The duplicate value is *value\_name*.

**Explanation:** An element contains the specified duplicate value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI200W** The XML structure of the *member\_name* information metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the information metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI201S** The XML structure of the *member\_name* information metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the information metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI202S** The XML structure of the *member\_name* information metadata member is not valid. The *element name* element is unknown.

**Explanation:** The specified element in the information metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI203S** The XML structure of the *member\_name* information metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI204S** The XML structure of the *member\_name* information metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI205S** The XML structure of the *member\_name* information metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI206S** The XML structure of the *member\_name* information metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI207S** The XML structure of the *member\_name* information metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI208S** The XML structure of the *member\_name* information metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.



---

**CCQI209S** The XML structure of the *member\_name* information metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute did not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI210S** The XML structure of the *member\_name* information metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI211S** The XML structure of the *member\_name* information metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI212S** The XML structure of the *member\_name* information metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI213S** The XML structure of the *member\_name* information metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the information metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI214S** The content of the *member\_name* information metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI215S** The content of the *member\_name* information metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI216S** The content of the *member\_name* information metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI217S** The content of the *member\_name* information metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the information metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI218S** The content of the *member\_name* information metadata member is not valid. The length of the *value\_name* value that of the *attribute\_name* attribute is longer than the *value\_name* value of the *attribute\_name* attribute.

**Explanation:** The first specified value cannot be longer

than the second specified value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI219S** The content of the *member\_name* information metadata member is not valid. The *value\_name* value of the *attribute\_name* attribute contains the *value\_name* value.

**Explanation:** The first specified value cannot be longer than the second specified value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI220S** The XML structure of the *member\_name* information metadata member is not valid. Content for the *attribute\_name* attribute in the *element\_name* element exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI223S** The XML structure of the *member\_name* information metadata member is not valid. The value that is specified for the DB2 Level already exists. The value is *value\_name*.

**Explanation:** The specified value already exists.

**System action:** Processing stops.

**User response:** Specify a different DB2 level. If the problem persists, contact IBM Software Support.

**CCQI224S** The XML structure of the *member\_name* information metadata member is not valid. The value that is specified for the DB2 Mode already exists. The value is *value\_name*.

**Explanation:** The specified value already exists.

**System action:** Processing stops.

**User response:** Specify a different DB2 mode. If the problem persists, contact IBM Software Support.

**CCQI250S** The information metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the information metadata member in the specified data set.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI251E** The *member\_name* member was not accessible in the *data\_set\_name* data set.

**Explanation:** The specified member could not be accessed in the data set.

**System action:** Processing stops.

**User response:** Specify the correct metadata library.

**CCQI252S** The information metadata member was not found in the *library\_name* component metadata library that is part of the *library\_name* pack metadata library. The name of the pack is *pack\_name*.

**Explanation:** The specified component metadata library does not contain the information metadata member.

**System action:** Processing stops.

**User response:** Specify the correct metadata library.

**CCQI253E** The *library\_name* Tools Customizer metadata library is not current. Update the metadata library on the Tools Customizer Settings panel.

**Explanation:** The specified metadata library is not current.

**System action:** Processing stops.

**User response:** Specify a current metadata library on the Tools Customizer Settings panel.

**CCQI300W** The XML structure of the *member\_name* sequence metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the sequence metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

**CCQI301S** The XML structure of the *member\_name* sequence metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the sequence metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception error code, and contact IBM Software Support.

**CCQI302S** The XML structure of the *member\_name* sequence metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified element in the sequence metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI303S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI304S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element is missing required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI305S** The XML structure of the *member\_name* sequence metadata member is not valid. Content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI306S** The XML structure of the *member\_name* sequence metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI307S** The XML structure of the *member\_name* sequence metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI308S** The XML structure of the *member\_name* sequence metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI309S** The XML structure of the *member\_name* sequence metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI310S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI311S** The XML structure of the *member\_name* sequence metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

User response: Contact IBM Software Support.

---

**CCQI312S** The XML structure of the *member\_name* sequence metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI313S** The XML structure of the *member\_name* sequence metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the sequence metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI314S** The content of the *member\_name* sequence metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI315S** The content of the *member\_name* sequence metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI316S** The content of the *member\_name* sequence metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI317S** The content of the *member\_name* sequence metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI350S** The XML structure of the *member\_name* sequence metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** A specified value for an attribute in the sequence metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI351S** The *member\_name* sequence metadata member was not found in the *data\_set\_name* metadata data set.

**Explanation:** Tools Customizer could not find the specified sequence metadata member in the metadata data set.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI352S** The *template\_name* product template was not found in the *data\_set\_name* metadata data set.

**Explanation:** Tools Customizer could not find the specified product template in the data set.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI353S** The sequence metadata member was not found in the *data\_set\_name* component data set that is part of the *data\_set\_name* pack.

**Explanation:** Tools Customizer could not find the sequence metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI360S** The XML structure of the *member\_name* sequence metadata member is not valid. The value of the *attribute\_name* attribute in the *element\_name* element already exists.

**Explanation:** The specified attribute contains a value that already exists.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI361S** The XML structure of the *member\_name* sequence metadata member is not valid. The condition element on the *level\_type* level already contains a relational operator.

**Explanation:** A relational operator already exists for the condition element on the specified level.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI362S** The XML structure of the *member\_name* sequence metadata member is not valid. The condition element on the *level\_type* level must contain only one content string or content number element.

**Explanation:** Only one content string element or content number element can be contained in the condition element on the specified level.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI363S** The XML structure of the *member\_name* sequence metadata member is not valid. The condition element in the *element\_name* element with the *attribute\_name* attribute must contain either the content string element or content number element.

**Explanation:** Either the content string element or the content number element must be in the condition element.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI400W** The XML structure of the *member\_name* parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining the parameter

metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI401S** The XML structure of the *member\_name* parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the parameter metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQI402S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element name* element is unknown.

**Explanation:** The specified element in the parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI403S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI404S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element requires content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQI405S** The XML structure of the *member\_name* parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI406S** The XML structure of the *member\_name* parameter metadata member is not valid. The content length for the *element\_name* element must be at least *minimum\_number* characters.

**Explanation:** The specified element does not contain enough characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI407S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI408S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI409S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI410S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI411S** The XML structure of the *member\_name* parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI412S** The XML structure of the *member\_name* parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI413S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI414S** The content of the *member\_name* parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an element in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

---

**CCQI415S** The content of the *member\_name* parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI416S** The content of the *member\_name* parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI417S** The content of the *member\_name* parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI420S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element is unknown for the overridden DB2 parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI421S** The XML structure of the *member\_name* parameter metadata member is not valid. The *element\_name* element is unknown for the overridden LPAR parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI422S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown for the overridden DB2 parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI423S** The XML structure of the *member\_name* parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown for the overridden LPAR parameter.

**Explanation:**

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI450S** The *member\_name* product parameter metadata member was not found in the *data\_set\_name* data set.

**Explanation:** Tools Customizer could not find the specified product parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI510W** The *data\_set\_name* data store data set does not exist.

**Explanation:** The specified data store data set does not exist.

**System action:** Processing continues.

**User response:** Ensure that the data store data set exists.

---

**CCQI511S** The *data\_set\_name* data store data set cannot be opened by using the *disposition\_type* disposition.

**Explanation:** The specified data store data set could not be opened with the specified disposition.

**System action:** Processing continues.

**User response:** Contact IBM Software Support.

---

**CCQI512S** The *data\_set\_name* data store data set cannot be opened by using the *option-type* option.

**Explanation:** The specified data store data set was unable to be opened with the specified option.

**System action:** Processing stops.

---

User response: Contact IBM Software Support.

---

**CCQI600W** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the product customization parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

---

**CCQI601S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the product customization parameter metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

---

**CCQI602S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified product customization parameter metadata member contains an unknown element.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI603S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI604S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI605S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI606S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI607S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQI608S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many



times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI609S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI610S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI611S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute does not contain required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI612S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The content length for the *attribute\_name* attribute in the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI613S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified product customization parameter metadata member contains an unknown attribute.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI614S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The value of the *element\_name* element is not valid. The value *value\_name*.

**Explanation:** The specified value of the element is not a valid value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI615S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The value of the *attribute\_name* attribute for the *element\_name* element is not valid. The value is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI616S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The data type of the *element\_name* element is 'not valid. The value of the element is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI617S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The data type of the *attribute\_name* attribute for the *element\_name* element is not valid. The value of the attribute is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI650S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The following value of the *attribute\_name* attribute in the *element\_name* element already exists: *value\_name*.

**Explanation:** The specified value for an attribute already exists.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI651S** The XML structure of the *member\_name* product customization parameter metadata member is not valid. The *parameter\_name* parameter refers to the following section, which was not found in the *member\_name* product customization parameter metadata member: *section-name*.

**Explanation:** The specified section is not in the product customization parameter metadata member.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI652S** The *member\_name* product customization metadata member not valid. The default length for the *element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The specified length cannot be shorter than the default length.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI653S** The content of the *member\_name* product customization parameter metadata member is not valid. The value of the *attribute\_name* attribute in the *element\_name* element is not valid. The value of the attribute is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI700W** The XML structure of the *member\_name* solution pack metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the specified solution pack metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the warning.

**CCQI701S** The XML structure of the *member\_name* solution pack metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the specified solution pack metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the error.

**CCQI702S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified solution pack metadata member contains an unknown element.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI703S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found

**Explanation:** Content was found in an element that cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI704S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element does not contain required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI705S** The XML structure of the *member\_name* solution pack metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI706S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI707S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI708S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI709S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI710S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot have content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI711S** The XML structure of the *member\_name* solution pack metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute is missing content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI712S** The XML structure of the *member\_name* solution pack metadata member is not valid. The content length for the *attribute\_name* attribute in the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI713S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute in the solution pack metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI714S** The XML structure of the *member\_name* solution pack metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value of the element is not a valid value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI715S** The XML structure of the *member\_name* solution pack metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified value of the attribute is not a valid value.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI716S** The XML structure of the *member\_name* solution pack metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI717S** The XML structure of the *member\_name* solution pack metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value of the attribute is *value\_name*.

**Explanation:** The specified data type is not a valid data type.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI720S** The XML structure of the *member\_name* solution pack metadata member is not valid. The *msg* element is required for the *component\_name* component that is not customizable.

**Explanation:** The *msg* element is required for the specified component, which cannot be customized by using Tools Customizer.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI750S** The solution pack metadata member was not found in the *library\_name* metadata library.

**Explanation:** Tools Customizer could not find the solution pack metadata member in the specified library.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI751S** The version in the *library\_name* solution pack metadata library is different than the version in the *library\_name* component metadata library. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The version in the solution pack metadata library does not match the version in the component metadata library.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI752S** The release in the *library\_name* solution pack metadata library is different than the release in the *library\_name* component metadata library. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The release in the solution pack metadata library does not match the release in the component metadata library.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQI753S** The modification level in the *library\_name* solution pack metadata library is different than the modification level in the *library\_name* component metadata library. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The modification level in the solution pack metadata library does not match the modification level in the component metadata library.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQM002E** The *command\_name* line command is not valid: .

**Explanation:** The specified line command is not valid.

**System action:** Processing continues.

**User response:** Specify a valid line command on the panel.

---

**CCQO000W** The XML structure of the *member\_name* discover parameter metadata member is not valid. The PL/I XML parser issued the following exception warning code: *code\_number*.

**Explanation:** While determining if the discover parameter metadata member is valid, the PL/I XML parser issued an exception warning code.

**System action:** Processing continues.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code.

---

**CCQO001S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The PL/I XML parser issued the following exception error code: *code\_number*.

**Explanation:** While determining if the Discover metadata member is valid, the PL/I XML parser issued an exception error code.

**System action:** Processing stops.

**User response:** See the *Enterprise PL/I for z/OS Programming Guide* for more information about the exception warning code. Contact IBM Software Support.

---

**CCQO002S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *element\_name* element is unknown.

**Explanation:** The specified element in the discover parameter metadata member is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO003S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is not allowed for the *element\_name* element, but content was found.

**Explanation:** The specified element cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO004S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is required for the *element\_name* element, but content was not found.

**Explanation:** The specified element is missing required content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO005S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The content length for the *element\_name* element cannot exceed *maximum\_number* characters.

**Explanation:** The specified element contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO006S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified element occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO007S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified element does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO008S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element cannot occur more than *maximum\_number* times.

**Explanation:** The specified attribute occurs too many times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO009S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element must occur at least *minimum\_number* times.

**Explanation:** The specified attribute does not occur enough times.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO010S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is not allowed for the *attribute\_name* attribute in the *element\_name* element, but content was found.

**Explanation:** The specified attribute cannot contain content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO011S** The XML structure of the *member\_name* discover parameter metadata member is not valid. Content is required for the *attribute\_name* attribute in the *element\_name* element, but content was not found.

**Explanation:** The specified attribute requires content.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO012S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The content length for the *attribute\_name* attribute in the *element\_name* element in the cannot exceed *maximum\_number* characters.

**Explanation:** The specified attribute contains too many characters.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO013S** The XML structure of the *member\_name* discover parameter metadata member is not valid. The *attribute\_name* attribute in the *element\_name* element is unknown.

**Explanation:** The specified attribute is unknown.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---



---

**CCQO014S** The content of the *member\_name* discover parameter metadata member is not valid because the value of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** A The specified value for an element in the discover parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO015S** The content of the *member\_name* discover parameter metadata member is not valid because the value of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified value for an attribute in the discover parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO016S** The content of the *member\_name* discover parameter metadata member is not valid because the data type of the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an element in the discover parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO017S** The content of the *member\_name* product parameter metadata member is not valid because the data type of the *attribute\_name* attribute in the *element\_name* element is incorrect. The value is *value\_name*.

**Explanation:** The specified data type value for an attribute in the product parameter metadata member is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQO050S** The *data\_set\_name* Discover REXX EXEC data set could not be initialized or was not found.

**Explanation:** Tools Customizer could not find or could not initialize the specified Discover REXX EXEC data set.

**System action:** Processing stops.

---

**User response:** Ensure that the Discover REXX EXEC is specified correctly.

---

**CCQO051W** The *data\_sharing\_group\_ID* data sharing group ID cannot contain more than four characters.

**Explanation:** The specified data sharing group ID contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified data sharing group ID does not exceed four characters.

---

**CCQO052S** The *REXX\_EXEC\_name* Discover REXX EXEC was not found in the *data\_set\_name* Discover data set.

**Explanation:** Tools Customizer could not find the Discover REXX EXEC in the specified data set.

**System action:** Processing stops.

**User response:** Ensure that the Discover data set was specified correctly.

---

**CCQO053W** The *LPAR\_name* LPAR name cannot contain more than eight characters.

**Explanation:** The specified LPAR name contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified LPAR name does not exceed eight characters.

---

**CCQO054W** The *subsystem\_ID* DB2 SSID cannot contain more than four characters. The record was not processed.

**Explanation:** The specified DB2 SSID contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified DB2 SSID does not exceed four characters.

---

**CCQO055W** The *parameter\_name* DB2 group attach name parameter is in the *record\_name* Discover record, but a DB2 group attach name was not specified. The record was not processed.

**Explanation:** The Discover record contains a data sharing group parameter, but a DB2 group attach name was not specified.

**System action:** Processing continues.

**User response:** Ensure that information is specified correctly on the Discover Customized Product Information panel.

---

**CCQO056W** The *parameter\_name* DB2 parameter in the *record\_name* Discover record did not have a DB2 group attach name or a DB2 SSID. The record was not processed.

**Explanation:** The Discover record did not have a DB2 group attach name or a DB2 subsystem ID in the DB2 parameter.

**System action:** Processing continues.

**User response:** Ensure that information is specified correctly on the Discover Customized Product Information panel.

---

**CCQO057W** The Discover EXEC could not find the *parameter\_name* parameter in the metadata for the product to be customized. The record was not processed.

**Explanation:** The specified parameter could not be found in the metadata for the product to be customized.

**System action:** Processing continues.

**User response:** Ensure that information is specified correctly on the Discover Customized Product Information panel.

---

**CCQO058W** The *parameter\_name* product parameter name in the *record\_type* Discover record does not start with CCQ\_LPR\_, CCQ\_DB2\_, or CCQ\_PRD\_. The record was not processed.

**Explanation:** The parameter in the record does not start with CCQ\_DB2\_, CCQ\_LPAR\_, or CCQ\_PRD\_.

**System action:** Processing continues.

**User response:** Contact IBM Software Support.

---

**CCQO059W** The *parameter\_name* product parameter cannot contain more than 72 characters. The record was not processed.

**Explanation:** The specified product parameter contains too many characters.

**System action:** Processing continues.

**User response:** Ensure that the specified product parameter does not exceed 72 characters.

---

**CCQO060W** The *record\_name* Discover record from the REXX EXEC output must start with the following record type: *record\_type*. The record was not processed.

**Explanation:** A Discover record from the REXX EXEC output must start with the specified DB2 record type.

**System action:** Processing continues.

**User response:** Contact IBM Software Support.

**CCQO061I** If you do not have a previously customized version of the product, do not run the Discover EXEC. Press END to go to the Customizer Workplace panel.

**Explanation:** This message is issued when you customize a product for a the first time. It prompts you to use the Discover EXEC to discover data from a previous customization of the specified product.

**System action:** Processing continues.

**User response:**

**Tip:** Using the Discover EXEC saves time and reduces errors that can error when parameters are specified manually. If you want to use the Discover EXEC, specify the required information on the Discover Customized Product Information panel. Otherwise, press End to continue without discovering data from a previous customization of the product.

**CCQO062W** The Discover EXEC could not find the following *parameter\_name* parameter in the DB2 metadata. The record was not processed.

**Explanation:** The specified parameter is missing in the DB2 metadata.

**System action:** Processing continues.

**User response:** If this parameter is required, contact IBM Software Support.

**CCQO064W** The *Discover-record* Discover record did not have a parameter name. The record was not processed.

**Explanation:** A parameter name was missing in the Discover record.

**System action:** Processing continues.

**User response:** Contact IBM Software Support.

**CCQO065W** The value for the *parameter\_name* parameter is ignored because it has more than *maximum\_number* characters, which is the maximum length that is defined in the metadata. The value is *parameter\_value*.

**Explanation:** The specified value exceeded the maximum allowed length, which was defined in the metadata. Tools Customizer truncated the extra characters.

**System action:** Processing continues.

**User response:** Contact IBM Software Support.

**CCQO066W** The *record\_name* Discover record from the Discover REXX EXEC output does not have a parameter value. The record was not processed.

**Explanation:** The Discover record was missing a parameter value from the Discover EXEC output.

**System action:** Processing continues.

**User response:** Ensure that information was specified correctly on the Discover Customized Product Information panel.

**CCQO067W** The *parameter\_name* parameter is defined in the metadata to support one value, but more than one value was found. The last value was used.

**Explanation:** The definition of the parameter in the metadata supports one value, but more than one value was specified. Only the last value was used.

**System action:** Processing continues.

**User response:** Ensure that information was specified correctly on the Discover Customized Product Information panel.

**CCQO068W** The value of the *parameter\_name* parameter is ignored because the parameter is defined as *internal=true*. The value is *value\_name*.

**Explanation:** The specified value of the parameter is ignored because it is defined as *internal=true*.

**System action:** Processing continues.

**User response:** Ensure that information was specified correctly on the Discover Customized Product Information panel.

**CCQO069W** The Discover EXEC did not find the *parameter\_name* parameter in the LPAR metadata. The record was not processed.

**Explanation:** The specified parameter is missing from the LPAR metadata.

**System action:** Processing continues.

**User response:** Ensure that information was specified correctly on the Discover Customized Product Information panel.

**CCQO070W** The *record\_type* Discover record contains an incorrect delimiter between the Environment section and the Data section. The record was not processed.

**Explanation:** Tools Customizer found an incorrect delimiter between the Environment section and the Data section.



**System action:** None.

**User response:** No action is required.

**CCQO071W** The *member\_name* member could not be found in the *data\_set\_name* Discover data set.

**Explanation:** Tools Customizer could not find the specified Discover data set.

**System action:** None.

**User response:** No action is required.

**CCQO072S** The *member\_name* discover metadata member was not found in the *data\_set\_name* metadata data set.

**Explanation:** Tools Customizer could not find the specified metadata member in the data set.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQO073E** The *member\_name* discover metadata member is not valid because the default length for the *element\_name* parameter element exceeds the length of the parameter. The default length is *default\_length*, and the specified length is *specified\_length*. The default length will be truncated accordingly.

**Explanation:** The default length for the specified parameter element is longer than the parameter.

**System action:** Processing continues.

**User response:** No action is required.

**CCQO074S** The content of the *member\_name* discover metadata member is not valid. The value of the *attribute\_name* attribute in the *element\_name* element is not valid. The value of the attribute is *value\_name*.

**Explanation:** The specified value is not valid.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQO075W** The *configuration\_ID* configuration ID in the *record\_name* Discover record is incorrect. The record was not processed.

**Explanation:** The specified configuration ID is not correct.

**System action:** Processing continues.

**User response:** No action is required.

**CCQO076W** The *configuration\_ID* configuration ID cannot contain more than *maximum\_number* characters. The record was not processed.

**Explanation:** The specified configuration ID contains too many characters.

**System action:** Processing continues.

**User response:** No action is required.

**CCQO077S** The discover metadata member was not found in the *data\_set\_name* component data set that is part of the *data\_set\_name* pack.

**Explanation:** The discover metadata member was not found in the specified component data set.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

**CCQO080I** *Product\_name* does not support the Discover process.

**Explanation:** The specified product does not support the Discover process.

**System action:** None.

**User response:** No action is required.

**CCQP000E** The value of the *mode\_name* DB2 mode is not valid for the *level\_name* DB2 level.

**Explanation:** The specified DB2 mode is not valid for the DB2 level.

**System action:** Processing stops.

**User response:** Specify a valid DB2 mode for the DB2 level.

**CCQP001E** The value of the *mode\_name* DB2 mode is missing.

**Explanation:** The specified DB2 mode is not defined.

**System action:** Processing stops.

**User response:** Specify a value for the DB2 mode.

**CCQP002E** The value of the *mode\_name* DB2 level is missing.

**Explanation:** The specified DB2 level is not defined.

**System action:** Processing stops.

**User response:** Specify a value for the DB2 level.

---

**CCQP003E** The value of the *level\_name* DB2 level is not valid.

**Explanation:** The specified DB2 level does not have a valid name.

**System action:** Processing stops.

**User response:** Specify a valid value for the DB2 level.

---

**CCQP004S** The *parameter\_name* parameter does not exist in the CCQ\$\$DB2 DB2 parameter metadata member.

**Explanation:** The CCQ\$\$DB2 DB2 parameter metadata member does not contain the specified parameter.

**System action:** Processing stops.

**User response:** Contact IBM Software Support.

---

**CCQP005E** The value of the *subsystem\_ID* DB2 SSID is missing.

**Explanation:** The specified DB2 SSID is not defined.

**System action:** Processing stops.

**User response:** Specify a valid value for the DB2 SSID.

---

**CCQP006E** The value of the *group\_attach\_name* DB2 group attach name is missing.

**Explanation:** The specified DB2 group attach name is not defined.

**System action:** Processing stops.

**User response:** Specify a valid DB2 group attach name.

---

**CCQQ000E** Specify a valid metadata library. Each qualifier of the library must start with an alphabetic character and must be 1-8 alphanumeric characters. The library name must be 1-44 characters.

**Explanation:** The metadata library was not specified in the correct format. The high-level qualifier must contain alphanumeric characters, and the first character cannot be numeric. The name cannot contain wildcard characters, such as asterisks (\*) and percent signs (%).

**System action:** Tools Customizer prompts for the correct library name.

**User response:** Specify a library name in the correct format.

---

**CCQQ001E** The *data\_set\_name* data set name that was specified for the metadata library was not found.

**Explanation:** The data set does not exist, or the data set name was written in the incorrect format. The

high-level qualifier must contain alphanumeric characters, and the first character cannot be numeric. The name cannot contain wildcard characters, such as asterisks (\*) and percent signs (%).

**System action:** Tools Customizer prompts for the correct data set name.

**User response:** Specify a data set name in the correct format.

---

**CCQQ002E** The data set name that was specified for the *library\_name* metadata library cannot be opened.

**Explanation:** Tools Customizer could not open the data set.

**System action:** Tools Customizer prompts for an available data set.

**User response:** Ensure that the specified data set is available for Tools Customizer to open it.

---

**CCQQ003E** The *data\_set\_name* data set name that was specified for the metadata sample library is not valid. The data set must be in the following format: HLQ.SxxxSAMP.

**Explanation:** The specified data set name was not specified in the correct format.

**System action:** None.

**User response:** Specify the data set name in the following format: HLQ.SxxxSAMP, where xxx is the three-character prefix for the product.

---

**CCQQ004E** The *data\_set\_name* data set is being used by another user. Try again when the data set is not being used.

**Explanation:** Another user is using the specified data set.

**System action:** None.

**User response:** Ensure that the specified data set is not being used.

---

**CCQQ009E** The *data\_set\_name* data set name that was specified for the metadata library is not valid because the data set is empty.

**Explanation:** The specified data set is empty.

**System action:** Tools Customizer prompts for an available data set.

**User response:** Ensure that the specified data set is available for Tools Customizer to open it.

---

---

**CCQQ011E** The *library\_name* metadata library for the component that is part of the *library\_name* pack was not found in the catalog. The name of the pack is *pack\_name*, and the name of the component is *component\_name*.

**Explanation:** The specified metadata library is not in the catalog.

**System action:** None.

**User response:** Specify another metadata library.

---

**CCQQ012E** The *library\_name* metadata library for the component that is part of the *library\_name* pack cannot be opened.

**Explanation:** The specified metadata library cannot be opened.

**System action:** None.

**User response:** Ensure that the name of the library is specified correctly.

---

**CCQS000I** Tools Customizer is being invoked for the first time or the previous ISPF session ended before Tools Customizer was exited. In both cases, the fields on this panel are populated with default values. Review these default values or specify new values to be used to customize products or packs.

**Explanation:** When you customize a stand-alone product or a solution pack for the first time, or when an ISPF session unexpectedly ends before the ISPF profile is saved, you must specify or review your Tools Customizer user settings.

**System action:** Processing stops.

**User response:** Review and accept the default settings, or specify new settings.

---

**CCQS001E** The following command is not valid: *command\_name*.

**Explanation:** The specified command is not a valid command on the panel.

**System action:** Processing stops.

**User response:** Specify a valid command.

---

**CCQS002W** The *data\_set\_name* Discover data set could not be found.

**Explanation:** Tools Customizer could not find the specified data set.

**System action:** Processing continues.

**User response:** Ensure that the data set name is specified correctly.

---

**CCQS003W** The *data\_set\_name* Discover data set was not found so it was created.

**Explanation:** Tools Customizer could not find the specified data set.

**System action:** Processing continues.

**User response:** Ensure that the data set name is specified correctly.

---

**CCQS004I** The settings were saved.

**Explanation:** The settings that you changed were saved.

**System action:** Processing continues.

**User response:** No action is required.

---

**CCQS006W** The length of a qualifier for the *data\_set\_name* customization library data set exceeds 26 characters.

**Explanation:** The qualifier for the customization library data set is too long. The qualifier cannot exceed 26 characters.

**System action:** Processing continues.

**User response:** Specify a qualifier that is 26 characters or less.

---

**CCQS007E** The discover data set *data\_set\_name* could not be opened with the *option-type* option.

**Explanation:** The specified option could not open the Discover data set.

**System action:** None.

**User response:** Specify a data set to which you have WRITE access.

---

**CCQS008E** An error occurred while the *data\_set\_name* Discover data set was being created.

**Explanation:** While the specified data set was being created, an error occurred.

**System action:** Processing continues.

**User response:** Ensure that you have WRITE authority access to this data set.

---

**CCQS010E** The customization library qualifier is not valid.

**Explanation:** The customization library qualifier that was specified is not valid.

**System action:** None.

**User response:** Specify a valid qualifier for the customization library.

---

**CCQS011E** The group attach option is not valid.

**Explanation:** The group attach option that was specified is not valid.

**System action:** None.

**User response:** Specify a valid option for the group attach option.

---

**CCQS012E** The Tools Customizer metadata library is not valid.

**Explanation:** The metadata library that was specified is not a valid data set.

**System action:** None.

**User response:** Specify a valid data set for the metadata library.

---

**CCQS013E** The Discover data set is not valid.

**Explanation:** The Discover data set that was specified is not a valid data set.

**System action:** None.

**User response:** Specify a valid Discover data set.

---

**CCQS014E** The data store data set is not valid.

**Explanation:** The data set that was specified is not a valid data set.

**System action:** None.

**User response:** Specify a valid data store data set.

---

**CCQS015E** Tools Customizer is already running.

**Explanation:** A session of Tools Customizer is already running in your environment. Only one Tools Customizer session is allowed.

**System action:** None.

**User response:** The trace data set is being used. Free the trace data set, and start Tools Customizer again.

---



---

**CCQS018E** Information on the first line of the job card exceeds 57 characters.

**Explanation:** The first line of the job card can contain only 57 characters. This character limit includes a continuation character.

**System action:** Tools Customizer clears the first line of the job card.

**User response:** Specify information that does not exceed 57 characters on the first line of the job card.

---

**CCQS019E** The required trace data set, *data\_set\_name*, is currently not accessible.

**Explanation:** The trace data set must be accessible.

**System action:** Processing stops.

**User response:** Ensure that the trace data set is accessible.

---

**CCQS020E** An error occurred while the customization library data set was being created. ALTER authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To create the customization library data set, ALTER authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that ALTER authority for the specified customization library data set is granted.

---

**CCQS021E** The value *value\_name* in the field that contains the cursor position is not valid.

**Explanation:** The specified value is not valid.

**System action:** None.

**User response:** Specify a valid value.

---

**CCQS022E** An error occurred while the customization library data set was being opened. UPDATE authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To open the customization library data set, UPDATE authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that UPDATE authority for the specified customization library data set is granted.

---

---

**CCQS023E** An error occurred while the customization library data set was being opened. UPDATE authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To open the customization library data set, UPDATE authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that UPDATE authority for the specified customization library data set is granted, or specify a different high-level qualifier for the customization library data set on the Tools Customizer Settings panel.

---

**CCQS024E** An error occurred while the customization library data set was being created. ALTER authority on the high-level qualifier for the customization library data set is required.

**Explanation:** To create the customization library data set, ALTER authority on the specified high-level qualifier must be granted.

**System action:** None.

**User response:** Ensure that ALTER authority for the specified customization library data set is granted, or specify a different high-level qualifier for the customization library data set on the Tools Customizer Settings panel.

---

**CCQS025I** The display options were saved.

**Explanation:** The options that you selected were saved.

**System action:** None.

**User response:** No action is required.

---

**CCQS030E** The following command is not a valid CREATE statement: *command\_statement*.

**Explanation:** The specified CREATE command statement is invalid because it contains blanks or alphabetic characters.

**System action:** Processing stops.

**User response:** Specify a valid CREATE command statement. The correct syntax is CREATE *nm*, where *nm* is 1 - 99.

---

**CCQS031E** The following command is not a valid CREATE statement: *command\_statement*. The number that can be specified with the CREATE command is 1 - 99.

**Explanation:** The specified CREATE command statement is invalid because it contains either 0 or a number greater than 99.

**System action:** Processing stops.

**User response:** Specify a valid CREATE command statement. The correct syntax is CREATE *nm*, where *nm* is 1 - 99.

---

**CCQT000I** The product configuration ID *copied\_configuration\_ID* was successfully copied from *configuration\_ID*.

**Explanation:** The specified configuration ID was copied.

**System action:** None.

**User response:** No action is required.

---

**CCQT001E** The *command\_name* line command was specified more than once, which is not allowed.

**Explanation:** The specified line command cannot be specified more than one time.

**System action:** Processing stops.

**User response:** Specify the line command only once.

---

**CCQT002E** The *configuration\_ID* configuration ID already exists. Specify a different configuration ID.

**Explanation:** The specified configuration ID exists.

**System action:** Processing stops.

**User response:** Ensure that the specified configuration ID is unique.

---

**CCQT003I** The product configuration ID *configuration\_ID* was created.

**Explanation:** The specified configuration ID was created.

**System action:** None.

**User response:** No action is required.

---

**CCQT004I** The product configuration ID *configuration\_ID* was removed.

**Explanation:** The specified configuration ID was removed.

**System action:** None.

**User response:** No action is required.

**CCQT005E** The product configuration ID *configuration\_ID* is not valid. The product configuration ID cannot contain a colon (:).

**Explanation:** The specified configuration ID contains a colon (:), but a colon is not valid.

**System action:** Processing stops.

**User response:** Specify a configuration ID that does not contain a colon.

**CCQT006E** The *configuration\_ID* configuration ID exists. Specify a different configuration ID.

**Explanation:** The specified configuration ID exists.

**System action:** Processing stops.

**User response:** Specify another configuration ID.

**CCQT007E** The *configuration\_ID* configuration ID exists but was removed from the list of configurations. To use this configuration ID, you must restore it.

**Explanation:** The specified configuration ID exists but was removed from the list of available configuration.

**System action:** Processing stops.

**User response:** Specify another configuration ID. To restore the specified configuration ID, issue the CREATE command, and specify the same configuration ID again.

**CCQT008E** The *configuration\_ID* configuration ID exceeds *maximum\_number* characters.

**Explanation:** The specified configuration ID contains too many characters.

**System action:** Processing stops.

**User response:** Specify another configuration ID that does not exceed the maximum number of characters that was set by DB2 Table Editor.

**CCQT010I** Create request for *configuration\_ID* configuration was cancelled by user.

**Explanation:** The request to create the specified configuration was canceled.

**System action:** Processing stops.

**User response:** No action is required.

**CCQT011I** The *configuration\_ID* configuration was not copied.

**Explanation:** The specified configuration was not copied.

**System action:** Processing stops.

**User response:** No action is required.

**CCQT012I** The *configuration\_ID* configuration was not removed.

**Explanation:** The specified configuration was not removed.

**System action:** Processing stops.

**User response:** No action is required.

**CCQT013I** None of the configurations were copied or removed. All of the previously selected configurations are deselected.

**Explanation:** The selected configurations were not copied or removed, and they are deselected.

**System action:** Processing stops.

**User response:** No action is required.

**CCQT014E** Specify Y or N and press Enter to continue, or press End to cancel.

**Explanation:** A function requires input.

**System action:** Processing stops.

**User response:** To continue, specify Y or N and press Enter. Otherwise, press End to cancel.

**CCQT015E** The *command\_name* command is not allowed during the process of "Select" configuration line command.

**Explanation:** The specified command is not allowed while the line command for selecting configurations is processing.

**System action:** Processing stops.

**User response:** Remove the specified line command.

**CCQT016I** The *configuration\_ID* configuration was not created

**Explanation:** The specified configuration was not created.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT017I** The *configuration\_ID* configuration was not copied.

**Explanation:** The specified configuration was not copied.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT018E** Specify Y or N, and press Enter.

**Explanation:** A function requires input.

**System action:** Processing stops.

**User response:** To continue, specify Y or N, and press Enter.

---

**CCQT019I** The select *configuration\_ID* configuration process ended.

**Explanation:** The select process for the specified configuration is finished.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT020E** The *configuration\_ID* configuration was not created because the data store was not accessible.

**Explanation:** The specified configuration was not created because the data store could not be accessed.

**System action:** Processing stops.

**User response:** Ensure that the data store is accessible and create the configuration again.

---

**CCQT021E** The *configuration\_ID* configuration was not copied because the data store was not accessible.

**Explanation:** The specified configuration was not copied because the data store could not be accessed.

**System action:** Processing stops.

**User response:** Ensure that the data store is accessible and copy the configuration again.

---

**CCQT025I** The *configuration\_ID* configuration was not updated.

**Explanation:** The specified configuration was not updated because the edit process was canceled.

**System action:** Processing stops.

**User response:** No action is required.

---

**CCQT027I** The product configuration was successfully updated.

**Explanation:** The configuration was updated.

**System action:** Processing continue.

**User response:** No action is required.

---

**CCQX001S** *Product\_name* has already been customized by using values from *data\_set\_name* data store data set. Switch to the specified data store data set to continue customizing this product.

**Explanation:** The specified product was customized by using values from the specified data store data set.

**System action:** Processing stops.

**User response:** Use the specified data store data set to continue customizing the product.

---

**CCQX002S** *component\_name* has already been customized by using values from *data\_set\_name* data store data set. Switch to the specified data store data set to continue customizing this component.

**Explanation:** The specified component was customized by using values from the specified data store data set.

**System action:** Processing stops.

**User response:** Use the specified data store data set to continue customizing the component.

---

**CCQX011I** *Product\_name* was not found.

**Explanation:** The specified product was not found.

**System action:** Processing stops.

**User response:** Specify another product.

## DB2 Table Editor Console, Developer, and User components messages

These topics provide the messages and error codes that DB2 Table Editor issues for the Console, Developer, and User components.

---

**ETI2001I** You cannot change a bound rule if the form uses static SQL. Revert the package to SQL dynamic usage.

**Explanation:** The validation rule cannot be changed or modified since the form is using static SQL.

**User response:** Revert to dynamic SQL in order to modify the validation rule.

---

**ETI2002I** You cannot change the attributes if the form uses static SQL. You should revert package to dynamic SQL usage.

**Explanation:** Attributes cannot be changed when the form uses static SQL for inserts, updates and deletes.

**User response:** To change attributes, revert back to dynamic SQL usage in the form.

---

**ETI2003W** This form has been saved using a previous version of DB2 Forms. Would you like to convert it to the current version?

**Explanation:** The form has been saved with a previous version of Table Editor.

**User response:** Convert the form to the current version to open it and work with it in the current version.

---

**ETI2004E** Linked control %s not found.

**Explanation:** The named control cannot be found in the form.

**User response:** The control may have been deleted. Modify the form accordingly.

---

**ETI2005W** Collection name is required.

**Explanation:** A collection name is required to bind the packages.

**User response:** Provide a collection name.

---

**ETI2006E** No servers are defined. You must specify the name of a server definition file containing one or more servers in order to continue.

**Explanation:** The developer component needs to point to a server definition file where the required servers are defined.

**User response:** Point to a server definition file.

---

**ETI2007E** An error occurred while opening the document from the server.

**Explanation:** An unknown error occurred while opening the document from the server. The form may have been saved with a version not compatible with the current version.

**User response:** Check connections to the server and make sure the form exists on the server.

---

**ETI2008E** An error occurred while saving the document at the server.

**Explanation:** The form was not saved at the named server due to an error.

**User response:** Check connections to the named server, and make sure DB2 Table Editor objects and packages exist on the server.

---

**ETI2009W** Are you sure you want to delete the primary table?

**Explanation:** The primary table is the table being edited.

**User response:** Verify table before deleting the primary table.

---

**ETI2010W** Deleting this table will automatically delete all the join and sort conditions associated with this table. Are you sure that you want to continue?

**Explanation:** There may be join and sort conditions associated with this table. Deleting the table will delete all associated join and sort conditions.

**User response:** Reconfirm before deleting table.

---

**ETI2011W** The form you are trying to delete is a full screen edit form, and cannot be modified using the DB2 Table Editor Developer application. Use the DB2 Table Editor User application to delete this form.

**Explanation:** The Full Screen Edit form was created using the DB2 Table Editor User component. It cannot be modified or deleted from the Developer component.

**User response:** Use the DB2 Table Editor User component to modify or delete this form.

---

**ETI2012W** You must enter a positive number as the help context.



**Explanation:** A valid positive number is needed for the help context.

**User response:** Use a valid positive number.

**ETI2013E**    **An error occurred while deleting %1,%2.**

**Explanation:** An error occurred while deleting the form represented by %1 and %2, where %1 is the owner and %2 is the form name.

**User response:** Check to see if the form being deleted exists.

**ETI2014W**    **The specified SQL select statement is not valid.**

**Explanation:** The SQL statement is not valid.

**User response:** Enter a valid SQL statement.

**ETI2015E**    **An error occurred while retrieving the list of tables.**

**Explanation:** DB2 Table Editor Developer component encountered an error while retrieving the list of tables from the DB2 catalog tables.

**User response:** Check to make sure all DB2 Table Editor objects and packages exist on the server.

**ETI2016E**    **An error occurred while retrieving the list of forms.**

**Explanation:** DB2 Table Editor Developer component encountered an error while retrieving the list of forms from the catalog tables.

**User response:** Check to make sure all DB2 Table Editor objects and packages exist on the server.

**ETI2017E**    **An error occurred while retrieving controls.**

**Explanation:** An error occurred while retrieving controls from a DBEdit panel when importing the panel into a DB2 Table Editor form.

**User response:** Check the DBEdit panel and make sure it exists and is not corrupted.

**ETI2018E**    **An error occurred while deleting the form from the server.**

**Explanation:** An error occurred while deleting the form from the DB2 Table Editor catalog tables on the server.

**User response:** Check if the form exists on the server.

**ETI2019W**    **One or more rules are defined for this control. Delete the rules before deleting the control.**

**Explanation:** The control cannot be deleted when it has validation rules associated with it.

**User response:** Delete the rules associated with the control before attempting to delete the control.

**ETI2020E**    **%1. This file could not be found.**

**Explanation:** The server definition file denoted by %1 could not be found.

**User response:** Make sure the file exists or make sure the path pointing to the file is valid.

**ETI2021E**    **An error occurred.**

**Explanation:** A general error occurred.

**User response:** Record the error number and call technical support.

**ETI2022W**    **Unable to join columns with incompatible data types.**

**Explanation:** When creating a join condition, the data types must be compatible.

**User response:** Create a join condition with compatible data types.

**ETI2023E**    **An error occurred while inserting items into the list control.**

**Explanation:** An error occurred when initializing the list control.

**User response:** Check the items being added to the list control.

**ETI2024I**    **The form is resized so as not to obscure any of the controls in the form.**

**Explanation:** The form has been automatically resized to prevent the controls in the form from being obscured.

**User response:** No action necessary

**ETI2025W**    **Tables are not matching.**

**Explanation:** When migrating forms from one server to the next, the tables being edited should have matching columns and data types.

**User response:** Verify that the form is migrated using matching tables.

---

**ETI2026W**    **The server specified for this form, %1, is not defined in the server definition file. Use master server instead?**

**Explanation:** The server defined in the form (as specified by the %1 variable in the message) to be opened using the **Open Form** button has not been defined in the server definition file.

**User response:** Define the server in the server definition file.

---

**ETI2027W**    **The defined links will be deleted. Do you want to continue?**

**Explanation:** The source location of the form has been changed, so the existing links currently associated with this form will be lost.

**User response:** Verify that you want to change the source location of the form.

---

**ETI2028W**    **An attempt to allocate memory failed.**

**Explanation:** Not enough memory is available on the system to allocate memory needed by the application.

**User response:** Free up some memory by closing some running applications.

---

**ETI2029I**    **Before changing attributes you must revert the package for dynamic use. Do you want to revert it now?**

**Explanation:** After binding the package for a form, you cannot alter the attributes for the form without first reverting to dynamic SQL.

**User response:** To change form attributes after binding a package, select **Revert to Dynamic SQL** on the Form menu.

---

**ETI2030I**    **Migrating form(s) has been completed.**

**Explanation:** The selected forms have been successfully migrated from one environment to another.

**User response:** No action necessary.

---

**ETI2031I**    **Specify one or more actions on which this rule will apply.**

**Explanation:** Select an action. The validation rule will be applied to the action that you select on the specified control.

**User response:** Select an action such as select, insert, update or delete.

---



---

**ETI2032W**    **You must enter a numeric value.**

**Explanation:** This validation rule needs a numeric value.

**User response:** Enter a numeric value.

---

**ETI2033I**    **You must specify a form to open.**

**Explanation:** A panel ID is needed to indicate the panel that is to be imported into DB2 Table Editor.

**User response:** Specify a panel id.

---

**ETI2034I**    **You must specify a form by entering its owner and name.**

**Explanation:** Specify a form by entering the owner and form name.

**User response:** Enter the form owner and name.

---

**ETI2035I**    **Select the table to be edited as the primary table.**

**Explanation:** The table to be edited is known as the primary table. The primary table must be selected from the list of tables selected for the form.

**User response:** Select a primary table.

---

**ETI2036I**    **You must enter a SELECT statement to generate values for this rule.**

**Explanation:** The result set from the SELECT statement will be used in the validation rule.

**User response:** Enter a SELECT statement.

---

**ETI2037I**    **You must specify a table by entering its owner and name.**

**Explanation:** Specify the table owner and name to specify a table.

**User response:** Enter the table owner and name.

---

**ETI2038I**    **You must specify a value for this rule.**

**Explanation:** A validation rule value is required in order for the validation rule to be validated.

**User response:** Enter a value for the validation rule.

---

**ETI2039I**    **You must specify values for this rule.**

**Explanation:** The validation rule needs values to be validated.

**User response:** Enter the values needed for the validation rule.

---

---

**ETI2040I** This type of control does not have DB2 Table Editor attributes.

**Explanation:** Some controls (for example, labels and borders) have properties and do not have attributes.

**User response:** No action necessary.

---

**ETI2041I** The table, %s, has not been modified since the form was created.

**Explanation:** This message indicates that the table that is specified by the %s variable in the message has not been altered since it was created.

**User response:** No action necessary.

---

**ETI2042W** No matching forms were found.

**Explanation:** No forms matching the search criteria were found in the Table Editor catalog tables.

**User response:** Make sure the correct catalog server is being used.

---

**ETI2043I** Select a server to be used with this form.

**Explanation:** Select a server from the server definition file to be used with this form.

**User response:** Select a server from the server definition file.

---

**ETI2044W** No matching aliases were found.

**Explanation:** No aliases matching the search criteria were found in the DB2 catalog tables.

**User response:** Make sure the correct server and catalogs are being used.

---

**ETI2045W** No matching objects were found.

**Explanation:** No DB2 objects (for example, tables, views, or aliases) matching the search criteria were found in the DB2 catalog tables.

**User response:** Make sure the correct server and catalogs are being used.

---

**ETI2046W** No matching panels were found.

**Explanation:** No DBEdit panels matching the search criteria were found in the DBEdit catalog tables.

**User response:** Make sure the correct server and catalogs are being used.

---

**ETI2047W** No matching tables were found.

**Explanation:** No tables matching the search criteria were found in the DB2 catalog.

**User response:** Make sure the correct server and catalogs are being used.

---

**ETI2048W** No matching views were found.

**Explanation:** No views matching the search criteria were found in the DB2 catalog.

**User response:** Make sure the correct server and catalogs are being used.

---

**ETI2049W** This XML file cannot be loaded into the developer environment as it was saved with an earlier version of the product. Open the associated DBE file and then re-save the project to update the XML file.

**Explanation:** An earlier version of the product was used to save the form into the XML file.

**User response:** Open the form using the binary file with the .dbe or .dbj extension and save the form into the XML file again.

---

**ETI2050I** The scroll bars should remain on since the form size is greater than the window size.

**Explanation:** The scroll bars property for the form is automatically set to True if the form size is greater than the window size.

**User response:** No action is necessary.

---

**ETI2051W** Specify bound column.

**Explanation:** The package for the form cannot be created because none of the controls in the form are bound to a column in the table.

**User response:** Bind at least one of the controls to a column using the control attributes.

---

**ETI2052W** Enter a control name.

**Explanation:** A control name has not been entered. Every control must have a unique control name.

**User response:** Enter a control name.

---

**ETI2053W** %1 is not a valid table name.

**Explanation:** The specified table name is not valid. When importing panels from DBEdit, the name of the table in the panel needs to be valid.

**User response:** Make sure the panel has a valid table name.

---

---

**ETI2054W** The form you are trying to open is a full screen edit form, and cannot be modified using the DB2 Table Editor Developer application. Use the DB2 Table Editor User application to open this form.

**Explanation:** The Full Screen Edit form was created using the DB2 Table Editor User component. It cannot be opened from the Developer component.

**User response:** Use the DB2 Table Editor User component to open this form.

---

**ETI2055W** You are not authorized to save or modify forms with owner = %1.

**Explanation:** The specified owner name (represented by the %1 variable) does not have the authority to save or modify forms.

**User response:** Contact a DB2 system administrator.

---

**ETI2056W** %1.%2 already exists. Are you sure that you want to replace it?

**Explanation:** A form represented by %1 and %2, where %1 is the owner name and %2 is the form name, already exists in the database.

**User response:** Overwrite the existing form or save the form under another name.

---

**ETI2057W** The package name is required.

**Explanation:** In order to bind the static SQL for this form, a package name is required.

**User response:** Enter a package name.

---

**ETI2058W** The query was not bound.

**Explanation:** An error was encountered when binding static SQL for the form.

**User response:** Retry binding packages.

---

**ETI2059I** Do you want to revert the package %s.%s for dynamic usage?

**Explanation:** The bound package for the form running static SQL is being reverted to dynamic SQL.

**User response:** Keep the package or revert to dynamic SQL.

---

**ETI2060I** The package %s.%s was reverted to dynamic usage.

**Explanation:** The bound package using static SQL is reverted to dynamic SQL.

**User response:** No action necessary.

---



---

**ETI2061W** Some of your changes will not take effect until you restart the application.

**Explanation:** If the server definition file has been changed, the application needs to be restarted for the new SDF to be used.

**User response:** Restart the application.

---

**ETI2062W** The control does not have a text property.

**Explanation:** Validation rules cannot be set on controls that do not have a text property.

**User response:** Choose a control that has a text property to use in the validation rule.

---

**ETI2063E** Unable to create the character conversion component.

**Explanation:** An error was encountered during validation rule evaluation. An OLE component for code page conversion was not available.

**User response:** Call technical support.

---

**ETI2064W** The control is not bound to a column.

**Explanation:** The control on the form is not bound to a column in the table being edited.

**User response:** Bind the control to a column in the table being edited.

---

**ETI2065I** Form %1.%2 saved.

**Explanation:** The specified form has been successfully saved at the server.

**User response:** No action is necessary.

---

**ETI2066E** An error occurred while connecting to the server.

**Explanation:** An error was encountered during an attempt to connect to the server.

**User response:**

1. Ensure that the server is up and running and that you have access to the server.
  2. The error message might indicate: No License to access this type of database server is available. The IBM DB2 Table Editor V4.4 GUI (ETIWIN) only allows connections to DB2 on z/OS.
- 

**ETI2067W** The server '%1' was not found in the server definition file. Select an existing server or use the DB2 Table Editor Console to add the server to the server definition file.

**Explanation:** The specified server (the server that is

being accessed) is not defined in the server definition file.

**User response:** Define the server in the server definition file.

**ETI2068I**    **Select a table from the list to delete.**

**Explanation:** The selected table will be deleted.

**User response:** Select a table from the list.

**ETI2069W**    **Select a table from the list to make it the primary table.**

**Explanation:** The primary table is the table being edited.

**User response:** Select a table from the list to be edited.

**ETI2070I**    **You should specify a join condition when more than one table is used in the form. If you do not specify a join condition, all combinations of rows from all tables will be returned.**

**Explanation:** When more than one table is added to the list of tables in a form, you need to create a join condition so that all the rows from all the tables are not returned.

**User response:** Create a join condition.

**ETI2071I**    **The SQL statement was successfully tested.**

**Explanation:** The SQL statement was tested to ensure that the form is saved with a valid SQL statement.

**User response:** No action necessary.

**ETI2072W**    **The table %1 does not exist in this database.**

**Explanation:** The table denoted by %1 does not exist in the database catalog tables.

**User response:** Make sure the table was created on this database.

**ETI2073E**    **An initialization error occurred.**

**Explanation:** The application cannot be started, probably due to an installation error.

**User response:** Contact technical support.

**ETI2074W**    **Unable to have unlocked column(s) on the left side of locked column(s).**

**Explanation:** When using the list control with the grid view property enabled, it is possible to lock columns in the control starting from the left and moving right.

**User response:** Begin locking columns from the left.

**ETI2075W**    **Enter a valid date format.**

**Explanation:** A valid date format is one of the formats available in the Windows control panel settings.

**User response:** Enter a valid date format.

**ETI2076W**    **Enter a valid time format.**

**Explanation:** A valid time format is one of the formats available in the Windows control panel settings.

**User response:** Enter a valid time format.

**ETI2077W**    **Enter a valid timestamp format.**

**Explanation:** A valid timestamp format is one of the formats available in the Windows control panel settings.

**User response:** Enter a valid timestamp format.

**ETI2078E**    **Syntax expression error.**

**Explanation:** The formula has a syntax error.

**User response:** Correct the syntax error.

**ETI2079E**    **Internal error occurred when set expression**

**Explanation:** A GPF error occurred when setting a formula.

**User response:** Contact technical support.

**ETI2080W**    **Variable '%1' is undefined**

**Explanation:** The specified variable (represented by %1 in the message) has not been defined.

**User response:** Define the variable or enter a formula without a variable.

**ETI2081W**    **Quote or apostrophe has been missed in expression.**

**Explanation:** The expression contains unmatched quotes or apostrophes.

**User response:** Match quotes or apostrophes in the expression.

**ETI2082W**    **Parenthesis or brace has been missed in expression.**

**Explanation:** The expression contains unmatched parentheses or brackets.

**User response:** Match the parenthesis or brackets in the expression.

---

**ETI2083W Invalid character in expression.**

**Explanation:** There is an invalid character in the expression.

**User response:** Remove any invalid characters from the expression.

---

**ETI2084W Expression is empty**

**Explanation:** The formula expression is empty.

**User response:** Enter a valid expression.

---

**ETI2085W Variable type mismatch in expression.**

**Explanation:** The variables in the expression should match.

**User response:** Match the variables in the expression.

---

**ETI2086W Division by zero occurred in expression**

**Explanation:** An error was encountered in the formula.

**User response:** Enter a valid expression.

---

**ETI2087W Expression result is undefined**

**Explanation:** The formula resulted in an error.

**User response:** Enter a valid expression.

---

**ETI2088W Overflow or infinity expression result**

**Explanation:** The formula resulted in an error.

**User response:** Enter a valid expression.

---

**ETI2089W The maximum limit of rows to fetch was exceeded**

**Explanation:** A Row Limit limits the number of rows that will be retrieved and displayed.

**User response:** Set a higher row limit.

---

**ETI2090W One or more formulas contains references to the row that is being deleted. Do you want to delete this row and lose the formulas?**

**Explanation:** If the row is deleted, the references to this row in the formula will be lost.

**User response:** Keep the row and validate the formula, or delete the row and lose the formula.

---

**ETI2091I The action was cancelled.**

**Explanation:** This message confirms that a performed action was canceled in response to the cancel command.

**User response:** No action necessary.

---

**ETI2092W This row has been modified by another user, unable to update**

**Explanation:** The table is not being accessed exclusively. There is more than one user updating rows in the table.

**User response:** Refresh the table to get the latest values from DB2 and then update.

---

**ETI2093W Continue replace all?**

**Explanation:** Message requesting confirmation for the find and replace feature.

**User response:** Press OK to replace all or cancel to abort the attempt.

---

**ETI2094I %1 rows in the database will be updated.**

**Explanation:** The number of rows specified by the %1 variable will be updated in the table.

**User response:** Press **OK** to continue or **Cancel** to abort.

---

**ETI2095W An error occurred while launching the contents of the control. %1**

**Explanation:** An application could not be launched based on the contents of the control represented by the %1.

**User response:** Check whether the contents of the control are valid for launching an application.

---

**ETI2096W Click OK when you have finished editing the value or click Cancel to cancel the operation.**

**Explanation:** An external application has been used to edit a LOB.

**User response:** Click **OK** to update changes made to the LOB. Clicking **Cancel** will not update the changes.

---

**ETI2097W %1 must contain a valid Hexadecimal format.**

**Explanation:** The control specified by the %1 variable requires a valid hexadecimal format.

**User response:** Enter a valid hexadecimal value.

---

---

**ETI2098W** Directory can not be dropped.

**Explanation:** A directory was encountered when dropping an object.

**User response:** Verify that the object being dropped is not a directory.

---

**ETI2099E** Failed to initialize the OLE libraries.

**Explanation:** An error was encountered while initializing the OLE libraries.

**User response:** Contact a system administrator or technical support.

---

**ETI2100W** The */IFormName* parameter must be specified as OWNER.FORMNAME.

**Explanation:** To start the DB2 Table Editor User application from the command line, the IFormName parameter must have the *owner.formname* format.

**User response:** Enter a valid format for the command line parameter.

---

**ETI2101W** To use the */IFormName* parameter, you must also specify the */IServer* parameter.

**Explanation:** The server needs to be specified in addition to the form name to start the application using command line parameters.

**User response:** Enter a valid server for the command line parameter.

---

**ETI2102W** This form is empty and does not contain any information. Use the Developer component to modify the form.

**Explanation:** An empty form has been created and saved from the Developer component of DB2 Table Editor.

**User response:** Use the Developer component to create a valid form.

---

**ETI2103E** An error occurred while opening the document.

**Explanation:** The form could not be opened in the User component of DB2 Table Editor.

**User response:** Verify that the form being opened is a valid DB2 Table Editor form.

---

**ETI2104E** Invalid file format.

**Explanation:** The file being opened has an invalid format.

**User response:** Verify that the file has a valid format.

---

---

**ETI2105W** You can only specify the column default value when inserting a row. It is not allowed when searching for, updating, or deleting a row.

**Explanation:** Columns in a table can have default values defined when the table is created. The default values can be used when inserting rows into the form only.

**User response:** Use the column default values only when inserting rows.

---

**ETI2106W** You can only retrieve rows after performing a search.

**Explanation:** In the form layout, the Next button cannot be used before using the Search button.

**User response:** Retrieve rows using the Search button before using the Next button.

---

**ETI2107I** There are no more rows matching the search criteria.

**Explanation:** DB2 Table Editor cannot find any more rows in the table that match the search criteria specified in the form.

**User response:** No action necessary.

---

**ETI2108I** No changes were specified.

**Explanation:** An update was not possible since no changes were made to any value in the form.

**User response:** Change values in the form before performing an update.

---

**ETI2109I** No changes were made in the primary table.

**Explanation:** Updates were not performed since no changes were made to the table with the primary key.

**User response:** Change values in the primary table before performing an update.

---

**ETI2110I** 1 row will be inserted into the database.

**Explanation:** The row with the specified values in the form will be inserted into the table in the database.

**User response:** No action necessary.

---

**ETI2111I** 1 row in the database will be deleted.

**Explanation:** The row with the specified values in the form will be deleted from the table in the database.

**User response:** No action necessary.

---

---

**ETI2112I** 1 row in the database will be updated.

**Explanation:** The row with the specified values in the form will be updated in the table in the database.

**User response:** No action necessary.

---

**ETI2113I** There are no changes to update.

**Explanation:** There are no changes to the values in the form to be updated.

**User response:** Change values in the form before performing an update.

---

**ETI2114W** The delete will effect one of a set of matching rows, and it is not known which row will be effected. Are you sure that you want to delete the row?

**Explanation:** The row being deleted is not unique. There is more than one row in the form that match the row deletion search criteria.

**User response:** Either delete a unique row or continue to delete any one of the multiple rows that match the search criteria.

---

**ETI2115I** %1 rows in the database will be deleted.

**Explanation:** The number of rows denoted by %1 will be deleted from the table in the database.

**User response:** Click **OK** to continue or **Cancel** to abort.

---

**ETI2116W** The update will effect one of a set of matching rows, and it is not known which row will be effected. Are you sure that you want to update the row?

**Explanation:** The row being updated is not unique. There is more than one row in the form matching the update row search criteria.

**User response:** Either update a unique row or continue to update any one of the multiple rows that match the search criteria.

---

**ETI2117E** An error occurred during table editing.

**Explanation:** An error was encountered while editing the table.

**User response:** Verify that there are adequate permissions to edit the table and that the table is valid.

---

**ETI2118W** Updates are not allowed for primary keys on this form.

**Explanation:** As specified in the setting when the form was created, primary keys cannot be updated on this form.

**User response:** Create the form with Primary Key enabled to update the primary keys.

---

**ETI2119W** No column values specified.

**Explanation:** No column values were specified during the insert operation.

**User response:** Specify column values.

---

**ETI2120W** All of the rows of the table will be deleted. Do you want to continue with delete?

**Explanation:** Message confirming the deletion of all the rows in the table.

**User response:** Confirm if this is the desired outcome.

---

**ETI2121W** The table, %1, has been modified since the form was created. The form cannot be loaded.

**Explanation:** The table denoted by %1 has been altered or modified since the form was created.

**User response:** Recreate the form with the modified table.

---

**ETI2122W** Commit scope must be set to 0 because this server does not support the CURSOR WITH HOLD option.

**Explanation:** If the commit scope is set to 0, changes will be committed every transaction. Commit scope of a higher value will not be supported for this server since it does not support the CURSOR WITH HOLD option.

**User response:** Create the form with a commit scope of 0.

---

**ETI2123W** The form contains %1, which is an invalid referback value.

**Explanation:** The refer-back value, denoted by %1 in the message text, that was specified when the form was created in the developer component is not valid.

**User response:** Verify that the refer-back value is valid when creating the form in the developer component.

---

**ETI2124W** This is not an FSE form. Only FSE forms can be deleted or modified.

**Explanation:** Only forms created in the user component can be modified in the user component of DB2 Table Editor. These forms have a file extension of fse. The other forms need to be modified in the developer component.

**User response:** If the form was not created in the user component, use the developer component to modify the form.



---

**ETI2125I** Are you sure you want to delete the form %1.%2?

**Explanation:** Message confirming the deletion of the specified form, denoted by %1 and %2.

**User response:** Confirm or cancel the deletion of the form.

---

**ETI2126W** There are no forms saved on this server.

**Explanation:** No DB2 Table Editor forms were found in the catalog tables.

**User response:** Verify if the correct server is being used or if any forms were saved at this server.

---

**ETI2127W** The launch string contains %1, which is an invalid control name.

**Explanation:** The string parsed for launching a file or application has an invalid string denoted by %1.

**User response:** Correct the invalid string before using the launch feature.

---

**ETI2128I** Form %1 saved into %2.

**Explanation:** This message confirms that the form that is denoted by %1 is saved to file denoted by %2.

**User response:** No action necessary.

---

**ETI2129E** General error occurred in expression.

**Explanation:** An error was encountered while evaluating the formula.

**User response:** Verify the formula has no syntax errors or the variables used, if any, are valid.

---

**ETI2130I** %1 database changes will be undone.

**Explanation:** The number of database transactions denoted by %1 will be undone.

**User response:** Click **OK** to continue rollback or **Cancel** to abort.

---

**ETI2131E** An error occurred while running the SQL statement. %s

**Explanation:** An error was encountered when running the SQL statement denoted by %s.

**User response:** Verify the SQL statement is valid.

---

**ETI2132W** Filter is not valid.

**Explanation:** A filter used to sort the result set is not valid.

**User response:** Verify that the filter is valid.

---

**ETI2133W** At least one column must be visible.

**Explanation:** The grid layout should display at least one column.

**User response:** Check the visible check box of at least one column in the columns dialog.

---

**ETI2134W** Unable to have unlocked column(s) on the left side of locked one(s). Do you want to rearrange columns automatically?

**Explanation:** When using the grid layout, it is possible to lock columns starting from the left and moving right.

**User response:** Start locking columns starting from the left, or click **OK** to rearrange columns automatically.

---

**ETI2135W** Variable name must not be empty.

**Explanation:** The variable name used for formulas cannot be empty.

**User response:** Enter a name for the variable.

---

**ETI2136W** Duplicate variable %1 has been found.

**Explanation:** The specified variable, denoted by %1, is a duplicate of another variable.

**User response:** Create a unique variable.

---

**ETI2137W** Variable name %1 must not duplicate column headers.

**Explanation:** The specified variable has the same name as a column name. The variable name cannot be the same as a column name.

**User response:** Create a unique name for the variable.

---

**ETI2138W** Symbols '[' and ']' can only be first and last characters.

**Explanation:** Square brackets can only be used in the variable names as the first and last characters.

**User response:** Specify a variable name with no braces in the middle of the name.

---

**ETI2139W** Variable name %1 contains invalid symbols.

**Explanation:** The specified variable, denoted by %1, contains an invalid character.

**User response:** Change the variable name so that it uses only valid characters.

---

---

**ETI2140W** Variable %1 is a number.

**Explanation:** The specified variable name cannot be a number.

**User response:** Create a variable name that is not a number.

---

**ETI2141W** Hex value is not valid.

**Explanation:** The hexadecimal value is not valid.

**User response:** Enter a valid hexadecimal value.

---

**ETI2142W** You have not fetched all of the data. Do you want to fetch all of the data first?

**Explanation:** All the data from the table needs to be fetched before using the Sort feature or the Replace All feature.

**User response:** Specify **Yes** to fetch all the data from the table.

---

**ETI2143W** Finished searching for %1.

**Explanation:** The value denoted by %1 was not found in a search.

**User response:** Check the value being searched.

---

**ETI2144W** Do you want to copy the processed data into clipboard?

**Explanation:** This message confirms the copying the data into clipboard.

**User response:** Click **OK** to continue or **Cancel** to abort.

---

**ETI2145W** No column values specified, continue with insert?

**Explanation:** Message to confirm inserting an empty row.

**User response:** Click **OK** to continue or **Cancel** to abort.

---

**ETI2146W** Edit is not allowed when there are multiple tables.

**Explanation:** DB2 Table Editor does not support editing multiple tables.

**User response:** Select one table to edit.

---

**ETI2147W** Enter null and enter default values must be different.

**Explanation:** The representation for the default value should be different than the representation of the null value.

**User response:** Enter unique values to represent default and null values.

---

**ETI2148E** Error retrieving column list, the SQL select statement is not valid.

**Explanation:** The SQL statement used to retrieve columns is not valid.

**User response:** Use a valid select SQL statement.

---

**ETI2149W** No column was checked.

**Explanation:** At least one column needs to be checked to create a form using the wizard.

**User response:** Select at least one column.

---

**ETI2150W** No button action was selected.

**Explanation:** At least one button action is needed to create a form using the wizard.

**User response:** Select at least one button action.

---

**ETI2151W** At least one column must contain an explicit value.

**Explanation:** All columns cannot use default values.

**User response:** Enter an explicit value for at least one column.

---

**ETI2152W** Timeout must be a positive integer or zero (to specify no limit).

**Explanation:** The CLI timeout value must be a number greater than zero (in seconds), or the value zero to specify no limit.

**User response:** Enter a valid timeout value.

---

**ETI2153W** Creator is required.

**Explanation:** You must specify a value for the creator.

**User response:** Enter a value for the creator.

---

**ETI2154W** The specified creator is too long.

**Explanation:** The creator you specified is too long. Specify a valid identifier for the creator and try the operation again.

**User response:** Enter a valid identifier for the creator.

---

**ETI2155W** You selected profiles for assignment or unassignment. Do you want to process these profiles before refreshing the list?

**Explanation:** You have specified assignment or unassignment requests that have not yet been saved in the database. You must either save or discard the requests before refreshing the list.

**User response:** Click **Yes** to save them or **No** to discard them.

---

**ETI2156E An error occurred while retrieving the list of user profiles.**

**Explanation:** An error occurred while retrieving the list of matching user profiles at the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Follow the additional messages.

---

**ETI2157I The user profiles were updated.**

**Explanation:** The assignment or unassignment requests you specified have been saved in the database.

**User response:** No action necessary.

---

**ETI2158E An error occurred while updating the user profiles.**

**Explanation:** An error occurred while updating the assignment and unassignment requests you specified. Additional messages produced with this message describe the error in more detail.

**User response:** Follow the additional messages.

---

**ETI2159I The packages were bound.**

**Explanation:** The user and administrator database packages have been bound.

**User response:** You must now grant authority to your users to execute the user packages.

---

**ETI2160E An error occurred while binding the packages.**

**Explanation:** An error occurred while binding the DB2 Table Editor packages. Additional messages produced with this message describe the error in more detail.

**User response:** Verify that the collection name used is valid. Try rebinding the packages under a different collection name.

---

**ETI2161W Name is required.**

**Explanation:** You must specify a value for the name.

**User response:** Enter a value for the name.

---

**ETI2162I All of the required objects already exist.**

**Explanation:** All of the objects referenced by the packages already exist. You do not need to create any additional objects before binding the packages.

**User response:** Continue to bind the packages if necessary.

---

**ETI2163E An error occurred while checking for the existence of the required objects.**

**Explanation:** This message indicates that an error occurred while determining whether or not any of the required Table Editor objects already exist.

**User response:** Call system administrator or customer support.

---

**ETI2164E An error occurred while checking table authorizations.**

**Explanation:** An error occurred while determining whether you have the required table authorizations.

**User response:** Contact the system administrator for authorizations.

---

**ETI2165W No tables were found.**

**Explanation:** DB2 Table Editor did not find any tables with the name and owner information specified.

**User response:** Verify the table information, and try the operation again.

---

**ETI2166W You have not specified any SQL statements to execute. Are you sure that you want to continue**

**Explanation:** You did not enter any SQL statements to create tables or other database objects. This message confirms that you are aware no statements will be executed.

**User response:** Continue if no SQL statements are required, otherwise enter SQL statements to execute.

---

**ETI2167I The SQL statements that you entered were executed.**

**Explanation:** The SQL statements you specified have been successfully executed and the tables and other database objects they created now exist.

**User response:** You can now bind the packages.

---

**ETI2168E An error occurred while executing the specified SQL statements.**

**Explanation:** This message indicates that an error occurred while executing the SQL statements you entered to create the tables required by DB2 Table Editor.

**User response:** Verify that the SQL statements entered are valid.

---

**ETI2169E**    **An error occurred while deleting the schedule.**

**Explanation:** An error occurred while deleting the resource limits group schedule from the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Check additional messages or call technical support.

---

**ETI2170E**    **An error occurred while saving the resource limits group.**

**Explanation:** An error occurred while saving the current resource limits group at the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Check additional messages or call technical support.

---

**ETI2171W**    **Group Name is required.**

**Explanation:** You must specify a value for the Group Name.

**User response:** Enter a value for the group name.

---

**ETI2172E**    **An error occurred while retrieving the resource limits group from the server.**

**Explanation:** An error occurred while retrieving the current resource limits group from the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Check additional messages or call technical support.

---

**ETI2173E**    **An error occurred while saving the resource limits group.**

**Explanation:** An error occurred while saving the current resource limits group at the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Check additional messages or call technical support.

---

**ETI2174E**    **An error occurred while saving the default schedule.**

**Explanation:** An error occurred while saving the changes to the server's default schedule. This may be because there is insufficient disk space on the drive containing the server definition file, or you do not have permission to update the file.

**User response:** Check disk space and permissions to save file.

---



---

**ETI2175E**    **An error occurred while saving the schedule.**

**Explanation:** An error occurred while saving the current resource limits group schedule at the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Check additional messages or call technical support.

---

**ETI2176W**    **From time is required.**

**Explanation:** You must specify a value for the From Time.

**User response:** Enter a value for the From Time.

---

**ETI2177W**    **A schedule with this number is already defined.**

**Explanation:** There is already a schedule in the resource limits group with the specified number. Schedule numbers must be unique within a resource limits group.

**User response:** Specify a different number.

---

**ETI2178W**    **Schedule number must be a positive integer.**

**Explanation:** The Schedule Number value must be a number greater than zero.

**User response:** Enter a number greater than zero.

---

**ETI2179W**    **Schedule number is required.**

**Explanation:** You must specify a value for the Schedule Number.

**User response:** Enter a value for the schedule number.

---

**ETI2180W**    **To time is required.**

**Explanation:** You must specify a value in the To Time field.

**User response:** Enter a value in the To Time field.

---

**ETI2181W**    **Idle Connection Timeout must be a positive integer or zero.**

**Explanation:** The Idle Connection Timeout value must be a number greater than zero (in seconds), or the value zero to specify no limit.

**User response:** Enter a valid Idle Connection Timeout.

---

---

**ETI2182W**    **Server Response Timeout must be a positive integer or zero.**

**Explanation:** The Server Response Timeout value must be a number greater than zero, or the value zero to indicate no limit.

**User response:** Enter a valid value.

---

**ETI2183W**    **Maximum Bytes must be a positive integer or zero.**

**Explanation:** The Maximum Bytes value must be a number greater than zero, or the value zero to specify no limit.

**User response:** Enter a valid value.

---

**ETI2184W**    **Maximum Connections must be a positive integer or zero.**

**Explanation:** The Maximum Connections value must be a number greater than zero, or the value zero to specify no limit.

**User response:** Enter a valid value.

---

**ETI2185W**    **Maximum Rows must be a positive integer or zero.**

**Explanation:** Maximum Rows value must be a number greater than zero, or the value zero to specify no limit.

**User response:** Enter a valid value.

---

**ETI2186W**    **The specified account is too long.**

**Explanation:** The account that was passed to InitializeServer was invalid.

**User response:** Enter a valid account.

---

**ETI2187E**    **An error occurred while granting permission on the tables.**

**Explanation:** An error occurred while setting permissions on the tables. Additional messages produced with this message describe the error in more detail.

**User response:** Check additional messages or call technical support.

---

**ETI2188I**    **Permissions were granted on the tables.**

**Explanation:** You have successfully granted authority to tables to the specified users. They can now use these tables in DB2 Table Editor.

**User response:** No action necessary.

---



---

**ETI2189W**    **A user profile with this creator is already defined.**

**Explanation:** The combination of creator, translation, and environment must be unique for all user profiles. The profile you are trying to create has the same values as an existing profile.

**User response:** Specify a different creator and try the operation again.

---

**ETI2190E**    **An error occurred while creating the user profile.**

**Explanation:** An error occurred while creating the user profile. Additional messages produced with this message describe the error in more detail.

**User response:** Check additional messages or call technical support.

---

**ETI2191I**    **The specified user profile has been created.**

**Explanation:** The user profile you specified has been created and assigned to the resource limits group you are currently working with.

**User response:** No action necessary.

---

**ETI2192W**    **Creator is required.**

**Explanation:** You must specify a value for the creator.

**User response:** Specify a value for the creator.

---

**ETI2193W**    **The specified creator is too long.**

**Explanation:** The creator you entered is too long. Specify a valid identifier for the creator and try the operation again.

**User response:** Enter a valid creator.

---

**ETI2194W**    **The specified collection ID is too long.**

**Explanation:** The collection ID you entered is too long. Specify a valid collection ID for the package and try the operation again.

**User response:** Enter a valid collection ID.

---

**ETI2195W**    **The specified owner is too long.**

**Explanation:** The object owner you entered is too long.

**User response:** Specify a valid identifier for the object owner and try the operation again.

---

---

**ETI2196W**    **Exiting without terminating connections can cause serious system problems. Are you sure that you want to exit?**

**Explanation:** You are attempting to exit while still connected to at least one database server.

**User response:** Terminate server connections before exiting.

---

**ETI2197W**    **A connection has not responded to a request for %1 seconds.**

**Explanation:** DB2 Table Editor is terminating the connections that were established with any database server. These connections must be terminated before exiting the application. However, a request to terminate has not completed within the specified time limit. This could indicate a problem with the database server, a problem with your CPI-C software or TCP software, or an internal application error. Additional messages produced with this message describe the options available to you.

**User response:** Follow additional messages or contact the system administrator.

---

**ETI2198E**    **An error occurred while granting permission to execute the user packages to the specified user IDs.**

**Explanation:** An error occurred while setting permissions on the DB2 Table Editor user packages or procedures. Additional messages produced with this message describe the error in more detail.

**User response:** Follow additional messages or contact the system administrator or technical support.

---

**ETI2199I**    **Permission to execute the user packages has been granted to the specified user IDs.**

**Explanation:** You have successfully granted authority to execute the DB2 Table Editor packages to the specified users. They can now run DB2 Table Editor.

**User response:** No action necessary.

---

**ETI2200E**    **An error occurred while revoking permission to execute the user packages from the specified user IDs.**

**Explanation:** An error occurred while setting permissions on the DB2 Table Editor packages. Additional messages produced with this message describe the error in more detail.

**User response:** Follow additional messages or contact the system administrator or technical support.

---



---

**ETI2201I**    **Permission to execute the user packages has been revoked from the specified user IDs.**

**Explanation:** You have successfully revoked authority to execute the DB2 Table Editor packages from the specified users. They can no longer run DB2 Table Editor.

**User response:** No action necessary.

---

**ETI2202W**    **You must specify at least one user ID.**

**Explanation:** You must enter at least one user ID for which to grant or revoke permission to execute the DB2 Table Editor packages.

**User response:** If you do not want to perform this action, click **Cancel**.

---

**ETI2203W**    **The specified RDB name was not found at the server.**

**Explanation:** The database server returned an error indicating that the RDB name specified for this server is invalid.

**User response:** Confirm the correct value to use and enter it in the Server Parameters dialog. For DB2 for MVS or z/OS database servers, this value is NOT necessarily the same as the subsystem ID.

---

**ETI2204I**    **The connection to the server was established.**

**Explanation:** DB2 Table Editor was able to connect to the database server. This indicates your network and database configuration is most likely correct. You can continue to use DB2 Table Editor.

**User response:** No action necessary.

---

**ETI2205W**    **A server with this name is already defined.**

**Explanation:** There is already a database server with this name defined in the current server definition file. Servers must have unique names.

**User response:** Specify a different name and try the operation again.

---

**ETI2206W**    **You must specify a number between 1 and 65535 for Port Number.**

**Explanation:** Enter the TCP port number that the database server is configured to use. Valid port numbers are from 1 to 65535. The default port number is 446, but servers are not required to use this value. The administrator of the database server can provide you with this information.

**User response:** Enter a valid port number.

---

**ETI2207W Database alias is required.**

**Explanation:** You must specify a database alias to create a connection using CLI.

**User response:** Enter a valid database alias.

---

**ETI2208W Host name is required.**

**Explanation:** Enter the host name of the machine on which the database server is running. The administrator of the database server can provide you with this information. The value that you enter can be either the host name of the machine, or the machine's address, in dotted decimal notation (for example, 1.2.3.4).

**User response:** Enter a valid host name.

---

**ETI2209W RDB name is required.**

**Explanation:** You must specify a value for the RDB Name.

**User response:** Enter a value for the RDB name.

---

**ETI2210W Symbolic Destination Name is required.**

**Explanation:** You must specify a value for the CPI-C Symbolic Destination Name.

**User response:** Enter a valid Symbolic Destination Name.

---

**ETI2211I Users of the server definition file that you are currently editing must supply their own user information. The information that you supply now applies only to you.**

**Explanation:** Each user must provide their own user ID and password to access a database server. This information is not part of a server definition file. When you specify a user ID and password on the subsequent Set User Information dialog box, it is only for your use, not your users.

**User response:** Have each user provide their own user ID and password.

---

**ETI2212W Collection ID is required.**

**Explanation:** You must specify a collection ID for the package you are binding. Database security mechanisms may restrict which values you may specify for a collection ID. See your database administrator for more information.

**User response:** Enter a valid collection ID.

---

**ETI2213W The specified collection ID is too long.**

**Explanation:** The collection ID you entered is too long. Specify a valid collection ID for the package and try the operation again.

**User response:** Enter a valid collection ID.

---

**ETI2214I You cannot assign the default resource limits group.**

**Explanation:** The default resource limits group is only used when a user is not explicitly assigned to a resource limits group, or when none of the schedules in the user's group is currently in effect. You cannot assign the default resource limits group to a user.

**User response:** Do not assign the default resource limits group to a user.

---

**ETI2215I You cannot delete the default resource limits group.**

**Explanation:** The default resource limits group is only used when a user is not explicitly assigned to a resource limits group, or when none of the schedules in the user's group is currently in effect. You cannot delete the default resource limits group.

**User response:** Do not delete the default resource limits group.

---

**ETI2216E An error occurred while retrieving the resource limits group.**

**Explanation:** An error occurred while retrieving the selected resource limits group from the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Follow the additional messages or contact technical support or an administrator.

---

**ETI2217I The resource limits group was created.**

**Explanation:** The resource limits group was created at the database server.

**User response:** No action necessary.

---

**ETI2218E An error occurred while retrieving the list of resource limits groups.**

**Explanation:** An error occurred while retrieving the list of resource limits at the database server. Additional messages produced with this message describe the error in more detail.

**User response:** Follow the additional messages or contact technical support or an administrator.

---

---

**ETI2219I** The user profiles were deleted.

**Explanation:** The user profiles you specified have been deleted.

**User response:** No action necessary.

---

**ETI2220E** An error occurred while deleting the user profiles.

**Explanation:** An error occurred while deleting the specified user profiles. Additional messages produced with this message describe the error in more detail.

**User response:** Follow the additional messages or contact technical support or an administrator.

---

**ETI2221E** An error occurred while retrieving the user profile.

**Explanation:** An error occurred while retrieving the specified user profile. Additional messages produced with this message describe the error in more detail.

**User response:** Follow the additional messages or contact technical support or an administrator.

---

**ETI2222I** Are you sure that you want to create (or recreate) the sample tables?

**Explanation:** If you confirm this action, the sample tables are created, and any existing sample tables are overwritten. If you cancel this action, the tables are not created.

**User response:** Confirm this to create sample tables or cancel to not create tables.

---

**ETI2223I** The sample tables were created.

**Explanation:** DB2 Table Editor sample tables were created.

**User response:** No action necessary.

---

**ETI2224E** An error occurred while creating the sample tables.

**Explanation:** An error occurred while creating the sample tables.

**User response:** Contact technical support or a system administrator.

---

**ETI2225E** An error occurred while saving the user profile.

**Explanation:** An error occurred while saving the specified user profile to the database. Additional messages produced with this message describe the error in more detail.

**User response:** Contact a system administrator or technical support.

---



---

**ETI2226W** The specified resource limits group name is too long.

**Explanation:** The resource limits group name you entered is too long.

**User response:** Specify a valid name and try the operation again.

---

**ETI2227W** The file %1 could not be created.

**Explanation:** An error occurred while trying to save a copy of the current server definition file.

**User response:** Check to make sure that the specified drive is valid, and that there is not an existing file with the same name that is read-only.

---

**ETI2228E** Re-opening the original file%1 failed.

**Explanation:** DB2 Table Editor Console was unable to open the original server definition file.

**User response:** Click **Open** on the File menu to select a different server definition file, or restart DB2 Table Editor Console.

---

**ETI2229W** The file %1 is read-only and cannot be opened.

**Explanation:** DB2 Table Editor Console must be able to write to the server definition file you open. The file you selected is read-only.

**User response:** Either make the file writable or select a different file.

---

**ETI2230E** An error occurred while saving the file %1.

**Explanation:** An error occurred while trying to save a copy of the current server definition file.

**User response:** Make sure that the drive is valid, and that there is not an existing file with the same name that is read-only, and then try the operation again.

---

**ETI2231W** No servers are defined in the local DB2 client that can be imported.

**Explanation:** DB2 Table Editor is unable to import any of the servers defined in the local client.

**User response:** Check that the servers are properly configured.

---

**ETI2232E** An initialization error occurred.

**Explanation:** An unexpected internal error occurred.

**User response:** Exit DB2 Table Editor, restart Windows, and try the operation again. If the problem persists, contact your system administrator or technical support.

---



---

**ETI2233E OLE initialization failed.**

**Explanation:** DB2 Table Editor was unable to initialize the OLE system libraries via the OleInIt() call.

**User response:** Make sure both DB2 Table Editor and OLE 2 are properly installed on your system.

---

**ETI2234E An unhandled internal error has occurred (code = %1). Exit the DB2 Table Editor Console and restart Windows.**

**Explanation:** An unexpected exception condition occurred. This may indicate a memory allocation failure, file access error, or an internal application error.

**User response:** Restart Windows and try the operation again. If the problem persists, contact your system administrator or technical support.

---

**ETI2235W Owner is required.**

**Explanation:** You must specify a value for the Owner field.

---

**User response:** Enter a valid owner.

---

**ETI2236I Additional error messages may be contained in %1.**

**Explanation:** When binding packages at a server that is being accessed through the DB2 UDB call level interface, error messages can be written to a separate log file.

**User response:** Consult the file specified in the message text for more information about why the bind process failed. Consult your database administrator for further assistance.

---

**ETI2237I History not available**

**Explanation:** No history data was found for the data that you selected. This can be caused by a missing DB2 versioning table, or because no matching data is found in the DB2 versioning table.

**User response:** If one does not already exist, create a versioning table for the DB2 table that is being browsed or edited.

---

## Gathering diagnostic information

Before you report a problem with DB2 Table Editor to IBM Software Support, you need to gather the appropriate diagnostic information.

### Procedure

Provide the following information for all DB2 Table Editor problems:

- A clear description of the problem and the steps that are required to re-create the problem
- All messages that were issued as a result of the problem
- Product release number and the number of the last program temporary fix (PTF) that was installed
- The version of DB2/IMS that you are using and the type and version of the operating system that you are using

Provide additional information based on the type of problem that you experienced:

**For online abends, provide the following information:**

- A screen capture of the panel that you were using when the abend occurred
- The job log from the TSO session that encountered the abend
- The job log from the server
- A description of the task that you were doing before the abend occurred

**For errors in batch processing, provide the following information:**

- The complete job log
- Print output
- Contents of the data sets that were used during the processing

**For problems with the Tools Customizer trace data set name:**

If you cannot allocate the trace data set, the trace data set runs out of

space, or IBM Software Support asks for it, you will need to identify the name of the trace data set. The name of the trace data set depends on the prefix setting in the TSO profile. To identify the name of the trace data set, you must know the prefix setting.

- If PREFIX is set, the name of the trace data set is *prefix*.CCQ.TRACE, where *prefix* is the TSO prefix that you specified in the profile.
- If NOPREFIX is set, the name of the trace data set is *user\_ID*.CCQ.TRACE, where *user\_ID* is your TSO user ID.

---

## Chapter 10. Tools Customizer reference

Before you use Tools Customizer, you should understand the Tools Customizer terminology and the data sets that Tools Customizer uses during customization.

---

### Tools Customizer terminology

Tools Customizer uses several unique terms that you should be familiar with before you begin to use Tools Customizer.

#### Products and components

How an IBM Tool is packaged determines whether it is referred to as a product or as a component in the Tools Customizer documentation and interface. An IBM Tool that is ordered as a stand-alone entity (that is, not as part of a solution pack) is referred to as a product. An IBM Tool that is part of a solution pack is referred to as a component. Some IBM Tools are available in both formats; therefore, the same IBM Tool can be referred to as a product or as a component depending on how it is packaged.

#### DB2 entry

You can customize DB2 Table Editor on one or more DB2 entries. A DB2 entry can be any of the following items:

##### DB2 subsystem

A distinct instance of a relational database management system (RDBMS) that is not part of a data sharing group. An example of a DB2 subsystem name is DB01.

##### DB2 group attach name

DB2 Table Editor does not support DB2 group attach names.

##### DB2 data sharing member

A DB2 subsystem that is assigned by the cross-system coupling facility (XCF) to a data sharing group. An example of a DB2 data sharing member name is DB02.

Tools Customizer maintains the following lists of DB2 entries:

##### Associated list

The list of DB2 entries that are associated with DB2 Table Editor. If the product to be customized requires DB2 entries, you can customize DB2 Table Editor only on DB2 entries that are in the associated list. When you customize DB2 Table Editor, this list is displayed in the DB2 Entries, Associations, and Parameter Status section of the Customizer Workplace panel.

You can add and copy DB2 entries to the associated list. When you add or copy DB2 entries to the associated list, the entries are associated with DB2 Table Editor.

##### Master list

The list of all DB2 entries that are defined but are not associated with DB2 Table Editor. Tools Customizer obtains information about these DB2 entries either from entries that were created manually or from the customizations of other products that were discovered. If you remove a DB2 entry from the associated list, the DB2 entry is

added to the master list. When you create a new DB2 entry, it is added to the master list, and when you associate the new entry with DB2 Table Editor, it is removed from the master list and added to the associated list. The master list is displayed on the Associate a DB2 Entry for Product panel.

If the associated list does not have the DB2 entries on which you want to customize DB2 Table Editor, you can associate existing entries from the master list to the associated list.

You can create new DB2 entries and copy existing entries to the master list.

### **High-level qualifier**

The high-level qualifier is considered to be all of the qualifiers except the lowest level qualifier. A high-level qualifier includes a mid-level qualifier.

### **Product parameters**

Parameters that are specific to DB2 Table Editor. These parameters are defined by DB2 Table Editor and are stored in a data member that is defined by DB2 Table Editor.

### **LPAR parameters**

Parameters on the local LPAR that are required to customize DB2 Table Editor. These parameters are defined by Tools Customizer and are stored in an LPAR parameter data member.

### **DB2 parameters**

Parameters for a DB2 entry. These parameters are defined by Tools Customizer and are stored in a DB2 parameter data member.

### **Status type**

#### **Product, LPAR, and DB2 entry status type**

After you specify the product that you want to customize, the product, the LPAR, and the DB2 entries have a status. The status is partly based on whether required parameters are defined. For some products, LPAR parameters or DB2 parameters might not be required. In these cases, the status is Not Required.

To customize DB2 Table Editor, all of the required parameters must be defined.

If required parameters for the the product parameters, LPAR parameters, or DB2 parameters are not defined, the status of the parameters is Incomplete. Define values for parameters by manually editing them or by generating the customization jobs and specifying values for all of the required parameters that are displayed on the panels.

When values for all of the required parameters are defined, the status is Ready to Customize. Customization jobs can be generated only when all of the required parameters are defined and the status is Ready to Customize or Customized for the product parameters, LPAR parameters, and DB2 parameters for the DB2 entries on which DB2 Table Editor will be customized.

The following table shows the meaning of the status types. Each status is defined differently for each type of parameter.

Table 32. Status types for the product, the LPAR, and the DB2 entries

Status	Product	LPAR	DB2 entries
Incomplete	The required product parameters are not defined, or the required product parameters are defined but LPAR parameters, DB2 parameters, or both are not defined.	The required parameters are not defined.	The required parameters are not defined.
Discovered	The product parameter definitions were discovered by using the product Discover EXEC.	N/A	N/A
Ready to Customize	The required product, LPAR, and DB2 parameters are defined, the status is Ready to Customize or Customized for the LPAR and at least one associated DB2 entry. You can generate the customization jobs.	The required LPAR parameters are defined or LPAR parameters are not required.	The required DB2 parameters are defined or DB2 parameters are not required.
Customized	The jobs are customized on the local LPAR.	The jobs are customized for the product or for all of the associated DB2 entries on the local LPAR.	The jobs are customized for the DB2 entry.
Errors in Customization	N/A	N/A	Errors occurred while the customization jobs were being generated.
Not Required	N/A	LPAR parameters are not required.	DB2 parameters are not required.

**Related tasks:**

“Creating and associating DB2 entries” on page 48

You can create new DB2 entries and associate them with DB2 Table Editor.

“Copying DB2 entries” on page 60

You can copy associated and not associated DB2 entries to other DB2 entries or to new DB2 entries.

“Removing DB2 entries” on page 61

You can remove DB2 entries from the associated list.

---

## Data sets that Tools Customizer uses during customization

Tools Customizer uses several unique data sets during the customization process. Familiarize yourself with these data sets before you begin to use Tools Customizer.

Several different data sets are required to customize DB2 Table Editor with Tools Customizer. These data sets are supplied by DB2 Table Editor, supplied by Tools Customizer, or allocated by Tools Customizer.

DB2 Table Editor provides the following data sets:

**Metadata library**

Contains the metadata for the product to be customized. Tools Customizer uses the metadata to determine which tasks, steps, and parameters to display on the Product Parameters panel, the LPAR Parameters panel, and the DB2 Parameters panel. This data set also contains the templates that Tools Customizer uses to generate the customization jobs.

The metadata library naming convention is *high\_level\_qualifier*.SETIDENU, where *high\_level\_qualifier* is all of the segments of the data set name except the lowest-level qualifier.

You specify the metadata library on the Specify the Metadata Library panel. READ access to this data set is required.

**Discover EXEC library**

Contains the DB2 Table Editor Discover EXEC. When you customize DB2 Table Editor, you can use the Discover EXEC to automatically retrieve and store product information, such as parameter values from an already customized product. Tools Customizer saves the discovered information in the data store.

The default name of the data set is the high-level qualifier for the metadata library plus a lowest-level qualifier. For DB2 Table Editor, the lowest-level qualifier is SETIDENU. You can change the default value on the Discover Customized Product Information panel. EXECUTE access to this data set is required.

Tools Customizer provides the following data sets:

**Tools Customizer metadata library**

Contains the metadata for the DB2 and LPAR parameters that are required to customize DB2 Table Editor. Tools Customizer uses the metadata to determine which parameters to display on the DB2 Parameters panel and the LPAR Parameters panel. In addition, Tools Customizer uses information in the metadata library to determine whether additional DB2 and LPAR parameters need to be displayed on these panels. As you customize different products, different DB2 and LPAR parameters might need to be defined.

The default name of the data set is DB2TOOL.CCQ110.SCCQDENU. You can change the default value on the Tools Customizer Settings panel. READ access to this data set is required.

**Tools Customizer table library**

Stores information about jobs that are customized. Job information that is stored includes a description of the job, its member name and template name, the SSID, and when the job was generated.

The default name of the data set is DB2TOOL.CCQ110.SCCQTENU. WRITE access to this data set is required.

Tools Customizer requires that the following data sets exist during the customization process. If the data sets do not exist, Tools Customizer automatically allocates them.

### Discover output data set

Contains the output that is generated when you run the DB2 Table Editor Discover EXEC. The DB2 Table Editor Discover EXEC retrieves the metadata and values for the parameters from a previous customization of DB2 Table Editor.

The default name of the data set is DB2TOOL.CCQ110.DISCOVER. You can change the default value on the Tools Customizer Settings panel or the Discover Customized Product Information panel. WRITE access to this data set is required.

### Data store data set

Contains product, LPAR, and DB2 parameter values, and DB2 entry associations. Tools Customizer uses this data set to permanently store all information that is acquired about the product, DB2 subsystems, and LPAR when you customize products on the local LPAR.

The default name of the data set is DB2TOOL.CCQ110.DATASTOR. You can change the default value on the Tools Customizer Settings panel. WRITE access to this data set is required.

### Customization library

Contains the customization jobs that Tools Customizer generates for DB2 Table Editor.

Tools Customizer checks whether a customization library name was specified for more than one instance of the same version of the same product. If the same customization library name is specified for more than one product of the same version, the CCQD123E message is issued to prevent you from overwriting previously generated customization jobs. Ensure that you specify unique qualifier for the customization library for each instance of the product.

To customize DB2 Table Editor, submit the members of the data set in the order in which they are displayed on the Finish Product Customization panel.

The data set naming convention is *hlq.\$LPAR\_name\$.xyzvrm*, where:

- *hlq* is the value of the **Customization library qualifier** field on the Tools Customizer Settings panel (CCQPSET)
- *LPAR\_name* is the four-character LPAR name
- *xyzvrm* is the three-letter product identifier with the version, release, and modification level

For example, the data set name might be DB2TOOL.PRODUCT.CUST.\$MVS1\$.XYZ410.

WRITE access to this data set is required.

Tools Customizer allocates the data sets for the discover output, the data store, and the customization library with the attributes that are shown in the following table:

Table 33. Data set attributes for allocating the Discover output, data store, and customization library data sets

Data set	Organization	Record format	Record length	Block size	Data set name type
Discover output data set	PO	Variable block	16383	32760	LIBRARY

Table 33. Data set attributes for allocating the Discover output, data store, and customization library data sets (continued)

Data set	Organization	Record format	Record length	Block size	Data set name type
Data store data set	PO	Variable block	16383	32760	LIBRARY
Product customization library	PO	Fixed block	80	32720	LIBRARY

**Restrictions:**

- Multiple users cannot simultaneously share the discover output data set, data store data set, Tools Customizer metadata library, and metadata library.
- You cannot share the data store data set across multiple LPARs with shared DASD or copy the data store data set to another LPAR. Tools Customizer creates many cross-references between product and DB2 associations. Therefore, if you share or copy the data store data set, member names that are empty or that do not exist might be generated.



---

## Chapter 11. Reference

Reference information supports the tasks that you must complete to install, customize, and use DB2 Table Editor.

---

### Sample library members

The sample library (SAMPLIB) that is supplied with DB2 Table Editor contains JCL that you can use as a model to create your own jobs.

The DB2 Table Editor SAMPLIB includes the following sample jobs:

*Table 34. DB2 Table Editor sample jobs*

Sample member	Description	Required authority
ALZCFG	The ALZCFG sample member provides sample JCL that you can copy and modify to create your own control statements.	You must have SYSADM authority to submit this job.
ALZRPT	The ALZRPT sample member provides generic JCL to run the DB2 / IMS Product_name Log Reporter for a specified log input file.	You must have SYSADM or DBADM authority to submit this job.
ALZUKMF	The ALZUKMF sample member provides an example of how to set up a module.  ALZUKMF is used by DB2 / IMS Product_name modules (and associated routines) to define fields in IMS log records. Each log record that is supported by DB2 / IMS Product_name must have a module. Every field in the log record is defined by using a ALZUKMF macro call.	You must have SYSADM or DBADM authority to submit this job.

---

### Keyboard shortcuts

You can use keyboard shortcuts to do all DB2 Table Editor functions.

The following table shows the shortcut keys that are supported by DB2 Table Editor.

*Table 35. Keyboard shortcuts*

Keyboard shortcut	Action
Tab	Moves focus between objects
Space	Selects an object
Ctrl+Space	Puts an object in edit mode
Shift+Space	Changes the current edit object
Alt+Shift+Q	Moves focus to the Query view

Table 35. Keyboard shortcuts (continued)

Keyboard shortcut	Action
Alt+Shift+R	Moves focus to the Reports view
Alt+Shift+S	Moves focus to the Summary view
Alt+Shift+T	Moves focus to the Tabular view
Alt+Shift+U	Moves focus to the Umbrella view

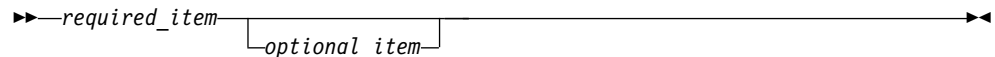
## How to read syntax diagrams

The following rules apply to the syntax diagrams that are used in this information:

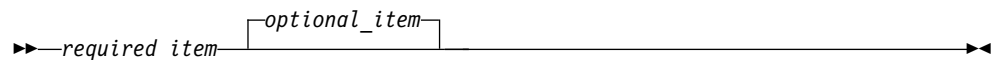
- Read the syntax diagrams from left to right, from top to bottom, following the path of the line. The following conventions are used:
  - The >>--- symbol indicates the beginning of a syntax diagram.
  - The ---> symbol indicates that the syntax diagram is continued on the next line.
  - The >--- symbol indicates that a syntax diagram is continued from the previous line.
  - The --->< symbol indicates the end of a syntax diagram.
- Required items appear on the horizontal line (the main path).



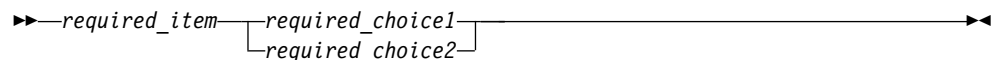
- Optional items appear below the main path.



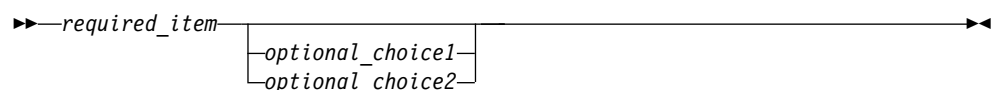
If an optional item appears above the main path, that item has no effect on the execution of the syntax element and is used only for readability.



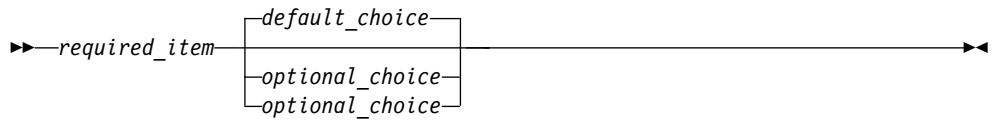
- If you can choose from two or more items, they appear vertically, in a stack. If you *must* choose one of the items, one item of the stack appears on the main path.



If choosing one of the items is optional, the entire stack appears below the main path.



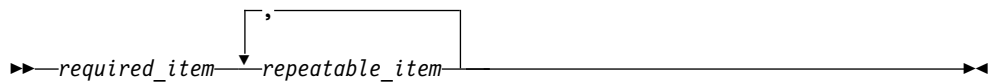
If one of the items is the default, it appears above the main path, and the remaining choices are shown below.



- An arrow returning to the left, above the main line, indicates an item that can be repeated.



If the repeat arrow contains a comma, you must separate repeated items with a comma.



A repeat arrow above a stack indicates that you can repeat the items in the stack.

- Keywords, and their minimum abbreviations if applicable, appear in uppercase. They must be spelled exactly as shown. Variables appear in all lowercase italic letters (for example, *column-name*). They represent user-supplied names or values.
- Separate keywords and parameters by at least one space if no intervening punctuation is shown in the diagram.
- Enter punctuation marks, parentheses, arithmetic operators, and other symbols exactly as shown in the diagram.
- Footnotes are shown by a number in parentheses; for example, (1).



---

## Notices

This information was developed for products and services offered in the U.S.A.

This material may be available from IBM in other languages. However, you may be required to own a copy of the product or product version in that language in order to access it.

IBM may not offer the products, services, or features discussed in this document in other countries. Consult your local IBM representative for information on the products and services currently available in your area. Any reference to an IBM product, program, or service is not intended to state or imply that only that IBM product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any IBM intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any non-IBM product, program, or service.

IBM may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents. You can send license inquiries, in writing, to:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive  
Armonk, NY 10504-1785  
U.S.A.

For license inquiries regarding double-byte (DBCS) information, contact the IBM Intellectual Property Department in your country or send inquiries, in writing, to:

Intellectual Property Licensing  
Legal and Intellectual Property Law  
IBM Japan Ltd.  
19-21, Nihonbashi-Hakozakicho, Chuo-ku  
Tokyo 103-8510, Japan

**The following paragraph does not apply to the United Kingdom or any other country where such provisions are inconsistent with local law:**

INTERNATIONAL BUSINESS MACHINES CORPORATION PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some states do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. IBM may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

Any references in this information to non-IBM Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this IBM product and use of those Web sites is at your own risk.

IBM may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Licensees of this program who wish to have information about it for the purpose of enabling: (i) the exchange of information between independently created programs and other programs (including this one) and (ii) the mutual use of the information which has been exchanged, should contact:

IBM Director of Licensing  
IBM Corporation  
North Castle Drive, MD-NC119  
Armonk, NY 10504-1785  
US.

Such information may be available, subject to appropriate terms and conditions, including in some cases, payment of a fee.

The licensed program described in this information and all licensed material available for it are provided by IBM under terms of the IBM Customer Agreement, IBM International Program License Agreement, or any equivalent agreement between us.

Any performance data contained herein was determined in a controlled environment. Therefore, the results obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products. Questions on the capabilities of non-IBM products should be addressed to the suppliers of those products.

All statements regarding IBM's future direction or intent are subject to change or withdrawal without notice, and represent goals and objectives only.

This information is for planning purposes only. The information herein is subject to change before the products described become available.

This information contains examples of data and reports used in daily business operations. To illustrate them as completely as possible, the examples include the names of individuals, companies, brands, and products. All of these names are fictitious and any similarity to the names and addresses used by an actual business enterprise is entirely coincidental.

COPYRIGHT LICENSE:

This information contains sample application programs in source language, which illustrate programming techniques on various operating platforms. You may copy, modify, and distribute these sample programs in any form without payment to IBM, for the purposes of developing, using, marketing or distributing application programs conforming to the application programming interface for the operating platform for which the sample programs are written. These examples have not been thoroughly tested under all conditions. IBM, therefore, cannot guarantee or imply reliability, serviceability, or function of these programs. The sample programs are provided "AS IS", without warranty of any kind. IBM shall not be liable for any damages arising out of your use of the sample programs.

Each copy or any portion of these sample programs or any derivative work, must include a copyright notice as follows:

© (your company name) (year). Portions of this code are derived from IBM Corp. Sample Programs. © Copyright IBM Corp. \_enter the year or years\_. All rights reserved.

If you are viewing this information softcopy, the photographs and color illustrations may not appear.

---

## Trademarks

IBM, the IBM logo, and [ibm.com](http://www.ibm.com)<sup>®</sup> are trademarks or registered marks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the web at "Copyright and trademark information" at: <http://www.ibm.com/legal/copytrade.shtml>.

Adobe, the Adobe logo, Postscript, and the Postscript logo are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States, and/or other countries.

Intel, Intel logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks and logos are trademarks or registered trademarks of Oracle and/or its affiliates.

---

## Terms and conditions for product documentation

Permissions for the use of these publications are granted subject to the following terms and conditions:

**Applicability:** These terms and conditions are in addition to any terms of use for the IBM website.

**Personal use:** You may reproduce these publications for your personal, noncommercial use provided that all proprietary notices are preserved. You may not distribute, display or make derivative work of these publications, or any portion thereof, without the express consent of IBM.

**Commercial use:** You may reproduce, distribute and display these publications solely within your enterprise provided that all proprietary notices are preserved. You may not make derivative works of these publications, or reproduce, distribute or display these publications or any portion thereof outside your enterprise, without the express consent of IBM.

**Rights:** Except as expressly granted in this permission, no other permissions, licenses or rights are granted, either express or implied, to the publications or any information, data, software or other intellectual property contained therein.

IBM reserves the right to withdraw the permissions granted herein whenever, in its discretion, the use of the publications is detrimental to its interest or, as determined by IBM, the above instructions are not being properly followed.

You may not download, export or re-export this information except in full compliance with all applicable laws and regulations, including all United States export laws and regulations.

IBM MAKES NO GUARANTEE ABOUT THE CONTENT OF THESE PUBLICATIONS. THE PUBLICATIONS ARE PROVIDED "AS-IS" AND WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, NON-INFRINGEMENT, AND FITNESS FOR A PARTICULAR PURPOSE.

---

## Privacy policy considerations

IBM Software products, including software as a service solutions, ("Software Offerings") may use cookies or other technologies to collect product usage information, to help improve the end user experience, to tailor interactions with the end user, or for other purposes. In many cases no personally identifiable information is collected by the Software Offerings. Some of our Software Offerings can help enable you to collect personally identifiable information. If this Software Offering uses cookies to collect personally identifiable information, specific information about this offering's use of cookies is set forth below.

This Software Offering does not use cookies or other technologies to collect personally identifiable information.

If the configurations deployed for this Software Offering provide you as customer the ability to collect personally identifiable information from end users via cookies and other technologies, you should seek your own legal advice about any laws applicable to such data collection, including any requirements for notice and consent.

For more information about the use of various technologies, including cookies, for these purposes, see IBM's Privacy Policy at <http://www.ibm.com/privacy> and IBM's Online Privacy Statement at <http://www.ibm.com/privacy/details> the section entitled "Cookies, Web Beacons and Other Technologies" and the "IBM



Software Products and Software-as-a-Service Privacy Statement” at <http://www.ibm.com/software/info/product-privacy>.



---

# Index

## A

- abbreviations
  - data type 110
- ABOUT
  - command 111
- accessibility
  - keyboard shortcuts 7, 313
  - overview 7
- activity log, ispf 115
- ALZCFG sample member 313
- ALZRPT sample member 313
- ALZUKMF sample member 313
- APF authorization 22
- attributes 2
- attributes, control 164, 166

## B

- B
  - command 111
- benefits 4
- binding
  - packages 130
- blank row, insert 89
- byte limits
  - over shooting 156

## C

- C
  - command 113, 114
- CANcel
  - command 115
- capital letters, force changes to 112
- capitalize
  - column 88
- CAPS OFF
  - command 112
- CAPS ON
  - command 112
- catalog
  - creating extension 134
  - extended catalog 152
  - for non-host servers 134
  - for ODBC servers 134
  - shared using ODBC 154
  - sharing 134
- CC
  - command 114
- cell
  - action 199
- change
  - command 114
- change all, command 98
- change, hex data 199
- change, hexadecimal data 199
- changes
  - commit 200
- changes, saving to DB2 95
- changing the SDF 136

- CHECK OFF
  - command 112
- CHECK ON
  - command 112
- checking, turn off 112
- checking, turn on 112
- CLI
  - driver-specific keywords 147
- CLI connectivity
  - requirements 153
- CLI environment
  - configure 16
- column
  - action 198
  - editing 88
- Column Editor, panel 86
- columns, select 111
- columns, select all 111
- command
  - ABOUT 111
  - B 111
  - C 113, 114
  - CANcel 115
  - CAPS OFF 112
  - CAPS ON 112
  - CC 114
  - change 114
  - CHECK OFF 112
  - CHECK ON 112
  - copy 113
  - COUNT 112
  - D 114
  - DD 114
  - delete 114
  - E 111
  - EXCLUDE ALL 111
  - EXPORT (EXP) 115
  - F 111, 114
  - FIND 96, 97, 114
  - FORM 111
  - HEX 112
  - HEX OFF 112
  - HEX ON 112
  - I 113
  - INCLUDE ALL 111
  - insert 113
  - LOAD 112
  - PF3 111
  - PF4 112
  - PRINTX 115
  - R 113
  - repeat row 113
  - RR 113
  - S 111
  - SAVE 112
  - SQL 111
  - U 114
  - undo delete 114
  - UU 114
  - ZOOM 112
- command, change all 98

- command, exclude all 77, 78, 80
- command, hex off 88
- command, hex on 88
- command, include all 77, 78, 80
- command, zoom 86
- commands
  - DISPLAY MEPL 100
  - line 111
- commit
  - changes 200
- communications 15
- component
  - User 65, 193
  - Windows User 65, 193
- components 4
- configuration
  - DB2 Table Editor 125
- configuration file, setup 111
- configure
  - CLI environment 16
  - Developer component 160
  - network environment 15
  - SNA environment 15
  - Table Editor 67
  - TCP/IP environment 16
- configuring
  - governing 137
- connectivity
  - DB2 for Windows CLI 129
  - DRDA over SNA 129
  - DRDA over TCP/IP 129
  - ODBC 129
- connectivity options
  - CPI-C 144
  - DRDA using SNA 144
  - DRDA using TCP/IP 144
  - ODBC 144
  - setting 144
- connectivity, DB2 Table Editor 14
- Console
  - add new server to server definition file 148
  - configure server definition file 148
  - delete server from server definition file 148
  - edit SDF server parameters 148
  - enable dynamic ODBC server definitions 148
  - getting started 148
  - import DB2 databases 148
  - main tasks 148
  - set global connectivity options 148
- Console component
  - hardware requirements 13
  - start 123
- control properties 173
- controls 2
- controls and their attributes 166
- controls and their attributes and properties 164
- controls and their properties 173

- cookie policy 317
- copy
  - command 113
- Copy DB2 Entries panel 60
- copy, row 113, 114
- copyright notice, displaying 111
- COUNT
  - command 112
- CPI-C and LU 6.2 15
- creating
  - DB2 Table Editor catalog tables 130
  - DB2 Table Editor objects 130
- CSORT 72, 106
- customization 31
  - associated list
    - adding DB2 entries 48
    - overview 307
  - associating DB2 entries 48
  - browsing parameters 60
  - changing parameters 41
  - component 307
  - copying DB2 entries 60
  - Create a DB2 Entry panel 48
  - creating DB2 entries 48
  - customization jobs
    - deleting 63
    - displaying 62
    - generating 57
    - maintaining 63
    - regenerating 57
    - renaming 63
    - sort sequence 58
    - submitting 58, 62
  - customization library
    - deleting jobs 63
    - maintaining 63
    - overview 310
    - recustomizing 63
    - renaming jobs 63
  - customization library qualifier
    - specifying 36
  - Customized status 307
  - Customizer Workplace panel 57
  - customizing a new version of a product 41
  - customizing a product for the first time 41
  - customizing settings 36
  - data sets
    - customization library 310
    - data store 310
    - Discover EXEC library 310
    - metadata library 310
  - data store
    - overview 310
  - data store data set
    - specifying 36
  - DB2 data sharing members
    - adding 48
    - associating 48
    - copying 60
    - creating 48
  - DB2 entries 307
    - adding 48
    - associating 48
    - copying 60
    - creating 48
- customization (*continued*)
  - DB2 entries (*continued*)
    - defining 57
    - deleting 61, 62
    - generating jobs for 57
    - removing 61
    - selecting 57
    - specifying 57
    - unassociating 61, 62
  - DB2 group attach field
    - specifying 36
  - DB2 group attach names
    - adding 48
    - associating 48
    - copying 60
    - creating 48
  - DB2 parameters
    - defining 55
    - editing 55
  - DB2 Parameters panel 55
  - DB2 subsystems
    - adding 48
    - associating 48
    - copying 60
    - creating 48
  - defining DB2 parameters 55
  - defining LPAR parameters 53
  - defining parameters 51, 57
  - defining product parameters 51
  - deleting DB2 entries 62
  - deleting jobs 43
  - Discover Customized Product Information panel 46
  - Discover EXEC
    - customizing a new version of a product 41, 42
    - overview 310
    - retrieving product information automatically 46
  - Discovered status 307
  - discovering previous versions 42
  - discovering product information 46
  - displaying jobs 62
  - editing LPAR parameters 53
  - editing parameters 41
  - editing product parameters 51
  - Errors in Customization status 307
  - finding trace data set 203
  - Finish Product Customization panel 58
  - first-time 41
  - first-time customization 41
  - generating jobs 57
  - high-level qualifier 307
  - Incomplete status 307
  - job sort order 58
  - jobs
    - deleting 63
    - displaying 62
    - maintaining 63
    - renaming 63
    - sort order 58
    - submitting 58, 62
  - list of generated jobs 20
  - LPAR parameters
    - defining 53
    - editing 53
- customization (*continued*)
  - LPAR Parameters panel 53
  - LPARs 63
  - maintaining jobs 63
  - master list
    - adding DB2 entries 48
    - Associate DB2 Entry for Product panel 48
    - overview 307
  - metadata libraries
    - specifying 44
  - metadata library
    - overview 310
    - specifying 36
  - modifying parameters 41
  - modifying settings 36
  - multiple instances 36
  - multiple-LPAR environment 63
  - Not Required status 307
  - panels
    - Associate DB2 Entry for Product 48
    - Create a DB2 Entry 48
    - Customizer Workplace 57
    - DB2 Parameters 55
    - Discover Customized Product Information 46
    - Finish Product Customization 58
    - LPAR Parameters 53
    - Product Parameters 51
    - Specify the Metadata Library 44
  - parameter values 22
  - parameters
    - browsing 60
    - defining 51, 57
    - viewing 60
  - preparing to use Tools
    - Customizer 36
  - product 307
  - product parameters 17
    - changing 43
    - defining 51
    - editing 43, 51
    - modifying 43
  - Product Parameters panel 51
  - Ready to Customize status 307
  - recustomization 41, 43
  - recustomizing 43
  - recustomizing a product 41
  - removing DB2 entries 61
  - roadmaps 41
    - customizing for the first time 41
    - first-time customization 41
    - reustomizing 43
  - Specify the Metadata Library panel 44
  - specifying data sets 36
  - specifying metadata libraries 44
  - starting Tools Customizer 35
  - status types
    - Customized 307
    - Discovered 307
    - Errors in Customization 307
    - Incomplete 307
    - Not Required 307
    - Ready to Customize 307
  - submitting jobs 58

- customization (*continued*)
  - terminology 307
  - trace data set 203
  - troubleshooting
    - finding trace data set 203
  - user job card settings
    - specifying 36
  - viewing parameters 60
- customization library
  - overview 310
- customization library qualifier
  - specifying 36
- customizing settings 36

## D

- D
  - command 114
- data 2
- data retrieval
  - buffers 156
  - byte limits 156
  - over shooting 156
  - Query Block Size 156
  - row limits 156
- data set names
  - gathering 17
- data store
  - overview 310
- data store data set
  - specifying 36
- data type
  - abbreviations 110
- data types
  - supported 21
- data, exporting 91
- database 2
- database administration
  - comprehensive solutions 5
- date format 205
  - Informix 205
- DB2 Administration Tool
  - integrating DB2 Table Editor 34
- DB2 group attach field
  - specifying 36
- DB2 Table Editor connectivity 14
- DB2 Table Editor Console
  - add new server to server definition
    - file 148
  - configure server definition file 148
  - delete server from server definition
    - file 148
  - edit server definition file server
    - parameters 148
  - enable dynamic ODBC server
    - definitions 148
  - getting started 148
  - import DB2 databases 148
  - main tasks 148
  - set global connectivity options 148
- DB2 Table Editor main panel 70
- DB2 Table Editor, working with 69
- DB2 Tools Launchpad
  - integrating DB2 Table Editor 33
- DB2, using DB2 Table Editor after
  - migrating to a new version of 41

- DD
  - command 114
- delete
  - command 114
- delete, row 94, 114
- Developer component
  - configure 160
  - hardware requirements 13
- diagnostic information
  - gathering 305
- Discover EXEC
  - overview 310
- disk failure
  - recovering 201
- DISPLAY MEPL command 100
- display, number of rows to be
  - returned 79, 112
- displaying, IBM copyright notice 111
- documentation
  - accessing 6
  - sending feedback 6
- documentation changes 1

## E

- E
  - command 111
- edit
  - table 194
- edit, contents of a long cell 112
- edit, long cell 86
- edit, row with hex editor 112
- edit, table 84
- edit, with hex editor 87
- edit, with hexadecimal editor 87
- editing
  - column 88
  - row 84
  - XML 84
- editing generated SQL statement used to
  - display table data 81
- error, SDF (server definition file) does not
  - appear in Server List 204
- errors, reporting software 100
- ETI\$DPSC panel 79
- ETI\$DSQL panel 81
- ETI\$XML
  - panel 84
- exclude
  - key field 187
- EXCLUDE ALL
  - command 111
- exclude all, command 77, 78, 80
- EXPORT (EXP)
  - command 115
- exporting data 91
- extended catalog
  - adding 148
  - editing 148

## F

- F
  - command 111, 114
- features 4
- filtering information in list controls 180

- find
  - command 114
- FIND
  - command 96, 97
- find, hex data 199
- find, hexadecimal data 199
- first-time customization 41
- FOR MIXED DATA columns, editing 83
- FORM
  - command 111
- form control properties 173
- form controls and their attributes 166
- form controls and their attributes and
  - properties 164
- form mode 90
- forms 2
  - full screen 2
- full-screen forms 2

## G

- governed resources 120
- governing 120, 137
  - assign users to resource limits
    - groups 137
  - control database access 139
  - control resource usage 139
  - create resource limits group 139
  - edit resource limits group
    - schedule 139
  - resource limits 137
  - resource limits groups 137
  - resource limits schedules 137
  - setup 137
- governing, profile use 121
- governing, resource limits group 120

## H

- hardware requirements
  - Console component 13
  - Developer component 13
  - User component 13
- HEX
  - command 112
- hex editor, edit row with 112
- hex editor, edit with 87
- hex editor, turning off 112
- HEX OFF
  - command 112
- hex off, command 88
- HEX ON
  - command 112
- hex on, command 88
- hex, change data 199
- hex, find data 199
- hexadecimal editor, edit with 87
- hexadecimal, change data 199
- hexadecimal, find data 199

## I

- I
  - command 113
- IBM copyright notice, displaying 111

- identifiers
  - format 149
- INCLUDE ALL
  - command 111
- include all, command 77, 78, 80
- Informix
  - date format 205
  - time format 205
- insert
  - command 113
- insert, blank row 89
- insert, row 113
- installation
  - unattended
    - User component 65
- installing
  - User component 65
  - Windows User component 65
- integrating DB2 Table Editor
  - DB2 Administration Tool 34
  - DB2 Tools Launchpad 33
- ispf
  - logging activity 115
- ISPF
  - messages 207
- ISPF component
  - locking 72

## J

- jobs
  - sample 313
- join 2

## K

- key field
  - exclude 187
- keyboard shortcuts 7, 313

## L

- large objects 194
  - opening 194
- legal notices
  - cookie policy 317
  - notices 317
  - programming interface
    - information 317
    - trademarks 317
- line commands 111
- links
  - non-IBM Web sites 319
- list controls 180
  - filtering information in 180
- LOAD
  - command 112
- load libraries
  - APF authorizing 22
- LOB 194
  - opening 194
- LOCK TABLE 72
- locking
  - ISPF component 72
  - table 191
- logging activity, ispf 115

- long cell, edit 86
- long cell, edit or view contents 112
- long cell, view or edit contents 112
- LU6.2 and CPI-C 15

## M

- matching patterns
  - wildcards 150
- messages
  - ISPF 207
  - overview 206
- metadata library
  - overview 310
  - specifying 36
- migrating to a new version of DB2, Using
  - DB2 Table Editor after 41
- modifying settings 36

## N

- network environment
  - configure 15
- notices 317
- number of rows to be returned,
  - display 79, 112

## O

- ODBC
  - advanced DSN settings 147
  - connectivity
    - DB2 data 153
    - DB2 Table Editor catalog 153
    - Informix data sources 153
    - requirements 153
  - data sources 154
  - driver manager 154
  - driver-specific keywords 147
  - enabling dynamic definition of
    - servers 144
  - supported features 154
- opening, table 75
- overview 1

## P

- package maintenance 120
- packages 120
  - list of 155
- Packages wizard
  - bind options 133
  - binding packages 131
  - creating catalog 131
  - creating objects 131
- panel
  - ETI\$XML 84
  - XML Parser ISPF Interface 84
- panel, Column Editor 86
- panel, DB2 Table Editor main panel 70
- panel, ETI\$DPSC 79
- panel, ETI\$DSQL 81
- panel, Select Columns 75
- panel, Table Selection 75

- panels
  - Copy DB2 Entries 60
- parameters
  - customization 22
- PF3
  - command 111
- PF4
  - command 112
- preparing to use Tools Customizer 36
- primary keys 197
- primary table 161
- PRINTX
  - command 115
- problems
  - diagnostic information about 305
- programming interface information 317
- properties 3
- properties, control 164, 173

## R

- R
  - command 113
- reader comment form 6
- recovery procedures
  - overview 201
- repeat row
  - command 113
- repeat, row 93, 113
- requirements
  - software
    - Table Editor ISPF component 14
    - Table Editor on Windows 14
- resource limits
  - assign users 137
  - creating groups 139
  - governing 137, 139
  - groups 137
  - schedules 137
- resource limits group 120, 122
  - assign users 141
  - assigning user profiles to 143
  - listing of available 143
- schedule
  - creating 139, 140
  - editing 139, 140
  - effective days 151
  - effective time 151
  - modeling on existing 140
  - multiple schedules for one
    - group 140
  - options, account information 140
  - options, API access 140
  - options, bind packages 140
  - options, confirm database
    - updates 140
  - options, export data 140
  - options, fetch all rows 140
  - options, fetch limits 140
  - options, isolation level 140
  - options, LOBs 140
  - options, maximum
    - connections 140
  - options, Report center 140
  - options, save data 140
  - options, saved queries only 140
  - options, SQL verbs 140

- resource limits group (*continued*)
  - schedule (*continued*)
    - options, table editor 140
    - options, time outs 140
    - options, user interface access 140
    - schedule priority 151
    - time differences 151
- resources, governed 120
- return to the previous screen 111
- roadmaps
  - customizing for the first time 41
  - first-time customization 41
- row
  - action 197
  - editing 84
  - XML 84
- row limits
  - data retrieval 156
  - over shooting 156
- row, copy 113, 114
- row, delete 94, 114
- row, insert 113
- row, repeat 93, 113
- row, undo delete 114
- row, undo deletion 95
- rows
  - sort 72, 106
  - columns 72, 106
- rows to be returned, display number 79, 112
- RR
  - command 113

**S**

- S
  - command 111
- sample library members
  - overview 313
- sample tables 123
- SAVE
  - command 112
- saving changes to DB2 95
- screen readers and magnifiers 7
- SDF 67, 125
- SDF, changing 136
- SDF, does not appear in Server List 204
- search and change, in a table 97, 98
- search, table 96, 97
- select all, columns 111
- Select Columns panel 75
- select, columns 111
- server definition file 67, 125
  - connectivity 129
  - creating new 126
  - default 150
  - deleting a server from 148
  - multiple 150
  - sample SDF 150
  - setting security parameters 128
- server parameters
  - overview 149
- service information 6
- set up, configuration file 111
- SNA connectivity
  - requirements 153

- SNA environment
  - configure 15
- software
  - requirements
    - Table Editor ISPF component 14
    - Table Editor on Windows 14
- software requirements
  - Table Editor ISPF component 14
  - Table Editor on Windows 14
- sort 72, 106
- SORT 72, 73, 106, 107
- sort columns 72, 106
- sort rows 72, 106
- sorting 73, 107
- special characters
  - matching patterns 150
- specifying data sets 36
- SQL
  - command 111
- SQL, viewing or editing generated SQL
  - statement used to display table data 81
- starting
  - Console component 123
  - User component 193
  - Windows User component 193
- starting DB2 Table Editor 111
- subsystem termination
  - recovering 202
- summary of changes 1
- support
  - required information 305
- support information 6
- supported
  - data types 21
- syntax diagrams
  - how to read 314

**T**

- table
  - cell 199
  - column 198
  - edit 194
  - locking 191
  - row 197
- Table Editor
  - configure 67
- Table Selection panel 75
- table, display for editing 79
- table, edit 84
- table, opening 75
- table, search and change in 97, 98
- table, searching a 96, 97
- tables
  - sample 123
- TCP/IP and WinSock 15
- TCP/IP connectivity
  - requirements 152
- TCP/IP environment
  - configure 16
- technotes 6
- terminology 2
- Tools Customizer
  - associated list
    - adding DB2 entries 48
    - overview 307

- Tools Customizer (*continued*)
  - associating DB2 entries 48
  - browsing parameters 60
  - component 307
  - Copy DB2 Entries panel 60
  - copying DB2 entries 60
  - Create a DB2 Entry panel 48
  - creating DB2 entries 48
  - customization jobs
    - deleting 63
    - displaying 62
    - generating 57
    - maintaining 63
    - renaming 63
    - sort sequence 58
    - submitting 58, 62
  - customization library
    - deleting jobs 63
    - maintaining 63
    - recustomizing 63
    - renaming jobs 63
  - customization library qualifier
    - specifying 36
  - Customized status 307
  - Customizer Workplace panel 57
  - customizing a new version of a product 41, 42
  - customizing a product for the first time 41
  - data sets
    - customization library 310
    - data store 310
    - Discover EXEC library 310
    - metadata library 310
  - data store data set
    - specifying 36
  - DB2 data sharing members
    - adding 48
    - associating 48
    - copying 60
    - creating 48
  - DB2 entries 307
    - adding 48
    - associating 48
    - copying 60
    - creating 48
    - defining 57
    - deleting 61, 62
    - generating jobs for 57
    - removing 61
    - selecting 57
    - specifying 57
    - unassociating 61, 62
  - DB2 group attach field
    - specifying 36
  - DB2 group attach names
    - adding 48
    - associating 48
    - copying 60
    - creating 48
  - DB2 parameters
    - defining 55
    - editing 55
  - DB2 Parameters panel 55
  - DB2 subsystems
    - adding 48
    - associating 48

- Tools Customizer (*continued*)
  - DB2 subsystems (*continued*)
    - copying 60
    - creating 48
  - defining DB2 parameters 55
  - defining LPAR parameters 53
  - defining parameters 51, 57
  - defining product parameters 51
  - deleting DB2 entries 62
  - deleting jobs 43
  - Discover Customized Product Information panel 46
  - Discover EXEC
    - customizing a new version of a product 41, 42
    - retrieving product information automatically 46
  - Discovered status 307
  - discovering product information 46
  - displaying jobs 62
  - editing LPAR parameters 53
  - editing product parameters 51
  - Errors in Customization status 307
  - features 32
  - finding trace data set 203
  - Finish Product Customization panel 58
  - first-time customization 41
  - generating jobs 57
  - high-level qualifier 307
  - Incomplete status 307
  - job sort order 58
  - jobs
    - deleting 63
    - displaying 62
    - maintaining 63
    - renaming 63
    - submitting 62
  - list of generated jobs 20
  - LPAR Parameters panel 53
  - maintaining jobs 63
  - master list
    - adding DB2 entries 48
    - Associate DB2 Entry for Product panel 48
    - overview 307
  - metadata libraries 44
    - specifying 44
  - metadata library
    - specifying 36
  - multiple instances 36
  - multiple-LPAR environment 63
  - Not Required status 307
  - overview 32
  - panels
    - Associate DB2 Entry for Product 48
    - Copy DB2 Entries 60
    - Create a DB2 Entry 48
    - Customizer Workplace 57
    - DB2 Parameters 55
    - Discover Customized Product Information 46
    - Finish Product Customization 58
    - LPAR Parameters 53
    - Product Parameters 51
    - Specify the Metadata Library 44

- Tools Customizer (*continued*)
  - parameters
    - browsing 60
    - viewing 60
  - preparing to use 36
  - product 307
  - product parameters 17
    - changing 43
    - editing 43
    - modifying 43
  - Product Parameters panel 51
  - Ready to Customize status 307
  - recustomization 41
  - recustomizing a product 41, 43
  - removing DB2 entries 61
  - roadmaps
    - customizing a new version of a product 42
    - recustomizing a product 43
    - using the Discover EXEC 42
  - Specify the Metadata Library panel 44
  - specifying metadata libraries 44
  - starting 35
  - status types
    - Customized 307
    - Discovered 307
    - Errors in Customization 307
    - Incomplete 307
    - Not Required 307
    - Ready to Customize 307
  - submitting jobs 58
  - terminology 307
  - trace data set 203
  - user job card settings
    - specifying 36
  - using the Discover EXEC 42
  - viewing parameters 60
  - trace data set
    - finding 203
  - tracing
    - activating 146
    - problem resolution 146
  - trademarks 317
  - troubleshooting, DB2 Table Editor 201
  - turn off, checking 112
  - turn on, checking 112

## U

- U
  - command 114
  - unattended installation
    - User component 65
  - undo delete
    - command 114
  - undo delete, row 114
  - undo row deletion 95
  - UNICODE data, editing 83
  - User component 193
    - hardware requirements 13
    - installing 65
    - starting 193
    - unattended installation 65
  - user information
    - setting 135

- user job card settings
  - specifying 36
- user profile
  - creating new 142
  - resource limits group 142
- user profiles
  - assigning to resource limits group 142
  - create user profiles 143
  - creating 142
- UU
  - command 114

## V

- validation rules 3
- view contents of a long cell 112
- viewing generated SQL statement used to display table data 81

## W

- what's new 1
- wildcards
  - search 150
- Windows User component 193
  - installing 65
  - starting 193
- WinSock and TCP/IP 15
- working with, DB2 Table Editor 69

## X

- XML
  - editing 84
  - row 84
- XML Parser ISPF Interface
  - panel 84

## Z

- ZOOM
  - command 112
  - zoom, command 86







Product Number: 5697-G65

Printed in USA

SC19-3781-05

