IRM



Session: 409160

iSeries. mySeries.

iSeries Access for Web: Database Access

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Session title: iSeries Access for Web: Database

Access

Session ID: 409160

Agenda Key: 46CK

Speaker: Warren Acker

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Agenda

- · iSeries Access for Web Overview
- · Database Overview
- · End user/Administrator tasks
- · Extract Server Data
- Working with SQL Tables
- Copying data to the iSeries
- · Run SQL and the SQL Wizard
- SQL output types and options
- Output destinations
- Importing Client Access Data Transfer requests
- · Managing saved requests
- Support for WebSphere Portal Server
- Summary
- Questions

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iSeries Access for Web is software that runs on the iSeries server. It provides access to various iSeries functions through a browser and provides a user-centric, web-based view of iSeries or AS/400 applications and information. No software required to be installed on the client, other than a web browser.

iSeries Access for Web functions include:

- Printers printer output viewing, printers, shared printers, and output queues
- Messages user messages, message queues, send messages
- Jobs work with jobs and server jobs
- 5250 user interface
- **Database** run SQL statements, work with tables, upload data, manage frequently run requests, extract server object information
- Files work with files in the iSeries integrated file system or within NetServer file shares, upload files to the integrated file system or a NetServer share.
- Command run iSeries commands from the browser.

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iSeries Access for Web Overview

To get hands on information about iSeries Access for Web functionality, attend or get the materials for:

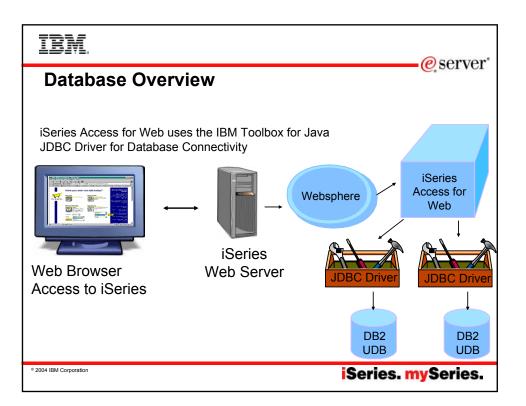
Sessions 35LA-36LA: OPEN LAB: iSeries Access for Web

Or

Visit the iSeries Access for Web Page.

http://www.ibm.com/servers/eserver/iseries/access/web/

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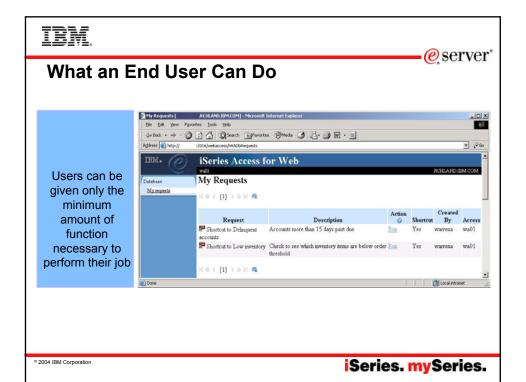
iSeries Access for Web - Database Functions



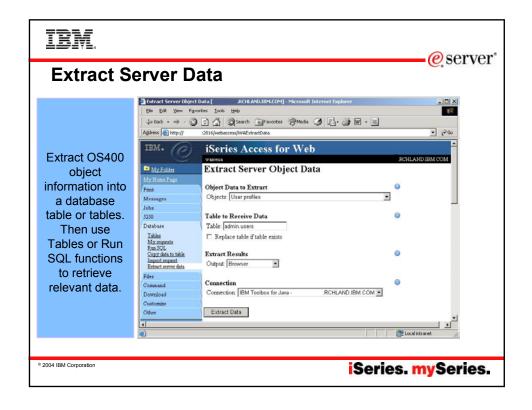
iSeries Access for Web has a very robust set of capabilities for working with DB2 UDB on the iSeries

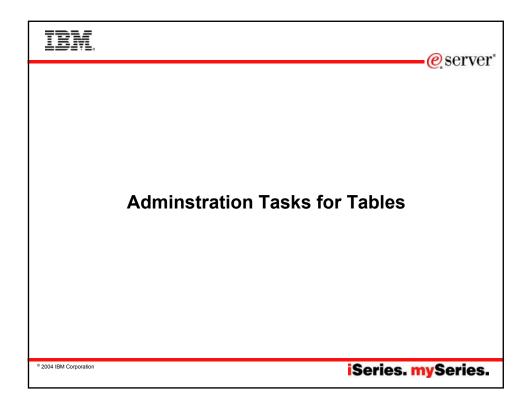
- Tables view, update, insert records into, or delete records from SQL tables.
- My Requests run, copy, delete, rename saved requests, or create and manage shortcuts.
- Run SQL run a SQL statement. The SQL wizard may be used to help create a SELECT statement.
- Copy data to table Copy data from a workstation file to a DB2 table on the iSeries.
- Import request Import an iSeries Access for Windows/Client Access Data Transfer request profile.
- Extract server data Allows for mining of OS/400 object data

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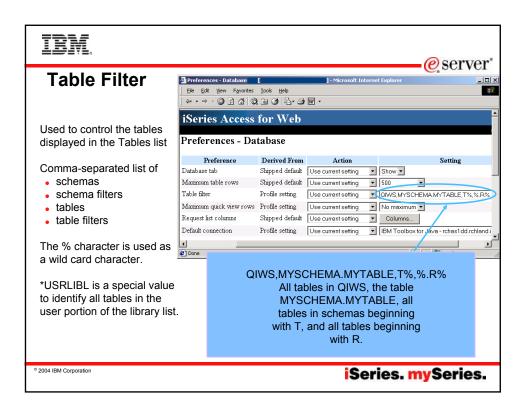


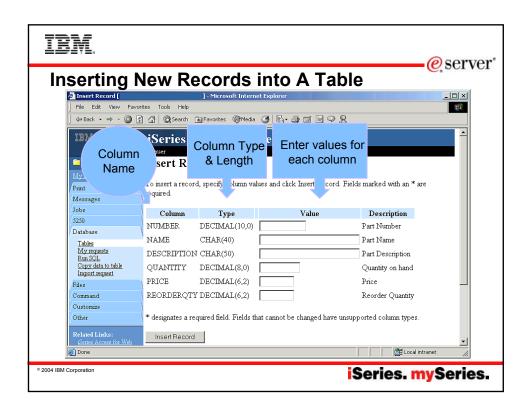


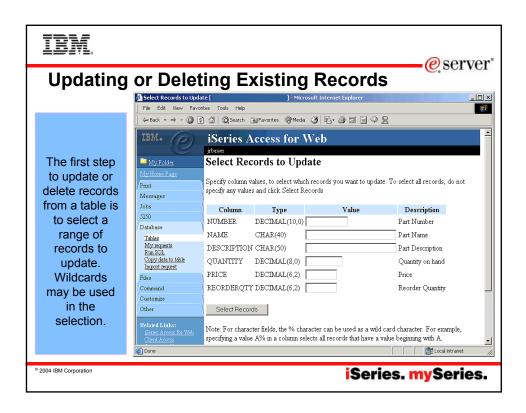


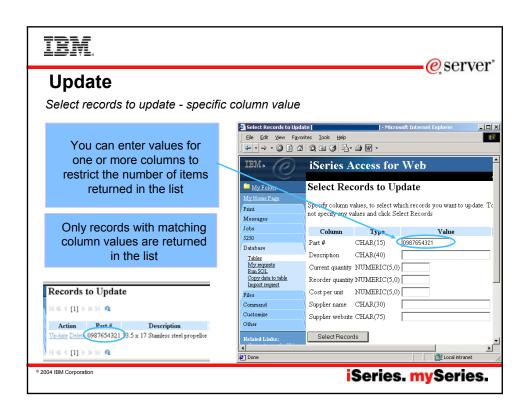


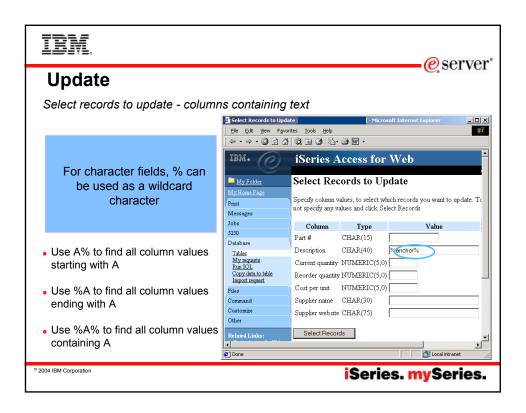


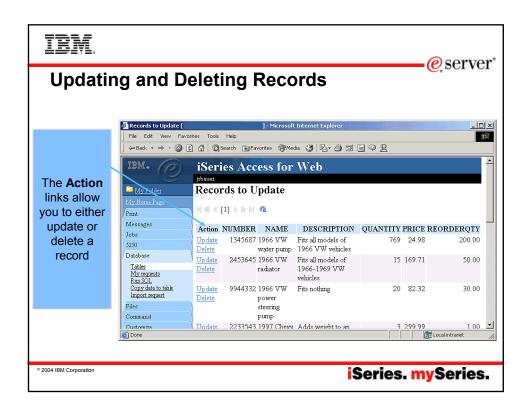


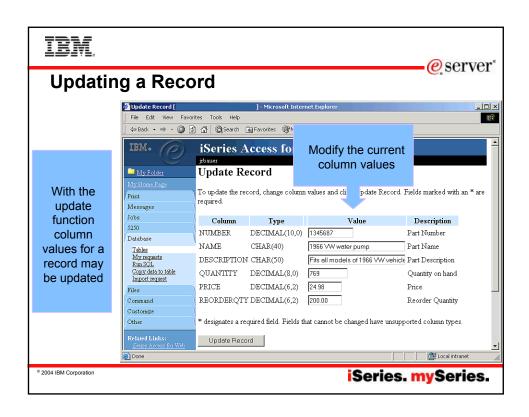


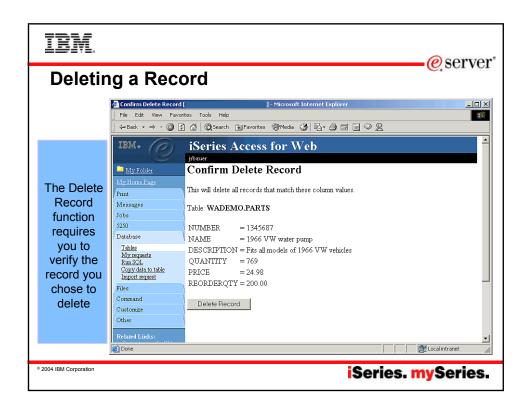


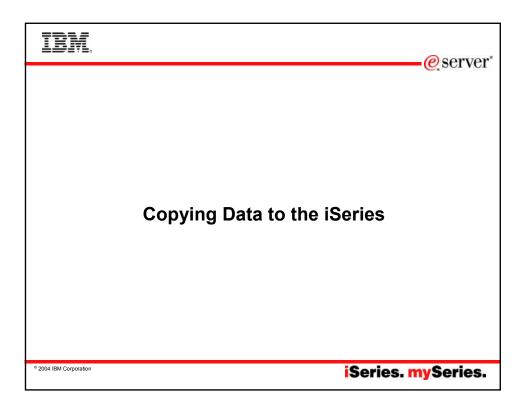


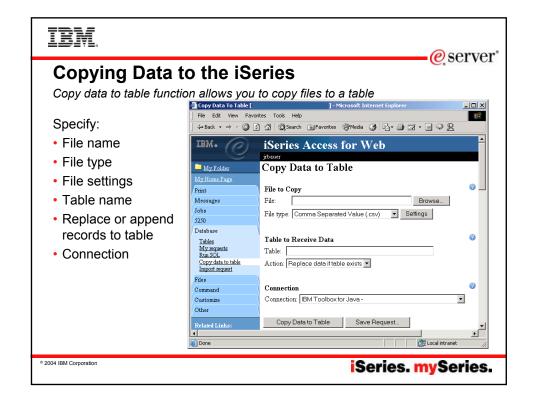


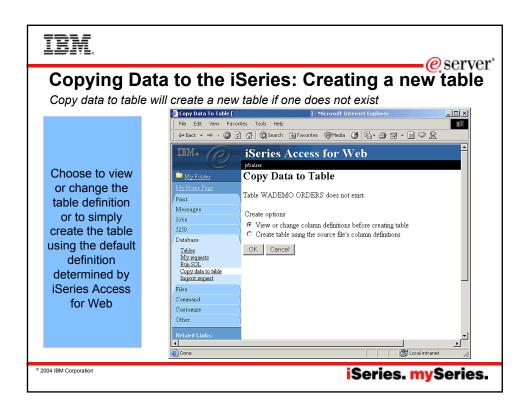


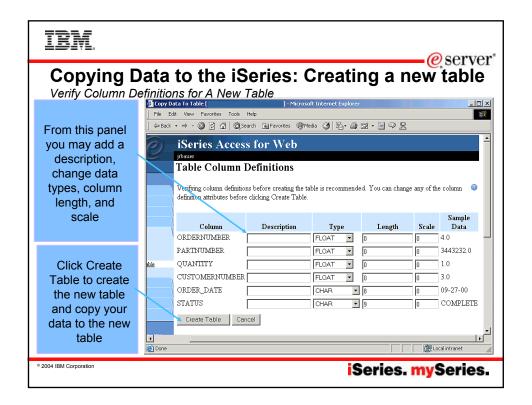














Copy Data to Table

Notes and Restrictions

- Data within a column needs to be the same type. This means a column that contains numeric data should only contain numeric data.
- Only first sheet of data is supported when using Microsoft Excel and Lotus spreadsheets
- Date/Time columns must be in a string format. Excel and Lotus date and time formats are not supported.
- Not all file types supported by Run SQL can be used for Copy Data To Table
- A saved Copy Data To Table request will always ask you to enter the name of the workstation file to copy the data from. This is done for security of your workstation data.

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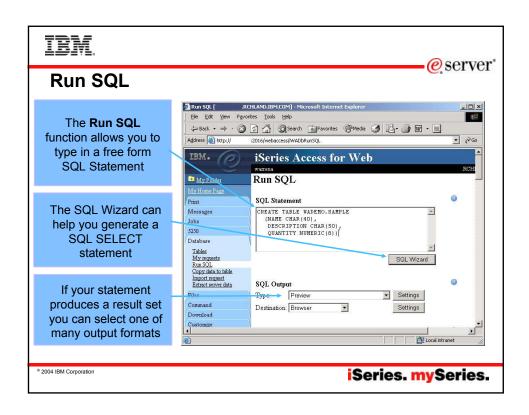
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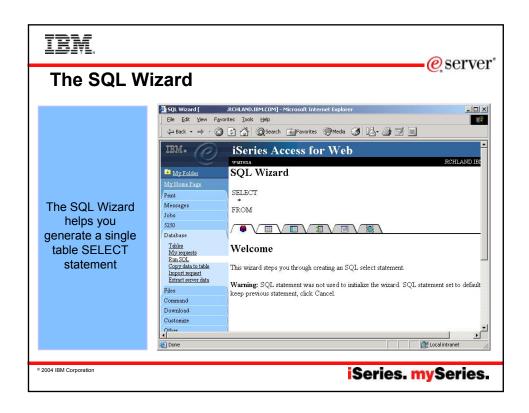
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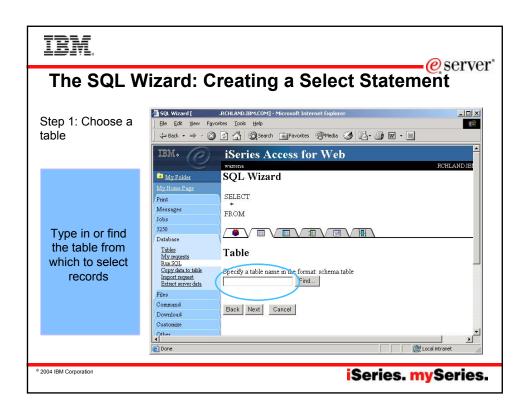
eserver*

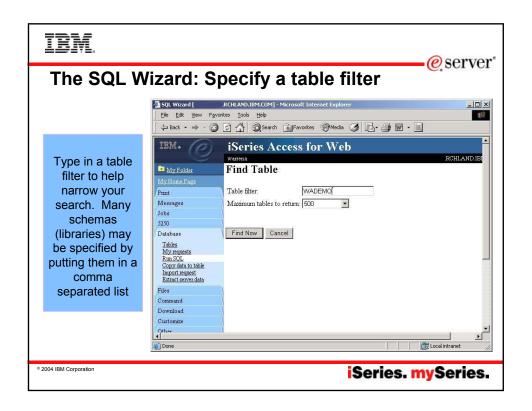
Run SQL and the SQL Wizard

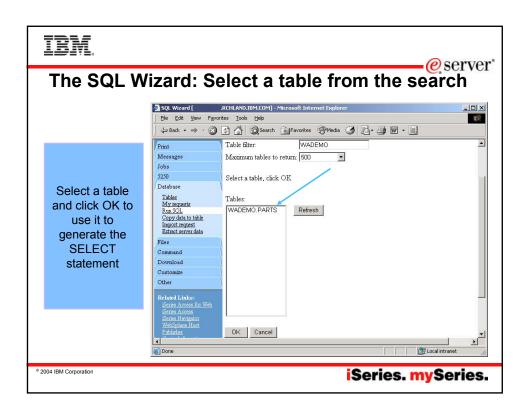
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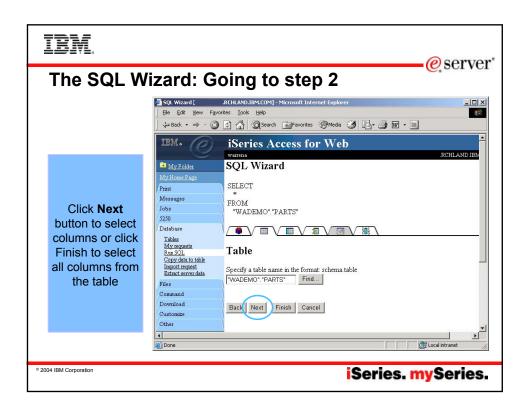


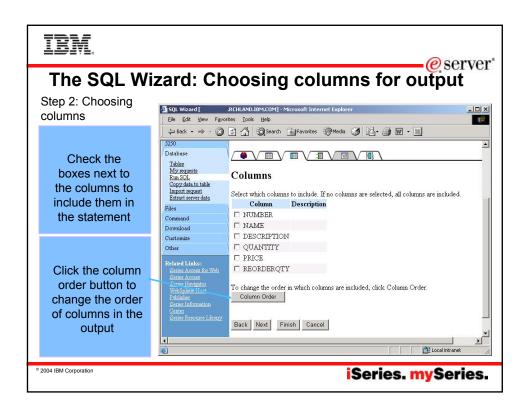


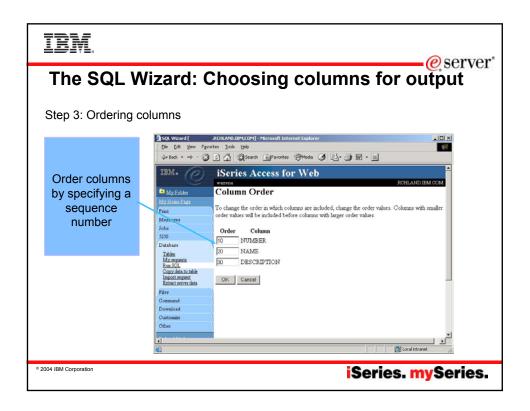


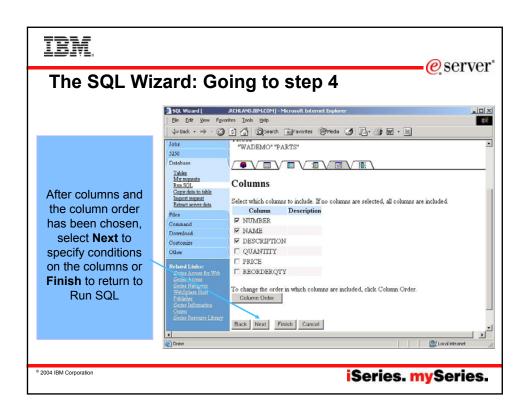


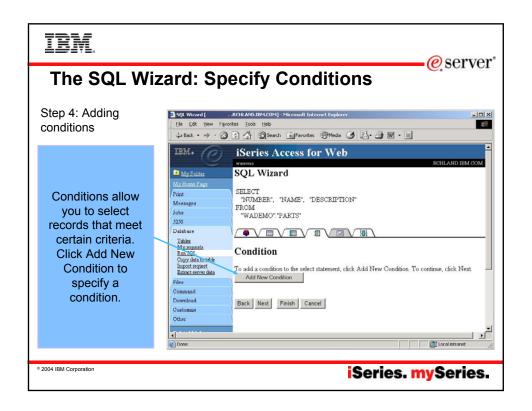


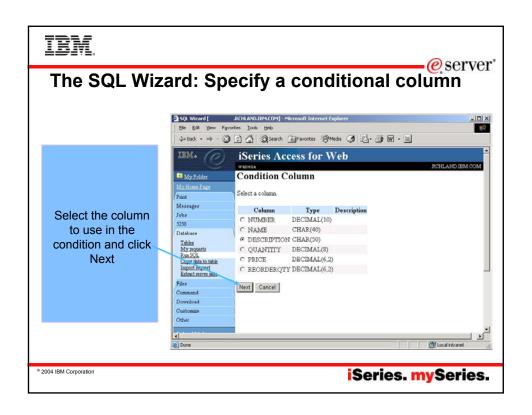


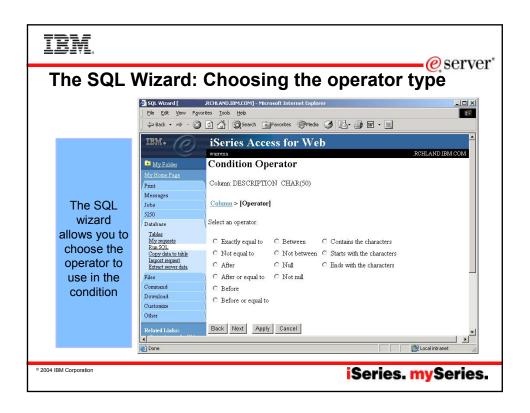


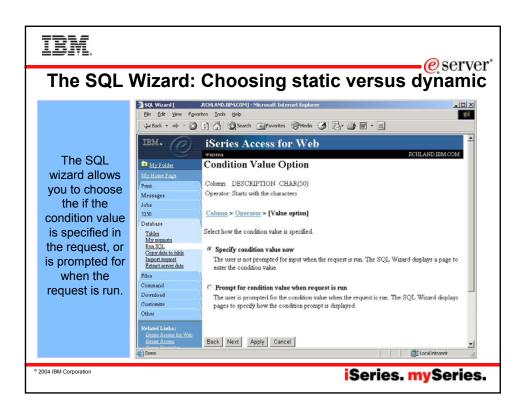


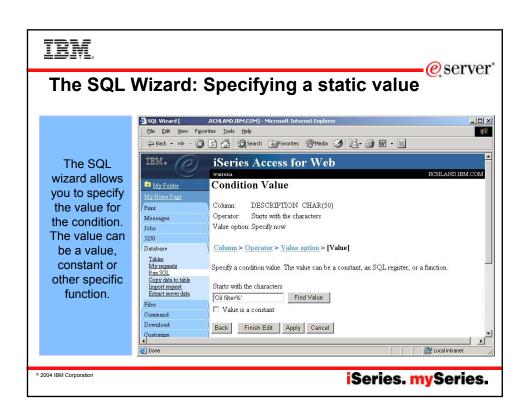


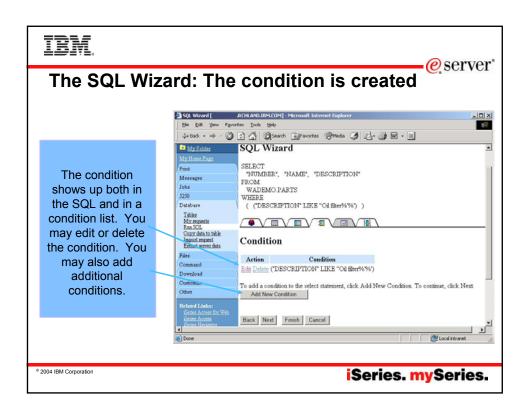


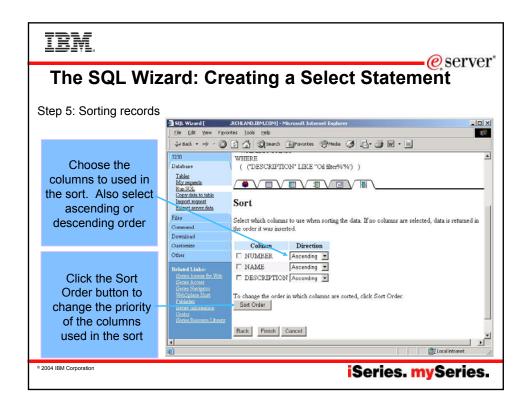


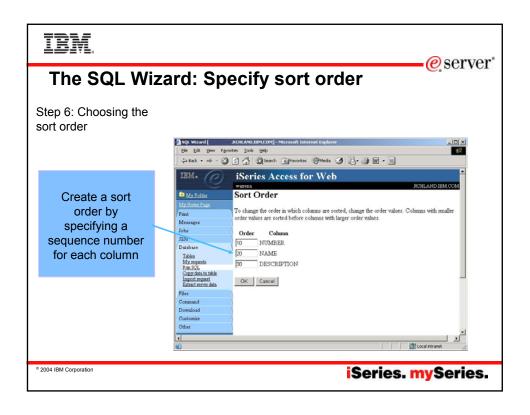


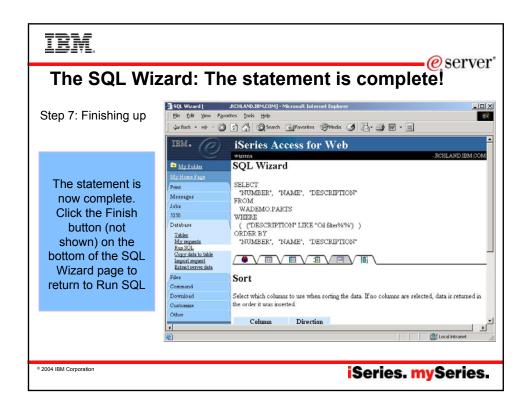


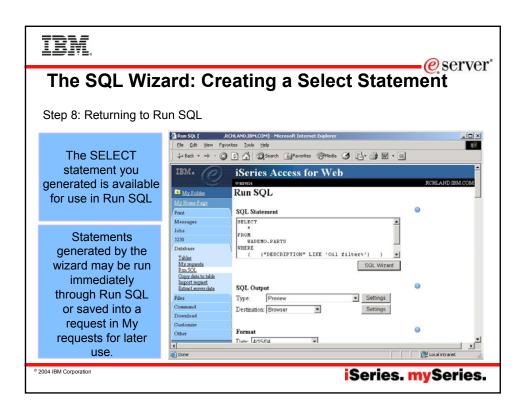


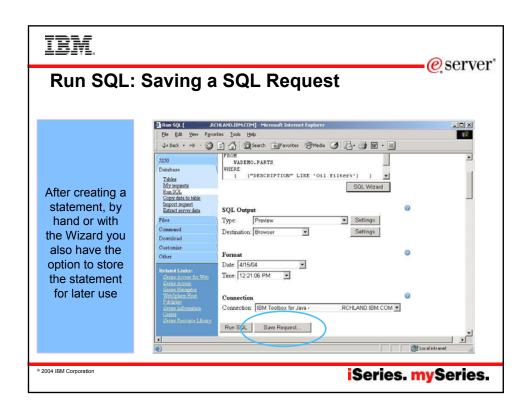


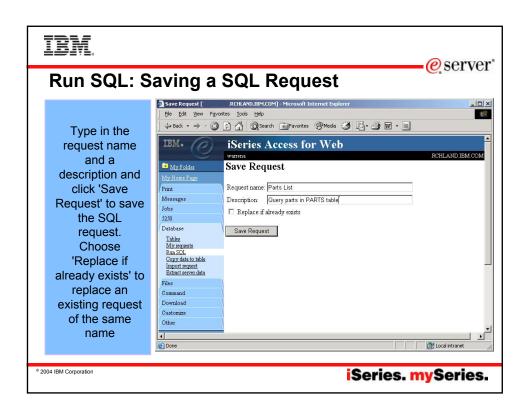


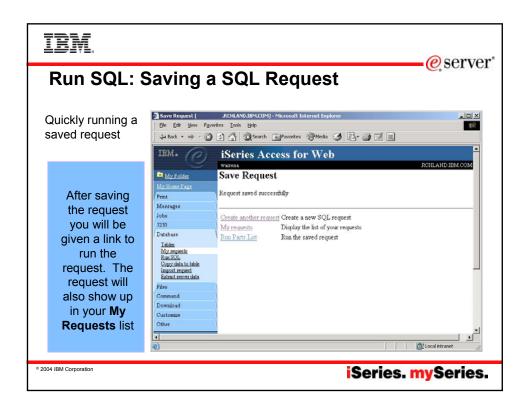


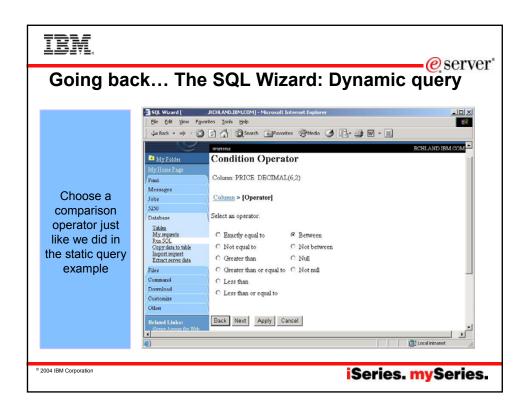


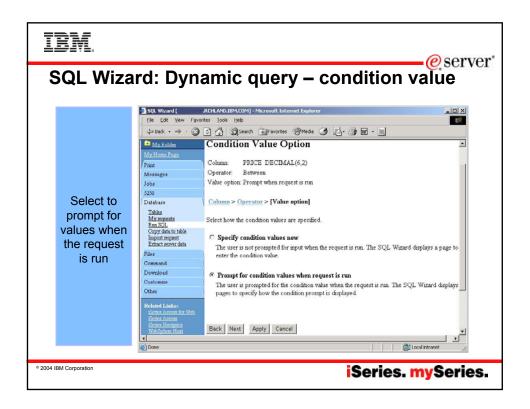


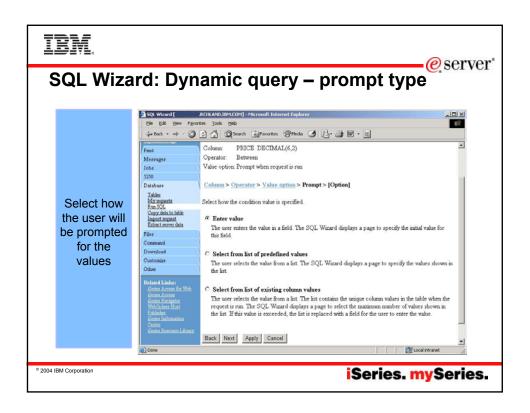


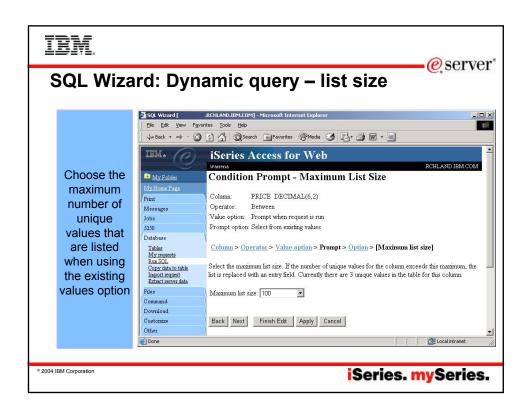


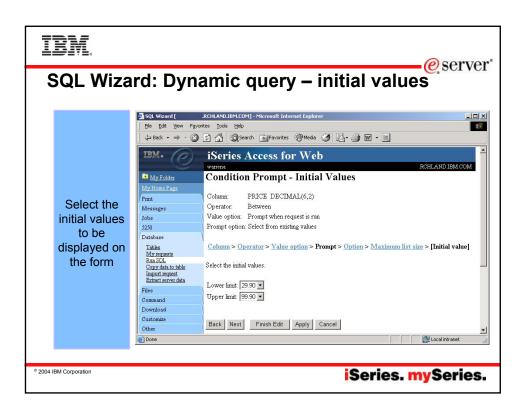


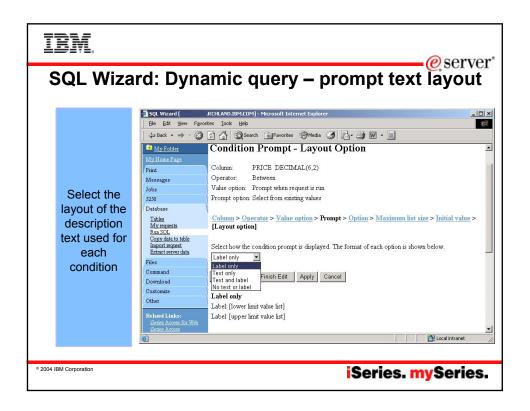


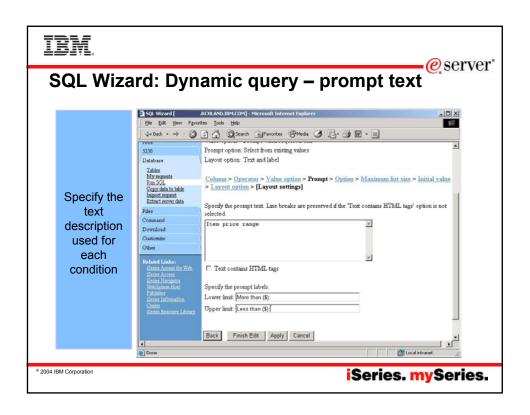


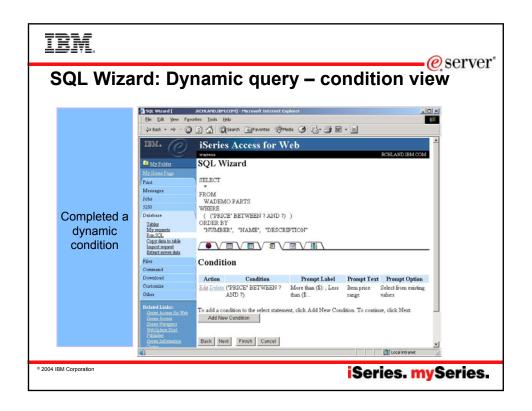


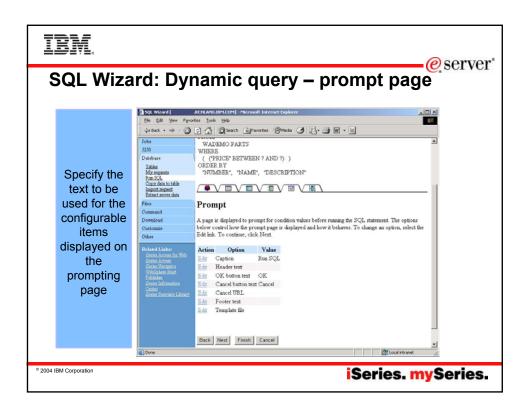


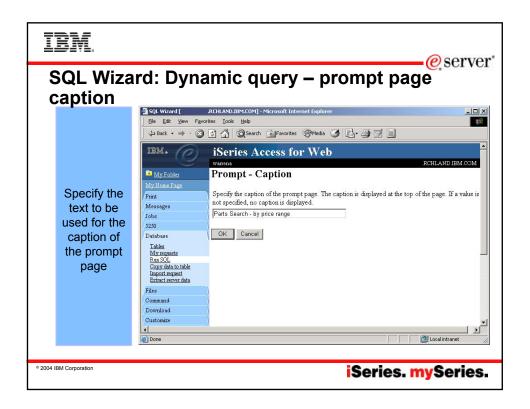


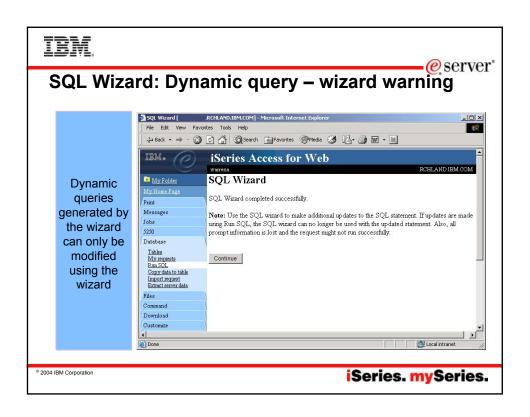


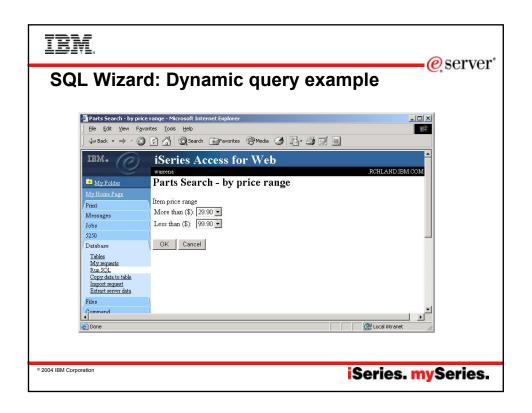


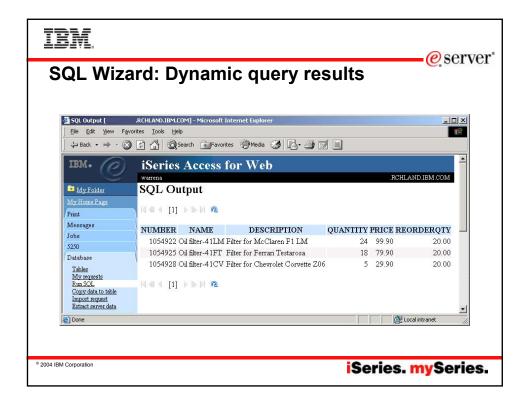












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Dynamic Query

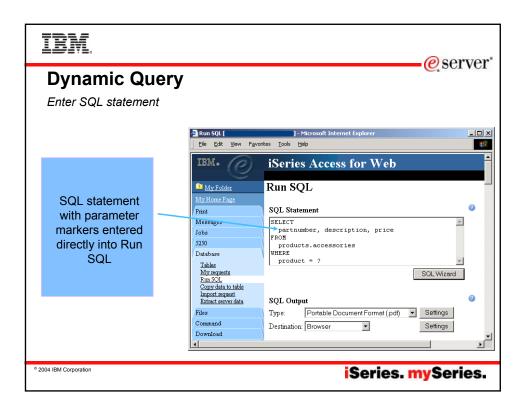
Advanced support

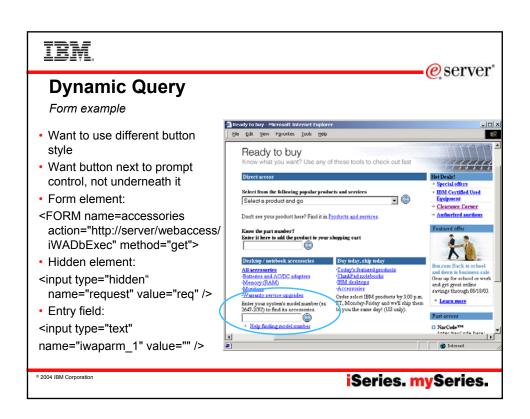
- Type prompted statement manually using Run SQL
 - SELECT * FROM QIWS.QCUSTCDT WHERE LSTNAM = ?
- No SQL wizard support
- Must save the request. Cannot run dynamically using Run SQL.
- Must pass values for each prompt (parameter marker) when request is run. Parameter name for first prompt must be iwaparm_1, parameter name for second prompt must be iwaparm 2 ... For example:
 - Form with input form elements named iwaparm_1, iwaparm_2, ...
 - Bookmark with URL parameters named iwaparm_1, iwaparm_2, ...
- Provides more flexibility on how the prompted values are specified compared to the SQL wizard approach

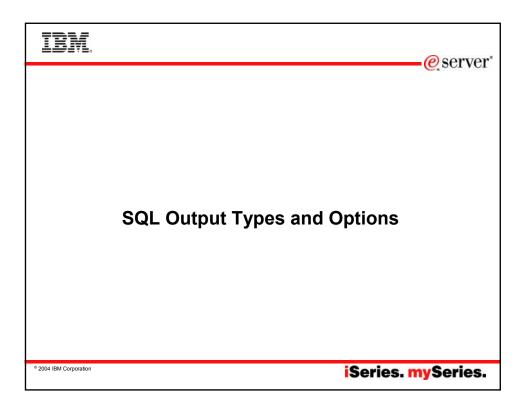
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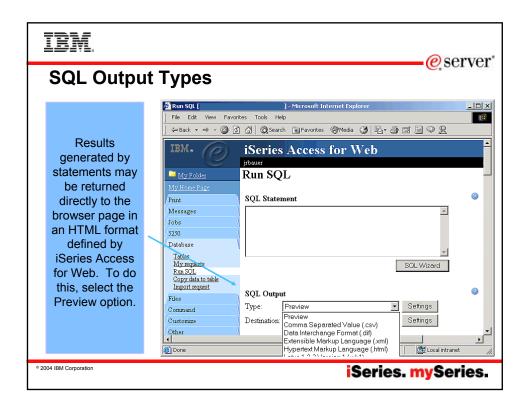
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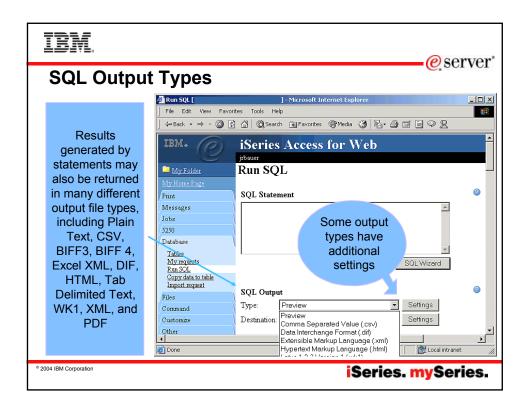
eserver°











IRM eserver° **SQL Output Types** Type Description Notes **Applications** Preview HTML paged-table list Browser Cannot mail or send to folder, can limit number or format rows returned, *note Hyper Text Markup Format commonly used Browser Formatting preserved if import into Excel, *note Language (*.html) by internet browsers Microsoft Excel 3 Binary Interchange File Microsoft Excel 3 Returns up to 16384 rows. Microsoft Excel 4 (*.xls) can be used with newer Format and later versions of Excel Portable Document Preserves all fonts, Printer-friendly format Adobe Acrobat Format (*.pdf) formatting, graphics, and color, *note Extensible Markup Universal format for XML parsers, newer *note Language (*.xml) structured documents versions of IE and and data on the Web Netscape browsers *note = supports unicode data 2004 IBM Corporation iSeries. mySeries.





SQL Output Types (cont.)

Туре	Description	Applications	Notes
Lotus 1-2-3 Version 1 (*.wk1)	Format used by Lotus 1-2-3 Version 1	Lotus 1-2-3 Version 1 and later	Returns up to 8192 rows, can be used with newer versions of Lotus 1-2-3
Comma Separated Value (*.csv)	Text format where fields are separated by commas	Supported by a wide variety of applications including Excel and 1-2-3	Numbers of rows returned not limited
Data Interchange Format (*.dif)	Format that represents data in rows and columns	Used for data interchange between spreadsheet programs and other applications	The original Lotus 1-2-3 format!
Text - Plain (*.txt)	Plain text format for editing, displaying and printing	Text editors	No separator characters placed between the fields of data

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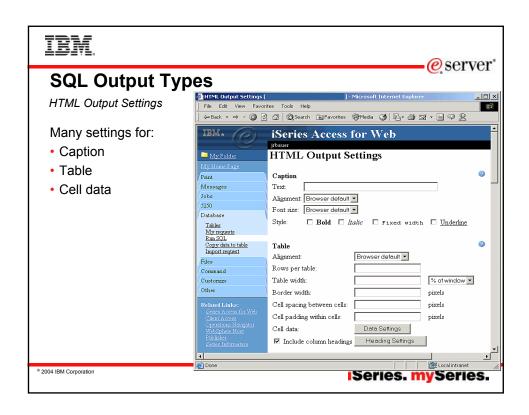
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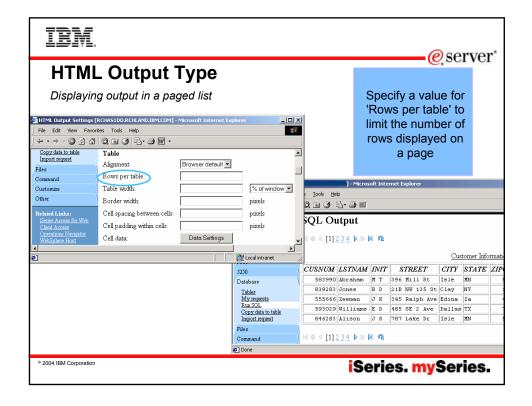
SQL Output Types (cont.)

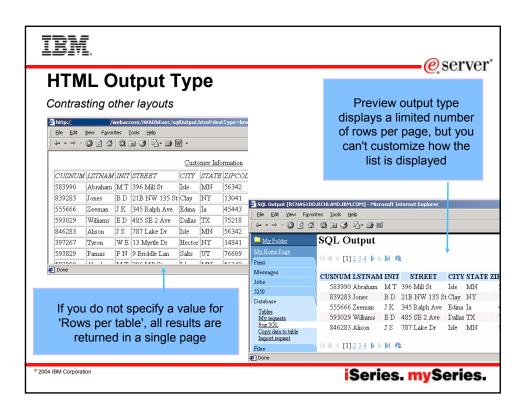
eserver*

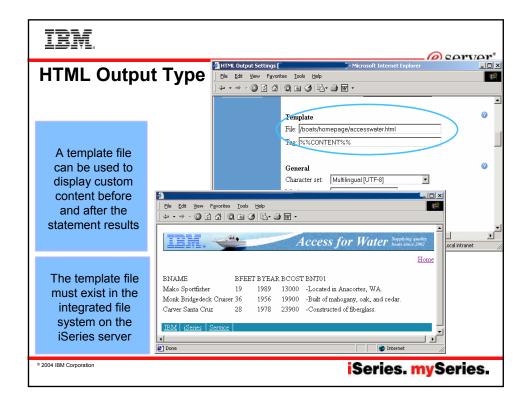
Туре	Description	Applications	Notes
Text – Tab Delimited (*.txt)	Text format where fields are separated by tab characters	Any application that processes text.	Alternative to CSV if numeric data contains commas
Microsoft Excel XML	New format supported by MS Office XP and newer	Any Microsoft product that can read MS XML files	Supports multiple sheets of data, with each sheet holding 65535 rows of data.

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HTML Output Type

Example of template file

```
<HTML>
<BODY>

<img SRC="boathead.gif" height=43 width=614>

align="right">
<a href="/webaccess/iWAHome">Home</a>

<br>
<br>
%%CONTENT%%
<br>
<BODY>
</HTML>
```

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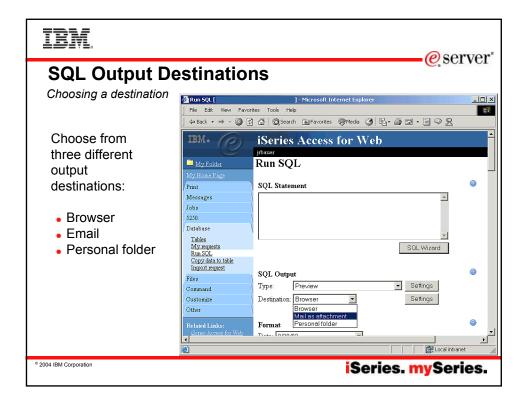
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SQL Output Destinations

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SQL Output Destinations

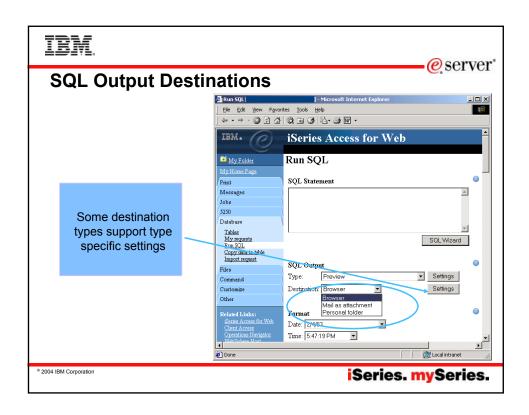
Items to consider when choosing destination type

- Browser
 - Allows for viewing results immediately after query completes.
 - Ties up browser session until query completes
- Fmail
 - SQL statement executes in the background, with control being returned to the browser session
 - Can include message text along with the results.
 - Can send results to people that don't have access to the iSeries system
 - Send results to multiple people.
 - User running SQL statement must have email address configured before using this option. This user will receive an email when request completes
- · Personal folder
 - SQL statement executes in the background, with control being returned to the browser session
 - Send results of SQL statement to multiple people.
 - Person receiving results must be an iSeries Access for Web user.

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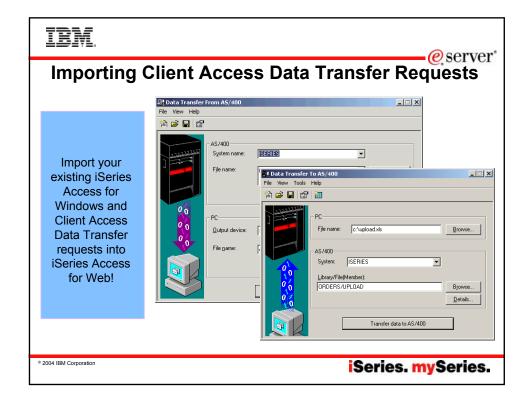
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Importing Data Transfer requests

Client Access, Client Access Express, and iSeries Access for Windows Data Transfer request profiles may be imported into iSeries Access for Web

Data Transfer From AS/400 / iSeries

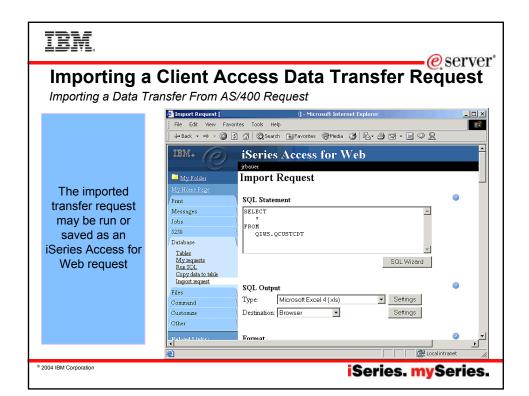
- .TTO and .DTF request files supported by iSeries Access for Web
- iSeries Access for Web tries to do a "best fit" match for options in the transfer request file when converting them to a SQL select statement

Data Transfer To AS/400 / iSeries

- · .TFR and .DTT request files supported by iSeries Access for Web
- iSeries Access for Web tries to do a "best fit" match for options in the transfer request when converting them to an upload request

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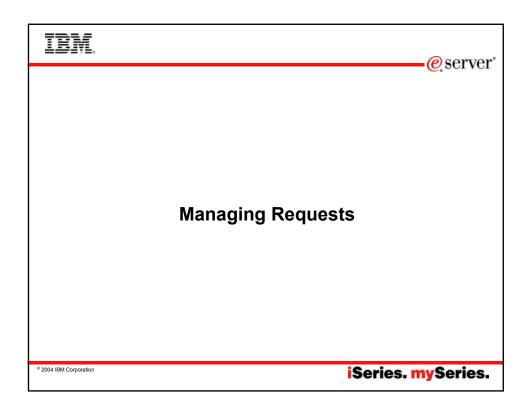


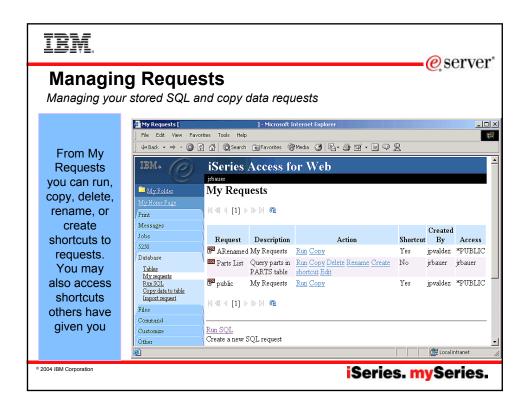


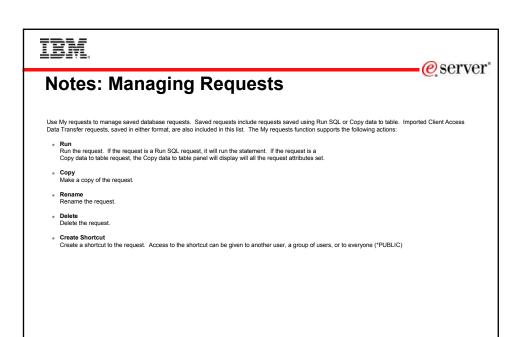


- Some file types supported by Data Transfer are not supported by iSeries
 Access for Web. In some cases the file type is mapped to a supported type.
 In the case where a close match for the file type does not exist in iSeries
 Access for Web, the import will fail.
- Some Data Transfer output options are not supported by iSeries Access for Web. These options are ignored. An example is a Data Transfer request to a printer.
- iSeries Access for Web only provides access to the default member of a file (table).
- iSeries Access for Web does not differentiate between source physical and data physical files. SRCSEQ and SRCDAT columns are never stripped on queries and never added on copies.
- Some Data Transfer download requests cannot be modified by the SQL Wizard. In these cases, you can modify the requests on the Run SQL panel.
- iSeries Access for Web determines the encoding of client files based on the Data Transfer translate option and the client browser settings. If the resulting encoding is not correct, you need to set the value on the Import page.

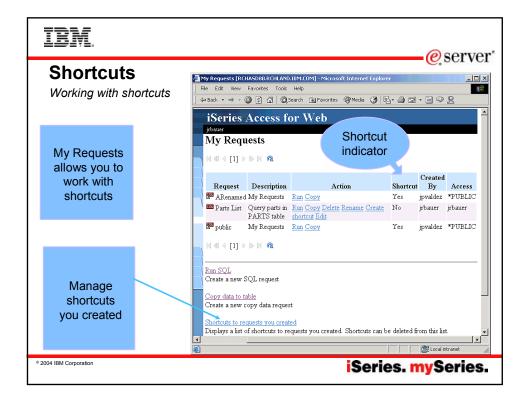
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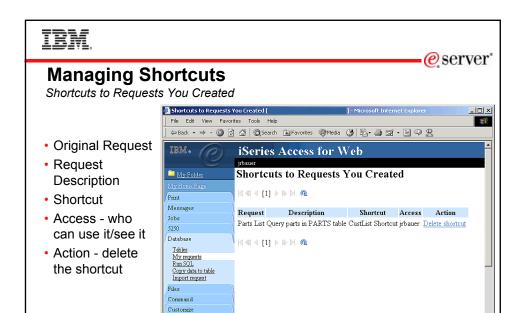






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Notes: Working with Shortcuts

Other Done



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Database requests can only be accessed by the iSeries user profile used to create them. A shortcut is a way to share a request with other users. The following topics describe how the request actions apply to shortcuts:

To create a shortcut, a name and an access value must be specified. The access value identifies who will be able to access the shortcut. The access value can be an existing user profile name on the iSeries server, an existing group profile name, or *PUBLIC.

When a shortcut is run, the original request is actually run. If the original request is modified, the shortcut automatically picks up the modified behavior. This is not true for connection information, since the connection information is stored directly with the shortcut. If the connection in the original request is updated, the shortcut will not pick up the new connection. If this is not the desired behavior, the shortcut can be deleted and recreated.

Copying a shortcut actually makes a copy of the original request. Like other requests, the access value for a copied request is the user profile used to create the copy. Therefore, any modifications to the copy do not affect the users of the the shortcut.

Delete a shortcut

Delete a shortcut can delete the shortcut. If the shortcut access is a single user profile, the user with access to the shortcut can also delete it. Only the shortcut creator can delete a group or "PUBLIC shortcut."

Only shortcuts with a sungle user profile access can be renamed. These shortcuts can be renamed by the shortcut creator or by the user with access to the shortcut.

Editing shortcuts or creating shortcuts to other shortcuts

Shortcuts cannot be editited and a shortcut cannot be created to another shortcut

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Request Accessibility

- Database requests can only be accessed by the iSeries user profile used to create them
- A shortcut is a way to share a request with other users on the server.
 - A shortcut is a reference to the original request
- When you create a shortcut to a request you need to specify an "Access" value
 - The access value determines who has access to the shortcut
 - An access value can be
 - a user profile name on the iSeries server
 - a group profile name
 - *PUBLIC (this gives all users on the server access to the shortcut)
- You cannot create shortcuts to another user's requests
- You cannot create shortcuts to shortcuts
- Only the shortcut creator can delete a *PUBLIC shortcut

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Shortcut Changes



- The settings of the request referenced by a shortcut cannot be modified by the end user.
- Changes made to the request referenced by the shortcut are automatically reflected when the shortcut is run
 - Note: This is not true for changes to the connection information since the connection information is stored as part of the shortcut

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Shortcut Example

Here is an example of how one company might use shortcuts and customization to manage database usage:

- Use customization to give the database administrator access to all database functions.
- Use customization to deny users, in the *PUBLIC group, access to all database functions actions other than running shortcuts.
- · Create the following three database requests:
 - "Past due accounts"
 - "Low inventory"
 - "New orders"
- · Create the following three shortcuts:
 - To "Past due accounts" and give access to the ACCOUNTING group.
 - To "Low inventory" and give access to the PURCHASING group.
 - To "New orders" and give access to the SHIPPING group.

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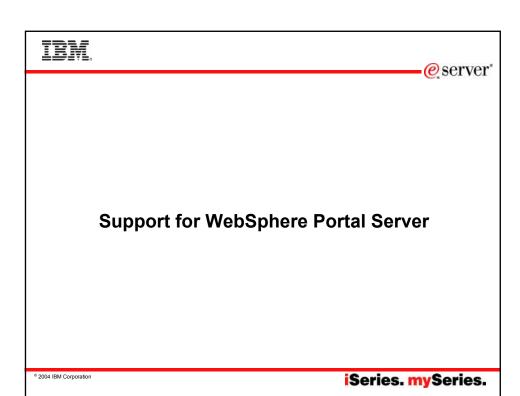
Shortcut Example (cont.)

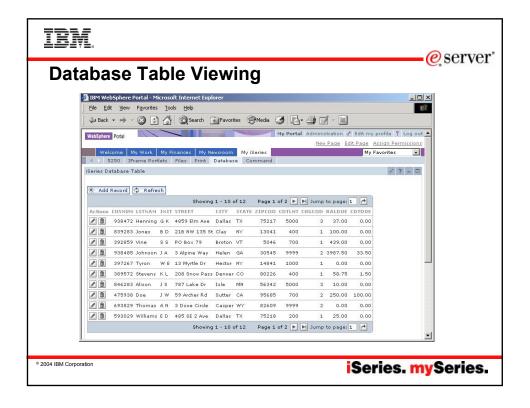


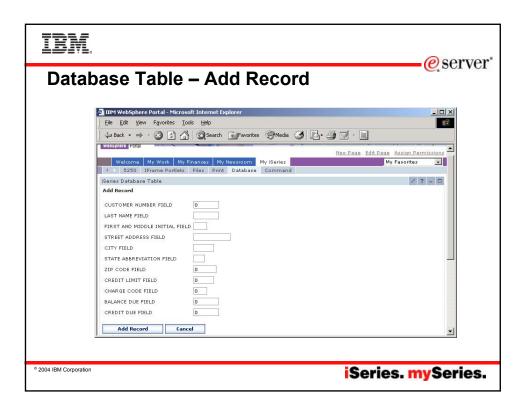
- · Only the database administrator is allowed to create and modify requests
- · Other users are only allowed to run shortcuts
- The shortcuts a user is allowed to run are limited to the shortcuts the administrator decides the user should be able to access.

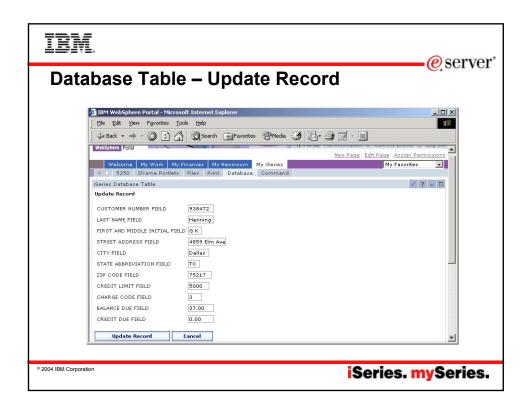


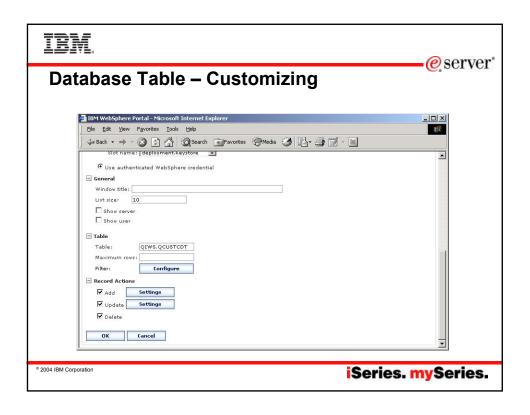
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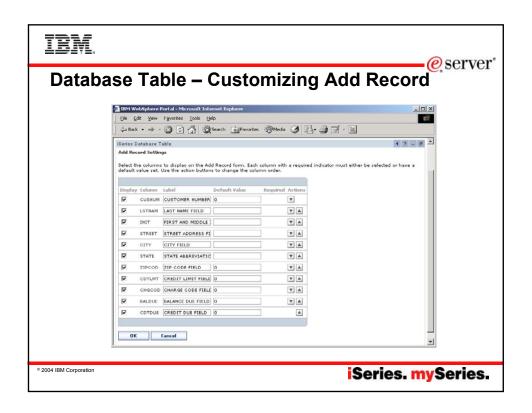


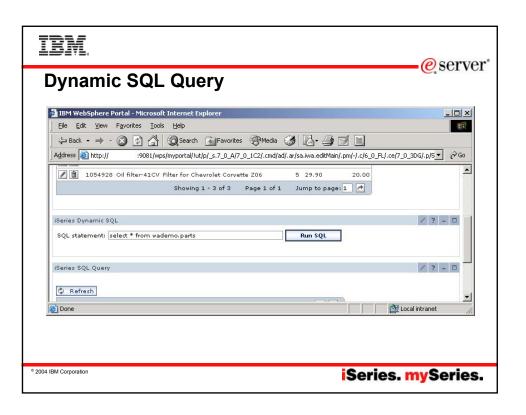


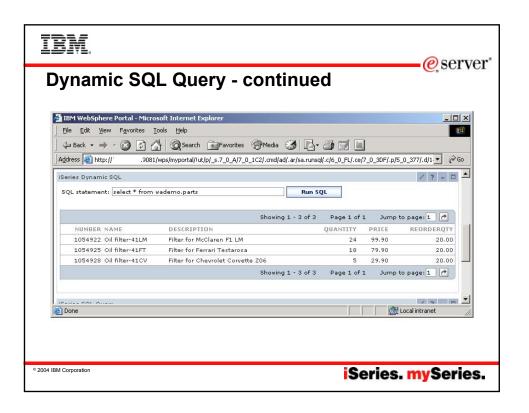


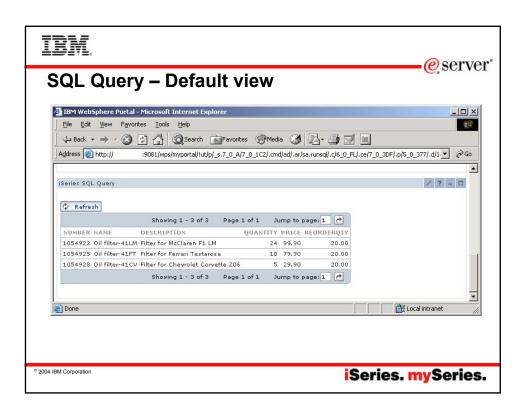


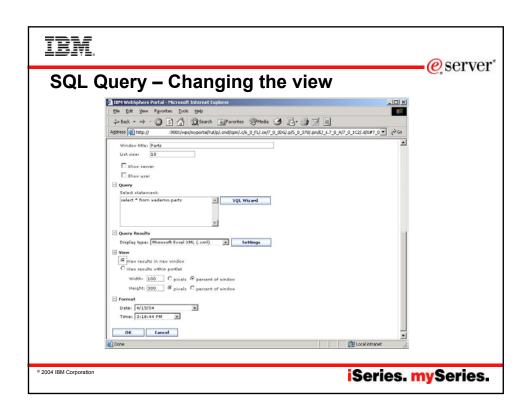








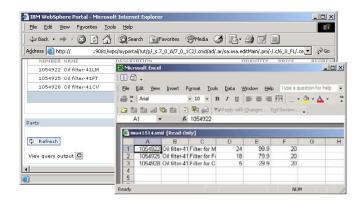






SQL Query – Tailored view





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Summary

eserver*

iSeries Access for Web Database:

- Is part of the iSeries Access for Web product
- · Runs completely on the iSeries Server
- · Can be accessed via a Web Browser
- Uses JDBC for DB2 UDB connectivity
- Allows you to work with SQL Tables. Including inserting, updating, and deleting records. You may also view the entire table.
- · Has an interface to run SQL statements
- Has a graphical SQL Wizard to help you build SQL SELECT statements.
- Supports many data formats for displaying and emailing SQL Output
- May be used to copy data to iSeries tables
- Capable of Importing Client Access Data Transfer requests
- Robust interface for managing SQL requests
- Fully Customizable

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Questions?

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