



## iSeries Access for Web Database Access

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why "i"? it's simple.



## Agenda

- iSeries Access for Web overview
- Database overview
- Web application support
  - Working with SQL Tables
  - Copying data to the iSeries
  - Run SQL and the SQL Wizard
  - Importing Client Access Data Transfer requests
  - Managing saved requests
  - Extract Server Data
- Portal application support
  - Database portlets
- What's new
- Summary
- Questions

## iSeries Access for Web Overview

iSeries Access for Web:

- Provides a web-based view of iSeries applications and resources through a browser.
- Runs on the iSeries server
- Requires no software be installed on the client, other than a web browser
- Provides two offerings:
  - Web Application
  - Portal Application

## iSeries Access for Web Overview

iSeries Access for Web functions include the following:

- **Printers** - view printer output, work with printers shared printers and output queues
- **Messages** - display messages, send messages, send break messages, work with operator messages and message queues
- **Jobs** - work with user and server jobs
- **5250** - start 5250 user interface sessions, record and play macros
- **Database** - work with tables, run SQL statements, copy data to tables, manage frequently run requests, extract server object information
- **Files** - work with files in the iSeries integrated file system and within NetServer file shares, upload files to the integrated file system and NetServer shares
- **Command** - run iSeries CL commands, search for commands, manage frequently run commands
- **Download** - perform managed file distribution

Note: Web application and portal application have different levels of functionality.

## iSeries Access for Web Overview

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

### Session 41LC-42LC: OPEN LAB:iSeries Access for Web

or

Visit the **iSeries Access for Web Page**.

<http://www.ibm.com/servers/eserver/series/access/web/>

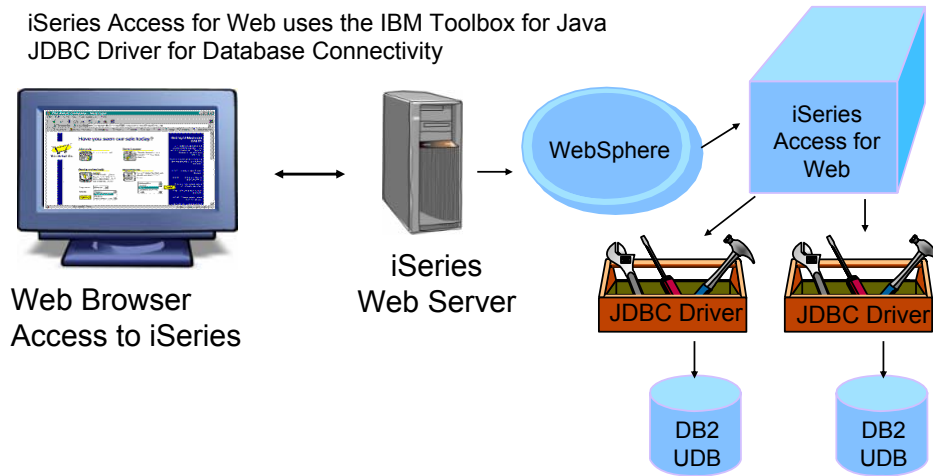
## iSeries Access for Web – Sessions in Orlando

1. 25MN - iSeries Access for Web: The Browser Alternative!
2. 25MN - Tips and Techniques for iSeries Access for Web
3. 31MN – iSeries Access for Web: Real World Usage **(NEW!)**
4. 32MN - iSeries Access for Web: Run 5250 in a Browser
5. 33MN - iSeries Access for Web: Setup and Configuration
6. 35LC - LAB: iSeries Access for Web: Installation and Configuration 
7. 36LC - LAB: iSeries Access for Web: Installation and Configuration 
8. 41LC - OPEN LAB: iSeries Access for Web
9. 42LC - OPEN LAB: iSeries Access for Web
10. 45MN - iSeries Access for Web: Database Access
11. 46MN – Programming with iSeries Access for Web
12. 52MN - iSeries Access for Web: Control Access to your iSeries Resources
13. 53MN - iSeries Access for Web Runs in a Portal
14. 54MF - iSeries Access for Web: Printing Made Easy Through Your Browser

 Voted "Best Traditional Lab" at Spring 2005 COMMON

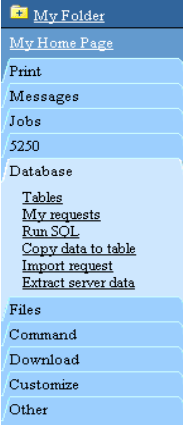
## Database Overview

iSeries Access for Web uses the IBM Toolbox for Java  
JDBC Driver for Database Connectivity



## Web Application Support

## 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, delete table records.
- Run SQL - run SQL statements, wizard to create SELECT statements, many supported output file formats
- Copy data to table - copy data from workstation file to iSeries table.
- Import request - import iSeries Access for Windows/Client Access Data Transfer requests.
- My Requests - run, copy, delete, rename saved requests. create and manage shortcuts.
- Extract server data – mine iSeries object data, store in database table

## Restricting End User Access

Policy	Derived From	Action	Setting
Database access	Shipped default	Use current setting	Allow
Database tab	Shipped default	Use current setting	Show
Tables	Profile setting	Use current setting	Deny
Maximum table rows	Shipped default	Use current setting	500
Table filter	Shipped default	Use current setting	*USURL
Table filter is user preference	Parent policy	Use current setting	Deny
Insert records into table	Parent policy	Use current setting	Deny

Use Customize to give users access to minimum set of functions needed to perform their jobs

## Working with Database Tables

## Working with Tables

The screenshot shows the IBM iSeries Access for Web interface in a Microsoft Internet Explorer browser window. The page title is "Series Access for Web". The main content area displays a table of database tables. A blue callout bubble points to the "Connection Info & Table filter" section, which includes a "Connection:" field set to "wademo" and a "Table filter:" field. Below this is a table with columns "Database", "Table", "Description", and "Action". The table lists a table named "WADEMO.PARTS" with actions for "Insert", "Update", "Quick view", "Run SQL", and "Copy data to table". A blue box labeled "Table actions" points to the "Action" column. Another blue box labeled "Database preferences" points to the "Database preferences" link below the table. The left sidebar contains a navigation menu with items like "My Home Page", "Print", "Messages", "Jobs", "5250", "Database", "Tables", "My requests", "Run SQL", "Copy data to table", "Import request", "Extract server data", and "Files".

Database	Table	Description	Action
	WADEMO.PARTS		Insert Update Quick view Run SQL Copy data to table

## Table Filter

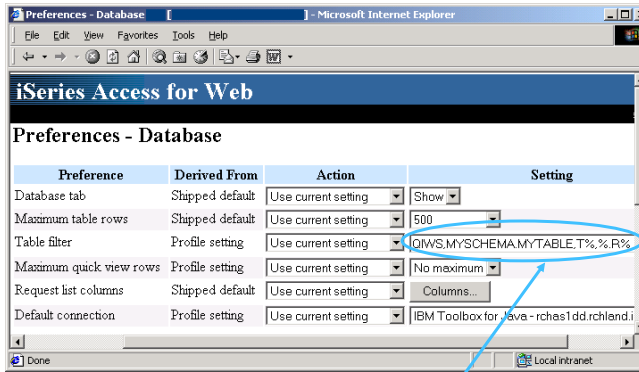
Used to control the tables displayed in the Tables list

Comma-separated list of

- schemas
- schema filters
- tables
- table filters

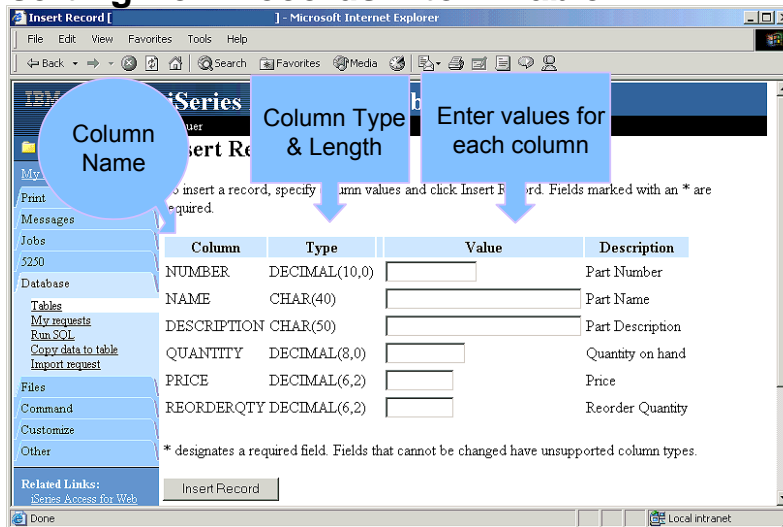
The % character is used as a wild card character.

\*USRLIBL is a special value to identify all tables in the user portion of the library list.



QIWS,MYSCHEMA.MYTABLE,T%,%R%  
 All tables in QIWS, the table MYSCHEMA.MYTABLE, all tables in schemas beginning with T, and all tables beginning with R.

## Inserting New Records into A Table



## Update

Select records to update - specific column value

- Enter values for one or more columns to restrict the number of items returned
- % can be used as a wildcard character for character fields
- Only matching records are returned

**Records to Update**

Action	Part #	Description
<a href="#">Update</a> <a href="#">Delete</a>	0987654321	3.5 x 17 Stainless steel propeller

Select Records to Update [ Microsoft Internet Explorer ]

**iSeries Access for Web**

Select Records to Update

Specify column values, to select which records you want to update. To not specify any values and click Select Records

Column	Type	Value
Part #	CHAR(15)	0987654321
Description	CHAR(40)	
Current quantity	NUMERIC(5,0)	
Reorder quantity	NUMERIC(5,0)	
Cost per unit	NUMERIC(5,0)	
Supplier name	CHAR(30)	
Supplier website	CHAR(75)	
Other		

Select Records

## Updating and Deleting Records

The Action links allow you to either update or delete a record

Records to Update [ Microsoft Internet Explorer ]

**iSeries Access for Web**

Records to Update

Action	NUMBER	NAME	DESCRIPTION	QUANTITY	PRICE	REORDERQTY
<a href="#">Update</a> <a href="#">Delete</a>	1345687	1966 VW water pump	Fits all models of 1966 VW vehicles	769	24.98	200.00
<a href="#">Update</a> <a href="#">Delete</a>	2453645	1966 VW radiator	Fits all models of 1966-1969 VW vehicles	15	169.71	50.00
<a href="#">Update</a> <a href="#">Delete</a>	9944332	1966 VW power steering pump	Fits nothing	20	82.32	30.00
<a href="#">Update</a>	2233543	1997 Chevy	Adds weight to an	3	299.99	1.00



## Updating a Record

Column values for a record may be changed

To update the record, change column values and click **Update Record**. Fields marked with an \* are required.

Column	Type	Value	Description
NUMBER	DECIMAL(10,0)	1345687	Part Number
NAME	CHAR(40)	1966 VW water pump	Part Name
DESCRIPTION	CHAR(50)	Fits all models of 1966 VW vehicle	Part Description
QUANTITY	DECIMAL(8,0)	769	Quantity on hand
PRICE	DECIMAL(6,2)	24.98	Price
REORDERQTY	DECIMAL(6,2)	200.00	Reorder Quantity

\* designates a required field. Fields that cannot be changed have unsupported column types.

Update Record

## Deleting a Record

The Delete Record function requires you to verify the record you chose to delete

This will delete all records that match these column values.

Table: WADEMO.PARTS

NUMBER	=	1345687
NAME	=	1966 VW water pump
DESCRIPTION	=	Fits all models of 1966 VW vehicles
QUANTITY	=	769
PRICE	=	24.98
REORDERQTY	=	200.00

Delete Record

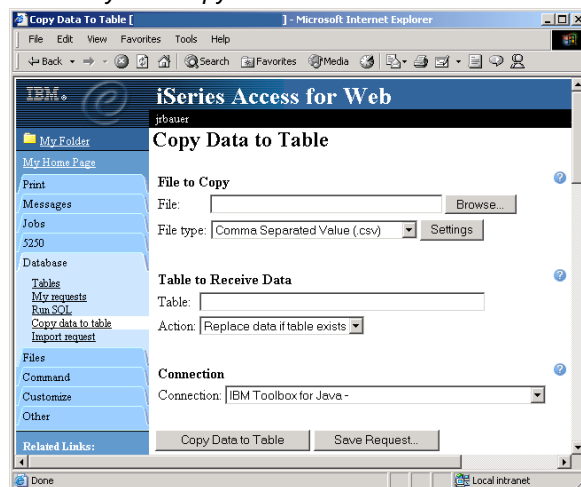
## Copying Data to the iSeries

## Copying Data to the iSeries

*Copy data to table function allows you to copy files to a table*

Specify:

- File name
- File type
- File settings
- Table name
- Replace or append records to table
- Connection



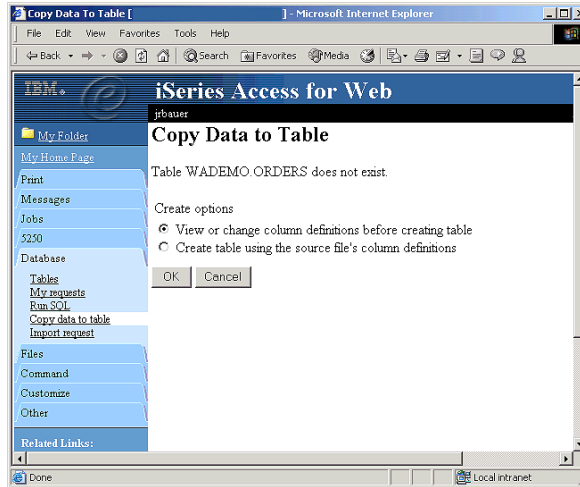
## Copying Data to the iSeries: Creating a new table

Copy data to table will create a new table if one does not exist

View table definition before creating (update if necessary)

OR

Create table with default definition determined by iSeries Access for Web

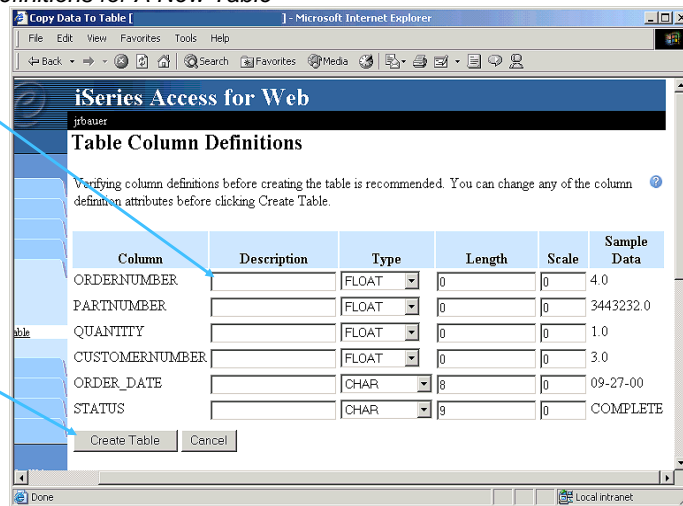


## Copying Data to the iSeries: Creating a new table

Verify Column Definitions for A New Table

From this panel you may add a description, change data types, column length, and scale

Click Create Table to create the new table and copy your data to the new table



## 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.

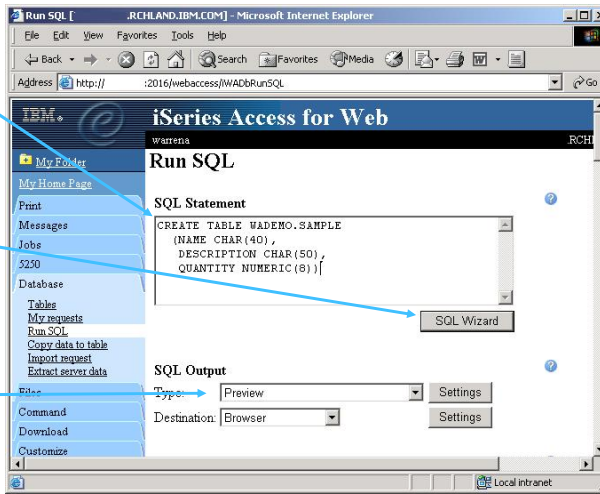
## Run SQL and the SQL Wizard

## Run SQL

The Run SQL function allows you to type in a free form SQL Statement

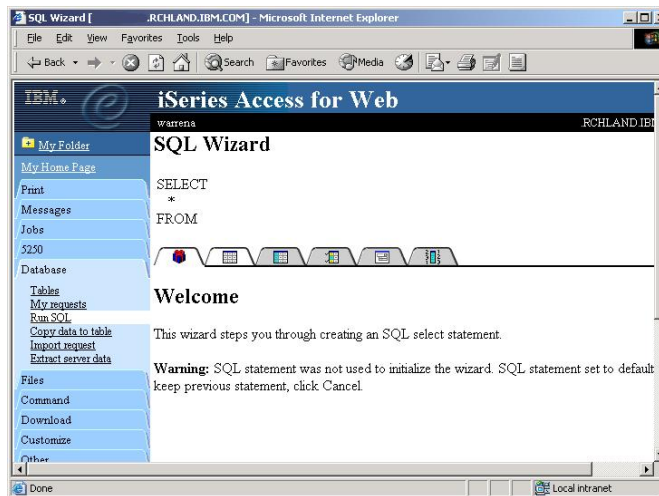
The SQL Wizard can help you generate a SQL SELECT statement

If your statement produces a result set you can select one of many output formats



## The SQL Wizard

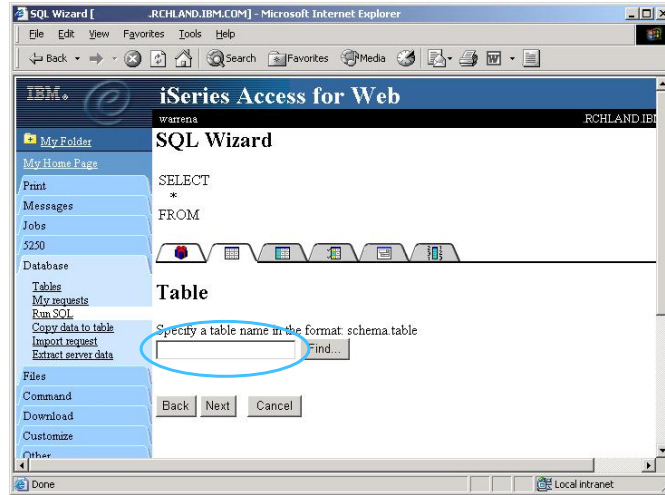
The SQL Wizard helps you generate a single table SELECT statement



## The SQL Wizard: Creating a Select Statement

Step 1: Choose a table

Type in or find the table from which to select records

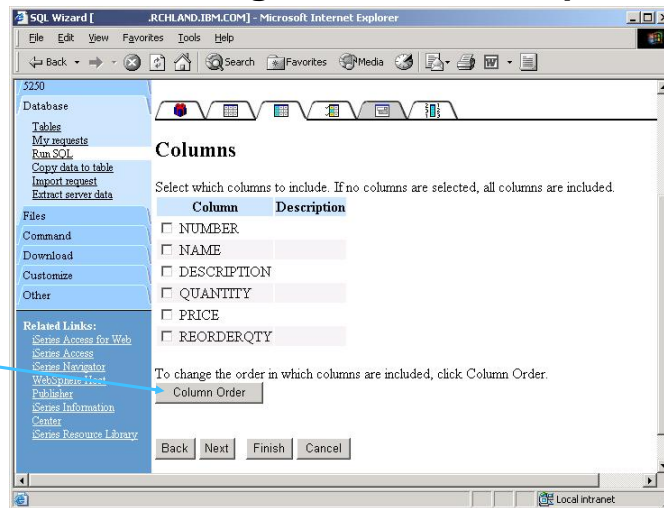


## The SQL Wizard: Choosing columns for output

Step 2: Choosing columns

Check the boxes next to the columns to include them in the statement

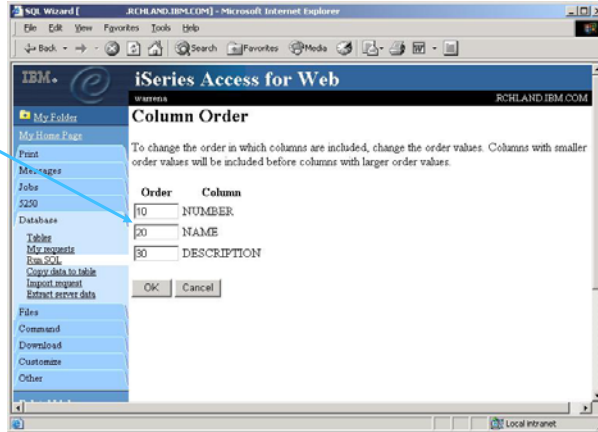
Click the column order button to change the order of columns in the output



## The SQL Wizard: Choosing columns for output

Step 3: Ordering columns

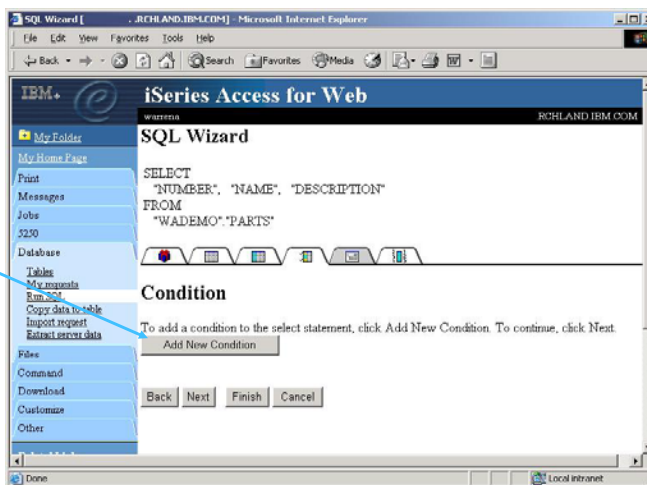
Order columns by specifying a sequence number



## The SQL Wizard: Specify Conditions

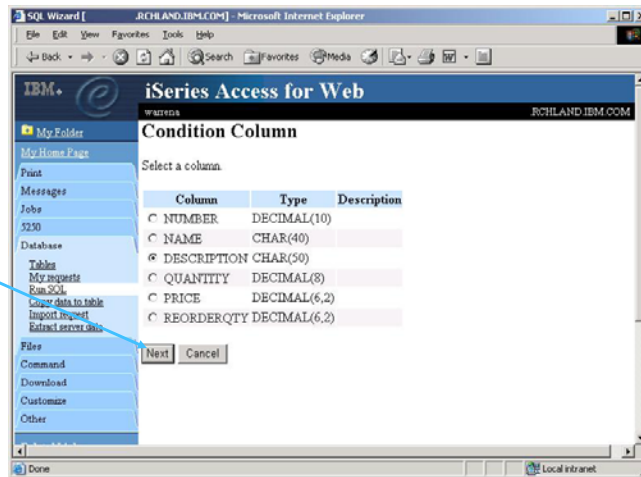
Step 4: Adding conditions

Conditions allow you to select records that meet certain criteria. Click Add New Condition to specify a condition.



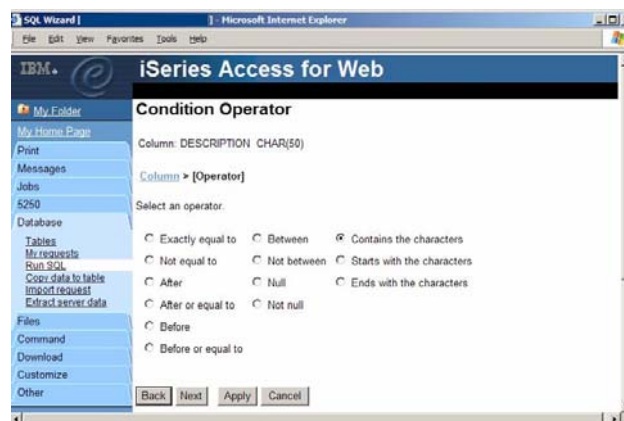
## The SQL Wizard: Specify a conditional column

Select the column to use in the condition and click Next



## The SQL Wizard: Choosing the operator type

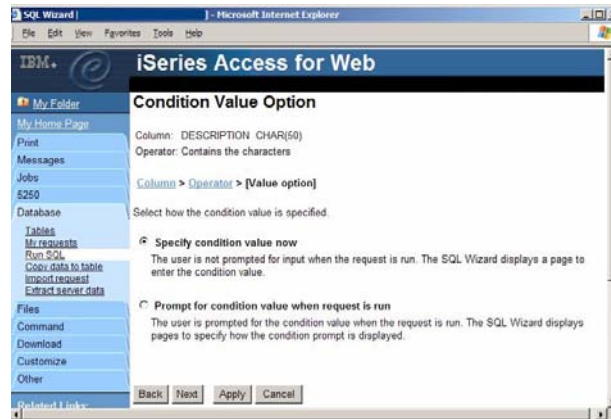
The SQL wizard allows you to choose the operator to use in the condition





## The SQL Wizard: Choosing static versus dynamic

The SQL wizard allows you to choose the if the condition value is specified in the request, or is prompted for when the request is run.



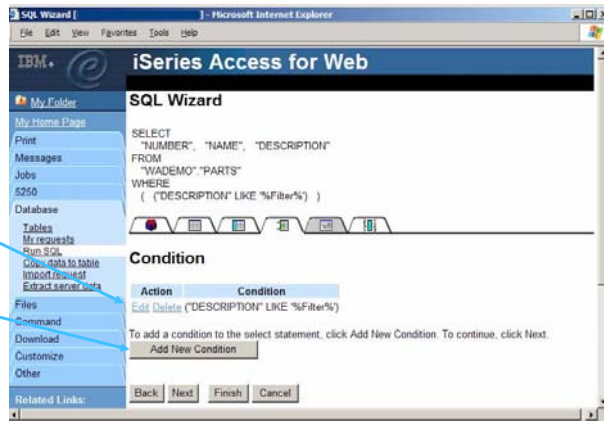
## The SQL Wizard: Specifying a static value

The SQL wizard allows you to specify the value for the condition. The value can be a value, constant or other specific function.



## The SQL Wizard: The condition is created

The condition shows up both in the SQL and in a condition list. You may edit or delete the condition. You may also add additional conditions.

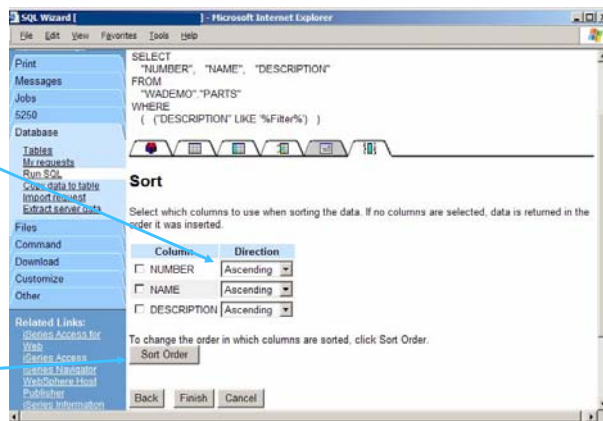


## The SQL Wizard: Creating a Select Statement

Step 5: Sorting records

Choose the columns to be used in the sort. Also select ascending or descending order

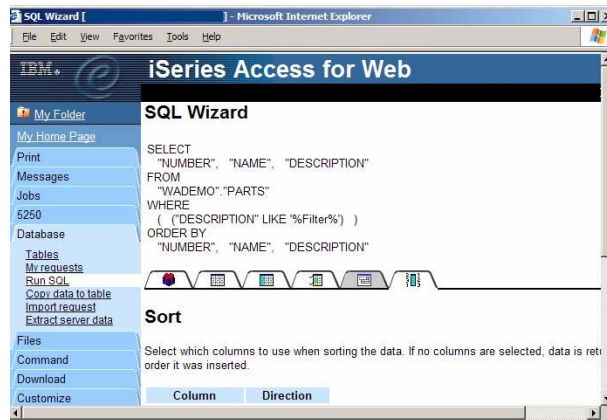
Click the Sort Order button to change the priority of the columns used in the sort



## The SQL Wizard: The statement is complete!

Step 7: Finishing up

The statement is now complete. Click the Finish button (not shown) on the bottom of the SQL Wizard page to return to Run SQL



## The SQL Wizard: Creating a Select Statement

Step 8: Returning to Run SQL

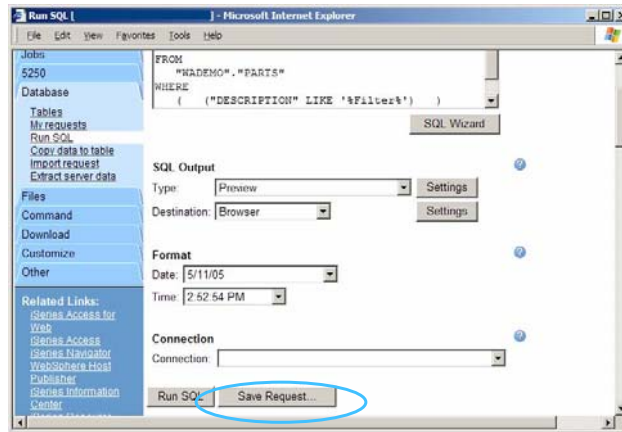
The SELECT statement you generated is available for use in Run SQL

Statements generated by the wizard may be run immediately through Run SQL or saved into a request in My requests for later use.



## Run SQL: Saving a SQL Request

After creating a statement, by hand or with the Wizard you also have the option to store the statement for later use

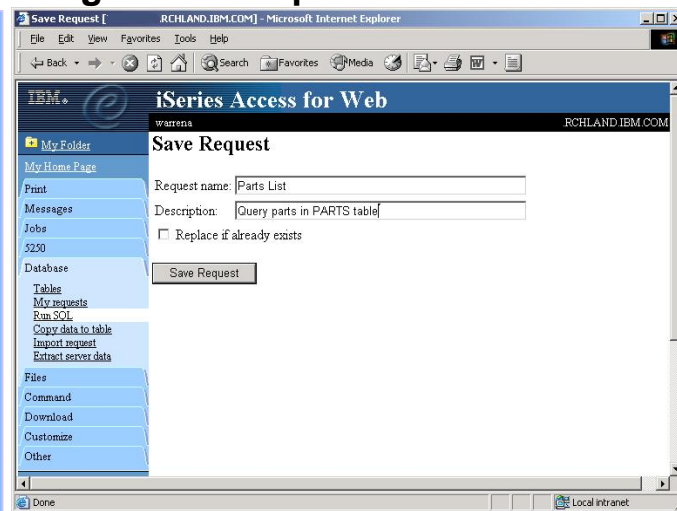


## Run SQL: Saving a SQL Request

Request must have a name

Description is optional

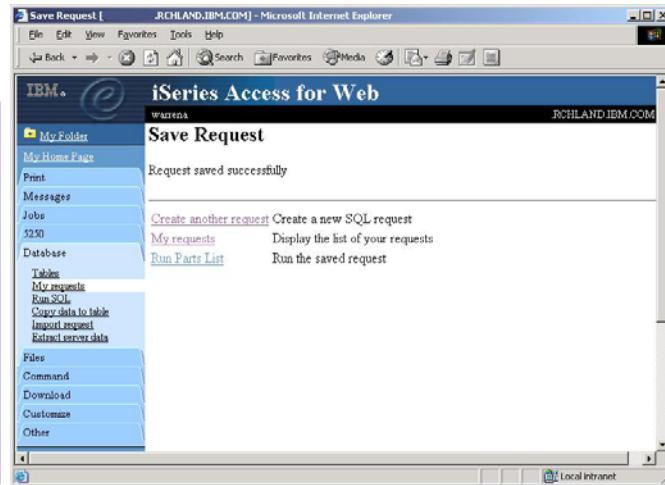
Use replace option to overwrite existing request



## Run SQL: Saving a SQL Request

Quickly running a saved request

After saving the request you will be given a link to run the request. The request will also show up in your **My Requests** list



## Run SQL: Static query results

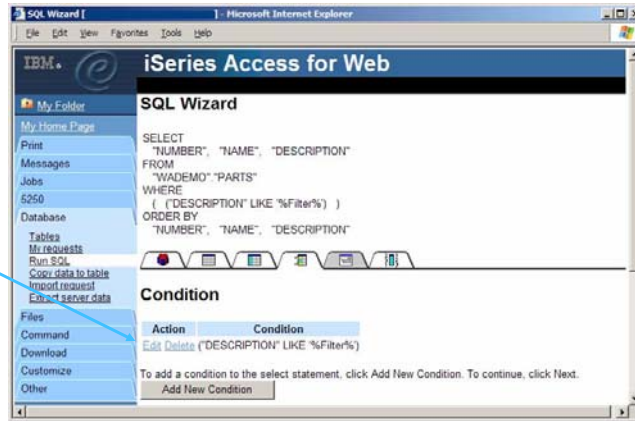
Retrieve all records with "Filter" in the description

Display results in the browser

NUMBER	NAME	DESCRIPTION
1054922	Oil filter-41LM	Filter for McClaren F1 LM
1054925	Oil filter-41FT	Filter for Ferrari Testarosa
1054928	Oil filter-41CV	Filter for Chevrolet Corvette Z06

## Going back... The SQL Wizard: Dynamic query

Use Edit to change condition



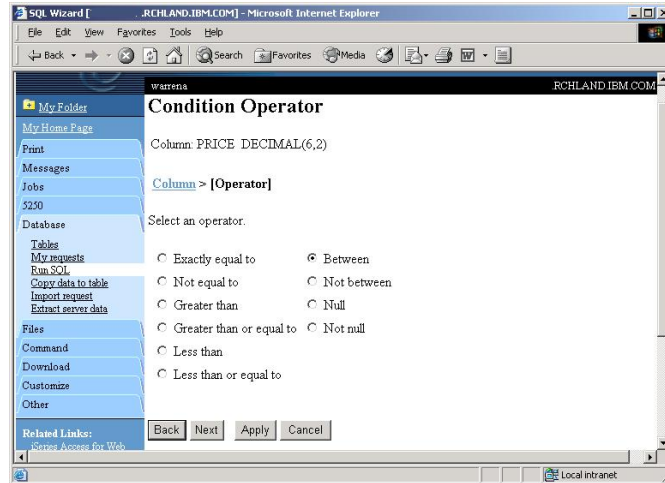
## SQL Wizard: Dynamic query - condition column

Choose a column just like we did for the static example



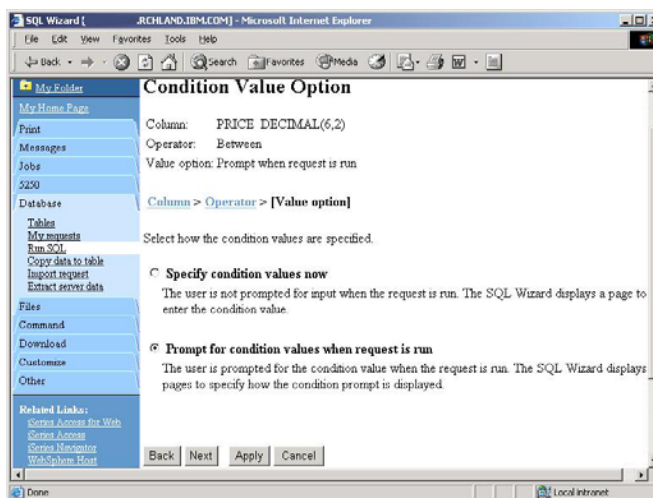
## SQL Wizard: Dynamic query - condition operator

Choose a comparison operator just like we did in the static query example



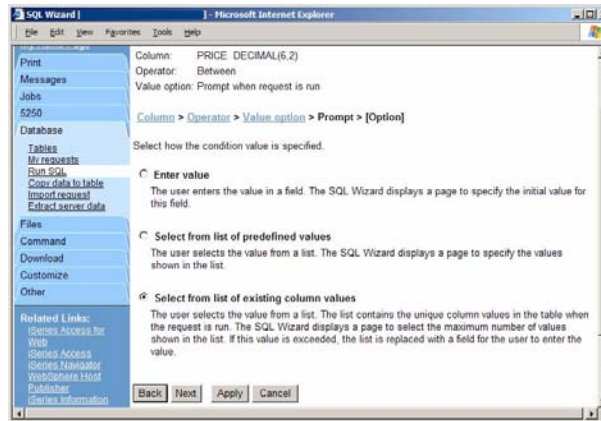
## SQL Wizard: Dynamic query – condition value

Select to prompt for values when the request is run



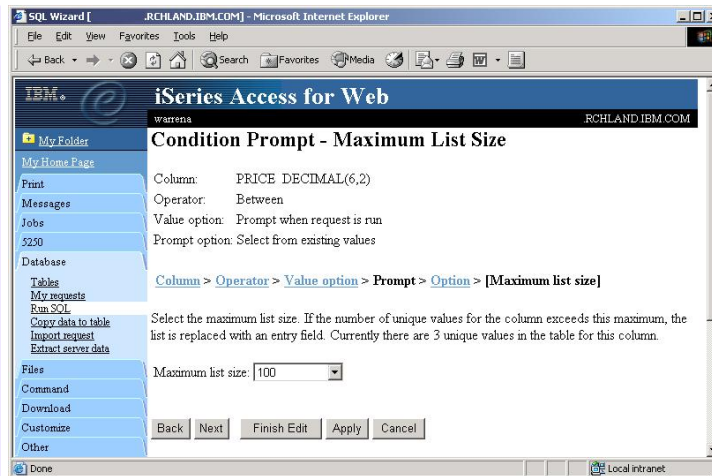
## SQL Wizard: Dynamic query – prompt type

Select how the user will be prompted for the values



## SQL Wizard: Dynamic query – list size

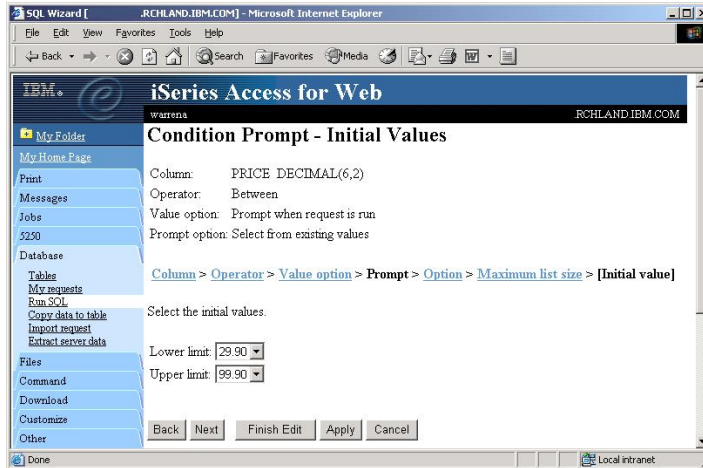
Choose the maximum number of unique values that are listed when using the existing values option





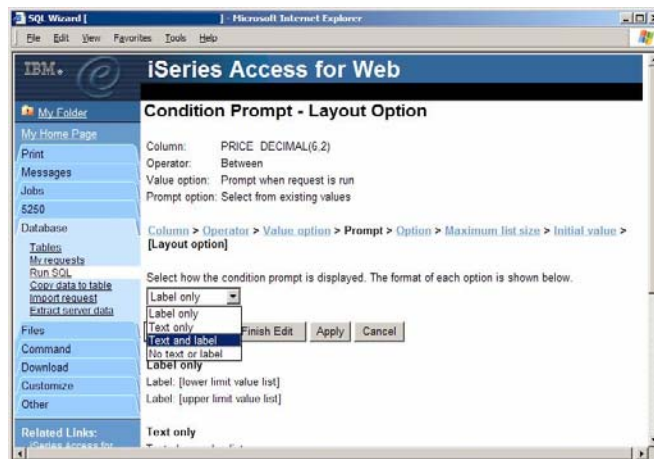
## SQL Wizard: Dynamic query – initial values

Select the initial values to be displayed in the lists



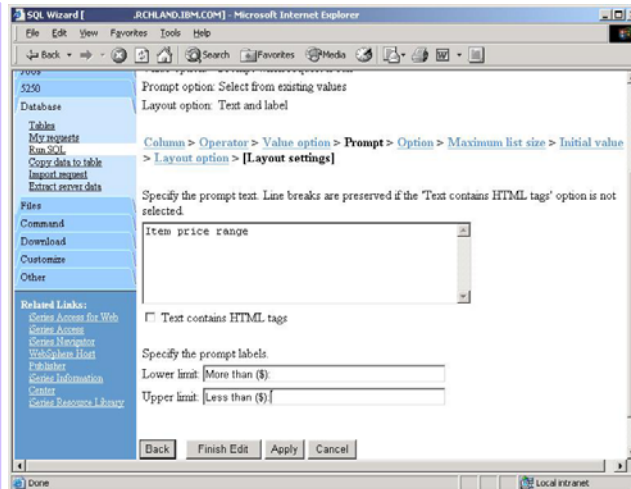
## SQL Wizard: Dynamic query – prompt text layout

Select the layout of the description text used for each condition



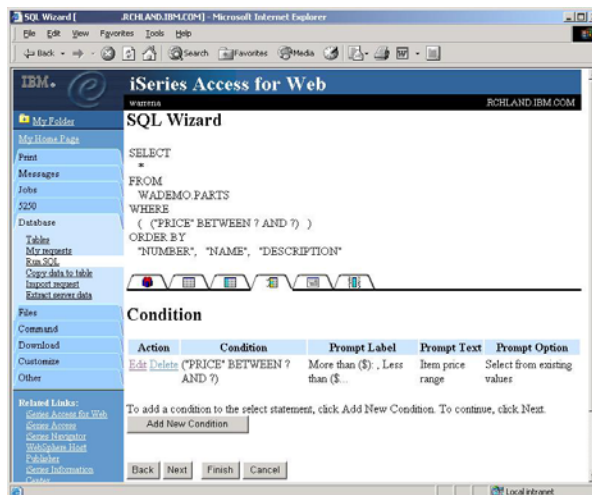
## SQL Wizard: Dynamic query – prompt text

Specify the text description used for each condition



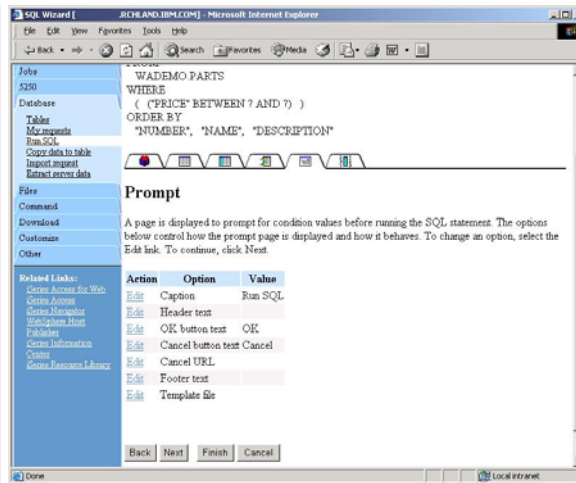
## SQL Wizard: Dynamic query – condition view

Completed a dynamic condition



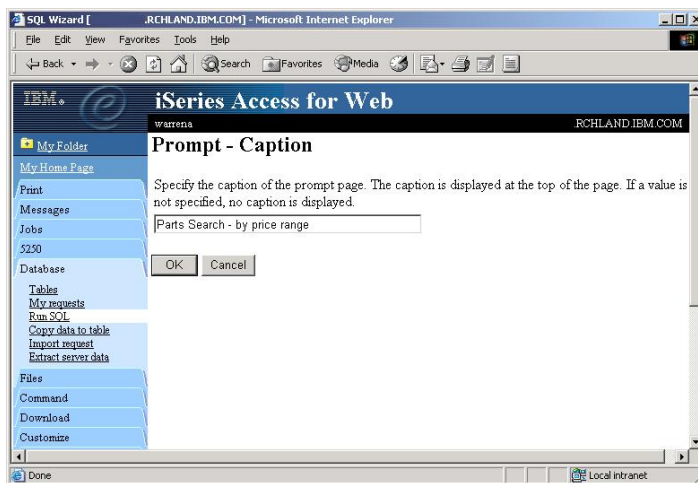
## SQL Wizard: Dynamic query – prompt page

Specify additional options for the prompting page



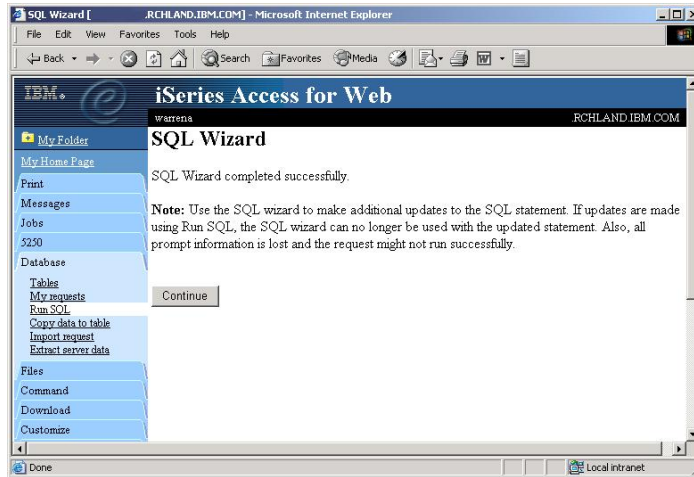
## SQL Wizard: Dynamic query – prompt page caption

Specify the text to be used for the caption of the prompt page

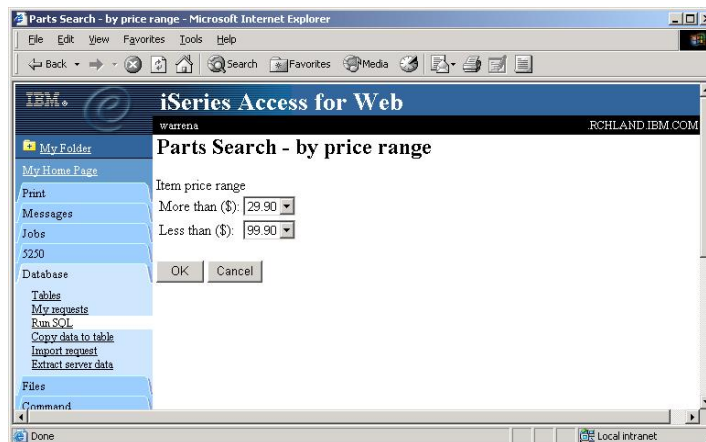


## SQL Wizard: Dynamic query – wizard warning

Dynamic queries generated by the wizard can only be modified using the wizard



## SQL Wizard: Dynamic query example



## SQL Wizard: Dynamic query results

NUMBER	NAME	DESCRIPTION	QUANTITY	PRICE	REORDERQTY
1054922	Oil filter-41LM	Filter for McLaren F1 LM	24	99.90	20.00
1054925	Oil filter-41FT	Filter for Ferrari Testarosa	18	79.90	20.00
1054928	Oil filter-41CV	Filter for Chevrolet Corvette Z06	5	29.90	20.00

## 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

## Dynamic Query

Enter SQL statement

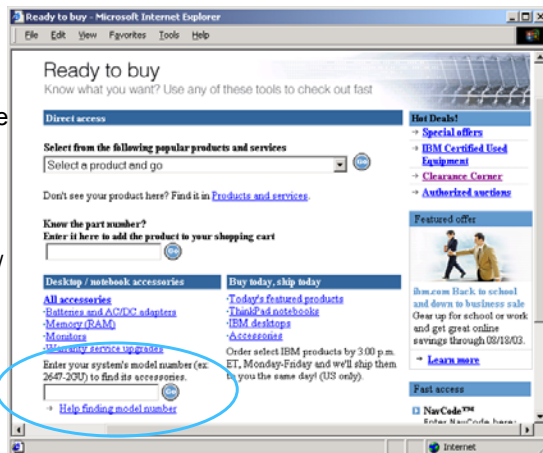
SQL statement with parameter markers entered directly into Run SQL



## Dynamic Query

Form example

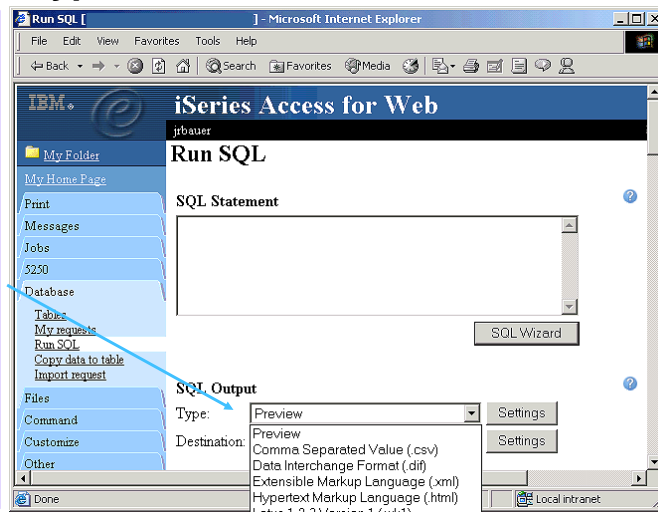
- Want to be part of page not generated by iSeries Access for Web
- Want to use different button style
- Want button next to prompt control, not underneath it
- Form element:  
`<FORM name=accessories action="http://server/webaccess/iWADbExec" method="get">`
- Hidden element:  
`<input type="hidden" name="request" value="req" />`
- Entry field:  
`<input type="text" name="iwaparm_1" value="" />`



## SQL Output Types and Options

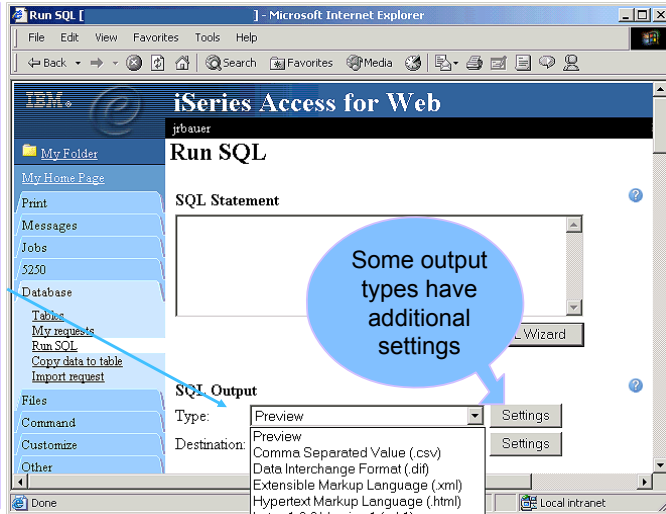
## SQL Output Types

Results generated by statements may be returned directly to the browser page in an HTML format defined by iSeries Access for Web. To do this, select the Preview option.



## SQL Output Types

Results generated by statements may also be returned in many different output file types, including Plain Text, CSV, BIFF3, BIFF 4, Excel XML, DIF, HTML, Tab Delimited Text, WK1, XML, and PDF



## SQL Output Types

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

\*note = supports unicode data



## SQL Output Types (cont.)

Type	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

## SQL Output Types (cont.)

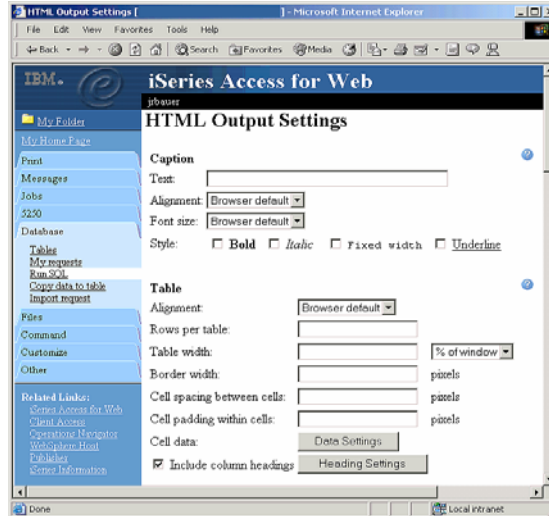
Type	Description	Applications	Notes
Text – Tab Delimited (*.txt)	Text format where fields are separated by tab characters	Any application that processes text.	Alternative to CSV if numeric data contains commas
Microsoft Excel XML	New format supported by MS Office XP and newer	Any Microsoft product that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

## SQL Output Types

### HTML Output Settings

Many settings for:

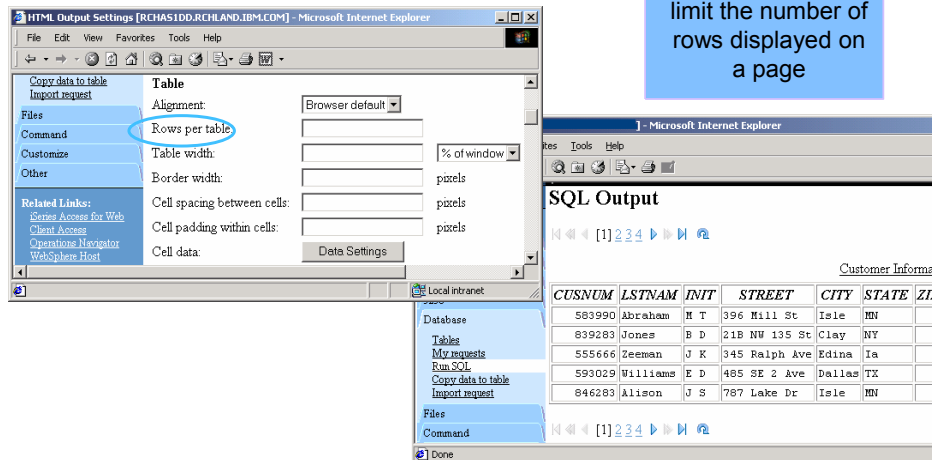
- Caption
- Table
- Cell data



## HTML Output Type

### Displaying output in a paged list

Specify a value for 'Rows per table' to limit the number of rows displayed on a page



## HTML Output Type

Contrasting other layouts

Preview output type displays a limited number of rows per page, but you can't customize how the list is displayed

Customer Information

CUSNUM	LSTNAM	INIT	STREET	CITY	STATE	ZIPCOOL
583990	Abraham	M T	396 Mill St	Isle	MN	56342
839283	Jones	B D	21B NW 135 St	Clay	NY	13041
555666	Zeeman	J K	345 Ralph Ave	Edina	Ia	45443
593029	Williams	E D	485 SE 2 Ave	Dallas	TX	75218
846283	Alison	J S	787 Lake Dr	Isle	MN	56342
397267	Tyron	W E	13 Myrtle Dr	Hector	NY	14841
593829	Pamas	F N	9 Briddle Lan	Salts	UT	76609

SQL Output

CUSNUM	LSTNAM	INIT	STREET	CITY	STATE	ZIP
583990	Abraham	M T	396 Mill St	Isle	MN	
839283	Jones	B D	21B NW 135 St	Clay	NY	
555666	Zeeman	J K	345 Ralph Ave	Edina	Ia	
593029	Williams	E D	485 SE 2 Ave	Dallas	TX	
846283	Alison	J S	787 Lake Dr	Isle	MN	

If you do not specify a value for 'Rows per table', all results are returned in a single page

## HTML Output Type

A template file can be used to display custom content before and after the statement results

The template file must exist in the integrated file system on the iSeries server

HTML Output Settings

Template

File: /boats/homepage/accesswater.html

Tag: %%CONTENT%%

General

Access for Water

BNAME	BFEET	BYEAR	BCOST	BNT01
Mako Sportfisher	19	1989	13000	-Located in Anacortes, WA.
Monk Bridge-deck Cruiser	36	1956	19900	-Built of mahogany, oak, and cedar.
Carver Santa Cruz	28	1978	23900	-Constructed of fiberglass.

## HTML Output Type

*Example of template file*

```
<HTML>
<BODY>
<table>
<tr><td>
<img SRC="boathead.gif" height=43 width=614>
</td>
<tr>
<td align="right">
<a href="/webaccess/iWAHome">Home</a>
</td>
</tr>
</table>
<br>
%%CONTENT%%
<br>
</BODY>
</HTML>
```

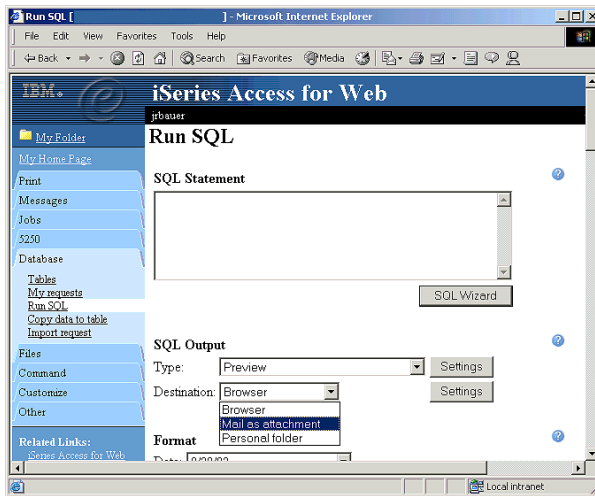
## SQL Output Destinations

## SQL Output Destinations

*Choosing a destination*

Choose from three different output destinations:

- Browser
- Email
- Personal folder



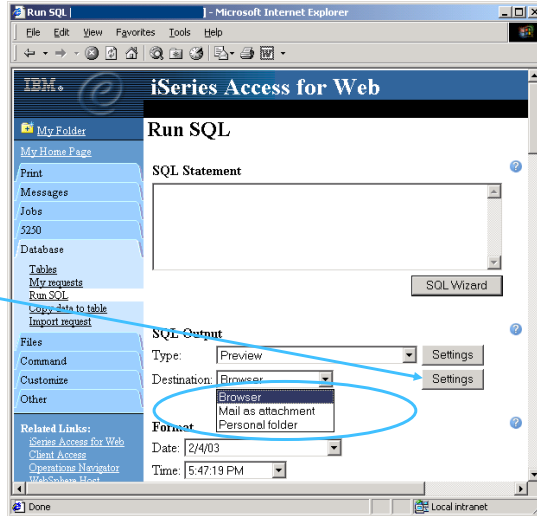
## SQL Output Destinations

*Items to consider when choosing destination type*

- Browser
  - Allows for viewing results immediately after query completes.
  - Ties up browser session until query completes
- Email
  - 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.

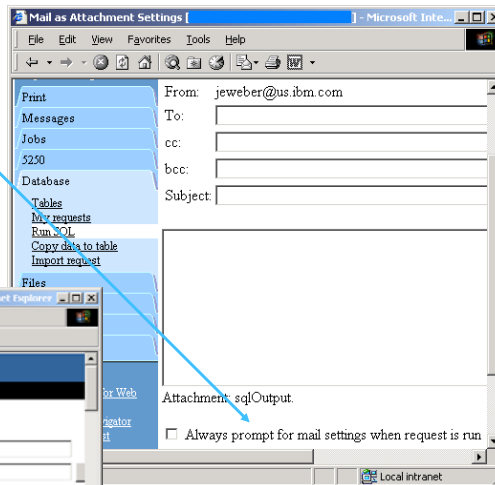
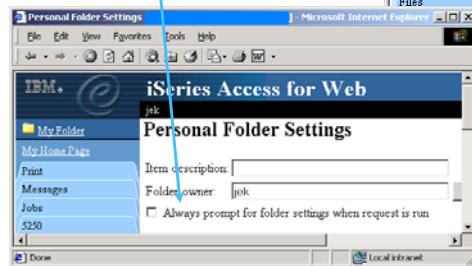
## SQL Output Destinations

Some destination types support type specific settings



## Destination Settings

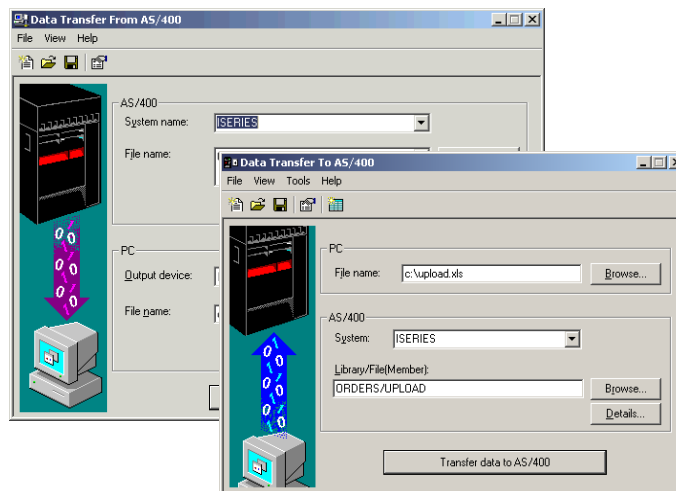
You can specify the folder and mail settings before the request is run or you can wait until the request is run



## Importing Data Transfer Requests

## Importing Client Access Data Transfer Requests

Import your existing iSeries Access for Windows and Client Access Data Transfer requests into iSeries Access for Web!



## 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

## Importing a Client Access Data Transfer Request

### The Import Function

Browse for or enter the name of the Client Access Data Transfer upload or download request to import

Import Client Access Data Transfer Request [ ] - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites Media Print Mail News RSS

IBM iSeries Access for Web

pt0user

My Folder

My Home Page

Print

Messages

Jobs

5250

Database

Tables

My requests

Run SQL

Copy data to table

Import request

Files

Command

Customize

Other

Related Links:

Done Local intranet

**Import Client Access Data Transfer Request**

Specify the Client Access Data Transfer request you want to import. The request will be converted to an iSeries Access for Web request.

**Note:** The converted iSeries Access for Web request could work differently than the Client Access request. Verifying the converted request is strongly recommended.

**Request to Import**

Client Access request:  Browse...

Character set:

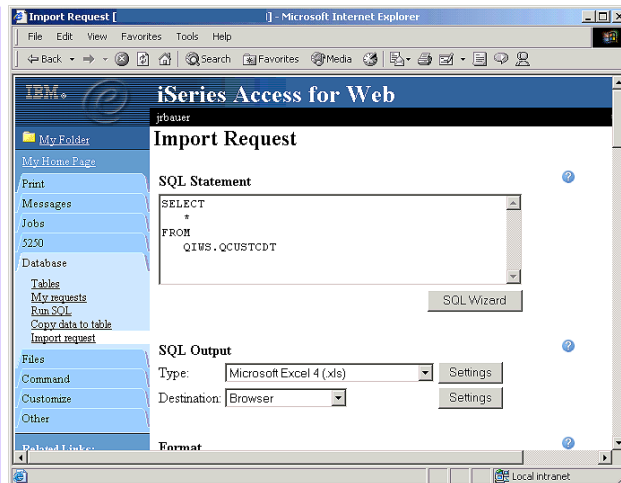
Import Request



## Importing a Client Access Data Transfer Request

*Importing a Data Transfer From AS/400 Request*

The imported transfer request may be run or saved as an iSeries Access for Web request



## Import Request - Restrictions

- 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.

# Managing Requests

## Managing Requests

*Managing your stored SQL and copy data requests*

From My Requests you can run, copy, delete, rename, edit or create shortcuts to requests. You may also access shortcuts others have given you

The screenshot shows a web browser window titled "My Requests" displaying the "iSeries Access for Web" interface. The main content area shows a table of requests with the following data:

Request	Description	Action	Shortcut	Created By	Access
ARenamed	My Requests	<a href="#">Run Copy</a>	Yes	jpvaldez	*PUBLIC
Parts List	Query parts in PARTS table	<a href="#">Run Copy</a> <a href="#">Delete</a> <a href="#">Rename</a> <a href="#">Create shortcut</a> <a href="#">Edit</a>	No	jrbaauer	jrbaauer
public	My Requests	<a href="#">Run Copy</a>	Yes	jpvaldez	*PUBLIC

Below the table, there is a "Run SQL" section with the text "Create a new SQL request".

## Understanding Shortcuts

- 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

## Shortcut Behavior

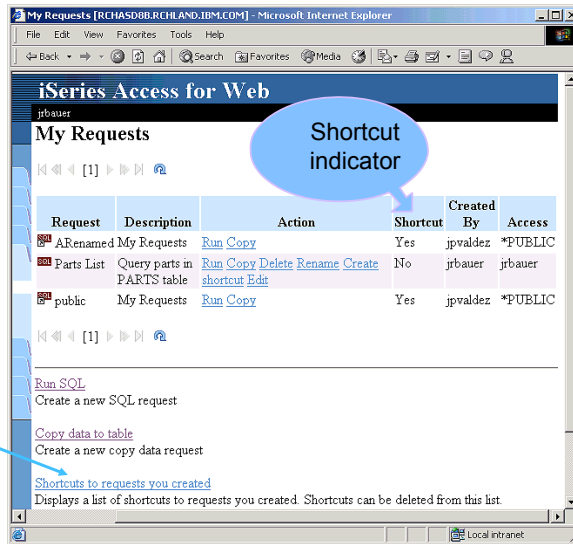
- The settings of the request referenced by a shortcut cannot be modified by the shortcut user.
- Changes made to the request referenced by the shortcut are automatically reflected when the shortcut is run
  - Note: This is not true for changes to the connection information since the connection information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

## Shortcuts

Working with shortcuts

My Requests allows you to work with shortcuts

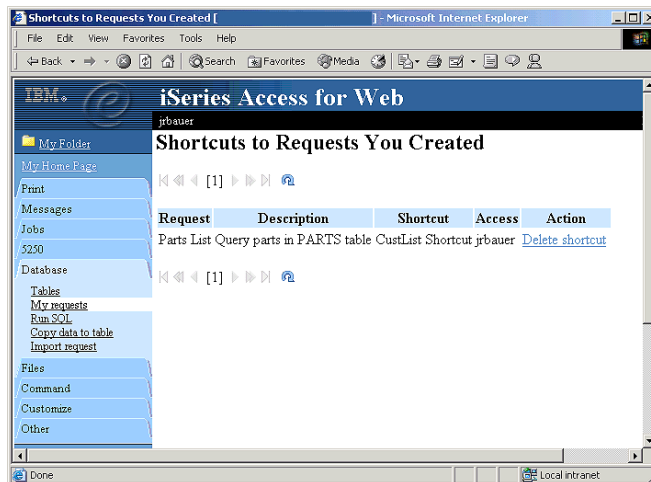
Manage shortcuts you created



## Managing Shortcuts

Shortcuts to Requests You Created

- Original Request
- Request Description
- Shortcut
- Access - who can use it/see it
- Action - delete the shortcut



## Notes: Working with Shortcuts

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:

### Create a shortcut

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.

### Run a shortcut

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.

### Copy a shortcut

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

The creator of 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.

### Rename a shortcut

Only shortcuts with a single 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

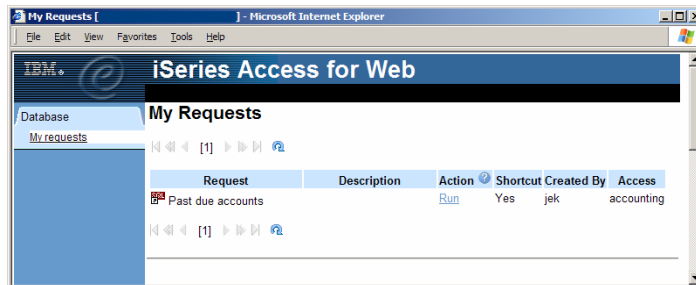
Shortcuts cannot be edited and a shortcut cannot be created to another shortcut.

## Shortcut Example

- Database administrator has access to all database functions
  
- \*PUBLIC only has access to run requests
  
- Database administrator creates three database requests:
  - "Past due accounts"
  - "Low inventory"
  - "New orders"
  
- Database administrator creates three shortcuts:
  - To "Past due accounts"      Access: ACCOUNTING
  - To "Low inventory"          Access: PURCHASING
  - To "New orders"              Access: SHIPPING

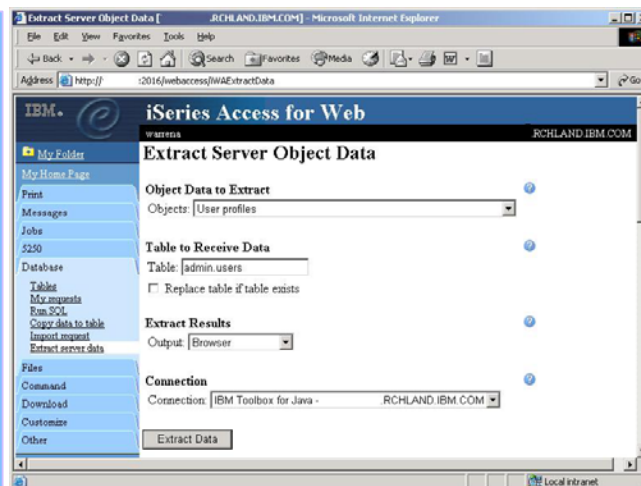
## Shortcut Example (cont.)

- Database administrator is the only one able to create and modify requests
- Users can only run requests needed to do their jobs.



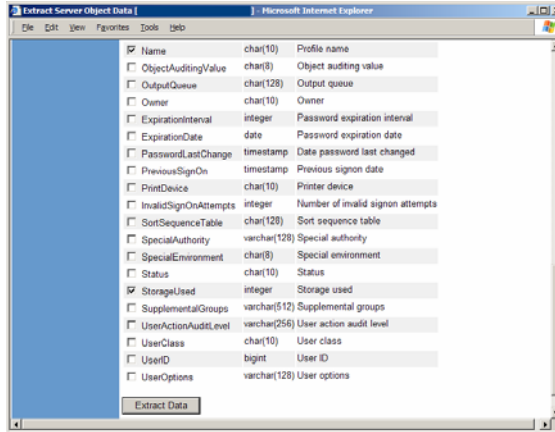
## Extract Server Data

Extract iSeries object information into a database table or tables. Then use Tables or Run SQL functions to retrieve relevant data.



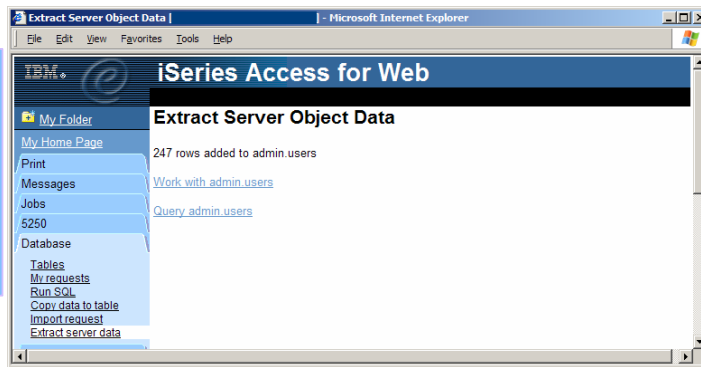
## Extract Server Data

Choose which information is extracted



## Extract Server Data

Choose how to work with results



## Extract Server Data

Query can be customized

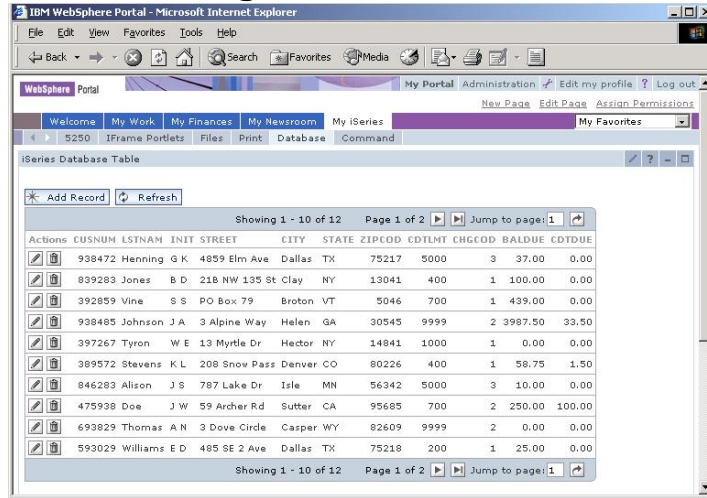


## Portal Application Support



## Database Table Viewing

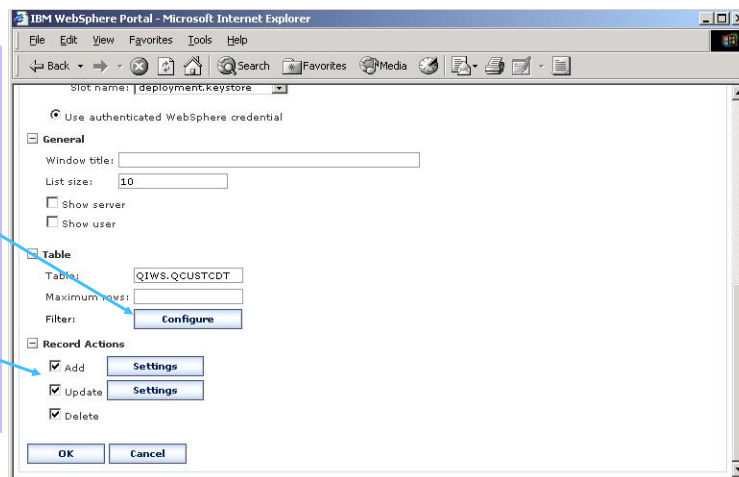
Insert, update and delete table records



## Database Table – Customizing

Configure a filter to limit the records in the table

Deny access to any of the actions



## Database Table – Customizing Add Record

Restrict user from entering values for some columns

Change column label displayed

Change column defaults

Change column order

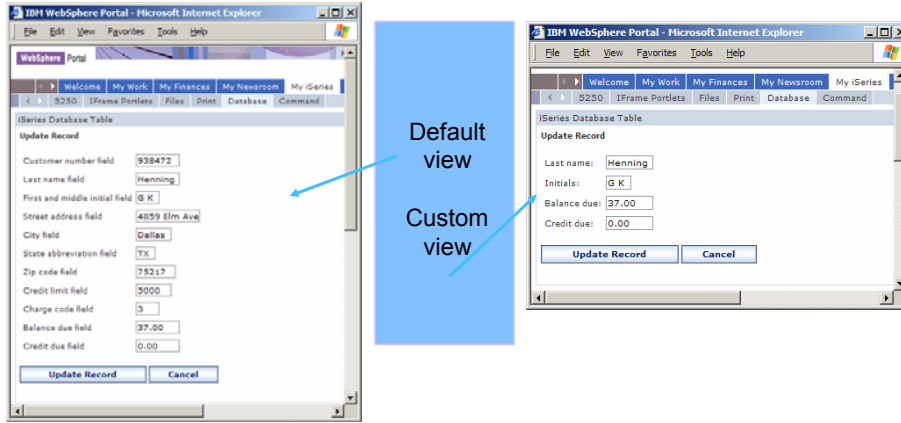
Display	Column	Label	Default Value	Required	Actions
<input checked="" type="checkbox"/>	CUSNUM	CUSTOMER NUMBER	0		
<input checked="" type="checkbox"/>	LSTNAM	LAST NAME FIELD			
<input checked="" type="checkbox"/>	INIT	FIRST AND MIDDLE			
<input checked="" type="checkbox"/>	STREET	STREET ADDRESS FI			
<input checked="" type="checkbox"/>	CITY	CITY FIELD			
<input checked="" type="checkbox"/>	STATE	STATE ABBREVIATIC			
<input checked="" type="checkbox"/>	ZIPCOD	ZIP CODE FIELD	0		
<input checked="" type="checkbox"/>	CDTLMT	CREDIT LIMIT FIELD	0		
<input checked="" type="checkbox"/>	CHGCOD	CHARGE CODE FIELD	0		
<input checked="" type="checkbox"/>	BALDUE	BALANCE DUE FIELD	0		
<input checked="" type="checkbox"/>	COTDUE	CREDIT DUE FIELD	0		

## Database Table – Add Record

Default view

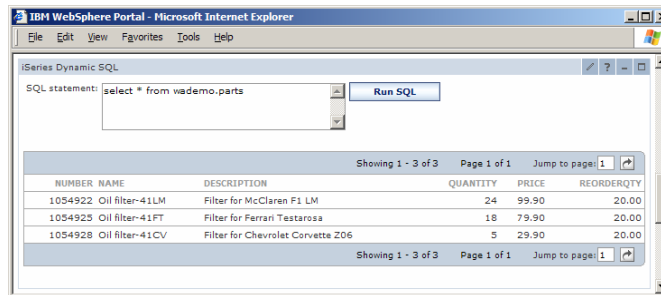
Custom view

## Database Table – Update Record



## Dynamic SQL

Run SQL statement and display the results

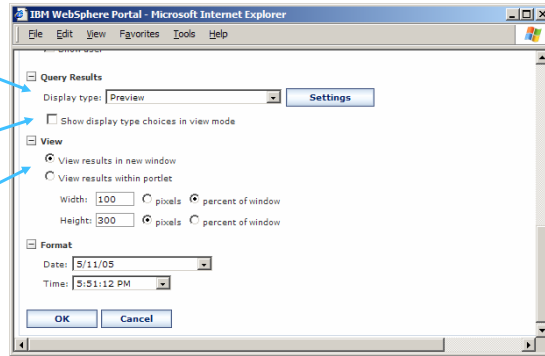


## Dynamic SQL - Customizing

Multiple display types supported

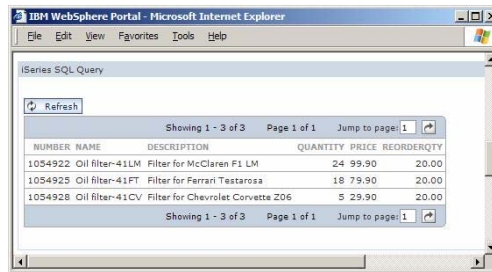
Display type can be chosen when statement is run

Results can be displayed in portlet window or new window  
 \* Choose new window if results need to be saved



## SQL Query – Default view

Display results of an SQL query statement

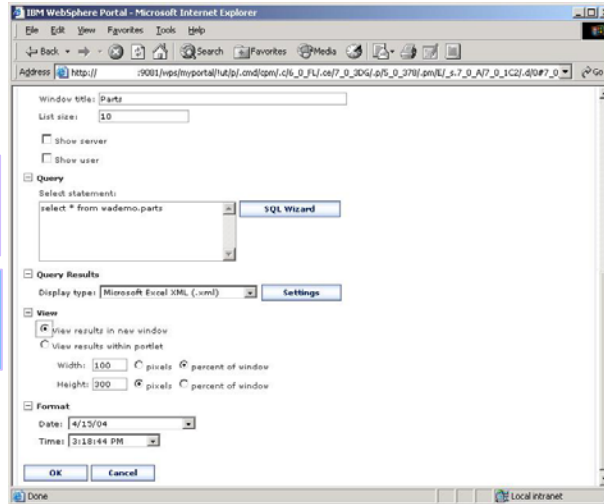


## SQL Query – Customizing

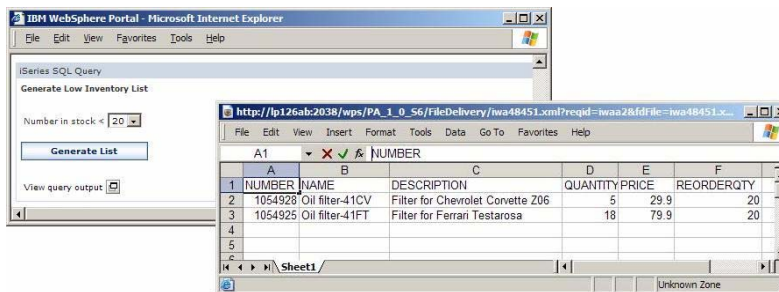
Only query statements can be specified

Full SQL wizard support, including dynamic queries

Supports same display types as Dynamic SQL portlet



## SQL Query – Tailored view



- Dynamic query built using SQL wizard
- Results displayed in separate window
- Excel XML used as display type

## What's New

## New Database Support in the Beta

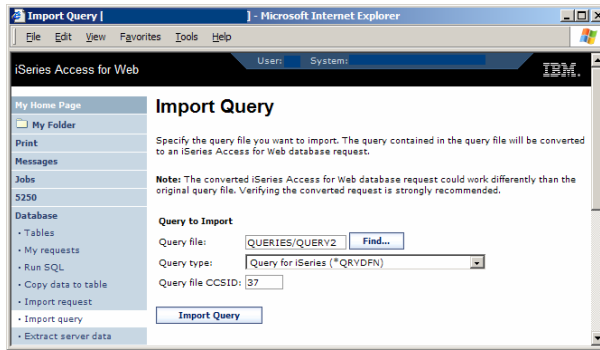
- Web application
  - Import Query
  - Open Office file format
  - Integrated file system destination
  - Data source connections
  - Find Record
- Portal application
  - Saved request support

## Import Query

Import query definition files or Query Manager files

Only the SQL statement is imported

Further customization of the database connection or request may be needed

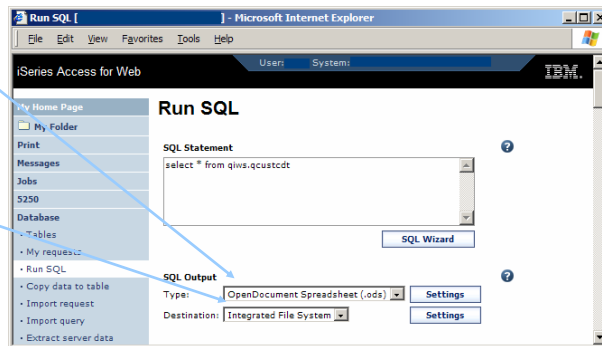


## New output type and destination

OpenDocument - file format supported by Open Office

SQL results can be sent to the integrated file system

Statement runs asynchronously when integrated file system destination is chosen

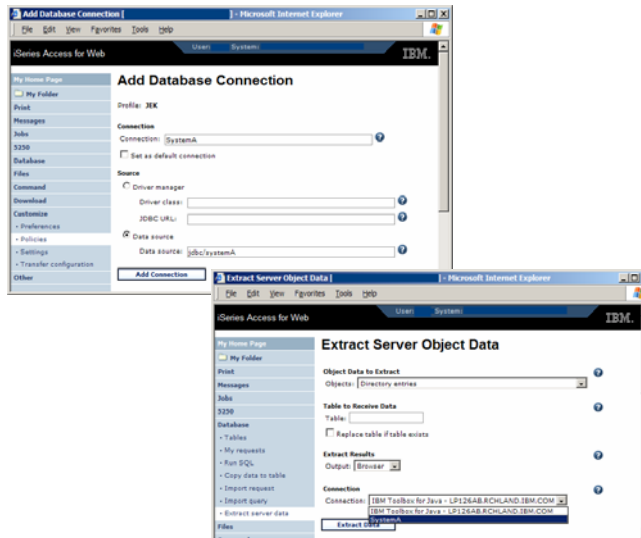


## Data Source Connections

Data source connections are created using Customize

Data source JNDI name used to identify the data source

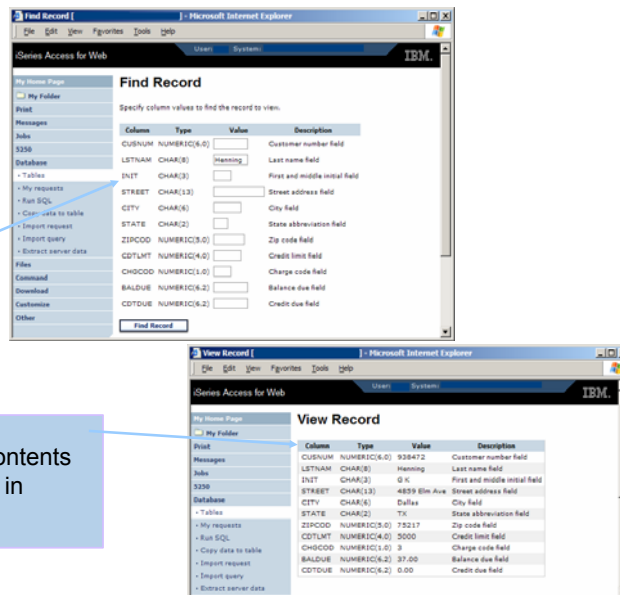
Allows you to take advantage of WebSphere's connection pooling



## Find Record

Available as action of Tables function

Specify criteria to locate record



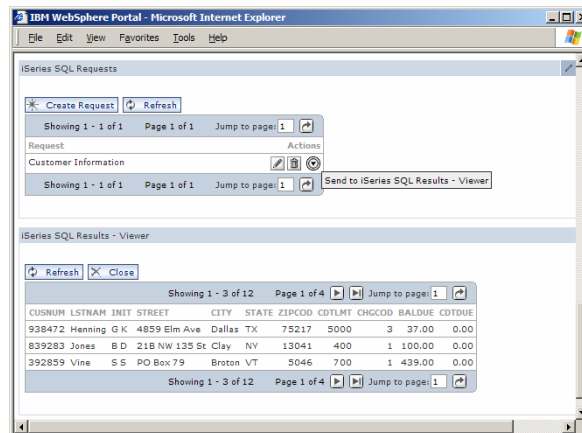
Record contents displayed in table



## Saved Requests Portlets

### Saved Requests:

- Can be shared with other users
- Stored in back-end database, not with portlet
- Sent to viewer portlet to run



## Summary

### 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 IBM Toolbox for Java JDBC driver for database connectivity
- Has web application server and portal server solutions
- 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
- Has robust interface for managing SQL requests
- Can mine iSeries object information and store results in a database table
- Is Fully Customizable
- Has exciting new function available in the beta

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@server	iSeries	WebSphere

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