Session: 32CL - 420015

iSeries. mySeries.

Tips and Techniques for iSeries Access for Web

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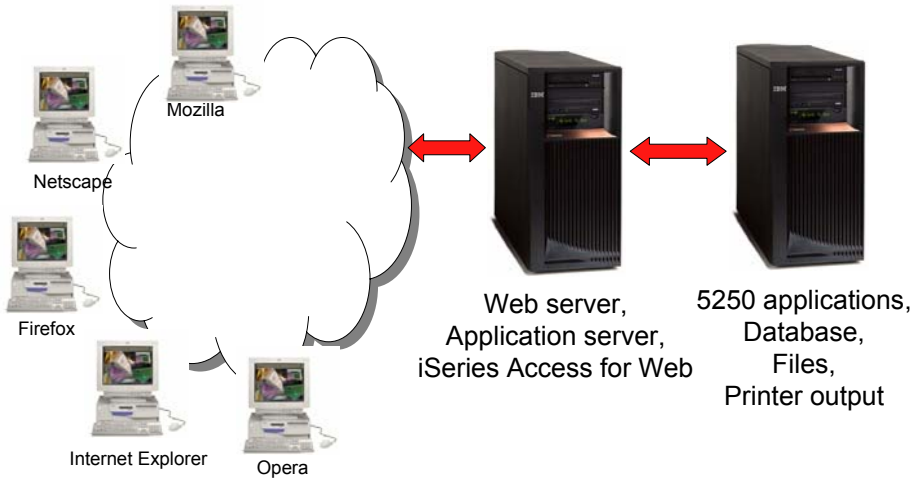

Overview

• iSeries Access for Web
  – Web browser access to i5/OS resources
    • 5250
    • File
    • Print
    • Database
    • Messages
    • Commands
    • And more…
  – Requires application server
    • WebSphere
    • Tomcat
  – Does not require client software other than a web browser

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What is iSeries Access for Web

Mozilla
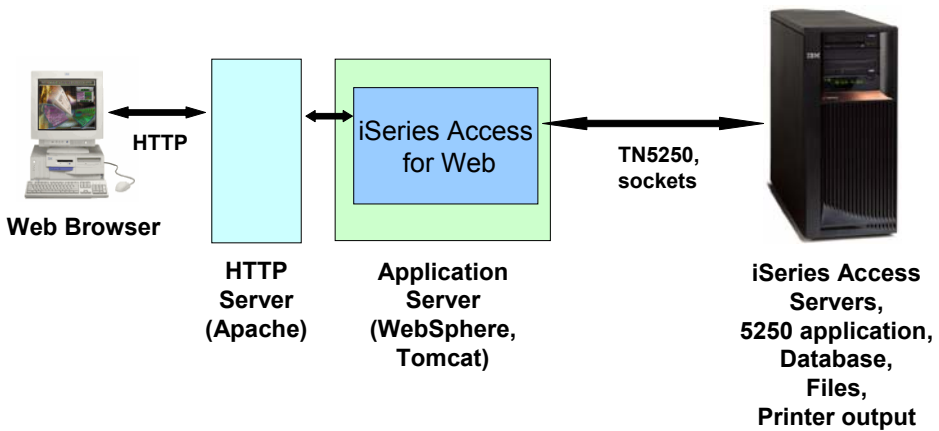
Netscape

Firefox

Internet Explorer   Opera

Web server,
Application server,
iSeries Access for Web

5250 applications,
Database,
Files,
Printer output

---

iSeries Access for Web Overview

HTTP

Web Browser

iSeries Access
for Web

**TN5250,
sockets**

**HTTP
Server
(Apache)**

**Application
Server
(WebSphere,
Tomcat)**

**iSeries Access
Servers,
5250 application,
Database,
Files,
Printer output**

Technique: iSeries Access for Web in a Three-Tier Environment

iSeries Access for Web can be configured as the middle tier in a three-tier environment

- iSeries Access for Web must be installed on the end-tier system
- iSeries Access for Web must be installed and configured in the middle tier system
- iSeries Access licenses must be available from the end-tier system
- Configure iSeries Access for Web to point to the end tier

System A

System B

TELNET

2

3

HTTP or HTTPS

Could have firewall here

This iSeries has:
- WAS
- Access for Web

This iSeries does not need WAS or Access for Web
- Must do RSTLICPGM to get Access for Web directory installed

1

•go to /QIBM/UserData/Access/Web2/[appserverinstance*]/config
•edit webaccess.properties (create it if it does not exist)
•add the entry realm=[host name] where host name is the name of the end tier system

*Note: appserverinstance varies depending on the application server used and the instance name.
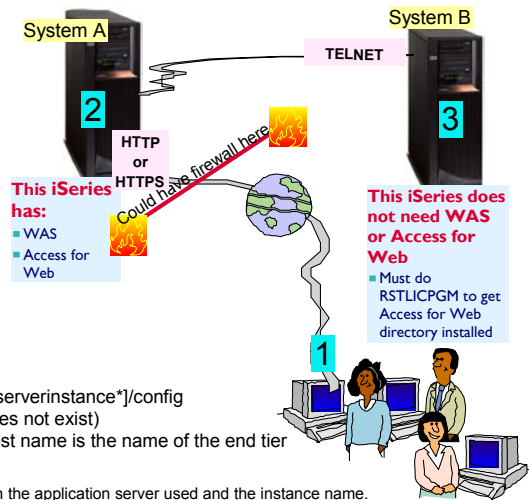
Tip: Manage User Access

- Customize policies for users and groups to
  - allow/deny functions users can access
  - limit the information users can see
- Use group profiles
  - manage policies for group profiles
  - add/remove users from groups
- Use *PUBLIC to set policies for all users
  - two strategies
    - allow all and deny specific users/groups
    - deny all and allow specific users/groups

Technique: Determining Policy Settings
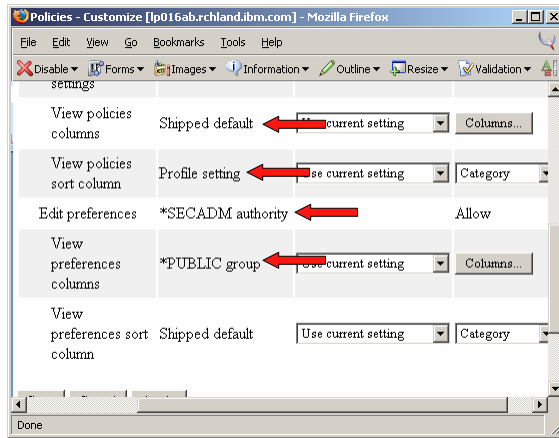
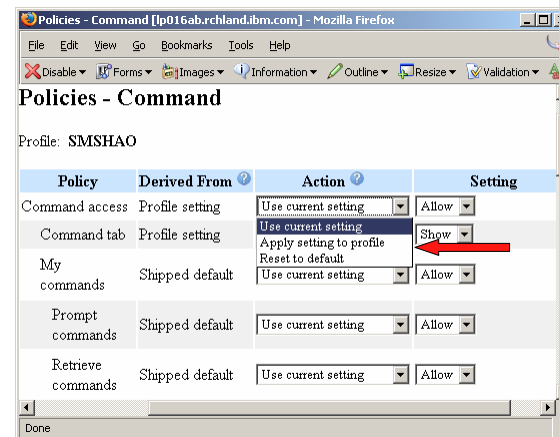Shipped default - policy is not set at any level, inherited from shipped default

Profile setting - Policy set at profile level

*SECADM special authority - policy is not set at any level, granted due to special authority on user profile

*PUBLIC group - policy set at *PUBLIC

Policy inherited from group (not shown in this example)

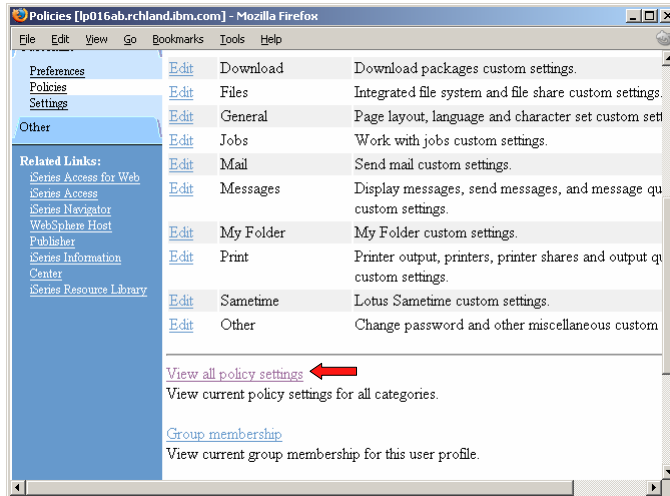
Applying Customization Settings

Use current setting - do not apply the value to current profile if setting is the same as inherited value.

Apply setting to profile - write the setting to current profile. Need to use this when value to set is the same as the inherited value.

Reset to default - only available when setting is derived from "Profile setting". Removes the setting from user profile.

Important: use "Reset to default" to remove a setting from profile and inherit value from group or *PUBLIC.

Tip: Determing Policy Settings

Tip: Determing Policy Settings

Sort by "Derived From" to get a sorted list of policy values set at user or group level

Use printer friendly format to get a printable list of policy settings

Tip: Simplify Printer Output

- Use Policies / Preferences to remove attribute columns
  - display only attributes that make sense for your users
- Use Policies to limit the view options

Printer Output [lp016ab.rchland.ibm.com] - Mozilla Firefox

File   Edit   View   Go   Bookmarks   Tools   Help

Disable ▼   Forms ▼   Images ▼   Information ▼   Outline ▼   Resize ▼   Validation ▼

File Name	User Data	Creation Date/Time	Pages Per Copy	Copies	Status	Action
QZSRHTTPTR	QSRV015075	10/31/03 3:38 PM	2	1	Ready	Work with View View as View PDF
QPDSPAJB		3/22/04 11:44 PM	5	1	Ready	Work with View View as View PDF
QPJOBLOG	QPADEV0003	4/8/04 4:35 AM	1	1	Ready	Work with View View as View PDF
QPJOBLOG	QPADEV000C	11/21/03	2	1	Held	Work with

Done

Tip: Take Advantage of Printer Views

- Use customize preferences or policies to control the printer view
  - Basic
    - hides the iSeries printer concept
    - simplified actions to control printers
  - Advanced
    - traditional iSeries printer
    - advanced actions
    - starting/stop writer
    - hold/release output queues
    - vary on/off device

Printers - Basic View

Printers - Advanced View

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Tip: Convert AFP and SCS Output to PDF

- All printer output sent to PDF printers are converted to PDF
- Use iSeries Access for Web to create a PDF printer
- Send 5250 application output to PDF printers to generate PDF
- Use iSeries Access for Web to access generated PDF documents
  – Use PDF printer output to access your PDF printer output
  – Use PDF printers to access PDF printer output by printer

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Tip: Use Fixed Width Font for 5250 Session

- Use fixed width font for screens that don't align correctly
  – Use the "Active session settings" link to change the setting
- Use web and traditional view to quickly switch settings

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Setting Fixed Width Font
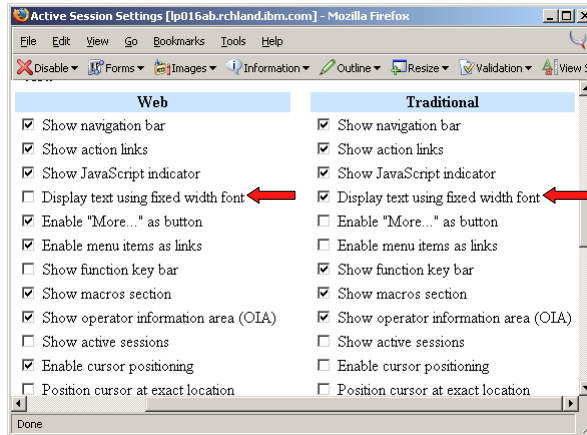
Example: 5250 - Proportional Width
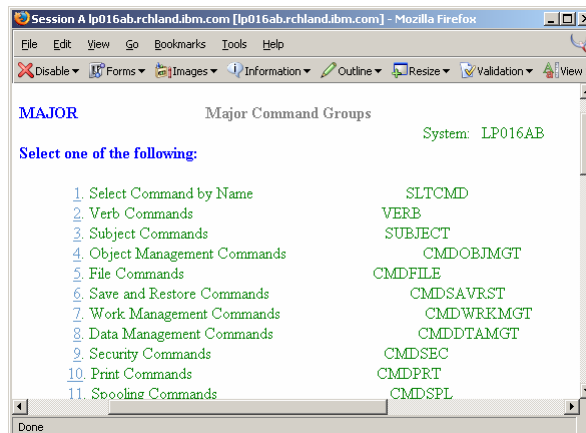
Example: 5250 - Fixed Width
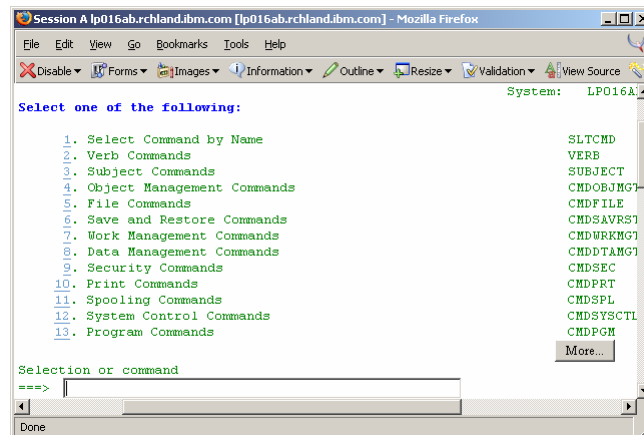
Tip: Position Cursor at Exact Location

- Some 5250 application are cursor sensitive
  - Help
  - Prompting
- iSeries Access for Web 5250 interface allow positioning cursor by clicking on the field
  - Default behavior – place the cursor at the start of field
  - V5R3 added the ability to place the cursor at every location for those applications that differentiate cursor locations within a field

Tip: turning on position cursor at exact location results in larger HTML file. Turn this capability on and off as needed.

Technique: Turning On Exact Cursor Location
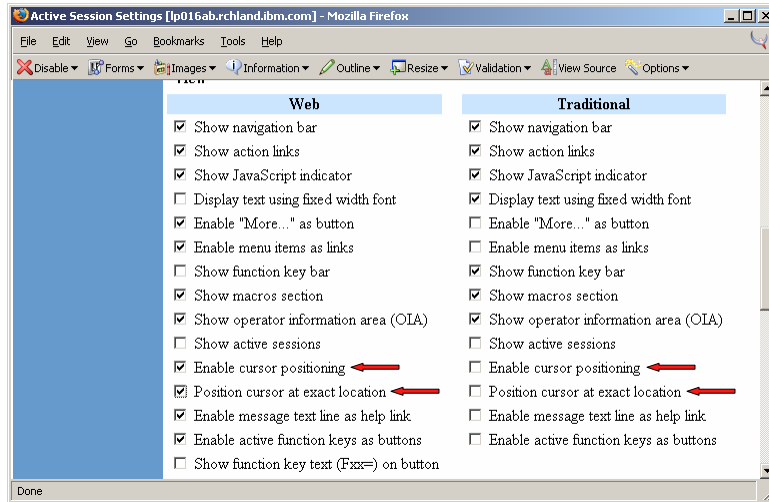
Technique: Replace User ID and Password
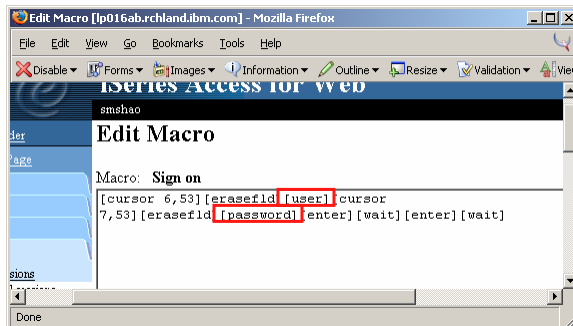
Use the keywords [user] and [password] in the macro to use the logged in user ID and password

Tip: single signon between iSeries Access for Web and 5250

Tip: Take Advantage of 5250 Initial Macro
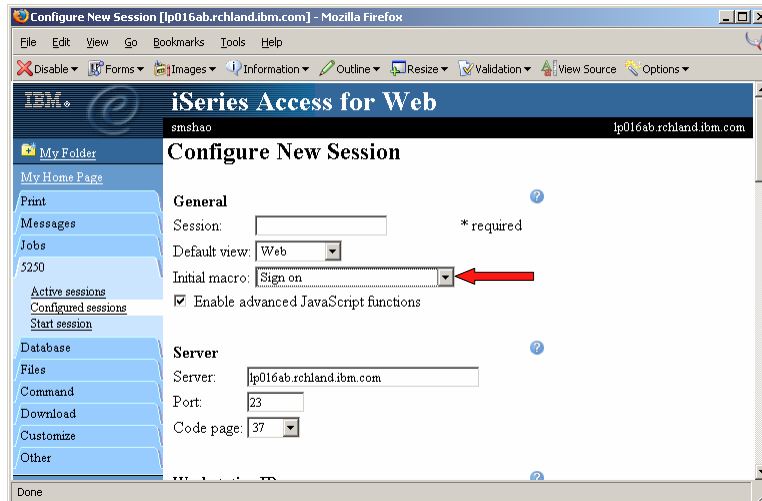
Tip: Take Advantage of 5250 Shortcuts

- Shortcut is a pointer to the actual object
  – Configured session
  – Macro
- Shortcuts can be created for user or group
  – Share configuration with other users
- Owner of the object has read/write access
  – Edit/modify configured session, macro
- Owner of the shortcut has read access
  – Use session configuration, macro
  – Deleting a shortcut only deletes the shortcut, does not delete the actual object

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Technique: Creating 5250 Session Shortcut

Configured Sessions [lp016ab.rchland.ibm.com] - Mozilla Firefox

File   Edit   View   Go   Bookmarks   Tools   Help

Disable ▼   Forms ▼   Images ▼   Information ▼   Outline ▼   Resize ▼   Validation ▼   View Source   Options ▼

	Session	Server	Action	Shortcut	Created By	Access
	my session	lp016ab.rchland.ibm.com	Start Copy Delete Rename Create Shortcut Edit	No	smshao	smshao
	Shortcut to my session	lp016ab.rchland.ibm.com	Start Copy Delete Rename	Yes	smshao	smshao
	Shortcut to test shortcut macro	rchas1dd.rchland.ibm.com	Start Copy	Yes	javactl	*PUBLIC
	Shortcut to testtraditional	lp016ab.rchland.ibm.com	Start Copy	Yes	warrena	*PUBLIC

My Home Page / Print / Messages / Jobs / 5250 / Active sessions / Configured sessions / Start session / Database / Files / Command / Download

Create a new shortcut

Owner may edit configuration

Shortcuts cannot be edited

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Technique: Creating 5250 Session Shortcut

Create Shortcut [lp016ab.rchland.ibm.com] - Mozilla Firefox

File   Edit   View   Go   Bookmarks   Tools   Help

Disable ▼   Forms ▼   Images ▼   Information ▼   Outline ▼   Resize ▼   Validation ▼   View

My Folder / My Home Page / Print / Messages / Jobs / 5250 / Active sessions / Configured sessions / Start session

Create Shortcut

Create shortcut to "my session"

Shortcut name: Shortcut to my session

Access: [   ]   Add...

Create Shortcut

Name the shortcut

Add the user or group
•Access is the user or group that would have access to the shortcut

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Tip: Configure Default 5250 Session
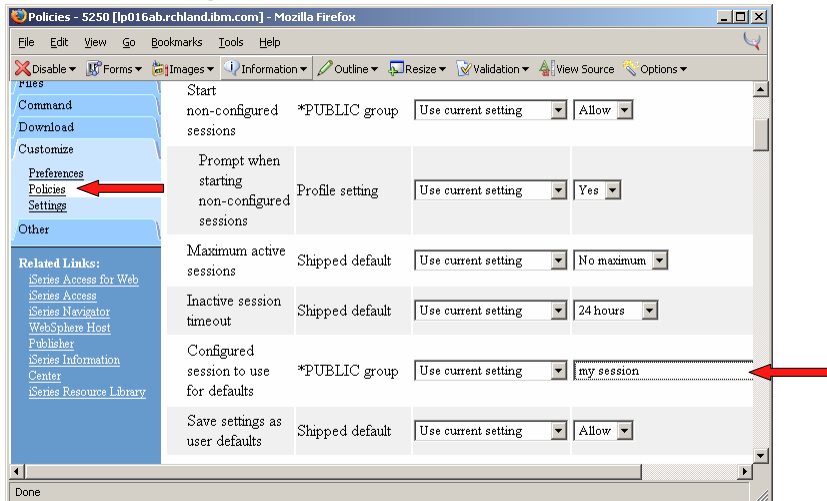
Tip: Share an Active 5250 Session

- Share an active session with other users or groups of users
- Shared session is read only
  – Others can only view the session
- Shared session is not refreshed automatically as screen content changes
  – Use browser refresh button to refresh the content
- Useful for showing someone the screen content
  – Ex. help desk

View-only Session

```
Session A lp016ab.rchland.ibm.com [lp016ab.rchland.ibm.com] - Mozilla Firefox      _ □ ×
File   Edit   View   Go   Bookmarks   Tools   Help

                                                       System:      LP016AB
     Select one of the following:

            1. User tasks
            2. Office tasks
            3. General system tasks
            4. Files, libraries, and folders
            5. Programming
            6. Communications
            7. Define or change the system
            8. Problem handling
            9. Display a menu
            10. Information Assistant options
            11. iSeries Access tasks

            90. Sign off

     Selection or command
     ===> _____

     F3=Exit  F4=Prompt  F9=Retrieve  F12=Cancel      F13=Information Assistant
```
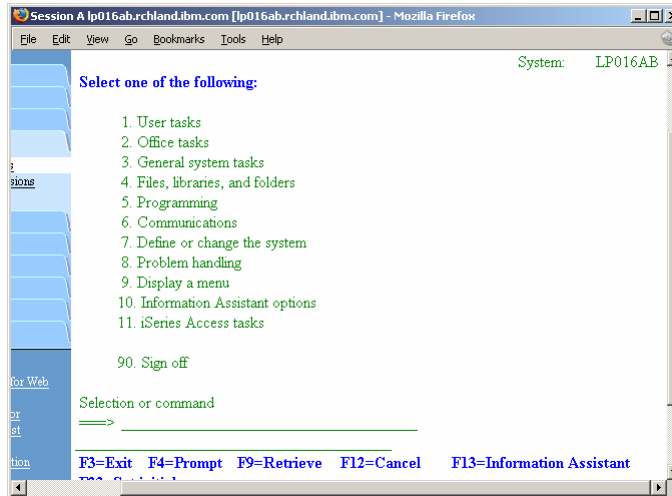

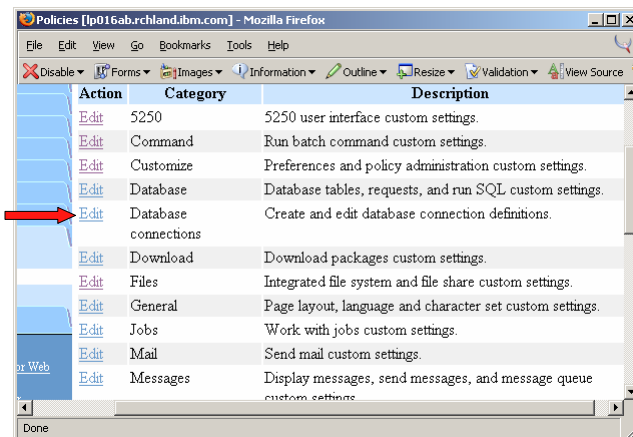## Tip & Technique: Integrating 5250 with Your Web Page

• Use the URL http://[host]:[port]/webaccess/iWA5250
   – Documented in the URL documentation on the web
   – Starts a new session if the user does not have an active session
   – Reconnects to the last accessed active session if the user has one or more active sessions
   – Use initmac parameter to execute a macro at session startup
       • If the parameter is present, and there is not an active session, a new session is started, and the macro is executed
       • Useful for taking a user directly into an application
       • ex: http://myhost/webaccess/iWA5250?initmac=mymacro will start a new 5250 session and execute the macro named mymacro if there is not an active session

Tip: Create Shortcuts to Saved Database Requests

- Shortcuts to a saved request to make the request available to another user or group of users
  - Shortcut is a reference to the actual request
  - Maintain ownership of the request
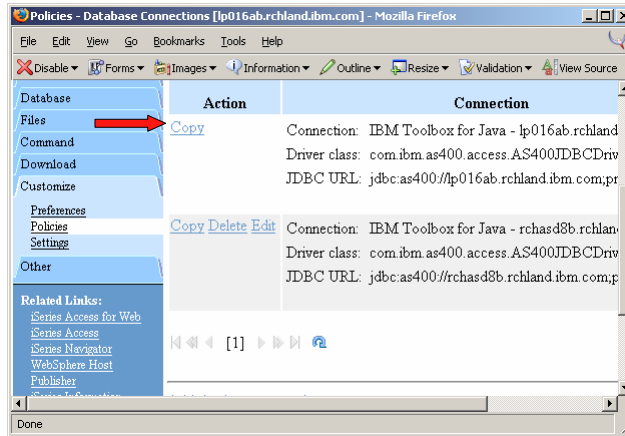 - Changes to the request is automatically reflected to shortcut

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Tip: Access Database on Another iSeries

- Configure a new connection to access tables on another iSeries
- Use policies to add or edit connections
  - connections can be configured for a user, group of users, or *PUBLIC
  - default connection uses Toolbox JDBC driver
 - other JDBC drivers can be used for new connections

Action	Category	Description
Edit	5250	5250 user interface custom settings.
Edit	Command	Run batch command custom settings.
Edit	Customize	Preferences and policy administration custom settings.
Edit	Database	Database tables, requests, and run SQL custom settings.
Edit	Database connections	Create and edit database connection definitions.
Edit	Download	Download packages custom settings.
Edit	Files	Integrated file system and file share custom settings.
Edit	General	Page layout, language and character set custom settings.
Edit	Jobs	Work with jobs custom settings.
Edit	Mail	Send mail custom settings.
Edit	Messages	Display messages, send messages, and message queue custom settings.

Technique: Configuring a Connection to Another iSeries
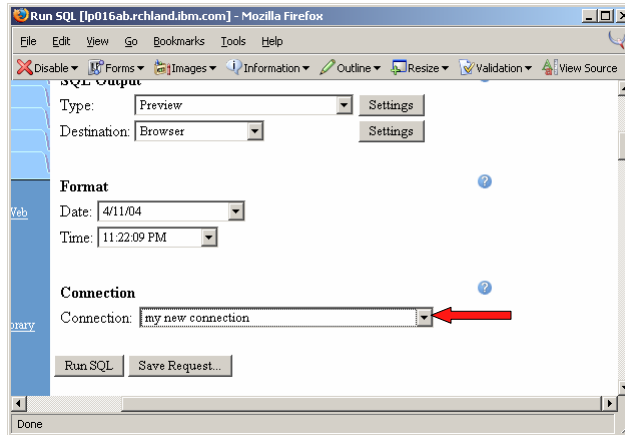
Copy the default connection

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Technique: Configuring a Connection to Another iSeries

- Name the connection
- Modify the JDBC URL to point to the new iSeries
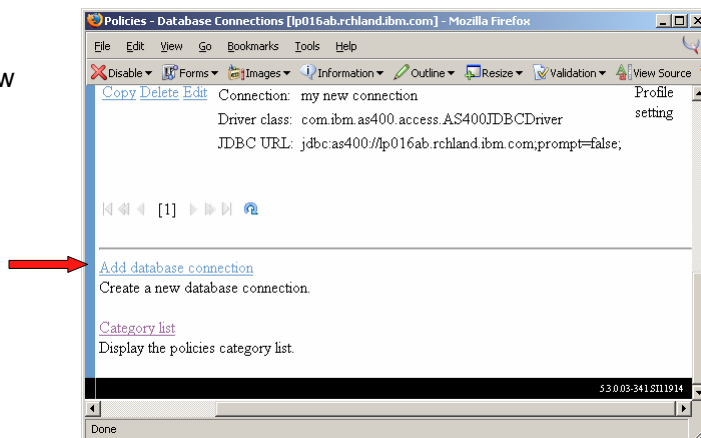
iSeries. mySeries.
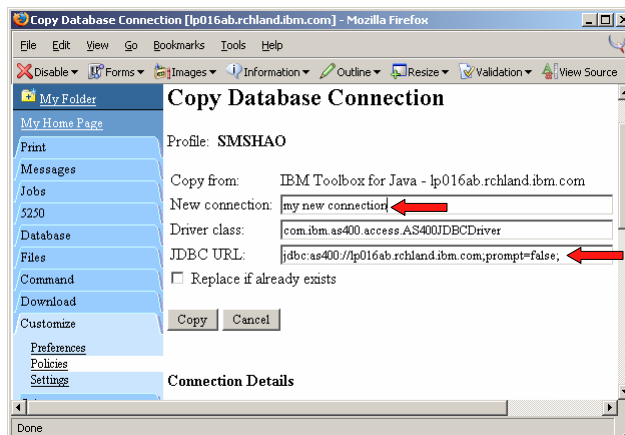
Technique: Configuring a Connection to Another iSeries

- Select the connection
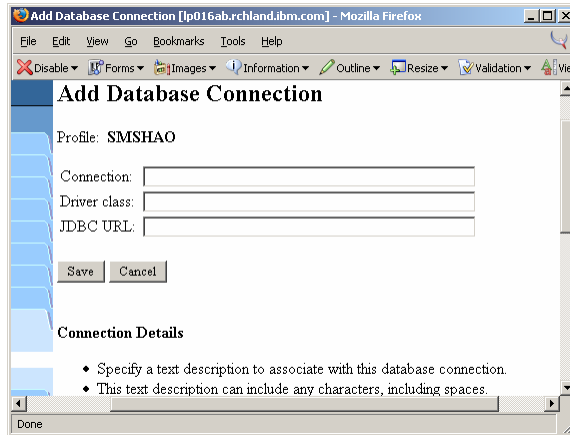 - Run SQL
  - Copy data to table

Tip: Using Another JDBC Driver

- Create a new connection

Technique: Using Another JDBC Driver

- Name the connection
- Provide the driver class name
  - Documented by the JDBC driver
  - fully qualified class name
  - case sensitive
  - e.g. com.ibm.....
- Provide the URL
  - documented by the JDBC driver
- Classes must be in the class path for the iSeries Access for Web instance

Add Database Connection [lp016ab.rchland.ibm.com] - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

Disable ▼   Forms ▼   Images ▼   Information ▼   Outline ▼   Resize ▼   Validation ▼   View

Add Database Connection

Profile: SMSHAO

Connection: [   ]
Driver class: [   ]
JDBC URL: [   ]

Save   Cancel

Connection Details

- Specify a text description to associate with this database connection.
- This text description can include any characters, including spaces.

Done

Tip: Extract Server Data

- Use Extract Server Data to gather information on the server
  - User profile information,
  - Product information,
  - PTFs,
  - Directory entries,
  - And more…
- Information is extracted into a database table
- Use Run SQL to create queries against the extracted data
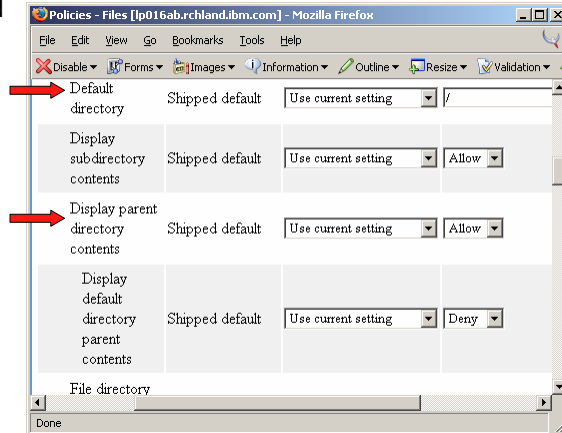
Using Another JDBC Driver

- Support
  - Unsupported except the native driver
- iSeries user ID and password are used for the JDBC connection

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Tip: Scope of Database Connection

- Database connections can be configured for *PUBLIC, group or user profile
  - Create connection for user or group to hide connection from other users or groups
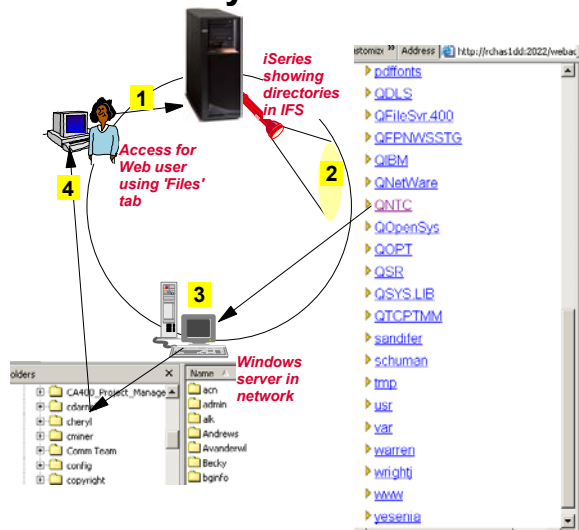 - Create connection for *PUBLIC to give everyone access to a connection

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Tip: Restrict File Access

- Restrict access to Files and File Shares
 - Set default directory for user or group

Policies - Files [lp016ab.rchland.ibm.com] - Mozilla Firefox

File   Edit   View   Go   Bookmarks   Tools   Help

✕ Disable ▾   📄 Forms ▾   🖼 Images ▾   ⓘ Information ▾   ✏ Outline ▾   🔲 Resize ▾   ✅ Validation ▾

Default directory	Shipped default	Use current setting ▾	/
Display subdirectory contents	Shipped default	Use current setting ▾	Allow ▾
Display parent directory contents	Shipped default	Use current setting ▾	Allow ▾
Display default directory parent contents	Shipped default	Use current setting ▾	Deny ▾
File directory			

Done

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Tip: Access Files on Other Systems

- File systems mounted in the IFS can be accessed
  - NFS
 - QNTC
- Use files to access files on other file systems

iSeries showing directories in IFS

Access for Web user using 'Files' tab

Windows server in network

istomizx ⁣" Address 🔲 http://rchas1dd:2022/webac ▾
- pdffonts
- QDLS
- QFileSvr400
- QFPNWSSTG
- QIBM
- QNetWare
- QNTC
- QOpenSys
- QOPT
- QSR
- QSYS.LIB
- QTCPTMM
- sandifer
- schuman
- tmp
- usr
- var
- warren
- wrightj
- www
- yesenia

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Tip: Zip and Unzip Files on the Server

- No need to download or map drives
- Zip up file or directory in IFS
- Unzip to IFS directory

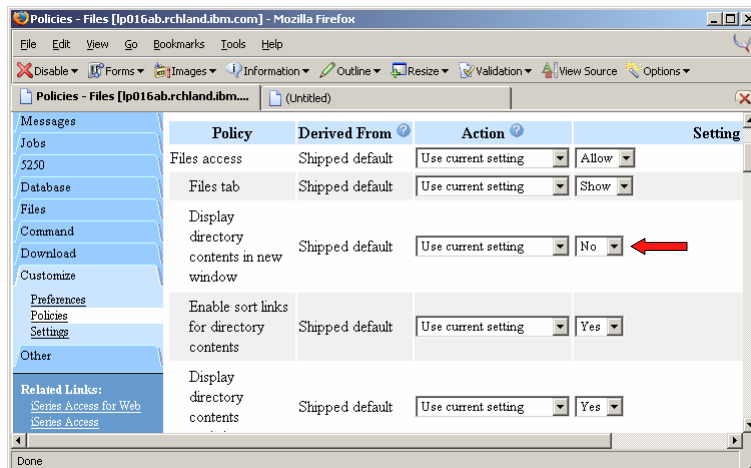
Zip and Unzip
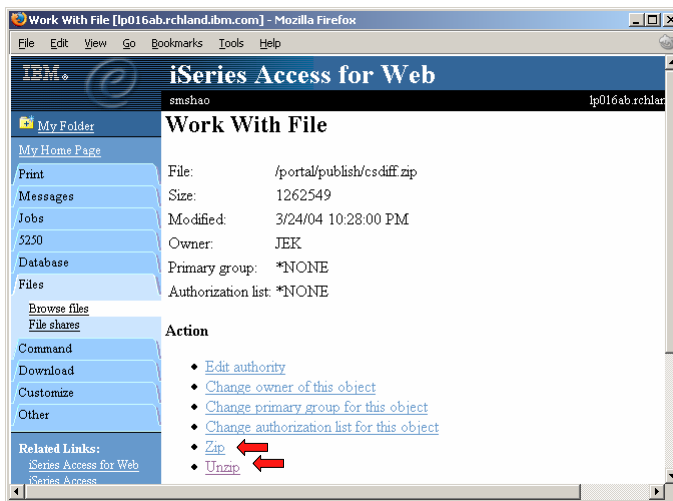
Manage File Ownership and Authority
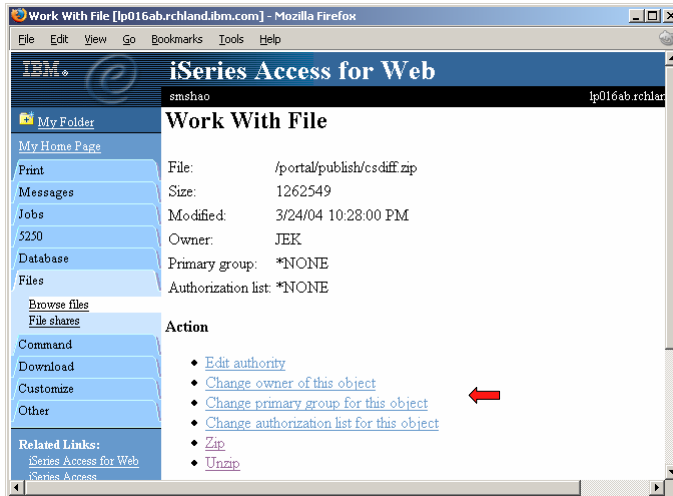
Tip: Display Directory Content in New Window

Tip: Taking Advantage of Commands

- Does not incur interactive cost
- Save frequently used commands
  - Use command prompting for saved commands to modify parameters
- Search for commands
  - wild card search
    - crt*, *prt, *dev*
  - Text search command description for commands
    - "work active job"

Tip: Mail and Personal Folder

- Allows asynchronous execution
  - database access
  - Commands
  - View PDF
- Use mail or personal folder when
  - task (query, command) takes a long time to execute
  - automatically send the result to other users
- Use personal folder when
  - user is an iSeries user
  - the resulting output is large
- Use email when
  - user is not an iSeries user

Tip: Setting Up Users for Mail

• Set SMTP mail server for *PUBLIC
  – All users use the same SMTP server
  – Can set SMTP server for specific user or group to override *PUBLIC setting

---

Tip: Folder Notification

• Set up for email notification
  – mail must be set up (SMTP server and email address)
  – set "Send e-mail on new folder items" to "yes"
  – notification email address does not have to be the same as mail settings
    • defaults to email address in the mail setting
    • override with email address of cell phone, or pager

Tip: Use Sametime for Notification and Broadcast

- Configure for Sametime server information and associate Sametime user with iSeries user profile
- Sametime can be used for
  - Notification (like email)
  - Broadcast message (like break message)

Tip: Navigating the Pages

- Most iSeries Access for Web pages are bookmarkable
- Use bookmarks/favorites to access frequently access functions directly
- Feel free to use the the browser "Back" button
  - except 5250 session
- Use browser history list to go back to a previous page

Tip: Application Integration

- URL syntax documented at
  http://www.ibm.com/servers/eserver/iseries/access/web/
- Use URLs to integrate with other web applications
- Bookmarked URLs may be used
  – undocumented URL syntax may change in the future

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Tip: Export Navigation as Bookmarks

- Export iSeries Access for Web navigation as bookmarks
  – Bookmarks can be imported by:
    - Internet Explorer
    - Netscape Navigator
    - Mozilla
    - Opera…

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Exporting Bookmarks

Tip: Use Download for File Distribution

- Method to distribute files to users
  – Manage access by OS/400 users and groups
  – Users only see files they are authorized to
- iSeries Access for Linux is configured for download by default
  – Visible to profiles with SECADM only
 – Need to configure access to all other users

Download: Create Download

Enter the
- Name of the download
- Description (optional)
- Path to the file
   - Use "Browse…" button to select file from your local workstation

---

Download: Default Download Permissions

- Downloads are created with
    - Owner allowed to manage and access
    - Profiles with SECADM special authority allowed to manage and access
    - Public is denied access and manage
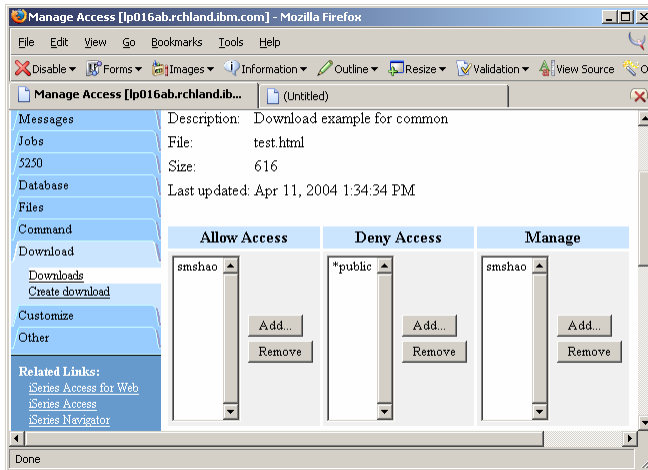
Download: Work With Download

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Download: Work With Download

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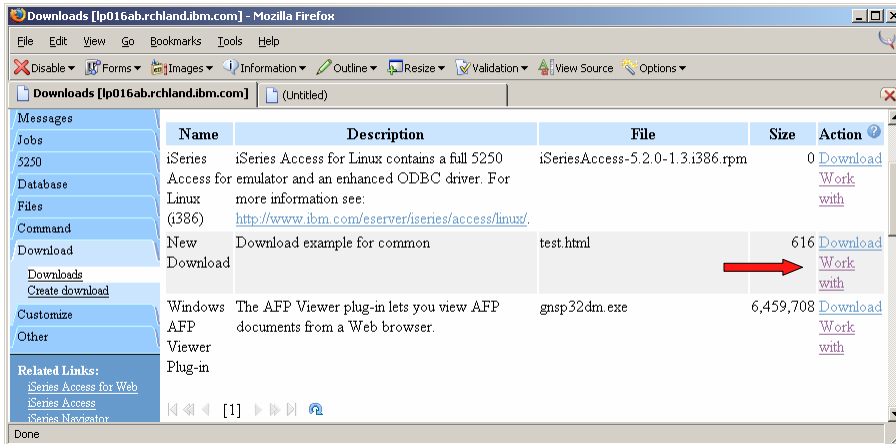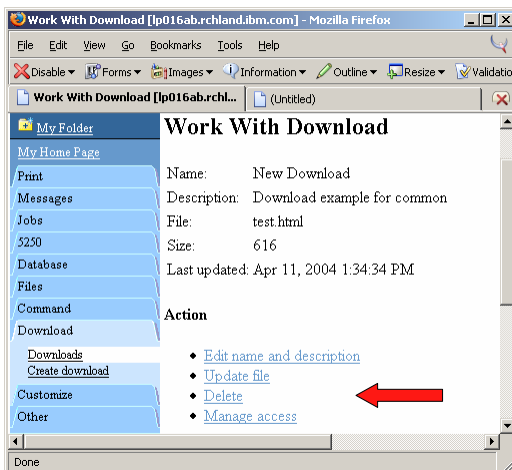
Download: Manage Access

- Allow Access
  - Users and groups that are granted access to download
- Deny Access
  - Users and groups that are denied access to download
- Manage
  - Users and groups that are allowed to manage this download

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eServer	IBM (logo)	
*@*server*	iSeries	

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Photographs shown are of engineering prototypes. Changes may be incorporated in production models.