

iSeries Access for Web: What an Administrator Needs to Know

OMNI Day of Education - November 13, 2007

Linda Hirsch <u>LLHIRSCH@us.ibm.com</u> http://www.ibm.com/systems/i/software/access/web/



Agenda

- Overview
- iSeries Access for Web Runtime Considerations
 - Use of policies
 - Customizing the home page/template files
- iSeries Access for Web Environment Security Considerations
 - SSL and VPN
 - Authentication security options
 - Servlets and Portlets how are they different?



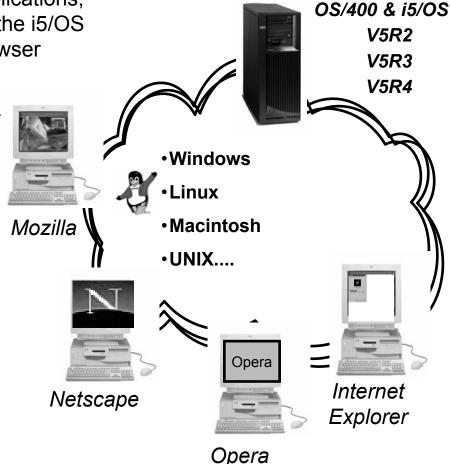
Overview



What is iSeries Access for Web?

End users can leverage business information, applications, and resources across an enterprise by extending the i5/OS resources to the client desktop through a web browser

- Provides access to i5/OS through a browser
 - 5250 access
 - Access to database, integrated file system, printers, output queues, jobs
 - Can run batch commands and send/receive messages
- It has the following advantages:
 - Is server based
 - Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop
 - Uses industry standard protocols HTTP, HTTPS and HTML





Try out iSeries Access for Web for yourself!

Start your browser and connect to the following web site: http://iseriesd.dfw.ibm.com/webaccess/iWAHome (case sensitive)

User ID = WACUST Password = demo2pwd	This shows the basic look of iSeries Access for Web as we ship it. You can try various functions including working with printer output, creating database requests, etc. Click on the 5250 tab, sign onto the iSeries, then start an RPG application called BOATS and run it.
User ID = BOATADMIN Password = demo2pwd	This is an example of how a customer might design a web page for their use. You will see that an end user could start the same BOATS application by clicking on the 5250 session, or they could have used HATS to run the application. You will also see other links that would let a user work with spoolfile information, work with IFS, run database requests, etc

Send email to: LLHIRSCH@us.ibm.com to reset the user profiles on iseriesd.dfw.ibm.com if either one gets disabled.



iSeries Access for Web Runtime Considerations



3 methods to control access using iSeries Access for Web

Administration Policies

 Administrators can use the Customize function to set policies for users and groups of users.

User Preferences

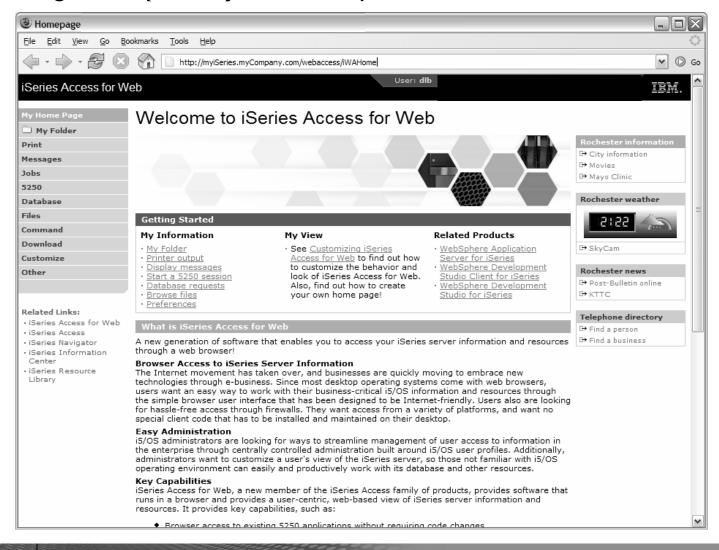
- Users can set their own Preferences for things like
 - What tabs are available in the navigation bar
 - How to view output (default rows/columns per page)
 - How to filter output

Customize the Home page and template files

- Administrators can use the Customize function to replace the default iSeries Access for Web home page with their own home page.
- Administrators can use the Customize function to replace the default template that defines the layout, look, and feel of iSeries Access for Web pages
- Style sheets The look of the iSeries Access for Web page content is now controlled by external style sheets.

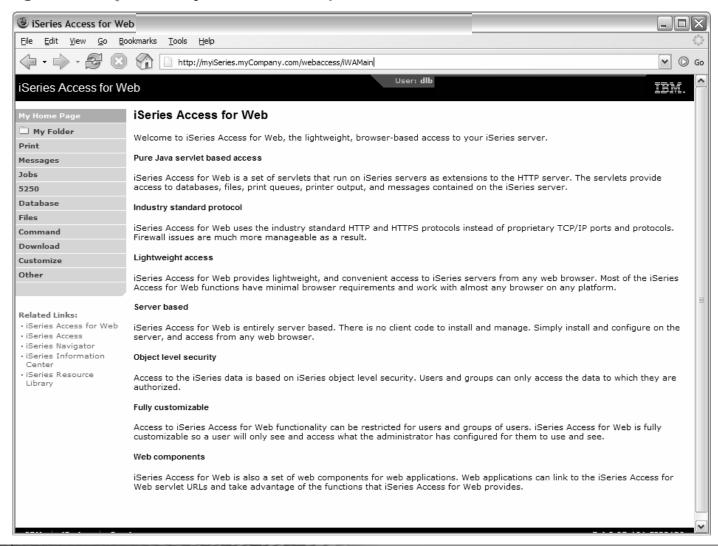


Home Page = http://<myiseries>:<port>/webaccess/iWAHome



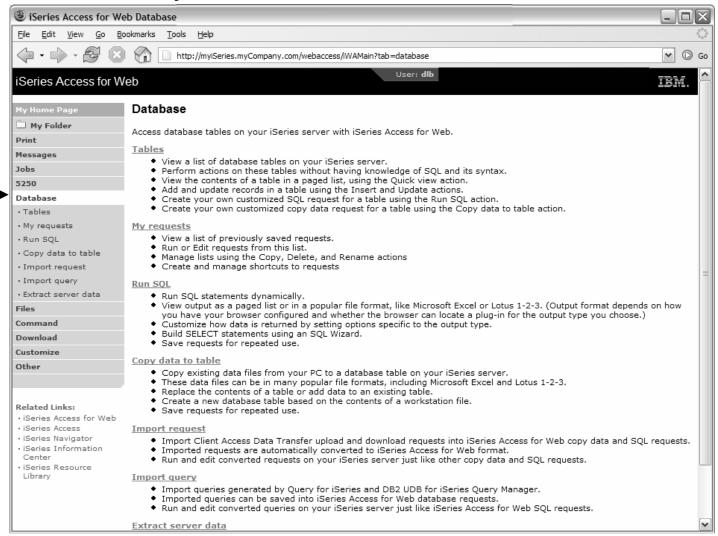


Main Page = http://<myiseries>:<port>/webaccess/iWAMain





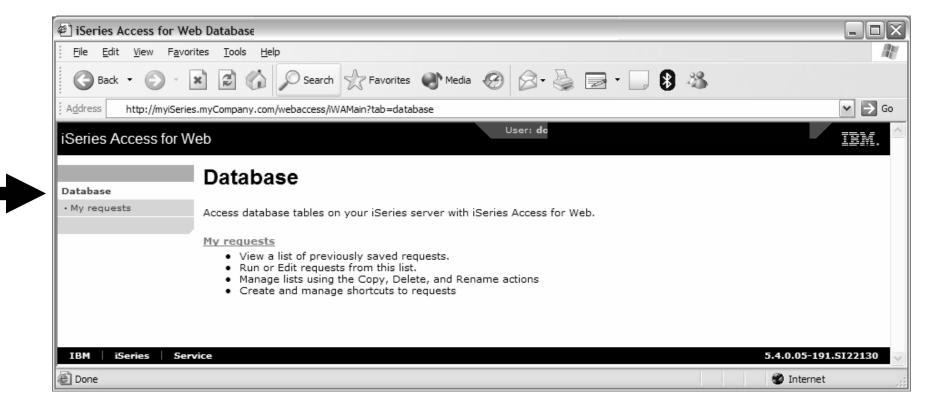
Product functionality







Sample for a user that only performs preset database queries





Controlling Access: Setting policies for users and groups of users



Controlling User Access

My Home Page
Print
Messages
Jobs
5250
Database
Files
Command
Download
Customize
Other

- Customize policies for users and groups to
 - Allow/Deny functions users can access
 - Limit the information users can see
- Use group profiles to simplify policy management
 - Manage policies for group profiles
 - Add/remove users from groups
- •When a function is restricted, access to the servlet is restricted
- You need *SECADM authority to customize profiles



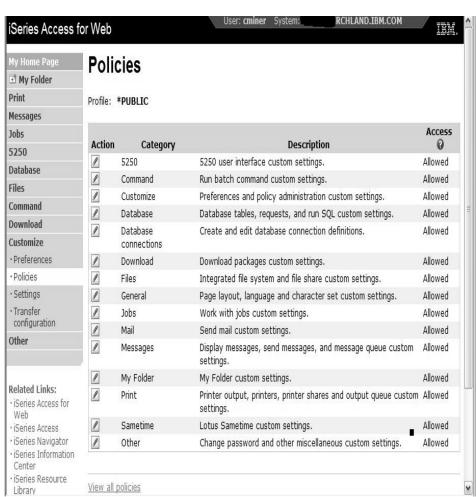
Notes: Controlling Access - How & Whom?

- The Customize function allows administrators to set policies for users and groups of users.
- These policies control...
 - Functions a user can perform.
 - How certain information is presented to the user.
- When a function is restricted...
 - Its navigation bar content is removed.
 - Access to the servlet is restricted.
 - It takes effect immediately.
- Administrators with *SECADM special authority are automatically authorized to administer settings for users and groups of users to which they have authority.
- These administrators can then grant other user profiles permission to administer iSeries Access for Web functions.



Controlling User Access

- iSeries Access for Web ships with default policy settings
- Default allows most functions to be available to all users
- Use *PUBLIC to set policies for all users
- •Strategy:
 - Grant an administrator profile access to all functions
 - Deny access to all functions to *PUBLIC
 - Then allow specific users/groups access to specific functions



View of the Policies page

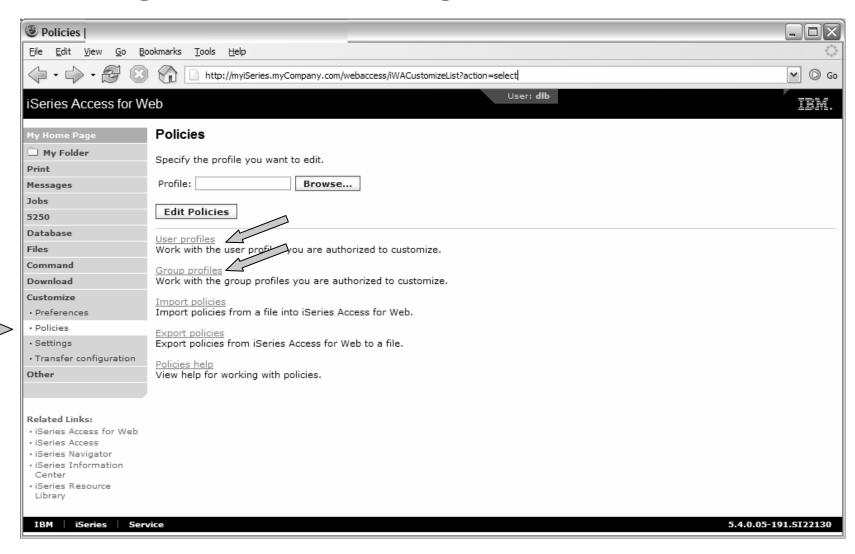


Notes: Controlling Access - Strategies

- iSeries Access for Web ships with a set of default policy settings. The default policy settings allow most of
 the iSeries Access for Web functions to be available for all users. Without any customization, users
 accessing iSeries Access for Web could begin using most of the available functions.
- As an administrator of this product, you may not want your users to be able to access all of these
 functions. It is the responsibility of an administrator to restrict functions they do not want their users to be
 able to access.
- One of the quickest strategies that can be deployed to restrict a function from all users is to use the Customize Group Profiles function and customize the *PUBLIC group profile.
- This group profile is defined such that every user is a member of this group. So, for example, if you were
 to customize the *PUBLIC profile and set the "Browse files" and "File shares" file functions to "Deny", you
 would restrict file system access from this product for all users.
- If some of your users required access to this function, you could specifically customize their user profiles and set this function back to "Allow". In this way, only users that have been specifically allowed access will be able to use that function, all others would not have access.
- It should be noted that the *PUBLIC group profile includes the administrator user ID that is used to
 customize other group and user profiles. If you were to deny functions for *PUBLIC, this would affect the
 administrator user profile. As you customize iSeries Access for Web for *PUBLIC, you may want to
 consider specifically allowing your administrator user profile to have access so that it is not locked out of
 iSeries Access for Web functions.

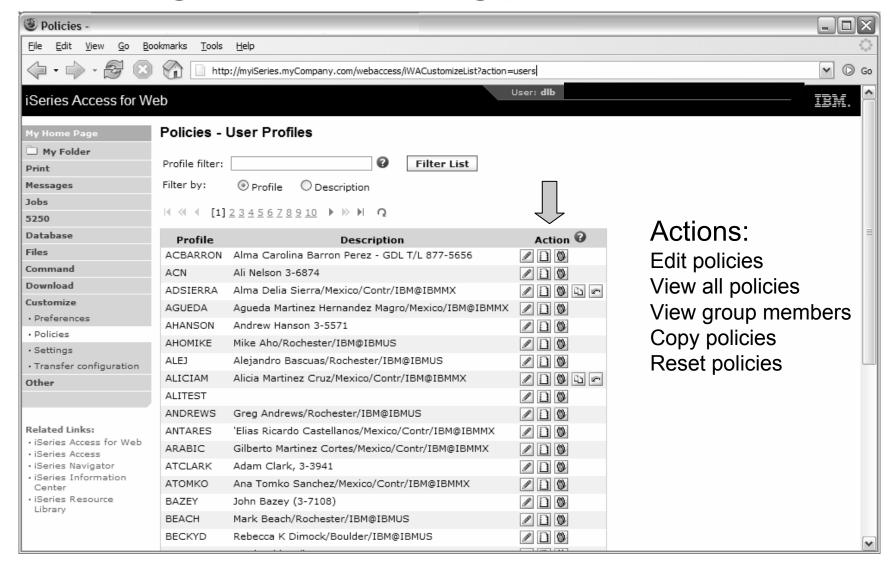


Controlling Access - Setting policies (continued)





Controlling Access - Setting policies (continued)

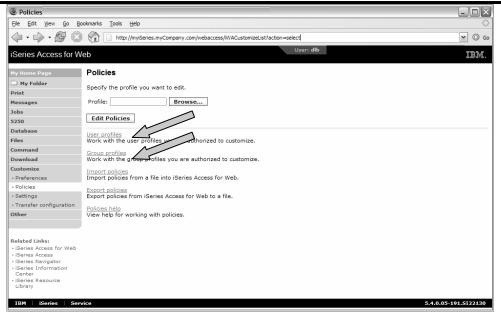




Controlling Access - Setting policies

Administrator actions on user & group profiles

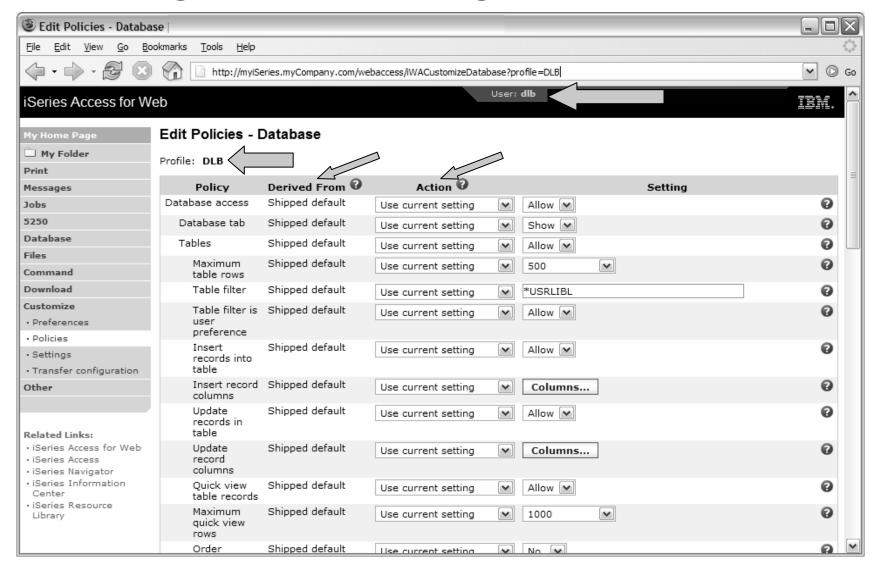
Action	Description
Edit	This action is always available. Use this option to create or modify policy settings for the specified user or group profile.
View all policies	Select this action to view all of the policy settings currently being used for the profile.
View group membership	Select this action to display the Group Membership page that lists the group and supplemental group profiles (by name) the user profile has been assigned membership.
View group members	Select this action to display the Group Membership page that lists the user profiles (by name) that are currently members of the group profile.
Сору	This action is only available when the user or group profile currently has specific policy settings. It allows you to copy all of the policy settings from this profile to one or more other profiles.
Reset	This action is only available when the user or group profile currently has policy settings. It allows you to remove all of the policy settings specific to this profile.



20



Controlling Access - Setting policies (continued)





Controlling Access - Setting policies (continued)

Administrator Action on each policy setting

Action	Description
Use current setting	This is the default action that is pre-selected. If the setting is not modified, no action is performed. If the setting is modified, it will be added to the user or group profile record in the iSeries Access for Web policies file.
Apply setting to profile	Select this action to add the current setting to the user or group profile record in the iSeries Access for Web policies file. The setting will be written to the user or group profile record, even if it was not modified. You would use this action to ensure the user or group profile gets this setting. This is because a different policy setting may be used based on the user profile being a member of one or more i5/OS group profiles.
Reset to default	Select this action to remove the setting from the user or group profile record in the iSeries Access for Web policies file. This option is only available if the user or group profile record currently contains a specific setting for this policy.



Controlling Access - Setting policies (continued)

The "Derived From" column (displayed when editing policy and preference settings) indicates where the policy setting that will be used for this user profile was found.

Action	Description
Profile setting	Indicates the setting is currently specific to the profile being customized. The setting had previously been applied to this profile.
Group – (groupName)	Indicates the setting is not specific to the profile being customized, but is being derived from the specified i5/OS group profile and the user is a member of this group.
*PUBLIC setting	Indicates the setting is not specific to the profile being customized. No setting was found in any i5/OS group profile memberships. The setting is being derived from the *PUBLIC group settings. This is a special group profile available to iSeries Access for Web administrators. All user profiles are automatically members of this special group profile. Administrators can modify this group profile to easily apply settings to all iSeries Access for Web users.
Shipped default	Indicates the setting is not specific to the profile being customized, no setting was found in any i5/OS group profile memberships, or the special *PUBLIC group profile. The setting is being derived from a shipped default value.
Parent policy	Indicates the function is a sub-function of a higher level category, and its policy setting is being controlled by a top level policy setting. For example, Tables is a sub-function of Database. If Database is restricted, Tables will be restricted as well and would show its being controlled by a parent policy.

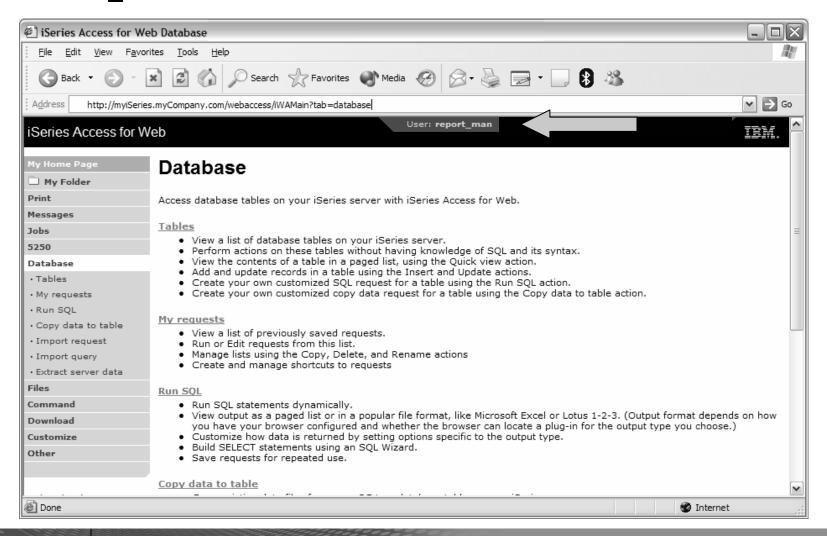


- The following screen shots step through setting the policies so a specific user only has the ability to run preconfigured database queries to generate reports.
- This example shows
 - the "Before" picture of what DB functions a user can perform with no customization of iSeries Access for Web
 - the specific database policies to set to restrict our user named REPORT_MAN
 - what general policies need to be set to restrict use of non-DB related functions by REPORT MAN
 - The "After" picture of what REPORT_MAN can do
- When the policy is set, it takes effect immediately.



Example: Simple Database User - Before

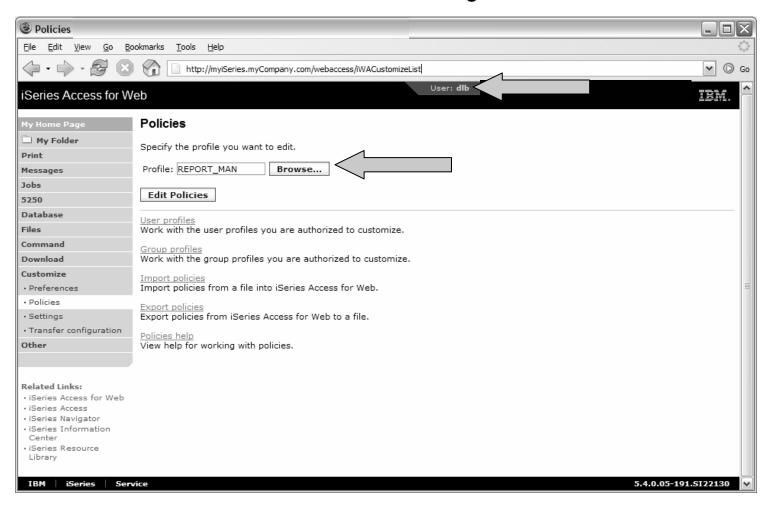
Accessing the Database tab of iSeries Access for Web as user REPORT MAN





Example: Simple Database User - Policies

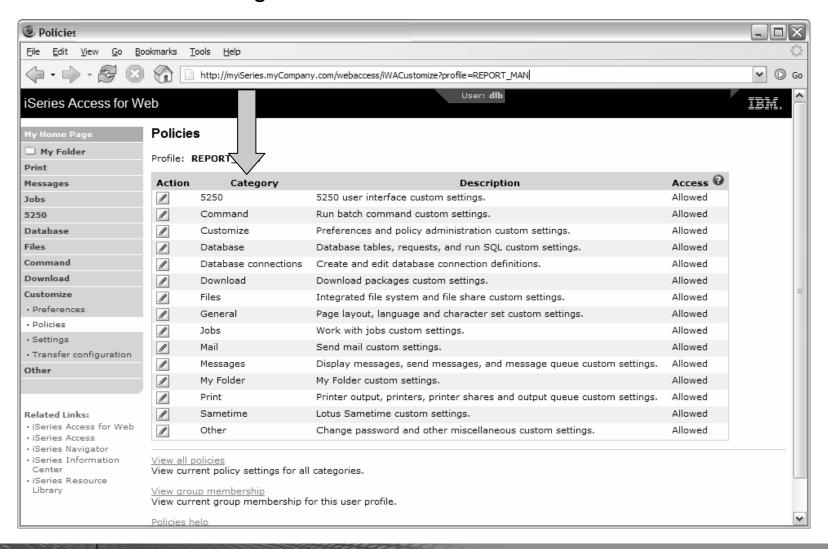
- Policies the starting point for customization of a specific user or group.
- This is a new browser session, where we signed on as an administrator.





Example: Simple Database User - Categories

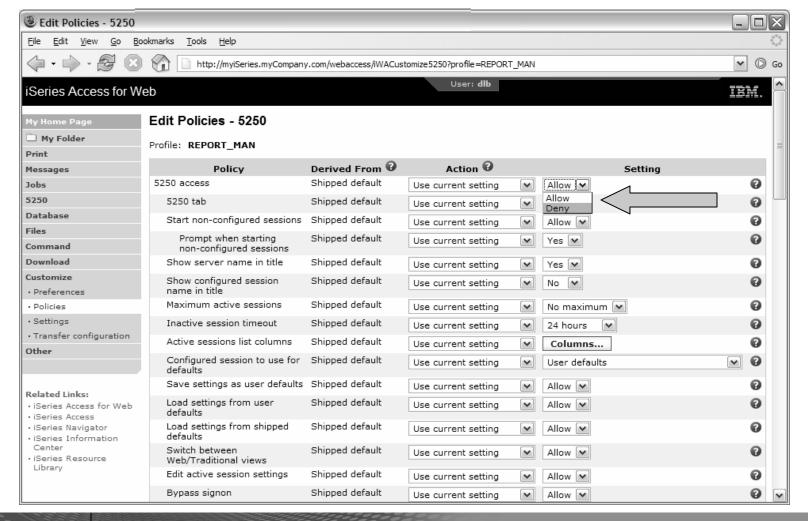
• Determine which categories need to be restricted/modified.





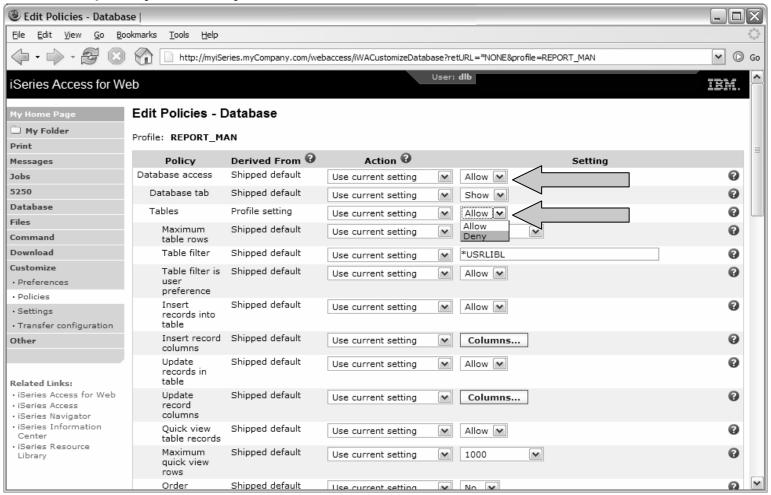
Example: Simple Database User – Other

- Turn off the other non-Database functions. Set top level to Deny.
- Repeat for each category, other than Database



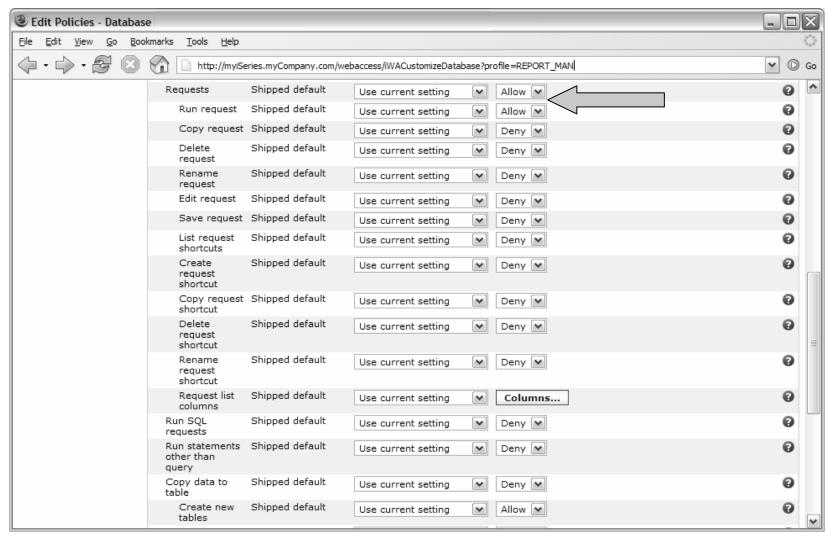


- Allow access to Database function.
- Set Tables policy to Deny.



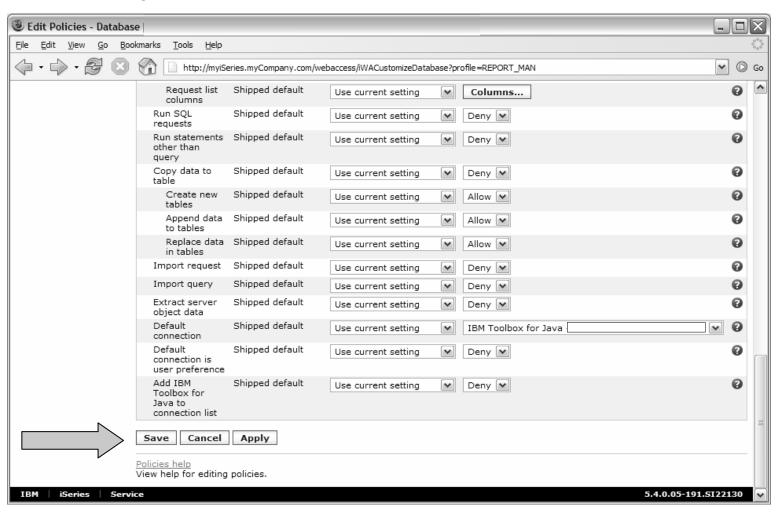


Only allow the user the ability to run a saved DB request (Run request)





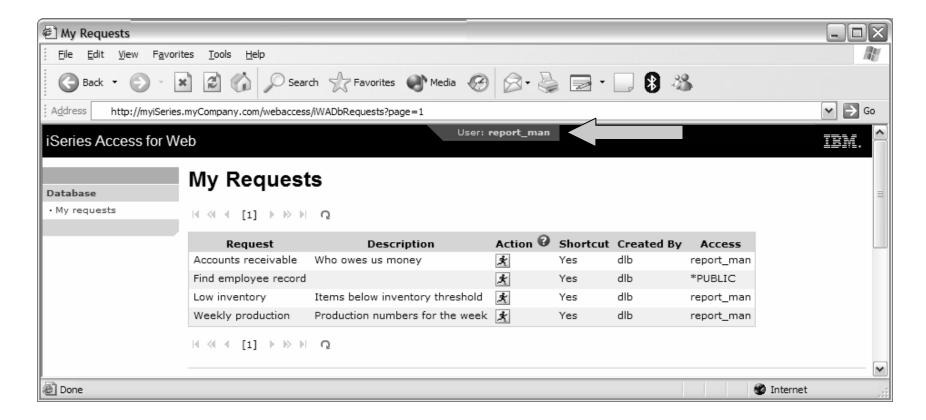
- Turn off the ability to perform the remaining database functions
- Save the changes





Example: Simple Database User - Completion

The user can now only run the DB queries they have been given.





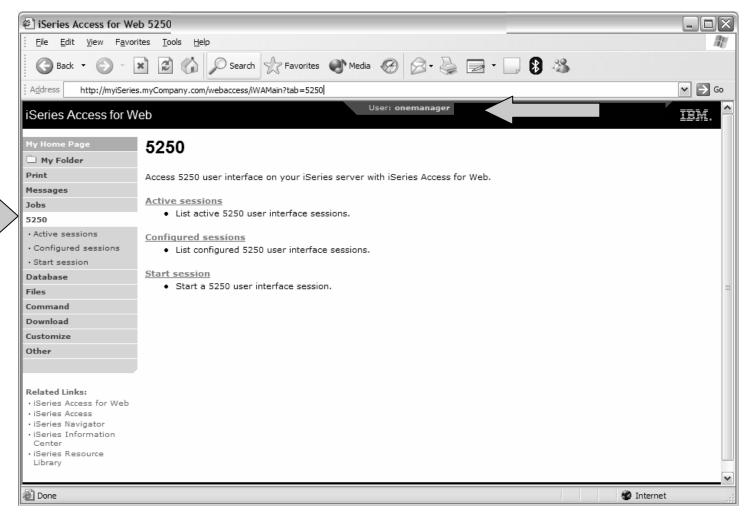
Example: 5250 Access

- The following screen shots step through setting up the items necessary to allow a group of users to use a single pre-configured 5250 session.
- In this example, ONEMANAGER is one of the user profiles in the MANAGERS group.
- This example shows
 - Creating a 5250 session and 5250 session shortcut to be used by the management team
 - Making the 5250 session shortcut the session used by the MANAGERS group profile.
 - Restricting access to other functions in iSeries Access for Web.
- When the policy is set, it takes effect immediately.



Example: 5250 Access - Before

 Access the 5250 tab iSeries Access for Web Main page as user ONEMANAGER.





Example: 5250 Access - Policies

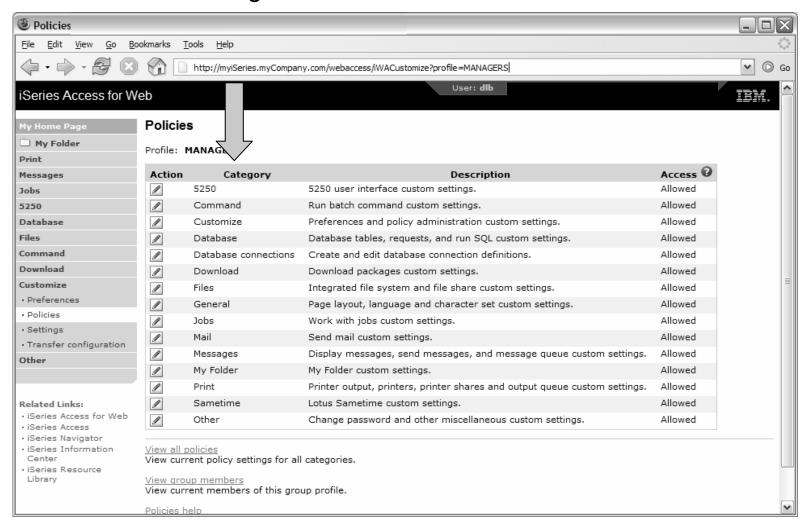
- Policies the starting point for customization of a specific user or group.
- This is a new browser session, where we signed on as an administrator.





Example: 5250 Access - Categories

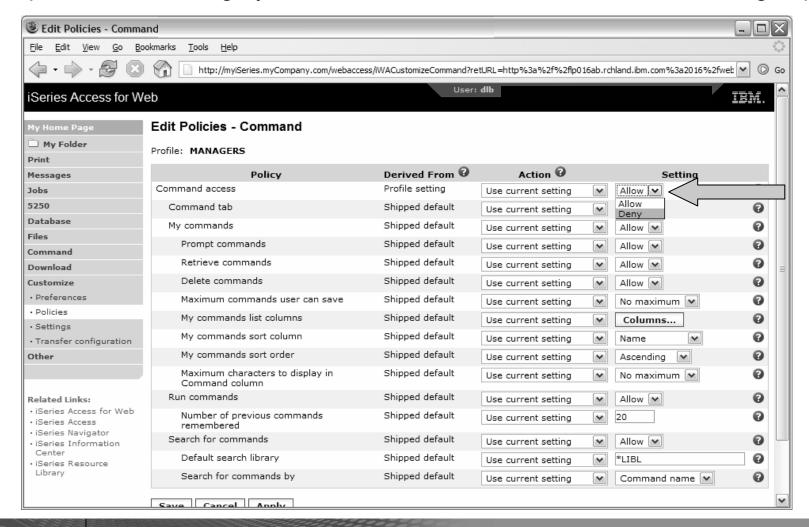
Determine which categories need to be restricted/modified.





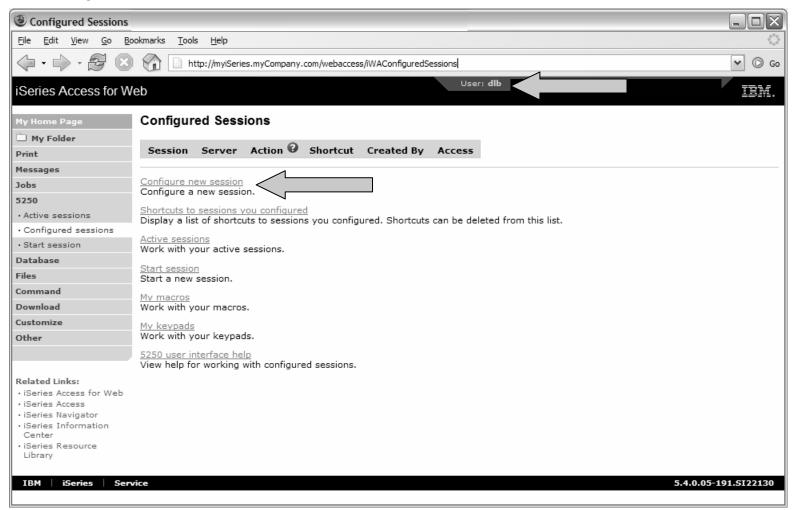
Example: 5250 Access – Other

- Turn off the other non-5250 functions. Set top level to Deny.
- Repeat for each category that should be restricted for the MANAGERS group.



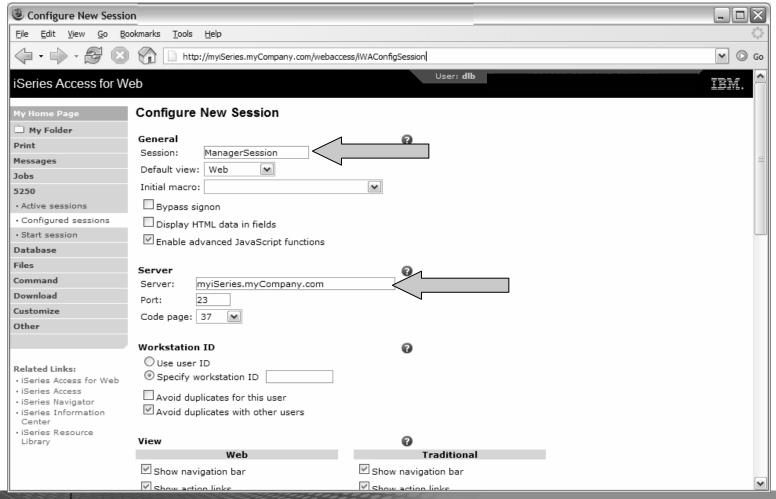


• The administrator goes to the Configured Sessions link on the 5250 tab. Select the "Configure new session" link.





- The administrator configures the 5250 session settings to be used by the managers.
- Settings include the server to connect to, color schemes, and many other options.



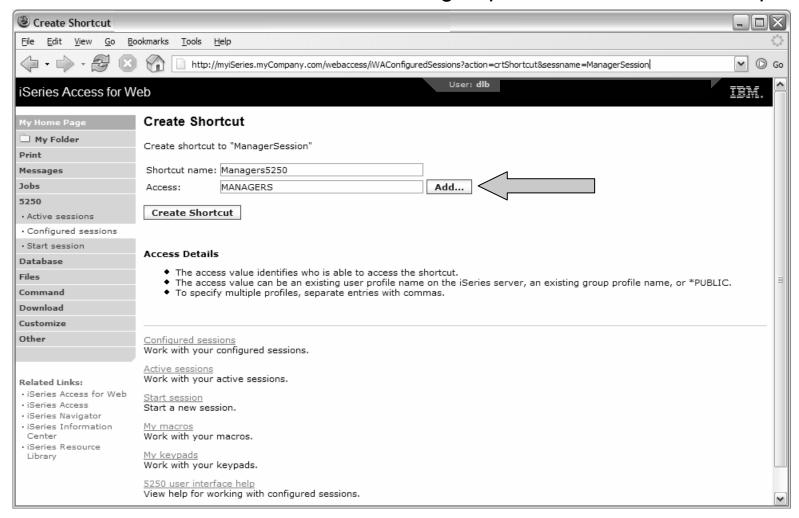


- The saved session is only available to the administrator that is currently signed on.
- The session must be shared to the managers. Use the "Create Shortcut" action.





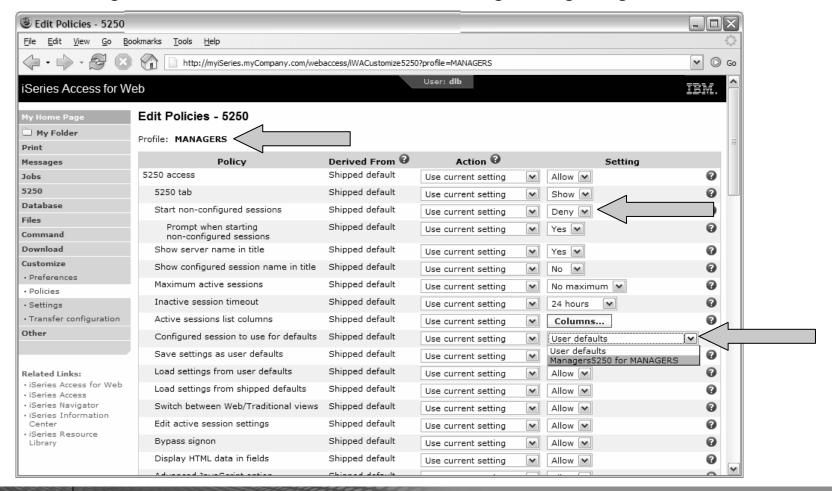
- Name the shortcut whatever you wish.
- Session can be shared with MANAGERS group, *PUBLIC, or individual profiles.





Example: 5250 Access – Back to Customize

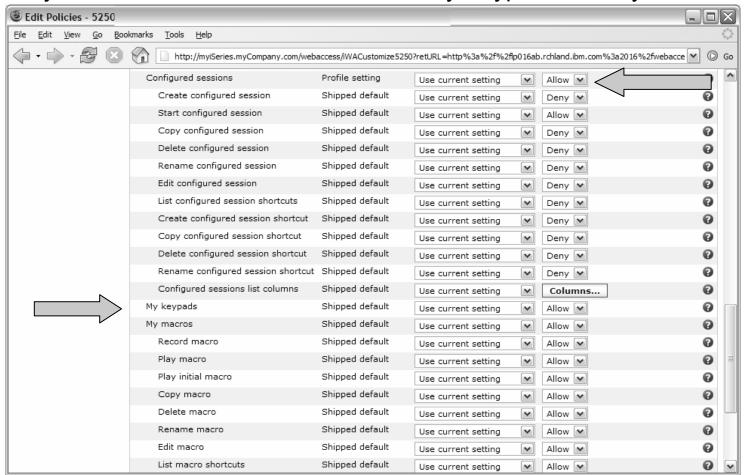
- Go back to 5250 in Customize Policies for the MANAGERS group profile.
- Select the shortcut to use as the default session settings for the MANAGERS.
- Select settings to lock MANAGERS out of starting/configuring new sessions.





Example: 5250 Access – More 5250 Settings

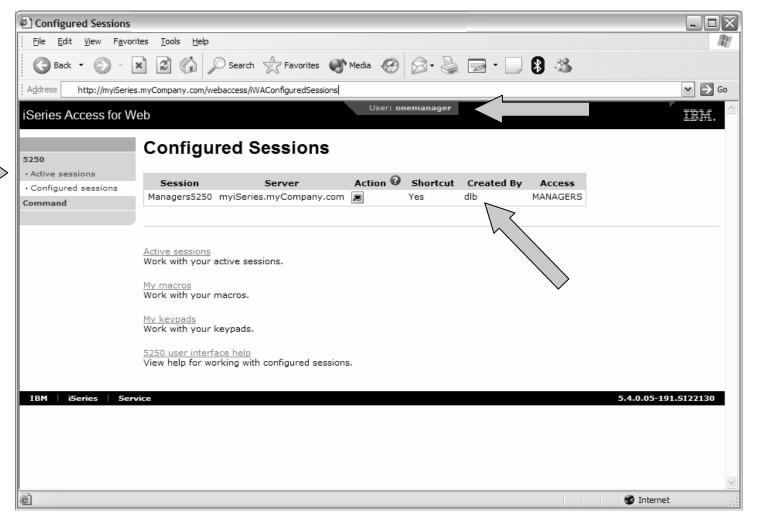
- Set all 5250 policies to Deny, except Configured Sessions and Start Configured Sessions.
- You may also want to allow them to access My Keypads and My Macros.





Example: 5250 Access – After

• The managers can now only start a pre-configured 5250 session, or reconnect to an active session.





User Preferences: Users can set their own Preferences



User Preferences

- The Preferences function allows users to customize iSeries Access for Web settings to meet their needs.
- By default, all users are allowed to modify their preferences.
- Preferences are a subset of the complete list of available policy settings.
- Users can set the following types of preferences
 - Column inclusion and ordering for functions that display output in columns.
 - Number of rows per page to display on output.
 - Show or hide navigation bar tabs.
 - Preferred language and character set.
 - Database table filters and default database connection.
 - Number of commands to save in the run command history.



User Preferences (continued)

- Restricting access to Preferences
 - Administrators can deny specific users or groups from accessing their preferences.
 - This is controlled by the "Edit preferences" policy.
 - This policy is useful in organizations where administrators want to set up all customization options for users and ensure users are not able to modify any preference settings.

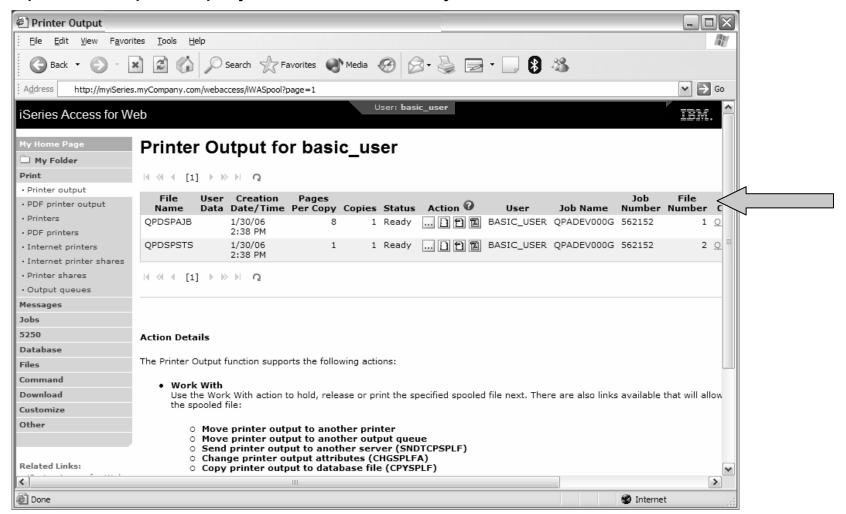


Example: User Preferences, Printer output

- The following screen shots step through setting a user preference for Printer output.
- This example shows
 - the default printer output page for user BASIC USER.
 - what settings the user can modify to change the printer output page output.
 - the printer output page after user BASIC_USER modifies the preferences.
- When the policy is set, it takes effect immediately.

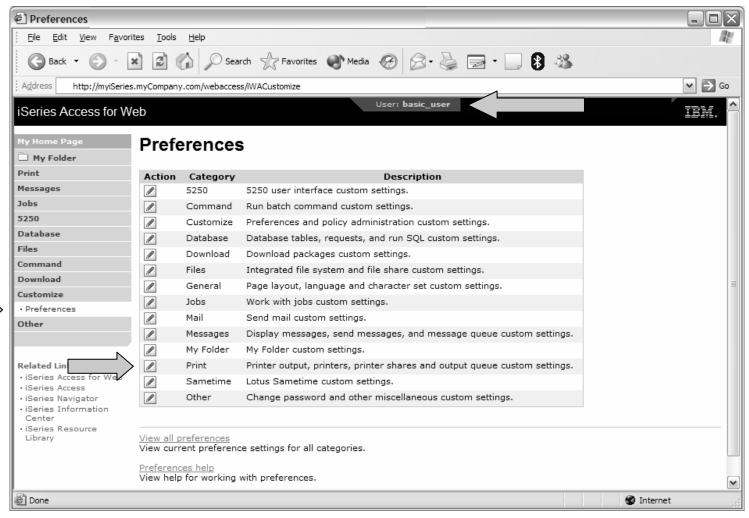


The printer output display defaults with many columns of information.





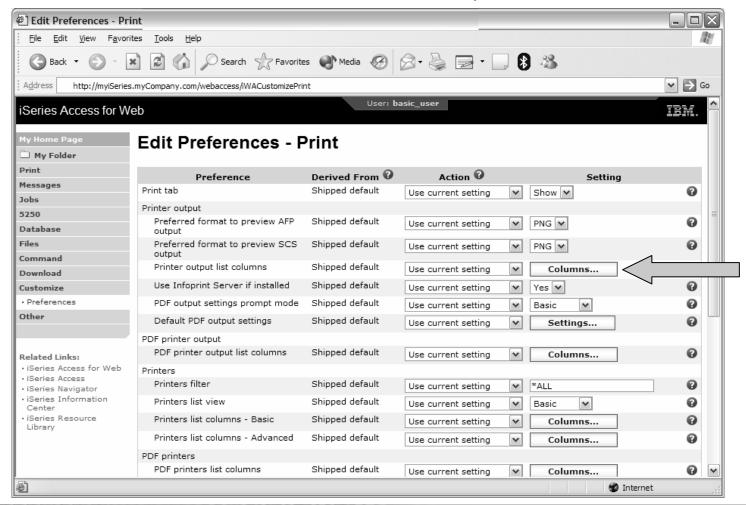
Click on the Customize tab to work with Preferences.





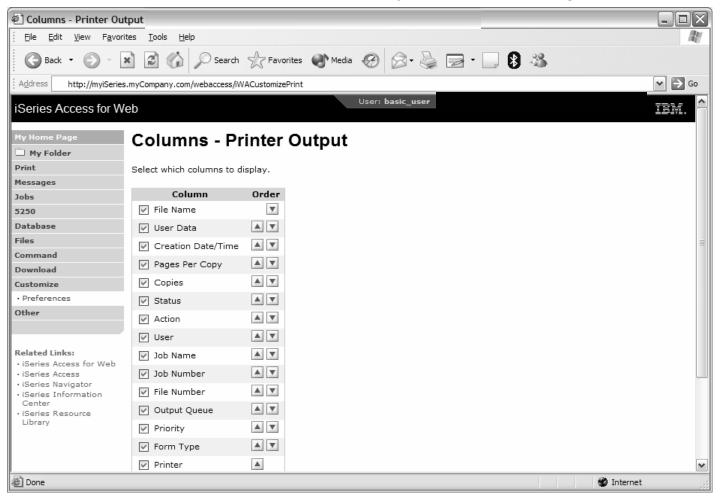


- Click on the Print category.
- Click on the Columns button for the "Printer output list columns" Preference.



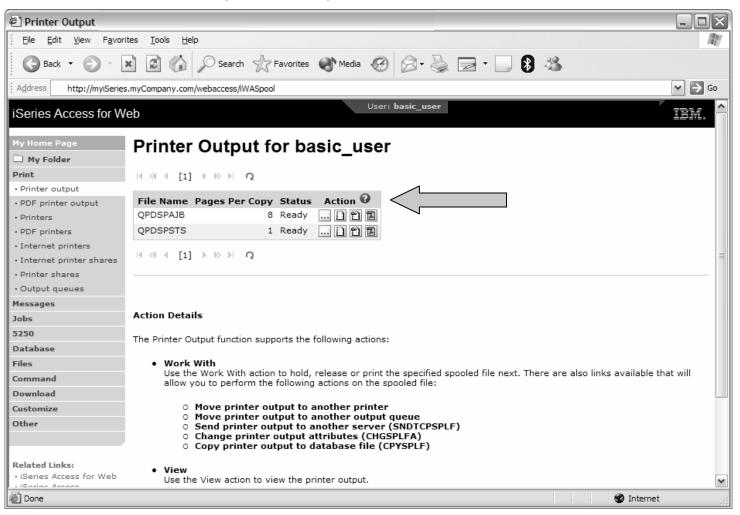


- The Columns displayed can be toggled off/on by checking the box.
- Click OK and Save buttons to immediately save the changes.





The printer output display now only has a few columns.





Tips

- This example showed that a user can modify their printer output view. An administrator can:
 - Restrict the user's access to the Preferences interface.
 - Perform the same changes by setting policies for the user, or a group of users.
- The Preferences interface that the user has access to is only a subset of all the policy settings an administrator can access for the same function.



Policy Tools for Administrators



Policies and Tools

V5R3

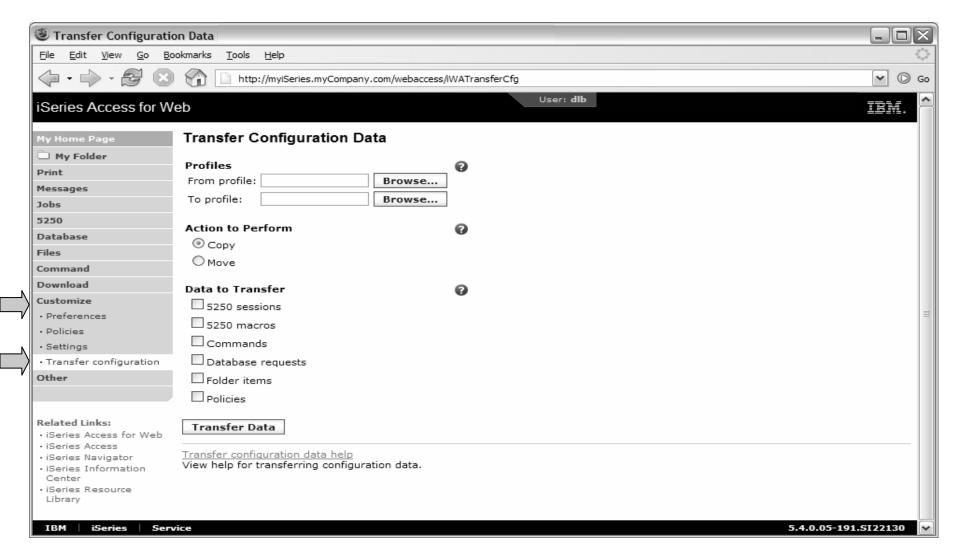
- Import/Export policy settings
 - Pick a user or group for export

V5R4

- Transfer configuration data from one user to another
 - Move and copy operations supported for:
 - 5250 sessions and macros
 - Saved commands
 - Database requests
 - My Folder items
 - Policies



Transfer Configuration Data





Page customization



Home Page Customization

- A default home page is displayed when the iWAHome servlet is invoked.
 - http://<mySystem.myCompany.com>/webaccess/iWAHome
 - It's a starting point to highlight functions.
 - It's an example of how to build your own home page or pages that access iSeries Access for Web functionality.
- The Customize function allows you to replace the default home page.
- Default home page replacement can be done for all users (*PUBLIC), or can be changed for only certain users and/or groups of users.

- Great article example
 - Build a quick and easy Web site with iSeries Access for Web" Janet Weber
 - http://www.ibm.com/servers/eserver/iseries/access/pdf/build_website_article.pdf
 - iSeries 400 Experts Journal
 - Updated Oct 2006 in <u>System i News</u> 'Tailor iSeries Access for Web'

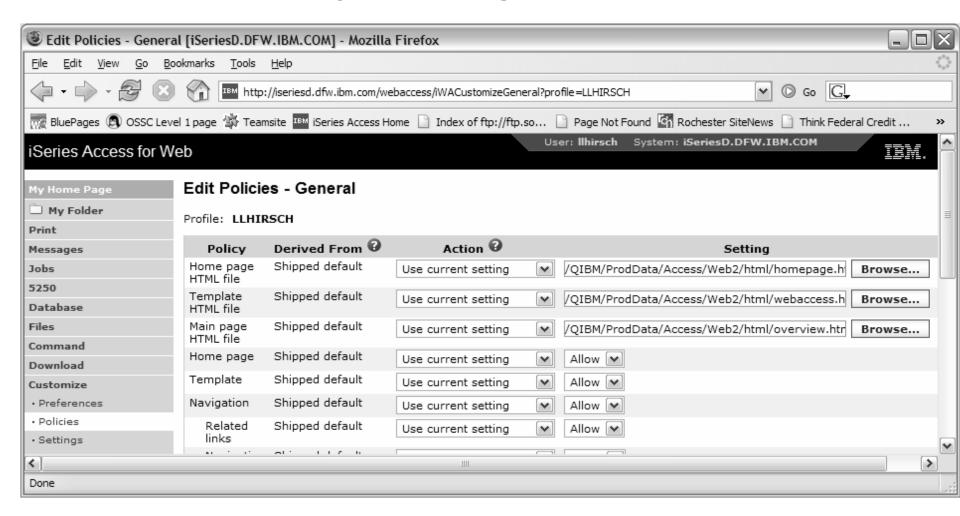


Template file customization

- iSeries Access for Web has a default look for it functional pages.
 - This look is controlled by a template file and cascading style sheet.
- The template file has sections to specify
 - Header/footer areas of functional pages.
 - Where iSeries Access for Web content is placed in the page.
- The Customize function allows you to replace the default template file.
- Default template file replacement can be done for all users (*PUBLIC), or can be changed only for certain users and/or groups of users.



Edit Policies: specify home page and template files





Special tags

- Within the home page and template .html files, special tags are used.
 - When these tags are encountered by the iSeries Access for Web code, they are replaced with the appropriate content.

Special tags...

- %%CONTENT%%
- %%include section=file%%
- %%MENU%%
- %%STYLESHEET%%
- %%STYLESHEET CLASSIC COLORS%%
- %%TITLE%%
- %%SYSTEM%%
- %%USER%%
- %%VERSION%%

Replaced with...

functional content for the page, separates the header/footer

HTML section/fragment to include

navigation bar

default style sheet

default style sheet prior to V5R4

title of the page

name of iSeries being accessed

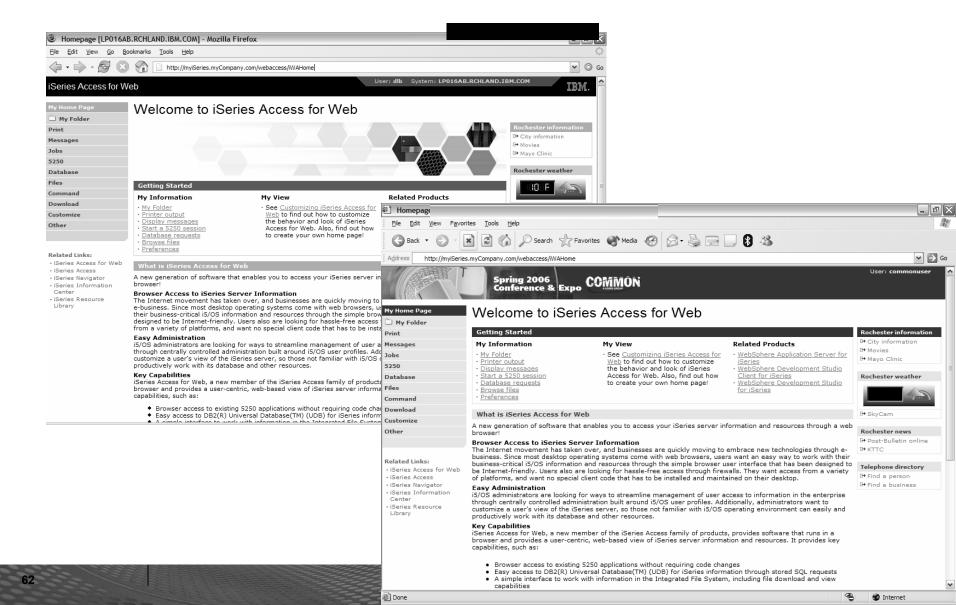
i5/OS user profile used to access the server

version of iSeries Access for Web

- For detailed information on these special tags
 - V5R4 iSeries Access for Web Info Center.
 - Connecting to iSeries->iSeries Access->iSeries Access for Web->iSeries Access for Web in a web
 application sever environment->Customize iSeries Access for Web->Default page content->Home page



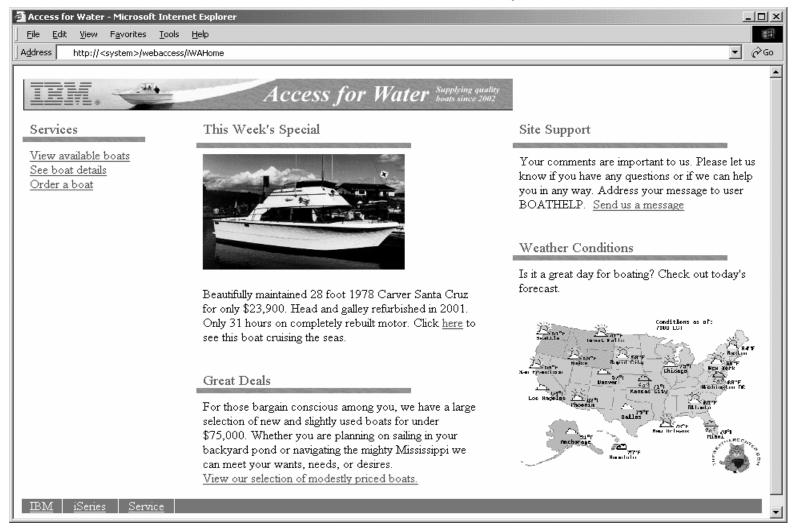
Home Page default – iWAHome servlet http://<system>/webaccess/iWAHome





Home Page customization – iWAHome (another example)

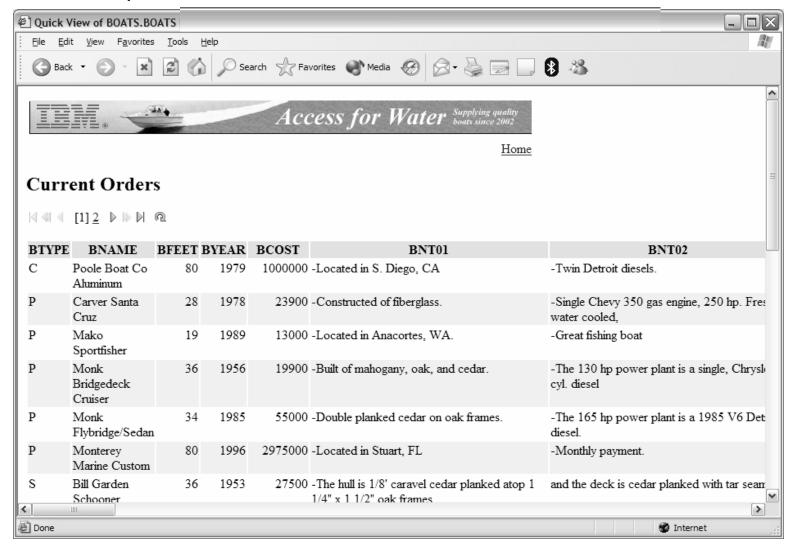
- Custom home page http://iseriesd.dfw.ibm.com/webaccess/iWAHome
 - Refer to chart 6 for info on how to access this sample





Home Page/Template Customization Example (continued)

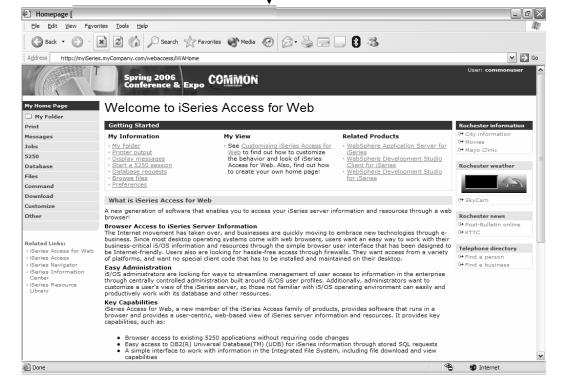
Custom template





iWAHome - structure

http://<system>/webaccess/iWAHome



Homepage file

common_homepage.html

Defines content, layout, images, links to be displayed when the iWAHome servlet is invoked in the browser.

Image files

images/s06common.gif images/iwa_navCorner.gif

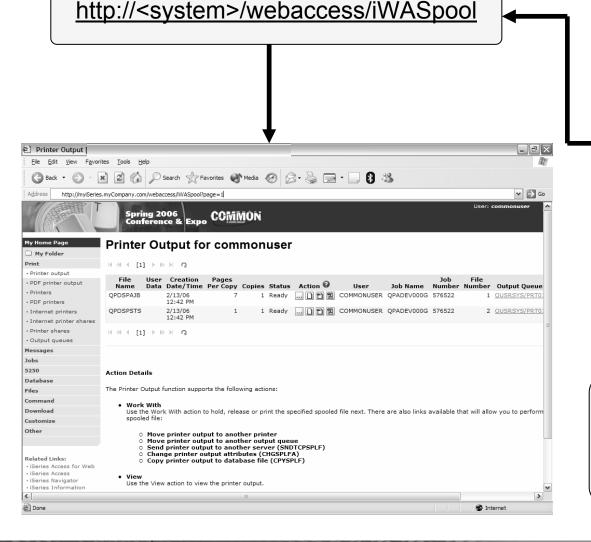
Cascading Style Sheet file

common_styles.css

Defines the colors, fonts, font sizes for the various elements in the .html files.



iWA servlet Template - structure



Homepage file

common_homepage.html

Defines content, layout, images, links to be displayed when the iWAHome servlet is invoked in the browser.

Template file

common_template.html

Defines the header, content, footer on all other servlet pages.

Image files

images/s06common.gif images/iwa_navCorner.gif

Cascading Style Sheet file

common_styles.css

Defines the colors, fonts, font sizes for the various elements in the .html files.



Refer to the Appendix for a step-by-step example of modifying the home page and template files

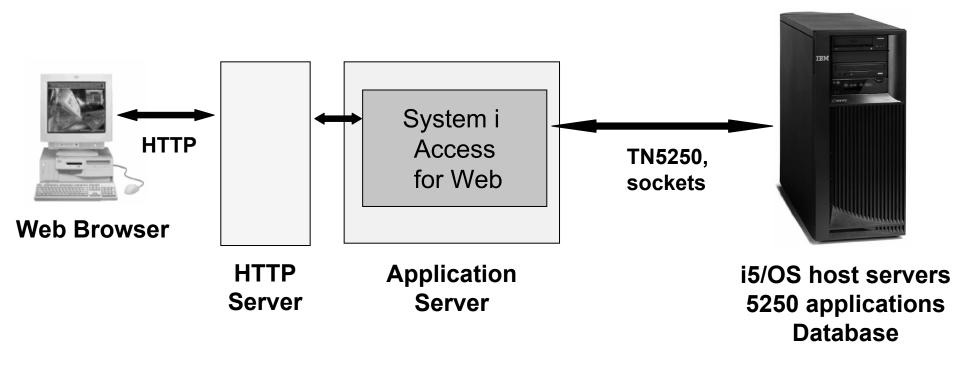
- Customizing policies to use different home page and template files
- Adding a different image as header, changing the footer
- Updating the cascading style sheet



iSeries Access for Web Environment Security Considerations



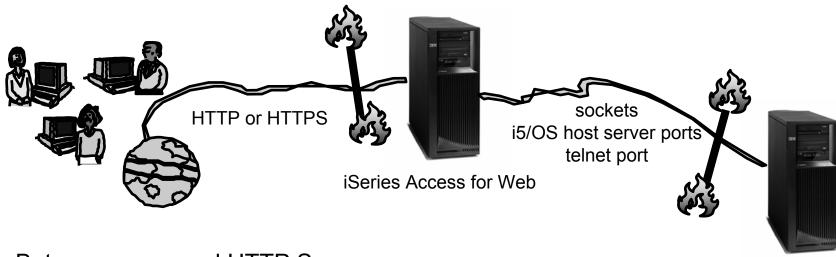
iSeries Access for Web Environment





i5/OS

iSeries Access for Web Environment (continued)



- Between users and HTTP Server
 - Secure Socket Layer (SSL)
 - Virtual Private Networking (VPN)
 - Firewalls
- Between iSeries Access for Web and i5/OS
 - VPN
 - Firewalls



Secure Sockets Layer

- Used for data confidentiality between Web browser and HTTP server
 - Digital certificates used to determine trust relationships
 - Point to Point encryption for all data (PC App to Server App)
 - Part of the standard HTTPS protocol
- See Info Center for specific details on Configuration and Setup.
 - See the "Configure WebSphere Security" topic
- Levels of SSL
 - TLSv1, SSLv3 recommended, use 128-bit or higher
 - SSLv2 should not be used anymore. Disable in clients and server (APAR SE25734)



Virtual Private Networking

- Used for data confidentiality between Web browser and HTTP server
 - Digital certificates and User authorization used establish tunnel
 - End to End encryption for all data (PC to Server tunnel)
 - Allows any protocol, including standard HTTP
- See Info Center for specific details on Configuration and Setup.
 - See the "Virtual Private Networking" topic
- Redbooks
 - IBM System i Security Guide for IBM i5/OS Version 5 Release 4 (SG24-6668-01)
 - OS/400 V5R2 Virtual Private Networks (REDP-0153-01)



Authentication security options

- How does the user authenticate to iSeries Access for Web?
- How does iSeries Access for Web authenticate with i5/OS?
- iSeries Access for Web in a WebSphere Single Signon (SSO) environment
- Special considerations for 5250



Authentication

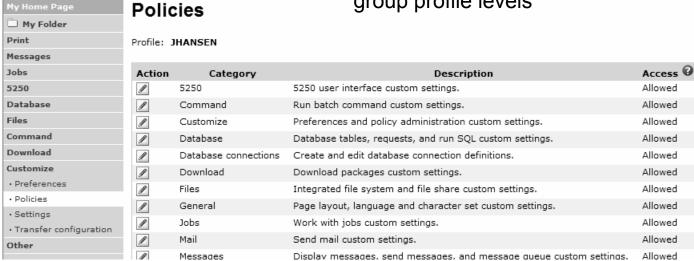
- Authentication is verifying the identity of the user
- iSeries Access for Web supports two types of authentication
 - Application
 - iSeries Access for Web handles the authentication
 - Application Server
 - WebSphere Application Server handles the authentication
- Specified by the AUTHTYPE parameter on the CFGACCWEB2 command
 - Application: AUTHTYPE(*APP)
 - Application Server: AUTHTYPE(*APPSVR)



Authorization

 Authorization is verifying that authenticated users have permission to access requested resources

- iSeries Access for Web uses the i5/OS user profile and object level security to authorize access to i5/OS resources
- iSeries Access for Web provides application level control of access to functions through policies
 - Policies can be administered at the i5/OS user and group profile levels





Application Authentication AUTHTYPE(*APP)

- iSeries Access for Web handles authentication
- i5/OS user profile and password
 - Hostname specified by the TGTSVR parameter on the CFGACCWEB2 command
- Method: HTTP basic authentication
 - RFC2617
 - User profile and password are encoded (not encrypted) in the HTTP headers and should be protected





Application Server Authentication AUTHTYPE(*APPSVR)

- WebSphere handles authentication
- WebSphere credentials
 - Typically a user ID and password
 - Authenticated with the active WebSphere user registry
- iSeries Access for Web uses Enterprise Identity Mapping (EIM) to map the authenticated WebSphere user identity to an i5/OS user profile
 - System i Access for Web identifies the user by the mapped i5/OS user profile
 - i5/OS user profile is used to authorize access to i5/OS resources using object level security



Application Server Authentication AUTHTYPE(*APPSVR)

(continued)

78

- iSeries Access for Web supports two methods of gathering credentials
 - HTTP basic authentication
 - User ID and password are encoded (not encrypted) in the HTTP headers and should be protected
 - Form-based authentication
 - User ID and password are clear text and should be protected
- Specified by the AUTHMETHOD parameter on the CFGACCWEB2 command
 - HTTP basic authentication: AUTHMETHOD(*BASIC)
 - Form-based authentication: AUTHMETHOD(*FORM)





Application Server Authentication Required Configuration

- WebSphere with global security enabled and an active user registry to authenticate users
- An EIM domain configuration for i5/OS to enable mapping of WebSphere user identities to i5/OS user profiles
- The EIM Identity Token Connector (resource adapter) installed and configured in WebSphere
 - Used to request identity tokens (encrypted data strings that represent the authenticated WebSphere user identity) which are input to EIM lookup operations.

Start Session



5250 Sessions

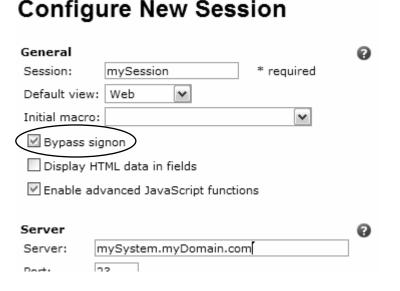
- 5250 sessions
 can be started to
 any system
 running i5/OS
- Must provide user profile and password on i5/OS Sign On screen

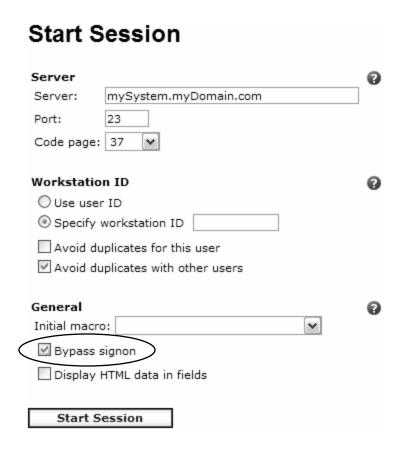
Server	@		
Server:			
Port: 23			
Code page: 37			
Workstation ID	•		
O Use user ID			
Specify workstation ID			
Avoid duplicates for this us	er		
✓ Avoid duplicates with othe	users		
General Initial macro:	②		
_	•		
Bypass signon			
Display HTML data in fields			
	Sign On		
Start Session		System: Subsystem:	QINTER
		Display :	QPADE\
	User	——	
	Password		
	Program/procedure		
	Menu		
	Current library		
	RELEASE: V05R03M00 DRIVER: 2600722		
1		NT APPROVED PURPOSES ONLY.	
C		E BY IBM MANAGEMENT.	
37	(C) COPYRIGHT IBM CORP. 1980	, 2003.



5250 Session Bypass Signon

- QRMTSIGN system value must be *VERIFY
- Select bypass signon when starting or configuring a session



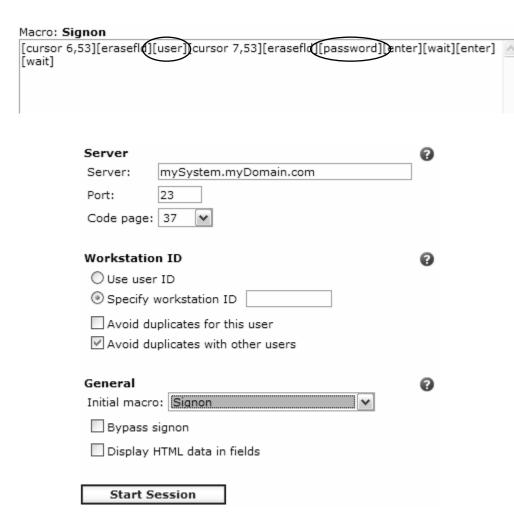


- iSeries Access for Web must be configured for Application Authentication in order for Bypass Signon to be available
 - CFGACCWEB2 AUTHTYPE(*APP) ...



5250 Session Signon Macro

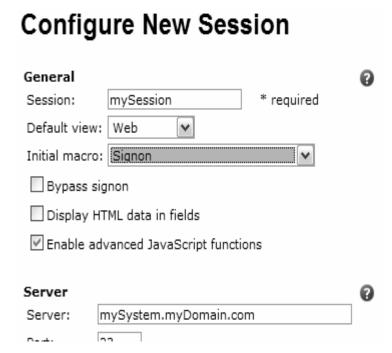
- Useful for V5R3 iSeries Access for Web (In V5R4, use Bypass sign-on instead)
- Record a macro to sign on
- Edit the macro
 - Replace user profile with [user]
 - Replace password with [password]
- Select as initial macro when starting session





5250 Session Signon Macro (continued)

- Select as initial macro when configuring a session
- iSeries Access for Web must be configured for Application Authentication in order for [password] substitution in macros to work
 - CFGACCWEB2 AUTHTYPE(*APP) ...





iSeries Access for Web Portlets

• How are things different?



Portal

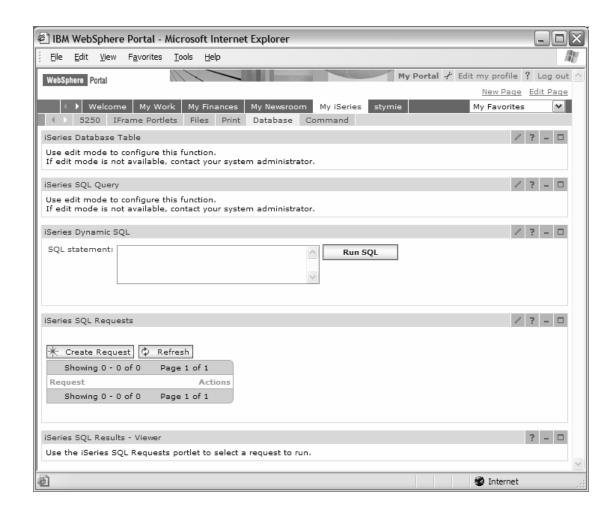
- Portal provides a single point of personalized interaction with applications, content, processes and people
- Integrate data and applications from various sources into one user experience





Portal Application

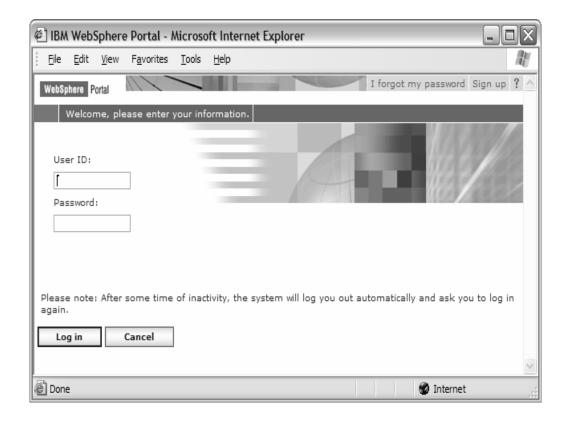
- iSeries Access for Web portlets integrate access to i5/OS resources in a portal environment
- Function is similar to the servlet application





Portal Authentication

- Portal handles authentication
- Portal credentials
 - Authenticated with the active user registry
- Form-based authentication
 - User ID and password are clear text and should be protected
- Use Portal interfaces to control access to pages and portlets





iSeries Access for Web Portlet Authentication

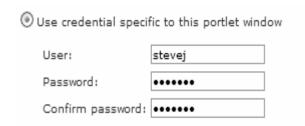
- Setting to specify the hostname of system for accessing i5/OS resources
 - Default is the hostname of the system where Portal is running
- Setting to specify the credential to use when accessing i5/OS resources
 - Used to authenticate to i5/OS
 - i5/OS user profile and object level security are used to authorize access to i5/OS resources
- Settings can be controlled by the Portal administrator

iSeries File List
Edit Portlet Settings
☐ Server
Server: mySystem.myDomain.com
■ Authentication
Ouse credential specific to this portlet window
User:
Password:
Confirm password:
Ouse credential set with iSeries Credentials portlet
Credential: myCredentials
O Use system shared credential set by administrator
Credential: deployment.keystore
Use authenticated WebSphere credential



Authentication Options

- Use credentials specific to this portlet
 - Specify the i5/OS user profile name and password
 - Specific to this portlet window for this user
- Use credential set with iSeries Access for Web Credentials portlet
 - Select the name of a credential maintained with the iSeries Credentials portlet
 - Credential contains an i5/OS user profile name and password

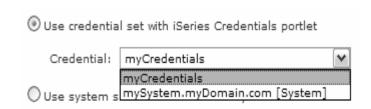


① Use credential set with iSeries Credentials portlet				
	myCredentials	٧		
	myCredentials mySystem.myDomain.com [System]			
O Use system s	mySystem.myDomain.com [System]			

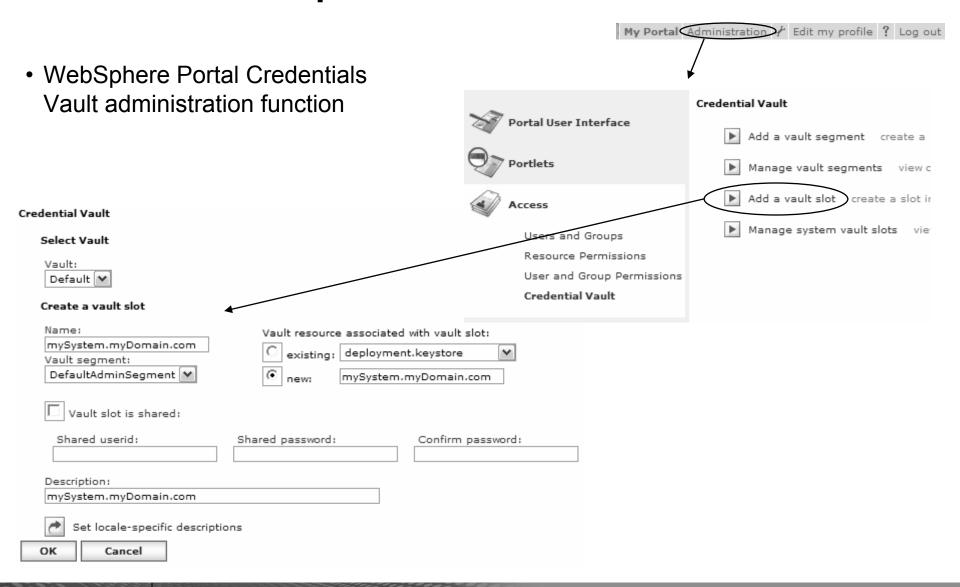


- Credentials portlet lets users create and manage their own list of credentials
 - User created credentials are not available to other users
- Administrator can create system credentials using the WebSphere Portal Credentials Vault administration function
 - System credentials are available to all users
 - Each user sets their own i5/OS user profile name and password
- Manage credential values in one place

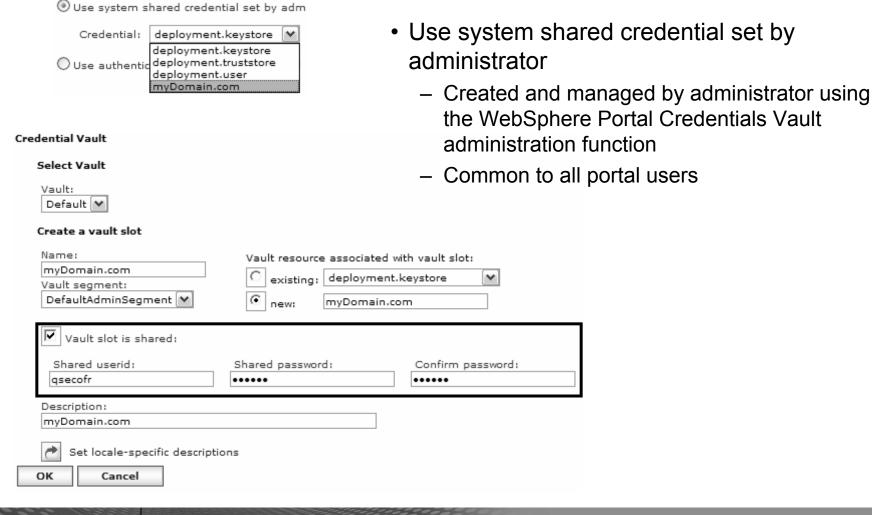














- Use authenticated WebSphere credential
 - Uses identity tokens and EIM to map the authenticated WebSphere user identity to an i5/OS user profile
 - Use authenticated WebSphere credential

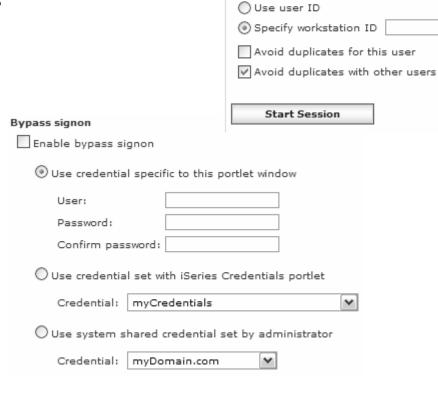
Requires:

- EIM domain configuration on each i5/OS where resources will be accessed
 - All in the same EIM domain
- EIM Identity Token Connector installed
 - J2C connection factories configured with JNDI names eis/iwa_IdentityToken and eis/IdentityToken
- EIM identifier target associations for each i5/OS that will be accessed



5250 Sessions in Portlets

- Bypass signon
 - QRMTSIGN system value must be *VERIFY
 - Settings to enable bypass signon and specify the credential to use
- No macro support



iSeries 5250 Session

23

Display HTML data in fields

x1519p4.rchland.ibm.com

Start Session

Code page: 37

Workstation ID

Server

Port:

Server:



Appendix



Let's demonstrate how to customize the Home page and Template



iWAHome – Steps to customize

- To customize the pages:
 - 1. Copy iSeries Access for Web .html/.css files.
 - 2. Copy image files.
 - 3. Customize policies to use .html files.
 - 4. Update .html files.
 - 5. Update cascading style sheet.
 - 6. Verify with a browser.



Step 1 - Copy iSeries Access for Web .html/.css files

- iSeries Access for Web provides the source for the default pages
 - Home page for iWAHome servlet
 - Template for all other servlets
 - Cascading Style Sheet to control the styling of HTML elements
- These source files can be used as a starting point for customization.
- Copy the default file(s) supplied to a new location in the integrated file system so they can be modified.
- Steps to copy the files:
 - MKDIR DIR('/common_homepage')
 - 2. CPY OBJ('/qibm/proddata/access/web2/html/en/homepage.html') TOOBJ('/common_homepage/common_homepage.html')
 - 3. CPY OBJ('/qibm/proddata/access/web2/html/en/webaccess.html') TOOBJ('/common_homepage/common_template.html')
 - 4. CPY OBJ('/qibm/proddata/access/web2/html/en/iwa_styles.css') TOOBJ('/common_homepage/common_styles.css')
 - WRKLNK OBJ('/common_homepage')
 - 6. Option #9 to work with authorities
 - Grant *PUBLIC *RWX
 - Repeat for all subdirectories and files



iWAHome – Steps to customize

- To customize the pages:
 - 1. Copy iSeries Access for Web .html/.css files.
 - 2. Locate and copy image files.
 - 3. Customize policies to use .html files.
 - 4. Update .html files.
 - 5. Update cascading style sheet.
 - 6. Verify with a browser.



Step 2 - Locate and copy image files

- Within the HTML source, images can be specified.
- Locate an image (i.e. your company logo/banner) you can use.
- The image file will need to reside in the same directory, or a directory below, as the .html files that refer to them.
 - Locating the image files in some other location will require HTTP server configuration updates.
- Copy the file(s) to an images subdirectory in the integrated file system, below the location of the .html source.
- Steps to copy the files:
 - MKDIR DIR('/common_homepage/images')
 - 2. Copy your image files to the /common_homepage/images directory.
 - We are using common_banner.gif, iwa_navCorner.gif
 - 3. WRKLNK OBJ('/common_homepage/images')
 - 4. Option #9 to work with authorities
 - Grant *PUBLIC *RWX
 - Repeat for all subdirectories and files



iWAHome – Steps to customize

- To customize the pages:
 - 1. Copy iSeries Access for Web .html/.css files.
 - 2. Locate and copy image files.
 - 3. Customize policies to use .html files.
 - 4. Update .html files.
 - 5. Update cascading style sheet.
 - 6. Verify with a browser.

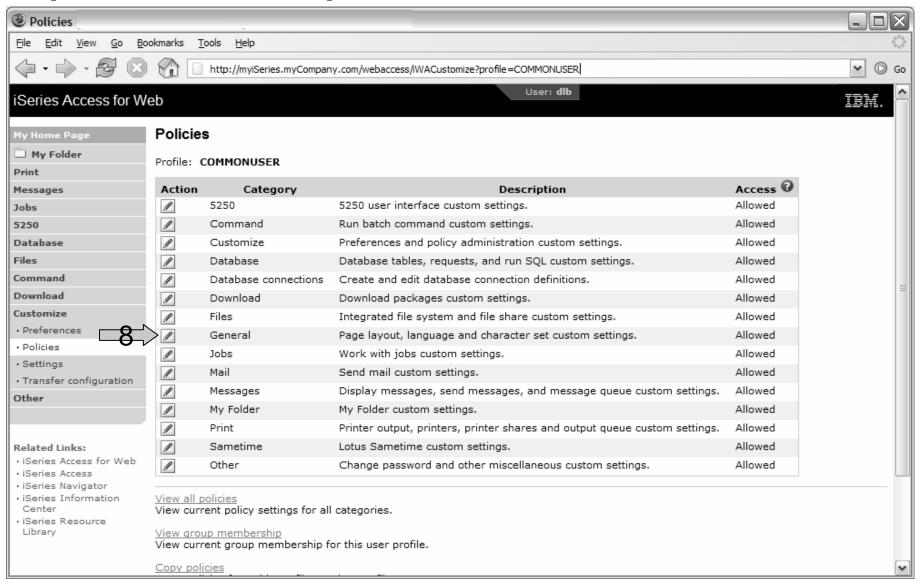


- iSeries Access for Web policies need to be changed to use the .html files.
- This will allow you to verify the incremental changes to the .html source in the following steps.
- Customize policies for a test user profile to use the modified .html files.
- Steps to set policies:
 - Identify a test i5/OS user profile you can use, or CRTUSRPRF USRPRF(COMMONUSER) PASSWORD() USRCLS(*USER)
 - 2. Open a browser to <a href="http://<system>/webaccess/iWAMain">http://<system>/webaccess/iWAMain
 - 3. Signon using an administrator level user profile.
 - 4. Click the Customize tab.
 - 5. Click the Policies link.
 - 6. Specify your test user profile, we are using COMMONUSER.
 - Click Edit Policies.
 - 8. Click the Action icon for the General category.
 - 9. Type in the Home page HTML file: /common_homepage/common_homepage.html
 - 10. Type in the Template HTML file: /common_homepage/common_template.html
 - 11. Scroll down click Save.

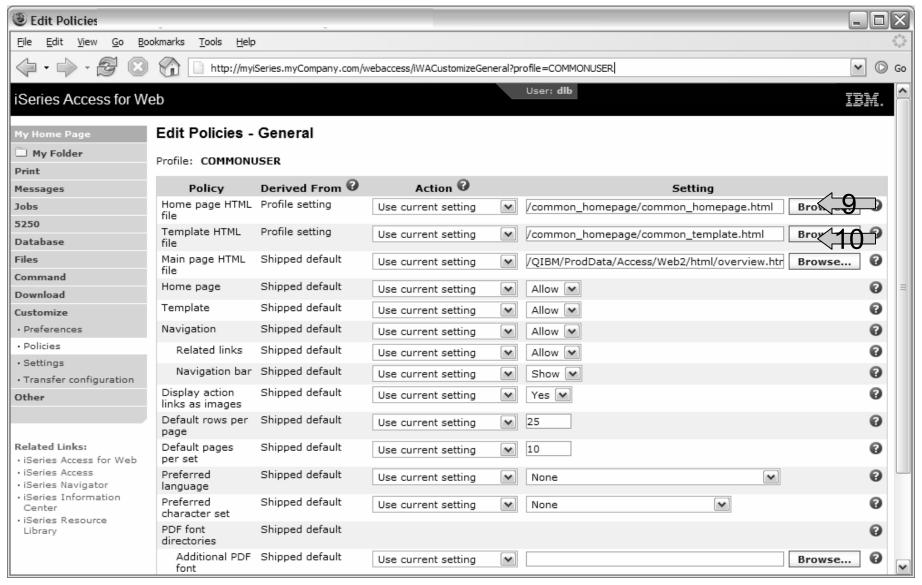














iWAHome – Steps to customize

- To customize the pages:
 - 1. Copy iSeries Access for Web .html/.css files.
 - 2. Locate and copy image files.
 - 3. Customize policies to use .html files.
 - 4. Update .html files.
 - 5. Update cascading style sheet.
 - 6. Verify with a browser.

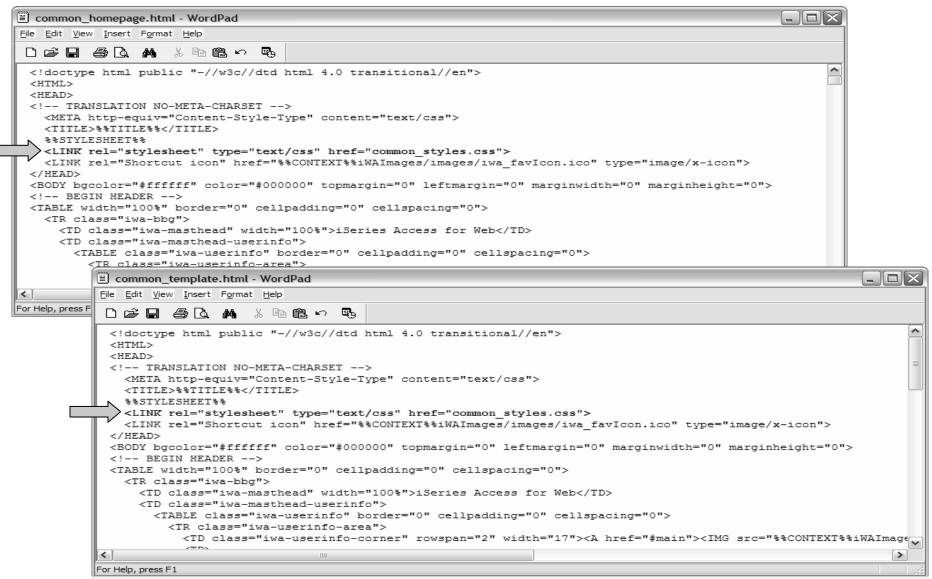


Step 4 – Update .html files – add .css reference

- To override the default cascading style sheet, the .html files must be updated to link to our copy (see Step 1).
- The cascading style sheet will be modified in a later step.
- Add the reference to the cascading style sheet file to both .html files
- Steps to add the reference:
 - 1. Open a browser to <a href="http://<system>/webaccess/iWAHome">http://<system>/webaccess/iWAHome
 - 2. Signon using your test user profile, we are using COMMONUSER.
 - 3. Open the following files with Wordpad
 - /common homepage/common homepage.html
 - /common_homepage/common_template.html
 - 4. At the top of the file, add the following below **%%STYLESHEET%%**
 - <LINK rel="stylesheet" type="text/css" href="common_styles.css">
 - 5. Save the changes to the .html files.
 - 6. Refresh the browser session. No visual changes should occur.



Step 4 – Update .html files – add .css reference



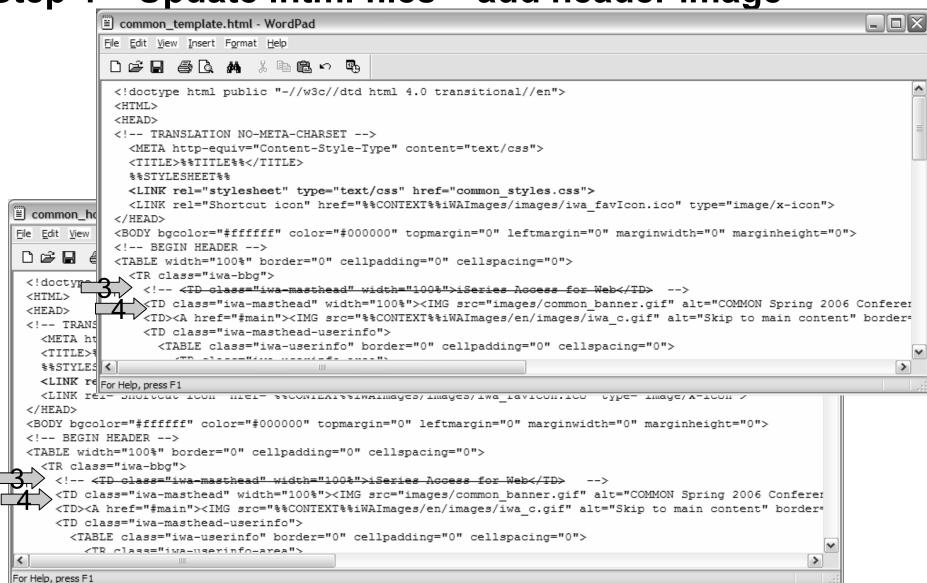


Step 4 – Update .html files – add header image

- To display your company's logo/image, the .html files must be updated to link in a different image file.
- The default masthead (header) reference needs to be removed.
- The new logo/image reference needs to be added.
- Steps to add the reference:
 - 1. Open the following files with Wordpad
 - /common_homepage/common_homepage.html
 - /common_homepage/common_template.html
 - 2. Near the top of the file, locate the following lines:
 - <!-- BEGIN HEADER -->
 - <TABLE width="100%" border="0" cellpadding="0" cellspacing="0">
 - <TR class="iwa-bbg">
 - <TD class="iwa-masthead" width="100%">iSeries Access for Web</TD>
 - 3. Remove this line
 - <TD class="iwa-masthead" width="100%">iSeries Access for Web</TD>
 - 4. Add these or similar lines to replace the masthead (header)
 - <TD class="iwa-masthead" width="100%"></TD>
 - <TD></TD>
 - 5. Save the changes.
 - 6. Refresh the browser. The image in the header should have changed.

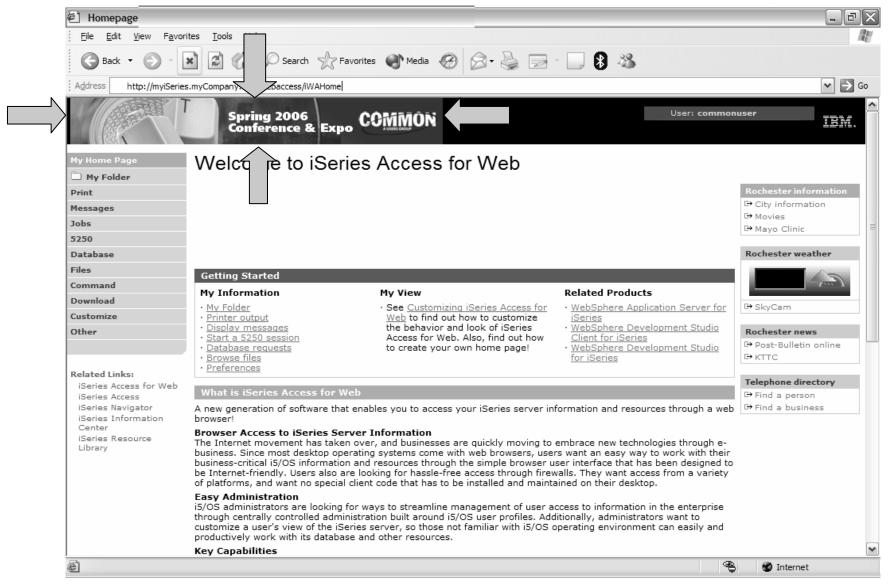


Step 4 – Update .html files – add header image





Step 4 – Update .html files – add header image





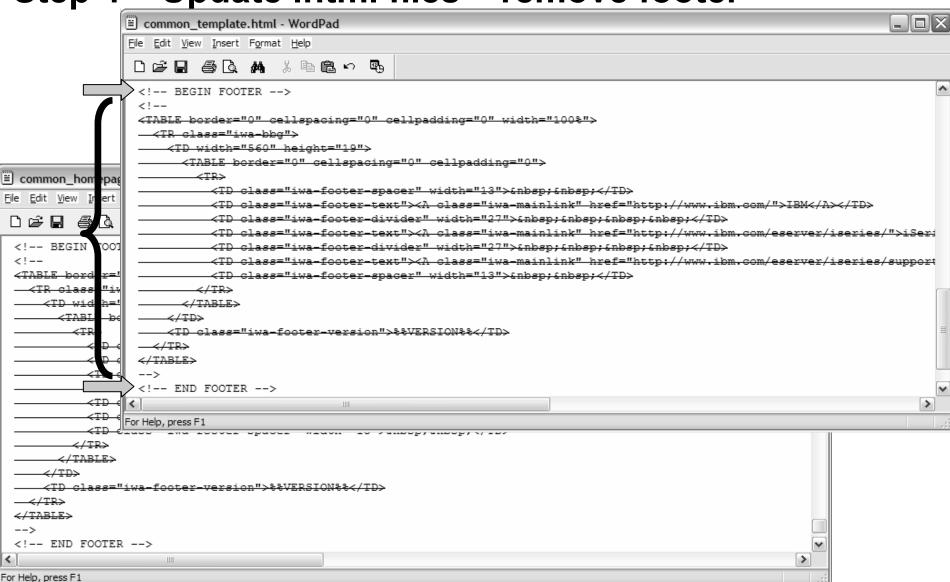
Step 4 – Update .html files – remove footer

- A footer exists at the bottom of the web page.
- We are going to remove that footer to simplify the look of the page.
- Locate the comments BEGIN FOOTER END FOOTER and remove the lines between them.

- Steps to remove the footer:
 - 1. Open the following files with Wordpad
 - /common_homepage/common_homepage.html
 - /common_homepage/common_template.html
 - 2. At the bottom of the file, locate the following lines:
 - <!- BEGIN FOOTER -->
 - <!- END FOOTER -->
 - 3. Remove all lines between the BEGIN-END comments.
 - 4. Save the changes.
 - 5. Close the Wordpad windows.
 - 6. Refresh the browser. Scroll down, the footer not be displayed.



Step 4 – Update .html files – remove footer

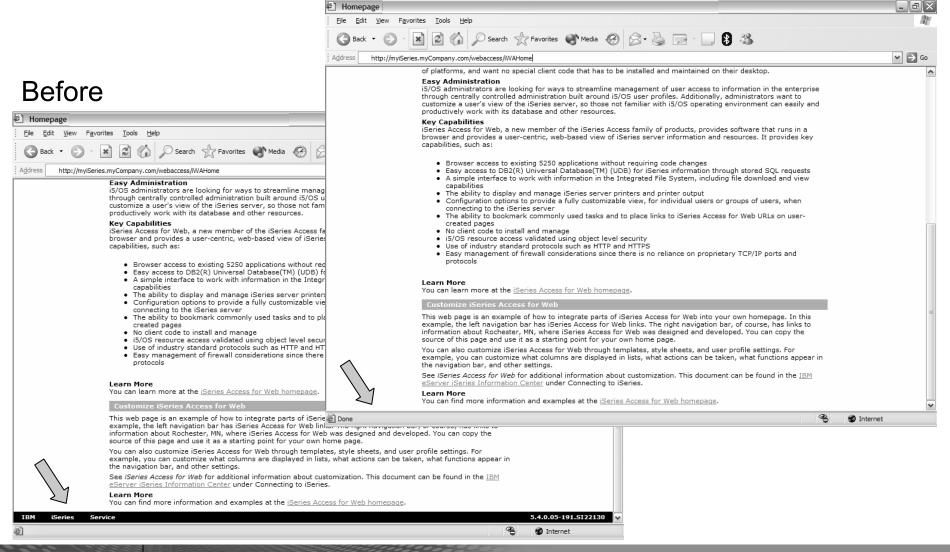


114



Step 4 – Update .html files – remove footer

After





iWAHome – Steps to customize

- To customize the pages:
 - 1. Copy iSeries Access for Web .html/.css files.
 - 2. Locate and copy image files.
 - 3. Customize policies to use .html files.
 - 4. Update .html files.
 - 5. Update cascading style sheet.
 - 6. Verify with a browser.



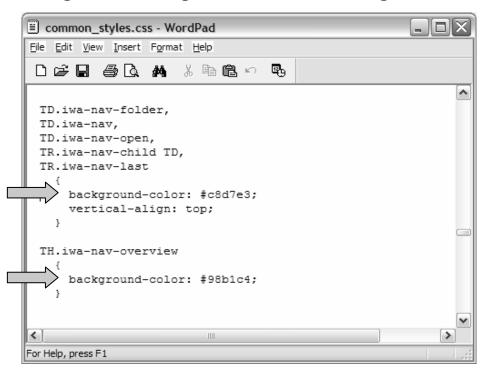
- iSeries Access for Web uses cascading style sheets (CSS) to control certain aspects of the appearance of web page content.
- For CSS information:
 - www.w3.org/Style/CSS/
 - www.w3.org/Style/LieBos2e/enter/
- The default style sheet controls the look of the page header, footer, navigation bar, and page content.
- Style sheets can be used to customize the home page and page template.
- Step 1 copied the shipped style sheet to
 /common_homepage/common_styles.css
- Step 4 updated the .html files to use our copy /common_homepage/common_styles.css
- Steps to update the .css:
 - 1. Open the following file with Wordpad
 - /common_homepage/common_styles.css
 - 2. Update various styles.
 - 3. Save the changes.
 - 4. Refresh the browser. Verify various areas of the screen were updated.







Original navigation bar settings



Changed navigation bar settings

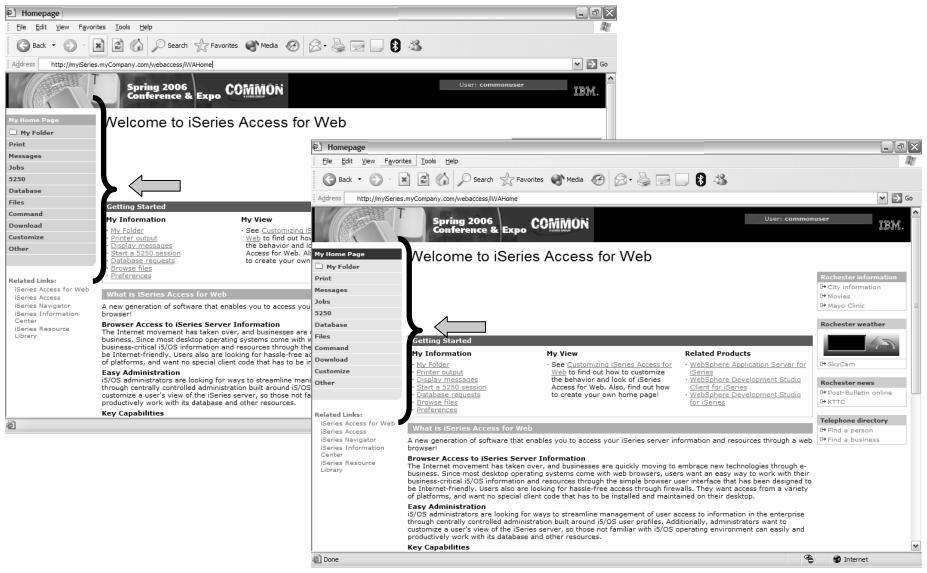
```
Ele Edit View Insert Format Help

TD.iwa-nav-folder,
TD.iwa-nav,
TD.iwa-nav-open,
TR.iwa-nav-child TD,
TR.iwa-nav-last
{
background-color: #FFE1BE;
vertical-align: top;
}

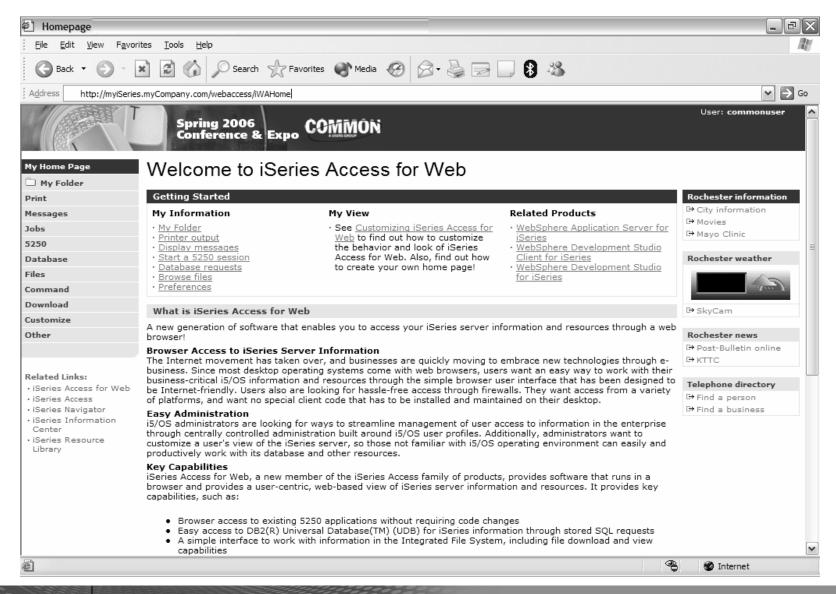
TH.iwa-nav-overview
{
background-color: #9D1813;
}

For Help, press F1
```











System i & WebSphere Resources & Deliverables

iSeries Information Center http://www.ibm.com/iseries/infocenter

iSeries site www.iseries.ibm.com/

iSeries WebSphere Application Server http://www-1.ibm.com/servers/eserver/iseries/software/websphere/wsappserver/

PartnerWorld for Developers, iSeries & WebSphere http://www.iseries.ibm.com/developer/websphere/

IBM eServer Solutions http://www-1.ibm.com/servers/eserver/iseries/solutions/

iSeries e-business Solutions http://www-1.ibm.com/servers/eserver/iseries/ebusiness/

iSeries B2B Solutions http://www-1.ibm.com/servers/eserver/iseries/btob/

Connect for iSeries http://www-1.ibm.com/servers/eserver/iseries/btob/connect/v11high.html

WebSphere Commerce Suite for iSeries http://www-1.ibm.com/servers/eserver/iseries/ebusiness/wcs51.html

iSeries and e-commerce http://www-1.ibm.com/servers/eserver/iseries/ebusiness/ecommerce.htm

iSeries HTTP Server http://www-1.ibm.com/servers/eserver/iseries/software/http/index.html

WebSphere Development Studio for iSeries http://www-3.ibm.com/software/ad/wds400/ iSeries and WebSphere References http://www.as400.ibm.com/developer/java/solutions/jjem.html http://www2.software.ibm.com/casestudies/swcsweb.nsf/platform

iSeries Solution Finder http://www.iseries.ibm.com/btobpartner/

iSeries & Domino http://www-1.ibm.com/servers/eserver/iseries/domino/

Dedicated Server for Domino http://www-1.ibm.com/servers/eserver/iseries/domino/dsd.htm

Workload Estimator for iSeries, WAS, WCS & Domino, HTTP Server, Java, etc. http://as400service.ibm.com/estimator/

iSeries Custom Technology Center http://www-1.ibm.com/servers/eserver/iseries/service/ctc/

iSeries Technical Support http://as400service.ibm.com/

iSeries Technical Studio http://www.as400.ibm.com/tstudio/

1st Install for iSeries & WebSphere Application Server http://www.iseries.ibm.com/developer/websphere/assistance.html

iSeries ToolsNet (Tools & Middleware) http://www.iseries.ibm.com/developer/tools/

iSeries & Services Network http://as400service.ibm.com/supporthome.nsf/document/19251245

iSeries e-business Handbook (SG24-5694-01) http://www.redbooks.ibm.com/abstracts/sg245694.html



System i & WebSphere Resources & Deliverables

WebSphere Commerce Suite With Back-End Order Mgmt. http://ibm.com/redbooks

iSeries Technology Center http://www.iseries.ibm.com/service/itc/ebiz.htm

iSeries University http://www-3.ibm.com/services/learning/community/as400/

WebSphere Application Server Overview http://www-4.ibm.com/software/webservers/appserv/

iSeries & WebSphere Documentation

Redbooks & Red Pieces

Form Numbers/Web Sites

Building iSeries Applications for WebSphere Advanced Edition

Building Java Applications for the iSeries with VisualAge for Java

SG24-6245

Integrating WCS with Domino Back-End Applications

http://ibm.com/redbooks (search for REDP0141)

Java & WebSphere Performance on iSeries

- http://publib-b.boulder.ibm.com/Redbooks.nsf/RedpieceAbstracts/sg246256.html?Open iSeries Application Development Directions white paper is now available
- http://www.iseries.ibm.com/developer/tools/documents/addir/index.html
 Connect for iSeries with WebSphere Commerce Suite Red Paper
- http://www.redbooks.ibm.com/redpapers/pdfs/redp0127.pdf

Tools for Application Reface and Redesign

•	nttp://www.as4uu.ibm.com/developer/comm/pidtechpapers.ntml?loois		
	Introduction to Enterprise JavaBeans for AS/400		SG24-5192-00
	Web enabling AS/400 Applications with WebSphere Studio Building AS/400 Applications with WebSphere Standard Edition 2.0		SG24-5634-00
			SG24-5635-00
	Building AS/400 C/S Apps with Java	SG24-2152-02	
	Building AS/400 Internet-based applications with Java		SG24-5337-00

WebSphere Commerce Suite www-4.ibm.com/software/webservers/commerce/

WebSphere Payment Manager www-4.ibm.com/software/webservers/paymgr/

MQSeries www.ibm.com/software/ts/mqseries IBM Redbooks

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

iSeries Nation

http://www-1.ibm.com/servers/eserver/iseries/announce/form.html



Trademarks and Disclaimers

© IBM Corporation 1994-2006. All rights reserved.

References in this document to IBM products or services do not imply that IBM intends to make them available in every country.

The following terms are trademarks of International Business Machines Corporation in the United States, other countries, or both:

 AS/400
 e-business on demand
 i5/OS

 AS/400e
 IBM
 OS/400

 eServer
 IBM (logo)
 System i5

 @ server
 System i

Rational is a trademark of International Business Machine Series ration and Rational Software Corporation in the United States, other countries, or both.

Intel, Intel Logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.

Linux is a trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.

UNIX is a registered trademark of The Open Group in the United States and other countries.

Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Other company, product or service names may be trademarks or service marks of others.

Information is provided "AS IS" without warranty of any kind.

All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. Actual environmental costs and performance characteristics may vary by customer.

Information concerning non-IBM products was obtained from a supplier of these products, published announcement material, or other publicly available sources and does not constitute an endorsement of such products by IBM. Sources for non-IBM list prices and performance numbers are taken from publicly available information, including vendor announcements and vendor worldwide homepages. IBM has not tested these products and cannot confirm the accuracy of performance, capability, or any other claims related to non-IBM products. Questions on the capability of non-IBM products should be addressed to the supplier of those products.

All statements regarding IBM future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. Contact your local IBM office or IBM authorized reseller for the full text of the specific Statement of Direction.

Some information addresses anticipated future capabilities. Such information is not intended as a definitive statement of a commitment to specific levels of performance, function or delivery schedules with respect to any future products. Such commitments are only made in IBM product announcements. The information is presented here to communicate IBM's current investment and development activities as a good faith effort to help with our customers' future planning.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. The actual throughput or performance that any user will experience will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

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