

31A System i Access for Web: What an Administrator Needs to Know

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System i Access Sessions

Windows:

System i Access for Windows: What's New?

Web:

- Get to the Web Fast with System i Access for Web V6R1 (Overview)
- Run 5250 Through a Browser with System i Access for Web
- Database Access with System i Access for Web
- System i Access for Web: Setup and Configuration
- System i Access for Web: What an Administrator Needs to Know

Functional enhancements can be submitted via the FITS system. The url is: http://www.ibm.com/systems/i/software/access/

And click on link "Request for Design Change"



Agenda

- Overview
- System i Access for Web Runtime Considerations
 - Use of policies
 - Customizing the home page/template files
- System i Access for Web Environment Security Considerations
 - SSL and VPN
 - Authentication security options
 - 5250 bypass signon notes



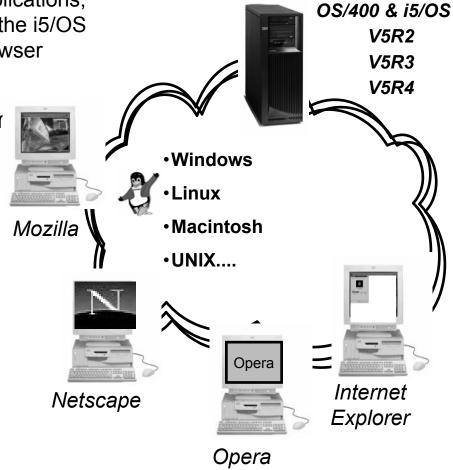
Overview



What is System i 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 System i 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 System i 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.



System i Access for Web Runtime Considerations



3 methods to control access using System i Access for Web

Administration Policies

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

User Preferences

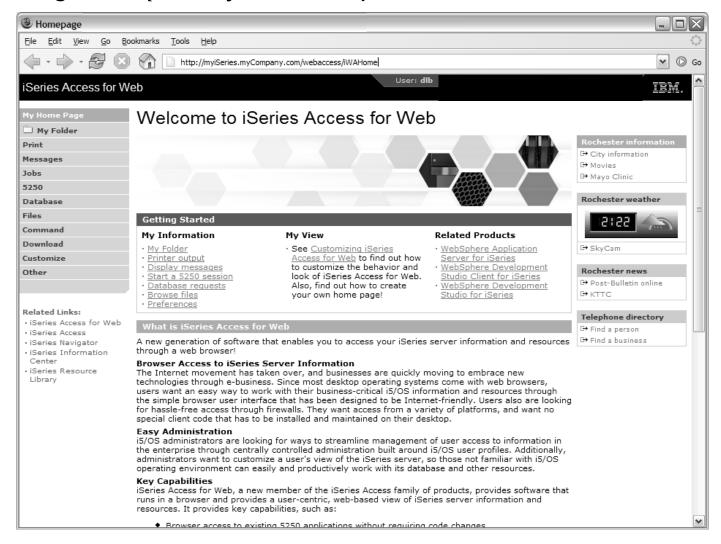
- Users can set their own Preferences for things like
 - What tabs are available in the navigation bar
 - How to view output (default rows/columns per page)
 - How to filter output

Customize the Home page and template files

- Administrators can use the Customize function to replace the default System i 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 System i Access for Web pages
- Style sheets The look of the System i Access for Web page content is now controlled by external style sheets.

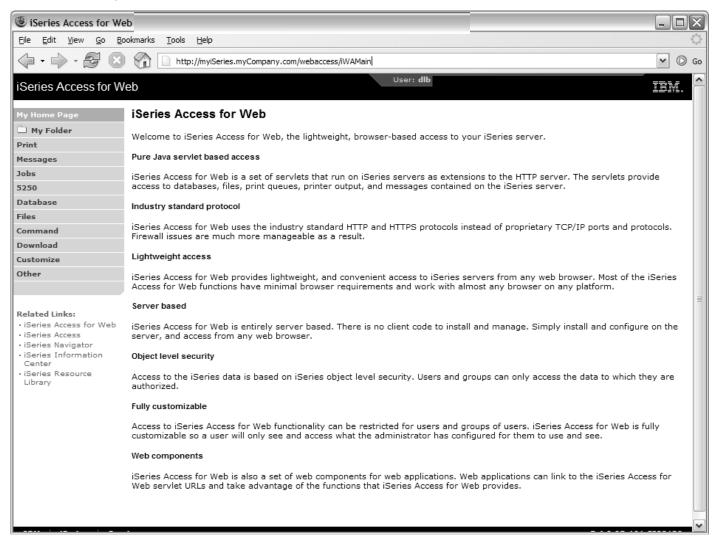


Home Page = http://<myiseries>:<port>/webaccess/iWAHome



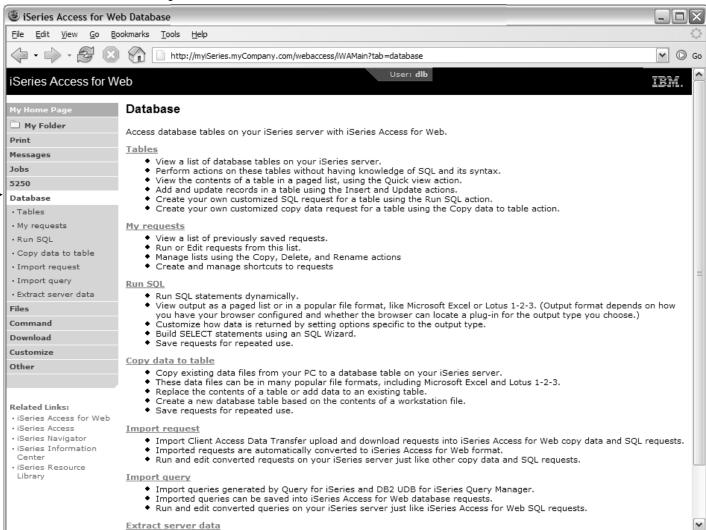


Main Page = http://<myiseries>:<port>/webaccess/iWAMain



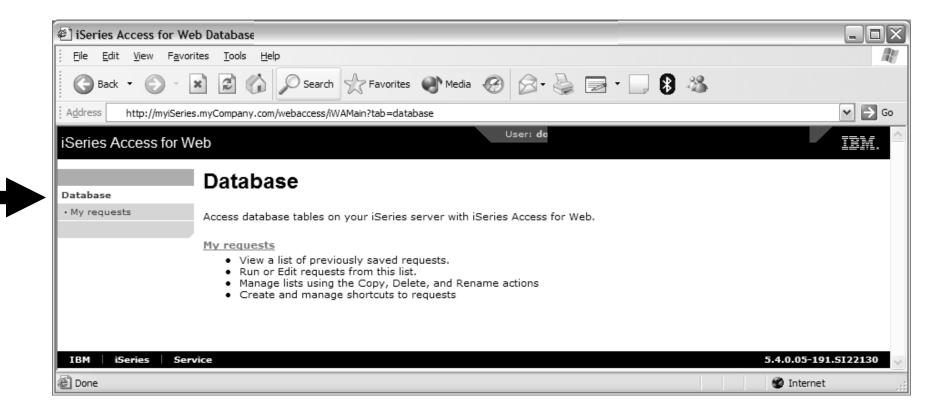


Product functionality





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
🖭 My Folder
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



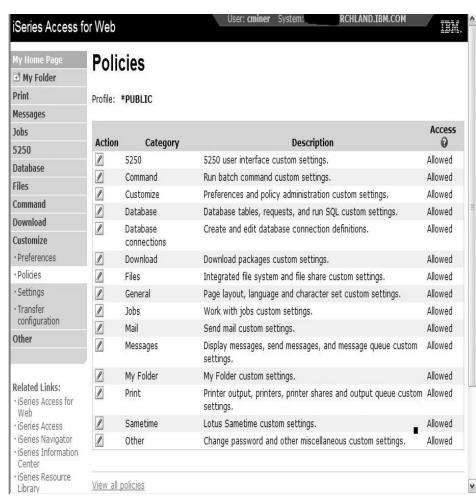
Notes: Controlling Access - How & Whom?

- 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 System i Access for Web functions.



Controlling User Access

- System i 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



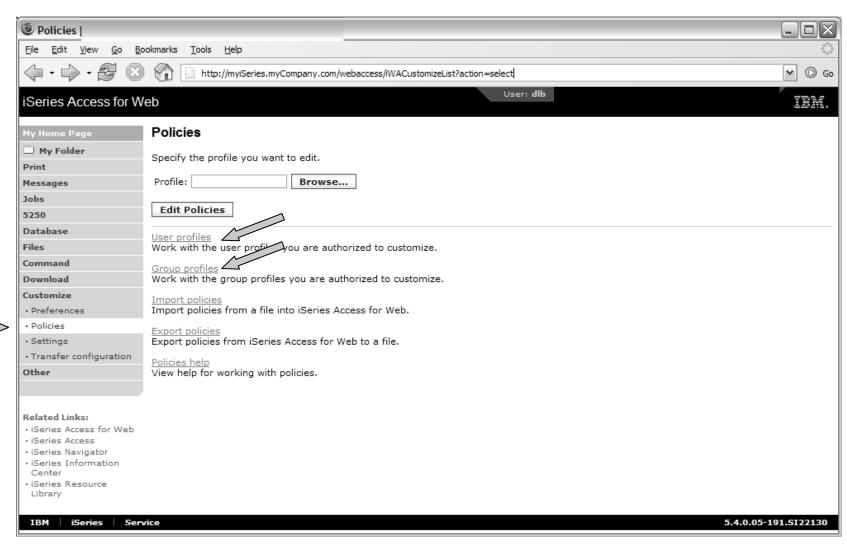
View of the Policies page



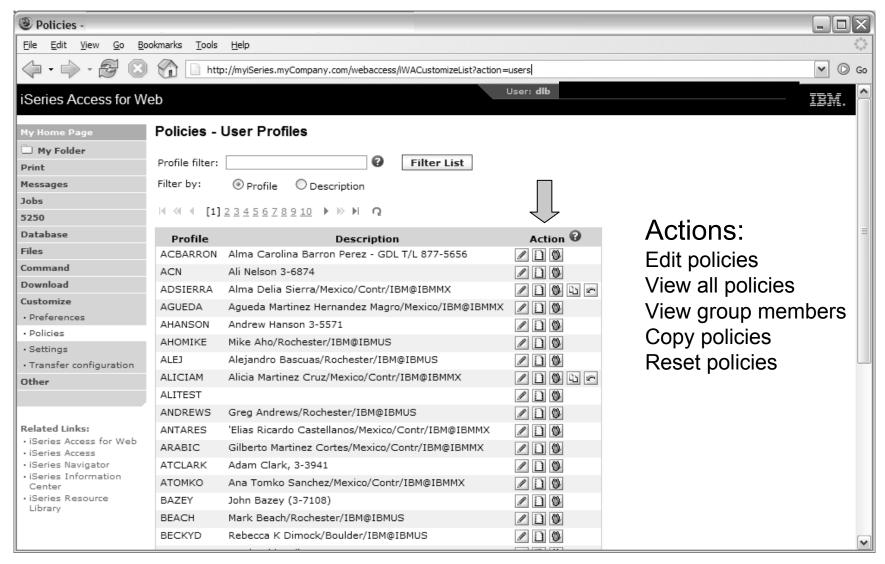
Notes: Controlling Access - Strategies

- System i Access for Web ships with a set of default policy settings. The default policy settings allow most
 of the System i Access for Web functions to be available for all users. Without any customization, users
 accessing System i 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 System i 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
 System i Access for Web functions.











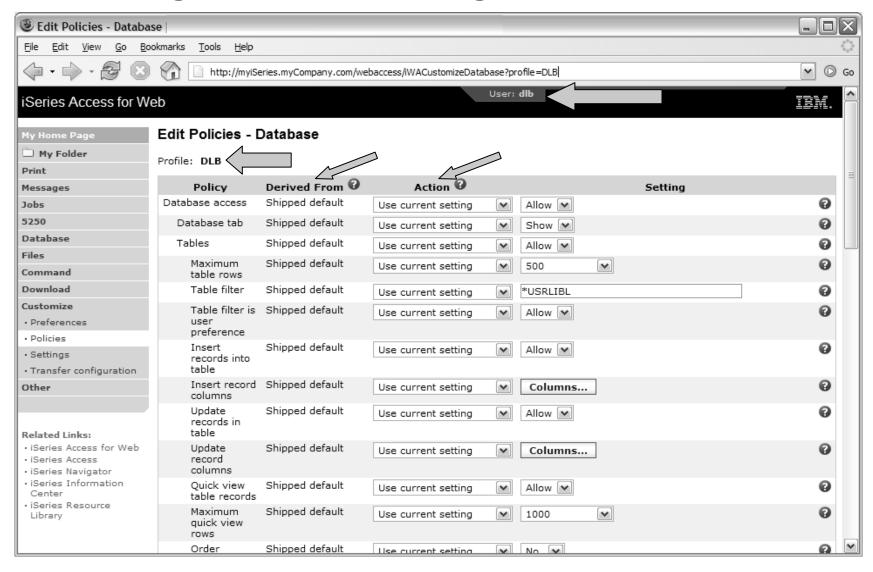
Controlling Access - Setting policies

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.









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 System i 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 System i 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 System i 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.



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 System i 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 System i 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.

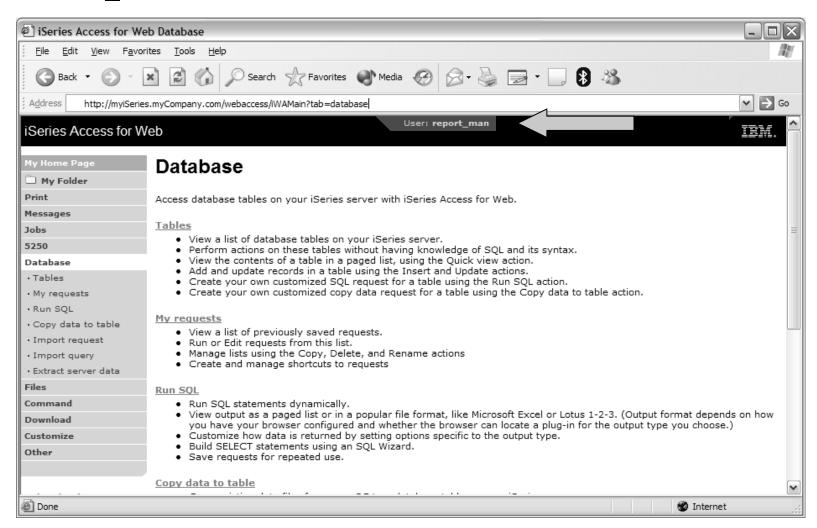


- The following screen shots step through setting the policies so a specific user only has the ability to run preconfigured database queries to generate reports.
- This example shows
 - the "Before" picture of what DB functions a user can perform with no customization of System i Access for Web
 - the 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

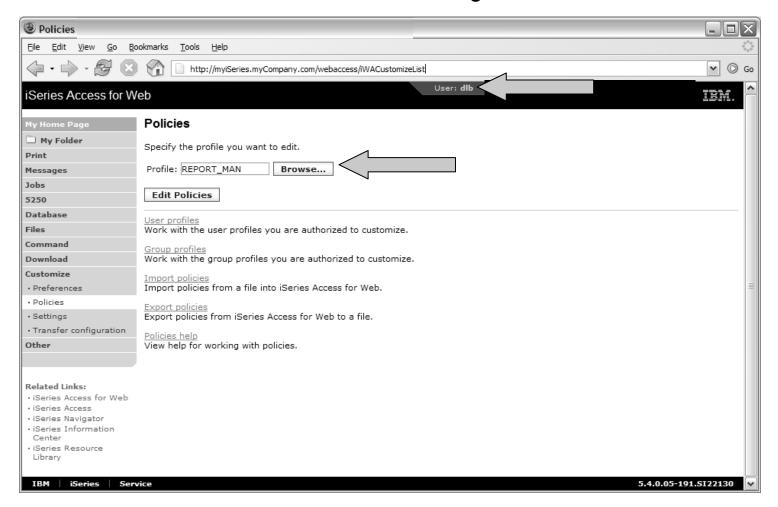
Accessing the Database tab of System i Access for Web as user REPORT_MAN





Example: Simple Database User - Policies

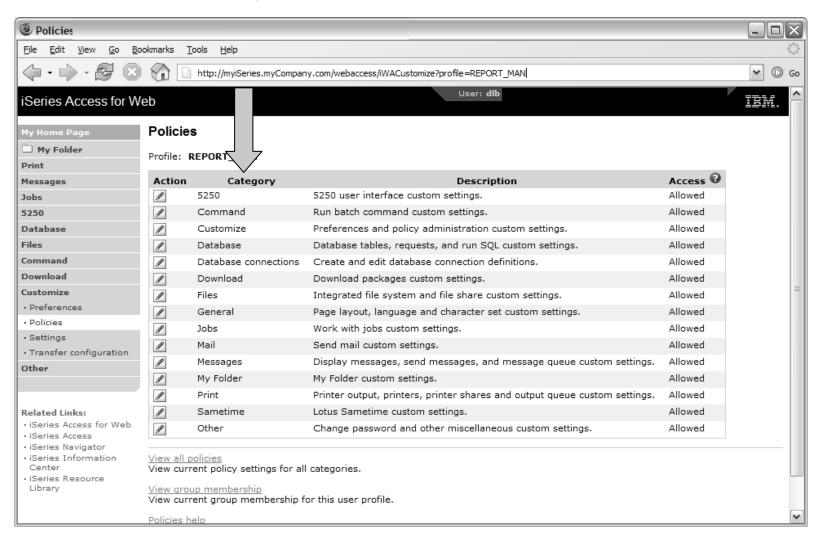
- Policies the starting point for customization of a specific user or group.
- This is a new browser session, where we signed on as an administrator.





Example: Simple Database User - Categories

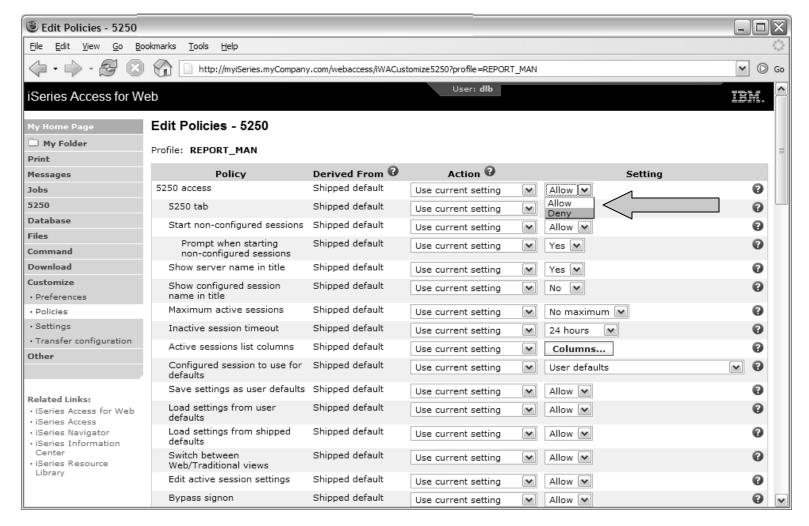
• Determine which categories need to be restricted/modified.





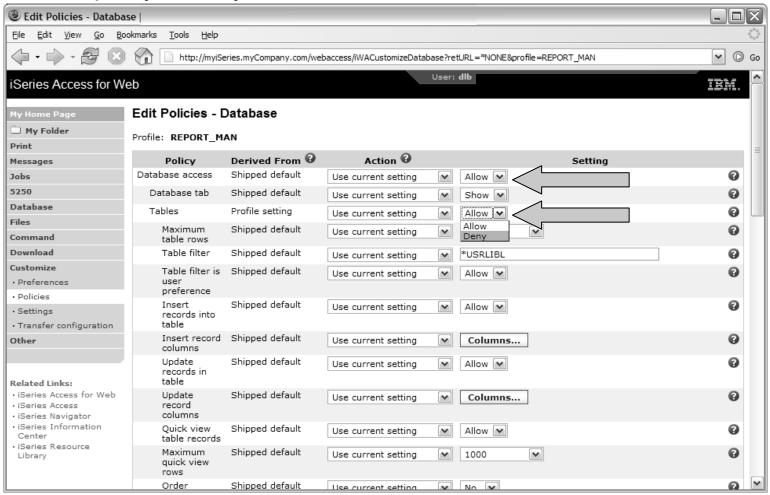
Example: Simple Database User – Other

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



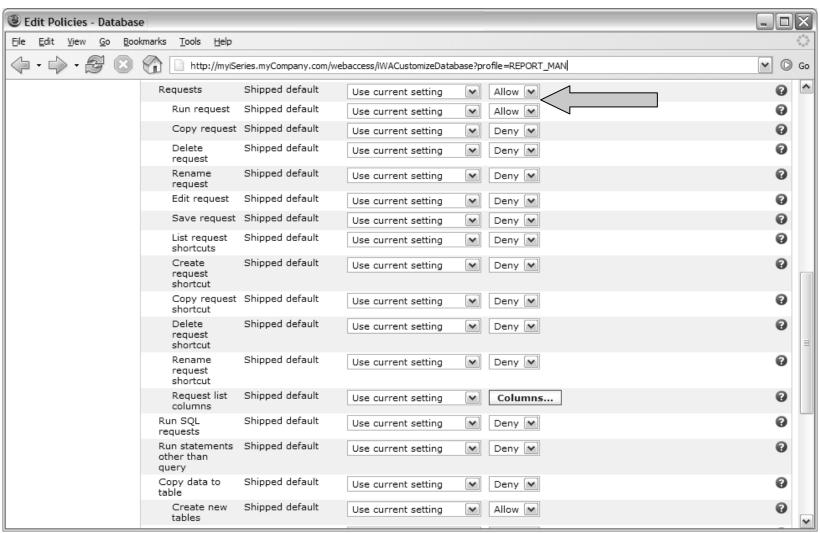


- Allow access to Database function.
- Set Tables policy to Deny.



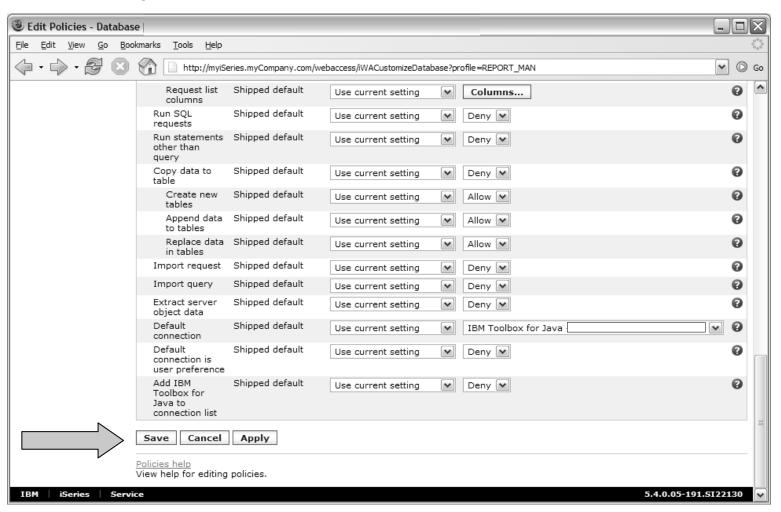


Only allow the user the ability to run a saved DB request (Run request)





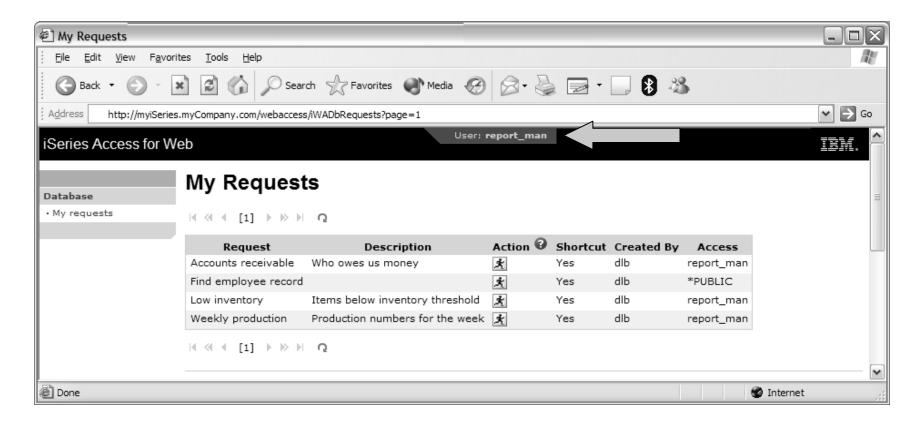
- Turn off the ability to perform the remaining database functions
- Save the changes





Example: Simple Database User - Completion

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





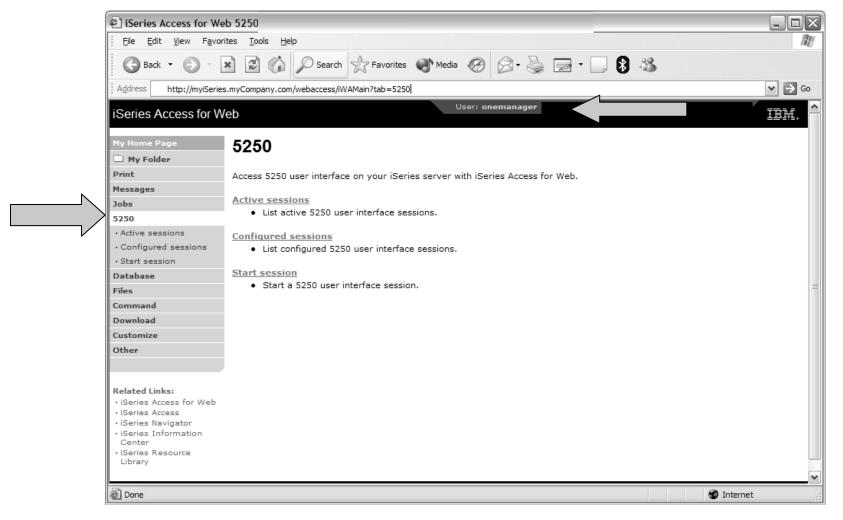
Example: 5250 Access

- 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 System i Access for Web.
- When the policy is set, it takes effect immediately.



Example: 5250 Access - Before

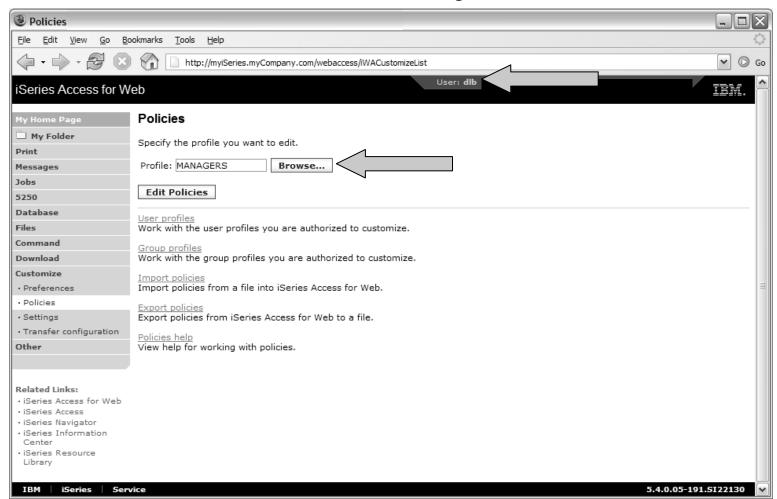
 Access the 5250 tab System i Access for Web Main page as user ONEMANAGER.





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

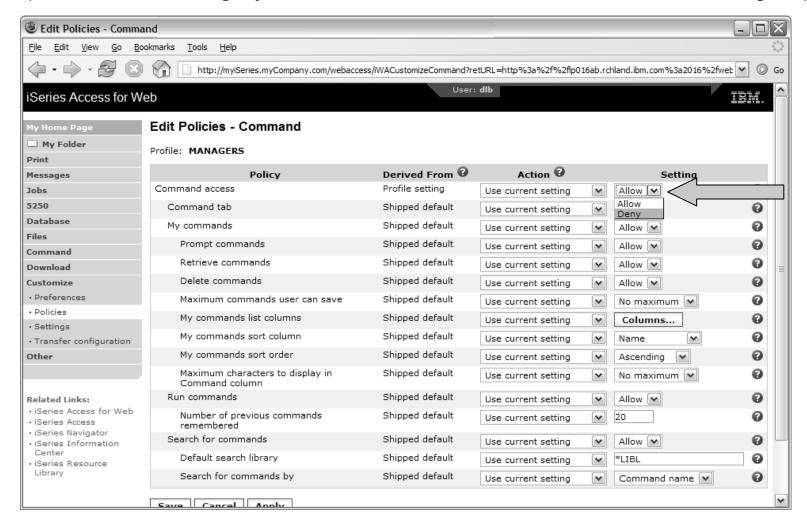
Determine which categories need to be restricted/modified.





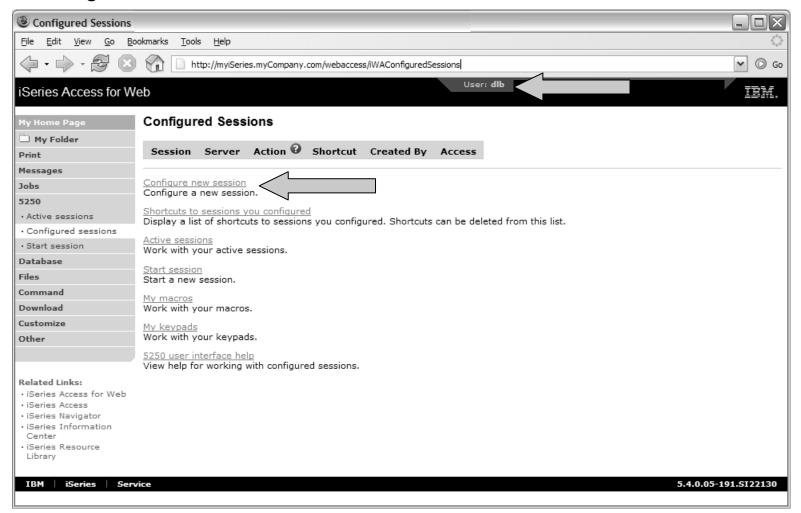
Example: 5250 Access – Other

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



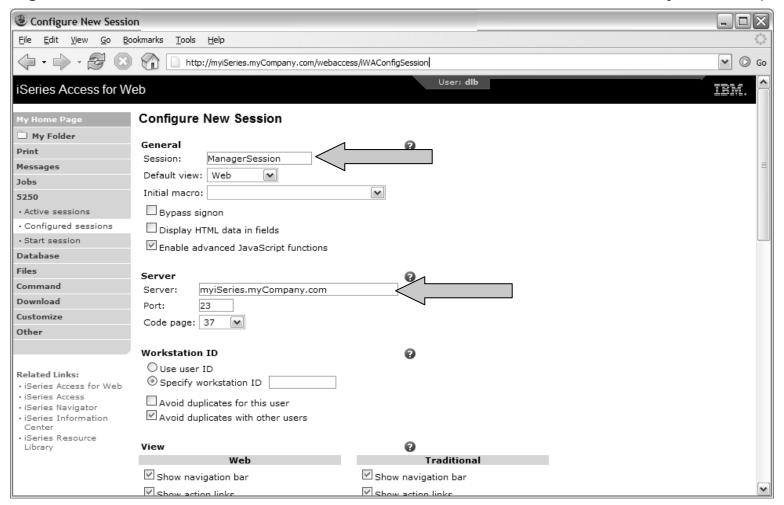


• The administrator goes to the Configured Sessions link on the 5250 tab. Select the "Configure new session" link.



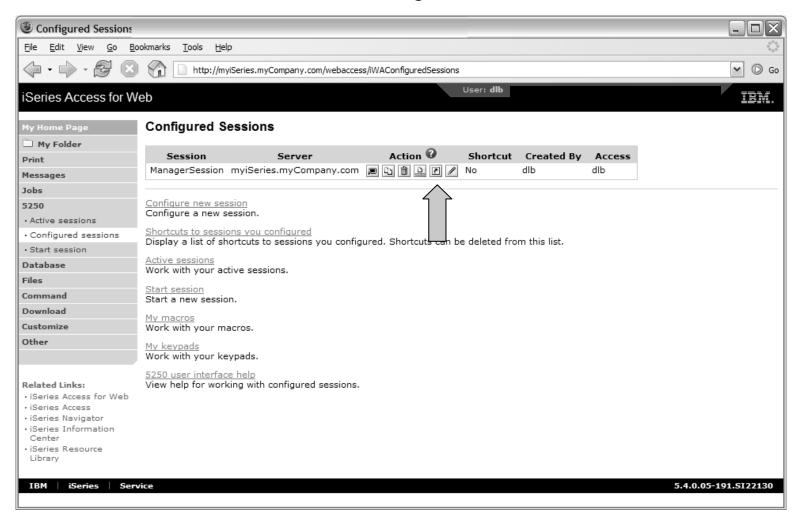


- The administrator configures the 5250 session settings to be used by the managers.
- Settings include the server to connect to, color schemes, and many other options.



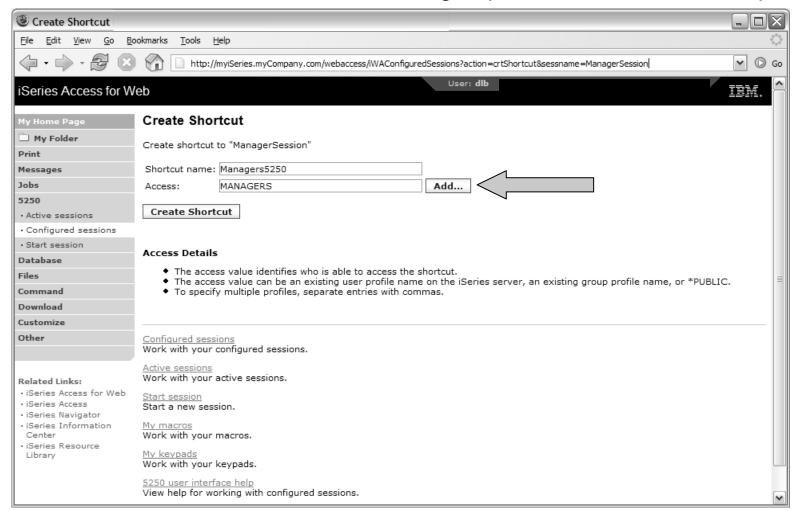


- The saved session is only available to the administrator that is currently signed on.
- The session must be shared to the managers. Use the "Create Shortcut" action.





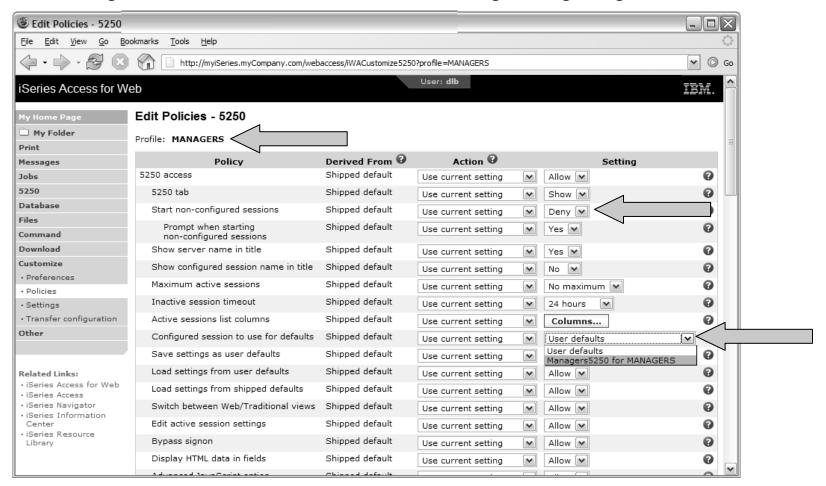
- Name the shortcut whatever you wish.
- Session can be shared with MANAGERS group, *PUBLIC, or individual profiles.





Example: 5250 Access – Back to Customize

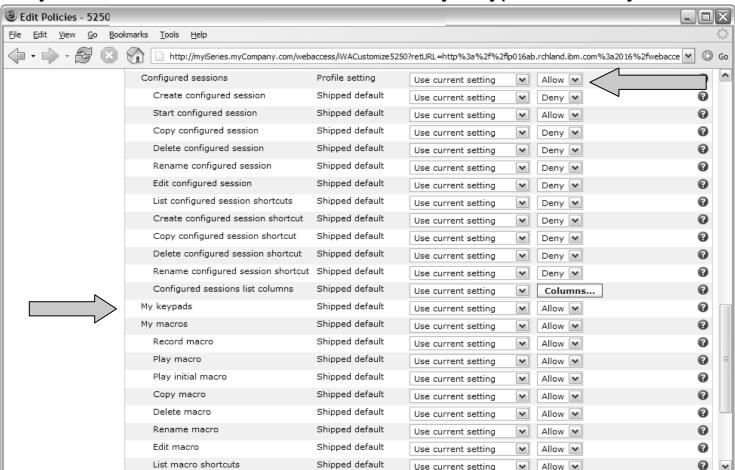
- Go back to 5250 in Customize Policies for the MANAGERS group profile.
- Select the shortcut to use as the default session settings for the MANAGERS.
- Select settings to lock MANAGERS out of starting/configuring new sessions.





Example: 5250 Access – More 5250 Settings

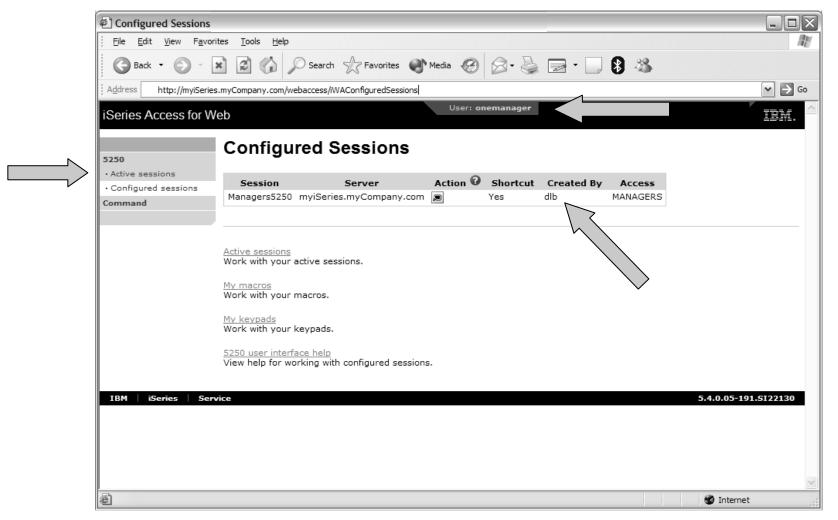
- Set all 5250 policies to Deny, except Configured Sessions and Start Configured Sessions.
- You may also want to allow them to access My Keypads and My Macros.





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 System i 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.

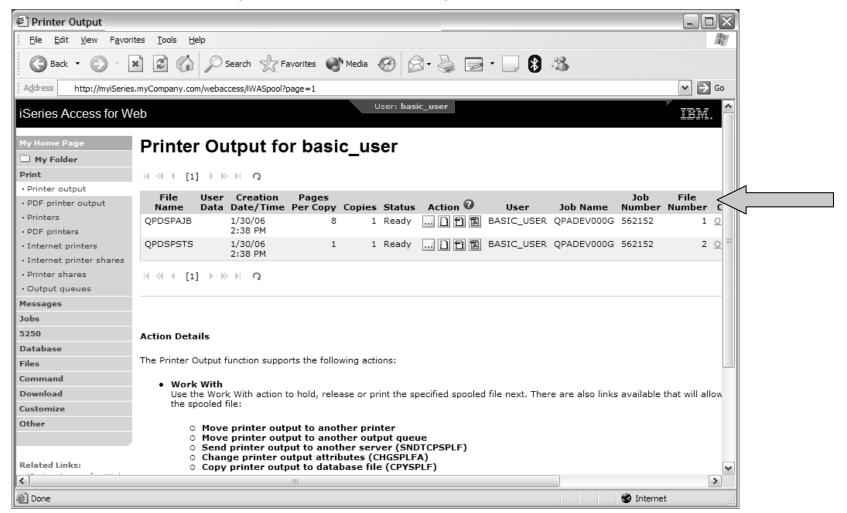


Example: User Preferences, Printer output

- 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.

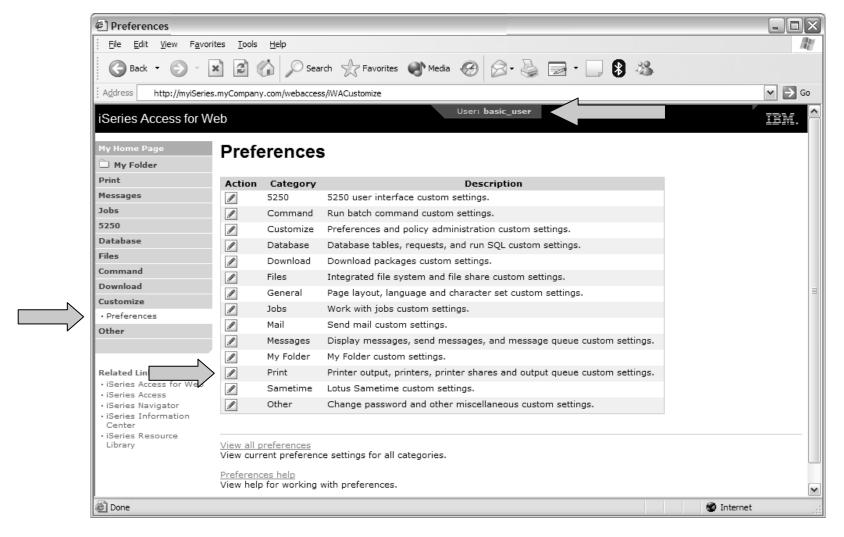


• The printer output display defaults with many columns of information.



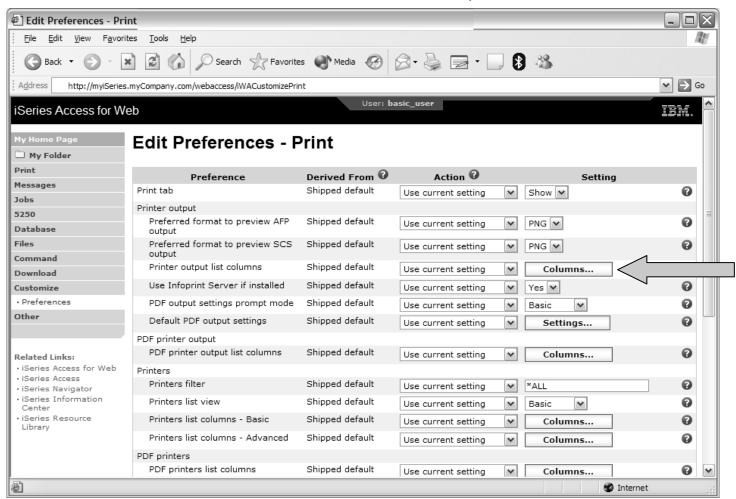


Click on the Customize tab to work with Preferences.



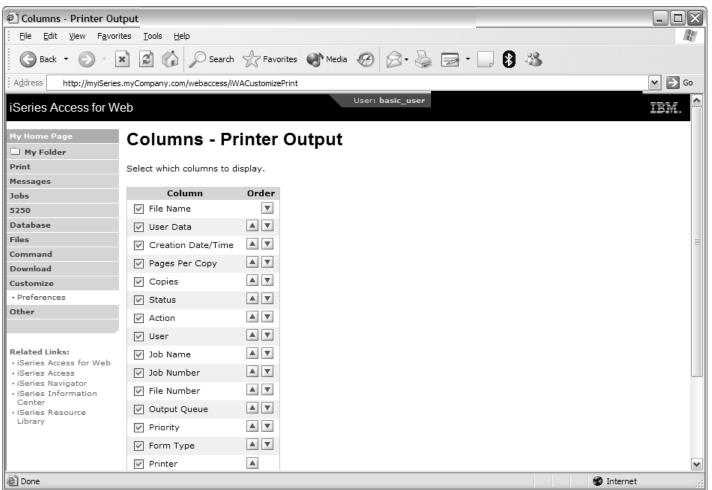


- Click on the Print category.
- Click on the Columns button for the "Printer output list columns" Preference.



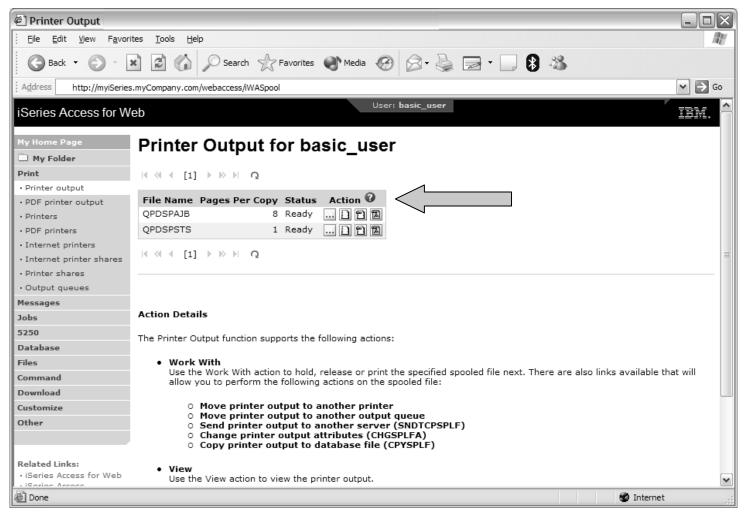


- The Columns displayed can be toggled off/on by checking the box.
- Click OK and Save buttons to immediately save the changes.





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



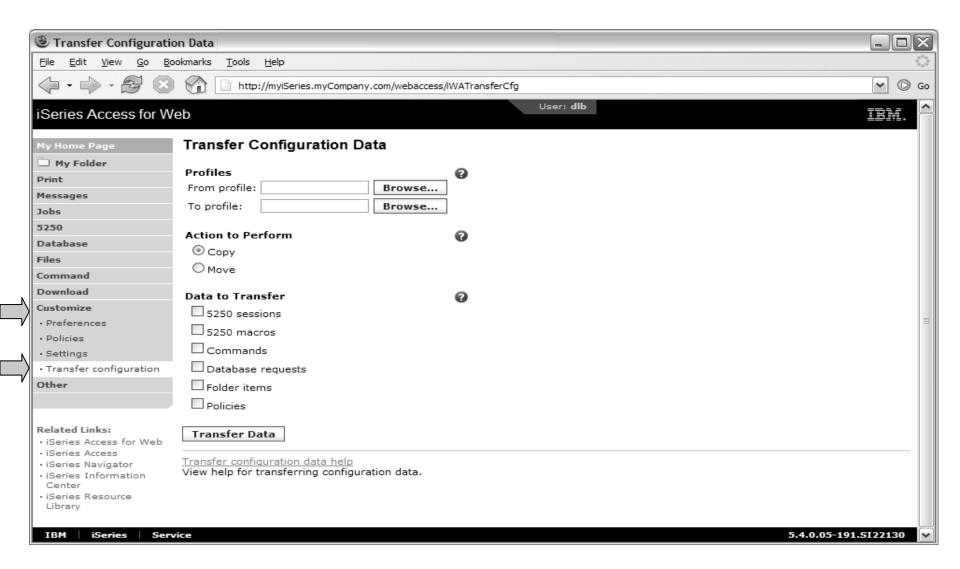
Policies and Tools

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

- 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 System i 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 System i 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 System i Access for Web'

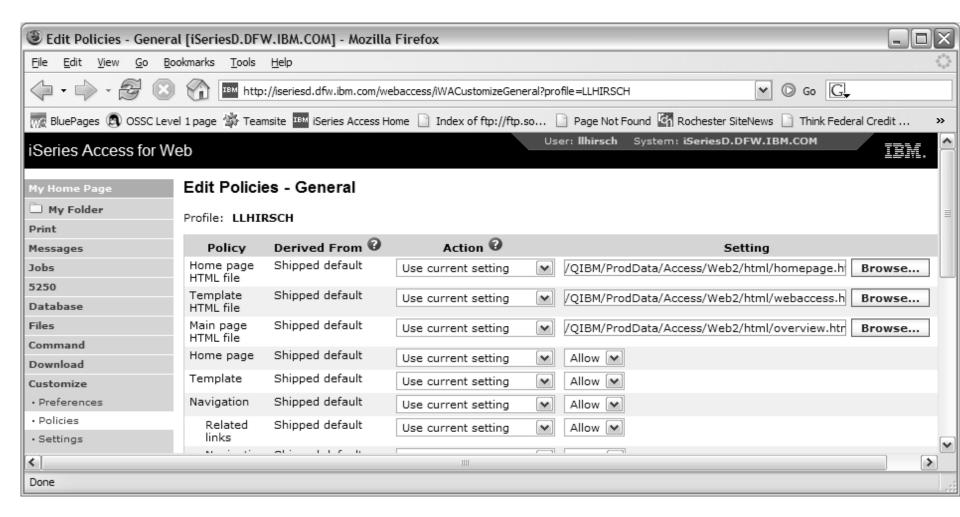


Template file customization

- System i 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 System i 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 System i 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

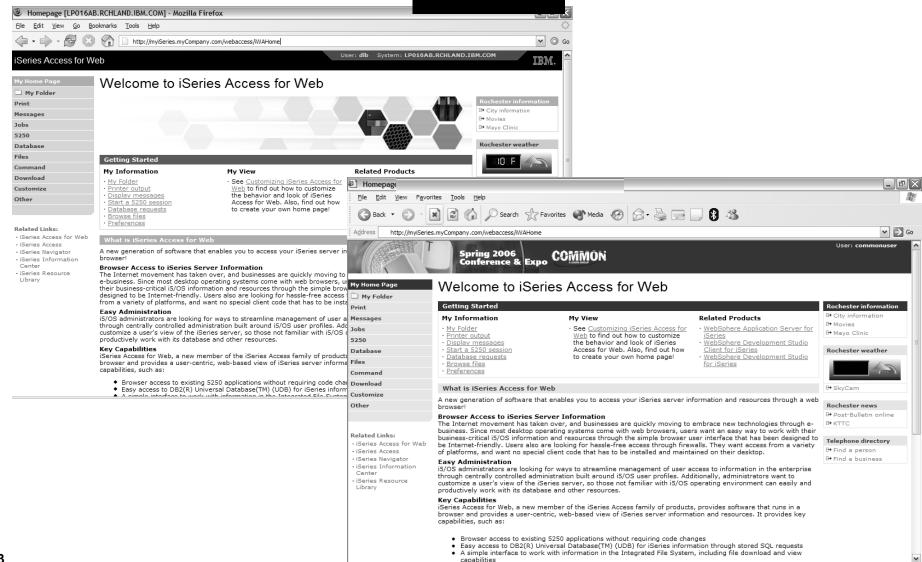
version of System i Access for Web

For detailed information on these special tags

- V5R4 System i Access for Web Info Center
 - Connecting to iSeries->System i Access->System i Access for Web->System i Access for Web in a web
 application sever environment->Customize System i Access for Web->Default page content->Home
 page



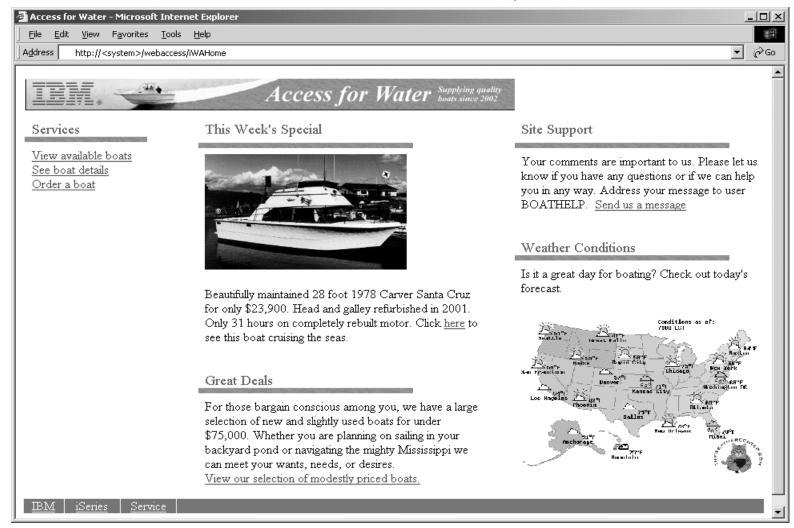
Home Page default – iWAHome servlet http://<system>/webaccess/iWAHome





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)

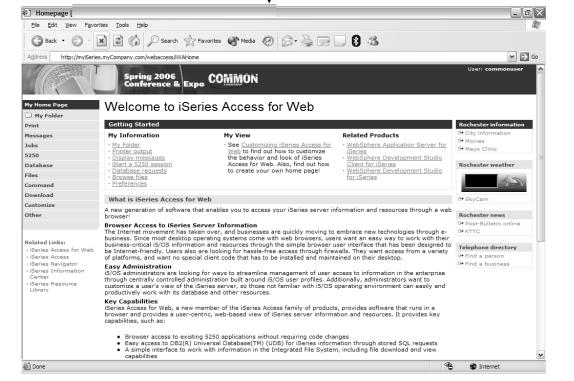
Custom template





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

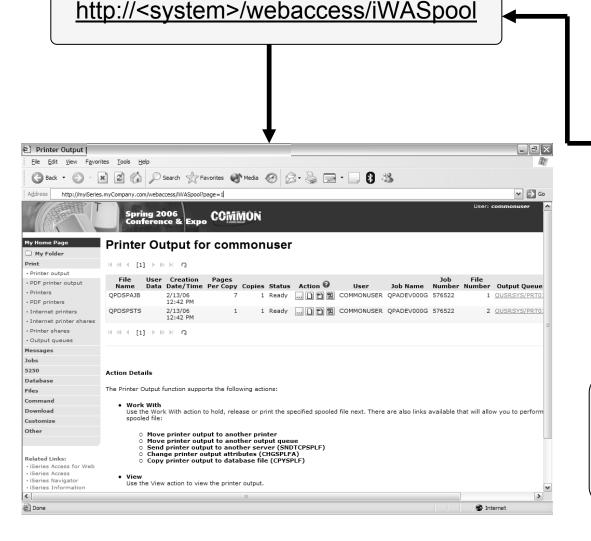
Cascading Style Sheet file

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

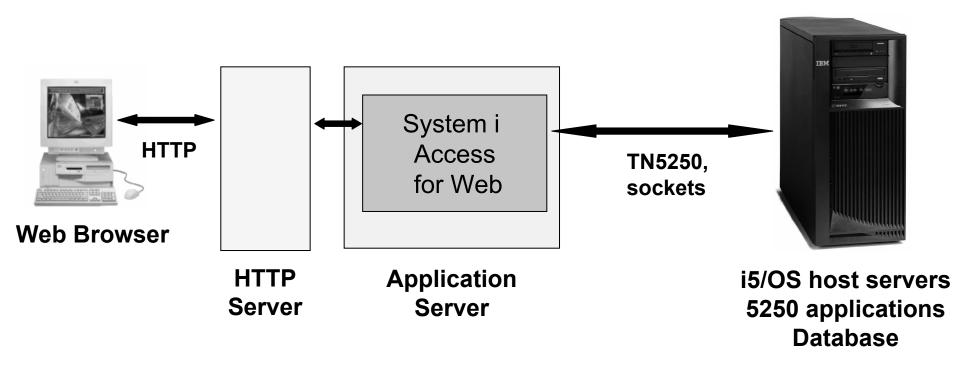
- Customizing policies to use different home page and template files
- Adding a different image as header, changing the footer
- Updating the cascading style sheet



System i Access for Web Environment Security Considerations

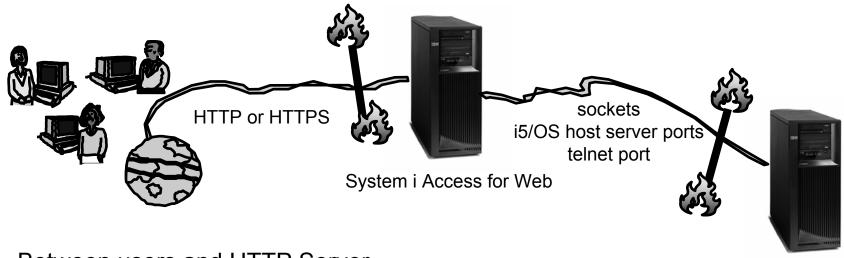


System i Access for Web Environment





System i Access for Web Environment (continued)



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

i5/OS



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



Authentication

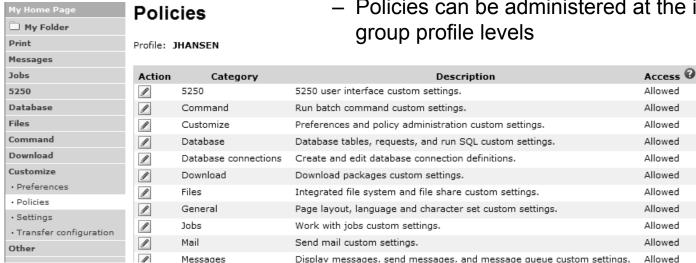
- Authentication is verifying the identity of the user
- System i Access for Web supports two types of authentication
 - Application
 - System i Access for Web handles the authentication
 - Application Server
 - WebSphere Application Server handles the authentication
- Specified by the AUTHTYPE parameter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



Authorization

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

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





Application Authentication

- System i 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

- WebSphere handles authentication
- WebSphere credentials
 - Typically a user ID and password
 - Can be Windows domain login information (new in V6R1)
 - Kerberos-based
 - Requires WebSphere Application Server V6.1
 - Authenticated with the active WebSphere user registry
- Specified by the AUTHTYPE parameter on the CFGACCWEB2 command
 - Application Server Authentication: AUTHTYPE(*APPSVR)
- WebSphere provides different methods of gathering credentials
 - Applications can choose which methods to support



Application Server Authentication (continued)

- System i 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
 - Kerberos-based authentication (V6R1)
 - Windows domain login information sent via Simple and Protected GSS-API Negotiation Mechanism (SPNEGO)
 - No additional prompt for user credentials
- Specified by the AUTHMETHOD parameter on the CFGACCWEB2 command
 - HTTP basic authentication: AUTHMETHOD(*BASIC)
 - Form-based authentication: AUTHMETHOD(*FORM)
 - Kerberos-based authentication: AUTHMETHOD(*KERBEROS)





Application Server Authentication Authorization

- HTTP basic authentication and form-based authentication
 - System i 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
- Kerberos-based authentiation
 - System i Access for Web uses Kerberos-based credentials to authenticate with i5/OS
 - i5/OS uses Network Authentication Service (NAS) and EIM to map the Kerberosbased 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 Configure System i Access for Web

- Configure System i Access for Web
 - CFGACCWEB2 AUTHTYPE(*APPSVR)AUTHMETHOD(*FORM) ...
 - CFGACCWEB2 AUTHTYPE(*APPSVR)AUTHMETHOD(*KERBEROS) ...







5250 Sessions

Start Session

- 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		0
Workstation ID ○ Use user ID ② Specify workstation ID □ Avoid duplicates for this user ☑ Avoid duplicates with other users		9
General Initial macro:	~	0
☐ Display HTML data in fields Start Session		Sign On
	User	

RELEASE: V05R03M00 DRIVER: 2600722

USE OF THIS SYSTEM IS FOR IBM MANAGEMENT APPROVED PURPOSES ONLY.

USE IS SUBJECT TO AUDIT AT ANY TIME BY IBM MANAGEMENT.

(C) COPYRIGHT IBM CORP. 1980, 2003.

System:
Subsystem ...:

Display :

37

6,53

QINTER

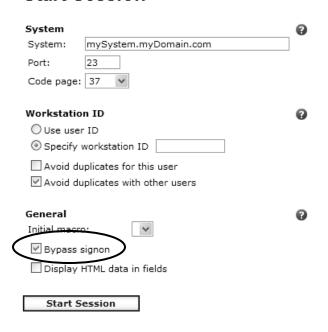
QPADEV0006



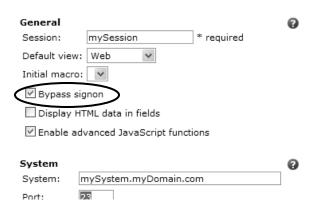
5250 Session Bypass Signon

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

Start Session



Configure New Session



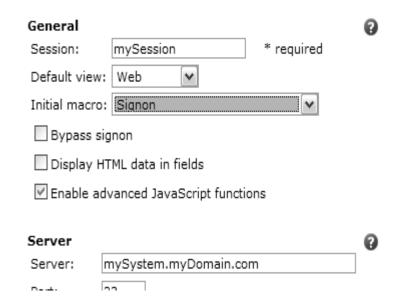
- System i Access for Web must be configured for application authentication or application server authentication with Kerberos for bypass signon to be available
 - CFGACCWEB2 AUTHTYPE(*APP) ...
 - CFGACCWEB2 AUTHTYPE(*APPSVR)AUTHMETHOD(*KERBEROS) ...



5250 Session Signon Macro

- Select as initial macro when configuring a session
- System i Access for Web must be configured for application authentication or application server authentication with Kerberos for bypass signon to be available
 - CFGACCWEB2 AUTHTYPE(*APP) ...
 - CFGACCWEB2AUTHTYPE(*APPSVR)AUTHMETHOD(*KERBEROS) ...
- Signon macro advantageous for V5R3
 Access for Web, since Bypass signon was provided in V5R4

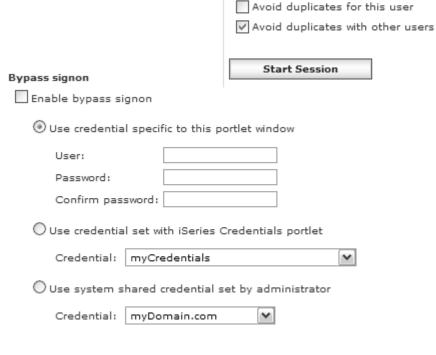
Configure New Session





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

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Display HTML data in fields

Specify workstation ID

x1519p4.rchland.ibm.com

Start Session

Code page: 37

Workstation ID

Use user ID

Server

Server:

Port:



Appendix: email Linda at LLHIRSCH@us.ibm.com for a step-by-step example of how to customize the Home page and Template files



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



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eServer	IBM (logo)	System i5
@server		System i

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