

## Deep Dive Into System i Access for Web Session 2:

## **Configuration and Controlling Access**

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## Agenda

- Part 1: Installation and Configuration
  - Hardware and software requirements
  - Supported web serving environments
  - Configuration steps

- Part 2: Runtime Considerations
  - Use of policies
  - Customizing the home page/template files



## Part 1: Installation and Configuration



## First you need a web-serving environment



Tier 1

Tier 2

Tier 3



## **Pieces of the web-serving environment**

- HTTP Server (powered by Apache)
  - Front door for your system into your web serving environment
  - HTTP/HTTPS (SSL)
  - Listens for web requests on a specific TCP/IP port
  - Routes web requests between an end-user browser and a web application sever
- Web application server
  - WebSphere Application Server
  - Integrated Web application server
  - Provides a java virtual machine environment where web applications run
- Web application
  - System i Access for Web
  - Provides specific function that users access using a web browser
  - Deployed/installed within a web application server
- WebSphere Portal/Workplace
  - Web application deployed to WebSphere Application Server
  - Provides environment in which portlets are deployed and run.



## **Supported Web Application Servers**

System i Access for Web servlet code can be used with any of the following web application servers:

#### V6R1 System i Access for Web

- Integrated Web application server
- WebSphere® Application Server V6.1 and V6.0 Express for i5/OS
- WebSphere Application Server V6.1 and 6.0 Base and Network Deployment

#### V5R4 System i Access for Web

- Integrated Web application server
- WebSphere® Application Server V6.1 and V6.0 Express for i5/OS
- WebSphere Application Server V6.1 and 6.0 Base and Network Deployment
- WebSphere Application Server V5.1 Express for iSeries
- WebSphere Application Server V5.0 Express
- WebSphere Application Server V5.1 and 5.0 Base and Network Deployment Editions
- ASF Tomcat

System i Access for Web portlet code can be used with any of the following portal servers.

#### V6R1 System i Access for Web

- WebSphere Portal for Multiplatforms V6.0
- WebSphere Portal for Multiplatforms V5.1.0.1

#### V5R4 System i Access for Web

- IBM Workplace Services Express V2.6 (V5R4 iSeries Access for Web)
- IBM Workplace Services Express V2.5
- WebSphere Portal for Multiplatforms V6.0
- WebSphere Portal for Multiplatforms V5.1.0.1
- WebSphere Portal Express for Multiplatforms V5.0.2
- WebSphere Portal Express Plus for Multiplatforms V5.0



## Performance...???

- Does running System i Access for Web affect performance?
  - Products like System i Access for Web don't put much load on i5/OS...
- How does the web application server affect performance?
  - If you have an older, under-powered System i, then performance may not be good...if you have a newer, bigger System i, then performance won't be an issue (unless you already are running your System i at maximum capacity).
  - Use the IBM Systems Workload Estimator to see what performance will be if WAS is added to your System i at: <u>http://www-912.ibm.com/wle/EstimatorServlet</u>
  - There is a Workload Estimator for WebFacing Workloads. System i Access for Web will be similar (depending on what functions of System i Access for Web are being used).
- Fine-tuning your web application server
  - If performance is not as good as expected, look in the WebSphere Information Center
  - <u>http://publib.boulder.ibm.com/infocenter/wasinfo/v6r1/index.jsp?topic=/com.ibm.websphere.base.iseri</u>
     <u>es.doc/info/iseries/ae/welc6topinstalling.html</u>



## **Performance Considerations...**

## Use the IBM Systems Workload Estimator at http://www-912.ibm.com/wle/EstimatorServlet





## Setting up your web application server

DMZ = demilitarized zone



#### Only need to set up 1 web application server

## **Port Requirements Comparison**

System i Access for Windows (5722-XE1)\* (5761-XE1)

- Port 449 for Port Mapper
- Port 8476 (9476) for Sign-on
- Port 8470 (9470) for Central
- Port 8472 (9472) for Data Queues
- Port 8471 (9471) for Database
- Port 8475 (9475) for Remote Commands
- Port 8473 (9493) for Print
- Port 2001 (2010) for Web Admin
- Port 446 (448) for DDM
- Port 23 (992) for Telnet
- Port 137, 138 for NetServer
- Port 389 (636) for LDAP
- Port 5555 (5566) for Mgmt Central
- Port 53 if using DNS Server

#### \*See Information APAR II12227 for detailed information

System i Access for Web (5722-XH2) (5761-XH2)

- Port 80 (or any other port) for HTTP Server
- Port 443 (or any other port) for HTTPS Server



## Hardware/Software Requirements



## **Client Browser Requirements**

- These browsers have been tested with V6R1 System i Access for Web:
  - Firefox 2.0 (Windows<sup>®</sup> and Linux<sup>®</sup>)
  - Internet Explorer 6.0 with Service Pack
     1 (Windows)
  - Internet Explorer 7.0 Windows)
  - Mozilla 1.7 (Windows, Linux, and AIX®)
  - Opera 9.2 (Windows and Linux)

- These browsers have been tested with V5R4 System i Access for Web:
  - Firefox 1.0.2 (Windows, Linux)
  - Internet Explorer 6.0 with Service Pack 1 (Windows)
  - Opera 7.54 (Windows, Linux)
  - Mozilla 1.7 (Windows, Linux, AIX)
  - Other browsers that support the current HTTP and HTML specifications should work, but have not been tested with System i Access for Web.

#### Set browser to allow 'Cookies'

 System i Access for Web requires that the web browser allow cookies. Set the cookie configuration option to allow cookies.



## **i5/OS Software Requirements**

Product Number	Product Name	Option	\$
5722-SS1 5761-SS1	V5R4 System i Access for Web: V5R3 or V5R4 i5/OS V6R1 System i Access for Web: V5R4 or V6R1 i5/OS	Base	w/HW
57xx-SS1	i5/OS - Extended Base Directory Support	3	N/C
57xx-SS1	i5/OS - AFP Compatibility Fonts	8	N/C
57xx-SS1	i5/OS - Host Servers	12	N/C
57xx-SS1	i5/OS QShell Interpreter	30	N/C
57xx-SS1	<ul> <li>If you plan to use Secure Sockets Layer (SSL)</li> <li>i5/OS Digital Certificate Manager</li> <li>Cryptographic Service Provider</li> </ul>	34 35	N/C N/C
57xx-DG1	IBM HTTP Server for iSeries	Base	N/C
57xx-JV1	Developer Kit for Java Developer Kit for Java Version 1.3 Developer Kit for Java Version 1.4 Developer Kit for Java Version 5.0 J2SE 5.0 32 bit (Check WebSphere doc for required version)		N/C N/C N/C N/C
57xx-JC1	Toolbox for Java	Base	N/C
57xx-TC1	TCP/IP Connectivity Utilities for iSeries	Base	N/C

#### Note: xx = "22" for V5R4, "61" for V6R1



## i5/OS Software Requirements (continued)

Product Number	Product Name	Option	\$
57xx-XW1	System i Access Family	Base	\$
57xx-XH2	<ul> <li>System i Access for Web</li> <li>Ships with 57xx-XW1 iSeries Access Family</li> <li>V5R4 System i Access for Web runs on i5/OS V5R3 and V5R4</li> <li>V6R1 System i Access for Web runs on i5/OS V5R4 and V6R1</li> </ul>	Base	part of XW1
5722-IP1	IBM Info Print Server ( <b>Optional</b> enables best PDF output but <u>is not</u> required to view PDF output)	Base	\$

#### Note: xx = "22" for V5R4, "61" for V6R1



## i5/OS Software Requirements (continued)

Product Number	Product Name	Option	\$
5733-W61 5733-W60 5722-E51 5733-W51 5722-IWE 5733-WS5 57xx-DG1	<ul> <li><u>One, or more, of the following web servers</u></li> <li>WebSphere Application Server V6.1 for i5/OS (all three editions)</li> <li>WebSphere Application Server V6.0 for OS/400 (all three editions)</li> <li>WebSphere Application Server V5.1 - Express for iSeries</li> <li>WebSphere Application Server V5.1 for iSeries (Base and ND)</li> <li>WebSphere Application Server V5.0 - Express for iSeries</li> <li>WebSphere Application Server V5.0 for iSeries (Base and ND)</li> <li>WebSphere Application Server V5.0 for iSeries (Base and ND)</li> <li>WebSphere Application Server V5.0 for iSeries (Base and ND)</li> </ul>	See documentation	
* * *	<ul> <li>Apache Software Foundation Tomcat</li> <li>WebSphere Portal for iSeries (Express and Express Plus) V5.0.2.2</li> <li>WebSphere Portal Enable for Multiplatforms V5.1.0.1</li> <li>WebSphere Portal V6.0</li> <li>IBM Workplace Services Express V2.5, V2.6</li> </ul>		

#### Note: xx = "22" for V5R4, "61" for V6R1

Refer to the documentation for the individual web serving environments additional requirements that may not be listed above.

- WebSphere
- Portal V5.0.2.2
- Portal V5.1.0.1
- Portal V6.0
- Workplace V2.5
- Workplace V2.6
- ASF Tomcat

- http://www.ibm.com/systems/i/software/websphere/index.html/
- http://publib.boulder.ibm.com/pvc/wp/502/smbi/en/InfoCenter/index.html
  - http://publib.boulder.ibm.com/infocenter/wp51help/index.jsp
  - http://publib.boulder.ibm.com/infocenter/wpdoc/v6r0/index.jsp
  - http://publib.boulder.ibm.com/infocenter/wseic/v2r5/index.jsp
  - http://publib.boulder.ibm.com/infocenter/wseic/v2r6/index.jsp
  - http://www.ibm.com/systems/i/software/http/index.html/



## **System i Access Family - Packaging**

V6R1 5761-XW1 System i Access Family	V5R4 5722-XW1 iSeries Access Family
System i Access for Windows, 5761-XE1, V6R1	iSeries Access for Windows, 5722-XE1, V5R4
System i Access for Web, 5761-XH2, V6R1	iSeries Access for Web, 5722-XH2, V5R4
System i Access for Linux, 5761-XL1, Vx.x (V6R1)	iSeries Access for Linux, 5722-XL1, V1.10 (V5R4)
System i Access for Wireless, 5722-XP1, V5R3	iSeries Access for Wireless, 5722-XP1, V5R3
V5R4 i5/OS customers not wanting to upgrade to V6R1 i5/OS but want the new V6R1 System i Access Family clients you can order no-charge Feature No. 2649 of Product No. 5722-XW1	



## System i Hardware Requirements

Models/Processor features/Memory

Refer to the web application server documentation to determine what server models, processor features, and the memory requirements are for your web serving environment

- WebSphere Application Server
  - http://www.ibm.com/systems/i/software/websphere/index.html/
- ASF Tomcat
  - http://www.ibm.com/systems/i/software/http/index.html/
- WebSphere Portal Express/Express Plus for iSeries V5.0.2.2
  - http://publib.boulder.ibm.com/pvc/wp/502/smbi/en/InfoCenter/index.html
- WebSphere Portal V5.1.0.1
  - http://publib.boulder.ibm.com/infocenter/wp51help/index.jsp
- WebSphere Portal V6.0
  - http://publib.boulder.ibm.com/infocenter/wpdoc/v6r0/index.jsp
- Workplace Services Express V2.5
  - http://publib.boulder.ibm.com/infocenter/wseic/v2r5/index.jsp
- Workplace Services Express V2.6
  - http://publib.boulder.ibm.com/infocenter/wseic/v2r6/index.jsp

#### Server disk space

#### Software product

V5R4 System i Access for Web

470MB365MB

V6R1 System i Access for Web



### System i Access for Web - Web Serving Environments Supported



## **3 Options for setting up the Access for Web environment**

- 1. Integrated Web application server
  - Simplest to set up
  - Preconfigured HTTP web server
  - User created instances
- 2. Express Runtime Web Environments
  - All components provided in a single package
  - Greatly simplifies the complexity of the environment
  - Most automated
  - Running web environment when installation completes
  - Desktop icon linking to the deployed web environment
- 3. Step by Step
  - Greatest flexibility
  - Choice of WebSphere Application Server version
  - May already have components on your system







## **1. Integrated Web Application Server**

- Simplest to set up
- Preconfigured HTTP web server
- User created instances





## What is it, does System i Access for Web support it?

- What is the i5/OS integrated Web application server?
  - A web application engine much like ASF Tomcat
  - Uses minimal system resources, similar to ASF Tomcat
  - Minimal effort by an Administrator to maintain
  - Administrative instance with preconfigured HTTP web server
  - User created instances
  - V5R4 is the last release i5/OS will contain ASF Tomcat

- How is it packaged?
  - With i5/OS
  - 57xx-DG1 IBM HTTP Server for i5/OS
  - Available in PTF package/group
    - V6R1 GA Cumulative PTF package
    - V5R4 SF99114 latest available level
    - V5R3 SF99099 latest available level
- System i Access for Web support
  - V5R4 System i Access for Web supports only the Administrative instance
  - V6R1 System i Access for Web supports
    - Administrative instance
    - User created instances



## To use System i Access for Web in this environment

#### Administrative instance and preconfigured HTTP web server

- 1. Stop the Web Administration for i5/OS
  - ENDTCPSVR SERVER(\*HTTP) HTTPSVR(ADMIN)
- 2. Load/apply latest PTFs (review cover letters for any additional information)
  - V6R1 GA cumulative PTF package
  - V5R4 SF99114 group for product 5722-DG1
  - V5R3 SF99099 group for product 5722-DG1
- 3. Load/apply latest System i Access for Web PTF
  - V6R1 SI29664 or later
  - V5R4 SI29607 or later
- 4. Configure System i Access for Web
  - QSH
  - cd /QIBM/ProdData/Access/Web2/install
  - cfgaccweb2 –appsvrtype \*INTAPPSVR
- 5. Start the Web Administration for i5/OS
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN)
- 6. Start preconfigured HTTP web server
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(IWADFT)
- 7. Open a browser to System i Access for Web using preconfigured HTTP port
  - http://>system\_name>:2020/webaccess/iWAMain
- 8. Done!



## To use System i Access for Web in this environment

#### User-created instance and HTTP web server (requires use of V6R1 System i Access for Web)

- 1. Load/apply latest PTFs (review cover letters for any additional information)
  - V6R1 GA cumulative PTF package
  - V5R4 SF99114 group for product 5722-DG1
- 2. Load/apply latest V6R1 System i Access for Web PTF
  - V6R1 SI29664 or later
- 3. Start the Web Administration for i5/OS
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN)
- 4. Use the Web Administration for i5/OS wizard to create an instance of the integrated Web application server and an HTTP web server.
  - http://<system\_name>:2001/HTTPAdmin
- 5. Configure System i Access for Web
  - QSH
  - cd /QIBM/ProdData/Access/Web2/install
  - cfgaccweb2 –appsvrtype \*INTAPPSVR –instance <instance\_name>
- 6. Start integrated Web application server and HTTP web server using the Web Administration for i5/OS interface.
  - http://<system\_name>:2001/HTTPAdmin
- 7. Open a browser to System i Access for Web using HTTP port you specified
  - http://>system\_name>:<port>/webaccess/iWAMain
- 8. Done!



## **Integrated Web application server**

## Questions regarding the integrated Web application server option?





# 2. Web Enable Feature – Express Runtime Environment



- All components provided in a single package
- Greatly simplifies the complexity of the environment
- Most automated
- Running web environment when installation completes
- Desktop icon linking to the deployed web environment



## What is the problem?

The complexity of the web-serving environment

- Several parts/pieces to install
- Can be challenging to configure all the parts/pieces





## What is the solution?

• Put all the parts/pieces into a single package

- Middleware components
  - HTTP web server
  - WAS Express 6.x
  - System i Access for Web
  - PTFs are included
- Sample applications modernizing an RPG application (flight400) using the following technologies:
  - HATS, WebFacing, Web Services
- First Steps
  - Web page with links to System i Access for Web, Samples, web administration, Information
- Getting Started Document
- Deployment help text
- Product licenses





## What is the solution? (continued)

- Make the package easily deployable
  - Easy to use wizard run from Windows workstation
  - Middleware is uploaded, installed/configured
  - System i Access for Web is set up
  - Sample applications are set up
  - FirstSteps webpage is deployed
  - Web-serving environment is ready for immediate use
  - Desktop icon to FirstSteps web page





## **Target Audience**

- i5/OS customers and partners
  - Anyone wanting/needing a simple way to setup web-serving on their i5/OS
- Users of the following:
  - System i Access for Web end user web browser access to i5/OS resources
  - WDHT / HATS / WebFacing applications
  - J2EE web applications (JSF, JSP, servlets, EJBs, etc)
  - SOA applications (web services, including RPG/COBOL integration)
  - Demo of an application modernized using SOA, HATs and WebFacing

#### Partners

- Modify a similar solution to include their applications
  - Obtain SAT and source from PartnerWorld
  - Rebuild solution to include their application



## Packaging/Ordering

Express Runtime Web Environments 5722-WE2 5761-WE2 Can also be ordered separately

 No-charge feature of 5722-WE2 Web Enablement for i5/OS

- Order feature 5905 for CDs
- Order feature 5906 for a DVD

- V5R4 i5/OS
  - 5722-WE2 V1R1M0 = WAS 6.0.2.9 & V5R4 System i Access for Web
  - 5722-WE2 V1R2M0 = WAS 6.1.0.11 & V5R4 System i Access for Web
- V6R1 i5/OS
  - 5761-WE2 V1R1M0 = WAS 6.1.0.11 & V6R1 System i Access for Web
- Ships with all i5/OS orders
  - V5R4 ships CDs, DVD is orderable
  - V6R1 ships DVDs
  - · All media contained in a single shrink wrapped package
- Packaged along with WebSphere Application Server Express product CDs
  - · Label on package identifies the two products and their purposes
  - Products identified on media labels
  - Look for DVD labeled: Express Runtime Web Environments V1R1, contains everything you need



## **Installation/Setup Process**

- Read the ReadMe packaged with the product
  - Verify requirements for Windows workstation and i5/OS system
- From a Windows workstation, launch the deployment wizard
  - Provide credentials
  - Specify i5/OS system to deploy
  - Name the HTTP web server, WebSphere profile/application server, ports
  - Optionally a backend i5/OS for System i Access for Web to connect
- Deployment wizard runs
  - Pushing middleware from workstation/media to the i5/OS system
  - Installs/configures middleware
  - Install/configures System i Access for Web, sample applications, FirstSteps web page
  - Creates desktop icon on Windows workstation

- Deployment wizard complete
  - Click desktop icon named
     Web\_Enablement\_Environment\_V5R4M0 or
     Web\_Enablement\_Environment\_V6R1M0
  - FirstSteps webpage provides links to web environment, System i Access for Web, sample applications
  - Administrator can then distribute web browser URL to users
  - GO LICPGM will list
    - 5733-SO1 Base Express Runtime Web Environments
    - 5733-SO1 1 Web Enablement Environment



## **Demonstration**

Launch the wizard. Deploy the web environment and create the desktop icon to the FirstSteps webpage





## **Demonstration** (continued)

#### Name of i5/OS system to deploy the environment to





## **Demonstration** (continued)

Name the HTTP web server and it's port

Name the WebSphere profile/app server and it's port range





## Questions regarding the Express Runtime Web Environments option?





## 3. Step by Step



- Greatest flexibility
- Choice of WebSphere
   Application Server version
- May already have components on your system


#### Formula for successful setup and configuration

You need to do the following in this order:

- 1. Decide what web application server environment to run
- 2. Install System i Access for Web on your i5/OS system
- 3. Verify, load, apply any additional PTFs
  - Cumulative PTF package
  - WebSphere, HTTP web server for i5/OS, integrated Web application server
  - System i Access for Web
- 4. Setup web-serving environment
- **5.** Configure System i Access for Web
- 6. Verify the installation and configuration

Information resources:

- These steps are detailed in System i Access for Web InfoCenter information
- Examples at http://www.ibm.com/systems/i/softwar e/access/web/doc.html



# Decide what web application server environment to run







## Which web application server environment?

System i Access for Web can be deployed to a variety of web serving environments.

#### - Servlets

- Integrated Web application server
- WebSphere Application Server V6.1 for i5/OS (Express, Base, Network Deployment)
- WebSphere Application Server V6.0 for OS/400 (Express, Base, Network Deployment)
- WebSphere Application Server V5.1 Express for iSeries
- WebSphere Application Server V5.1 for iSeries (Base and Network Deployment)
- WebSphere Application Server V5.0 Express for iSeries
- WebSphere Application Server V5.0 for iSeries (Base and Network Deployment)
- ASF Tomcat
  - ASF Tomcat is delivered within the IBM HTTP Server for i5/OS product (5722-DG1)
  - V5R4 i5/OS is last release for ASF Tomcat on i5/OS

#### Portlets

- IBM WebSphere Portal Express/Express Plus for Multiplatforms V5.0.2.2
- IBM WebSphere Portal Enable for Multiplatforms V5.1.0.1
- IBM WebSphere Portal V6.0
- IBM Workplace Services Express V2.5, V2.6



#### Install System i Access for Web on your i5/OS system



# Install System i Access for Web on your i5/OS system

Installing System i Access for Web

- Use the RSTLICPGM command to restore (install) the licensed program
- RSTLICPGM LICPGM(5722XH2) DEV(OPT01) OPTION(\*BASE) V5R4 version
- RSTLICPGM LICPGM(5761XH2) DEV(OPT01) OPTION(\*BASE) V6R1 version

The restore will...

- Create library QIWA2 and objects in QIWA2
- Create file system directories
  - /QIBM/ProdData/Access/Web2/...
  - /QIBM/UserData/Access/Web2/...
- Set basic ownership/authorities for library and file system objects

The restore will not...

- Make any changes to HTTP web server configurations
- Make any changes to web application server configurations
- Enable use of System i Access for Web











# Verify, load, apply any additional PTFs

- Each component of the web application serving environment has PTFs
  - 1. WebSphere Application Server
    - http://www.ibm.com/systems/i/software/websphere/index.html
  - 2. Integrated Web application server
    - http://www.ibm.com/systems/i/software/http/index.html
  - 3. i5/OS Cumulative PTF package
  - 4. HTTP web server
    - http://www.ibm.com/systems/i/software/http/index.html
  - 5. WebSphere Portal/Workplace Services Express
    - Refer to the Portal and Workplace Information Center documentation
  - 6. System i Access for Web
    - http://www.ibm.com/systems/i/software/access/web/servicepacks.html
- PTFs for the above components should be verified and updated as needed





#### Setup up web-serving environment





#### Step by Step Setup web-serving environment

Tier 1



Tier 3





### Notes: Set up web-serving environment

- HTTP web server
  - Front door for into your web serving environment
  - HTTP/HTTPS (SSL)
  - Listens for web requests on a specific TCP/IP port
  - An HTTP server is configured to "talk" to a specific web application server
  - Routes web requests between and end-user browser and a web application sever
- WebSphere web application server (WAS)
  - Profiles (instances) are created containing a web application server
  - The web application server provides an environment for the deployment and management of web applications
  - Many different WAS versions can be installed and coexist on an i5/OS system
  - All web applications running within a web application server share the same name space.
  - You could create multiple profiles (instances) on a single i5/OS for the following reasons:
    - To create separate development environments for different developers. This allows them to have different versions of the same objects in their own name space.
    - To create separate development and test environments



#### **Setup web-serving environment**

Use IBM Web Administration for i5/OS

- Easy to use wizard that prompts for required information and does all the work
- STRTCPSVR SERVER(\*HTTP) HTTPSVR(\*ADMIN)
- http://<system\_name>:2001/HTTPAdmin



Setup  $\rightarrow$  Create Application Server





Select version of WebSphere Application Server of those installed on your

system





#### Enter a name for the web application server, optionally a description

😻 HTTP Server Administration on LP016AB - Mozilla Firefox: IBM Edition				
<u>Eile Edit View Go Bookmarks Tools Help</u>				
IBM Web Administration for i5/03 Setup Manage   Advanced   Re	S elated Links		I WebSphere.	IBM
Common Tasks and Wizards     Create HTTP Server     Create Application Server     Migrate Original to Apache     Create WebSphere Portal     Create IBM Workplace	Create WebSpher Specify Application Serv Specify a unique name fo Application server name: Server description:	e Application Server - Express, V6.1 er Name r the application server. iwa61express System i Access for Web		
	Back Next Cance			
Done				



Enter name for HTTP server, optional description, port on which this HTTP server will listen





Enter first port in a range of available ports – the communication ports between the HTTP server and WAS





A few other steps in the wizard, then click Finish to create the web-serving

#### environment





Environment is ready for configuratoin when status reaches Running





#### **Configure System i Access for Web**





#### **Configure System i Access for Web**

# System i Access for Web must be deployed (configured) to a running web application server

System i Access for Web provides CL and QShell commands

- CL commands QIWA2 library
  - CFGACCWEB2 Configure System i Access for Web
  - STRACCWEB2 Start System i Access for Web
  - ENDACCWEB2 End System i Access for Web
  - RMVACCWEB2 Remove System i Access for Web
- QShell /QIBM/ProdData/Access/Web2/install
  - cfgaccweb2 Configure System i Access for Web
  - straccweb2 Start System i Access for Web
  - endaccweb2 End System i Access for Web
  - rmvaccweb2 Remove System i Access for Web

Commands are provided to...

- Ease the complexity of deploying a web application
- Check dependencies
- Invoke appropriate WebSphere tool to deploy a web application
- Perform additional required setup
- /QIBM/UserData/Access/Web2/ ... structure
- Allows for PTFs that make use of the normal i5/OS PTF tools



### Configure System i Access for Web (continued)

Use available documentation  $\rightarrow$ 

- System i Access for Web Information Center
  - Place to start to get System i Access for Web installed and running

When the commands are run  $\rightarrow$ 

- The WebSphere web application server must be running before running the CFGACCWEB2 or RMVACCWEB2 commands
- The WebSphere web application server will need to be restarted after the CFGACCWEB2 or RMVACCWEB2 commands
  - No updates are made to the HTTP web server configuration.

#### Notes

- Do not use the web administration interface or WebSphere Admin console to configure (deploy) or remove System i Access for Web
- Do not attempt to migrate a WebSphere environment to another WebSphere environment when System i Access for Web is configured







## Verify the installation and configuration

IBM Web Administration for i5/OS  $\rightarrow$  Applications  $\rightarrow$  Manage Installed Applications





## When things do not work

- Verify the HTTP web server is running
- Verify the WebSphere web application server was restarted after running CFGACCWEB2
- Verify the WebSphere web application server is running
- Verify you have the latest group PTFs for the HTTP web server and WebSphere Application Server.
- Verify that System i Access for Web is listed as an installed application in the WebSphere application server (via the IBM Web Administration for i5/OS interface)
- Look at System i Access for Web logs

High level translated log	/QIBM/UserData/Access/Web2/logs/cmds.log
Low level untranslated log	/QIBM/UserData/Access/Web2/logs/cmdstrace.log
Logs for specific WAS servers. Note: some logs may be EBCDIC requiring use of WRKLNK i5/OS command to view them	/QIBM/UserData/Access/Web2/logs/ <appsvrtype>/<wa sprf&gt;/<appsvr>/logs/*</appsvr></wa </appsvrtype>

 Next, if needed, the doc will lead you to the WebSphere Application Server or Portal logs



#### Part 2: 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

iSeries Access for We	ь	×
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	vokmarks <u>T</u> ools <u>H</u> elp	ं
🔶 • 🔶 • 🥩 😣	Inttp://myiSeries.myCompany.com/webaccess/WAMain	Go
iSeries Access for W	eb User: dib IBM.	^
My Home Page	iSeries Access for Web	
🗅 My Folder Print	Welcome to iSeries Access for Web, the lightweight, browser-based access to your iSeries server.	
Messages	Pure Java servlet based access	
Jobs 5250	iSeries Access for Web is a set of servlets that run on iSeries servers as extensions to the HTTP server. The servlets provide access to databases, files, print queues, printer output, and messages contained on the iSeries server.	
Database Files	Industry standard protocol	
Command	iSeries Access for Web uses the industry standard HTTP and HTTPS protocols instead of proprietary TCP/IP ports and protocols. Firewall issues are much more manageable as a result.	
Download	Lightweight access	
Other	iSeries Access for Web provides lightweight, and convenient access to iSeries servers from any web browser. Most of the iSeries Access for Web functions have minimal browser requirements and work with almost any browser on any platform.	
Polated Links	Server based	=
iSeries Access for Web     iSeries Access     iSeries Navigator	iSeries Access for Web is entirely server based. There is no client code to install and manage. Simply install and configure on the server, and access from any web browser.	
iSeries Information     Center	Object level security	
<ul> <li>iSeries Resource Library</li> </ul>	Access to the iSeries data is based on iSeries object level security. Users and groups can only access the data to which they are authorized.	
	Fully customizable	
	Access to iSeries Access for Web functionality can be restricted for users and groups of users. iSeries Access for Web is fully customizable so a user will only see and access what the administrator has configured for them to use and see.	
	Web components	
	iSeries Access for Web is also a set of web components for web applications. Web applications can link to the iSeries Access for Web servlet URLs and take advantage of the functions that iSeries Access for Web provides.	



#### 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

Series Access	for Web			
My Home Page	Poli	ries		
🗄 My Folder	1 411	UICO		
Print	Profile:	*PUBLIC		
Messages		1.1.1010-011.005		
Jobs	Action	Category	Description	Access
5250	1	5250	5250 user interface custom settings.	Allowed
Database		Command	Run batch command custom settings.	Allowed
iles		Customize	Preferences and policy administration custom settings.	Allowed
Command		Database	Database tables, requests, and run SOL custom settings.	Allowed
)ownload		Database	Create and edit database connection definitions.	Allowed
Customize		connections		A
Preferences	1	Download	Download packages custom settings.	Allowed
Policies	1	Files	Integrated file system and file share custom settings.	Allowed
Settings	1	General	Page layout, language and character set custom settings.	Allowed
Transfer	1	Jobs	Work with jobs custom settings.	Allowed
configuration	1	Mail	Send mail custom settings.	Allowed
Other		Messages	Display messages, send messages, and message queue custom settings.	Allowed
	1	My Folder	My Folder custom settings.	Allowed
elated Links: • iSeries Access for Web		Print	Printer output, printers, printer shares and output queue custom settings.	Allowed
· iSeries Access	1	Sametime	Lotus Sametime custom settings.	Allowed
iSeries Navigator iSeries Information Center		Other	Change password and other miscellaneous custom settings. $\blacksquare$	Allowed



#### **Controlling Access - Setting policies** (continued)

Policies		
Eile Edit View Go Bo	pokmarks Tools Help	() ()
🔷 • 🌳 • 🎘 🖸	http://myiSeries.myCompany.com/webaccess/iWACustomizeList?action=select	✓ Ø Go
iSeries Access for W	Veb	IBM.
My Home Page	Policies	
🛄 My Folder	Specify the profile you want to edit.	
Print		
Messages	Profile: Browse	
Jobs		
5250	Edit Policies	
Database		
Files	Work with the user profile you are authorized to customize.	
Command	Group profiles	
Download	Work with the group profiles you are authorized to customize.	
Customize	Import policies	
Preferences	Import policies from a file into iSeries Access for Web.	
Policies	Export policies	
Settings	Export policies from iSeries Access for Web to a file.	
Transfer configuration	Policies belo	
Other	View help for working with policies.	
Related Links: • iSeries Access for Web • iSeries Access		
iSeries Navigator     iSeries Information     Center     iSeries Resource     Library		
IBM iSeries Ser	vice	5.4.0.05-191.SI22130



### **Controlling Access - Setting policies** (continued)

Policies -				
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	ookmarks <u>T</u> ools	Help		
💠 • 🍌 • 🎅 📀	😭 🗋 http	p://myiSeries.myCompany.com/webaccess/iWACustomizeList?action=	users	<b>v o</b>
iSeries Access for W	/eb		Jser: <b>dlb</b>	IBM.
My Home Page	Policies -	User Profiles		
🛄 My Folder				
Print	Profile filter:	G Filter List		
Messages	Filter by:	Profile     Opescription		
Jobs	N 24 4 141	DOLECTROID N.N.N.O.		
5250	14 54 4 [1]	2345676910 P M M 12		
Database	Profile	Description	Action 😧	ACTIONS:
Files	ACBARRON	Alma Carolina Barron Perez - GDL T/L 877-5656		Edit nalicies
Command	ACN	Ali Nelson 3-6874		
Download	ADSIERRA	Alma Delia Sierra/Mexico/Contr/IBM@IBMMX	10000	View all policies
Customize	AGUEDA	Agueda Martinez Hernandez Magro/Mexico/IBM@IBMMX	100	View group membership
Preferences	AHANSON	Andrew Hanson 3-5571	100	
Policies	AHOMIKE	Mike Aho/Rochester/IBM@IBMUS	100	View group members
Settings     Transfer configuration	ALEJ	Alejandro Bascuas/Rochester/IBM@IBMUS		Conv policies
Other	ALICIAM	Alicia Martinez Cruz/Mexico/Contr/IBM@IBMMX		
other	ALITEST			Reset policies
	ANDREWS	Greg Andrews/Rochester/IBM@IBMUS		-
Related Links:	ANTARES	'Elias Ricardo Castellanos/Mexico/Contr/IBM@IBMMX		
• iSeries Access for Web	ARABIC	Gilberto Martinez Cortes/Mexico/Contr/IBM@IBMMX		
iSeries Access     iSeries Navigator	ATCLARK	Adam Clark, 3-3941		
iSeries Information     Center	АТОМКО	Ana Tomko Sanchez/Mexico/Contr/IBM@IBMMX		
iSeries Resource	BAZEY	John Bazev (3-7108)		
Library	BEACH	Mark Beach/Rochester/IBM@IBMUS		
	BECKYD	Rebecca K Dimock/Boulder/IBM@IBMUS		
	SEGRE			


#### **Controlling Access - Setting policies** (continued)

😉 Edit Policies - Databa	se					[	X
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	okmarks <u>T</u> ools <u>H</u> elp						
🔷 • 🔿 - 🎅 🙁	http://myiSe	eries.myCompany.com/we	baccess/iWACustomizeData	abase?pr	ofile=DLB	✓ ○ G	Go
iSeries Access for W	eb			User:	dlb	IBM.	^
My Home Page	Edit Policies - [	Database					
D My Folder	Profile: DLB						
Print							≣
Messages	Policy	Derived From	Action 🔮		Setting		
Jobs	Database access	Shipped default	Use current setting	*	Allow 💌	•	
5250	Database tab	Shipped default	Use current setting	~	Show 💌	0	
Database	Tables	Shipped default	Use current setting	~	Allow 💌	0	
Files	Maximum	Shipped default	Use current setting		500	0	
Command	table rows		Ose current setting		300	•	
Download	Table filter	Shipped default	Use current setting	~	*USRLIBL	0	
• Preferences	Table filter is user	Shipped default	Use current setting	~	Allow 💌	0	
Policies	preference	Chinesed default				0	
Settings     Transfer configuration	records into table	Shipped default	Use current setting	~	Allow 💌	e	
Other	Insert record columns	Shipped default	Use current setting	~	Columns	0	
Related Links:	Update records in table	Shipped default	Use current setting	~	Allow 💌	0	
iSeries Access for Web     iSeries Access     iSeries Navigator	Update record columns	Shipped default	Use current setting	~	Columns	0	
iSeries Information Center     iSeries Reserves	Quick view table records	Shipped default	Use current setting	~	Allow 💌	0	
Library	Maximum quick view rows	Shipped default	Use current setting	~	1000	0	
	Order	Shipped default	Use current setting		No 💌	2	~



- 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

🕘 iSeries Access for We	eb Database	
<u>File E</u> dit <u>V</u> iew F <u>a</u> vor	rites Tools Help	2
🗧 🎯 Back 🔹 🕥 🕤	🗴 🛃 🏠 🔎 Search 🧙 Favorites 🜒 Media 🧭 😥 - چ 🚍 - 📴 🚯 🦓	
Address http://myiSerie	s.myCompany.com/webaccess/iWAMain?tab=database 🕞 🄁	Go
iSeries Access for W	/eb	. ^
My Home Page	Database	
Print	Access database tables on your iSeries server with iSeries Access for Web.	
Messages	Teller	
Jobs	<ul> <li>View a list of database tables on your iSeries server.</li> </ul>	≡
5250	<ul> <li>Perform actions on these tables without having knowledge of SQL and its syntax.</li> </ul>	
Database	<ul> <li>View the contents of a table in a paged list, using the Quick view action.</li> <li>Add and update records in a table using the Insert and Update actions.</li> </ul>	
Tables	<ul> <li>Create your own customized SQL request for a table using the Run SQL action.</li> <li>Create your own customized convideta request for a table using the Convideta to table action.</li> </ul>	
• My requests	<ul> <li>Create your own customized copy data request for a table using the Copy data to table action.</li> </ul>	
Copy data to table	My requests	
Import request	<ul> <li>View a list of previously saved requests.</li> <li>Bun or Edit requests from this list.</li> </ul>	
Import query	Manage lists using the Copy, Delete, and Rename actions	
• Extract server data	Create and manage shortcuts to requests	
Files	Run SQL	
Command	Run SQL statements dynamically.	
Download	<ul> <li>View output as a paged list or in a popular file format, like Microsoft Excel or Lotus 1-2-3. (Output format depends on how you have your browser configured and whether the browser can locate a plug-in for the output type you choose.)</li> </ul>	/
Customize	Customize how data is returned by setting options specific to the output type.	
Other	<ul> <li>Build SELECT statements using an SQL wizard.</li> <li>Save requests for repeated use.</li> </ul>	
	Copy data to table	~
ど Done	🥥 Internet	



#### **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.

Policies	
Eile Edit View Go Bookmarks Tools Help	$\langle \rangle$
A Second Action Company.com/webaccess/iWACustomizeList     A Second Action Company.com/webaccess/iWACustomizeList     Company.com/webaccess/iWACus	Go
iSeries Access for Web	^
My Home Page Policies	
My Folder     Specify the profile you want to edit.	
Print Spearly the prome year while to call	
Messages Profile: REPORT_MAN Browse	
Jobs	
5250 Edit Policies	
Database User profiles	-
Files Work with the user profiles you are authorized to customize.	
Command Group profiles	
Download Work with the group profiles you are authorized to customize.	
Customize Import policies	
Preferences Import policies from a file into iSeries Access for Web.	=
Policies     Export policies	
Settings Export policies from iSeries Access for Web to a file.	
Transfer configuration     Policies belo	
Other View help for working with policies.	
Related Links:	
Series Access     Series Access	
· Series Navigator	
· Series Information	
Center	
Library	
IBM iSeries Service 5.4.0.05-191.SI22130	~



# **Example: Simple Database User - Categories**

• Determine which categories need to be restricted/modified.

Policies				
Eile Edit View Go Bo	ookmarks <u>T</u>	[ools <u>H</u> elp		
🔶 • 🏟 • 🈂 😢	0 🏠 🗋	http://myiSeries.myCompar	ny.com/webaccess/iWACustomize?profile=REPORT_MAN	
Series Access for W	/eb		User: dlb	
1y Home Page	Policie	s		
My Folder	Profile: I			
Print	Action	Category	Description	Access 0
lobs	1	5250	5250 user interface custom settings.	Allowed
250		Command	Run batch command custom settings.	Allowed
Database		Customize	Preferences and policy administration custom settings.	Allowed
Files		Database	Database tables, requests, and run SQL custom settings.	Allowed
ommand	1	Database connections	Create and edit database connection definitions.	Allowed
ownload		Download	Download packages custom settings.	Allowed
ustomize	/	Files	Integrated file system and file share custom settings.	Allowed
Preferences	1	General	Page layout, language and character set custom settings.	Allowed
Policies	1	Jobs	Work with jobs custom settings.	Allowed
Settings		Mail	Send mail custom settings.	Allowed
Transfer configuration	1	Messages	Display messages, send messages, and message queue custom settings.	Allowed
Iner	1	My Folder	My Folder custom settings.	Allowed
	1	Print	Printer output, printers, printer shares and output queue custom settings.	Allowed
Related Links:	1	Sametime	Lotus Sametime custom settings.	Allowed
iSeries Access for Web iSeries Access	1	Other	Change password and other miscellaneous custom settings.	Allowed
<ul> <li>iSeries Navigator</li> <li>iSeries Information Center</li> <li>iSeries Resource Library</li> </ul>	<u>View all p</u> View curr <u>View grou</u> View curr	<u>policies</u> rent policy settings for al <u>up membership</u> rent group membership f	l categories. or this user profile.	
	Policies h	ielo		



# **Example: Simple Database User – Other**

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

🕑 Edit Policies - 5250						_ 0	×
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	okmarks <u>T</u> ools <u>H</u> elp						$\langle \rangle$
💠 • 🔶 - 🎅 🕴	http://myiSeries.myCompany	.com/webaccess/iWACus	tomize5250?profile=REPORT	_MAN		<ul><li><b>&gt;</b></li></ul>	Go
iSeries Access for We	eb		User: dlb			IBM.	
My Home Page	Edit Policies - 5250						•
My Folder	Profile: REPORT_MAN						≡
Messages	Policy	Derived From 🕝	Action 😧		Setting		
Jobs	5250 access	Shipped default	Use current setting	~	Allow 💌	0	
5250	5250 tab	Shipped default	Use current setting	~	Allow	0	
Database	Start non-configured sessions	Shipped default	Use current setting	~	Allow M	0	
Command	Prompt when starting non-configured sessions	Shipped default	Use current setting	•	Yes 💌	0	
Download	Show server name in title	Shipped default	Use current setting	~	Yes 💌	0	
Customize     Preferences	Show configured session name in title	Shipped default	Use current setting	~	No	0	
• Policies	Maximum active sessions	Shipped default	Use current setting	~	No maximum 💌	0	
Settings	Inactive session timeout	Shipped default	Use current setting	~	24 hours 💌	0	
Other	Active sessions list columns	Shipped default	Use current setting	~	Columns	0	
	Configured session to use for defaults	Shipped default	Use current setting	~	User defaults	• ?	
Related Links	Save settings as user defaults	Shipped default	Use current setting	~	Allow 🔽	0	
iSeries Access for Web     iSeries Access	Load settings from user defaults	Shipped default	Use current setting	~	Allow 💌	0	
<ul> <li>iSeries Navigator</li> <li>iSeries Information</li> </ul>	Load settings from shipped defaults	Shipped default	Use current setting	*	Allow 💌	0	
Center • iSeries Resource	Switch between Web/Traditional views	Shipped default	Use current setting	~	Allow 💌	0	
Libiary	Edit active session settings	Shipped default	Use current setting	~	Allow 🔽	0	
	Bypass signon	Shipped default	Use current setting	~	Allow 💌	0	~



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

😉 Edit Policies - Databa	se						
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	okmarks <u>T</u> ools <u>H</u> elp				() ()		
🔶 - 🤣 😒 😭 🗋 http://myiSeries.myCompany.com/webaccess/iWACustomizeDatabase?retURL=*NONE&profile=REPORT_MAN							
iSeries Access for W	eb			User: dlb	IBM. A		
My Home Page	Edit Policies - D	Database					
My Folder	Profile: REPORT_M	AN					
Print	Dalia		Action 2	Catting			
Inde	Database access	Shipped default		Setting	Ø		
5250	Database tab	Shipped default	Use current setting		0		
Database	Tables	Brofile cotting	Use current setting				
Files	Tables	Frome setting	Use current setting		•		
Command	table rows	Shipped default	Use current setting	Deny	•		
Download	Table filter	Shipped default	Use current setting	VSRLIBL	0		
Customize	Table filter is	Shipped default	Use current setting	Allow V	0		
Preferences	user preference						
Policies     Settings	Insert	Shipped default	Use current setting	Allow 💌	0		
Transfer configuration	records into table						
Other	Insert record columns	Shipped default	Use current setting	Columns	0		
Related Links:	Update records in table	Shipped default	Use current setting		0		
<ul> <li>iSeries Access for Web</li> <li>iSeries Access</li> <li>iSeries Navigator</li> </ul>	Update record columns	Shipped default	Use current setting	Columns	0		
iSeries Information     Center     iSeries Reserves	Quick view table records	Shipped default	Use current setting	Allow M	0		
Library	Maximum quick view rows	Shipped default	Use current setting	1000	0		
	Order	Shipped default	Use current setting		<u> 2 ×</u>		



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

۲	Edit Polic	ies - Da	tabas	se							_ D	X
Eile	<u>E</u> dit <u>V</u>	iew <u>G</u> o	Boo	okmarks	<u>T</u> ools	<u>H</u> elp						$\diamond$
	• 🔶	• 🔁	$\otimes$		📄 http	o://myiSe	ries.myCompany.com/	webaccess/iWACustomize	Database?p	rofile=REPORT_MAN	<ul> <li>O</li> </ul>	Go
				Re	equests		Shipped default	Use current settir	ig 💌	Allow 💌	0	^
					Run rec	quest	Shipped default	Use current settir	ig 💌	Allow 💌	0	
					Copy re	equest	Shipped default	Use current settir	ig 💌	Deny 💌	0	
					Delete request	t	Shipped default	Use current settin	ig 💌	Deny 💌	0	
					Rename request	e t	Shipped default	Use current settin	ig 💌	Deny 💌	0	
					Edit req	quest	Shipped default	Use current settir	ig 💌	Deny 💌	0	
					Save re	equest	Shipped default	Use current settir	ig 💌	Deny 💌	0	
					List req shortcu	juest its	Shipped default	Use current settin	ig 💌	Deny 💌	0	
					Create request shortcu	t It	Shipped default	Use current settin	ig 💌	Deny 💌	0	
					Copy re shortcu	equest It	Shipped default	Use current settin	ig 💌	Deny 💌	0	
					Delete request shortcu	t It	Shipped default	Use current settin	ig 💌	Deny 💌	0	=
					Rename request shortcu	e t it	Shipped default	Use current settin	ig 💌	Deny 💌	0	
					Reques column	st list s	Shipped default	Use current settin	ig 💌	Columns	0	
				Ru	un SQL quests		Shipped default	Use current settin	ig 💌	Deny 💌	0	_
				Ru ot qu	un stater her than iery	ments 1	Shipped default	Use current settir	ig 💌	Deny 💌	0	
				Co ta	opy data ble	to	Shipped default	Use current settin	ig 💌	Deny 💌	0	
					Create tables	new	Shipped default	Use current settir	ig 💌	Allow 💌	0	~



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

🥹 Edit Policies - Database						_ 0	$\mathbf{X}$
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> ookmarks	s <u>T</u> ools <u>H</u> elp						$\langle \rangle$
🧇 • 🄶 • 🥰 🙁 😚	http://myiSe	ries.myCompany.com/web	access/iWACustomizeDataba	se?pro	ofile=REPORT_MAN	• 0	Go
	Request list columns	Shipped default	Use current setting	~	Columns	0	
R	tun SQL equests	Shipped default	Use current setting	•	Deny M	0	
R oi q	tun statements ther than juery	Shipped default	Use current setting	~	Deny 💌	0	
C	Copy data to able	Shipped default	Use current setting	•	Deny M	0	
	Create new tables	Shipped default	Use current setting	•	Allow 💌	0	
	Append data to tables	Shipped default	Use current setting	•	Allow 💌	?	
	Replace data in tables	Shipped default	Use current setting	~	Allow 💌	0	
Ir	mport request	Shipped default	Use current setting	<b>v</b>	Deny 💌	0	
Ir	mport query	Shipped default	Use current setting	•	Deny 💌	0	
E	xtract server bject data	Shipped default	Use current setting	•	Deny 💌	?	
D	)efault onnection	Shipped default	Use current setting	•	IBM Toolbox for Java	• •	
	Default onnection is Iser preference	Shipped default	Use current setting	•	Deny 💌	8	
A T St C	dd IBM oolbox for ava to onnection list	Shipped default	Use current setting	~	Deny 💌	0	
Sav	ve Cancel	Apply					_
<u>Polici</u> View	i <u>es help</u> help for editing	policies.					
IBM iSeries Service					5.4.0.05-191.SI	22130	~



# **Example: Simple Database User - Completion**

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

My Requests							-	. 🗆
<u> </u>	tes <u>T</u> ools <u>H</u> elp							4
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Address http://myiSeries	.myCompany.com/webaccess	s/iWADbRequests?page=1		1			~	🔁 G
iSeries Access for W	eb	User:	report_man					SM.
Database	My Request	S						
• My requests	≪	Q						
	Request	Description	Action 😧	Shortcut	Created By	Access		
	Accounts receivable	Who owes us money	×	Yes	dlb	report_man		
	Find employee record		×	Yes	dlb	*PUBLIC		
	Low inventory	Items below inventory threshold	×	Yes	dlb	report_man		
	Weekly production	Production numbers for the week	×	Yes	dlb	report_man		
		Q						
🙆 Done							🥝 Internet	



#### 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.
  - And more
- Restricting access to Preferences
  - Administrators can deny specific users or groups from accessing their preferences.
  - This is controlled by the "Edit preferences" policy.



# **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.



#### Example: User Preferences, Printer output (continued)

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

Printer Output		
<u>File E</u> dit <u>V</u> iew F <u>a</u> vo	vorites Tools Help	<i>.</i>
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Address http://myiSerie	ries.myCompany.com/webaccess/iWASpool?page=1	Go
	Wob User: basic_user	
Identes Access for v		•
My Home Page	Printer Output for basic user	
🔲 My Folder		
Print		
Printer output	File User Creation Pages Job File	
PDF printer output	Name Data Date/Time Per Copy Copies Status Action 🖓 User Job Name Number Number	C
Printers     PDE printers	QPDSPAJB 1/30/06 8 1 Ready 🗋 🖺 BASIC_USER QPADEV000G 562152 1	Q
Internet printers	OPDSPSTS 1/30/06 1 1 Ready [] [9] [9] BASIC USER OPADEV000G 562152 2	o≡
Internet printer shares	2:38 PM	
Printer shares		
Output queues		
Messages		
Jobs		
5250	Action Details	
Database	The Drinker Output function success to the following actions:	
Files	The Printer Output function supports the following actions:	
Command	Work With	
Download	Use the Work With action to hold, release or print the specified spooled file next. There are also links available that will al the spooled file:	low
Customize		
Other	<ul> <li>Move printer output to another printer</li> <li>Move printer output to another output queue</li> </ul>	
	<ul> <li>Send printer output to another server (SNDTCPSPLF)</li> <li>Change printer output attributes (CHCSPLEA)</li> </ul>	
Related Links:	<ul> <li>Copy printer output to database file (CPYSPLF)</li> </ul>	~
1		>
•		<u> </u>



#### Example: User Preferences, Printer output (continued)

• Click on the Customize tab to work with Preferences.

Preferences				_ 🗆 🔀
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Address http://myiSeries.	myCompany	.com/webacces	s/iWACustomize	🕶 🄁 Go
iSeries Access for We	eb		User: basic_user	
My Home Page	Prefe	erences	5	
Print	Action	Category	Description	
Messages	I	5250	5250 user interface custom settings.	
Jobs	I	Command	Run batch command custom settings.	
5250	I	Customize	Preferences and policy administration custom settings.	
Database	1	Database	Database tables, requests, and run SQL custom settings.	
Files	I	Download	Download packages custom settings.	
Command	I	Files	Integrated file system and file share custom settings.	
Download	I	General	Page layout, language and character set custom settings.	=
· Dreferences	1	Jobs	Work with jobs custom settings.	
Other	1	Mail	Send mail custom settings.	
	1	Messages	Display messages, send messages, and message queue custom settings.	
N	I	My Folder	My Folder custom settings.	
Related Lin	I	Print	Printer output, printers, printer shares and output queue custom settings.	
iSeries Access for We	I	Sametime	Lotus Sametime custom settings.	
iSeries Navigator	1	Other	Change password and other miscellaneous custom settings.	
iSeries Information     Center     iSeries Reserves				
Library	View all p View curr	ent preferences ent preferences	e settings for all categories.	
	View help	for working	with preferences.	*
🛃 Done				🔮 Internet



#### Example: User Preferences, Printer output (continued)

• AFTER: The printer output display now only has a few columns.

🕙 Printer Output		IX
<u> </u>	ites <u>T</u> ools <u>H</u> elp	<b>*</b>
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Address http://myiSeries	s.myCompany.com/webaccess/iWASpool	Go
iSeries Access for W	eb	
My Home Page	Printer Output for basic_user	
Print		
Printer output		
PDF printer output	File Name Pages Per Copy Status Action 🛛	
Printers	QPDSPAJB 8 Ready 🗋 🖺 🔟	
PDF printers	QPDSPSTS 1 Ready 🗋 👚 🔟	
Internet printers		_
<ul> <li>Internet printer shares</li> </ul>		=
<ul> <li>Printer shares</li> </ul>		-
Output queues		
Messages	Action Details	
Jobs	Action Details	
5250	The Printer Output function supports the following actions:	
Database		
Files	<ul> <li>Work With Use the Work With action to hold, release or print the specified spooled file next. There are also links available that will</li> </ul>	
Command	allow you to perform the following actions on the spooled file:	
Download		
Customize	<ul> <li>Move printer output to another printer</li> <li>Move printer output to another output queue</li> </ul>	
Other	<ul> <li>Send printer output to another server (SNDTCPSPLF)</li> <li>Shansa asinta anti-induce (SUSSELE)</li> </ul>	
	<ul> <li>Change printer output attributes (CHGSPLFA)</li> <li>Copy printer output to database file (CPYSPLF)</li> </ul>	
Related Links		
• iSeries Access for Web	View Use the View action to view the printer output.	
- iforios Accoss		•
Cone Cone	S Internet	



#### **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**

Transfer Configuration Data						
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	ookmarks <u>T</u> ools <u>H</u> elp	$\langle \rangle$				
🔶 • 🔶 - 🎅 🙁	http://myiSeries.myCompany.com/webaccess/iWATransferCfg	💌 🔘 Go				
iSeries Access for W	Veb	iem. 🏫				
My Home Page	Transfer Configuration Data					
D My Folder	Profiles					
Print	From profile: Browse					
Messages						
Jobs	browse					
5250	Action to Perform (?)					
Database	Opy					
Files	OMove					
Command						
Customizo	Data to Transfer ?					
Preferences	5250 sessions	=				
Policies	5250 macros					
• Settings	Commands					
Transfer configuration	Database requests					
Other	Folder items					
	Policies					
Related Links: • iSeries Access for Web • iSeries Access	Transfer Data					
<ul> <li>iSeries Navigator</li> <li>iSeries Information Center</li> <li>iSeries Resource Library</li> </ul>	View help for transferring configuration data.					
IBM iSeries Serv	rvice 5.4.0.05-191	.SI22130				



#### **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
  - <u>http://www.ibm.com/servers/eserver/iseries/access/pdf/build\_website\_article.pdf</u>
  - 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

🕹 Edit Policies - General [iSeriesD.DFW.IBM.COM] - Mozilla Firefox					
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> o	ookmarks <u>T</u> ools	<u>H</u> elp			<u></u>
🔶 - 🔗 🛞 🎧 🌆 http://iseriesd.dfw.ibm.com/webaccess/iWACustomizeGeneral?profile=LLHIRSCH 🕥 🕼 💽					
🚾 BluePages 🕲 OSSC Level 1 page 🔹 Teamsite 🍱 iSeries Access Home 📄 Index of ftp://ftp.so 📄 Page Not Found 🔄 Rochester SiteNews 📄 Think Federal Credit 🛛 >>					
iSeries Access for W	eb			User: Ilhirsch System: iSeriesD.DFW.IBM.	COM IEM.
My Home Page	Edit Policie	es - General			
🗅 My Folder	Profile: LLHT	SCH			
Print	Frome. EEM				
Messages	Policy	Derived From 😯	Action 😧	Setting	
Jobs	Home page	Shipped default	Use current setting	<ul> <li>/QIBM/ProdData/Access/Web2/html/hor</li> </ul>	mepage.ht Browse
5250	Template	Shipped default	Use current setting	VOIBM/ProdData/Access/Web2/html/we	baccess.h Browse
Database	HTML file				
Files	Main page HTML file	Shipped default	Use current setting	/QIBM/ProdData/Access/Web2/html/ove	erview.htr Browse
Command	Home page	Shipped default	Use current setting		
Download	- L		Use current setting		
Customize	Template	Shipped default	Use current setting	Allow 💌	
Preferences	Navigation	Shipped default	Use current setting	Allow 💌	
Policies	Related	Shipped default	Use current setting		
• Settings	links	:S			¥
<	and the state	<u> </u>			
Done					



# **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.demos.ibm.com/webaccess/iWAHome
  - Refer to chart 6 for info on how to access this sample





#### Home Page/Template Customization Example (continued)

Custom template

🖉 Quick View of BOATS.BOATS							
Eile Edit View Favorites Tools Help							
🕞 Back 🔻 🕑 👻 😰 ổ 🔎 Search 🧙 Favorites 🔇 Media 🧭 😥 🤤 🔜 😫 🚳							
Access for Water Supplying quality							
					Home		
BTYP	E BNAME	BFEET E	BYEAR	BCOST	BNT01	BNT02	
С	Poole Boat Co Aluminum	80	1979	1000000	-Located in S. Diego, CA	-Twin Detroit diesels.	
Р	Carver Santa Cruz	28	1978	23900	-Constructed of fiberglass.	-Single Chevy 350 gas engine, 250 hp. Fres water cooled,	
Р	Mako Sportfisher	19	1989	13000	-Located in Anacortes, WA.	-Great fishing boat	
Р	Monk Bridgedeck Cruiser	36	1956	19900	-Built of mahogany, oak, and cedar.	-The 130 hp power plant is a single, Chrysle cyl. diesel	
Р	Monk Flybridge/Sedan	34 1	1985	55000	-Double planked cedar on oak frames.	-The 165 hp power plant is a 1985 V6 Det diesel.	
Р	Monterey Marine Custom	80	1996	2975000	-Located in Stuart, FL	-Monthly payment.	
S <	Bill Garden Schooner	36	1953	27500	-The hull is 1/8' caravel cedar planked atop 1 1/4" x 1 1/2" oak frames	and the deck is cedar planked with tar sear	
ど Done						🥶 Internet 📑	











Contact Linda at <u>LLHIRSCH@us.ibm.com</u> for a step-by-step example of how to customize 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



#### **Appendiz - Tips**



#### **Auto-start Web environment after an IPL?**



- You can configure the HTTP web server to automatically start the WebSphere application server when it starts
- Use the following command to start the HTTP web server as part of your IPL procedures and it will start your WebSphere application server.
  - STRTCPSVR SERVER(\*HTTP) HTTPSVR(<http\_server\_name>)



#### Auto start web environment after an IPL (continued)

#### STRTCPSVR SERVER(\*HTTP) HTTPSVR(IWA51BASE)

😻 HTTP Server Administration		
<u>File E</u> dit <u>V</u> iew <u>G</u> o <u>B</u> ookmarks	<u>T</u> ools <u>H</u> elp	$\diamond$
IBM Web Administration for i5 Setup Manage Advanced	/OS WebSphere.	IBM
All Servers HTTP Servers A	pplication Servers   ASF Tomcat Servers	
🛚 Stopped 🚺 🗔 🗌 💋 S	erver: IWA51BASE - Apache 💉 Server area: Global configuration 💉	
<ul> <li>✓ Common Tasks and Wizards</li> <li><sup>3</sup>Create HTTP Server</li> <li><sup>3</sup>Create Application Server</li> <li><sup>3</sup>Migrate Original to Apache</li> </ul>	IWA51BASE > WebSphere Application Server         WebSphere Application Server	
➡ HTTP Tasks and Wizards ☆ Add a Directory to the Web ⓑ LDAP Configuration ☆ Servlet and JSP Enablement	General This HTTP server is currently associated with application server "iwa51base, V5.1 Base".	
<ul> <li>Server Properties</li> <li>General Server Configuration</li> <li>Container Management</li> <li>Virtual Hosts</li> <li>URL Mapping</li> </ul>	<ul> <li>○ Disable Servlets and JSPs (Java Server Pages)</li> <li>○ WebSphere Application Server, V6.0 ND</li> <li>■ ○ WebSphere Application Server, V6.0</li> </ul>	
Request Processing     HTTP Responses     Content Settings     Directory Handling	WebSphere Application Server, V5.1 Base     WebSphere instance: iwa51base	
읍 Security 읍 Dynamic Content and CGI 읍 Logging	Start all WebSphere application server(s) for the associated WAS instance when this HTTP server is started : Yes Stop all WebSphere application server(s) for the associated WAS instance when this HTTP server is stopped : Yes	
B Proxy B System Resources B FRCA B Compression	O WebSphere Application Server, V5.1 Express	
ASF Tomcat Setup task     ASF Tomcat Settings     Domino Application Server     WebSphere Application Server	OK Apply Cancel	Preview



# If using WAS Network Deployment

- For the WebSphere Application Server Network Deployment environment
  - WebSphere v5.0/5.1 Base Edition must be installed
  - WebSphere v6.0 Base/Express Edition must be installed
  - System i Access for Web does not support WebSphere instances/profiles that are federated to the WebSphere Network Deployment environment





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