



IBM System i™

Session: 420015

Tips and Techniques for iSeries Access for Web

Carole A Miner
IBM Rochester
cminer@us.ibm.com

i want stress-free IT.
i want control.
i want an i.

© Copyright IBM Corporation, 2006. All Rights Reserved.
This publication may refer to products that are not currently
available in your country. IBM makes no commitment to make
available any products referred to herein.

IBM System i



This presentation focuses
on additional things
you need to understand
about **deploying and using**
iSeries Access for Web
in your network



i want an i.

© 2006 IBM Corporation

IBM System i

iSeries Access for Web sessions/labs

- 21MC - Get to the Web Fast with iSeries Access for Web
- 23MC - iSeries Access for Web: Setup and Configuration
- 25MC- iSeries Access for Web: Run 5250 in a Browser
-  26LB - LAB: Series Access for Web: Installation and Configuration
- 36MC - Build a Home Page to Your i5/OS Using iSeries Access
- 41MC - Tips & Techniques for iSeries Access for Web
- 44LB - LAB: iSeries Access for Web
- 45MC - iSeries Access for Web: Database Access
- 51MM - iSeries Access for Web: Security Considerations
- 53MM - iSeries Access for Web Runs in a Portal
- 55ML - Programming with iSeries Access for Web
-  58LB - LAB: Series Access for Web: Installation and Configuration

 Voted "Best Traditional Lab" at Spring and Fall 2005 COMMON

Functional enhancements can be submitted via the FITS system. The url is:
<http://www.ibm.com/eserver/iseries/access/>
 And click on link "[Request for Design Change](#)"

i want an i. © 2006 IBM Corporation

IBM System i

Functions you can perform with iSeries Access for Web 5722-XH2, V5R4

Print <ul style="list-style-type: none"> • Printer output • PDF Printer output • Printers • PDF Printers • Internet Printers • Internet Printer Shares • Printer shares • Output Queues 	Database <ul style="list-style-type: none"> • Tables • My Request • Run SQL <ul style="list-style-type: none"> - Open Office Formats • Copy Data to Table • Import Requests <ul style="list-style-type: none"> - iSeries Access for Windows - Query Manager - Query/400 • Extract Server Data 	Commands <ul style="list-style-type: none"> • Run commands • My commands • Search Messages <ul style="list-style-type: none"> • Display Messages • Send Messages • Sametime • Operator Messages • Message Queue My Personal Folder	Customize <ul style="list-style-type: none"> • Preferences • Policies • Settings • Transfer configuration Download
5250 <ul style="list-style-type: none"> • Active Sessions • Start 5250 Session • Configured Sessions • Bypass Sign-on 	Files <ul style="list-style-type: none"> • Browse Files • Browse File Shares • File Shares 	Jobs <ul style="list-style-type: none"> • User Jobs • Server Jobs 	Other <ul style="list-style-type: none"> • Bookmarks • Change Password • Connection Pool Status • Trace • About


i want an i. © 2006 IBM Corporation

IBM System i		
V5R4 iSeries Access for Web Enhancements		
Both Servlets and Portlets	Servlets	Portlets
Authentication <ul style="list-style-type: none"> Support Single sign-on (SSO) using WAS security model (EIM, LDAP) 5250 Bypass i5/OS sign-on screen Database <ul style="list-style-type: none"> Support for OpenOffice Spreadsheet format (.ods) 5250 <ul style="list-style-type: none"> Support DDS HTML keywords Display HTTP/HTTPS URL strings as links 	Database <ul style="list-style-type: none"> Import/run DB2 Query Manager and IBM Query for DB2 for i5/OS queries A new output destination of IFS for SQL requests New option of 'Find' on Tables link Administration <ul style="list-style-type: none"> Can transfer configuration items between i5/OS user profiles Can use WebSphere data source names for database connections Files <ul style="list-style-type: none"> Browse File Share link added 	Database <ul style="list-style-type: none"> DB2 for i5/OS SQL Requests added DB2 for i5/OS SQL Results Viewer added Files <ul style="list-style-type: none"> Zip function added i5/OS Credentials <ul style="list-style-type: none"> Can change i5/OS password via Access for Web

i want an i. © 2006 IBM Corporation

IBM System i

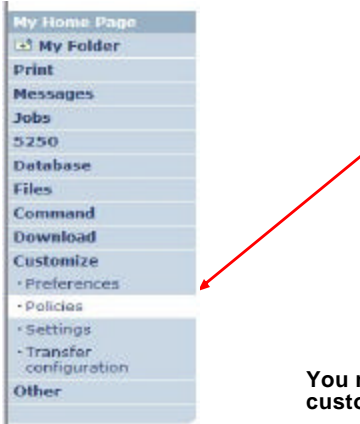
Control User Access to functions



i want an i. © 2006 IBM Corporation

IBM System i

Control User Access to functions



1. How do I keep my users from using all these functions?
2. How do I set up the environment for my users?
3. Should I let my users set have some individual screen settings for some functions?

You need *SECADM authority to customize profiles

i want an i. © 2006 IBM Corporation

IBM System i

Access for Web uses i5/OS User Profiles

***PUBLIC profile is a set of default policy settings shipped with Access for Web**

- The defaults allow most functions to be available to all users

The settings in these policies indicate what functions within iSeries Access for Web, a user can attempt to use.

When a user attempts to access any iSeries Access for Web function, the following sequence of checks are made to authenticate user access:

- User profile
- Group profile(s)
- *PUBLIC profile

For example, let's say:


- You give users full access to the 'Database' tab.
- You have Object Level authority set up on your System i data
- When user attempts to use the iSeries Access for Web Database function to get at database information, the user will get an i5/OS message indicating they are not authorized to access the table

i want an i. © 2006 IBM Corporation

IBM System i

Customize → Policies

- Policies are used to control access to iSeries Access for Web functions
- Policies are saved and associated with the appropriate iSeries user or group profile
- Each 'Category' expands for granular control



Action	Category	Description	Access
<input checked="" type="checkbox"/>	5250	5250 user interface custom settings.	Allowed
<input checked="" type="checkbox"/>	Database	Run batch command custom settings.	Allowed
<input checked="" type="checkbox"/>	Files	Preferences and policy administration custom settings.	Allowed
<input checked="" type="checkbox"/>	Command	Database tables, requests, and run SQL custom settings.	Allowed
<input checked="" type="checkbox"/>	Database	Create and edit database connection definitions.	Allowed
<input checked="" type="checkbox"/>	Database connections	Download packages custom settings.	Allowed
<input checked="" type="checkbox"/>	Download	Integrated file system and file share custom settings.	Allowed
<input checked="" type="checkbox"/>	Files	Page layout, language and character set custom settings.	Allowed
<input checked="" type="checkbox"/>	General	Work with jobs custom settings.	Allowed
<input checked="" type="checkbox"/>	Jobs	Send mail custom settings.	Allowed
<input checked="" type="checkbox"/>	Mail	Display messages, send messages, and message queue custom settings.	Allowed
<input checked="" type="checkbox"/>	Messages	My Folder custom settings.	Allowed
<input checked="" type="checkbox"/>	My Folder	Printer output, printers, printer shares and output queue custom settings.	Allowed
<input checked="" type="checkbox"/>	Print	Lotus Sametime custom settings.	Allowed
<input checked="" type="checkbox"/>	Sametime	Change password and other miscellaneous custom settings.	Allowed
<input checked="" type="checkbox"/>	Other		

i want an i.

© 2006 IBM Corporation

IBM System i

Recommendations for Setting Up Policies

Do as much customization as you can using *PUBLIC

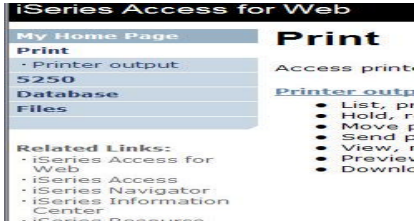
Create some 'Groups' of users and apply more specific customization

Examples:

- Setting up **Printer Output** view
- Setting up **Mail Server SMTP** address
- Creating look and feel of **5250 sessions**
- Creating **Database Connections**
- **General Page Layouts**

Example: Create "Office" group

- Take away all tabs and functions except (for example) **Printer Output, 5250, Database, IFS**



i want an i.

© 2006 IBM Corporation

IBM System i

Tip: Might want to Set up Printer Output with *PUBLIC

Shipped look

- 15 columns
- Multiple Actions

Display only attributes that make sense for your users

- Fits on one screen

Use Policies / Preferences to remove attribute columns

Use Policies to modify the Action options

© 2006 IBM Corporation

IBM System i

Set Policy to Default to Specific Directory in IFS

Set a 'Default Directory' for:

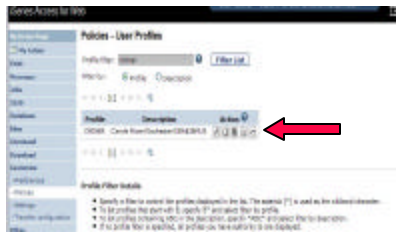
- *PUBLIC
- Groups of users
- Specific user

In this example, I went into CMINER1 profile, and set policy to show only the 'CMINER1' directory to this user...

© 2006 IBM Corporation

Customization – ‘Copy Policies’ between profiles

- The Copy Policies function enables policy settings to be copied from one profile to any number of other specified profiles.
- This enables iSeries Access for Web administrators to edit policy settings for one profile and replicate the settings to other profiles.



Must have at least *CHANGE object authority

–Administrators can copy policy settings for user and group profiles

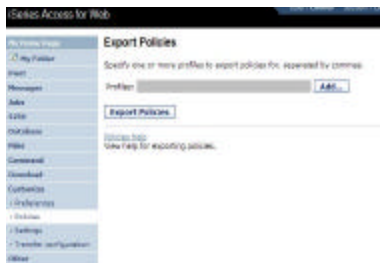


Copy Profile Settings from one System i to another

To copy customized profile settings from one System i to another System i

1. Use the Export function to put them in a PC file
2. Then use the Import function to put the profile settings on another System i

This is useful if you wish to create user group profiles (such as SALES, SECRETARY, etc) and set them up similarly on a variety of systems.



IBM System i

Transfer Configuration Data function (new in V5R4)


The Transfer Configuration Data function enables administrators to move configuration items between user profiles.

Configuration items supported are:

- 5250 sessions
- 5250 macros
- Commands
- Database requests
- Folder items
- Policies

Configuration items can be:

- Replicated via the Copy action
- Ownership transferred via the Move action



Transfer ownership

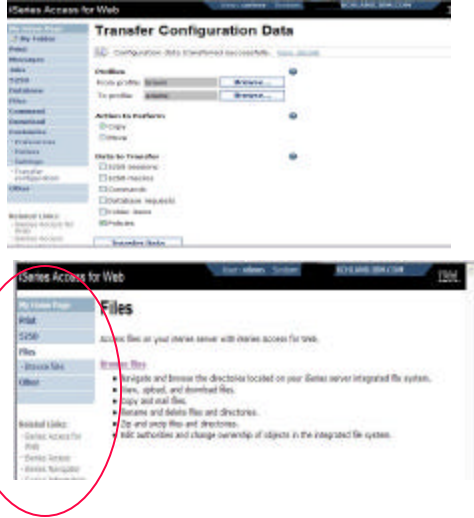
i want an i. © 2006 IBM Corporation

IBM System i

Example of using Transfer Configuration Data

Created a new user
? Used **Commands** function

Gave new user same Policies same another user
? Used **Transfer Configuration Data** and selected 'Policies'



i want an i. © 2006 IBM Corporation

IBM System i

Customization Settings

The way it looks when first installed

Use Current Setting


1. The default shipped setting
2. Any setting that has been applied (ie, someone sets something at *PUBLIC level)

Apply setting to profile

1. Apply some setting
2. Don't change setting even if you are in a group that is getting a setting changed

Reset to default

1. Go back to default shipped setting



'Reset to default' added when setting changed

i want an i. © 2006 IBM Corporation

IBM System i

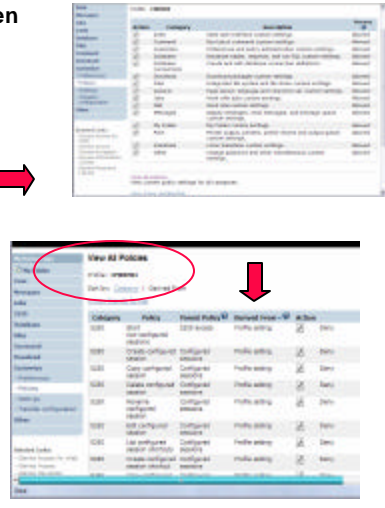
View All Policies set for User or Group

To later determine what policies have been set for a specific user and group, go into **Customize → User or Group (name) → Select 'View All Policies'**

- Can sort by Category or Derived From

Derived From tells you:


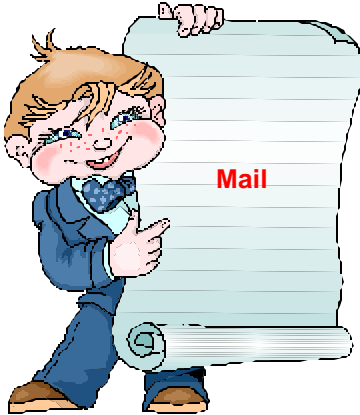
- Shipped default
- Profile setting
- Group - <group profile>
- *PUBLIC group
- *JOBCTL authority (special authority set for the i5/OS profile)
- SECADMIN authority
- Parent policy
- Administrator privileges
- Limit capabilities (*YES in the i5/OS profile)
- Directory entry (user's profile directory entry in the system directory)
- E-mail address
- Sametime user



i want an i. © 2006 IBM Corporation

IBM System i

Tips on Mail



i want an i.

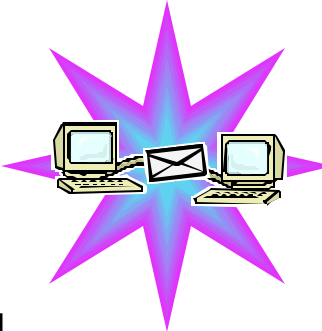
© 2006 IBM Corporation

IBM System i

Integrate User's email with iSeries Access for Web

Can send results of the following iSeries Access for Web functions:

- PDF view of print information
- Database (SQL) results
- Information stored in the IFS
- CL command



Sent as an attachment to 'email'

One-step way to distribute information across the network, and particularly useful when recipient is:

- Not a System i user
- Does not have access to a web browser

i want an i.

© 2006 IBM Corporation

IBM System i

Users can easily email results

'Mail' option displays for function of Access for Web that supports 'Mail'

Mail output

i want an i.

© 2006 IBM Corporation

IBM System i

Send your e-mail

Your email address plugged in for you...

...see PDF attachment there...

i want an i.

© 2006 IBM Corporation

IBM System i

How to set up Access for Web to use e-mail

Do nothing

- If you currently use OS/400 System Distribution Directory (SDD) to store your e-mail addresses, then do nothing to Access for Web.
- If no SMTP address has been provided, Access for Web will look in SDD for e-mail address for signed-on user

Use Access for Web 'Customize' function to set up SMTP mail server address and each user's e-mail address

- Use Policies (*PUBLIC) to set SMTP mail server address for everyone
- Use Policies for each user to add unique e-mail address, or
- Let each user use Preferences to set up their own e-mail address

Use V5R3 'Import Policy Settings' to provide all e-mail addresses to Access for Web

i want an i. © 2006 IBM Corporation

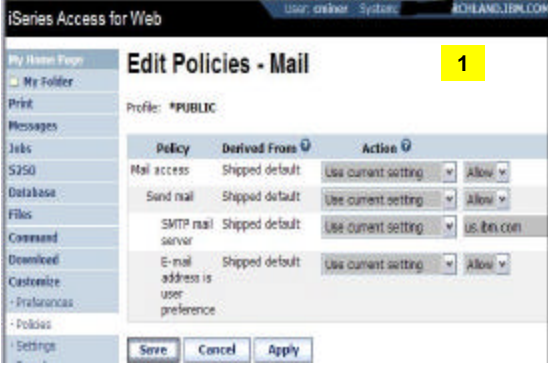
IBM System i

You must 'Customize' to use Email function

You need to identify your SMTP Server address

Use *PUBLIC to set up SMTP Server address

- You probably have same SMTP server address for all users



Note:
If the SMTP server address is blank, Access for Web will query the system directory (SDD) for email config info for your profile


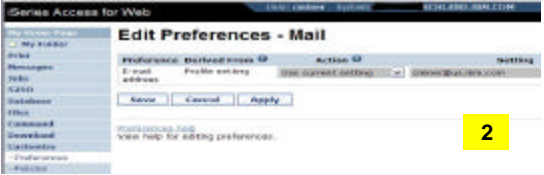
i want an i. © 2006 IBM Corporation

IBM System i

All Users' Email addresses must be set up

e-Mail address must be set for each user

- Administrator could go into each user's profile and set email address
- Each user could do this themselves through 'Preferences'

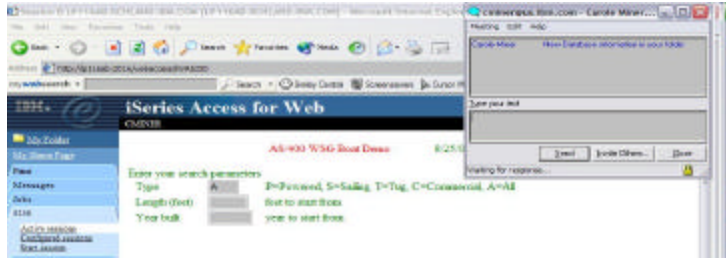
i want an i. © 2006 IBM Corporation

IBM System i

Integration with Lotus Sametime

You can receive Sametime messages:

- When something is added to 'My Folder' -- this could be someone has put something new in my folder or a database or CL command request that I previously submitted has completed
- The administrator/system operator has sent a break message



You must have a Sametime Server installed in your network and accessible from your System i. Sametime is an add-on product to Lotus Notes.

i want an i. © 2006 IBM Corporation

IBM System i

Setup needed to integrate use of Sametime

Use **Settings** to globally set up Sametime server address and port number

• Use **Policies** to individually include each user's Sametime address

-- or --

• Let each user use **Preferences** to set up their own Sametime address

© 2006 IBM Corporation

IBM System i

Import Policies from existing mail server directory

The policy settings for multiple user profiles can be updated by using the **Import Policies** (one request)

• This eliminates need for each profile to be individually updated

• Email addresses and SAMETIME addresses

Administrators are only able to import policy settings to user and group profiles for which they have at least *CHANGE object authority

© 2006 IBM Corporation

IBM System i

Import Policies requires a file type of .XML (example)

```
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<QIWA Policies>
  <profile name="TSMITH">
    <mail>
      <fromEmailAddress>tsmith@myMailServer.com</fromEmailAddress>
    </mail>
    <sametime>
      <userName>tsmith@mySametime.com</userName>
    </sametime>
  </profile>
  <profile name="CJONES">
    <mail>
      <fromEmailAddress>cjones@myMailServer.com</fromEmailAddress>
    </mail>
    <sametime>
      <userName>cjones@mySametime.com</userName>
    </sametime>
  </profile>
</QIWA Policies >
```

i want an i.

© 2006 IBM Corporation

IBM System i

Tip: Folder Notification

Set up for email notification

Set "Send e-mail on new folder items" to "yes"

Notification email address does not have to be the same as mail settings

- defaults to email address in the mail setting
- override with email address of cell phone, or pager

Policy	Derived From	Action	Setting
My Folder access	Shipped default	Use current setting	Allow
My Folder tab	Shipped default	Use current setting	Show
Create folder items	Shipped default	Use current setting	Allow
Resume folder items	Shipped default	Use current setting	Allow
Copy folder items	Shipped default	Use current setting	Allow
Copy folder items to file	Shipped default	Use current setting	Allow
Mail folder items	Shipped default	Use current setting	Allow
Maintain folder items	Shipped default	Use current setting	Yes
My Folder notification	Shipped default	Use current setting	Email and Sametime
Notify on new folder items	Shipped default	Use current setting	Yes
Notify on folder items threshold	Shipped default	Use current setting	Yes

i want an i.

© 2006 IBM Corporation

IBM System i


Tip: Export Navigation as Bookmarks

Most iSeries Access for Web pages are bookmarkable

- Use bookmarks/favorites to access frequently access functions directly

Export iSeries Access for Web navigation as bookmarks

- Bookmarks can be imported by:
 - Internet Explorer
 - Netscape Navigator
 - Mozilla
 - Opera...



The screenshot shows the 'iSeries Access for Web' interface. On the left is a navigation menu with options like 'My Home Page', 'My Profile', 'PMF', 'Messages', 'Jobs', 'S2SO', 'Database', 'Files', 'Content', 'Download', 'Customize', 'Other', 'Bookmarks', 'Change password', 'Connection pool status', 'Track', and 'About'. The main content area is titled 'Other' and contains sections for 'Bookmarks' (Export bookmarks for iSeries Access for Web), 'Change password' (Change your password on your iSeries server), 'Connection pool status' (Display summary of iSeries Access for Web connections to the iSeries Access server), 'Track' (Change trace settings for iSeries Access for Web), and 'About' (Display information about iSeries Access for Web).

i want an i. © 2006 IBM Corporation

IBM System i

On the 'About' link under Other...

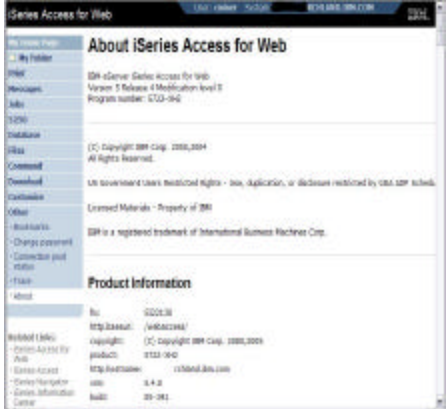
Product information about Access for Web

About end user connection


- Request information
- Request headers
- iSeries Access for Web information

iSeries Access for Web properties

- IBM Toolbox for Java properties
- Connection pool settings



The screenshot shows the 'About iSeries Access for Web' page. It is divided into three main sections: 'Request Headers', 'Product Information', and 'Connection Pool Information'. The 'Request Headers' section lists fields like 'Request ID', 'Client Access ID', 'Auth', 'Server Access', 'Client Navigator', 'Client Information', and 'Cache'. The 'Product Information' section lists 'URL', 'Version', 'Copyright', 'Product', 'Edition', and 'Build'. The 'Connection Pool Information' section lists 'Request ID', 'Client Access ID', 'Auth', 'Server Access', 'Client Navigator', 'Client Information', and 'Cache'.

And more... 

i want an i. © 2006 IBM Corporation

IBM System i

On the 'About' link under Other... (continued)

Way down at the end of 'Other'

Memory

List installed software products on System i

- List Software fixes installed

List system values

- Allocation system values
- Date/time
- Security system values...

The screenshot shows a web browser window displaying system information. At the bottom, there are two links: "List installed software products" and "List system values". A cartoon character is pointing to these links with arrows.

© 2006 IBM Corporation

IBM System i

On the 'About' link under Other... (continued)

Find out everything about the **Software** products on your System i

Software Products

- You can see all software products installed on System i. Click on the 'Product' link and get to

Software Product Properties

- From there click on 'List Software Fixes'

Software Product Fixes

- Can see all software fixes applied, including the following on each fix:
 - General Information
 - Symptoms
 - Cover Letter

The screenshots show the following data:

Software Products Table:

Product ID	Product Name	Product Description	Status	Product Description
00000000	0000	00000000	00000000	00000000

Software Product Properties:

Product ID: 00000000
 Product Name: 00000000
 Product Description: 00000000
 Status: 0000
 Product ID: 00000000
 Product Name: 00000000
 Product Description: 00000000
 Status: 0000

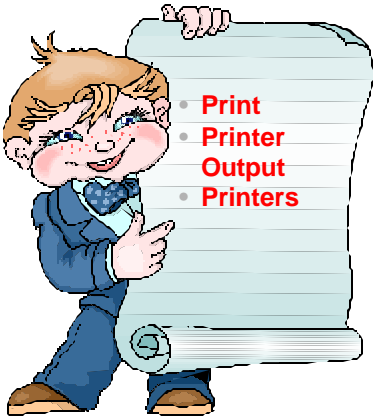
Software Product Fixes Table:

Product ID	Product Name	Product Description	Status	Product Description
00000000	0000	00000000	00000000	00000000

© 2006 IBM Corporation

IBM System i

Tips on Print



- **Print**
- **Printer Output**
- **Printers**

i want an i. © 2006 IBM Corporation

IBM System i

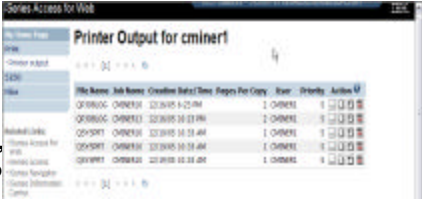

Printer Output

Printer output displayed is for the signed-on user id.

If you want to see a different spool file, you can do it by adding a parameter to the iSeries Access for Web path.

Example...

- I am signed on as user 'cminer1'. By default I can see all 'cminer1' spool files.
- If I enter a new url path as http://<iseries_name>/webaccess/iWASpool?user=warrena
- Then I would be able to see all 'warrena' spool files -->

Must have the proper authority in your i5/OS user profile

i want an i. © 2006 IBM Corporation

HATS uses iSeries Access for Web for Printer Output

<http://publib.boulder.ibm.com/infocenter/hatsv6/index.jsp>

Use iSeries Access for Web 'Printer Output' capability with HATS applications

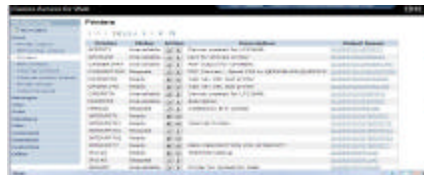
Note:
InfoPrint Server **not required**



Tip: Take Advantage of Printer Views

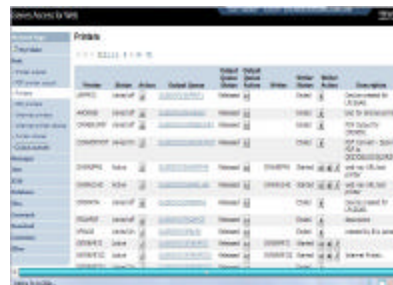
Basic (default)

- Hides the System i printer concept
- Simplified actions to control printers



Advanced

- Traditional System i printer
- Advanced actions
- Starting/stopping writer
- Hold/release output queues
- Vary on/off device



Use Policies or Preferences to control the printer view

- Customize → Printers → Printers List View

IBM System i


IBM InfoPrint Server

http://www.printers.ibm.com/internet/wwwsites.nsf/vwebpublished/ipserverhome_i_ww

Use iSeries Access for Web to create a PDF printer

Use InfoPrint Server to convert AFP and SCS printer output to PDF

- Direct 5250 application output to PDF printer
- All printer output sent to PDF printer is converted to PDF




Use iSeries Access for Web to access generated PDF documents

- Use PDF printer output to access your PDF printer output
- Use PDF printers to access PDF printer output by printer

i want an i. © 2006 IBM Corporation

IBM System i

Create PDF Printer, PDF Printers, PDF Printer Output

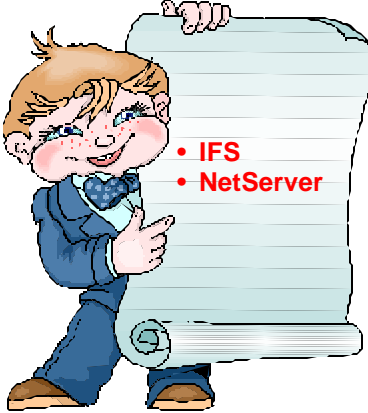


To use any of these features requires InfoPrinter Server

i want an i. © 2006 IBM Corporation

IBM System i

Tips on File Serving



- IFS
- NetServer

i want an i. © 2006 IBM Corporation

IBM System i

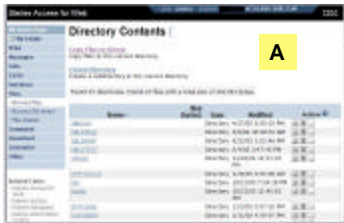

IFS – Use as a File Server

A. Full access to IFS

- Files tab has many link options beneath it
- Connected to 'Root' directory
 - Can see all directories in IFS
 - No access restrictions

B. Limited (controlled) access to IFS

- Files tab has only one option
 - Browse Files
- Connected to CMINER1 directory
 - Cannot get out of this view and work with other directories in IFS
 - No access restrictions for CMINER1 directory
- Can view information on SALESINFO directory
 - Was given a symbolic link to this directory

i want an i. © 2006 IBM Corporation

IBM System i


Can perform many tasks without going to 5250 or iNAV

Create Directories

- Can create directories under the Root, can open a directory and create directories under another directory

Can 'Work With' directories

- 'Edit Authorities' (as shown)
 - Note that when a directory is created *PUBLIC have full access to it
- 'Change Owner' of the directory
 - Default is the one who created it
- 'Change Primary Owner'
- 'Change Authorization List'
- Zip / Unzip



i want an i. © 2006 IBM Corporation

IBM System i


Set Default Directories for Your Users

Customize → Policies → User ID

- Put path to directory in 'Default Directory'
- Good idea to put directories in the /home path of IFS as that is the default used by many programs

You want users to work with one shared directory as well as their personal directory

- Again, create user directories in /home path
- Shared directory can be in root or any other path
- Set up a **symbolic link** to the shared directory from each user's directory
 - /home/user directory/shared directory



i want an i. © 2006 IBM Corporation

IBM System i

Tip: Display Directory Content in New Window

Result

The screenshot shows the 'Directory Contents / home' window with a table of files. A separate 'Edit Policies - Files' window is open, with a red arrow pointing to a specific entry in the table.

Name	Size (bytes)	Type	Modified	Action
.. (Parent Directory)				
Account		Directory	1/11/06 11:34:11 PM	
Account		Directory	0/14/05 8:47:27 AM	
Account		Directory	0/20/04 38:20:05 AM	
Account		Directory	1/10/04 1:28:53 PM	
Account		Directory	2/04/05 38:30:31 AM	
Account		Directory	0/14/05 11:01:30 PM	
Account		Directory	1/11/06 2:08:28 PM	
Account		Directory	1/11/06 5:42:49 PM	
Account		Directory	1/11/06 10:26:27 AM	
Account		Directory	1/20/04 4:28:24 PM	
Account		Directory	4/4/05 13:32:11 AM	
Account		Directory	3/24/05 35:57:02 AM	
Account		Directory	0/14/05 35:47:02 AM	

i want an i. © 2006 IBM Corporation

IBM System i

System i NetServer

System i Support for Windows Network Neighborhood

What is it?

- File and print serving for CIFS clients
- Compatible with Microsoft Networking and SAMBA
- Part of the base IBM i5/OS™ Operating System

Why Use it?

- Network Neighborhood (My Network Places)
- Search for computers
- Connect to a share
- Work with output queues
- Use Network DOS commands
- Encrypted password

Print PC output on System i printers

Store/Share PC data in IFS

The diagram illustrates the flow of data from a printer to a server and from a folder icon to a group of people, representing the integration of System i NetServer with Windows Network Neighborhood.

i want an i. © 2006 IBM Corporation

IBM System i


Files Shares

'NetServer view of IFS

- Directories set to Read or Read/Write
- Determined through 'shares' (similar to PC servers)
- iSeries Navigator used to set up 'shares'

File Shares

- Shows all directories that have been set up with 'File Sharing'
- If user clicks on a directory that no 'share' was set for user, the user will get a 'not authorized' message from i5/OS



The screenshot shows the 'iSeries NetServer File Shares' window. It contains a table with the following data:

Share Name	Description	User Count	Permission
BTSHARE	BVT	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write
QIBM	QIBM	0	Read/Write

User sees only 'share names' of directories, not actual path or directory names


i want an i. © 2006 IBM Corporation

IBM System i

Browse Files Share (new in V5R4)

Browse File Share link

- Displays directory that is identified in the user's Policy settings
- Shipped Default for *PUBLIC is the QIBM folder
 - QIBM is one directory that automatically ships with a 'share' assigned



The screenshot shows the 'Directory Contents QIBM' window. It contains a table with the following data:

Name	Size (Bytes)	Type	Modified	Action
QIBM		Directory	1/11/06 8:36:04 PM	
QIBM		Directory	1/11/06 8:25:53 PM	
QIBM		Directory	1/11/06 12:17:58 PM	
QIBM		Directory	4/20/05 12:38:58 AM	
QIBM		Directory	11/10/04 6:28:04 PM	
QIBM		Directory	8/10/04 11:40:11 PM	



i want an i. © 2006 IBM Corporation

IBM System i

Browse File Share with Policy setting

Customize → Policies → Files

- Scroll down to 'Browse File Shares'
- Change directory from QIBM to another directory previously set up as a 'shared' directory
 - Note: Put in sharename not directory name or path

Advantage over 'Browse Files'

- Already set up to Read Only or Read/Write
- Don't have to go into Policies and make any other settings.

i want an i.

© 2006 IBM Corporation

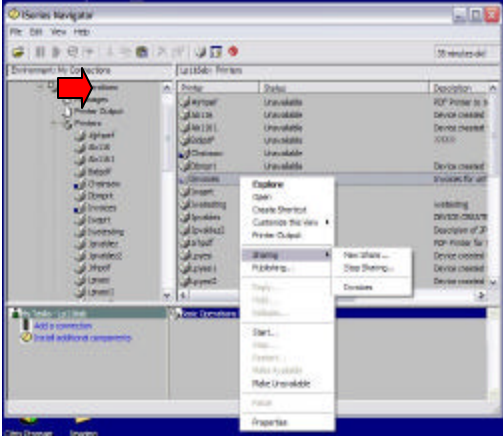
IBM System i

Setting up NetServer Print Shares

Use **iSeries Navigator** to set up Print Shares for your users

Click on

- Basic Operations
- Printers
- Right-click on Printer to set up...



i want an i.

© 2006 IBM Corporation

IBM System i

Printer Shares

<http://<myiseries>/webaccess/iWAPrinterShares>

- All printers defined as shared printers will show up in here.
- If user also has adequate 'object level authority' they could work with printers and printer output from here

Share	Output Queue	Printer Device	Spooled File Data Type	Status	Description
CAMBESHARE	QUSRSYS.WAHSRINT		Auto-select	<input type="checkbox"/>	DEVICE CREATED FOR LP116AB
CHAINSAW	QUSRSYS.CHAINSAW		Auto-select	<input type="checkbox"/>	Trunk' line
DEVICELIB	QUSRSYS.DEVOCLES		Auto-select	<input type="checkbox"/>	Resources for output orders
MYPRINT	MYQUSRSYS.MYLIB	printer	Advanced function printing	<input type="checkbox"/>	printer
PRTNTER	QUSRSYS.PRTNTER		Auto-select	<input type="checkbox"/>	INTERNET PRINTER (SQL TEST)
PRT116AB	QUSRSYS.PRT116AB		Auto-select	<input type="checkbox"/>	DEVICE CREATED FOR LP116AB
WEBSHARE	QUSRSYS.WAASFP	Access for Web print shares	Advanced function printing	<input type="checkbox"/>	Access for Web print shares

i want an i.

© 2006 IBM Corporation

IBM System i

Internet Printers - Shares

<http://<myiseries>/webaccess/iWAIPPSHares>

Share	Output Queue	URL	Printer Data Type	Printer File	Authentication Method
PRT116AB-IPP	QUSRSYS.PRT116AB	http://LP116AB:631/ipp/printers/PRT116AB-IPP	Auto-select	QPNDSPRIF	None
CHAINSAW	QUSRSYS.CHAINSAW	http://LP116AB:631/ipp/printers/CHAINSAW	Auto-select	QPNDSPRIF	None

i want an i.

© 2006 IBM Corporation

IBM System i

Tip: Access Files on Other Systems

File systems mounted in the IFS can be accessed

- NFS
- QNTC

Use files to access files on other file systems

1. iSeries showing directories in IFS

2. Windows server in network

3. Access for Web user using 'Files' tab

4. Client accessing files

i want an i.

© 2006 IBM Corporation

IBM System i

Tips on 5250

- This is the only function in the iSeries Access for Web product that requires the 'interactive feature'.
- All other functions in iSeries Access for Web run as 'batch' tasks on System i

i want an i.



© 2006 IBM Corporation

IBM System i

How to Start a 5250 Session and save it

Two options:

- Select to 'Start Session'**
 - Fill in information on Start Session and connect
 - Select 'Active Session Settings' link at bottom of screen
 - Modify as you wish, then click on 'Save'
- Select 'Configured Sessions'**
 - Select 'Configure New Session' link on lower screen
 - Set up as you wish, then click on 'Save'

i want an i. © 2006 IBM Corporation

IBM System i

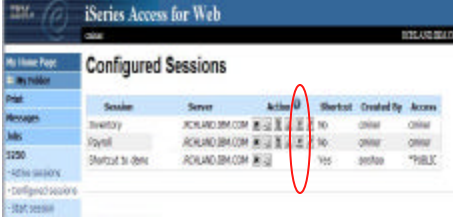

Create 'Shortcuts' to Configured Sessions

Your Configured Session

- Create 'Shortcuts' for other users

Can set Policies

- To restrict what users can do with your shortcut.
- Do not allow users to:
 - Copy your shortcut
 - Delete your shortcut
 - Rename your shortcut
 - Edit your shortcut
 - Create another Shortcut

i want an i. © 2006 IBM Corporation

IBM System i

Configuring a New Session (continued)

Web view is default

- Can switch to Traditional view

Many keyboard and screen settings to improve end user productivity and satisfaction

Can also set up different text colors

Create a consistent 'look' for all your users...

© 2006 IBM Corporation

IBM System i

Example: 5250 - Proportional Width Vs Fixed Width

Default for Web setting is to display output using Proportional width fonts

To change to Fixed width fonts, check the box that says:

- Display text using fixed width fonts

Users can also do this on-the-fly by clicking on the "Active session settings" link and change the setting for this connection, or by switching to Traditional view.

© 2006 IBM Corporation

IBM System i

Position Cursor at Exact Location

Some 5250 applications are cursor sensitive

- Help
- Prompting

Can be set so clicking the cursor on a field will display information

- Default behavior – place the cursor at the start of field
- V5R3 enhanced to allow the cursor to be placed at any location.

Helps those applications that differentiate cursor locations within a field

View	Web	Traditional
<input checked="" type="checkbox"/>	Show navigation bar	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Show action links	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Show hotspot links	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Show JavaScript indicator	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Display text using fixed width font	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Enable "More..." as button	<input type="checkbox"/>
<input type="checkbox"/>	Enable menu items as links	<input type="checkbox"/>
<input type="checkbox"/>	Show function key bar	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Show macros section	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Show operator information area (OIA)	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Show active sessions	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Enable cursor positioning	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Position cursor at exact location	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Enable message text line as help line	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Enable active function keys as buttons	<input type="checkbox"/>
<input type="checkbox"/>	Show function key text (Fxx) on button	<input type="checkbox"/>

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

i want an i. © 2006 IBM Corporation

IBM System i

Enable Active Function Keys As Buttons

Defaults:

- Display Active Function Keys as Buttons
- Show More... as a button

Can uncheck these boxes to deliver a more traditional view

Active function	Type	Options	Press Enter	Function	Module
More...	SPF10	SPF5	SPF5	F10	SPF5
More...	SPF6	SPF5	SPF5	F6	SPF5
More...	SPF7	SPF5	SPF5	F7	SPF5
More...	SPF8	SPF5	SPF5	F8	SPF5
More...	SPF9	SPF5	SPF5	F9	SPF5
More...	SPF10	SPF5	SPF5	F10	SPF5
More...	SPF11	SPF5	SPF5	F11	SPF5
More...	SPF12	SPF5	SPF5	F12	SPF5

i want an i. © 2006 IBM Corporation

IBM System i

My Keypads

Configuring a Keypad is a very effective way to simplify many end user tasks

- For example, a button to do a 'Host Print' of a screen

3

1

2

i want an i.

© 2006 IBM Corporation

IBM System i

Creating a Macro to use with 5250



- Record the Macro
 - Start Session and get to OS/400 sign-on screen
 - Go to bottom of screen and start macro record
 - Continue recording macro until you have reached spot you want users to come into (ie, OS/400 Main Menu, your own menu, a particular application...)
 - Go down to bottom of screen and stop macro recording
 - When you get to the save macro screen, select a **macro name**
- Edit the Macro to bypass sign-on screen
 - Go to 'Start Session' and go to bottom of page and select 'My Macros' to work with macro you just created
 - Remove your password that was recorded and put in **[password]**, then remove your workstation id and put in **[user]** in the macro.
 - This is documented in 5250 User Interface Help at bottom of 'Configure New Session' page

i want an i.

© 2006 IBM Corporation


IBM System i

Record and Save Your Macro

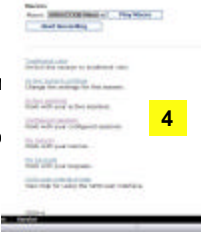



Press **Stop Recording** when you've reached point you want users to come in at

Start at i5/OS sign-on screen and click on **Start Recording** to create your macro




Go to bottom of 5250 screen and select to **Edit** the macro you just created



i want an i. © 2006 IBM Corporation



IBM System i

Edit Your Macro and Create A Shortcut for it



Select Action to **Edit** your macro

- Replace your password with [password] and your user id with [user]
Then when this runs, the signed on user id and password will be plugged in



- Go back to My Macro page and section Action to **Create Shortcut** to your Macros
- Add who can use this Macro (*PUBLIC?)

i want an i. © 2006 IBM Corporation

IBM System i

Add Macro Name to a 5250 Session

8

- Create a new session via the Start Session link
- Under the Macro parameter, the pulldown will have your Macro listed

O
R

- Select one of your Configured Sessions and add the Macro shortcut

i want an i.

© 2006 IBM Corporation

IBM System i


Reconnect to an Active Session

A user can be in the middle of a 5250 application, then go somewhere else in my browser

- Work with printer output, go to some other web page, etc)
- But did not sign off the 5250 session...

User can come right back to same screen through 'Active Session' link

User could also have shut down the PC, go to another PC and open a connection to the same System i and pick right up on same page



SESSION	USER	TS	ST	DATE	TIME	APPL	APPL
000001	W	0000	1				
000002	W	000000	0				0000
000003	W	000000	0				0000
000004	W	000000	0				0000
000005	W	000000	0				0000
000006	W	000000	0				0000
000007	W	000000	0				0000
000008	W	000000	0				0000
000009	W	000000	0				0000
000010	W	000000	0				0000
000011	W	000000	0				0000
000012	W	000000	0				0000
000013	W	000000	0				0000
000014	W	000000	0				0000
000015	W	000000	0				0000
000016	W	000000	0				0000
000017	W	000000	0				0000
000018	W	000000	0				0000
000019	W	000000	0				0000
000020	W	000000	0				0000

Not a good idea to remove 'Active Session' link from users' desktops, as then they do not have the flexibility to jump in and out of the 5250 application...

i want an i.

© 2006 IBM Corporation

IBM System i

Reconnect to an Active Session

Server	Session	Started	Last Accessed	View	Action
RCHLAND.IBM.COM	J - Ordering System	1/18/06 3:57:18 PM CST	1/18/06 3:57:24 PM CST	Web	[Icons]
RCHLAND.IBM.COM	D - Sales System	1/17/06 5:31:09 PM CST	1/18/06 3:16:36 PM CST	Web	[Icons]
RCHLAND.IBM.COM	I - Sales System	1/18/06 3:15:59 PM CST	1/18/06 3:16:00 PM CST	Web	[Icons]
RCHLAND.IBM.COM	H - Sales System	1/18/06 3:14:46 PM CST	1/18/06 3:14:47 PM CST	Web	[Icons]
RCHLAND.IBM.COM	G - Inventory System	1/18/06 3:14:21 PM CST	1/18/06 3:14:26 PM CST	Web	[Icons]
RCHLAND.IBM.COM	F - Inventory System	1/17/06 5:32:54 PM CST	1/18/06 12:16:35 PM CST	Web	[Icons]

Sessions listed here are sessions I did not 'sign off' of i5/OS

They would show up here even if System i had released them. If a user attempts to Reconnect, they may get a message that the session has been closed and they would have to start a new 5250 session

i want an i. © 2006 IBM Corporation

IBM System i

Share an Active 5250 Session

Share an active session with another user/group

Shared session is read only

- Others can only view the session

Shared session is not refreshed automatically as screen content changes

- Use browser refresh button to refresh the content

Useful for showing someone the screen content

- Ex. help desk

i want an i. © 2006 IBM Corporation

Going directly to 5250 from your browser

If you enter iSeries Access for Web by using the following url address:

[http://\[host\]:\[port\]/webaccess/iWA5250](http://[host]:[port]/webaccess/iWA5250)

The 5250 session to be started is selected as follows:

- Reconnects to the last accessed active session if the user has one or more active sessions
- Starts a new session identified in the 5250 Policies as the 'Configured session to use for defaults'
- Starts a session to the System i where iSeries Access for Web is running

Use initmac parameter to execute a macro at session startup

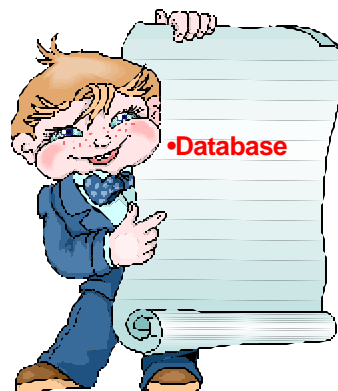
[http://\[host\]:\[port\]/webaccess/iWA5250?initmac=mymacro](http://[host]:[port]/webaccess/iWA5250?initmac=mymacro)

If there is not an active session, this will start a new 5250 session and execute the macro named mymacro

- Useful for taking a user directly into an application

(Documented in the URL documentation on the web)

Tips on Data Exchange



IBM System i

Import Query *(new in V5R4)*

New Import wizard to convert SQL statements from:

- DB2 Query Manager (5722-ST1)
- IBM Query for iSeries (5722-QU1)

Doesn't require Interactive 5250, runs Batch with iSeries Access for Web

i want an i. © 2006 IBM Corporation

IBM System i

Some reasons to move your queries to iSeries Access

Secure Web access to iSeries information for both local and remote users

- Cost-effective way to bring your System i data to your users, as there is nothing to install or configure on the user desktops.
- Start using the queries as soon as they are set up.

Simply start up a browser session to a predefined url

- An easy way to make queries available to your users.

Simply click on My Requests link and run the predefined query

- End users want data, but don't understand 'database/file/field' concepts
- If security is an issue, iSeries Access for Web conforms to standard OS/400 security to restrict users to just the information you want them to see.
- Through Shortcuts, you only give users the queries you want them to run

A graphical interface makes life easier

- Users can display results, then simply click an option to save the data in any PC file format
- They can convert it to PDF and print it.
- They can even mail results to any user

Interactive processing on a System i is more costly, run the queries with iSeries Access for Web in the batch subsystem.

i want an i. © 2006 IBM Corporation

Considerations for using Import Query function

iSeries Access for Web “Run SQL” function stores only the SQL statement.

- Query files can contain much more information in them than just the SQL statement. In cases where the Query file contains special instructions for the query, you might need to use the Customize function to create a new iSeries Access for Web database connection to honor the special case.
- Default iSeries Access for Web database connections will run database query requests using SQL naming conventions and using the locale specific defaults for the current user profile.

Restrictions

- Query files with SQL statements containing program variables or replacement variables are not supported
- Query files containing forms or procedures are not supported.

Tip: Extract Server Data – V5R3

Use Extract Server Data to retrieve information about objects on the System i server

- General object information can be retrieved for any iSeries object type.
- Object specific information can also be retrieved for the following object types:
 - Directory entries
 - Messages
 - Software fixes
 - Software products
 - System pool
 - User profiles

Then use Run SQL to work with the data



You could easily build a query:


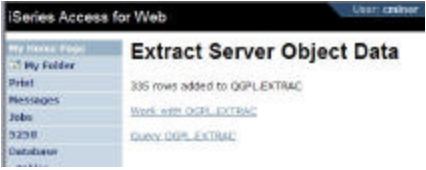
- To find out what users have used more than 100 MB of storage in the IFS
- Or you might want to know what users have had more than 2 invalid sign-on attempts in the past three months.

This powerful capability lets you look at your System i information in any manner that is of importance to you.

IBM System i

Using 'Extract Server Data' function


- Data can be extracted from **directory entries, messages, software fixes, software products, user profiles, and system objects.**
- Select the fields you want to save
- Pick a table name, and iSeries Access for Web creates the database table
- Once it has been copied, you can now work with the new table

i want an **i**.

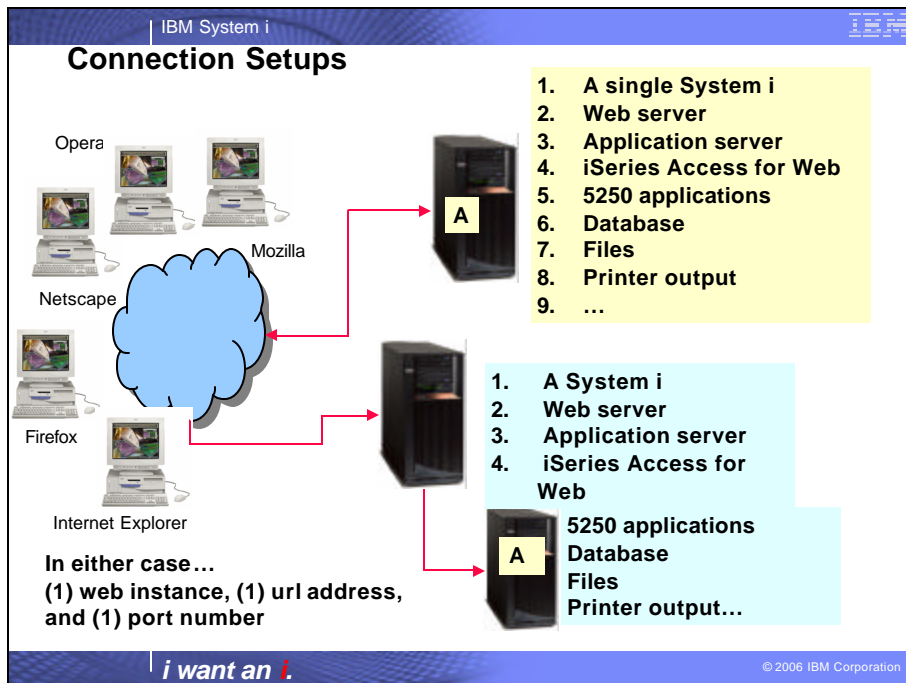
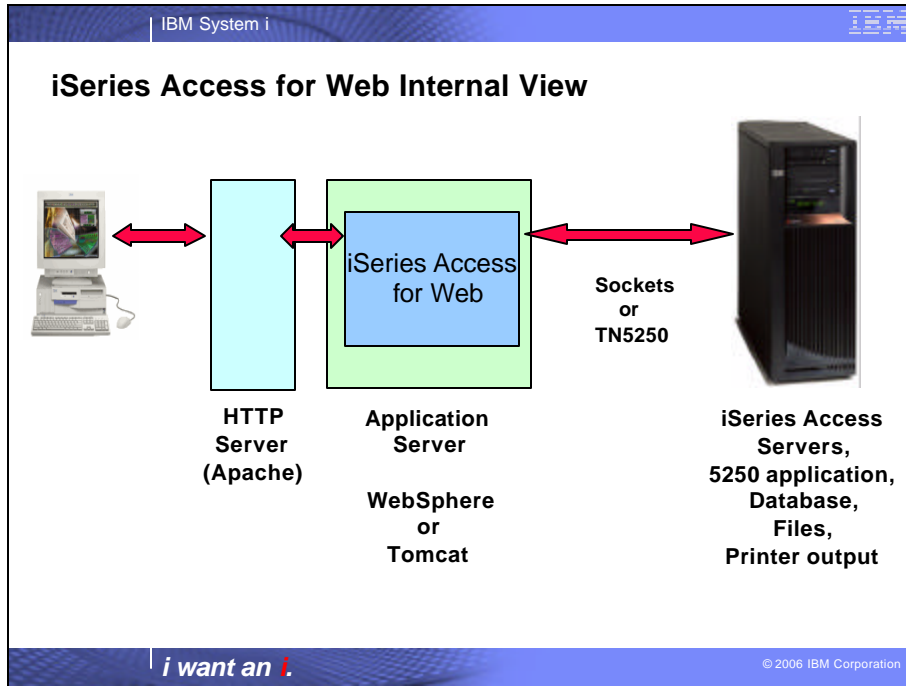
© 2006 IBM Corporation

IBM System i




i want an **i**.


© 2006 IBM Corporation



IBM System i

Access Considerations

1. A single System i
2. Web server
3. Application server
4. iSeries Access for Web
5. 5250 applications
6. Database
7. Files
8. Printer output
9. ...




- Browser users provide url address to System A and can automatically access resources on System A
- Users can also start 5250 emulation and Database functions to any other System i in the network
 - Users cannot work with printer output, IFS, commands, etc on other systems with this setup

i want an i. © 2006 IBM Corporation

IBM System i

Can use 5250 and Database to any system in the network

Can connect to any System i in my network and run 5250 emulation and Database (upload, download, work with tables, etc)




5250 Emulation

- Provides a panel to start a 5250 session and save this session configuration

Database

- You can add additional connections via Policy → Database Connections
- These additional connections are then available to users on the Database screens.



Connection	Action	Connection	Default time
Default	Default	Default	Default
Default	Default	Default	Default
Default	Default	Default	Default

i want an i. © 2006 IBM Corporation

IBM System i

Access from Internet

Ports 5001, 5002, 5003

Web environment on i5/OS A is started

- 3 HTTP servers listening on ports 5001, 5002, 5003

iSeries Access for Web is accessed using...

- `http://A:5001/webaccess/iWAMain` to get to ServerB
- `http://A:5002/webaccess/iWAMain` to get to ServerC
- `http://A:5003/webaccess/iWAMain` to get to ServerD

Host Server ports

Please note:
This is only one example of how to configure this environment.

i want an i.

© 2006 IBM Corporation

IBM System i

Tips on Web Integration

•Web page integration

i want an i.

© 2006 IBM Corporation


IBM System i

Your **Window** to your System i

Customized user 'window' to System i

Window is associated with OS/400 profiles

- An administrator can create multiple different 'windows' based on user profile / group profile for different types of users.
- Can tightly control what functions a user can perform on your System i
- Tie in with other web applications (such as WebFacing, HATS, etc from here as well)
- Link to other systems, not just i systems



- *One view and set of functions for the Accounting department*
- *Another view and set of functions for the Warehouse staff*

i want an i.

© 2006 IBM Corporation

IBM System i

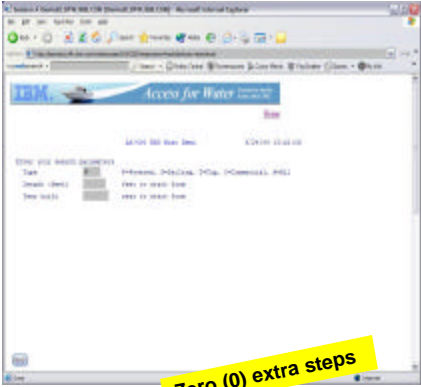
Using 5250 emulator in Access for Web

The company banner, 'Access for Water' is carried forward on all screens

- Went into 'Customize / General' and pointed at file with the company .gif.

5250 emulator in Access for Web

- Application looks better and did no work
- Could set to bypass sign-on screen
or
- Use macro support to bypass OS/400 sign-on screen and to start this BOATS application



Zero (0) extra steps

i want an i.

© 2006 IBM Corporation

IBM System i

Try out 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 = WUSER Password = DEMO2PWD	This shows the basic look of 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 System i, 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 WebFacing 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..

i want an i. © 2006 IBM Corporation

IBM System i

Trademarks and Disclaimers

© IBM Corporation 1994-2006. All rights reserved.
 References in this document to IBM products or services do not imply that IBM intends to make them available in every country.

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

AS/400	e-business on demand	i5/OS
AS/400e	IBM	OS/400
eServer	IBM (logo)	System i5
	iSeries	

Rational is a trademark of International Business Machines Corporation and Rational Software Corporation in the United States, other countries, or both.
 Intel, Intel Logo, Intel Inside, Intel Inside logo, Intel Centrino, Intel Centrino logo, Celeron, Intel Xeon, Intel SpeedStep, Itanium, and Pentium are trademarks or registered trademarks of Intel Corporation or its subsidiaries in the United States and other countries.
 Linux is a trademark of Linus Torvalds in the United States, other countries, or both.
 Microsoft, Windows, Windows NT, and the Windows logo are trademarks of Microsoft Corporation in the United States, other countries, or both.
 UNIX is a registered trademark of The Open Group in the United States and other countries.
 Java and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.
 Other company, product or service names may be trademarks or service marks of others.

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

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

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

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

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

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

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

i want an i. © 2006 IBM Corporation