IBM

iSeries Access for Web:
Tips and Techniques

http://www.ibm.com/eserver/iseries/access/web

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i want stress-free IT.

i want control.

i want an i.

This presentation focuses

on additional things

you need to understand

about **deploying and using**

iSeries Access for Web

in your network

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"

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iSeries Access for Web

End users can leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the client desktop through a web browser
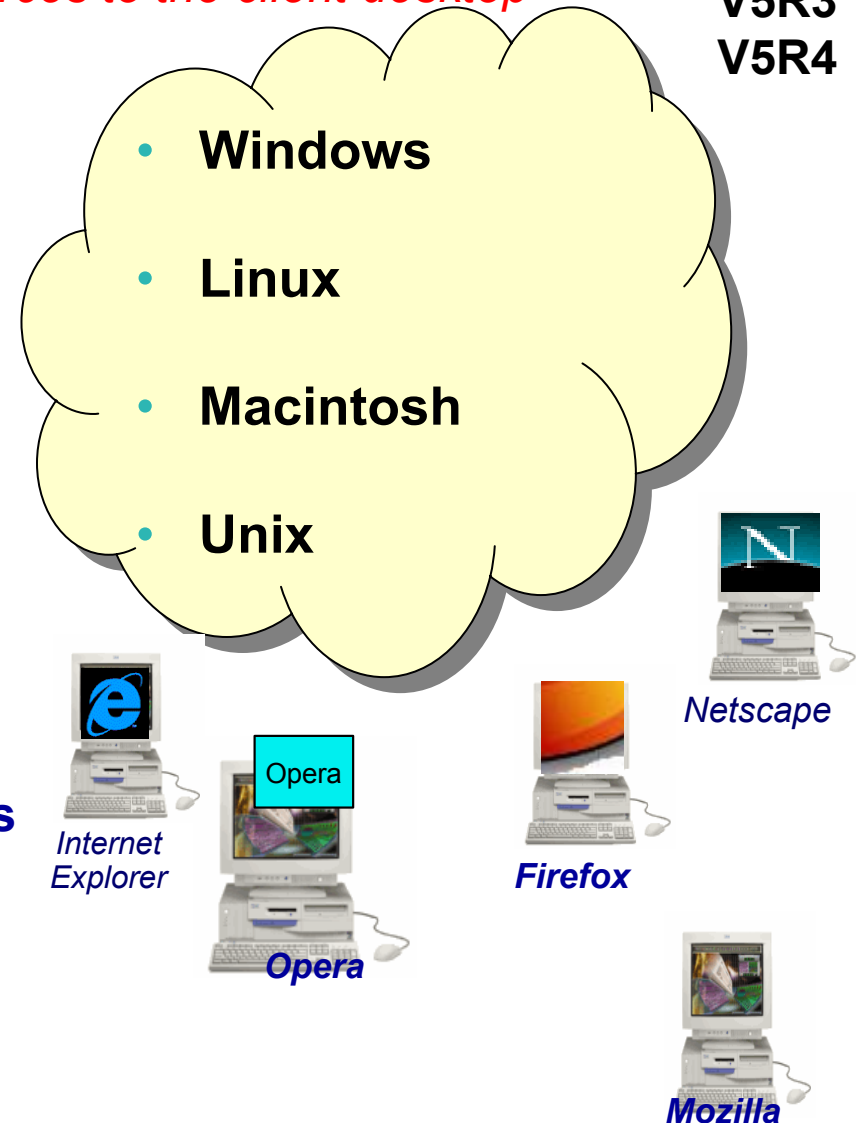
**i5/OS
V5R3
V5R4**

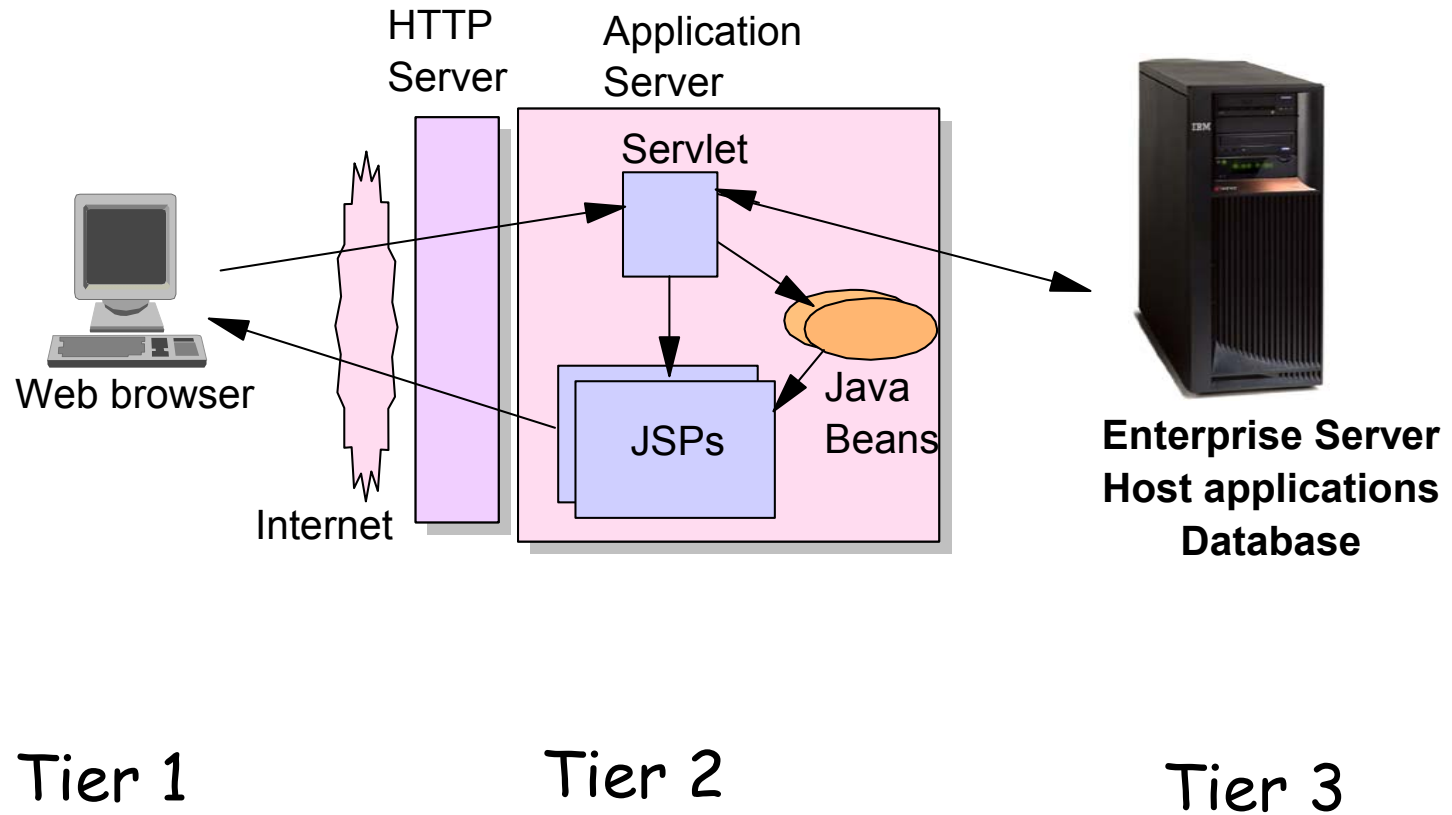## Provides access to iSeries through a browser

- **5250 access**
- **Access to database, integrated file system, printers, output queues, jobs**
- **Can run batch commands and send/receive messages**

It has the following advantages:

- **Is server based**
- **Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop**
- **Uses industry standard protocols - HTTP, HTTPS and HTML**

- **Windows**
- **Linux**
- **Macintosh**
- **Unix**

Netscape

Internet Explorer

Opera

Firefox

Opera

Mozilla

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First you need a web application server

HTTP Server

Application Server

Servlet

Web browser

Internet

JSPs

Java Beans

Enterprise Server
Host applications
Database

Tier 1

Tier 2

Tier 3

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Supported Web Application Servers

The iSeries Access for Web servlet code can be used with any of the following web application servers;

- **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**

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

- 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

July 2006 PTFs required for WAS 6.1, WSE V2.6, Portal 6.0:
http://www.ibm.com/eserver/iseries/access/web/servicepacks.html

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

Print
- **Printer output**
- **PDF Printer output**
- **Printers**
- **PDF Printers**
- **Internet Printers**
- **Internet Printer Shares**
- **Printer shares**
- **Output Queues**

5250
- **Active Sessions**
- **Start 5250 Session**
- **Configured Sessions**
- **Bypass Sign-on**

Files
- **Browse Files**
- **Browse File Shares**
- **File Shares**

Items marked in red are new in the V5R4 version

Messages
- **Display Messages**
- **Send Messages**
- **Sametime**
- **Operator Messages**
- **Message Queue**

Database
- **Tables**
- **My Request**
- **Run SQL**
  - **Open Office Formats**
- **Copy Data to Table**
- **Import Requests**
  - **iSeries Access for Windows**
  - **Query Manager**
  - **Query/400**
- **Extract Server Data**

Commands
- **Run commands**
- **My commands**
- **Search**

My Personal Folder

Jobs
- **User Jobs**
- **Server Jobs**

Customize
- **Preferences**
- **Policies**
- **Settings**
- **Transfer configuration**

Download

Other
- **Bookmarks**
- **Change Password**
- **Connection Pool**
- **Status**
- **Trace**
- **About**

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iSeries Access for Web has many entry points

Can enter at many different pages

Can use navigation bar to move from function to function

http://<myiseries>/webaccess/iWAMain

http://<myiseries>/webaccess/iWA5250

http://<myiseries>/webaccess/iWASpool
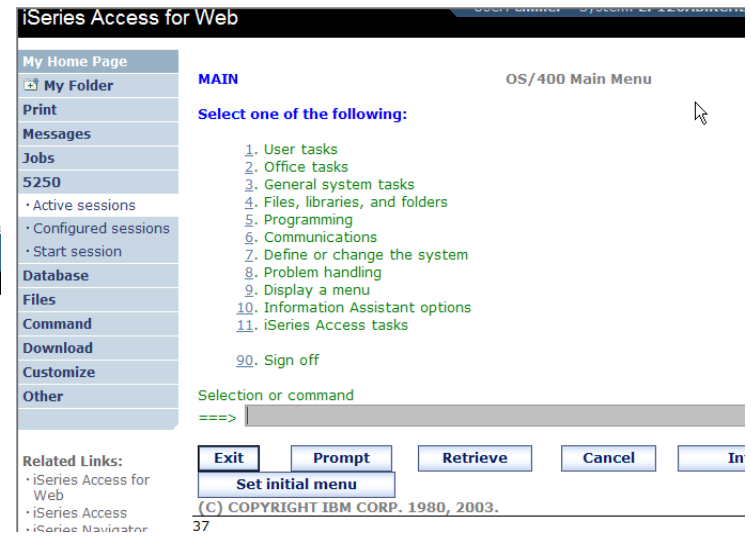
i want an i.

5250 session

1. Default 'web' look

2. Changed colors, added keypad at side, changed buttons at bottom to words

3. Removed navigation bar, put keypad on top
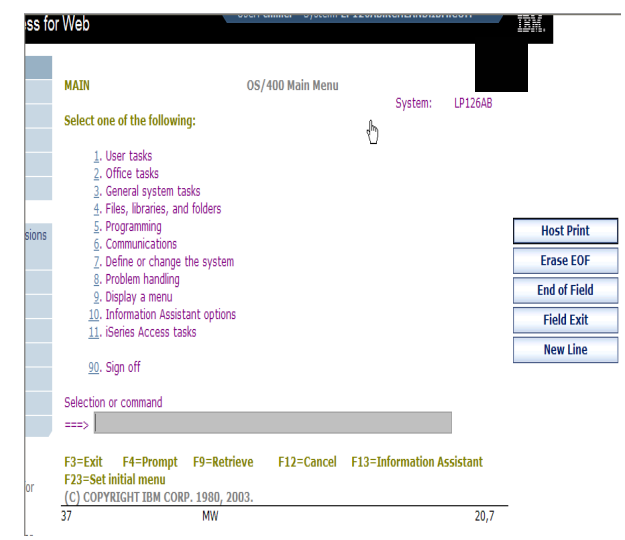
4. Selected 'traditional' view, removed navigation bar

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Database: Run SQL

Run SQL allows you to run SQL statements
- Could copy/paste complex SQL statements in here...

Variety of output types
- PDF, Excel, 1-2-3, XML, etc

Destination
- Browser
- Mail as attachment
- Personal Folders
- IFS **(new V5R4)**

Can save request
- My Requests, Give Shortcut to others

iSeries Access for Web

Run SQL

My Home Page
My Folder
Print
Messages
Jobs
5250
Database
· Tables
· My requests
· Run SQL
· Copy data to table
· Import request
· Import query
· Extract server data
Files
Command
Download
Customize
Other

Related Links:
· iSeries Access for Web
· iSeries Access
· iSeries Navigator
· iSeries Information

SQL Statement

```
SELECT
    "BCOST", "BYEAR", "BTYPE", "BNAME", "BFEET", "BNT01"
FROM
    BOATS.BOATS
WHERE
    (  ("BCOST" > 10000)  )
```

SQL Wizard

SQL Output
Type: Microsoft Excel XML (.xml)   Settings
Destination: Mail as attachment   Settings

Format
Date: 12/23/05
Time: 10:16:44 AM

Connection
Connection: IBM Toolbox for Java - .RCHLAND.IBM.COM

Run SQL   Save Request...

I want it all!

V5R4 iSeries Access for Web Enhancements

Both Servlets and Portlets	Servlets	Portlets
Authentication • Support Single sign-on (SSO) using WAS security model (EIM, LDAP) • 5250 Bypass i5/OS sign-on screen **Database** • Support for OpenOffice Spreadsheet format (.ods) **5250** • Support DDS HTML keywords • Display HTTP/HTTPS URL strings as links	**Database** • Import/run DB2 Query Manager and IBM Query for iSeries queries • A new output destination of IFS for SQL requests • New option of 'Find' on Tables link **Administration** • Can transfer configuration items between i5/OS user profiles • Can use WebSphere data source names for database connections **Files** • Browse File Share link added	**Database** • iSeries SQL Requests added • iSeries SQL Results Viewer added **Files** • Zip function added **iSeries Credentials** • Can change i5/OS password via Access for Web

i want an i.

Setting up your web serving environment

i want an i.

iSeries Access for Web from the Internet and Security
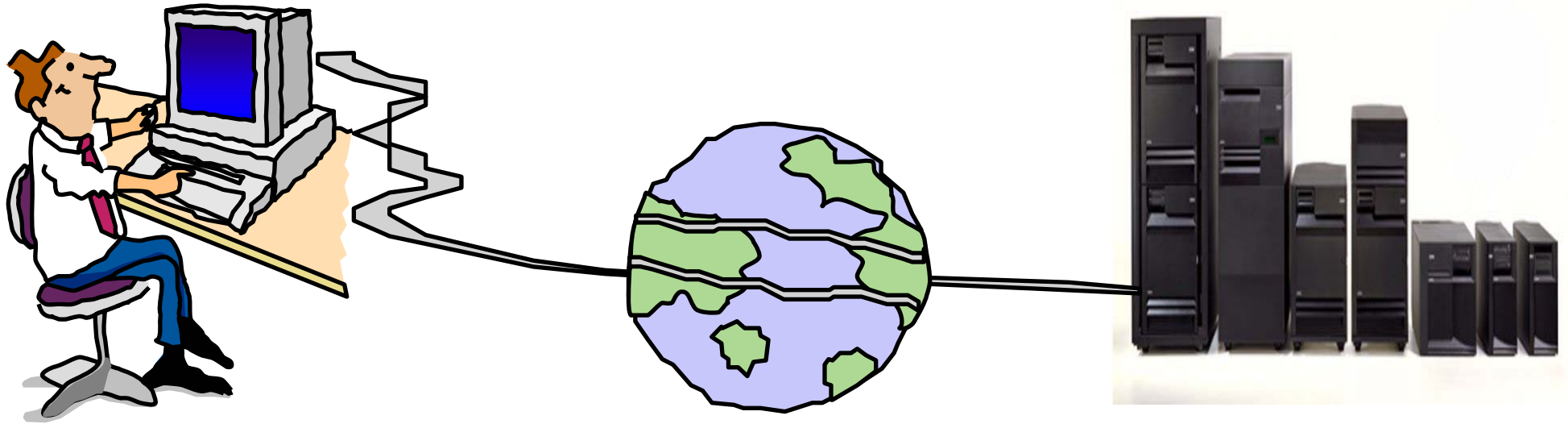
Would it be possible for my users to access their data from home over the internet? What would the setup/environment look like?

How would security be enabled to protect the network?

Could the web environment be isolated from the servers containing data?

Let's look at an example...

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iSeries Access for Web Internal View

Web Browser

HTTP

HTTP Server (Apache)

iSeries Access for Web

Application Server (WebSphere, Tomcat)

TN5250, sockets

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

i want an i.
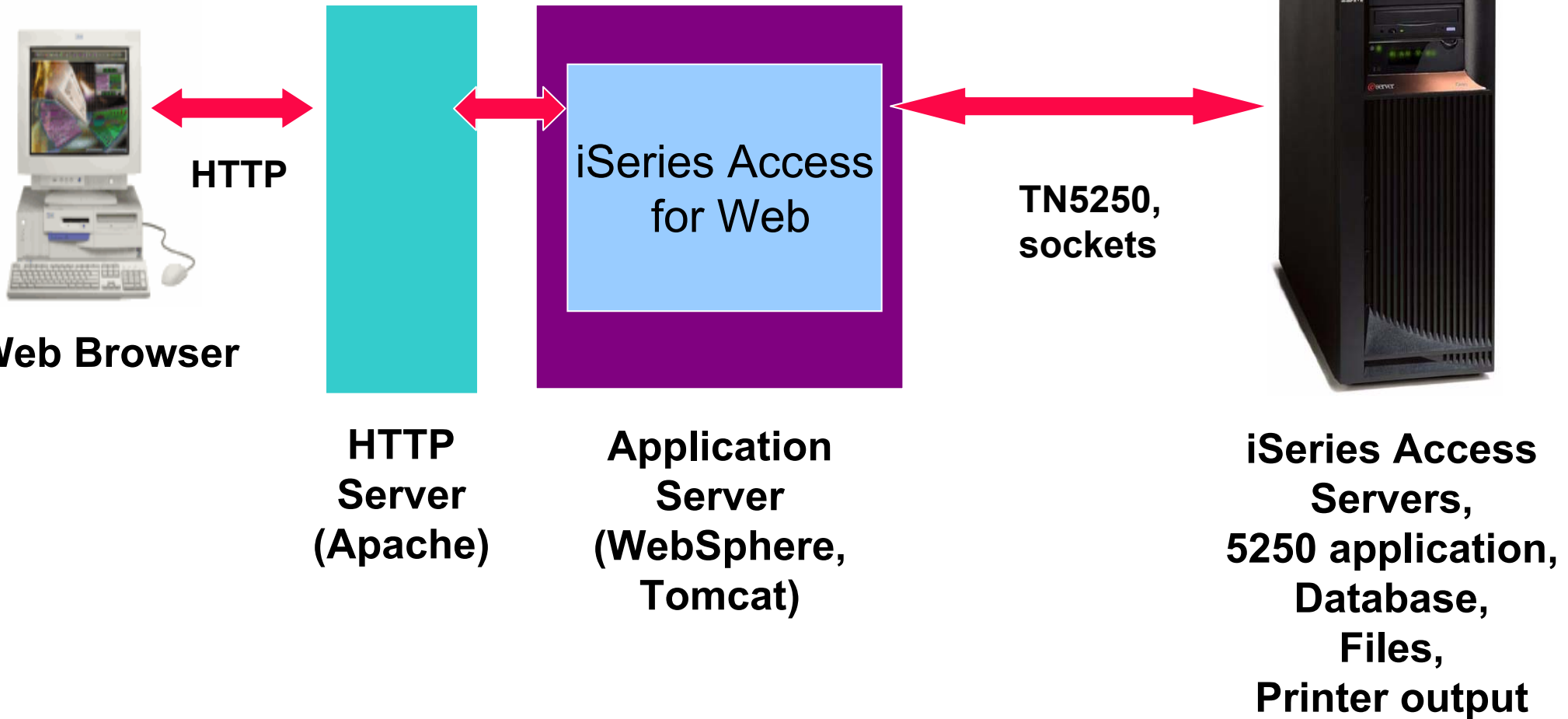
Backend i5/OS

The backend i5/OS B, C, D contain data.

They are inside the company network.

i5/OS B, C, D do not have web serving software installed, let's assume they don't.

I want some users to be able to always connect to i5/OS B, some others to i5/OS C, and some others to i5/OS D

i5/OS B

i5/OS C

i5/OS D

i want an i.
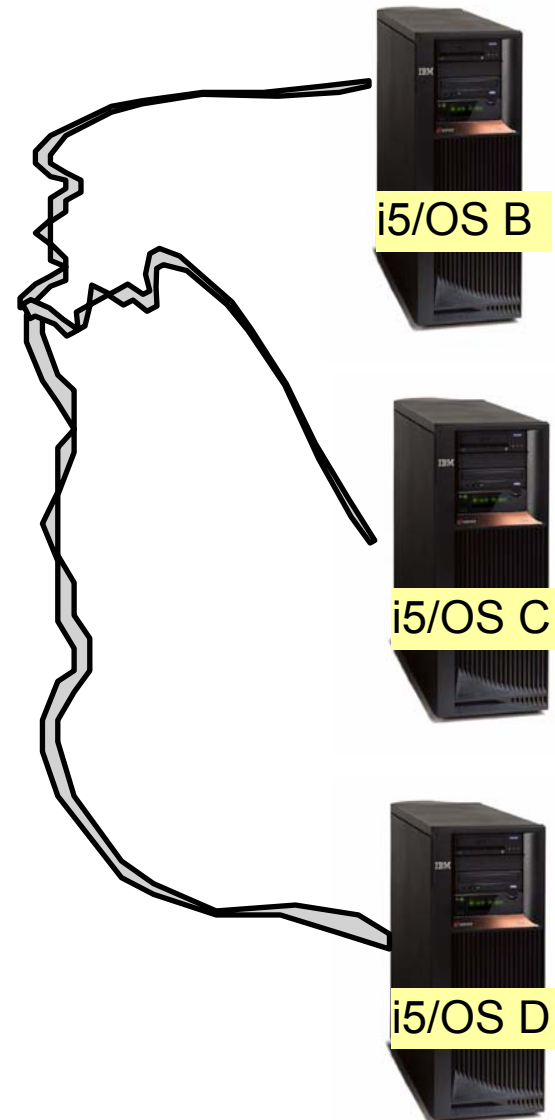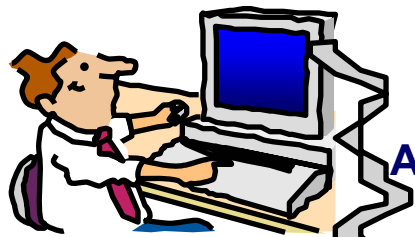
Administrator sets up...

i5/OS A

i5/OS B

i5/OS C

i5/OS D

i5/OS web server A is added

This i5/OS has:

- HTTP/HTTPS
- WebSphere Application Server
- iSeries Access for Web (installed and configured)

i5/OS B, C, and D...

- Must have 5722-XW1 iSeries Access Family installed for licensing purposes
- 5722-XH2 iSeries Access for Web installed (RSTLICPGM) but not configured

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Setting up i5/OS A
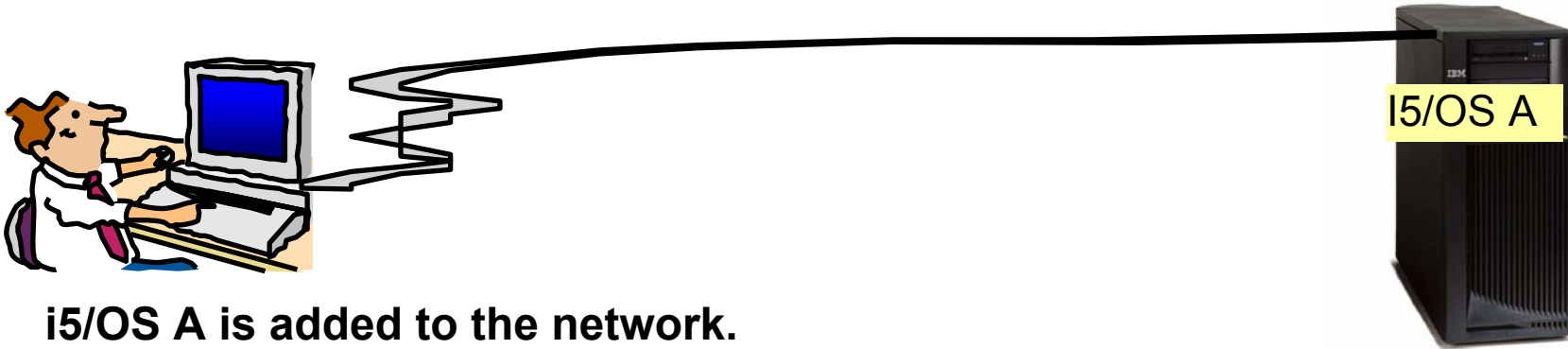
I5/OS A

i5/OS A is added to the network.

I5/OS A has HTTP/HTTPS, WebSphere Application Server, iSeries Access for Web installed/configured.

Configure 3 HTTP servers-- one for i5/OS B, one for i5/OS C, and one for i5/OS D

3 WAS or Tomcat instances (one for each system)

Configure iSeries Access for Web in each instance (use TGTSVR parameter on CFGACCWEB2 command)

Adds "realm=server_name.mydomain.com" to
/QIBM/UserData/Access/Web2/<wasinst>/<appsvr> /config/webaccess.properties

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i5/OS A

i5/OS B

i5/OS C

Administrator sets up...

Firewall between web
server and data servers.
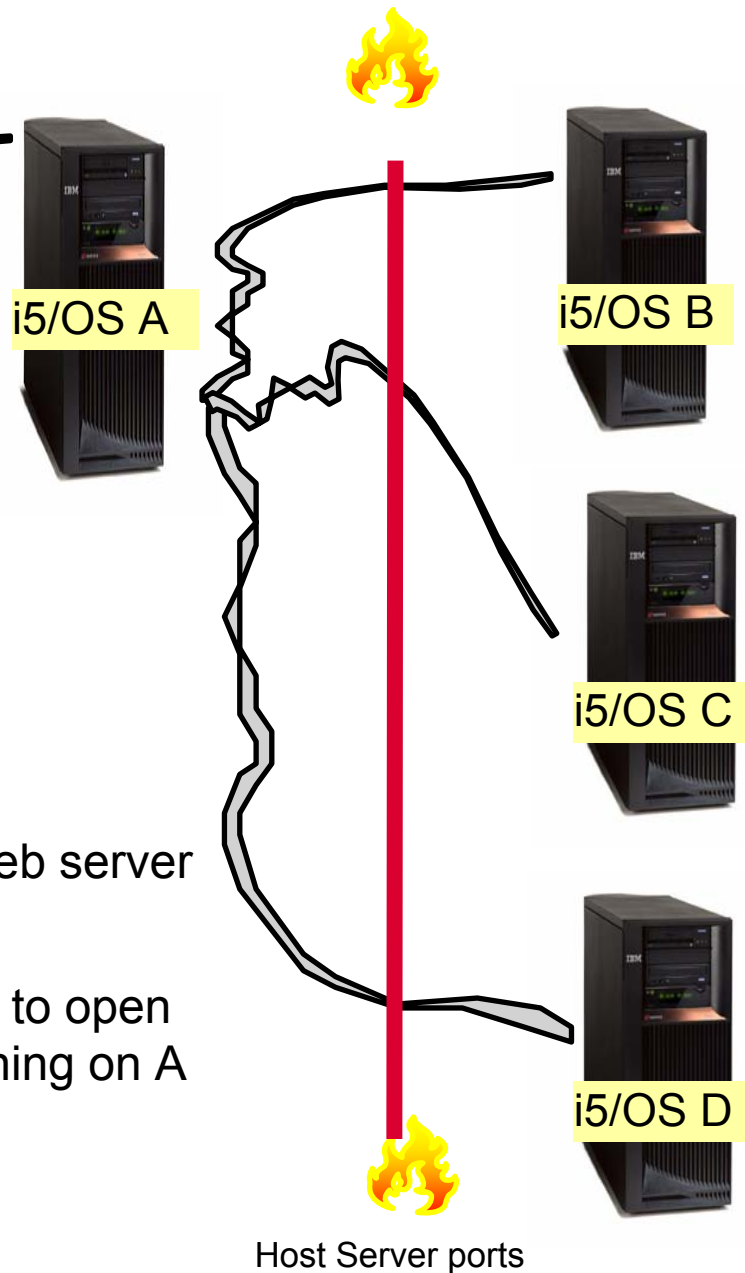
A firewall is put in place between the web server
(A) and the data servers (B, C, D).

iSeries Access for Web will require you to open
the Host Server ports because it is running on A
and only connecting to B, C, D.

i5/OS D

Host Server ports

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Access from Internet

Ports 5001,
5002, 5003

i5/OS A

i5/OS B

i5/OS C

i5/OS D

Host Server ports
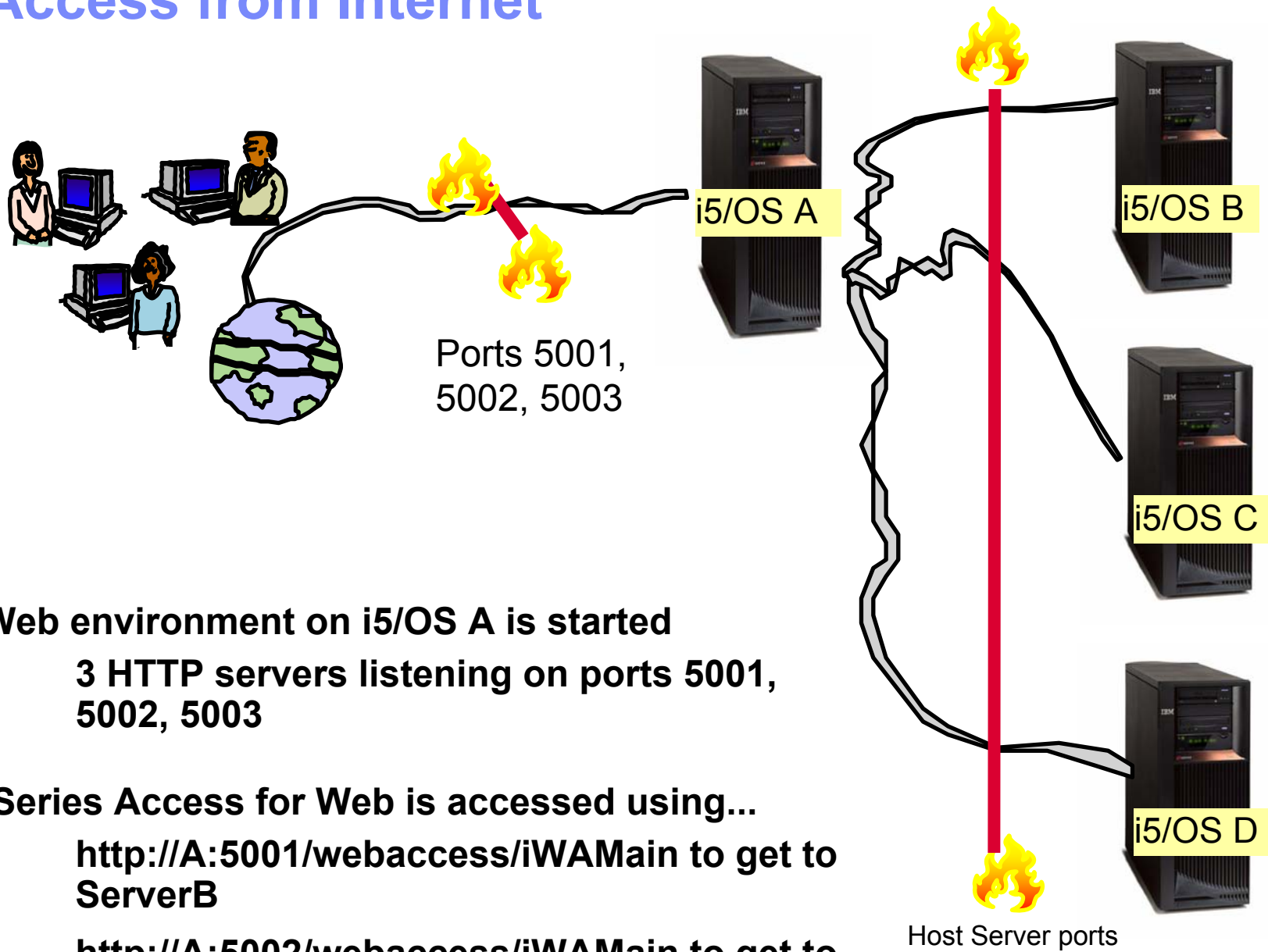
Web environment on i5/OS A is started

> **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**

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

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User starts browser and keys in url address...

iSeries Access for Web user is providing a different address to get to each i5/OS server...

> **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

The user must provide the correct i5/OS user ID and password for the backend data system to gain access.

i5/OS B

i5/OS C

i5/OS D

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Security Considerations

- HTTP or HTTPS
- Firewall

A

B

C

D

Host Server ports
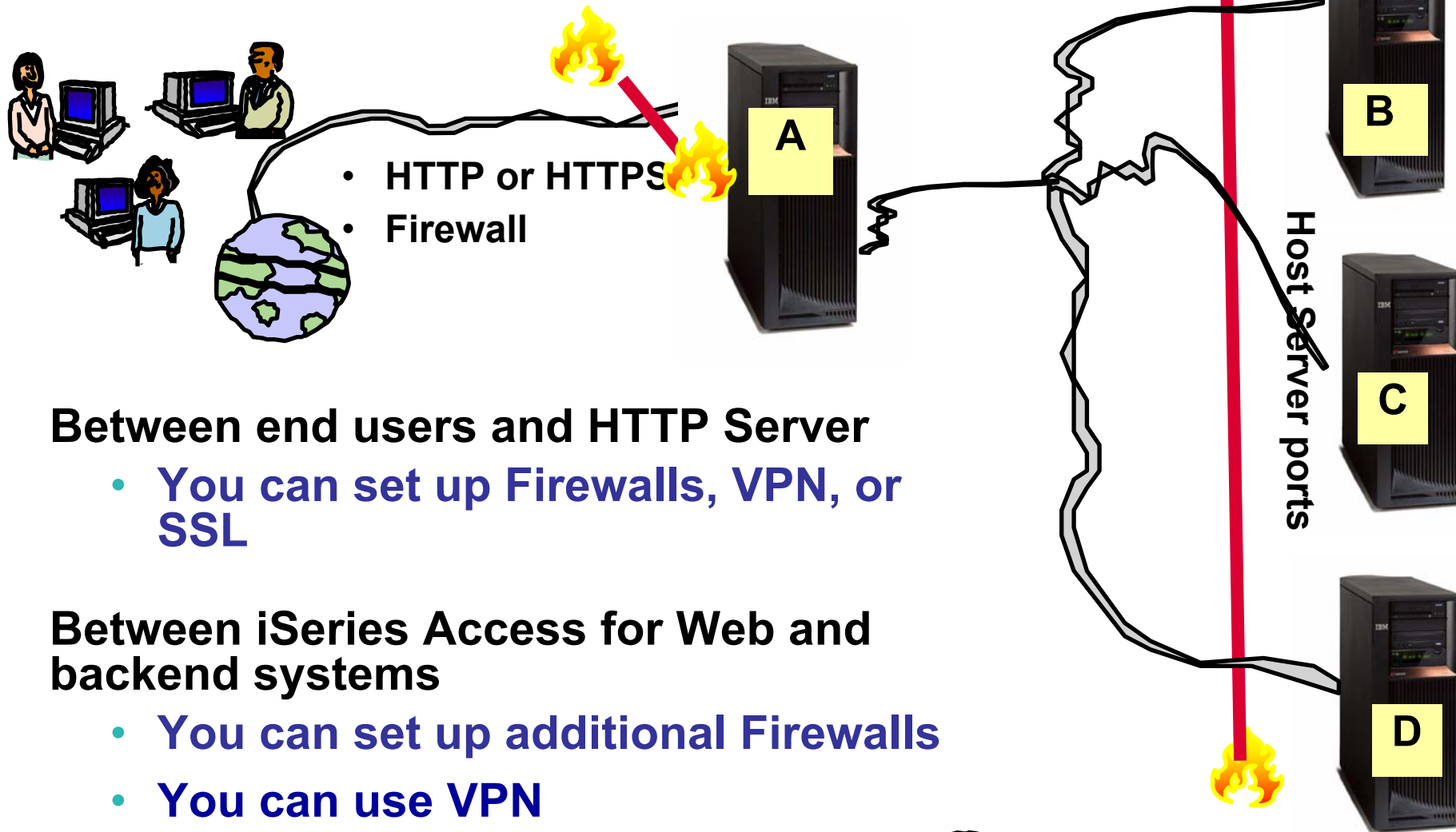
Between end users and HTTP Server

- You can set up Firewalls, VPN, or SSL

Between iSeries Access for Web and backend systems

- You can set up additional Firewalls

- You can use VPN

- You **cannot use SSL** between System A and backend systems.

i want an 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.**

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iSeries Access for Web - 5250 emulation

Could be connected to i5/OS B and start a new session from there to i5/OS C or i5/OS D
Identify i5/OS server
Determine what workstation (device) ID to use
Connect to another i5/OS

i want an i.

Or could connect to another System i through a preconfigured shortcut

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•Single Sign-On

i want an i.

Authentication

Authentication is verifying the identity of the user

iSeries Access for Web supports two types of authentication

- **Application**
    - iSeries Access for Web handles the authentication
- **Application Server – New in V5R4**
    - WebSphere® handles the authentication

Specified by the AUTHTYPE parameter on the CFGACCWEB2 command

- **Application: AUTHTYPE(*APP)**
- **Application Server: AUTHTYPE(*APPSVR)**

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Application Authentication

iSeries Access for Web handles authentication

i5/OS user profile and password

- **Hostname specified by the TGTSVR parameter on the CFGACCWEB2 command**

Method: HTTP basic authentication

- **User profile and password are encoded (not encrypted) in the HTTP headers and should be protected**

User profile cannot be shared between System i web applications

If you want to use Bypass sign-on, you must use Application Authentication.

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Application Server Authentication

WebSphere handles authentication

WebSphere credentials

- **Typically a user ID and password**

- **Authenticated with the active WebSphere user registry**

Single sign-on can be accomplished between WAS applications.

iSeries Access for Web uses Enterprise Identity Mapping (EIM) to map the authenticated WebSphere user identity to an i5/OS user profile

- **iSeries Access for Web identifies the user by the mapped i5/OS user profile**

- **i5/OS user profile is used to authorize access to i5/OS resources using object level security**

i want an i.

Control User Access to functions

- •Customize

i want an i.

Tip: Manage 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

- **Manage policies for group profiles**

- **Add/remove users from groups**

You need *SECADM authority to customize profiles

i want an i.

Tip: Manage User Access

Two Strategies

- **Allow all and deny specific users/groups**

- **Deny all and allow specific users/groups**

  - **V5R3 Access for Web enhanced so *SECADM can never get locked out, but you may not see a tab on navigation bar…**

Use *PUBLIC to set policies for all users

View of the Policies page

i want an i.

Recommendations for Setting Up Policies

Do as much customization as you can using *PUBLIC

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

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

Examples:

Create "Office" group
- Take away all tabs and functions except (for example) Printer Output, 5250, Database, IFS

iSeries Access for Web

My Home Page

Print

· Printer output

5250

Database

Files

Related Links:
· iSeries Access for Web
· iSeries Access
· iSeries Navigator
· iSeries Information Center

Print

Access print

Printer outp

- List, p
- Hold, r
- Move p
- Send p
- View, r
- Previe
- Downl

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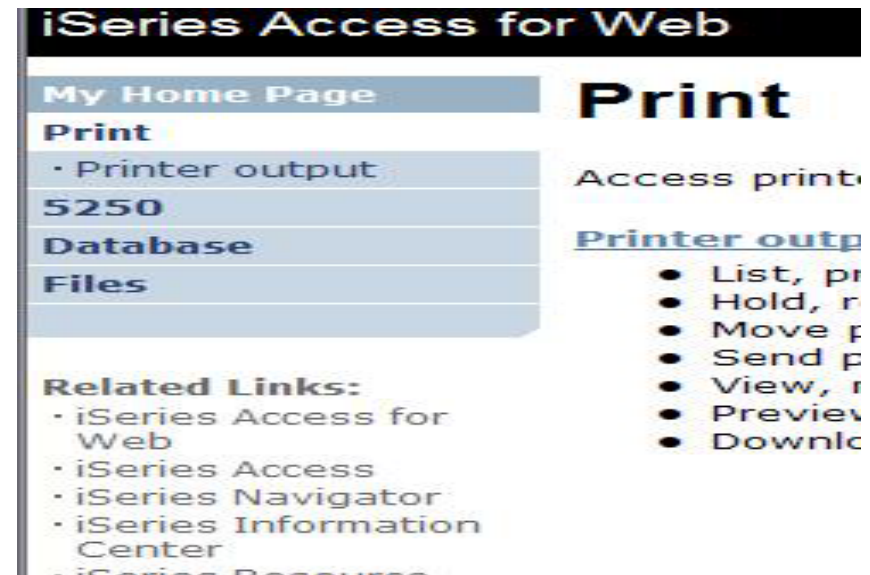
Tip: Might want to Set up Printer Output with *PUBLIC

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

i want an i.

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**

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Copy Profile Settings from one System i to another

To copy customized profile settings from one System i to another

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.

iSeries Access for Web

User: chmier System: LP01

My Home Page
My Folder
Print
Messages
Jobs
5250
Database
Files
Command
Download
Customize
· Preferences
· Policies
· Settings
· Transfer configuration
Other

Export Policies

Specify one or more profiles to export policies for, separated by commas.

Profiles: [   ] [Add...]

[Export Policies]

Policies help
View help for exporting policies.

iSeries Access for Web

My Home Page
My Folder
Print
Messages
Jobs
5250
Database
Files
Command
Download
Customize
· Preferences
· Policies
· Settings
· Transfer configuration

Import Policies

Specify the file containing policies you want to import.

File: [   ] [Browse...]

[Import Policies]

Policies help
View help for importing policies.

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Example of using Transfer Configuration Data

1. **Created a new user**

- **Used Commands function**

2. **Gave new user same Policies as another user**

- **Used Transfer Configuration Data and selected 'Policies'**

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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

Tips on 5250

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 the System i**

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Configuring a New Session

Can connect to any System i in the network

- **Not just the one configured in CFGACCWEB2**

Bypass Signon

- **New in V5R4**

Add a previously created macro to this configured session

Define how device ID is to be assigned

My Home Page
⊞ My Folder
Print
Messages
Jobs
5250
· Active sessions
· Configured sessions
· Start session
Database
Files
Command
Download
Customize
Other

Related Links:
· iSeries Access for Web
· iSeries Access
· iSeries Navigator
· iSeries Information Center
· iSeries Resource

Configure New Session

General

Session: Inventory System * required

Default view: Web

Initial macro:

☑ Bypass signon

☐ Display HTML data in fields

☑ Enable advanced JavaScript functions

Server

Server: INVENTORY.RCHLAND.IBM.COM

Port: 23

Code page: 37

Workstation ID

◉ Use user ID

○ Specify workstation ID

☐ Avoid duplicates for this user

☑ Avoid duplicates with other users

i want an i.

Configuring a New Session (continued) – Workstation ID

Workstation ID

○ Use user ID
◉ Specify workstation ID [＿＿＿＿＿＿]
☐ Avoid duplicates for this user
☑ Avoid duplicates with other users

The Workstation ID options are:

Use user ID: The iSeries Access for Web authenticated user ID is used for the workstation ID, up to ten characters.

Specify workstation ID: Enter a workstation ID of your choice, up to ten characters. If you select the radio button and leave the text field blank, a value is generated by the server. The default device name starts with *QPADEV*.

The configuration options for avoiding conflicts are:

Avoid duplicates for this user: When this option is enabled, a wild card character is added to the device name to make it unique for the current user.

Avoid duplicates with other users: When this option is enabled, the server adds a wild card character to the device name to make it unique for all users on the server.

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Configuring a New Session (continued) – Workstation ID

You can enter keyword and special characters, like you do for PC5250. Here is how they are handled.

Computer name or User name (&COMPN, &USERN): These keywords are accepted. However, they will not resolve to the PC name and the Windows login user ID like they do in PC5250.

> Computer name: resolved to the System i name
> User name: resolved to the user profile name of the web application
>   server job.

Also note that using the &COMPN and &USERN keywords could result in workstation IDs that are longer than ten characters which would then be truncated.

Session Type ID (%): This will add an "S" to workstation ID, indicating that this is a display session. With PC5250, a "P" would replace the "%" if a printer session was started. However, iSeries Access for Web only has display sessions.

Configuring a New Session (continued) – Workstation ID

Keyword and special characters, continued…

Short session ID (*): Adding this character will make the ID unique for this user. The iSeries Access for Web option **Avoid duplicates for this user** causes the "*" character to be added at the end of the ID. Therefore, if you use both the "*" and Avoid duplicates for this user, then two special characters will be added to the workstation ID.

Collision Avoidance ID (=): Adding this character will make the session ID unique. The iSeries Access for Web option **Avoid duplicates with other users** causes the "=" character to be added at the end of the string. Therefore, if you use both the "=" and Avoid duplicates with other users, then two "=" will be added to the string..

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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…

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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.

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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
☑ Show navigation bar	☑ Show navigation bar
☑ Show action links	☑ Show action links
☐ Show hotspot links	☐ Show hotspot links
☑ Show JavaScript indicator	☑ Show JavaScript indicator
☐ Display text using fixed width font	☑ Display text using fixed width font
☑ Enable "More..." as button	☐ Enable "More..." as button
☑ Enable menu items as links	☐ Enable menu items as links
☐ Show function key bar	☑ Show function key bar
☑ Show macros section	☑ Show macros section
☑ Show operator information area (OIA)	☑ Show operator information area (OIA)
☐ Show active sessions	☐ Show active sessions
☑ Enable cursor positioning	☐ Enable cursor positioning
☐ Position cursor at exact loca⟷	☐ Position cursor at exact location
☑ Enable message text line as help link	☐ Enable message text line as help link
☑ Enable active function keys as buttons	☐ Enable active function keys as buttons
☐ Show function key text (Fxx=) on button	

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

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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

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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, and started up a connection to the same system, and pick right up on same page

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.

Reconnect to an Active Session

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

- **They would show up here even if iSeries 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.

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

The 5250 session to be started is selected as follows:

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

Use initmac parameter to execute a macro at session startup

> http://[host]:[port]/webaccess/iWA5250?initmac=mymacro

1. 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)

i want an i.

Tips on Print
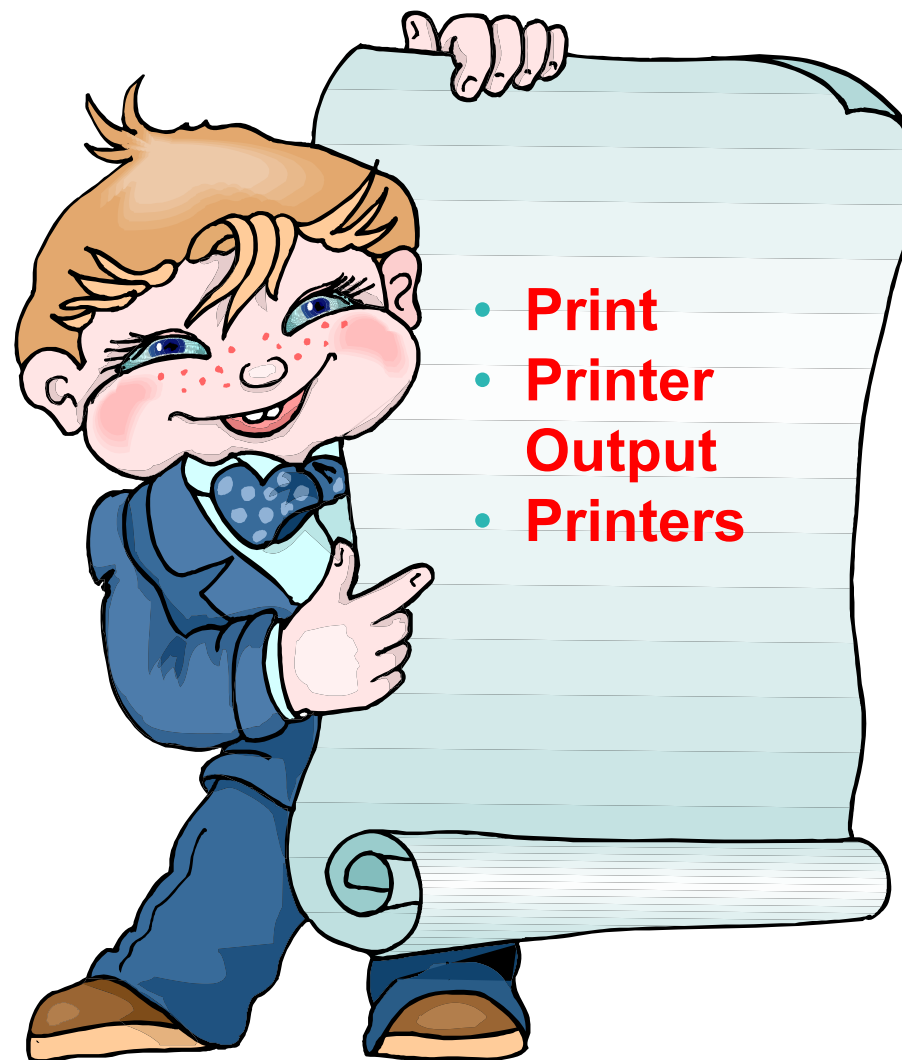
- **Print**
- **Printer Output**
- **Printers**

i want an 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.

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**

i want an i.

IBM InfoPrint Server

http://www.printers.ibm.com/internet/wwsites.nsf/vwwebpublished/ipserverhome_i_ww

Use iSeries Access for Web to create a PDF printer

Uses 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.

Create PDF Printer, PDF Printers, PDF Printer Output

To use any of these features requires InfoPrinter Server

i want an i.

Tips on Mail

•**Mail**

i want an i.
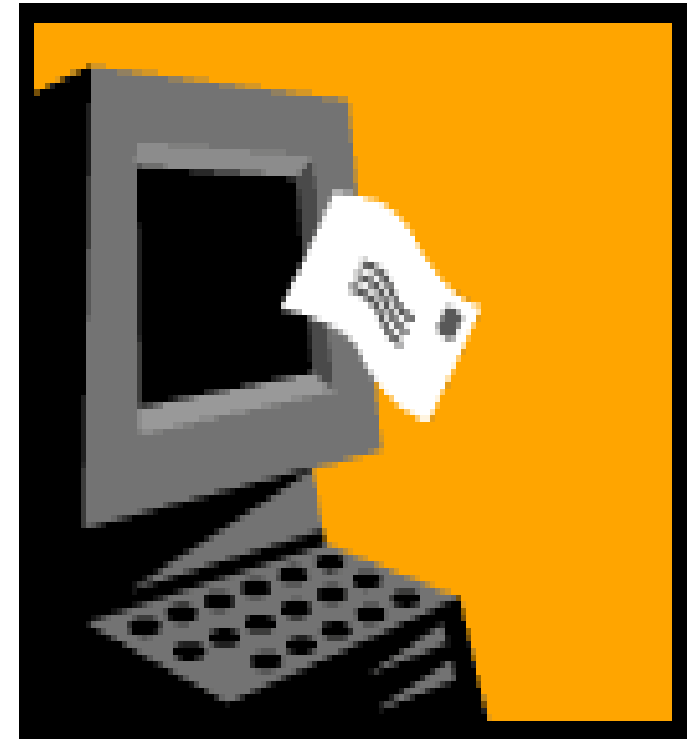
Integrate user's e-mail with iSeries Access for Web

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**

Result sent as an attachment

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

- **Not an System i user**

- **Does not have access to a web browser**

i want an i.
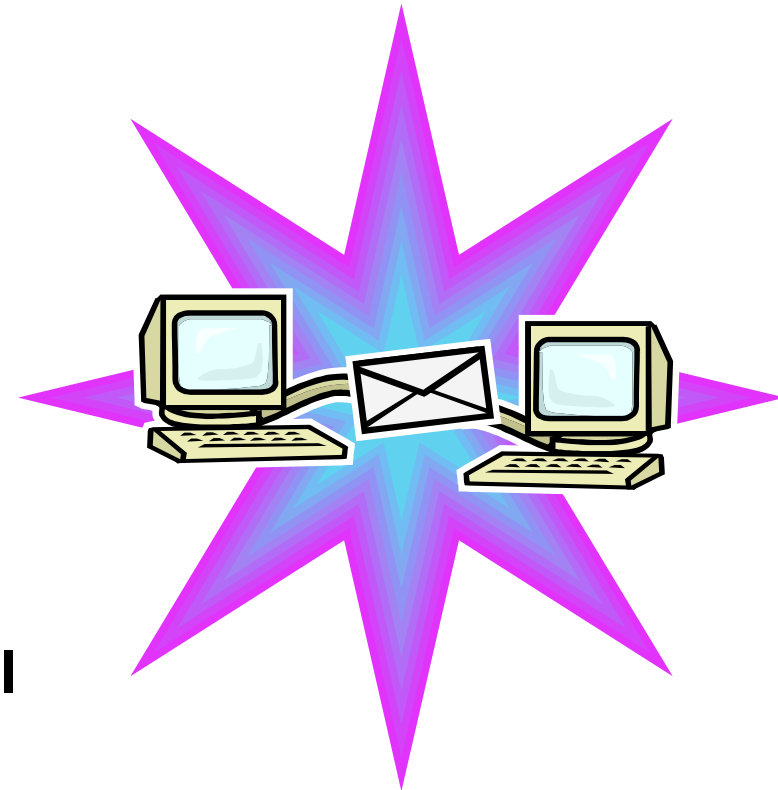
Users can easily e-mail results

Working with PDF printer output

Database request

Mail output

IFS File System

i want an i.

Send your e-mail: result of Printer output "Mail as attachment"

i want an i.
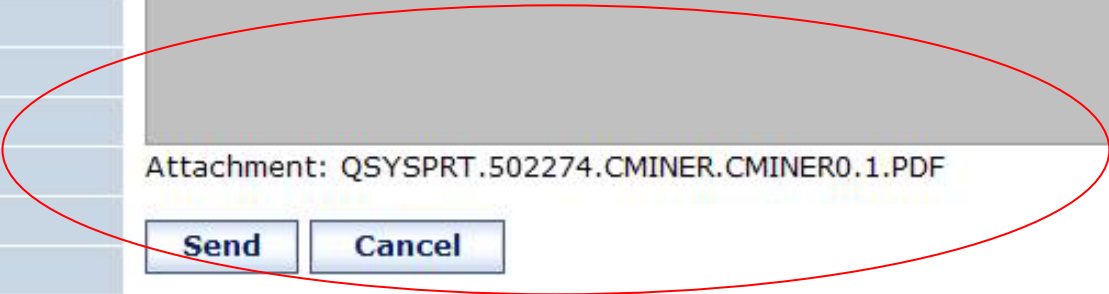
How to set up iSeries Access for Web to use e-mail

Do nothing

- **If you currently use OS/400 System Distribution Directory (SDD) to store your e-mail addresses, then do nothing to iSeries 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 iSeries 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 iSeries Access for Web

i want an i.

You must 'Customize' to use E-mail 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.

All users' e-mail 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.

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

iSeries Access for Web   User: **cminer**   System: .RCH

My Home Page
My Folder
Print
Messages
Jobs
5250
Database
Files
Command
Download
Customize
· Preferences
· Policies
· Settings
· Transfer configuration
Other

Import Policies

Specify the file containing policies you want to import.

File: [   ] [Browse...]

[Import Policies]

Policies help
View help for importing policies.

i want an i.

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

```xml
<?xml version="1.0" encoding="utf-8" standalone="yes"?>
<QiwaPolicies>
    <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>
 </QiwaPolicies>
```

i want an 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**

Edit Policies - My Folder

My Home Page
My Folder
Print
Messages
Jobs
5250
Database
Files
Command
Download
Customize
· Preferences
· Policies
· Settings
· Transfer configuration
Other

Related Links:
· iSeries Access for Web
· iSeries Access
· iSeries Navigator
· iSeries Information

Profile: CMINER

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	
Rename 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	
Mark folder items opened/unopened	Shipped default	Use current setting	Yes	
My Folder notification	Shipped default	Use current setting	E-mail 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.

Tips on File Serving

- **IFS**
- **NetServer**

i want an i.
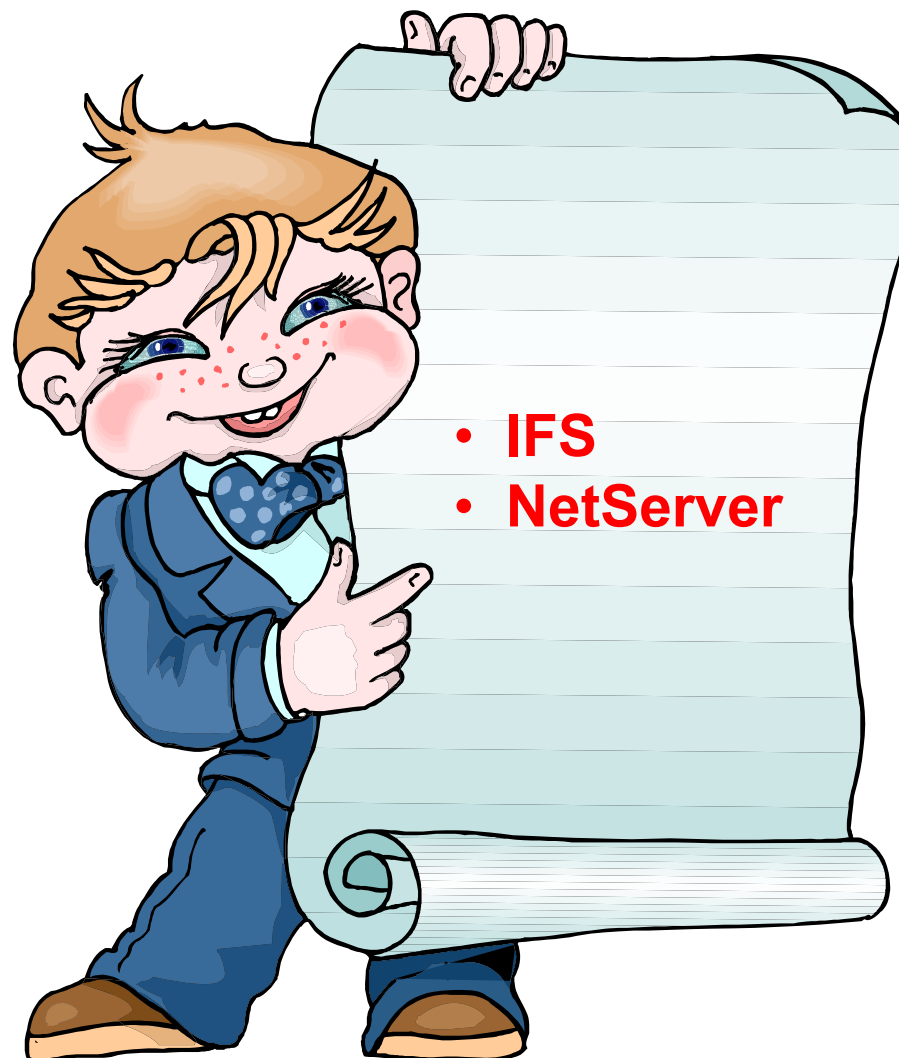
IFS: Perform many tasks without going to 5250 or iSeries Navigator

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**

How to Limit Directory Access

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.

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.
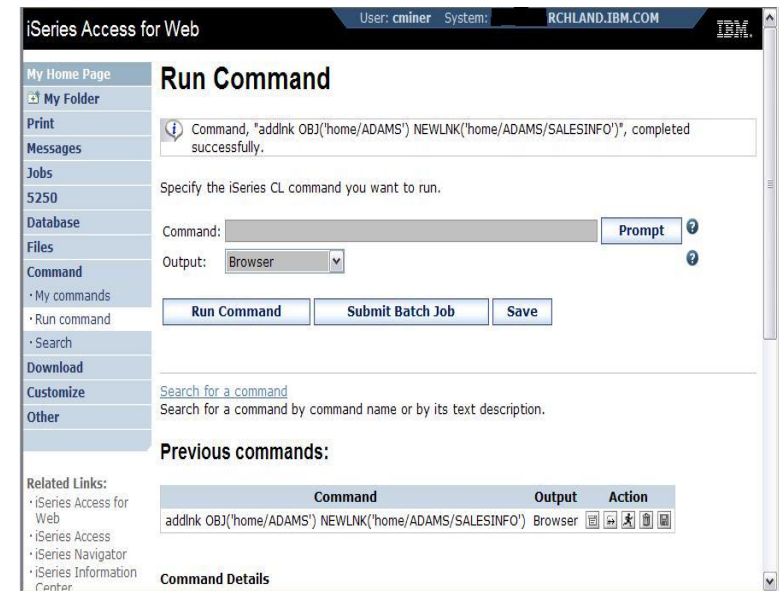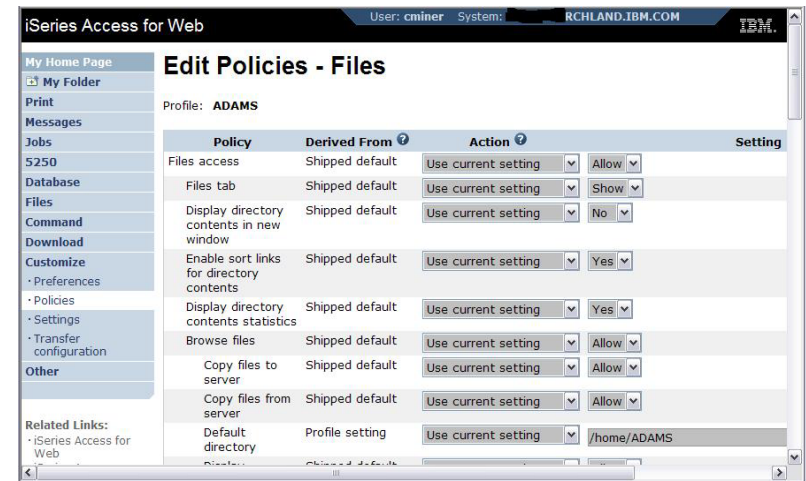
Tip: Display Directory Content in New Window

i want an i.

iSeries NetServer

iSeries 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**

i want an i.
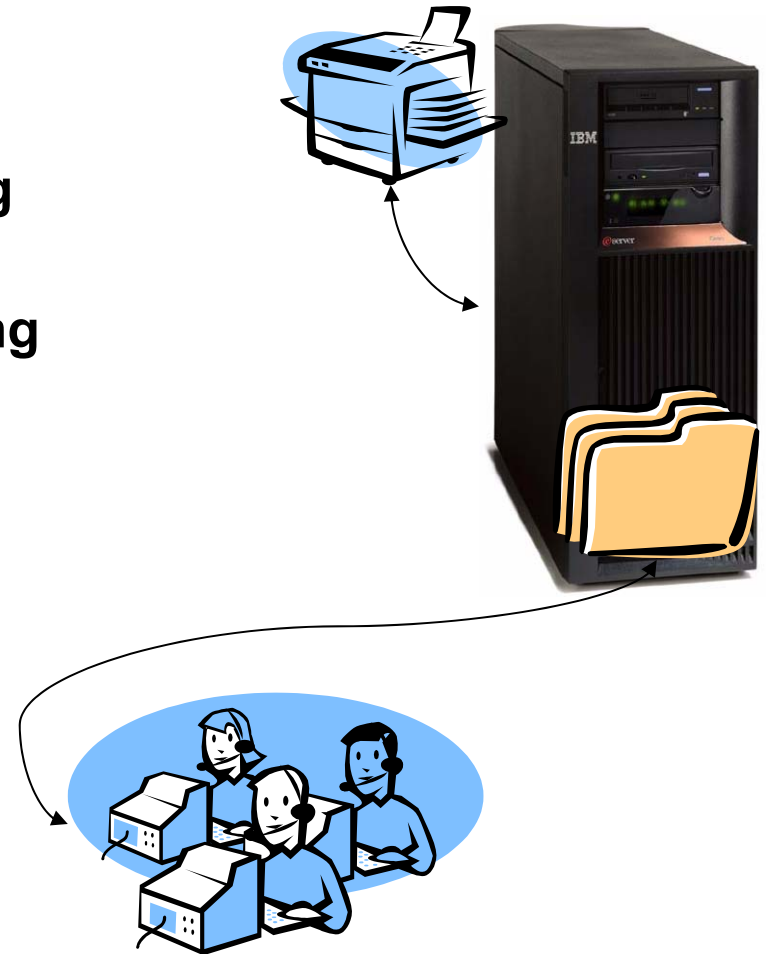
Files Shares

'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**

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

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.**

  - **As QIBM is one directory that automatically ships with a 'share' assigned**

i want an 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.
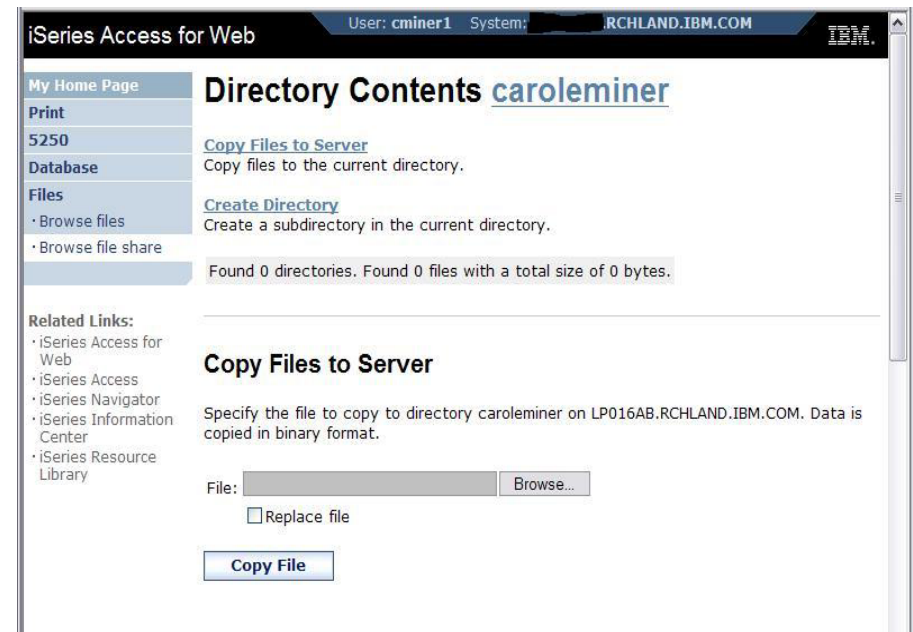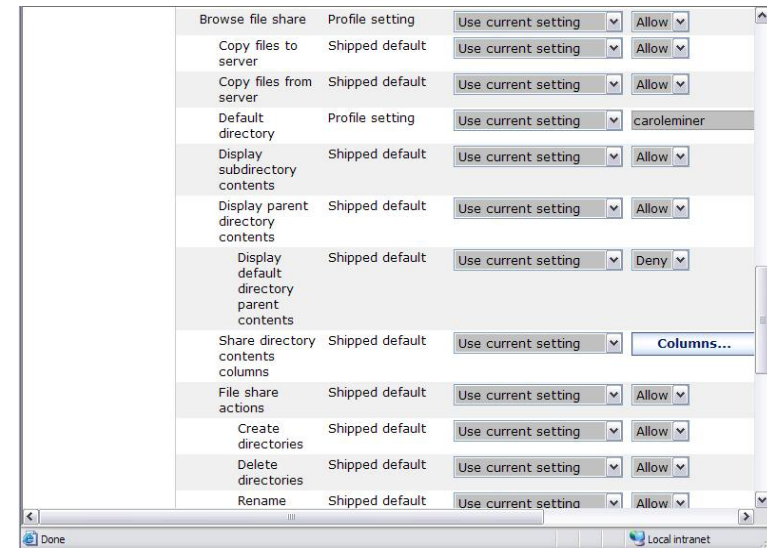
Setting up NetServer Print Shares

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.
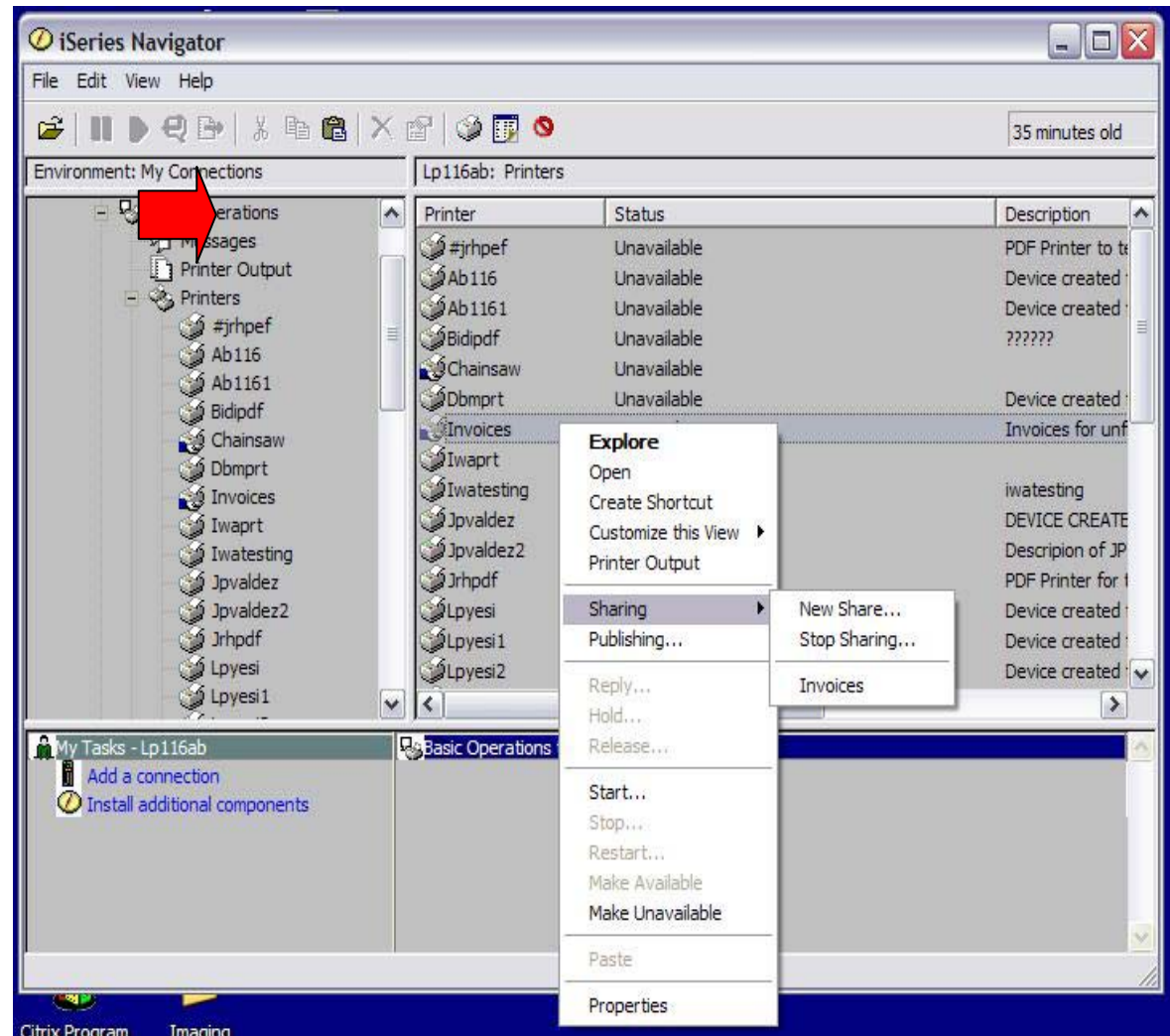
Printer Shares

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

Printer Shares

Share	Output Queue	Printer Driver	Spooled File Data Type	Users	Description
CAMINERSHARE	QUSRSYS/WPAPRINT		Auto-select	0	DEVICE CREATED FOR LP116AB.
CHAINSAW	QUSRSYS/CHAINSAW		Auto-select	0	Travis' test
INVOICES	QUSRSYS/INVOICES		Auto-select	0	Invoices for unfilled orders
MYPRT	MYOUTQ/MYLIB	prtdesc	Advanced function printing	0	prtdesc
PRTINTER	QUSRSYS/PRTINTER		Auto-select	0	INTERNET PRINTER (GDL TEST)
PRT116ABS	QUSRSYS/PRT116AB		Auto-select	0	DEVICE CREATED FOR LP116AB.
WEBSHARE	QUSRSYS/IWAAFP	Access for Web print share	Advanced function printing	0	Access for Web print share

Left navigation:
My Folder
My Home Page
Print
- Printer output
- PDF printer output
- Printers
- PDF printers
- Internet printers
- Internet printer shares
- Printer shares
- Output queues

Messages
Jobs
5250
Database
Files
Command
Download
Customize
Other

Related Links:
- iSeries Access for Web
- iSeries Access
- iSeries Navigator
- WebSphere Host Publisher
- iSeries Information Center

Done

i want an i.

Internet Printers - Shares

http://<myiseries>/webaccess/iWAIPPShares

iSeries Access for Web

cminer

Internet Printer Shares

◄◄ ◄◄ ◄ [1] ► ►► ►► ⟳

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

◄◄ ◄◄ ◄ [1] ► ►► ►► ⟳

i want an 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

iSeries showing directories in IFS

Access for Web user using 'Files' tab

Windows server in network

1 **2** **3** **4**

Address http://rchas1dd:2022/webad

- pdffonts
- QDLS
- QFileSvr.400
- QFPNWSSTG
- QIBM
- QNetWare
- QNTC
- QOpenSys
- QOPT
- QSR
- QSYS.LIB
- QTCPTMM
- sandifer
- schuman
- tmp
- usr
- var
- warren
- wrightj
- www
- yesenia

olders
- CA400_Project_Manage
- cdarn
- cheryl
- cminer
- Comm Team
- config
- copyright

Name
- acn
- admin
- alk
- Andrews
- Avanderwl
- Becky
- bginfo

i want an i.

Tips on Data Exchange

•**Database**

i want an 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.

Some reasons to move your queries to iSeries Access

- **Secure Web access to System i information for both local and remote users**
  - Cost-effective way to bring your iSeries 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 an System i is more costly, run the queries with iSeries Access for Web in the batch subsystem.**

i want an i.

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.**

i want an i.

Considerations for using Import Query function

Known special cases requiring the creation of non-default database connections, with the special attributes set, are:

- System naming convention is used for the table designation
- Date and time formats other than locale defaults are specified in
the query
- Decimal separator character other than the locale default is used
 in the query
- A non-default sort sequence is specified
- iSeries Access for Web cannot determine the CCSID of the contents of the query file.
- If the user profile that is importing the query has a CCSID that does not match the CCSID of the data in the query file, incorrect conversions or conversion errors might result. Users can set a CCSID value during the import of the query to overcome this problem.

i want an i.

Tip: Extract Server Data – V5R3

Use Extract Server Data to retrieve information about objects on the iSeries 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 iSeries information in any manner that is of importance to you.

i want an i.

Using 'Extract Sever Data' function

Many things you can look at on i5/OS

- **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**

iSeries Access for Web — User: cminer   System: RCHLAND.IBM.COM

Extract Server Object Data

My Home Page
My Folder
Print
Messages
Jobs
5250
Database
· Tables
· My requests
· Run SQL
· Copy data to table
· Import request
· Import query
· Extract server data
Files
Command
Download

Object Data to Extract
Objects: Directory entries

Table to Receive Data
Table:
☐ Replace table if table exists

Extract Results
Output: Browser

Connection
Connection: IBM Toolbox for Java - LP126AB.RCHLAND.IBM.COM

[Extract Data]

iSeries Access for Web — User: cminer

Extract Server Object Data

My Home Page
My Folder
Print
Messages
Jobs
5250
Database

335 rows added to QGPL.EXTRAC

Work with QGPL.EXTRAC

Query QGPL.EXTRAC

Tips on Web Integration

- Web page integration
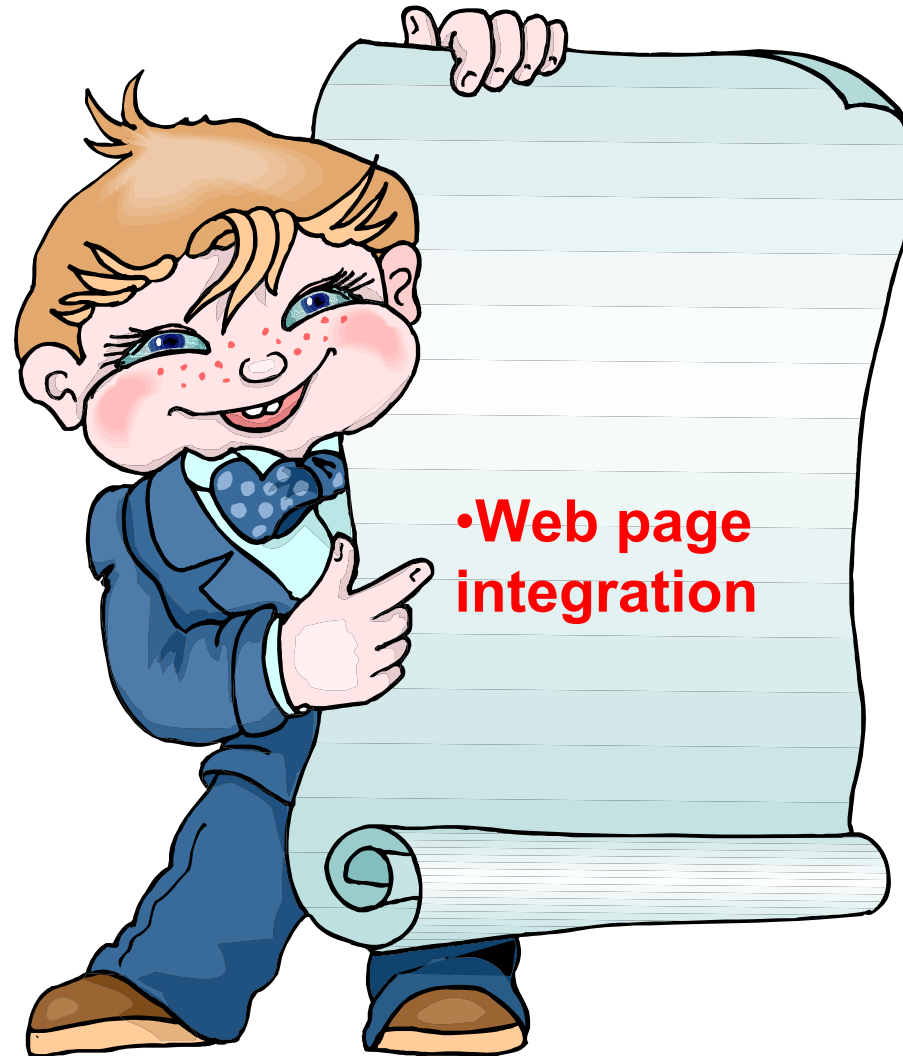
i want an i.

Customized Home Page

Customized view of the Home Page

Could be used as 'entry' point to iSeries

Test drive this at:

http://iseriesd.dfw.ibm.com/webaccess/iWAHome

USER ID =

BOATADMIN

PASSWORD =

DEMO2PWD

i want an i.

Your **Window** to your iSeries

Customized user 'window' to iSeries

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 iSeries**

- **Tie in with other web applications (such as WebFacing, HATS, etc from here as well**

- **Link to other systems, not just iSeries servers**
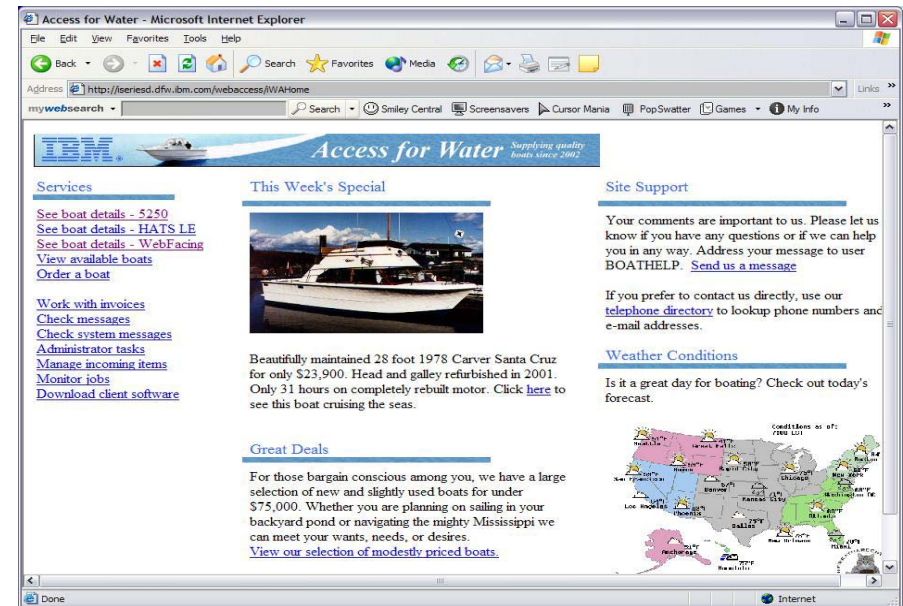
- *One view and set of functions for the Accounting department*

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

i want an i.

Using 5250 emulator in iSeries 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.
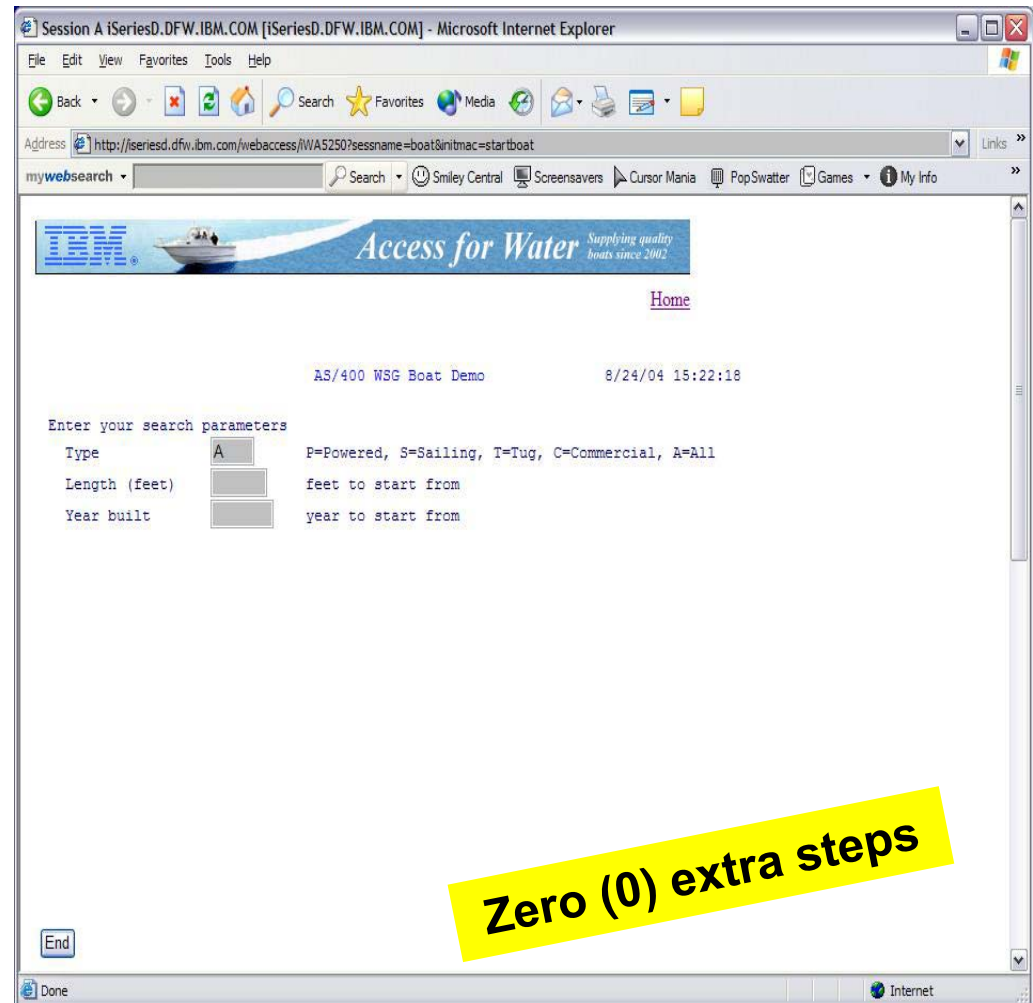
Article on how to do it

Go to iSeries Access Web page
At:
www.ibm.com/eserver/iseries/access/web

Select 'Articles' link, and find the one written in Jan/Feb 2003 labelled "Build a quick and easy Web site with iSeries Access for Web"

i want an i.

iSeries Access for Web has many entry points

Can enter at many different pages

Can use navigation bar to move from function to function

http://<myiseries>/webaccess/iWAMain

http://<myiseries>/webaccess/iWA5250

http://<myiseries>/webaccess/iWASpool

i want an i.

Entry points are documented in URL Interfaces doc

Download it from iSeries Access Web page at www.ibm.com/eserver/iseries/access/web

Documents how iSeries Access for Web can be accessed through a number of URL interfaces.

- **These URLs can be included as links on web pages to provide direct access to iSeries Access for Web functions.**

- **These URLs can also be bookmarked for easy access to frequently used tasks.**

IBM

@server

iSeries

URL Interfaces to iSeries Access for Web

i want an i.

Tips & Goodies in 'Other Tab'

iSeries Access fo

- My Home Page
- My Folder
- Print
- Messages
- Jobs
- 5250
- Database
- Files
- Command
- Download
- Customize
- Other
  - Bookmarks
  - Change password
  - Connection pool status
  - Trace
  - About

Other

i want an i.

Good information for load balancing your iSeries

Connection Pool Status

- **How many Access for Web users have been connected?**
- **How many on now?**
- **Who are they?**

Settings – Connection Pool

- **Any settings you make apply to all users**
- **Set number of sessions a user can start**
- **How much inactivity before we clean up a session**

i want an i.

Tip: Export Navigation as Bookmarks

Most iSeries Access for Web pages can be bookmarked

- **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…**

i want an i.

On the 'About' link under Other…

Product information about iSeries 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**

i want an i.

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

Way down at the end of 'Other'
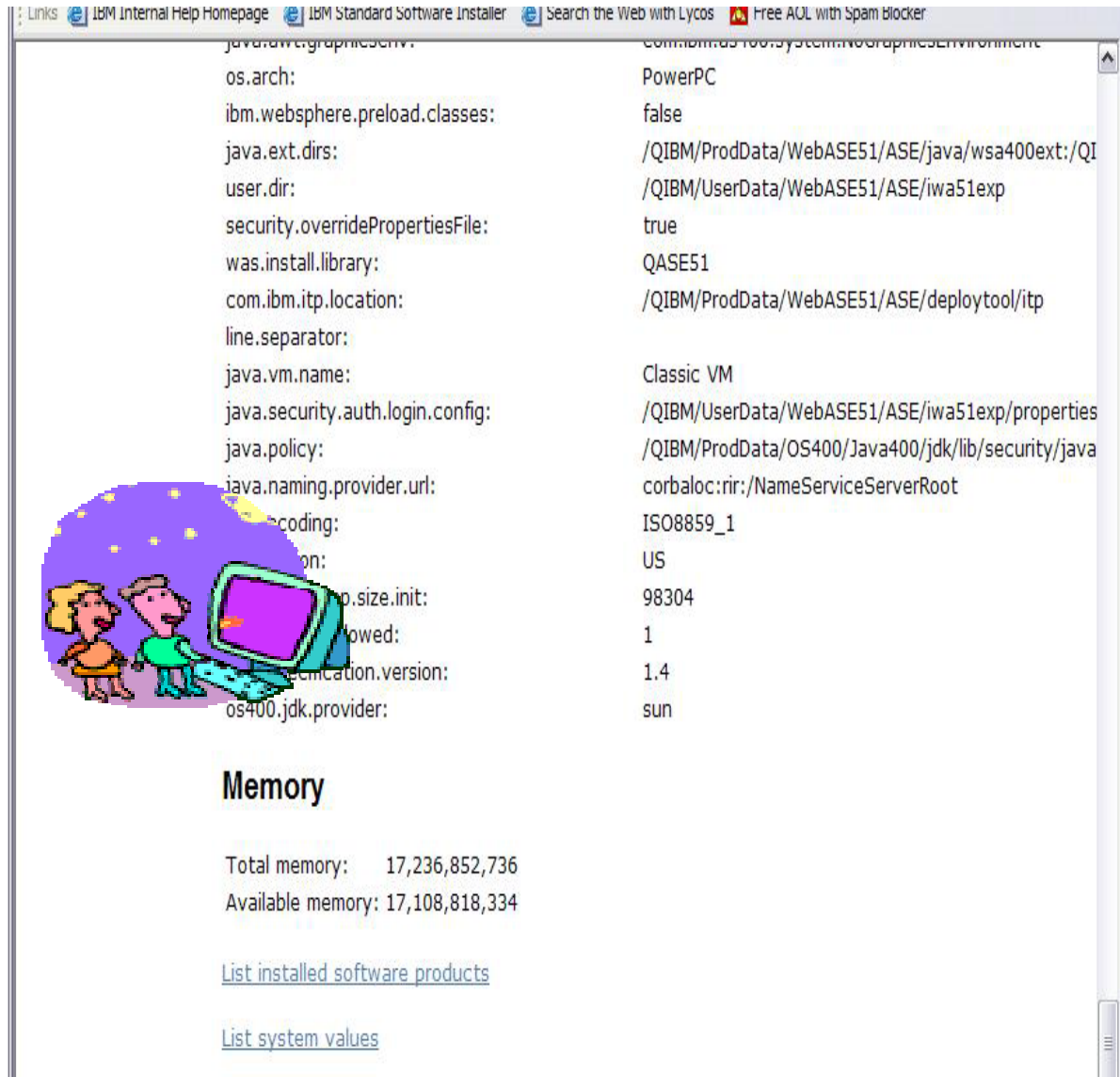
Memory

List installed software products on iSeries

- **List Software fixes installed**

List system values

- **Allocation system values**

- **Date/time**

- **Security system values...**

Links | IBM Internal Help Homepage | IBM Standard Software Installer | Search the Web with Lycos | Free AOL with Spam Blocker

os.arch:	PowerPC
ibm.websphere.preload.classes:	false
java.ext.dirs:	/QIBM/ProdData/WebASE51/ASE/java/wsa400ext:/QI
user.dir:	/QIBM/UserData/WebASE51/ASE/iwa51exp
security.overridePropertiesFile:	true
was.install.library:	QASE51
com.ibm.itp.location:	/QIBM/ProdData/WebASE51/ASE/deploytool/itp
line.separator:	
java.vm.name:	Classic VM
java.security.auth.login.config:	/QIBM/UserData/WebASE51/ASE/iwa51exp/properties
java.policy:	/QIBM/ProdData/OS400/Java400/jdk/lib/security/java
java.naming.provider.url:	corbaloc:rir:/NameServiceServerRoot
...coding:	ISO8859_1
...on:	US
...p.size.init:	98304
...owed:	1
...cification.version:	1.4
os400.jdk.provider:	sun

Memory

Total memory: 17,236,852,736
Available memory: 17,108,818,334

List installed software products

List system values

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

Find out everything about the Software products on your iSeries

Software Products

- **You can see all software products installed on the iSeries. 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**

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More Tips

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How can I get iSeries Access for Web to start automatically after my system IPLs?

I am using WAS V5 Express for iSeries

You can use a CL command to start your application server instance.

But before making the call, you need to be sure to start the WAS Express subsystem first by running the command:

STRSBS QASE5/QASE5

To start your application server from the i5/OS command line, run this command:

SBMJOB CMD(CALL PGM(QASE5/QASESTRSVR) PARM('-instance' '/QIBM/UserData/WEBASE/ASE5/instance')) JOB(instance) JOBD(QASE5/QASE5) JOBQ(QASE5/QASE5) USER(QEJBSVR) LANGID(*USRPRF) CNTRYID(*USRPRF) CCSID(*USRPRF)

where instance is the name of the application server instance that you want to start. You can only start one application server when you run this command. To start additional application servers, you must run the command separately for each application server that you want to start.

Note: To run this command, your user profile must have *USE authority to the QEJBSVR user profile. Use the Edit Object Authority (EDTOBJAUT) command to add or verify that your user profile has this authority.

Note: Refer to WAS documentation for additional details and other WAS versions

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How can I get Access for Web to start automatically after my System i5 IPL's each night? (continued)

I am using WAS V5.1 "Base edition" for iSeries

You can configure the HTTP server for your WAS instance to automatically start the WAS instance when it starts.

Use the STRTCPSVR *HTTP HTTPSVR(IWA51BASE) command to start the HTTP server as part of your IPL procedures and it will start your WAS application server.

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How can I get iSeries Access for Web to start automatically after my system IPLs? (continued)

STRTCPSVR *HTTP HTTPSVR(IWA51BASE)

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Additional information

The following resources are available

> **HTTP Server redbook**
>
> > **http://www.redbooks.ibm.com/redpieces/pdfs/sg246716.pdf**
> >
> > | Section 6.3 | Encrypting your data with SSL and TLS |
> > | Section 6.4 | Proxy server: Protecting direct access |
>
> **Information Center - Setting up a reverse proxy for HTTP server**
>
> > **http://publib.boulder.ibm.com/iseries/v5r2/ic2924/index.htm?info/rzaie/rzaier everseproxy.htm**

See Appendix A for additional information

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		System i
	iSeries	@server

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