iSeries Access
Connecting to the iSeries
Connecting to the iSeries

The iSeries server offers you many ways to connect to and communicate with the servers in your iSeries environment. From mobile telephones to remote consoles to the powerful functions of iSeries Navigator, the iSeries environment offers you flexible solutions to use in your systems management strategy.
Agenda

Windows Client (formerly Client Access Express):
- iSeries Access for Windows
- iSeries Navigator

V5R2 level browser based products for connecting to iSeries servers and modernizing 5250 green screen applications
- iSeries Access for Web
- WebSphere Host Publisher

Additional enhancements and new product
- iSeries Access for Wireless (includes Management Central - Pervasive)
- iSeries ODBC Driver for Linux
Types of Clients


Clients

Windows Clients

- iSeries Access for Windows
- iSeries Navigator

Web Clients

- iSeries Access for Web

Wireless Clients

- iSeries Access for Wireless

Consoles

- iSeries Operations Console
- Twinaxial Console
Notes: Type of Clients

Windows Clients
iSeries Access for Windows (5722-XE1), called Client Access Express prior to V5R2, provides industry-leading PC-to-server connectivity. It offers an all-inclusive client solution for accessing and using resources from your Windows desktop. iSeries Access for Windows includes 5250 emulation, access to DB2 Universal Database(R) (UDB) for iSeries through its Data Transfer, utilizing iSeries NetServer for working with the OS/400 Integrated File System and printers, and more. It also has a variety of middleware for using and developing client applications to access OS/400 resources.

iSeries Navigator (packaged in is now the primary user interface for administering and managing iSeries environments. iSeries Navigator allows you to perform many functions with ease by incorporating Wizards, customizable displays, and a wide variety of applications. All iSeries Navigator components are packaged with iSeries Access for Windows but it does not require an iSeries license.

Web Client
iSeries Access for Web (5722-XH2) is the latest offering in the iSeries Access (5722-XW1) family of products. It offers web browser based access to iSeries servers. iSeries Access for Web enables end users to leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the client desktop through a web browser.

Wireless Clients
iSeries Access for Wireless is your solution for wireless device connectivity. Using the functions of the iSeries Access for Wireless licensed program, you can use your wireless device to access and administer your servers. It consists of the iSeries Navigator for Wireless and IBM Toolbox for Java 2 Micro Edition services that can be used individually, or together, to provide the access you need.

Console
You can interact with your iSeries through a console. There are two types of consoles you can use, iSeries Operations Console or Twinaxial console. While the Twinaxial console is a basic cable connected setup, iSeries Operations Console offers more flexibility because the iSeries can be accessed both locally and remotely.
iSeries Access for Windows
5722-XE1

The most comprehensive Windows-to-iSeries solution in the marketplace...
iSeries Access for Windows

A comprehensive Windows-to-iSeries solution in the marketplace...

- Easily installable, maintainable and reliable
- Designed for TCP/IP networks

Provides all key functions needed by end user and programmers

- 5250 display and printer emulation
- Data Transfer
- SSL to secure network connections
- Key middleware such as ODBC, OLE DB, ActiveX Automation Objects, Wizards for developing Visual Basic applications, iSeries Toolbox for Java

Includes the 'face of iSeries' for operators and administrators

- iSeries Navigator
- Operations Console
- EZ-Setup
iSeries Access for Windows - V5R2 enhancements

Support for Kerberos
- Emerging industry preferred way to authenticate users

Support for 64-bit Intel Itanium processor
- ODBC, OLE DB

Support for Switchable IASPs

Middleware enhancements for accessing DB2 UDB for iSeries
- ODBC Driver and OLE DB Provider

Install Enhancements
- Silent Install Enhancements
- Enable customers to create a customized install image on CD

Migrate SSL users to 128-bit encryption program (5722-CE3)
Notes: iSeries Access for Windows - V5R2 enhancements

Kerberos is an emerging industry preferred way to authenticate users. This authentication service allows the iSeries Access for Windows, to use a Kerberos ticket as an optional replacement for a user name and password for authenticating a user. Kerberos protocol allows a principal (a user or service) to prove its identity to another service within an insecure network. Authentication of principals is completed through a centralized server called a key distribution center (KDC) and no additional password needs to be entered by the user. Since iSeries cannot act as a Kerberos ticket server, there will need to be another server in the network (probably a Windows server). PC5250 bypass signon will also be able to take advantage of this.

The Kerberos system was designed and developed in the 1980’s by the Massachusetts Institute of Technology (MIT), as part of the Athena project. The current version of Kerberos is Version 5, which is standardized in RFC 1510, The Kerberos Network Authentication Service (V5).
For more details see http://www.ietf.org/rfc/rfc1510.txt

Kerberos is freely available from MIT, under copyright permissions very similar those used for the BSD operating system and the X Window System. MIT provides Kerberos in source form so that anyone who wishes to use it may look over the code for themselves and assure themselves that the code is trustworthy. In addition, for those who prefer to rely on a professionally supported product, Kerberos is available as a product from many different vendors.

The Security detail presentation has additional information on Kerberos on iSeries.

iSeries Access for Windows now provides support for both a 32-bit and 64-bit ODBC driver. The 64-bit ODBC driver is automatically installed along with the 32-bit ODBC driver when running under a 64-bit version of Windows. ODBC applications running in 64-bit versions of Windows will automatically use the appropriate ODBC driver, depending on what bit version the application was compiled for. For example, the 64-bit driver can only be used by a 64-bit application. The remainder of Access for Windows will continue to run in 32-bit mode on 64-bit hardware. Printer drivers are currently 16-bit and will not run on 64-bit hardware. Future releases targeted to support McKinley and/or AMD (Sledgehammer) 64-bit processors.

ODBC Driver and OLE DB Provider (requires V5R2 connection) gives you ROWID support, 64K SQL statement support and additional descriptor information. OLE DB can now support updatable cursors for the SQL dialect and is also thread safe.
iSeries Access for Windows now supports accessing multiple databases through Independent ASPs. To use Independent ASPs through ODBC, you need to set up your system, configure your ODBC DSN and then specify the RDB name that corresponds with the Independent ASP that you wish to connect to in the Server Tab. If no RDB name is specified, the default RDB name is determined from the job description of the user profile that is making the ODBC connection. By default, the driver uses the setting of the user profile for the user making the ODBC connection.

Silent Installation eliminates the need for any user interaction during the iSeries Access for Windows set up process. A response file provides all installation information so that no dialog boxes display while installing iSeries Access for Windows. New for V5R2, silent install now has a progress indicator. The Silent Install Indicator will be an icon in the task tray which will appear when a silent install is launched, and remain in the task tray as long as the install is executing. The Silent Install Indicator can be expanded to expose information regarding the install.

Customized install image on CD is good for remote, slower connections, and also a way to control what functions of Access for Windows can be installed by end users. You can start the tailored installation wizard from the iSeries Setup and Operations CD, or by navigating to the installation image directory, \QIBM\ProdData\Access\Windows\Install\Image, and entering CWBINIMG. Any tailored installation images are not updated when Program Temporary Fixes (PTFs) are applied to or removed from the iSeries server. You must re-create the installation image to get service pack updates or alternatively, you can combine the service pack directly with your existing tailored installation image.

As worldwide import/export laws preventing 128-bit encryption have been withdrawn, 56-bit SSL encryption (CE2) is no longer available. Only 128-bit SSL encryption will be supported. 128-bit encryption program (5722-CE3) will automatically migrate client PCs from 56-bit to 128-bit.
iSeries Access for Windows

Latest version of Personal Communications 5250 emulator - V5.5

- PC5250 has acquired Windows 2000 certification
- Improved NLV Support
- Ease of Use Support Enhancements

Database Access Enhancements

- New Spreadsheet formats - additional rows supported
- Support for uploading more than 256 columns of data to a database file
Notes: iSeries Access for Windows

5250
PC5250 version 5.5 of the Personal Communications 5250 emulator. Additional NLV support has been added for Hindi and Japanese code page 1390/1399. It now allows the paste of copied text across fields and lines without breaking in the middle of a word, or ending a line with an invalid word. The polarity sign, +/- sign, has been moved before the number when copy/pasting for consistency with other Windows applications. There are improved error messages for 'Display Confirmation' Records.

Database
Data Transfer now supports Lotus 123 Version 9 file format, 65536 rows, which is improved over 8192 rows in Lotus 123 Version 97. Prior to V5R2, Data Transfer would either not move the data into the spread sheet or the extra data would be dropped - depending on the file type. In V5R2 an additional spreadsheet is created hold the additional rows.

For example, the Excel limit is 65,000 plus rows. If the user tries to put in 80,000 rows, 65,000 would go into the first spreadsheet and 15,000 in the second spreadsheet. In the past, the extra 15,000 rows would be lost.

Also, with V5R2 Data Transfer can support uploading more than 256 columns of data to a database file.
iSeries Navigator

(packaged with iSeries Access for Windows, 5722-XE1)
iSeries Navigator

Takes advantage of users' existing GUI skills
Reduces need to learn OS/400 command interface
Helps keep IS shops running when new operations staff need to be hired

V5R1: Major enhancements
V5R2: Many enhancements
Notes: iSeries Navigator

The iSeries Navigator (Operations Navigator in previous releases) provides a familiar user interface for those experienced in using graphical interfaces. It is consistent with the other 'Windows Application Interface' and so new operations staff can be trained easily. It also decreases the need for users to learn the character-based interface. iSeries Navigator functionality includes system navigation, configuration, and planning capabilities and much more. Over 1600 commands have been added to the iSeries Navigator.

The iSeries Navigator online help gives you a lot of information on how to perform tasks in iSeries Navigator.
What the iSeries Navigator can do?

Administrator
- Manage OS/400 users and groups across the network
- Integrated xSeries (Netfinity) Servers - Manage Windows server users and groups, disk storage
- Create LPs and fixes, distribute and install

Operator
- DASD Management - Balancing, compression, manage ASPs, manage disk units
- Work Management - Active jobs, job queues, memory pools, subsystems
- GUI CL command prompter

Database Administrator/Programmer
- Database Navigator - pictorial representation of database objects and their relationships
- Generate SQL - reconstruct SQL statements used to create existing database objects (sometimes referred to as reverse engineering)
- SQL Visual Explain - for fine-tuning SQL statements
iSeries Navigator - New and Enhanced

New in V5R2

- Monitors for B2B Activity, File monitors
- Stand-alone Tape Devices - vary on/off, properties, format, display, print, etc.
- Wizards to create IP Version 6 (IPv6) configuration, interfaces and routes
- Users can create and manage their own servers via a wizard

Primary V5R2 Enhancements

- Database folder supports Multiple Databases and Database Transactions, SQL statement Assist, improved Visual Explain and Database Navigator
- Disk Management adds support for Parity Sets, enhanced Disk Pools, and new Taskpad items
- Integrated File System (IFS) more integrated with Disk Pools and other usability enhancements
- Synchronize time and QUTCOFFSET on V5R2 iSeries servers
**Notes: iSeries Navigator - New and Enhanced -1**

**B2B activity monitors:** If you have an application like Connect for iSeries, 5733-B2B, configured, you can use a B2B activity monitor to monitor your B2B transactions. You can view a graph of active transactions over time, and you can run commands automatically when thresholds are triggered. You can search for and display a specific transaction as well as view a bar graph of the detailed steps of that specific transaction. Supported added in V5R1 via Service Pack SI02795 (Feb 02).

**File monitors:** You can monitor for an action performed on a byte stream file, database file (table), and QHST history log. See the Performance presentation for more information.

**Handle Stand-alone Tape Devices:** From the iSeries Navigator you can now Vary on/off Tape resources (including Libraries) and also display Properties, Format, Duplicate, Display, Print and Eject cartridges.

**IP Version 6:** V5R2 supports both the older and widely used IPv4 and the emerging next generation Internet internet protocol - IPv6 on the iSeries. IPv6 has several capabilities over IPv4 but its primary purpose to support a much larger IP set of addresses than is possible with IPv4. Since IPv6 is an emerging standard (RFCs in a state of change), your iSeries can support both IPv4 and IPv6 when properly configured. To use the IPv6 function, you need to change your TCP/IP configuration by configuring a line that is dedicated to IPv6 which you can do on a 2838 or 2849 Ethernet adapter or on a configured tunnel line (virtual line). To configure IPv6 on the server, you must change the server's configuration using the IPv6 Configuration wizard in iSeries Navigator. For more details on IPv6 see the Communications presentation.

Define and manage your own servers: This support enables those with knowledge of their application implementation define jobs to be treated like IBM-provided servers, such as viewing and managing them as servers under Work Management.

**Synchronize time and QUTCOFFSET on V5R2 iSeries servers**
With Management Central you can select a new System Values option for a system or a system group to synchronize the time based on the "current time" of a model system. QUTCOFFSET from either the model system or the local system can be used. See the OS/400 presentation for more details.
Notes: iSeries Navigator - New and Enhanced -2

Database Navigator supports Multiple Databases and Transactions: Database Navigator, you can explore the complex relationships of your database objects using a graphical representation that presents the tables in your database, the relationships between tables, and indexes and constraints that are attached to tables. Database Navigator supports Multiple Databases and Transactions Independent disk pools now support libraries, each independent disk pool can be a unique database/schema, and the database folder shows all databases on system. Transactions are a set of computational tasks that must be completed as a single entity. You can view Transactions for a job, Job associated with a transaction, and Lock holders for an object and then transactions using a lock space.

Additionally the new SQL Assist function enables prompted building of SQL statements - much like the 5250 STRSQL interface has done for years. The iSeries Navigator support is greatly enhanced over the 5250 interface by in the way it supports the new SQL standards functions.

The interface to the Visual Explain "create a recommended index” function has been enhanced and a new Database Navigator supports Triggers and is much easier to use for a large number of related database objects.

The Database presentation contains more information.

Configuration and Service -> Hardware -> Disk Management adds support for Parity Sets, Independent Disk Pools (IASPs) , and new Taskpad items: The disk management functions of iSeries Navigator allow you to view and manipulate large disk configurations including the ability to view subsets of all disk units, view disk units in a physical and logical hierarchical layout, and sort the disk units by various criteria such as size, resource name, or associated controller. You can access wizards that provide streamlined disk maintenance procedures for installing disk units, creating and protecting disk pools, adding disk units, and replacing failed disk units. Another convenient feature is the Taskpad that is available with all disk management functions right at your fingertips.

Integrated File System (IFS) more integrated with Disk Pools and other usability enhancements: The IFS has added and enhanced information for the various ways to access the integrated file system. Whether you prefer the traditional iSeries interface or the drag and drop interface of your PC, you can access the integrated file system however you choose. The IFSRoot/dev interface has been enhanced to support the independent auxiliary storage pools (ASPs). The Independent ASP QSYS.LIB file system supports your library structure in independent ASPs you create and define. It provides access to database files and all of the other iSeries server object types that the library support manages. The IFS has added function and support for *TYPE2 directories in the "root" (/), QOpenSys, and user-defined file systems (UDFS). The *TYPE2 directory format is an enhancement of the original *TYPE1 directory format.

The Availability presentation has additional IASP information.
Primary V5R2 Enhancements continued

- Work Management now includes System Status, Output Queues
- Clusters - supports up to 4 nodes, can change, remove, add disk pools group
- Quality of Service (QoS) adds LDAP server support
- Packet Rules and VPN can be viewed, edited and disable with a text editor
- Software Management enhances Package/Product Definitions

- Windows Administration
  - Install, uninstall Windows operating system fixes, run Windows commands
  - Extended to new Windows Cluster support (full management performed by Windows Cluster support)

- LPAR - can create partitions for guest operating systems such as Linux

- General Usability enhancements
  - Menus have been reorganized and simplified, customized Taskpads, auto-refresh on all folders, include changes before opening folder, convert printer output to PDF (e-mail too!)
  - Key Adding a new connection
Notes: iSeries Navigator - New and Enhanced-2

Work Management: Core work management function support is now provided in iSeries Navigator. While not all work management functions are supported V5R2 provides the support needed for a typical system operator to control and manage the work on the system. In V5R2 you now have sub folders for Active Jobs, Subsystems, Server Jobs, Job Queues, Memory Pools, and Output Queues. For output queues you can see the files, manage the files on the queue including hold and release, and see writer information for any write- output queue assignment. You can drag files from one output queue to another.

The context menu for the Work Management folder now has a System Status function, similar to the 5250 Work with System Status (WRKSYSSTS) command in earlier releases.

You can also see threads for a specific job.

Clusters: The New Cluster wizard allows you to create and start a simple cluster. An iSeries cluster is a collection or group of one or more servers that work together as a single server. The iSeries clustering architecture supports up to 128 nodes in a cluster, however the iSeries Navigator interface supports up to four nodes in a cluster. This wizard will allow you to create a simple cluster consisting of one or two nodes. You can then add nodes, change node to communicate with cluster or change cluster version. There is new Switchable data (independent ASP) and support to remove/add disk pool to a Switchable hardware group.

Quality of Service (QoS) adds LDAP server support: QoS allows you to request network priority and bandwidth for TCP/IP applications. Packet priority is important to you if you send applications that need predictable and reliable results, such as multimedia. You can use the New Quality of Service Configuration wizard to begin policy configuration. This wizard asks you to define some start-up instructions for the different QoS parameters. The new QoS and LDAP integration may require use of a wizard to migrate QoS defined prior to V5R2.

Packet Rules and VPN can be viewed, edited and disable with a text editor: A virtual private network (VPN) allows your company to securely extend its private intranet over the existing framework of a public network, such as the Internet. The New Connection wizard helps you to easily create a virtual private network (VPN) for your organization. Answer the questions on each of the dialogs, and the wizard will create a VPN based on your specifications. You can edit packet rules file with a text editor and have the ability to disable filter rules and to view rules from different servers at the same time.
Software Management: The support for fixes inventory has been enhanced. You can select and deselect individual missing fixes and can choose to do a compare and update or only an update with the Compare and Update wizard. This enhancement allows you to update the target system directly from the model system without viewing the compare results. You can specify whether to collect fixes only when changes have occurred to the fixes data or to collect fixes even when no changes have occurred since the last collection.

Inventory collection now add network attributes, service contact information and service attributes. This information can be routed to IBM as part of its inventory information for your system.

Windows Administration: There is additional install and uninstall assistance for Windows OS fixes. A Windows Cluster Server can be managed as other Windows servers. Windows Cluster configured and fully managed from the Windows OS. Network Server Storage objects and Network Storage Server Description objects support parameters necessary for Windows Clustering. Full configuration and management is performed by the Windows Cluster management support.

You can also a run Windows operating system command from iSeries Navigator.

LPAR: iSeries Navigator contains a graphical wizard you can use to help you create logical partitions, easily configure and manage logical partitions; dynamically move processors, memory, interactive performance, and some I/O processors and shared processors with the new shared processor pool. With the new enhancements you can create a Linux partition and dynamically move processors.

The following foils provide a few window examples showing some of the new or enhanced functions.

The detail presentations on Availability, Database and Performance provide additional iSeries Navigator examples of new or enhanced interfaces and functions available through iSeries Navigator.
Add Connection: Changed interface example
Notes: Add Connection: Changed interface example

This window in this foil shows the changes to the "adding a connection" function:

The Add connection item is on a second level context menu.
The Signon options show a direct link to Kerberos support - to be used only if you have set up Kerberos on your iSeries.
Work Management: Output queues, system status examples
Notes: Output queues, system status examples

This foil illustrates two new Work Management folder-bases functions for V5R2:

Output queues:
Display and work with output queues on the system. With Basic Operations - Printer Output you can specify to look at all printer output on the system (not initially showing output queue information) or with - Printers, you can see the output queue associated with a printer.

System Status
The System Status context menu support provides a graphical and more flexible interface to the Work with System Status command information.
iSeries Access for Web

5722-XH2

the browser-based alternative...
What is iSeries Access for Web?

Using browsers and modernizing green screens

Customers just getting started with e-business

- You can help solve pressing business problems with the iSeries Access for Web and WebSphere Host Publisher

Use iSeries Access Family to ease customers into e-business and WebSphere

- iSeries Access for Web can be the instant 'window' to the iSeries with its completely customizable front page capability besides providing tremendous function and flexibility
- Host Publisher can be the way to integrate existing host applications within industry-standard Web pages or WebSphere applications so it can be viewed in a browser
What is iSeries Access for Web?

Provides access to iSeries through a browser

- Can access database, integrated file system, printers, output queues
- Can run batch commands, send/receive messages, work with jobs, create and send .pdf and .xml

It has the following advantages:

- Is server based, implemented using Java Servlet technology
- Is lightweight, requiring only a browser on the client, no applets installed on desktop
- No configuration required at desktop
- Uses industry standard protocols - HTTP (port 80), HTTPS (port 443) and HTML
Notes: What is iSeries Access for Web?

With the proliferation of the Internet, businesses are quickly moving to embrace these technologies through e-business. Since almost all desktop operating systems come with web browsers, users want an easy way to work with their business critical OS/400 information and resources through this simple user interface that has been designed to be Internet friendly. Users also are looking for hassle-free access through firewalls. They want access from a variety of platforms, and do no want special client code that has to be installed and maintained on their desktop.

V5R2 iSeries Access for Web (5722-XH2) is the latest offering in the iSeries Access (5722-XW1) family of products. It offers web browser based access to iSeries servers. iSeries Access for Web enables end users to leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the client desktop through a web browser.

iSeries Access for Web must be configured with a web application server and an HTTP server

Pure Java servlet-based access: iSeries Access for Web is a set of servlets that run on iSeries servers as extensions to the HTTP server. It provides access to common user functions such as database, file, print, jobs, 5250 sessions, and messages on the iSeries server. It enables easy access to DB2 Universal Database for iSeries information through built-in SQL requests and has a simple interface to work with information in the Integrated File System, including file download and view capabilities.

Industry-standard protocol: iSeries Access for Web uses the industry standard HTTP and HTTPS protocols, and does not use any proprietary TCP/IP ports and protocols. Firewall issues are much more manageable as a result.

Lightweight Access: The intent of iSeries Access for Web is lightweight and casual access to iSeries servers from a Web browser. Most of the iSeries Access for Web functions have minimal browser requirements and would work with almost any browser on any platform.

Server-based: iSeries Access for Web is entirely server based. There is no client code to install and manage. You simply install and configure it on the server and access it from any Web browser.

Fully customizable: iSeries Access for Web functionality can be restricted for users and groups of users. iSeries Access for Web is fully customizable. Object level security is used to validate access to OS/400 resources. Users and groups can only access resources to which they are authorized. What users see when connecting to the iSeries server is fully customizable by the OS/400 Administrator

Host Publisher and Host Publisher Studio have been bundled with the 5722-XH2 iSeries Access for Web product to provide a complete web-to-host integration solution.
Example of iSeries Access for the Web Homepage

You can

- Integrate iSeries Access for Web functions with your own web applications.
- Use Host Publisher or the WebFacing Tool to build web interfaces to your own existing 5250 applications.
- Customize iSeries Access for Web through templates and user profile settings.
- Customize what columns are displayed in lists, what actions can be taken, what functions appear in the navigation bar, and other settings.
Print functions

Printer output
List, preview, and manage printer output for current user

Printers
List and manage system printers

Internet printers
List and manage Internet (IPP) printers

Printer shares
List and manage NetServer printer shares

Output queues
List, manage, and view status of output queues

<table>
<thead>
<tr>
<th>File Name</th>
<th>User Data</th>
<th>Creation Date/Time</th>
<th>Pages Per Copy</th>
<th>Copies</th>
<th>Status</th>
<th>Action</th>
<th>Preview</th>
</tr>
</thead>
<tbody>
<tr>
<td>QSYSPEKET</td>
<td></td>
<td>5/2/02 1:04 PM</td>
<td>3</td>
<td>1</td>
<td>Ready</td>
<td>Hold</td>
<td>Print Next Delete PDF GIF TIFF PCL AFP Viewer</td>
</tr>
</tbody>
</table>
Notes: Print functions

Printer output
- List, preview and manage printer output on your iSeries server.
- Hold, release, or cause a spooled file to be printed next.
- View, mail, or send printer output in PDF format.
- Preview SCS and AFP printer output in GIF, TIFF, PCL, and AFP formats.
- View AFP output with the AFP viewer plug-in.

Printers
- List and manage printers on your iSeries server.
- View printer and status information.
- Vary on and vary off the printer device.
- List, preview, and manage printer output for a printer from the printer list.
- View and answer messages waiting on the writer job.
- Manage the writer job associated with the printer using hold, release, start, and stop functions.

Internet printers
- List Internet printers on your iSeries server.
- View configuration information and status from an Internet printer list.
- Access and manage printer output from the Internet printer list and the iSeries printer defined by the Internet printer.

Printer shares
- List printer shares, complete with printer share information and status, on your iSeries server.
- Access and manage printer output from a printer share list.

Output queues
- List, manage, and view the status of output queues on your iSeries server.
- Hold and release an output queue from the output queue list.
- List, preview, and manage printer output in an output queue from the output queue list.
Message functions

Display messages
Display and manage messages for current user

Send message
Send messages to users and message queues

Operator messages
Display and answer messages in system operator
message queue (QSYSOPR)

Message queues
List message queues and display/manage messages

<table>
<thead>
<tr>
<th>Message ID</th>
<th>Description</th>
<th>Severity</th>
<th>Time</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPF2456</td>
<td>Log version QHST02121A in QSYS closed and should be saved</td>
<td>Informational</td>
<td>5/1/02 10:06 PM</td>
<td>Delete</td>
</tr>
<tr>
<td>CPC1E1D</td>
<td>Cleanup has completed.</td>
<td>Completion</td>
<td>5/1/02 10:00 PM</td>
<td>Delete</td>
</tr>
</tbody>
</table>
Notes: Message functions

Messages
- Display messages: Display, answer, and manage messages in the message queue for the logged on user.
- Send message: Send a message to users and message queues.
- Operator messages: Display, answer, and manage messages in the system operator message queue.

Message queues
- List message queues on the iSeries server.
- Select, display, and manage messages in message queues.
### Jobs

List and manage jobs for the current user

### Server jobs

List and manage server jobs that are started on behalf of the current user

<table>
<thead>
<tr>
<th>Job</th>
<th>Detailed Status</th>
<th>Server</th>
<th>Run</th>
<th>Thread Count</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>QZRCSRVS</td>
<td>Running</td>
<td>OSI400 TCP Remote Command Server</td>
<td>20</td>
<td>1</td>
<td>Hold, Delete/End, Job Log, Properties</td>
</tr>
<tr>
<td>QZRCSRVS</td>
<td>Waiting for time interval</td>
<td>OSI400 TCP Remote Command Server</td>
<td>20</td>
<td>1</td>
<td>Hold, Delete/End, Job Log, Properties</td>
</tr>
</tbody>
</table>
Notes: Jobs functions

Jobs
- List and manage user jobs on your iSeries server.
- View job logs for active jobs.
- View printer output for completed jobs.

Server jobs
- List and manage server jobs on your iSeries server.
- View job logs for server jobs.
**5250 Sessions**

**Active sessions**
List active 5250 user interface sessions

**Configured sessions**
List configured 5250 user interface sessions

**Start session**
Start a 5250 user interface session

```
Server:
- Server: servename.ibm.com
- Port: 23
- Code page: 37

Workstation ID
- Use user ID
- Specify workstation ID: ITSOF212
- Avoid duplicates for this user
- Avoid duplicates with other users

Start Session
```

IBM Corporation

ibm.com/eserver/iseries
Database functions

Tables
View and manage tables using SQL

My requests
View and manage previously saved SQL requests

Run SQL
Dynamically run SQL and manage output

Copy data to table
Upload data from PC to iSeries

Import request
Import Data Transfer requests

SQL Wizard
SELECT *
FROM QIWS. QCUSTCĐT

Table
Specify a table name in the format: schema.table
QIWS. QCUSTCĐT Find...
Notes: Database functions

Tables
- View a list of database tables on your iSeries server.
- Perform actions on these tables without having knowledge of SQL and its syntax.
- View the contents of a table in a paged list, using the Quick view action.
- Add and update records in a table using the Insert and Update actions.
- Create your own customized SQL request for a table using the Run SQL action.
- Create your own customized copy data request for a table using the Copy data to table action.

My requests
- View a list of previously saved requests.
- Run or Edit requests from this list.
- Manage lists using the Copy, Delete, and Rename actions
- Create and manage shortcuts to requests

Run SQL
- Run SQL statements dynamically.
- View output as a paged list or in a popular file format, like Microsoft Excel or Lotus 1-2-3. (Output format depends on how you have your browser configured and whether the browser can locate a plug-in for the output type you choose.)
- Customize how data is returned by setting options specific to the output type.
- Build SELECT statements using an SQL Wizard.
- Save requests for repeated use.
Notes: Database functions -2

Copy data to table
- Copy existing data files from your PC to a database table on your iSeries server.
- These data files can be in many popular file formats, including Microsoft Excel and Lotus 1-2-3.
- Replace the contents of a table or add data to an existing table.
- Create a new database table based on the contents of a workstation file.
- Save requests for repeated use.

Import request
- Import Client Access Data Transfer upload and download requests into iSeries Access for Web copy data and SQL requests.
- Imported requests are automatically converted to iSeries Access for Web format.
- Run and edit converted requests on your iSeries server just like other copy data and SQL requests.
Files functions

Browse files
Navigate and browse directories in the iSeries IFS

File shares
View NetServer file shares
**Notes: Files functions**

**Browse files**
- Navigate and browse the directories located on your iSeries server integrated file system.
- View and download files in a file manager like interface.

**File shares**
- View a list of the iSeries NetServer file shares.
- Browse the NetServer file shares and navigate the directories from the file share list.
- View and download files in a file manager like interface.
**Commands functions**

My commands
List and use previously saved commands

<table>
<thead>
<tr>
<th>Name</th>
<th>Command</th>
<th>Output</th>
<th>Action</th>
<th>Last access</th>
</tr>
</thead>
<tbody>
<tr>
<td>dspfwrscl</td>
<td>dspfwrscl OUTPUT(*PRINT) My folder</td>
<td>Run Prompt Retrieve Delete</td>
<td>5/2/02 1:05 PM</td>
<td></td>
</tr>
<tr>
<td>PTF List</td>
<td>dspptf OUTPUT(*PRINT) My folder</td>
<td>Run Prompt Retrieve Delete</td>
<td>5/2/02 1:06 PM</td>
<td></td>
</tr>
</tbody>
</table>

Run command
Run CL commands on the iSeries

```
Command: dspfd OUTPUT(*PRINT) FILE(qiws/qcustedit)
Output: My folder
```

Search
Search for CL commands

```
Command: 
Library: *LIBL
Search by:
- Command name
- Text description
```
**Notes: Commands functions**

You can access batch level iSeries commands on your iSeries server with iSeries Access for Web:

- **My commands**: List and use previously saved commands.
- **Run command**: Run a CL command on your iSeries server.
- **Search**: Search for CL commands on your iSeries server.
Customize

Preferences
Update preference settings

User profiles
Work with user profiles and edit policy settings

Group profiles
Work with group user profiles and edit policy settings

Selected profile
Work with specific user profile and edit policy settings

<table>
<thead>
<tr>
<th>Profile</th>
<th>Description</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>*PUBLIC</td>
<td>Default settings for all users</td>
<td>Edit</td>
</tr>
<tr>
<td>LOCKDOWN</td>
<td>Restricted group until further testing is complete</td>
<td>Edit</td>
</tr>
</tbody>
</table>
Notes: Customize

You can customize access preference and policy settings on your iSeries server with iSeries Access for Web.

- **Preferences**
  - Update your preference settings.
  - Select columns to display when viewing list output.
  - Show or hide navigation tabs.
  - Adjust the number of items to display per page.

- **User profiles**
  - Work with user profiles on your iSeries server.
  - Edit policy settings for user profiles.
  - Copy or reset policy settings for user profiles.

- **Group profiles**
  - Work with group profiles on your iSeries server.
  - Edit policy settings for group profiles.
  - Copy or reset policy settings for group profiles.
  - Administer default policy settings for all users.

- **Selected profile**
  - Work with specific user or group profile on your iSeries server.
  - Edit policy settings for the specified profile.
Other functions

Change password
Change the password for the current user profile

Connection pool
Change connection pool settings

Trace
Change trace settings for iSeries Access for Web

About
Display information about iSeries Access for Web

Current password: 
New password: 
New password (to verify): 

Property | Value | Description
---|---|---
Cleanup interval: | 5 minutes | Specify how often to clean up connections.
Connections per user: | No maximum | Maximum number of concurrent connections allowed per user.
**Notes: Other functions**

This foils lists a miscellaneous set of functions also available through iSeries Access for Web.

- **Change password:** Change your password on your iSeries server.
- **Connection pool:** Change connection pool settings for iSeries Access for Web.
- **Trace:** Change trace settings for iSeries Access for Web.
- **About:** The options displayed under this tab are useful for problem determination.
  - Display information about iSeries Access for Web
  - Includes iSeries Access for Web product information, properties, connection information, and system properties
  - Includes links to display IBM Licensed Program products and PTF information
  - Includes link to display iSeries system values
V5R2 iSeries Access for the Web enhancements
Earlier in this presentation we listed the V5R2 enhancements. The next set of foils provide additional details on selected topics:

- My Folder
- PDF format output
- Jobs
- 5250

Refer to the IBM Redbook *iSeries Access for Web V5R2 and WebSphere Host Publisher V4.0*, SG24-6804 (to be published later in 2002) for details on all new features.
Run SQL example:
- Select all records
- Output to be in Lotus 1-2-3 format
- Output to be placed in a personal folder
**Notes: My Folder**

My Folder is:
- A container that resides on the iSeries server (in the IFS)
- One folder is created for each user
- Can only be directly accessed by the owner

My Folder can be used to receive asynchronous results from long running tasks and to send results to another user.

My Folder is linked to from the Navigation tabs. You can do the following functions:
- Open
- Delete
- Rename
- Mail content to another user

**Item notification**
Administrators have the ability to set a policy (at the group level) or preferences (at the user level) to notify the arrival of new items via e-mail. This requires e-mail support (SMTP) to be set up on the iSeries server.

Consider this example:
Run an SQL statement and request the output to be placed in Lotus 1-2-3 format in My Folder (this will be appropriate for long running SQL jobs).
### My Folder notification example

#### SQL output is placed in My Folder

Notification of completion sent to My Folder

---

**iSeries Access for Web**

**My Folder**

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
<th>From</th>
<th>Date/Time</th>
<th>Size</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status [SQL output in WK.1]</td>
<td>Unopened</td>
<td>itso</td>
<td>4/11/02 3:16 PM</td>
<td>192</td>
<td><strong>Open</strong> <strong>Delete</strong> <strong>Rename</strong> <strong>Mark opened</strong></td>
</tr>
<tr>
<td>SQL output in WK.1</td>
<td>Unopened</td>
<td>itso</td>
<td>4/11/02 3:16 PM</td>
<td>2422</td>
<td><strong>Open</strong> <strong>Delete</strong> <strong>Rename</strong> <strong>Mark opened</strong></td>
</tr>
<tr>
<td>dspsrsrf</td>
<td>Opened</td>
<td>itso</td>
<td>4/10/02 5:59 PM</td>
<td>76</td>
<td><strong>Open</strong> <strong>Delete</strong> <strong>Rename</strong> <strong>Mark unopened</strong></td>
</tr>
<tr>
<td>dspsrsrf</td>
<td>Opened</td>
<td>itso</td>
<td>4/10/02 5:53 PM</td>
<td>53</td>
<td><strong>Open</strong> <strong>Delete</strong> <strong>Rename</strong> <strong>Mark unopened</strong></td>
</tr>
<tr>
<td>wrkuspsrf</td>
<td>Opened</td>
<td>itso</td>
<td>4/10/02 5:52 PM</td>
<td>53</td>
<td><strong>Open</strong> <strong>Delete</strong> <strong>Rename</strong> <strong>Mark unopened</strong></td>
</tr>
</tbody>
</table>

---

**Related Links:**
- iSeries Access for Web
- Client Access
- Operations Navigator
- eServer Information
Notes: My Folder notification example

The My Folder icon is updated when new files are added to the folder.

**IFS paths for My Folder**

**Note:** The path depends on the application server in use and the user profile being used. If there are no files in My Folder for a particular user, the directory does not appear in the IFS folder structure. Once the folder is created, it remains in the IFS when emptied.

My Folder path for WebSphere Application Server 4.0 Advanced Edition environment

```
/QIBM/UserData/Access/Web2/was40adv/default/users/<userid>/folder/
```

My Folder path for WebSphere Application Server 4.0 Advanced Single Server Edition environment

```
/QIBM/UserData/Access/Web2/was40sng/default/users/<userid>/folder/
```

My Folder path for Apache Software Foundation (ASF) Tomcat Application Server environment

```
/QIBM/UserData/Access/Web2/asftomcat/tomcat_server/users/<userid>/folder/
```
PDF format option is included as an Action
- Uses Infoprint Server to generate a PDF if software is available
- Uses basic transform to PDF if the Infoprint Server is not installed
Notes: PDF Format functions

The Print support allows users to view, mail, or send printer output in PDF format. The most advanced support uses IBM's Infoprint Server (5722-IP1) Licensed Program Product. IBM Infoprint Server is a separately purchasable LPP.

If IBM Infoprint Server is not currently installed on the server, a more basic approach of embedding PNG page images into a PDF document is used.

PDF output is also selectable as an output type from the Database - Run SQL screen. Selecting the settings for the PDF output type allows the user to control most aspects of the output format.
### Jobs for itso

<table>
<thead>
<tr>
<th>Job</th>
<th>Status</th>
<th>Type</th>
<th>Entered System</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITSO1</td>
<td>Running</td>
<td>Interactive</td>
<td>4/16/02 12:03:41 PM</td>
<td>Hold Delete/End Job Log Printer Output Properties</td>
</tr>
<tr>
<td>ITSO2</td>
<td>Running</td>
<td>Interactive</td>
<td>4/16/02 12:03:01 PM</td>
<td></td>
</tr>
<tr>
<td>QDFTJOBD</td>
<td>Scheduled on job queue</td>
<td>Batch</td>
<td>4/16/02 12:07:03 PM</td>
<td></td>
</tr>
</tbody>
</table>

#### Jobs preferences

- **Job filter**
- **List columns**
- **Sort order**
Notes: Jobs

V5R1 Operations Navigator added new, powerful work management functions. With V5R2 iSeries Access for the web adds a lot of those Operations Navigator/iSeries Navigator functions.

Jobs
Users can list and manage their jobs on the iSeries server. View job logs for active jobs. View printer output for completed jobs.

Server jobs
Users can list, manage, or view job logs of server jobs.

Users can perform the following actions on jobs listed for an individual user profile:

- Hold: Hold a job (delay processing)
- Delete/End: End or Delete a job
- Joblog: View the joblog for a given session
- Printer output: List and view the output associated with this user profile
- Properties: Review the job properties on the iSeries

Users can select the range of jobs, the attributes to be displayed, and the sort order to be displayed for both user and server jobs:

- User job list filter
- User job list columns
- User job log sort order
- User job log columns
- Server job list columns
- Server job log sort order
- Server job log columns
5250 functions - the web interface

iSeries Access for Web

MAIN

SELECT ONE OF THE FOLLOWING:

1. USER TASKS
2. OFFICE TASKS
3. GENERAL SYSTEM TASKS
4. FILES, LIBRARIES, AND FOLDERS
5. PROGRAMMING
6. COMMUNICATIONS
7. DEFINE OR CHANGE THE SYSTEM
8. PROBLEM HANDLING
9. DISPLAY A MENU
10. INFORMATION ASSISTANT OPTIONS
11. CLIENT ACCESS/400 TASKS

00. SIGN OFF

SELECTION OR COMMAND

F3=EXIT    F4=PROMPT    F9=RETRIEVE    F12=CANCEL    F13=INFORMATION ASS

F23=SET INITIAL MENU

(C) COPYRIGHT IBM CORP. 1980, 2000.

37          MW

Attention    Refresh Screen    Field Exit    Page Up    Enter
System Request    Stop Session    Reset    Page Down
Notes: 5250 functions - the web interface

iSeries Access for Web V5R2 includes a new native 5250 interface. The 5250 interface is aimed at users who:

- Access the system infrequently
- Are used to browse response times

  - The performance of the host component of iSeries Access for Web depends on the availability of system resources.
  - A component of the overall response time at the Web browser is determined by network speeds and loads.

Users who require a full function 5250 emulation session or require frequent, long-term use of a green screen should consider using a full function emulator such as:

- iSeries Access for Windows (5722-XE1)
- Personal Communications

The native 5250 interface included with iSeries Access for Web may be configured in one of two views:

- Web view
- Traditional view

The view may be toggled between the two options while using the 5250 interface session. The sessions may be pre-configured and started in a predefined manner by starting a session from a saved profile.

5250 function keys are enabled as buttons on the Web browser.

iSeries Access for Web 5250 sessions have 132-column capability.
5250 Interface details: Traditional view

iSeries Access for Web

MAIN

SELECT ONE OF THE FOLLOWING:

1. USER TASKS
2. OFFICE TASKS
3. GENERAL SYSTEM TASKS
4. FILES, LIBRARIES, AND FOLDERS
5. PROGRAMMING
6. COMMUNICATIONS
7. DEFINE OR CHANGE THE SYSTEM
8. PROBLEM HANDLING
9. DISPLAY A MENU
10. INFORMATION ASSISTANT OPTIONS
11. CLIENT ACCESS/400 TASKS

90. SIGN OFF

SELECTION OR COMMAND

F3=EXIT  F4=PROMPT  F9=RETRIEVE  F12=CANCEL  F13=INFORMATION ASSISTANT
F23=SET INITIAL MENU

(C) COPYRIGHT IBM CORP. 1980, 2000.
Notes: 5250 Interface details: Traditional view

This shows the 5250 "traditional view" (close to the actual 5250 screen and keyboard) which can display the available 5250 function keys as browser buttons.
Controlling the 5250 interface settings

Active Session Settings

**General**
Session:
Default view: Web
☑ Enable advanced JavaScript functions for Internet Explorer

**Server**
Server: SYSTEMA.ibm.com
Port: 23
Code page: 37

**Workstation ID**
Workstation ID:
Use user ID: No
Specify workstation ID: Yes
Avoid duplicates for this user: No
Avoid duplicates with other users: Yes

**View**

<table>
<thead>
<tr>
<th>Web</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ Show navigation bar</td>
<td>☑ Show navigation bar</td>
</tr>
<tr>
<td>□ Display text using fixed width font</td>
<td>☑ Display text using fixed width font</td>
</tr>
<tr>
<td>☑ Enable &quot;More...&quot; as button</td>
<td>☑ Enable &quot;More...&quot; as button</td>
</tr>
<tr>
<td>☑ Enable menu items as links</td>
<td>□ Enable menu items as links</td>
</tr>
<tr>
<td>□ Show function key bar</td>
<td>☑ Show function key bar</td>
</tr>
</tbody>
</table>

On-line help
Notes: Controlling the 5250 interface settings

The 5250 interface sessions are configurable. The following options are available:

- Workstation ID
- Foreground color
- Background color
- Show navigation bar
- Display text using fixed width font
- Enable "More..." as button
- Enable menu items as links
- Show function key bar
- Enable macros
- Enable cursor positioning
- Enable message text line as help link
- Enable active function keys as buttons
- Show function key text (Fxx=) on buttons
5250 Synchronization

Displayed page did not match active session state. Input was discarded and screen was refreshed.

SELECT ONE OF THE FOLLOWING:

MANUAL INSTALL
1. INSTALL ALL

PREPARATION
2. PREPARE FOR INSTALL

LICENSED PROGRAMS
10. DISPLAY INSTALLED LICENSED PROGRAMS
11. INSTALL LICENSED PROGRAMS
12. DELETE LICENSED PROGRAMS
13. SAVE LICENSED PROGRAMS

Avoid using the browser Back button without using the Refresh Screen button
**Notes: 5250 Synchronization**

iSeries Access for Web may encounter situations where the Web browser display does not match the current state of the 5250 session. There are a few different scenarios that can cause a loss of synchronization between the 5250 session and the Web browser:

- Using the browser **Back** button
- Receiving a break message
- Running a program which automatically updates the display
- A session timing out

A message is posted to the browser when the next action is attempted on the 5250 session. The text of the message is:

"**Displayed page did not match active session state. Input was discarded and screen was refreshed.**"

In all cases, the **Refresh Screen** button in the 5250 user interface keypad should be used refresh the browser view of the 5250 session. This is not intended to discourage users from navigating to other URLs while using a 5250 session. iSeries Access for Web gives the user an easy means of re-establishing synchronization. An alternate method is to use the **Reconnect** option on the Active Sessions display.

The **workstation ID** identifies the device name used in the 5250 interface session. The maximum length of this value is ten characters. Additional characters are truncated. If a workstation device name is specified, system value QAUTOVRT must be set to 1 or the device must be manually created. If no workstation ID is specified, a system created virtual device is assigned. The 5250 interface creates a model 3477 device type by default.

**Cursor sensitivity:** The cursor may be positioned within the 5250 session for the following functions:

- When prompting a command, the F1 key displays help for a parameter if the cursor is positioned on a parameter name.
- When prompting a command, the F4 key displays possible values for a parameter if the cursor is positioned in the input area for a parameter.
- If the cursor is positioned on the command line, the F9 key retrieves previously run commands.
**iSeries Access for Web - Requirements**

**iSeries Access for Web (V5R1, 5722-XH1)**

- Available 9/28/2001, English-only
- Runs on WebSphere Application Server 3.5
  - Runs on OS/400 V4R5 and V5R1
- Can run one instance of iSeries Access for Web on WAS 3.5

**iSeries Access for Web (V5R2, 5722-XH2)**

- Fully translated, including DBCS NLVs
- Runs on WebSphere Application (Advanced and Single) Server 4.0 and IBM HTTP Server with the "Tomcat" plug-in from the Apache Software Foundation (ASF)
  - Runs on OS/400 V5R1 and V5R2
- Can be configured to run with more than one web application server and can run concurrently.
  - WAS Advanced 4.0, WAS Single Server 4.0, and ASF Tomcat can all be installed, configured, and running on an iSeries server concurrently
  - iSeries Access for Web V5R1 (5722-XH1) and V5R2 (5722-XH2) can be installed and run on the same iSeries server concurrently, and V5R2 (5722-XH2) can be configured to run in more than one WebSphere administrative instance concurrently.
WebSphere Host Publisher V4.0
What is WebSphere Host Publisher?

Host Publisher is a solution for integrating existing business critical applications with Web data

- Presents data from back-end sources on web pages
- Easily integrates existing host applications within industry-standard Web pages or WebSphere applications
- Supports 3270, 5250, VT, and JDBC back-end data sources
- Shields user from data source
Notes: What is WebSphere Host Publisher?

Most businesses today share similar challenges in attempting to move to an e-business environment in order to stay competitive or gain a competitive advantage. To do this more effectively they need to leverage the investment they have in existing applications and data, and they need to reduce the cost of implementing web applications by extending these existing applications to new web users. WebSphere Host Publisher is integrated with iSeries Access for Web. It enables programmers to replace traditional green screens with the look and feel of the Web and these applications can then be accessed from any standard Web browser.

Host Publisher allows you to integrate multiple sources of data, including host and database applications, into a single Web page with no change to the back end applications.

Host Publisher Studio provides the ability to:
- Modernize existing 5250 applications - selected parts or entire application
- Modernize existing host Java applications - selected parts or entire application
- Create database applications

WebSphere Host Publisher V3.5 (5648-E25)
- Available since 9/28/2001, 11 languages
- Runs on WebSphere Application Server 3.5
  - Runs on OS/400 V4R5 and V5R1
- Can run one instance of WebSphere Host Publisher on WAS 3.5

WebSphere Host Publisher V4.0
- Fully translated, including DBCS NLVs
- Runs on WebSphere Application (Advanced and Single) Server 4.0
- Runs on OS/400 V5R1 and V5R2
- Can run only one instance of WebSphere Host Publisher
  - Can run with WAS 4.0 Advanced or Single Server
  - Cannot run with WebSphere Host Publisher V3.5 and V4.0 in same system partition.

Host Publisher V4.0 must be configured with a web application server and an HTTP server. Use the DSPSFWRSC command to display the status of the Host Publisher Server component (5724-B81). Host Publisher does not display in the GO LICPGM list of installed licensed programs.
## Host Publisher: System Requirements

### Hardware requirements
- Processor/memory/disk
- Refer to notes *

### Software requirements

**OS/400**

<table>
<thead>
<tr>
<th>Version</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>V4R5</td>
<td>V5R1</td>
<td>V5R2</td>
</tr>
</tbody>
</table>

**Product** | **Option** | **Description**
---|---|---
SS1 | 3 | Extended Base Support
SS1 | 12 | Host Servers
SS1 | 30 | Qshell Interpreter
SS1 | 34 | Digital Certificate Manager
JV1 | Base | Java Developers Kit
JV1 | 3 | JDK 1.2
JV1 | 5 | JDK 1.3
JC1 | Base | Toolbox for Java
TC1 | Base | TCP/IP Connectivity Utilities
5724-B81 | Base | Host Publisher Server
Notes: Host Publisher: System Requirements

Hardware requirements*
A iSeries server requires a minimum hardware configuration to effectively run Host Publisher server. This includes sufficient disk capacity and main storage to run the software, as well as sufficient processing power to provide adequate system performance. The minimum configuration is:

- AS/400 Model 170 F/C2292 (220 CPW) for servlets and JSPs or F/C2385 (460 CPW) for servlets, JSPs, and EJBs
- AS/400 Model 270 F/C2061 (240 CPW) for servlets and JSPs or F/C2062 (420 CPW) for servlets, JSPs, and EJBs
- iSeries Model 270 F/C2250 (370 CPW) for servlets and JSPs or F/C2252 (950 CPW) for servlets, JSPs, and EJBs
- iSeries Model 820 F/C2395 (370 CPW) for servlets and JSPs or F/C2396 (950 CPW) for servlets, JSPs, and EJBs
- 1 GB of main storage (recommended)
- 170 MB of disk space in addition to space required for all other software and data

The models listed are considered a minimum requirement due to the integration with the WebSphere and Java environments. Ensure that sufficient disk arms are configured for adequate performance.

Software requirements
The following Licensed Program Products are required to run Host Publisher V4.0:

- OS/400 V4R5 or later
- OS/400 (5722-SS1): Extended Base Support, Host Servers, Qshell Interpreter (options 3, 12, and 30)
- Java Developer Kit (5722-JV1): Options *Base, 3, and 5)
- IBM Toolbox for Java (5722-JC1)
- TCP/IP Connectivity Utilities (5722-TC1)
- IBM HTTP Server (5722-DG1): This provides the original and powered by Apache HTTP servers
- IBM WebSphere Application Server V4.0: Advanced Edition (5733-WA4 ) or Single Server Edition (5733-WS4)
- If the SSL protocol needs to run between the browser and the iSeries for security purposes, the following software should be installed:
  - OS/400 Digital Certificate Manager ( 5722-SS1 option 34)
  - IBM Cryptographic Access Provider
    - 56-bit encryption (5722-AC2)
    - 128-bit encryption 5722-AC3)

Use the DSPSFWRSC command to display the status of the Host Publisher Server component (5724-B81). Host Publisher does not display in the GO LICPGM list of installed licensed programs.
Host Publisher and required servers

Host Publisher V4.0 must be configured with a **Web application server** and an **HTTP server**

<table>
<thead>
<tr>
<th></th>
<th>WebSphere Application Server 4.0 Advanced Edition</th>
<th>WebSphere Application Server 4.0 Advanced Single Server Edition</th>
<th>ASF Tomcat</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBM HTTP Server (original)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>IBM HTTP Server (powered by Apache)</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Lotus Domino HTTP Server</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Notes: Host Publisher and required servers

Host Publisher V4.0 must be configured with a Web application server and an HTTP server.

The table shows the supported combinations of servers on the iSeries. The following list shows the licensed programs IDs.

- WebSphere Application Server 4.0 Advanced Edition (5733-WA4)
- WebSphere Application Server 4.0 Advanced Single Server Edition (5733-WS4)
- ASF Tomcat (5722-DG1)
- IBM HTTP Server (original) (5722-DG1)
- IBM HTTP Server (powered by Apache) (5722-DG1)
- Lotus Domino R5.0.x (5769-LNT)
- Lotus Domino R6.0 (5733-LN6)

The HTTP server supplied with Domino R5.0.5 and later versions may be configured with a WebSphere administrative server to enable Host Publisher V4.0.

The IBM strategic Web application server is WebSphere Application Server. The latest version of WebSphere Application Server is Version 4 and it includes two editions for iSeries customers: WebSphere Application Server Advanced Single Server Edition and WebSphere Server Advanced Edition. These two editions of WebSphere Application Server V4 support Servlets, JavaServer Pages, Enterprise JavaBeans, and more. Customers who require a robust and scalable Web application server will select WebSphere Application Server.

ASF Tomcat is offered as a way for iSeries customers to "get started" with Java server-side components and Web application serving. Customers should select WebSphere Application Server when they need to deploy e-business solutions that are J2EE compliant, provide the most function and deliver the highest levels of reliability, scalability and security. ASF Tomcat provides less function and capabilities compared to the IBM WebSphere Application Server. For example, ASF Tomcat does not support Enterprise JavaBeans, it is not J2EE compliant, nor does it provide Domino integration. For more information, see:

WebSphere Host Publisher concept

Merge two or more existing applications into a single composite web page
Using Host Publisher Studio tool for application development significantly reduces the need for programming, as changes to the existing legacy applications themselves are not required.

Support for non-Java enabled clients, or HTML delivery, provides the broadest possible reach to new web users.

Maximum ease of use is delivered by Host Publishers composite application capability. The ability for Host Publisher in response to a single request can access multiple different databases, pull data from each one, and create a single integrated web page for the end web users. The fact that multiple different databases were involved is completely transparent to the web user.

Host Publisher is tightly integrated with the WebSphere application server.

Host Publisher provides the enterprise-class security, scalability, and availability for customers e-business applications.
Host Publisher Components

Development Environment

Runtime Environment

Runtime Infrastructure

Host Publisher Studio
Win98, WinNT, Win2000, WinME, WinXP,

Host Publisher Server
iSeries

IBM WebSphere web application server
Notes: Host Publisher Components

The main components to run Host Publisher are listed below.

Development Environment
- Creates reusable Host Integration Objects that encapsulate host interactions and data retrieval
- Generates fully customizable Web pages
- Uses task oriented, graphical user interface

Runtime Environment
- Provides session management, license monitoring, run-time administration, load balancing and log and trace management
- Supports SSL encryption and DES encrypted passwords
- Supports integration with other IBM connectors

Runtime Infrastructure
- Provides advanced runtime environment for Host Publisher Server and Host Publisher applications.
- Prerequisite but not a part of Host Publisher.

Note: The XML Gateway is no longer integrated as the 5250 interface for iSeries Access for Web, as iSeries Access for Web V5R2 provides an integrated 5250 interface. The XML Gateway, however, is required for Host Publisher Host Access.

The XML Gateway may still be configured with iSeries Access for Web, as a 5250 interface. Refer to the following publications for details of the installation of the Host Publisher Server and configuring the XML Gateway with iSeries Access for Web.

- Redbook *iSeries Access for Web V5R2 and WebSphere Host Publisher V4.0*, SG24-6804
- IBM WebSphere Host Publisher V4.0
- *IBM WebSphere Host Publisher Planning and Installation Guide*, SC31-8734
- *IBM WebSphere Host Publisher Administration and Users Guide*, GC31-8728

This is achieved by using the -iwa parameter on the cfgHPsvr command. This parameter allows Host Publisher to obtain an iSeries Access license from the license component of the iSeries Access Family product (5722-XW1).
Host Publisher and WebSphere

Web Browser

HTTP

Web Publisher Studio

Host Access

Database Access

HTML/JSP Files

Integration Object (JavaBeans)

Ear file

Web Server

WebSphere

Admin Servlet

Connection Management

Java Beans

HTML/JSP Files

Transfer

Data Source
The left hand side of this chart represents the PC with Host Publisher Studio running. This environment is used to build the web application by generating the JSPs and Integration Objects.

Once the JSPs & Integration Objects have been uploaded to the iSeries server, the WebSphere Application Server facilitates the distribution of the HTML application screens via the HTTP server.

The right hand side of the chart represents the ability of the Host Publisher Application to access more than one data source, and combine program functions across platforms and present them as a single Web-enabled application.
WebSphere Host Publisher V4.0 - Education

Education Specific to iSeries and Host Publisher
IBM WebSphere Host Publisher Application for iSeries Development
  ■ Course Code:  S6232
  ■ See iSeries Technology Center Website at:

Building A Java Adapter Over a 5250 Application to enable B-B transactions:- An example of taking an interactive 5250 order entry application running on an iSeries machine, and making it accessible via a Web browser
  ■ http://www.iseries.ibm.com/developer/java/topics/hostpubadapter.html

Other Host Publisher Education
Web Enablement Workshop for iSeries
  ■ Course Code:  ITC08
  ■ See iSeries Technology Center Website at: http://www.ibm.com/eserver/iseries/service/itc/educ.htm

IBM WebSphere Host Publisher Application Development Workshop
  ■ Course Code:  SW910
  ■ See AIM Services Education Website at: http://www.ibm.com/software/ad/aimclasses/curriculum/SW910.html

Redbooks:
  ■ Building Integration Objects With IBM SecureWay Host Publisher Version 2.1, SG24-5385-00
  ■ InDepth Study of  iSeries Access for Web and WebSphere Host Publisher

Programmer's Guide
  ■ On Host Publisher Studio CD
Host Publisher Studio

Three components:

- Host Access
- Database Access
- Application Integrator
Notes: Host Publisher Studio

Host Publisher Studio relies on three components to build J2EE applications that make specific data from the host or the database available to end users.

Host Access:
- The Host Access application creates Integration Objects that collect data from applications on the terminal-oriented host.
- By navigating the required information using a 5250 connection, Host Publisher records the keystrokes used and allows the definition of the host application screens within the Integration Object.

Database Access:
- Database Access application creates Integration Objects that encapsulate a database statement.
- To create the Integration Objects, specify the data you want to retrieve from the database table using structured query language (SQL) statement.

Application Integrator:
- The Application Integrator component of Host Publisher Studio creates Web pages that use the Integration Objects created using Host Access or Database Access.
- Application Integrator enables importing the Integration Objects, EJB Access Beans, and other Java beans or objects.
Host Publisher V4.0 Enhancements

WebSphere Application Server V4.0 support
  ✓ Advanced Edition
  ✓ Advanced Single Server Edition

Web Services Enabled
  Turn legacy services into Web Services

WebSphere Portal Server Support
  Turn legacy content into portal content

J2EE Compliance
  ✓ JSP 1.1
  ✓ EJB 1.1

Multi-language support

Serviceability
  Software Maintenance Utility
Notes: Host Publisher V4.0 Enhancements

Host Publisher Version 4.0
Host Publisher Server on iSeries requires WebSphere Application Server 4.0.2. Advanced Edition or Advanced Single Server Edition be installed. As part of the WebSphere V4.0 environment, the following enhancements are made in Host Publisher:

**J2EE application support:** Applications produced by Host Publisher Studio comply with J2EE, an industry-standard architecture that is intended to reduce the cost and complexity of developing enterprise applications. A J2EE application takes the form of an Enterprise Archive (.ear) file into which all the application's pages, Java objects, and resources are assembled. Host Publisher applications on the server developed with an earlier version of the product must be migrated to Version 4.0. A migration tool is provided.

**JavaServer Pages (JSP) 1.1 support:** Host Publisher Studio now produces JSP pages at the JSP 1.1 level. Applications with JSP 1.0 tags will still run, but applications with JSP 0.91 tags (created prior to Host Publisher Version 3.5) need to be migrated. Two migration tools are provided. One PC based tool is supplied with Host Publisher Studio and one on the server is provided with the product.

**Enterprise JavaBeans (EJB) 1.1 support:** Host Publisher now builds EJB-based applications supporting the EJB 1.1 specification level. EJB Access Beans developed with an earlier version of the product must be migrated to the 1.1 level; a migration tool is provided as part of Host Publisher Studio.

**Web Services:** An application integration technology, based on open standards and implemented in middleware, provides a way for applications to connect and interact on the Web more easily and efficiently. Host Publisher Integration Objects and EJB Access Beans are enabled to become Web Services.

**Multi-language support:** Host Publisher Server Administration allows the Host Publisher documentation to be viewed in languages other than the server's default language.

**Serviceability:** The Software Maintenance Utility is a new command-line tool that assists in the application of software fixes.

Other improvements of Host Publisher Studio Version 4.0 provide better usability and more extensive documentation.

IBM WebSphere Host Publisher and IBM WebSphere Host Publisher Studio have been bundled with iSeries Access for Web.
Comparison between Host Publisher and Web Facing

Host Publisher

- Part of iSeries Access Family
- Data source can be 5250 (3270, VT) or a database with JDBC interface
- Can integrate OS/400 system UIM screens into application
- Users can be given access to only some of the application's screens
- Reduces complexity of application and improves end user productivity
- Multiple data sources can be combined into a single application to create a composite application
- Creates Integration Objects and reusable Java beans and JSPs. Can output data from one Integration Object as input to another.
- Do not need source code - 5250 program runs 'as is'

Web Facing

- Part of WebSphere Development Tools for iSeries
- Data source is 5250 screen
- Fast path to globally convert applications to run in a browser
- Users will see all application screens, one-for-one conversion of application screens
- Good for interactive applications. Needs DDS source - converts DSPF DDS source to JSPs and Java Beans.
- No change to 5250 program -- it runs 'as is'

- Either implementation is considered a 5250 application by the system
Notes: Comparison between Host Publisher and Web Facing

It is not appropriate to compare these two tools other than to point out the most significant differences:

- iSeries Access for Web is an *user interface* to iSeries functions
- Host Publisher is a *development tool* to Web enable iSeries applications

This foils lists some obvious "points to consider," but is not an in-depth evaluation.

For further information, refer to: http://www-1.ibm.com/servers/eserver/iseries/clientaccess/web/web_to_host_comparisons.html

The table on the Web site compares all the Web-to-host products available to access the iSeries server. It compares the following products:

- iSeries Access for Web
- WebSphere Host Publisher
- WebFacing Tool
- WebSphere Host On Demand
- Screen Customizer

For the purposes of this presentation, only the iSeries Access for Web and the WebSphere Host Publisher are considered.
iSeries Access for Wireless

5722-XP1
What is iSeries Access for Wireless

A new member of the iSeries Access Family, iSeries Access for Wireless

- Integrated package of wireless functions and middleware
- Delivered with iSeries at no additional cost

V5R2 Content:

- Management Central-Pervasive
  - Functional enhancements for V5R2
  - Worldwide enablement

- iSeries Toolbox for Java Micro Edition
  - Access the iSeries through Java classes running on the device
  - Write Java Toolbox applications with the customized look of an installed client

- JDBC Micro Edition
  - Access DB/2 on the iSeries from Java running on a wireless device
  - Write full-featured JDBC applications (transactions, stored procedures, DataBase triggers, .....)

ibm.com/eserver/iseries
Notes: What is iSeries Access for Wireless

Management Central Pervasive, originally introduced as in V4R5, is now known as iSeries Navigator for Wireless in V5R2. iSeries Access for Wireless, licensed program 5722-XP1, provides access to iSeries servers from wireless, handheld devices. It consists of the following separate services that can be used individually, or together, to provide the access you need: iSeries Navigator for Wireless and IBM Toolbox for Java 2 Micro Edition.

iSeries Navigator for Wireless
iSeries Navigator for Wireless provides a user interface for performing some systems management activities from wireless, handheld devices. As network administrator, it allows you to monitor your iSeries server while you are away from the office.

IBM Toolbox for Java 2 Micro Edition
IBM Toolbox for Java 2 Micro Edition is a set of Java classes that allow you to develop Java programs to access iSeries servers from wireless, handheld devices. You can use these classes to write client/server applications that work with data and resources on your iSeries server. For example, you can access iSeries database data using functions similar to Java Database Connectivity (JDBC), an industry standard.
What is iSeries Access for Wireless ... 

Device specific conversion of existing Web content
- WebSphere Transcoding Publisher
- Additional XML application enablers for reading and generating XML data from existing applications and data
- XML Extenders for DB2/UDB

Application Development Tools
- Web Facing
- Host Publisher

Wireless Application
- MQ Everyplace - write applications for wireless devices
- iSeries Toolbox for Java Micro Edition - write applications with customized look of an installed client
- JDBC Micro Edition - write full featured JDBC applications access to DB/2 on the iSeries on a wireless device
Notes: iSeries Access for Wireless

You can combine the use of iSeries Access for Wireless with other products as illustrated in this foil.
What is iSeries Access for Wireless ...

iSeries Navigator for Wireless allows administrators to remotely monitor and manage system performance, status, jobs, and messages using an Internet-ready telephone, a personal data assistant (PDA) with a wireless modem, or a traditional Web browser on a workstation.

Using the power of Management Central you can manage fixes and running commands across multiple systems to viewing real-time graphs of their systems performance.
Notes: iSeries Access for Wireless ...

The following are the hardware and software requirements to run the latest enhancements of iSeries Navigator for Wireless:

- A device to run the function
  - An Internet-enabled telephone with a wireless Internet service
  - A PDA with a web browser, a wireless modem, and a wireless Internet service
  - A traditional web browser on a workstation
- A server running OS/400 V5R2 or later in a TCP/IP network. This will be your central system used by Management Central.
- A web application server running on your central system, such as any of the following:
  - ASF Jakarta Tomcat Application server
  - WebSphere Application Server
  - Any other application server that runs on the central system, having the capability to host servlets
What is iSeries Access for Wireless

Using iSeries Navigator for Wireless is quite simple. Once your central system is set up properly, you can connect to your central system by pointing your internet-ready telephone, PDA, or traditional web browser to the URL on your central system. It connects to your central system, asks you to log on, and shows you a summary of the status of all your systems, monitors, and tasks.

- Monitors
  - System
  - Job
  - Message
  - File
- Job details and control
- Command
  - Run command
  - Results
- Improved Navigation and Control of Integrated xSeries servers
- Management Central task status
Notes: iSeries Access for Wireless

With the iSeries Navigator you can

- Work with iSeries systems
  - iSeries Navigator for Wireless allows you to view the properties of systems, add or remove a system and customize the system list.
- Work with Integrated xSeries Servers
  - iSeries Navigator for Wireless provides you with the ability to manage your Integrated xSeries Servers from your wireless device.
- Work with tasks
  - You can view summary details for all your Management Central tasks.
- Run commands across multiple systems
  - iSeries Navigator for Wireless makes it easy to run commands on iSeries systems from your wireless device.
- View and interact with monitors
  - If you have pre-configured monitors to run in Management Central, you can view and interact with system monitors, message monitors, job monitors, file monitors, and B2B activity monitors using iSeries Navigator for Wireless.
Operations Console

Packaged with iSeries Access for Windows
(5722-XE1)
Operations Console and EZ-Setup

Op Console wizards usability improved

Better integration between EZ-Setup and Op Console

Sharing of wizards
Notes: Operations Console and EZ-Setup

Improvements have also been made to the usability of iSeries Operations Console, through the use of more detailed help, additional graphics, and panels that are easier to understand, it will be easier to bring up your iSeries for the first time.

The out-of-box experience is further enhanced by adding an interview process to EZ-Setup to determine what the iSeries will be used for and developing a custom path through initial planning and configuration to meet those needs. EZ-Setup has been enhanced to be used with LAN Console.

A pre-installation program is available to help you ensure the PC you choose will have all of the prerequisite function needed to support Operations Console and Virtual Control Panel support is the recommended alternative to the parallel cable remote control panel. Additional hardware support has added for feature codes 2742 and 2793.

Enhanced authentication and data encryption provide network security for console procedures. Operations Console network connections uses a version of Secured Sockets Layer (SSL) which supports device and user authentication but without using certificates.

Operations Console now supports the Windows XP Professional Operating System.

Enhancements have been made to for Operations Console documentation which now includes planning, set up, managing, and troubleshooting information in one location.
iSeries ODBC Driver for Linux
5722-LO1
downloadable from the Web
Extending the Reach to iSeries Data

A new offering for Linux users/servers connecting to iSeries, iSeries ODBC Driver for Linux

- Enables Linux applications to access DB2 UDB for iSeries data
- Downloadable from the web
- Available 3/28/2002
Notes: Extending the Reach to iSeries Data

The iSeries ODBC Driver for Linux allows you to access iSeries database data from a Linux application written to the ODBC API. It is based on the ODBC driver in the Client Access Express for Windows product. As in that driver, the Linux ODBC driver uses the iSeries database Host Servers as the access point to the system, using a socket connection. The iSeries ODBC Driver for Linux is an ODBC 3.5 ANSI driver with the ability to store and process Unicode data.

Two versions of the driver exist
  ■ for Linux running in an iSeries LPAR.
  ■ for Intel-based Linux workstations.

The iSeries ODBC Driver for Linux is a no charge iSeries licensed program -- 5733-LO1 and is available only as a web download.
**ODBC Driver for Linux - PowerPC Version**

A version of the driver exists for Linux running in an iSeries LPAR. It can run on Linux in any of the following environments:

- Red Hat, Turbo, and SuSE PowerPC - runs in an iSeries partition, pSeries, or any PowerPC
- Download ODBC Driver iSeriesODBC-5.1.0-0.xx.ppc.rpm


ODBC Driver for Linux - Intel Version

A version of the driver exists for Linux running in an iSeries LPAR. It can run on Linux in any of the following environments:

- Red Hat, Turbo, and SuSE PowerPC - runs in an iSeries partition, pSeries, or any PowerPC
- Download ODBC Driver iSeriesODBC-5.1.0-0.xx.i386.rpm.
Requirements ODBC Driver for Linux

OS/400 requirements for running iSeries ODBC Driver for Linux
The following server requirements must be met to use the iSeries ODBC Driver for Linux to access database data on an iSeries server.

- The driver is supported only when connecting to servers running OS/400 Version 4 Release 5 or above. The driver may work to earlier releases of OS/400, but is supported only on V4R5 and above.
- The QUSER user profile must be enabled.
- The host servers must be started.
- TCP/IP must be running.

Linux requirements for running iSeries ODBC Driver for Linux
The following client requirements must be met to use the iSeries ODBC Driver for Linux to access database data on an iSeries server.

- Beta versions of the iSeries ODBC Driver for Linux must be removed.
- The client must be running one of the following versions of Linux:
  - RedHat for Intel version 7.x
  - RedHat for iSeries version 7.x
  - SuSe for Intel version 7.x
  - SuSe for iSeries version 7.x
  - TurboLinux for Intel version 7.x
  - TurboLinux for iSeries version 7.x
- UNIX ODBC driver manager version 2.0.11 or greater must be installed on the client.

Note: if you recompile the UNIX ODBC driver manager, the ./configure --prefix default is /usr/local. If you use this default, you may need to update your shared library (/etc/ld.so.conf) and executable paths to include it.
Naming and Packaging
## New Names, Products

1. New or revised in V5R2

<table>
<thead>
<tr>
<th>Description</th>
<th>V5R1 Names</th>
<th>V5R2 Names</th>
<th>Product Numbers</th>
</tr>
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<tbody>
<tr>
<td>Family Name</td>
<td>iSeries Client Access Family</td>
<td>iSeries Access Family</td>
<td>5722-XW1</td>
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<tr>
<td>Windows Client</td>
<td>AS/400 Client Access Express for Windows</td>
<td>iSeries Access for Windows</td>
<td>5722-XE1</td>
</tr>
<tr>
<td>Face of OS/400</td>
<td>Operations Navigator</td>
<td>iSeries Navigator</td>
<td>part of 5722-XE1</td>
</tr>
<tr>
<td>Browser</td>
<td>iSeries Access for the Web</td>
<td>iSeries Access for the Web</td>
<td>5722-XH2</td>
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<tr>
<td>Application Tool</td>
<td>WebSphere Host Publisher V3.5</td>
<td>WebSphere Host Publisher V4.0</td>
<td>5724-B81 (1)</td>
</tr>
<tr>
<td>Handheld</td>
<td>MC Pervasive</td>
<td>iSeries Access for Wireless</td>
<td>5722-XP1 (1)</td>
</tr>
<tr>
<td>Linux</td>
<td></td>
<td>iSeries ODBC driver for Linux</td>
<td>5722-L01 web Download version only (1)</td>
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</table>
### New Products, New Packaging

<table>
<thead>
<tr>
<th>Product Numbers</th>
<th>Product Names</th>
<th>On Stacked Media</th>
<th>Chargeable (Y/N)</th>
<th>Notes</th>
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<tbody>
<tr>
<td>5722-XW1</td>
<td>iSeries Access Family</td>
<td>Yes</td>
<td>Yes</td>
<td>User Based or Processor Based Purchase</td>
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<tr>
<td>5722-XH2</td>
<td>iSeries Access for Web</td>
<td>Yes</td>
<td>Yes</td>
<td>Requires 5722-XW1</td>
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<tr>
<td>5648-E25</td>
<td>WebSphere Host Publisher V4.0</td>
<td>No</td>
<td>Yes</td>
<td>Requires 5722-XW1</td>
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<tr>
<td>5722-XE1</td>
<td>iSeries Access for Windows</td>
<td>Yes</td>
<td></td>
<td>Parts are no-charge</td>
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<tr>
<td></td>
<td>iSeries Navigator</td>
<td>Yes</td>
<td>No</td>
<td>Require 5722-XW1 to use PC5250 and Data Transfer</td>
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<tr>
<td>5722-XP1</td>
<td>iSeries Access for Wireless</td>
<td>Yes</td>
<td>No</td>
<td>Part of 5722-XE1</td>
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<tr>
<td>5722-LO1</td>
<td>iSeries ODBC driver for Linux</td>
<td>No</td>
<td>No</td>
<td>Web downloadable only</td>
</tr>
</tbody>
</table>
IBM Product Function Comparison

1. IBM Personal Communications, Host On-Demand and Screen Customizer are packaged together as Host Access Client Package.

2. iSeries Access for Web, WebSphere Host Publisher, and iSeries Access for Windows are packaged together in iSeries Access Family.

3. Web Facing is included in WebSphere Development Studio for iSeries

<table>
<thead>
<tr>
<th>Feature</th>
<th>iSeries Access for Web</th>
<th>WebSphere Host Publisher</th>
<th>WebFacing</th>
<th>WebSphere Host On-Demand</th>
<th>Screen Customizer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browsers/desktops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>supported</td>
<td>● Netscape 4.7 (Windows, AIX, Linux) and 6.1 (Windows)</td>
<td>● Netscape 4.7 (Windows, UNIX, AIX, Linux) and 6.1 (Windows)</td>
<td>● Internet Explorer 5.0, 5.5, and 6.0 (Windows)</td>
<td>● Netscape 4.6, 4.7, and 6.0 (Windows 95/98/NT, UNIX), 4.6.1 (OS/2, Mozilla Web Browser for OS/2)</td>
<td>● Netscape 4.6, 4.7, and 6.0 (Windows 95/98/NT, UNIX), 4.6.1 (OS/2, Mozilla Web Browser for OS/2)</td>
</tr>
<tr>
<td>Browsers/desktops</td>
<td>● Internet Explorer 5.0, 5.5, and 6.0 (Windows)</td>
<td>● Internet Explorer 5.0, 5.5, and 6.0 (Windows)</td>
<td>● Opera 5.11 (Windows) and 5.0 (Linux)</td>
<td>● Internet Explorer 4.01, 5.0, 5.1, 6.0 (Windows)</td>
<td>● Internet Explorer 4.01, 5.0, 5.1, 6.0 (Windows)</td>
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<tr>
<td>Browsers/desktops</td>
<td>● Opera 5.11 (Windows) and 5.0 (Linux)</td>
<td>● Opera 5.11 (Windows) and 5.0 (Linux)</td>
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<td>no</td>
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<td>license</td>
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<tr>
<td>Requires server runtime</td>
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<td>yes (2)</td>
<td>yes (3)</td>
<td>no</td>
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<tr>
<td>license</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unique functions</td>
<td>● Fastpath templates can web-enable application quickly</td>
<td>● Multiplatform customizable emulator</td>
<td>● No programming for basic emulator customization</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Integration with desktop (i.e., can upload/download data directly into spreadsheet)</td>
<td>● Works with multiple applications and systems concurrently</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Fastpath templates can web-enable application quickly</td>
<td>● Multiplatform customizable emulator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Works with multiple applications and systems concurrently</td>
<td>● Can also convert OS/400 system screens</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● Easy, web interface to work with OS/400 system functions</td>
<td>● Doesn’t require source program</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>● No programming for basic emulator customization</td>
<td></td>
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</tr>
</tbody>
</table>
Licensing summary

iSeries Access Family licensing component (5722-XW1)

- iSeries Access for Windows requires a license when PC5250 or Data Transfer functions are used
- iSeries Access for web requires a license
- Host Publisher acquires licenses from iSeries Access Family for:
  - XML Gateway
  - Customer applications
Notes: Licensing summary

The `-iwa` parameter in the `cfgHPsvr` command tells Host Publisher to acquire licenses from the iSeries Access Family licensing component (5722-XW1).

When either of the following Host Publisher functions are run, the Host Publisher code queries the iSeries Access Family license component for the maximum available number of licenses:
- XML Gateway
- customer application

If the maximum has not yet been reached, a counter is increased in increments and the license is granted. When the Host Publisher function terminates, the counter is decreases in decrements.
Summary

iSeries Access for Web
- iSeries requirements
- What's new in V5R2
- Packaging

Functions
- Print
- Messages
- Jobs
- 5250
- Database
- Files
- Command
- Customize

WebSphere Host Publisher
- iSeries requirements
- What's new in V4.0
- WebSphere architecture

Host Publisher components
- Host Publisher Server
- Host Publisher Studio
- Application building
- XML Gateway
Related Web sites

iSeries Information Center
  • http://as400bks.rochester.ibm.com/pubs/html/as400/v5r1/ic2924/index.htm

IBM Redbooks
  • http://.ibm.com/redbooks --> iSeries Access for Web V5R2 and WebSphere Host

IBM ~ iSeries Support
  • http://www.as400service.ibm.com

IBM WebSphere Application Server
  • http://www.ibm.com/servers/eserver/iseries/software/websphere/wsappserver/

iSeries Navigator
  • http://www-1.ibm.com/servers/eserver/iseries/navigator/index.htm

iSeries Access for Web
  • http://www.ibm.com/servers/eserver/iseries/clientaccess/web/
Related Web sites -2

IBM HTTP Server

IBM WebSphere Host Publisher

Lotus Domino Support

WebSphere Software Products
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