



Session:

iSeries Access Family What's New and Hot

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why "i"? it's simple.



iSeries Access Family Products

- This presentation will cover the variety of connectivity options that iSeries Access Family provides to meet your needs:

▶ Linux (native)  ★ iSeries Access for Linux

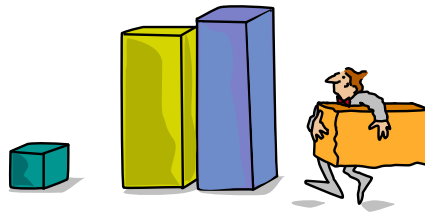
▶ Windows (native)  ★ iSeries Access for Windows

▶ Wireless  ★ iSeries Access for Wireless

▶ Browser-based  ★ iSeries Access for Web

 ★ HATS LE

Packaging & Ordering



iSeries Access Family Packaging

V5R3 5722-XW1 iSeries Access Family	V5R2 5722-XW1 iSeries Access Family
<ul style="list-style-type: none"> iSeries Access for Windows, 5722-XE1, V5R3 	<ul style="list-style-type: none"> iSeries Access for Windows, 5722-XE1, V5R2
<ul style="list-style-type: none"> iSeries Access for Web, 5722-XH2, V5R3 	<ul style="list-style-type: none"> iSeries Access for Web, 5722-XH2, V5R2
<ul style="list-style-type: none"> iSeries Access for Wireless, 5722-XP1, V5R2 	<ul style="list-style-type: none"> WebSphere Host Publisher, 5724-B81, V4.0, 5724-B81, V4.01
<ul style="list-style-type: none"> HATS Limited Edition V5.0, 5724-F97-01 	<ul style="list-style-type: none"> HATS Limited Edition V4.0 5724-D34-01 (after 6/30/2003)
<ul style="list-style-type: none"> iSeries Access for Linux, 5722-XL1, V5R3 	
	<p>V5R2 customers not wanting to upgrade to OS/400 V5R3 but want the new V5R3 iSeries Access Family clients can order no-charge Feature No. 2647 of Product No. 5722-XW1</p>



- OS/400 V5R1
- EOM was 12/2003
 - ~~EOS was 5/31/2004~~
 - EOS has been extended to 9/30/2005

Products - Focus

Description	Product	Product Number	Need 5722-XW1 to use
Family Name	➤ iSeries Access Family	5722-XW1	Yes
Windows client	➤ iSeries Access for Windows	5722-XE1	Yes (for 5250 and Data Transfer)
Linux client	➤ iSeries Access for Linux	5722-XL1	Yes
Browser Access	➤ iSeries Access for Web	5722-XH2	Yes
	➤ HATS LE	5724-F97-01	Yes
Handheld / Wireless offering	➤ iSeries Access for Wireless	5722-XP1	No
	➤ iSeries Toolbox for Java ME		
OS/400 systems management	➤ iSeries Navigator	Packaged in 5722-XE1	No
	➤ Operations Console		
	➤ EZ-Setup		

Flexible Purchase Options

- ⊗ Processor-Based = purchase price based on software tier, connect unlimited numbers of users
- ⊗ User-Based = purchase only number of users who will be concurrently connected
- Note: Can upgrade from User-Based to Processor-Based, but cannot go back to User-Based after purchasing Processor-Based
- ⊗ Software maintenance included in base OS/400 software subscription

iSeries Access for Linux

- **First available in Aug 2003**
- **Latest release available Aug 2005**



www.ibm.com/eserver/series/access/linux

What is iSeries Access for Linux

- **iSeries Access for Linux includes the following features:**
 - **Full function 5250 emulator**
 - This function enables end users to work with OS/400 system screens and run host applications
 - **ODBC driver**
 - This function enables your Linux PC applications to access information in DB2 UDB for iSeries
 - **iSeries Access APIs**
 - RmtCmd, NLS, System Object...
- **Supported for use on the following:**
 - **Linux operating systems with Intel processors and on Power PCs**
 - **iSeries server logical partition (LPAR)**

Designed to run natively  on Linux operating systems

Two different versions available

32-bit Linux operating systems

- **Available August 2, 2005: Version 1.10**
- The 32-bit version provides an ODBC driver for accessing the DB2 Universal Database® (UDB) for iSeries and a 5250 emulator.
- Version 1.10 includes new support for Kerberos and Single Sign-On (SSO), bypass sign-on, and an example SSL configuration.

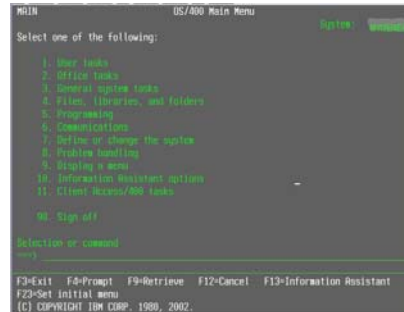
64-bit Linux operating systems

- **Available February 21, 2005: Version 1.2**
- The 64-bit version provides an Extended Dynamic Remote SQL (EDRS) driver for Power PC.
- It is supported only on SuSE SLES 9 and requires the iSeries Access for Linux 32-bit product to be installed first.
- For more information on ERDS, refer to the [XDA Web Site](#) and [iSeries Infocenter](#), "Extended Dynamic Remote SQL (EDRS) APIs" in the Programming -> APIs -> Database and File -> Database section.

Full-function, Native 5250 emulator

The 5250 emulator contains a variety of functions, such as:

- Ability to provide a workstation/device ID
- Both 80 and 132 screen sizes
- Keyboard mapping (GUI)
- Macro support
- Record/playback
- Pop-up/pull-down keypads
- Screen print
- Asynchronously display server messages in the 5250 interface
- Bypass Sign-on
- Support for Kerberos and EIM

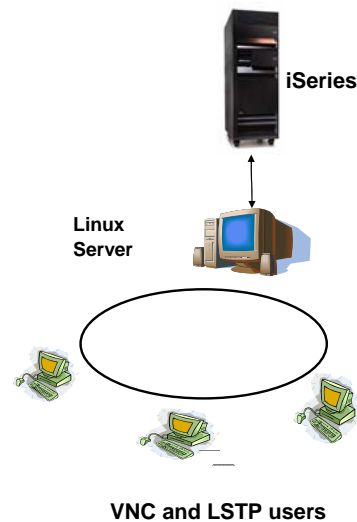


Users Guide explains 5250 emulator functions

www.ibm.com/eserver/iseries/access/linux/pdf/iseries_access_5250.pdf

Supports 3-tier environments

- New ibm5250 - STAND_ALONE command line option.
- Enables easy use of:
 - Virtual Network Computing (VNC)
 - Linux Terminal Server Project (LSTP)



National Language Support - SBCS

- 5250 emulation menus and messages are available in many national language versions
 - The main emulator window labels and helper applications are translated and will display based on the \$LANG system environment variable
 - The command line value – LANGID may also be used to set the language
 - English text displayed for missing NLVs

Language	Locale	Description
2922	pt_PT	Portuguese in Portugal
2924	en_US	English
2925	fi_FI	Finnish
2926	da_DK	Danish
2928	fr_FR	French
2929	de_DE	German
2931	es_ES	Spanish
2932	it_IT	Italian
2933	no_NO	Norwegian
2937	sv_SE	Swedish
2929	de_CH	German Swiss
2940	fr_CH	French Swiss
2942	it_CH	Italian Swiss
2963	nl_BE	Belgium
2966	fr_BE	French in Belgium
2980	pt_BR	Portuguese in Brazil
2981	fr_CA	French Canadian

National Language Support - DBCS

ibm5250 has been tested using the default XIM compliant IME's listed below.

Language	Simplified Chinese	Traditional Chinese	Japanese	Korean
XIME	xcin-zh_CN	xcin-zh_TW	kinput2	nabi
xx (MRI dir /opt/ibm/iseriess Access/mri/xx)	zh	zh_TW	ia	ko
LANG	zh_CN	zh_TW	ia_JP	ko_KR
Font Encoding SB	iso8859-1	iso8859-1	jjsx0201.1976-0	iso8859-1
Font Encoding SB	gb2312.1980-0	big5-0	jjsx0208.1983-0	ksc5601.1987-0

Notes: Double-Byte Support

- **IBM5250 ideographic (DBCS) language support requirements and setup**
- Input methods are used to input characters that are not found on the keyboard. Languages that require more characters than the keyboard contains must use an Input Method Editor (IME) to compose characters. The X Input Method protocol was developed to allow the X Input Method Editors (XIME) to compose and send characters to X applications. Ideographic languages, formerly referred to as Double Byte Character Set (DBCS) languages, will require an IME that is XIM compliant when using ibm5250 to connect to ideographic locale i5/OS sessions. For more technical information on IME, XIM or XIME, see the Links section at the end of this document.
- **Requirements**
- ibm5250 requires the following for ideographic language (DBCS) support
 - LANG environment variable is set to the proper locale.
 - Input Method editor (IME) that is X Input Method (XIM) compliant, installed and configured for the ideographic language (DBCS) language.
 - Monospaced fonts with the proper Single Byte and Double Byte encodings for the language.
 - IBM5250 inputMethod resource is correct for the X Input Method Editor (XIME).
 - The environment variable XMODIFIERS is set for the XIME.
 - The IME is started before launching ibm5250.
- **Default XIME Setting/Values and Required Fonts**
- The default IBM5250 XIME values are
IBM5250 inputmethod: XIME
XMODIFIERS=@im=XIME
- The following monospaced font sets are required:
 - For 8x16 and 16x16 FontSet

```

          *-*-medium-r-normal-*-*-*-*c-80-(see encodings below)  Single Byte
          *-*-medium-r-normal-*-*-*-*c-160-(see encodings below) Double Byte
        
```
 - For 12x24 and 24x24 FontSet

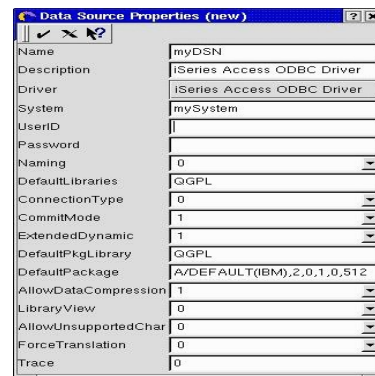
```

          *-*-medium-r-normal-*-*-*-*c-120-(see encodings below) Single Byte
          *-*-medium-r-normal-*-*-*-*c-240-(see encodings below) Double Byte
        
```
- To display the available fonts, type:
 - `xlsfonts -fn "FontPattern"`
- For example, to display the available jisx0201.1976-0 fonts
`xlsfonts -fn *-*-medium-r-normal-*-*-*-*c-*jisx0201.1976-0*`
- **NOTE:**
`ibm5250` has only been tested using the default XIM compliant IME's listed below.

Native ODBC Driver

Extending the reach to iSeries data...

- Can run ODBC applications, such as:
 - OpenOffice
 - ODBC and PHP for Web Serving
 - ODBC and Perl
 - unixODBC DataManager
 - "Explorer" type of application to manage DSNs
 - Run and view results of SQL requests
 - unixODBC 2.2.3 version ships DataManagerII with additional features
 - unixODBC isql
 - Command line application
 - Neat way to generate simple HTML page with data tables
 - Your own applications...



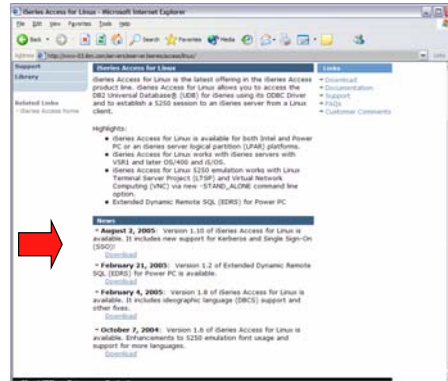
The high-function, best-performing iSeries ODBC driver (included in iSeries Access for Windows) was ported to run on Linux

iSeries Access for Linux (V1.10 & V1.2)

iSeries Access for Linux available via 'download'

You can obtain iSeries Access for Linux V1.10 in two ways

- Download from the web
 - www.ibm.com/eserver/iseries/access/linux
- Connect to your iSeries using iSeries Access for Web.
 - Select the 'Download' tab, then select the appropriate Access for Linux download



The 64-bit EDRS Driver (V1.2) is only available as a web download

iSeries Access for Linux is fully supported through IBM SupportLine

Access for Web 'Download' Capability

Let users download iSeries Access for Web by using iSeries Access for Web 'Download' feature



Go out to our demo web site at:
<http://iseriesd.dfw.ibm.com/webaccess/iWAPackages> (userid is WUSER, password is DEMO2PWD) and see Access for Web 'Download' capabilities

iSeries NetServer: Supports Linux Clients



- iSeries NetServer was expanded to support **Linux** clients.
 - Thus iSeries NetServer provides the same file and print sharing functions to Linux users as it does for Windows users.
- Linux clients (with kernel Version 2.4.3 or higher) with SAMBA (Version 2.0.7 or 2.2) can access the iSeries
- This functions in built into OS/400 V5R2 (and a PTF in OS/400 V5R1)

This gives the iSeries administrator the ability to easily control what files or printers a Linux user can get access to

For additional information, see:
<http://www.ibm.com/eserver/series/netserver>

Combine iSeries Access for Web for a complete Linux solution

iSeries Access for Web, 5722-XH2, V5R3

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





iSeries Access for Linux – Customer Reference

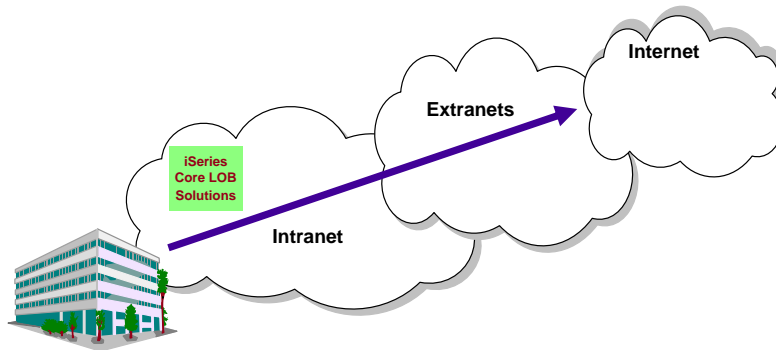
Thanks IBM!!!

Great job folks! For several months I had been looking for a software package to handle IBM's 5250 protocol for Linux. While there are a few projects out there none of them could fit our needs. IBM's developers have done a great job in setting up a very smooth running version of Client Access for Linux. I was even more excited to see that the newest version would work with our LTSP system (Linux Terminal Server Project). We are now serving up 40+ desktops with full iSeries access from one Linux server with plans to expand the user base. Again, Great Job!

Eric Pell
 Manager of Information Systems
 Gainey Transportation Services
<http://www.gaineycorp.com>



Core LOB Solutions



Looking for highly functional and integrated solution for:

- Windows servers and Windows desktop users
- iSeries administration and operation



**iSeries Access for Windows
5722-XE1**



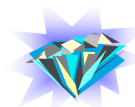
www.ibm.com/eserver/series/access/windows



Integrating native Windows with iSeries

Want a single solution for working with all iSeries resources...

- **A single offering designed for Windows users that provides:**
 - High-function, easy-to-use 5250 emulator to work with iSeries applications
 - A PC print server that OS/400 output can be sent to and run unattended
 - Access to iSeries database and other resources from Windows applications
 - Ability to use iSeries as file and print server
 - Administer users and monitor/manage iSeries servers in the network
- **No special web application server code required**
 - All code runs natively on the Windows
- **It's all in iSeries Access for Windows**
 - PC5250 emulation, Data Transfer, ODBC, etc for end users and Windows programmers
 - iSeries Navigator for iSeries operators and administrators
 - Operations Console to work with OS/400 system console
 - EZ-Setup to quickly and easily set up new iSeries servers



- **The most comprehensive iSeries native Windows connectivity solution in the market**
- **90+% of iSeries customers already using iSeries Access for Windows**

Windows Operating Systems

The V5R3 version of iSeries Access for Windows will not install on:

- Windows 95
- Windows 98
- Windows ME

The V5R3 version of iSeries Access for Windows can be installed on:

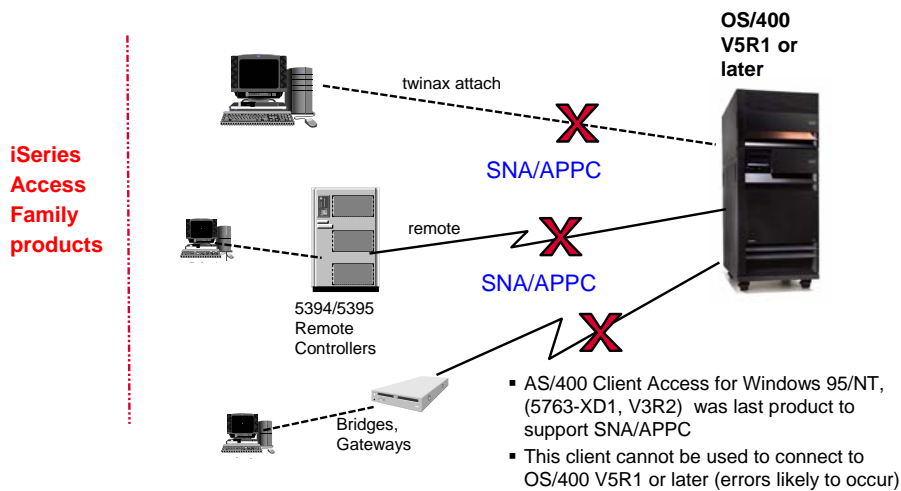
- Windows NT 4.0
- Windows 2000
- Windows XP Professional
- Windows 2003 Server

▪ The V5R2 version of iSeries Access for Windows can be used on Windows 98, ME, NT 4.0, 2000, XP, 2003

▪ The V5R1 version of iSeries Access for Windows can be used on Windows 95, 98, and ME, NT 4.0, 2000, XP

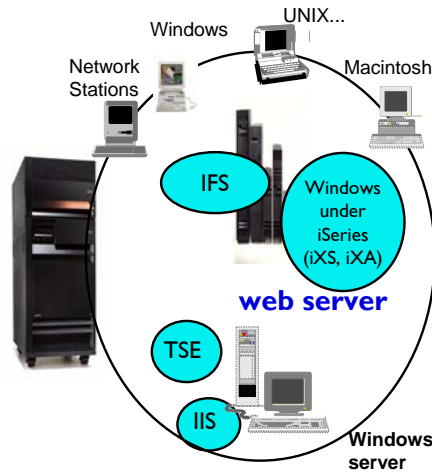
No SNA/APPC support in iSeries Access Family

If you are upgrading an existing customer who has an SNA/APPC network, plan for time and effort to switch network to TCP/IP...



Supports Microsoft operating environments...

- **Microsoft Transaction Services (MTS)**
 - example, an Auction House application where may need to back out transactions (ie, 2-phase commit)
- **Terminal Server Edition (TSE)**
 - iSeries Access runs on a Windows server, and enables multiple simultaneous users (such as Network Stations, DOS, Unix, or Macintosh) work with iSeries resources
- **Internet Information Services (IIS)**
 - Provides a Web application infrastructure for Windows Servers. iSeries Access runs on server, and fulfills requests for iSeries data (ie, ODBC, OLE DB, etc)



Supports new components...

Intel Itanium hardware

- **The ODBC and OLE DB components have been ported to run natively on 64-bit Windows**
 - Most other components will run in 32-bit mode on 64-bit hardware (print drivers and SSL support will not run with 64-bit applications).



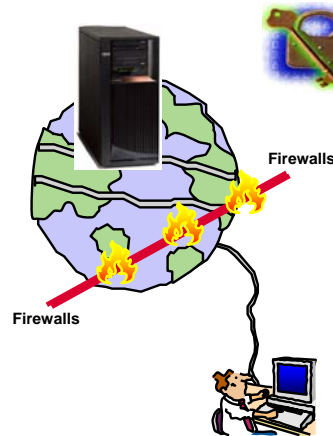
Supports leading network and security offerings...

Security

- **Secure Sockets Layer (SSL)**
 - Including SSL client authentication
- **Kerberos**
 - Enterprise Identify Mapping (EIM) can be used with Kerberos
- **Long passwords**

Networking

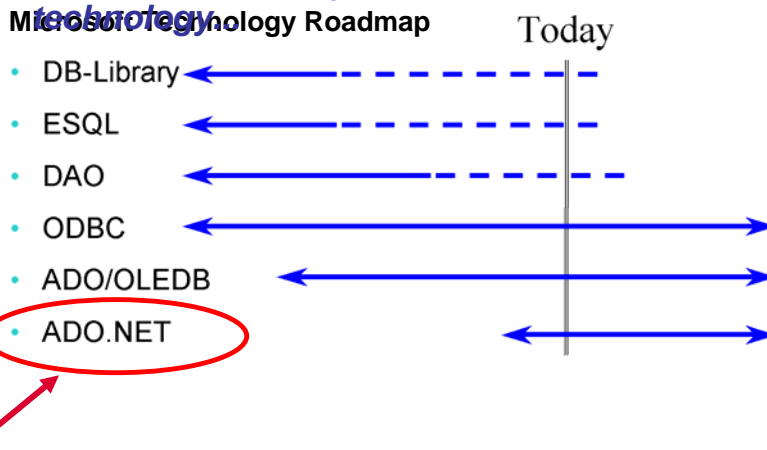
- **Virtual Private Networks (VPN)**
 - Tunneling protocol and encryption to ensure secure communications
- **NAT (Network Address Translation)**
 - Hides iSeries address when on Internet



If you do it on iSeries,
you can do it with
iSeries Access for
Windows...

Microsoft-defined application middleware

.NET is the next big wave in Microsoft technology.



Database Middleware

- ODBC Driver
 - Best performing ODBC driver for accessing iSeries database
- OLE DB Data Provider
 - Functionally rich access to iSeries database (including record-level access) and applications
 - Also has add-ins to Visual Basic to simplify development of Windows applications to work with iSeries
- .NET Data Provider
 - Enables applications using Microsoft's .NET framework to access iSeries database
- Data Transfer
 - Upload/download database information
- Middleware continually enhanced to stay current with new functions in iSeries and in Windows
 - **Unicode enablement** / New Unicode text file type

UTF8	UCS2	UTF16
ABC	ABC	ABC
εφΩ	εφΩ	εφΩ
Дня	Дня	Дня
אבג	אבג	אבג
طبرق	طبرق	طبرق

Retrieved record 7

A product description could be stored in the database in 10 different languages and used during product packaging for all these languages

iSeries Access for Windows – chargeable items

5250 Display and Printer emulation

- Personal Communications V5.7 5250 emulation product included in iSeries Access for Windows

• Key characteristics

- Full keyboard support (function keys, field exit key, etc)
- Macros, play-record features
- Break messages shown
- Optimal performance for data entry
- Printer emulation provides ability to 'push' iSeries printer output to PC-attached printers.
- Printer emulation enables user to print selected pages of output
- Worldwide enabled (SBCS, DBCS, bi-directional...)

Data Transfer

- Upload PC data to iSeries database, download iSeries database information to PC

• Key characteristics

- Add-ins for Excel to upload/download directly from/into spreadsheet
- Full set of conversions from PC format to iSeries database format
- Can schedule requests to run on desktop (without user intervention)
- Batch transfer capability
- Wizard to create iSeries tables on uploads
- Can SSL-enable individual transfer requests
- APIs for all data transfer GUIs
- Unicode enabled (UTF8, UTF16)
- Worldwide enabled (SBCS, DBCS, bi-directional...)

Combine use of Tailored Install and Silent Install

You want to control what your users install and manage the install centrally:

- Install only selected parts of iSeries Access for Windows, maybe different parts for different users (based on OS/400 user profiles)
- Don't want users to find additional Access for Windows functions in the Selective Install window
- Install the code on users' PCs without their intervention
- Get updates (service packs) and new releases automatically installed on those end user PCs

Use a combination of Tailored Install and Silent Install and a few PC commands (wizards) to do this:

- From then on, Access for Windows will keep desktop users up to date.

Use new PTFFORM to update Tailored Install directory with fixes

Steps to perform...



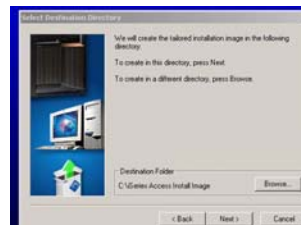
Starting up 'Tailored Install'

Run **Cwbinimg.bat** wizard

- CWBinimg.bat is in QIBM directory. Path is `\myseries\qibm\ProdData\CA400\Express\Instal\Image`
- Open/Start CWBINIMG.BAT, and it will start the iSeries Access for Windows Tailored Install wizard.



- Put this file somewhere where your users can access it (IFS, PC server...)



Use PTFFORM to add new Service Pack to Tailored Install image

www.ibm.com/eserver/series/access/windows and select 'Service Packs'

PTFFORM only puts in fixes for code that is contained in image

The screenshot shows a web browser displaying the IBM website's 'Service Packs' section. A table lists service packs for V5R2M0 and V5R1M0. Below the table, there are instructions on how to download a service pack. A yellow box highlights the 'PTFFORM.EXE' file in a file explorer window. Another yellow box highlights the 'Address' field in the browser's address bar, which contains the FTP URL. A third yellow box highlights the 'View' menu in the browser's menu bar.

iSeries Access for Windows (Client Access Express) (5722.XE1) Release Level	Latest Service Pack PTF Number	Server Maintenance	Date PTF was Available	Installed File Date	Target for Next Service Pack
V5R2M0	S108894	Refer to Server Notes	June 20, 2003	08/05/02	October 24, 2003
V5R1M0	S108369	Refer to Server Notes	May 8, 2003	05/06/01	November 21, 2003

Problems downloading a Service Pack?

- For problems downloading a service pack, [click here](#).
- For support information on iSeries Access and the Microsoft Windows operating systems, [click here](#).

Operations Console users: [Known problems with Operations Console and Windows 2000 Service Pack 4](#)

New Redbook for iSeries Administrators

- Download it from www.ibm.com/eserver/series/access/windows
- IBM Form Number SG24-6939-00

The image shows the cover of an IBM Redbook. The title is 'V5R2 iSeries Access for Windows Hot Topics: Administering installation, fixes, functions, secure communications'. The cover features a globe graphic and the IBM logo. The authors listed are Erika McCarty, Jeremy Schatz, Rochan Tanna, and Jim Cook. The IBM logo is at the top right, and the Redbooks logo is at the bottom right. The URL 'ibm.com/redbooks' is at the bottom left.

Customer comment

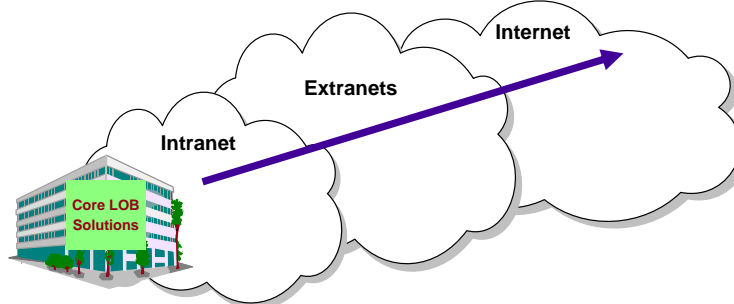
iSeries Access for Windows V5R3 beta

- I was able to quickly create a VB.NET data access program to read data from an iSeries table. The performance seemed great.
- I was also impressed with the improved performance of many of the Ops Nav system functions. For example, it used to take minutes to display the tables in a relatively small library, now it takes only seconds.
- I am using VPN to access our iSeries over the Internet using a cable modem.

Paul D. Olsen, Senior Systems Architect
Silvon Software, Inc., Annapolis MD
The Enterprise Performance Management Company
www.silvon.com



Extend iSeries applications to the Web



Customers are looking for **no network desktop administration** and **easy access** to iSeries information:

- For a variety of desktop users
- For users with no iSeries skills

Moving to Web and e-business

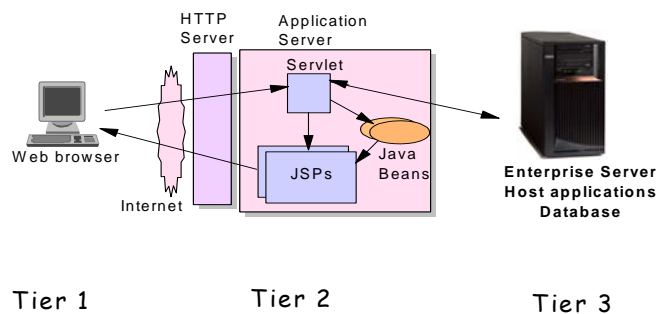
Customers want a new look on their iSeries and extend its information reach...

- **iSeries Access Family** provides alternatives so you can easily take your iSeries to the Web and e-business
 - This will help you solve pressing business problems quickly, practically, affordably -- with flexibility for the future
- **iSeries Access for Web** can be the instant 'window' to the iSeries
 - It provides completely customizable front page capability and tremendous function and flexibility
- **Host Access Transformation Server Limited Edition (HATS LE)** another instant 'windows' to the iSeries
 - You can provide 5250 access via a browser to users within minutes.



Top executive focus topic:
Get rid of those green screens!

First you need a web application server





Web Application Server Options

Web Application Server Options	Minimum iSeries Requirements
ASF Tomcat The ASF Tomcat web application server is part of the no-charge IBM HTTP Server for iSeries (5722-DG1)	70 CPW 256 MB memory
WebSphere Application Server - Express V6.0 WebSphere Application Server - Express V5.1 WebSphere Application Server - V5.0 Express for iSeries These ship with i5/OS V5R3 at no additional charge	300 CPW 512 MB memory
WAS V6.0 Base, WAS V5.1 Base, WAS V5.0 Base WAS V6.0 Network Deployment, V5.1 ND, V5.0 ND	512-750 MB memory
IBM Workplace Services Express V2.5 (SI18964) WebSphere Portal for Multiplatforms V5.1.0.1 (SI18964) WebSphere Portal Express for Multiplatforms V5.0.2 WebSphere Portal Express Plus for Multiplatforms V5.0.2	750 CPW 2 GB memory
WAS Advanced Edition V4 WAS Advanced Edition Single Server V4 WAS V3.5	Old...



Is your AS/400 or iSeries ready?

	<p>Under 512MB Under 300 CPW</p> <p>Bxx, Cxx, Dxx, Exx, Fxx S10, S01, Pxx S20 / # 2161, # 2163 100, 150 170 / # 2159, # 2160, # 2164 170 / # 2289, # 2290, # 2291 170 / # 2292</p> <p>170 / # 2407, # 2408, # 2409 200, 20S, 250 270 / # 2422, # 2423, # 2424 270 / # 2248, # 2452, # 2454 3xx, 4xx 500, 510, 50S 53S / # 2154</p> <p>530 / # 2150, # 2151 600 620 / # 2175, # 2179, # 2180, # 2181 720 / # 2061 820 / # 2425, # 2426, # 2457, # 2456</p>	<p>Need HW Upgrade for any WAS</p>
	<p>S30 / # 2257 S20 / # 2170, # 2165 170 / # 2176, # 2183, # 2383 170 / # 2384, # 2385, # 2386 270 / # 2250, # 2431 53S / # 2155 530 / # 2152</p> <p>620(1) 640 / # 2185, # 2186, # 2187 640 / # 2237 720 / # 2062 820 / # 2395, # 2427, # 2458 800 810</p>	
	<p>SB1, SB2, SB3 S20(1), S30(1), S40 170 / # 2388 270 / # 2252, # 2253 270 / # 2432, # 2434 53S / # 2156, # 2157 530 / # 2153, # 2162</p> <p>640 / # 2238, # 2239 650 720(1), 730, 740 820(1), 830, 840 825 870 890</p>	

All 2004 i5 models

(1) = Except as listed above

WAS-Express, WebFacing & IBM Telephone Directory

WAS-Express, V5, ND, WebFacing, IBM Telephone Directory (1000+ cpw = Portal & Commerce)

http://www-1.ibm.com/servers/eserver/series/software/websphere/lay_foundation.html



Determine Your Performance

Use the IBM Workload Estimator Tool at
<http://www-912.ibm.com/wle/EstimatorServlet>

Minimum Configuration



Express requires less system resources!

I5/OS V5R3 or OS/400	Processor CPW*	Memory* (Per Instance)
V5R2M0	300	512 MB
or		(768 MB for support for Web Admin GUI)
V5R1M0		

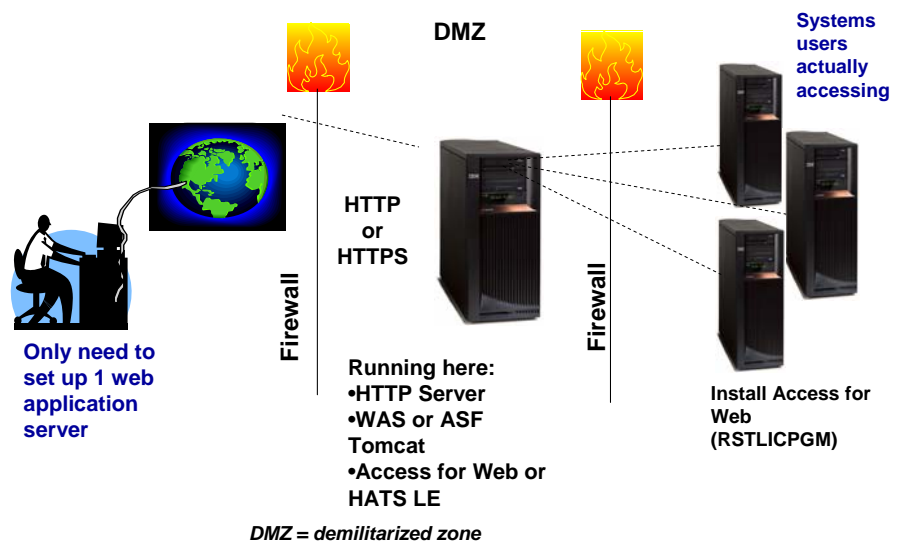
2 MB L2 cache (recommended)

*For running the application server only. Values define available resources and existing system workloads should be understood. Smaller configurations may be used, but performance degradation should be expected. Applications may add additional configuration requirements.

Use the IBM Workload Estimator Tool to develop a custom configuration estimate based on application design aspects.



Setting up your web application server



Only need to set up 1 web application server

iSeries Access for Web (5722-XH2)



<http://<myseries>/webaccess/iWAHome>

What is iSeries Access for Web?

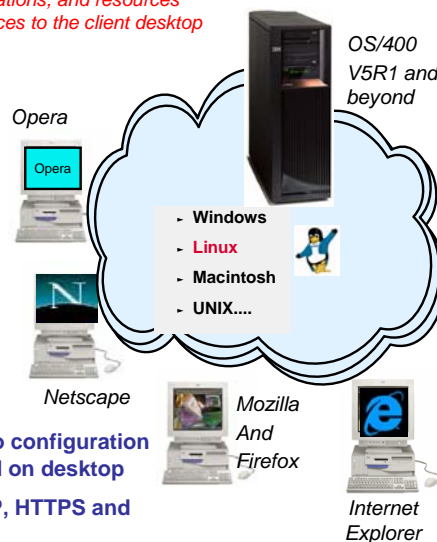
End users can leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the client desktop through a web browser

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:

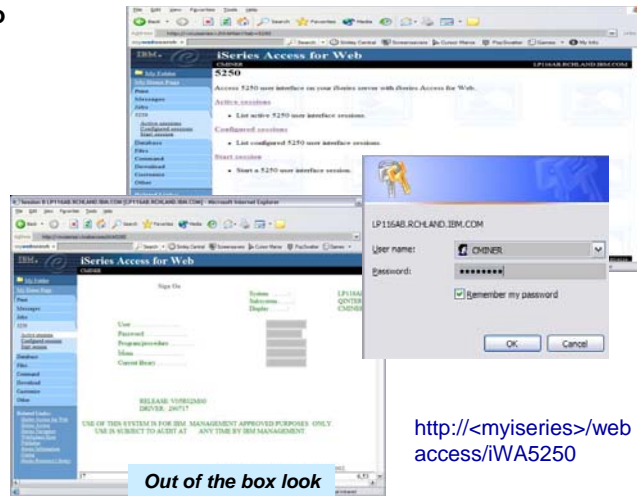
- Is server based
- Requires only a browser on the client, no configuration required at desktop, no applets installed on desktop
- Uses industry standard protocols - HTTP, HTTPS and HTML



5250 display emulation

<http://<myiseries>/webaccess/iWAMain?tab+5250>

- Can reconnect to a previously **active** session
- Can **configure** a session or work with previously configured sessions
- Can **start** a new 5250 session



<http://<myiseries>/webaccess/IWA5250>

5250 Emulation Capabilities

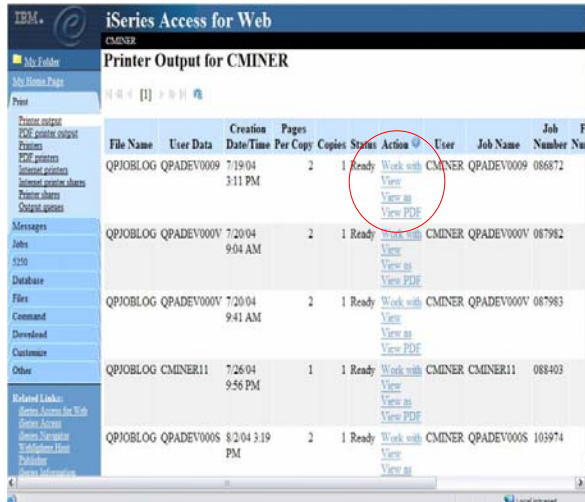
- **Page up, page down, and function keys supported on:**
 - Microsoft Internet Explorer (version 5.0 and later), Netscape (version 6.0 and later), Mozilla
- **Can Assign unique device ID**
- **Screen auto-switches to 132 columns as needed**
- **Cursor positioning**
 - Ability to place cursor at non-input fields for cursor sensitive applications
- **Macros**
 - New 'initial macro' can be played immediately after a session is started. It is a way for users to **bypass the OS/400 sign-on screen** and perhaps have a specific host application started in their behalf.
- **Keypads**
- **Shortcuts to session configurations and macro definitions can now be created.**
 - You can pre-configure what another user or group of users can use for sessions and macros. You could then take away their ability to create sessions and macros and enable them to use only the ones you have created.
- **Active sessions can now be shared with other users and groups.**
 - This can be useful from a Help Desk perspective to be able to view what the end user is viewing.

Work with Printer Output Queue - Spoolfile

http://<myiseries>/webaccess/iWASpool

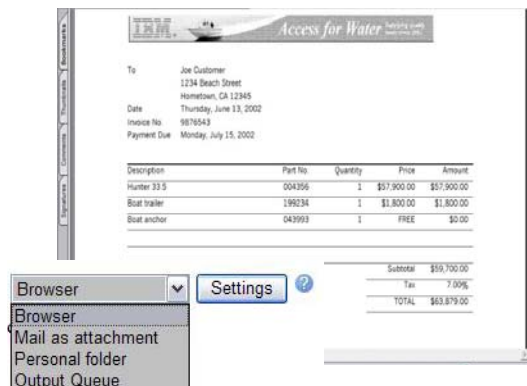
- My 'printer output'
 - Can view it
 - Or can select 'Work with' for more options

- Easy-to-use GUI for working with my printer output
 - Don't need to sign onto a 5250 session, and run commands to get to spool file



Convert Printer Output to PDF

- On-the-fly conversion of all printer output (SCS, AFP) to PDF
 - Convert it and display it in browser
 - Print it to any local or network printer
 - E-mail it
 - Put it in any Personal Folder
 - Move it to another print queue

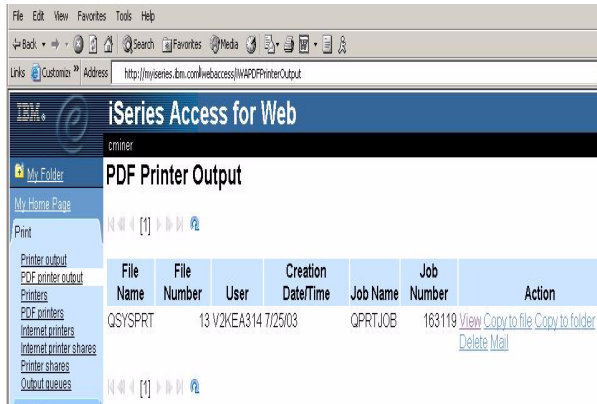


PDF Printer Output

<http://<myseries>/webaccess/iWAPDFPrinterOutput>

PDF Printer Output is a new tab

- It will display a list of PDF documents that have been converted by any of the PDF printers that you have access to
- Now users can go straight to the 'PDF Printer Output' tab and click to view the output, email it, copy it to a file or Personal Folder, or delete it



Requires InfoPrint Server (5722-IP1)

Infoprint Server for iSeries – 5722-IP1

- Go beyond 'print and distribute.' Go to the next level of automation to manage and present business information electronically.
 - Receive more value from your IBM iSeries investment. Extend core iSeries output capabilities that help enable you to reengineer business processes to improve service levels, decrease transaction costs, reduce paper flow and enhance competitive advantage with speed and flexibility.
- With Infoprint® Server, you can transform any standard iSeries output format and produce electronic output in Advanced Function Presentation (AFP™) or PDF.
 - This capability allows you to manage and distribute information via e-mail, Web or local printing.
 - And, you gain iSeries management of network output.
- Infoprint Server provides transforms for PCL, PostScript®, GIF, TIFF, JPEG and PDF data into AFP
 - So you can bring these documents into the iSeries for efficient and cost-effective handling.



Complimentary trial

Activate your 70-day evaluation of Infoprint Server for iSeries today. Unlock the trial from the OS/400® Version 5 release set of CDs. Learn more

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

Integrates with desktop user's email server

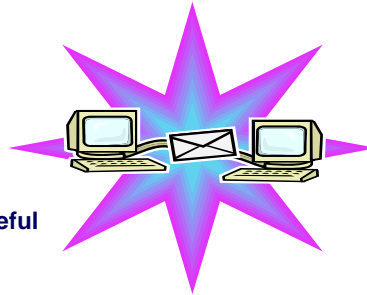
Can send results to a recipient with status sent to sender for:

- A database (SQL) action
- CL command
- File command
- PDF view of print information

Sent as an attachment to the 'email'

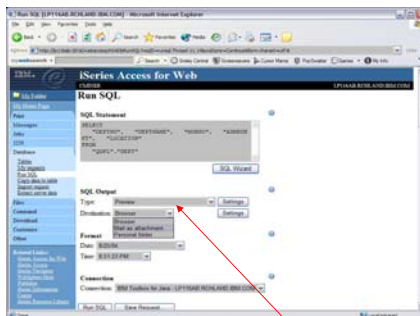
A one-step way to distribute information across the network, and particularly useful when recipient is:

- Not an iSeries user
- Does not have access to a web browser



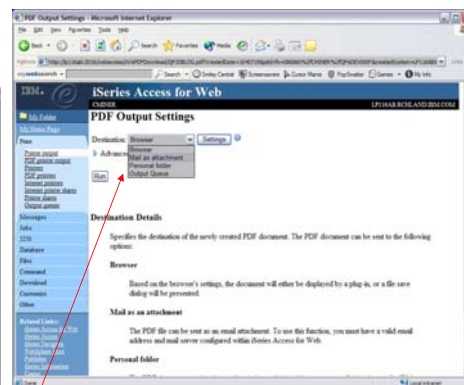
Users can easily email results

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



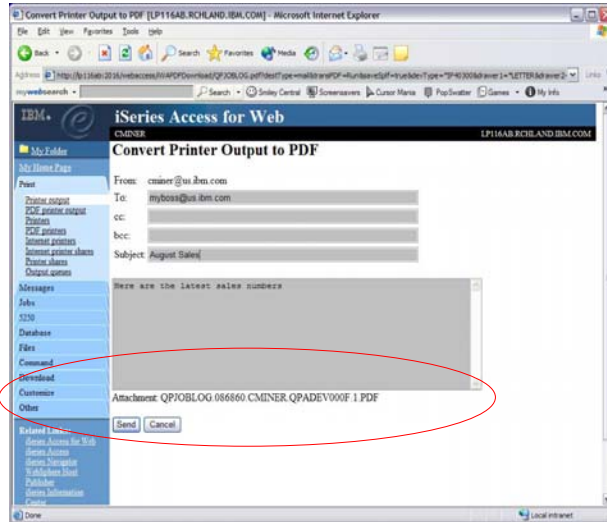
Database request

Mail output



Working with PDF printer output

Send your e-mail



Your email address plugged in for you...

...see PDF attachment there...

Integration with Lotus Sametime – V5R3

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



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

Database functions



Easy-to-use GUIs for working with the iSeries database

- **Tables**
 - View contents of a table using Quick View
 - Add or update records using 'Insert and Update'
 - Perform actions without having knowledge of SQL and its syntax
- **List previously saved requests**
 - Run or Edit Requests
 - Copy, Delete, and Rename actions
- **RUN SQL using SQL Wizard**
- **Exchange spreadsheet data with iSeries**
- **Import existing Client Access Express for Windows Data Transfer requests**
- **Extract Server data**

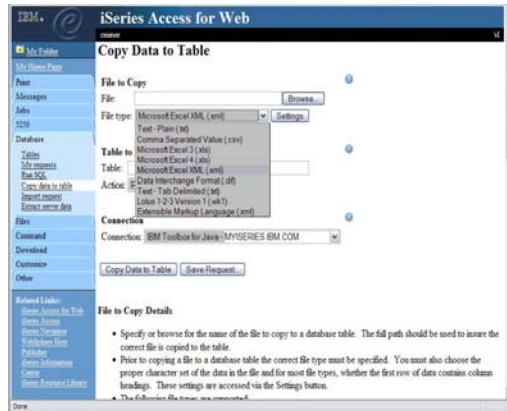
Run Requests

- You could give users or groups of users some database requests that you have created for them.
- They can only run these specific requests



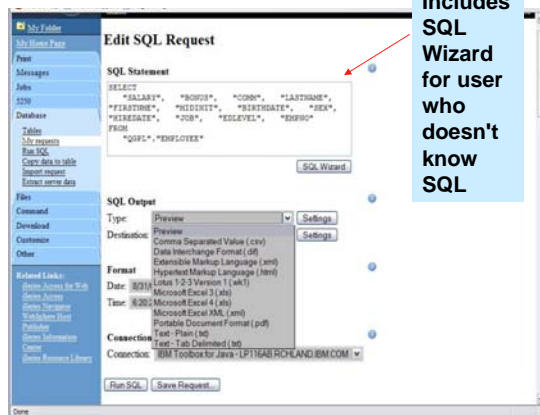
Upload Data

- Upload data from a variety of file types
 - Excel, XML, Lotus, etc
- Put into iSeries database
 - 'Replace' contents of table
 - 'Append' to existing data
- If no table exists on the iSeries, you will get a wizard to help you create a new table



Run SQL

- Run SQL allows you to dynamically 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
- Can save request
 - My Requests, Give Shortcut to others



Includes SQL Wizard for user who doesn't know SQL

IBM eServer iSeries

SQL Wizard

SQL Wizard enables you to:

- Select **tables**
- Select which **columns** to return
- Add **conditions** to your select statement
- Select the **columns** by which you want the data **sorted**

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why "i"? it's simple.

IBM eServer iSeries

Dynamic Queries – V5R3

- SQL Wizard now supports **dynamic database queries**
- Contains the ability to generate SQL statement with markers for conditional values
- For example, an Administrator might build a query to retrieve some particular customer information, then when the end user runs the query a prompt would appear for user to key in 'customer name', 'customer number', etc.

Request	Description	Action	Shortcut	Created By	Access
Accounting Programs		Run Copy Delete Rename Create shortcut Edit	No	cmrnr	cmrnr
Employee Output	History	Run Copy Delete Rename Create shortcut Edit	No	cmrnr	cmrnr
Fill out timecard		Run Copy Delete Rename Create shortcut Edit	No	cmrnr	cmrnr
Find Employee Record		Run Copy Delete Rename Create shortcut Edit	No	cmrnr	cmrnr
Find Employee Record		Run Copy Delete	Yes	cmrnr	*PUBLIC

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why "i"? it's simple.

The best way to learn about iSeries Access for Web is to try it!

Access the following web site through your browser:

- <http://iseriesd.dfw.ibm.com/webaccess/iWAHome> (case sensitive)
- This is an IBM iSeries server in Dallas

Use the following User ID and password to sign into the EXPERIENCED USER page:

- User ID of **WUSER**
- Password of **DEMO2PWD**

This shows the basic look of Access for Web as we ship it. You can try various functions -- including working with printer output and the options we provide. You can click on the 5250 tab, sign onto the iSeries, then start an RPG application called BOATS and run it.

Start up a different another browser session to same url address above, and use the following User ID and password to sign into the Access for Water INEXPERIENCED USER page:

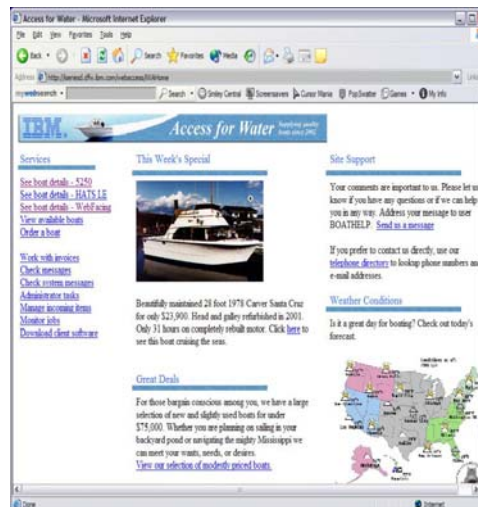
- User ID of **BOATADMIN**
- Password of **DEMO2PWD**

This is an example of how you might design a web page for your company use. You will see that an end user could start the same BOATS application by clicking on the 5250 session -- or if they had used WebFacing or Host Publisher they could run the application with them. So click on all 3 links and see the same application in different views. You will also see other links that would let a user work with spoolfile information, work with IFS, run database requests, etc..

Demo page – 'window' to iSeries

See integration with other products

- IBM Telephone Directory (that ships with all WebSphere Application Server orders) integrated into front page
- Get printer output from iSeries spool file as a PDF
- Get information out of iSeries database
- Run a movie that is stored in iSeries IFS



Why use iSeries Access for Web?

Start simple, grow fast...

Any iSeries customer -- **with any hardware model** - can quickly get started working in a Web environment

- If your system hasn't got the capacity to run WAS, they you can easily install the ASF Tomcat web application server. ASF Tomcat runs on hardware with 70 CPW and 256 MB memory

Any iSeries customer -- **with little Web experience** - can easily get started working with e-business

- iSeries Access for Web is simple to install and configure
- No programming skills required to set it up

Any iSeries customer -- **without training or setup on users' desktops** - can extend the reach of their resources to end users

- Use customize facility to set up view ('window') to iSeries and to control access to various iSeries resources
 - all built around OS/400 user profiles

A great first step to get iSeries into e-business

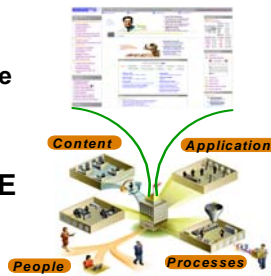
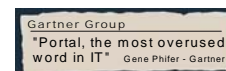


Use 'out of the box'

WebSphere Portal Offerings for i5/iSeries

Flexible portal licensing (per-user OR per-processor pricing)

- Workplace Services Express V2.5 ships with the Enterprise Edition for i5 Models 550, 570 and 595
- WebSphere Portal Express Plus ships with Enterprise Edition for i5 Model 520
- Depending on the server model, you may also be entitled to services and education vouchers.

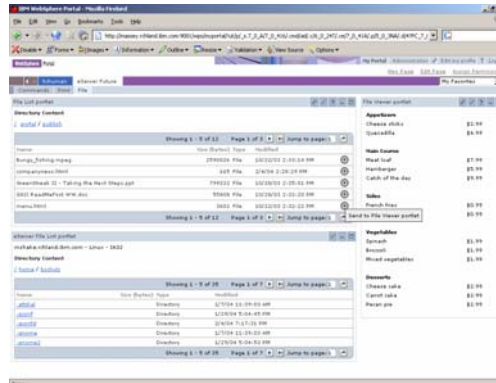


Improved Setup and Configuration with WSE V2.5

- Wizards to deploy on IBM i5/OS V5R3
- Improved performance and reduced system requirements
- Deploy a solution for document management, instant messaging and portal all on one server

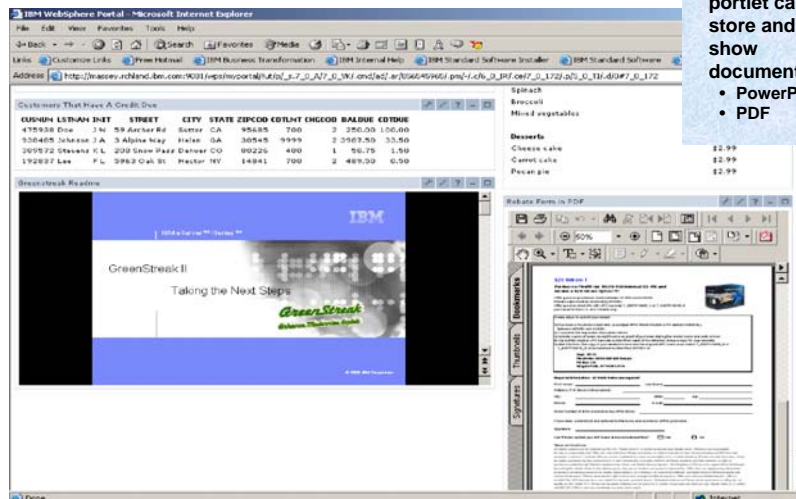
Use Access for Web with Portal

- Support for WebSphere Portal Express and Express Plus
 - The V5R3 Access for Web product (with software fixes) runs as a portlet on both versions of WebSphere Portal.
- Most functions can run as portlets
 - 5250 emulation runs in a portlet window
 - Other functions of Access for Web can individually be assigned to a portlet window as well.
 - For example, one might have the 'Database' function in one window and 'Print' function in another windows



iSeries Access for Web running in a portal...

Simple Content Publishing



Using 'IFS' portlet can store and show documents

- PowerPoint
- PDF

Beta (next release!) available via web download

New servlet support

- **Database**
 - Support for Open Office file spreadsheet
 - Import Query Manager and Query/400 requests
- **5250**
 - Bypass sign-on
 - Support HTML keyword
 - Hotspots for URLs
- **Administration**
 - Support for transferring user data settings to another user
- **Single sign-on using authenticated Websphere credential**

New portlet support

- **Database**
 - SQL Requests portlet
 - SQL statement builder portlet
 - "SQL Query" portlet to accept click-to-action requests
- **New portlet to allow changing of iSeries password**

Download from
www.ibm.com/eserver/iseries/access/web

Customer comment

iSeries Access for Web

- I read your article in the iSeries400 experts journal (*). This article was very informative and inspired us here at Guelph Hydro to implement the product. We had the product up and running in a day and configured our security using the tools available with the product. **I can confidently say that this product is definitely "Cool" and we have already taken advantage of the powerful features of this product. This is a definite "got to have" product for any serious iSeries shop.**
- You can give your development team two thumbs up on this one.
- Thanks again.

Mike Joaquin
 Guelph Hydro Electric Systems Inc
 Guelph, Ontario Canada



(*) "A Peek at the Future: iSeries Access for Web" appeared in iSeries 400 Experts Journal, November/December 2003 edition

HATS Limited Edition

- **Host Access Transformation Services Limited Edition**
 - 5250 emulator that is used through a browser
 - Servlet - entire product runs on web application server, nothing to install or configure at the desktop

- **Available only in iSeries Access Family, 5722-XW1**
 - Automatically ships with 5722-XW1 orders
 - First made available 6/30/03
 - No additional charge for HATS LE (beyond the cost of 5722-XW1)



A quick and easy way to put iSeries applications on the Web

HATS LE

Runs in a browser

- Delivers HTML to the desktop
- Only software needed on the client is a Web browser
- Uses browser SSL features

Works on all 5250 screens

- Stock Templates included so you can quickly personalize your web page to your company look and feel

Screens are converted on the fly, in real time

- Selection lists can be converted to hot links, buttons, drop-down menus, or option lists (radio buttons)
- PF keys are can be converted to buttons or hot links

No programming necessary

- Doesn't break if changes are made to 5250 application
- No need to access source code

HATS LE: Real-time Screen Conversion

Traditional green screen

Drop-down menu

HATS LE on-the-fly conversion using customer-provided HTML (logo and graphics)

HATS LE handles 'Subfiles'

HATS LE has special default code to handle 'subfiles'.

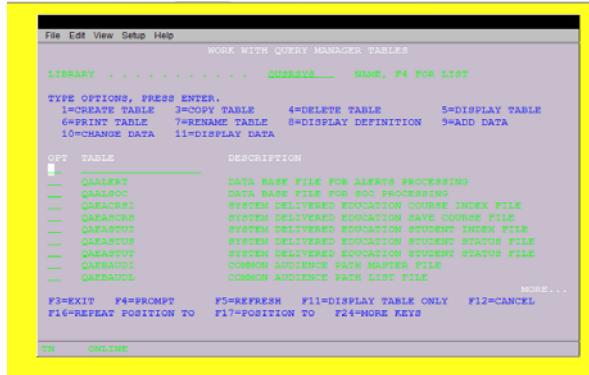
- Ran command 'STRQM'
- Selected 'Work with Query Manager Tables'

HATS LE was configured to show these tables as pull-downs

Select	Table	Description
Select	BOOKHST	Book History Database
Select	BOOKINV	Book Inventory Database
Select	BOOKREF	Book Cross Reference Database
Select	CORP_CATALOG	CORPORATE MERCHANDISE CATALOG
Select	CORP_38001	CORPORATE MERCHANDISE CATALOG
Select	JK_CATALOG	JK Toys Product Catalog
Select	JK_INVENTORY	JK Toys Product Inventory
Select	JK_INVENTORY	JK Toys Product Inventory
Select	JK_INVENTORY	JK Toys Product Inventory
Select	PRDCCAT	Wholesale Sports Product Catalog

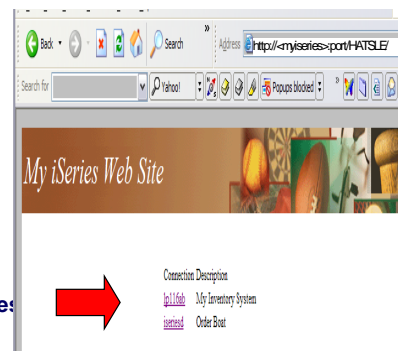
Typical emulator handling of Subfile fields

- These same screens views by another browser-based 5250 emulator



HATS LE – Version 5.0

- New features in HATS LE V5 (available on V5R2 or V5R3)
 - Ability to configure multiple iSeries connections – users then select from a menu which iSeries server they wish to connect to
 - Improved default transformation features
 - Improved Subfile rendering
 - Improved selection list rendering
 - Detect 'More...' option on 5250 screen
 - Automatic table detection
 - Support for reverse image
 - New templates and additional support to work with new templates



Try out HATS LE for yourself!

Demo web site...connect to iSeries using HATS LE

 <http://iseriesd.dfw.ibm.com:2034/HATSLE/>

- Key in user-id of **WUSER**
- Key in password of **DEMO2PWD**

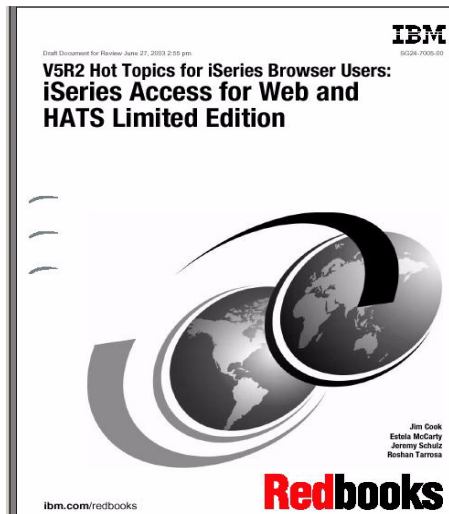
- Note that Workstation ID also starts with WUSER for each session → used HATS LE Workstation ID wildcard support



Redbook

New Redbook...
SG24-7005-00

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



iSeries Access for Wireless 5722-XP1



Application Flexibility, Innovative Technology

Integrated package of wireless functions and middleware

- **Management Central-Pervasive**
 - Runs on WebSphere Application Server on the iSeries
 - V5R3 enhancements includes scripts to simplify setup and configuration, and Application Administration support.
- **iSeries Toolbox for Java Micro Edition**
 - Runs in the Java Virtual Machine (JVM) on the desktop, and provides access to iSeries through Java™ classes running on the devices, and ability to write Java Toolbox applications with the customized look for the devices
 - Also includes access to iSeries DB/2 from Java application running on a wireless device (can create full-featured JDBC applications with transactions, stored procedures, DB triggers, etc.)



iSeries Access for Wireless is a relatively new member of the iSeries Access Family

Delivered with OS/400 V5R2 at no additional cost

Delivers strong features to enhance development of wireless applications for use with the iSeries

IBM eServer iSeries

Management Central Pervasive

a 'System Monitor' has just reached a threshold

Status: 1 threshold triggered on 1 of 3 systems Systems and groups: Sue's Group

CPU Utilization (Average) - (5:51:30, 100.00) on System3

CPU Utilization (Average) - (5:51:30, 100.00) on System3

System	Graph Line Status
<input checked="" type="checkbox"/> System1	
<input checked="" type="checkbox"/> System2	
<input checked="" type="checkbox"/> System3	

App3 (41.07)

Property	Value
Job name	App1
User name	Smtowns
Job number	329674
Job type	B
Job culture	

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why "i"? it's simple.

IBM eServer iSeries

Connectivity solutions...

iSeries Access Family is investing in a variety to connectivity options to meet customer needs:

- Linux (native) → ★ **iSeries Access for Linux**
- Windows (native) → ★ **iSeries Access for Windows**
- Wireless → ★ **iSeries Access for Wireless**
- Browser-based → ★ **iSeries Access for Web**
- ★ **HATS LE**

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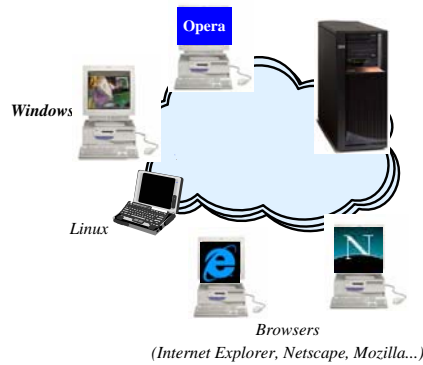
why "i"? it's simple.



Summary

The way to work with your iSeries is through an easy-to-use and powerful GUI..

- Your desktop solutions will 'look great'...
- You have leading technology at your fingertips that bring exceptional productivity benefits...
- You can easily expand your business to the Web



As one customer so aptly said a 'definite "got to have" product for any serious iSeries shop'



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AS/400e	IBM	
eServer	IBM (logo)	iSeries
	iSeries	i5/OS

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