



System i Access : What's New in Windows and Web?

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<http://www.ibm.com/systems/i/software/access>

System i Access Sessions/Labs

Presentations:

- **J11 – System i Access: What's New in Windows and Web?**
- **F15 – System i Access for Web: Run 5250 in a Browser**
- **J23 - Get to Your i5/OS with a Browser: System i Access for Web V6R1 (Overview)**

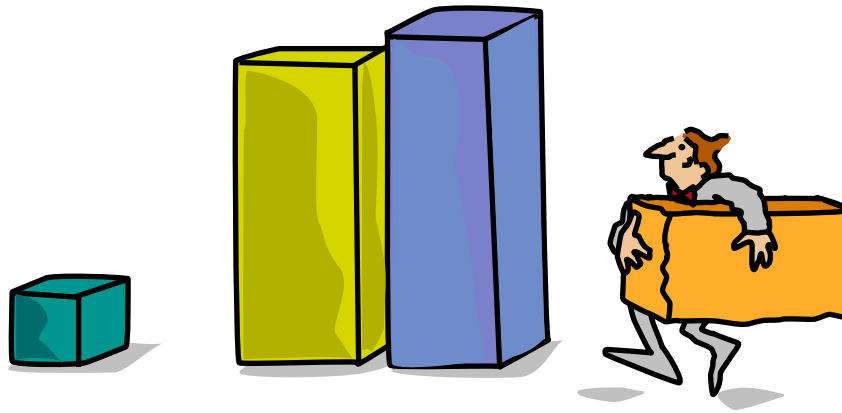
Labs

- **H12 - System i Access for Web – Using the Functions**
- **H13 - System i Access for Web Configuration**
- **H22 - Administrator's First Steps to Customize System i Access for Web**
- **H24 - System i Access for Windows: Basic or Advanced**

Functional enhancements can be submitted via the FITS system. The url is:
<http://www.ibm.com/systems/i/software/access/>

And click on link [Request for Design Change](#)

Packaging & Ordering



System i Access Family

A variety of connectivity software

System i Access for Windows

runs natively on Microsoft **Windows** operating systems



System i Access for Web

enables users to access i5/OS through a workstation **web browser**, independent of desktop OS

System i Access for Linux

runs natively on **Linux** operating systems



System i Access for Wireless

runs on **handheld** devices



These products provide the functionality and interfaces to gain access to applications, data, and resources on i5/OS.

System i Access Family - Packaging

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

Products - Focus

Description	Product	Product Number	Need 5761-XW1 or 5722-XW1 to use?
Family Name	➤ System i Access Family	5761-XW1	
Windows client	➤ System i Access for Windows	5761-XE1	Yes (for 5250 and Data Transfer)
Linux client	➤ System i Access for Linux	5761-XL1	Yes (for 5250)
Browser Access	➤ System i Access for Web	5761-XH2	Yes
Handheld / Wireless offering	➤ System i Access for Wireless ➤ iSeries Toolbox for Java ME	5722-XP1	No
i5/OS systems management	➤ System i Navigator ➤ Operations Console	Packaged in 5761-XE1	No

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 i5/OS software subscription

System i Access Family included with new hardware

System i Access Family (5722-XW1 or 5761-XW1) unlimited user feature included with the following System i hardware

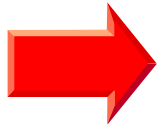
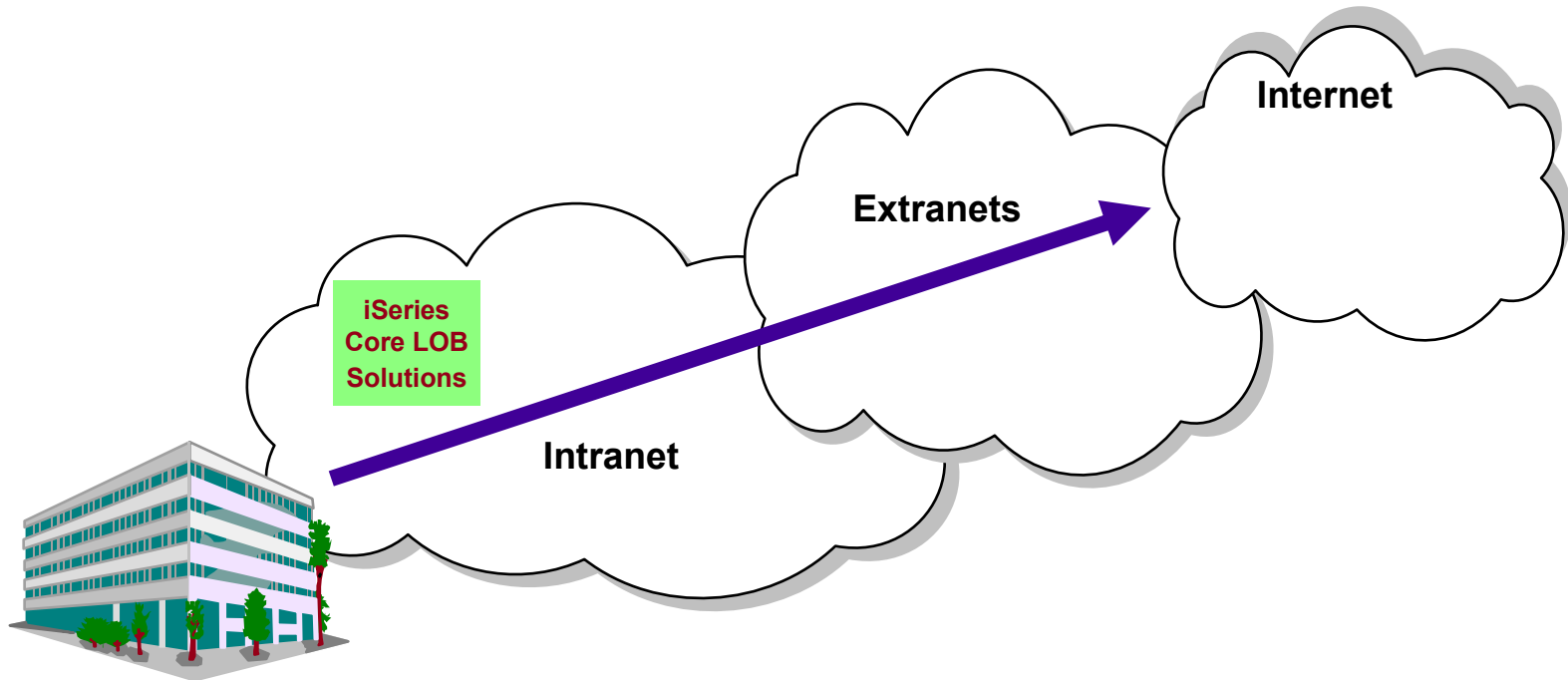
- System i Model 515 Express configurations
 - See Announcement Letter 107-181 dated 4/1/07 for more details
- System i Model 525 Express and CBU configurations
 - See Announcement Letter 107-182 dated 4/1/07 for more details
- System i Model 570 with POWER6 technology
 - See Announcement Letter 107-448 dated 7/31/07 for more details
- [The new Power Systems Models 570 and 595 - announced April 2008](#)

Any i5/OS user connecting to the above System i models is entitled to use any of the System i Access Family products at no additional charge. This includes:

- System i Access for Windows
- System i Access for Web
- System i Access for Linux



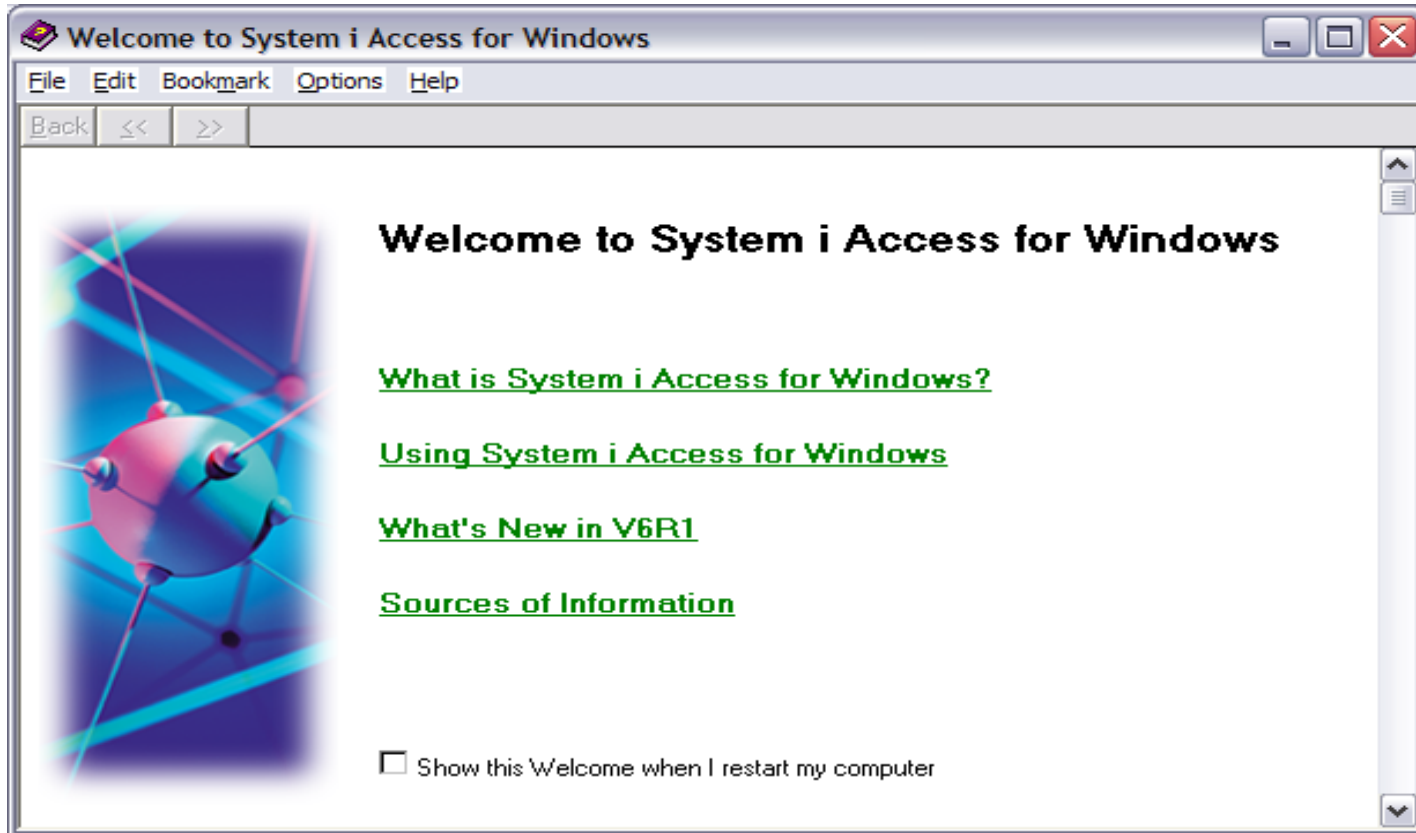
Core LOB Solutions



Looking for highly functional and integrated solution for:

- Windows servers and Windows desktop users
- i5/OS administration and operation

System i Access for Windows



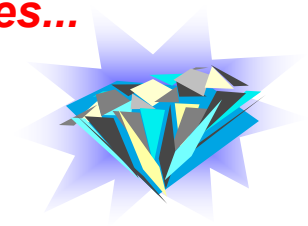
- Name: PC Support -> Client Access -> Client Access Express -> iSeries Access for Windows -> System i Access for Windows
- Heritage: DOS, Extended DOS, OS/2, Windows 3.1, Windows 95/NT, Windows XP, Windows Vista,...

<http://www.ibm.com/systems/i/software/access/windows/>

Integrating native Windows with System i

If you want a single solution for working with all System i 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 System i 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 System i Access for Windows**

Supports Microsoft operating environments...

Microsoft Transaction Services (MTS)

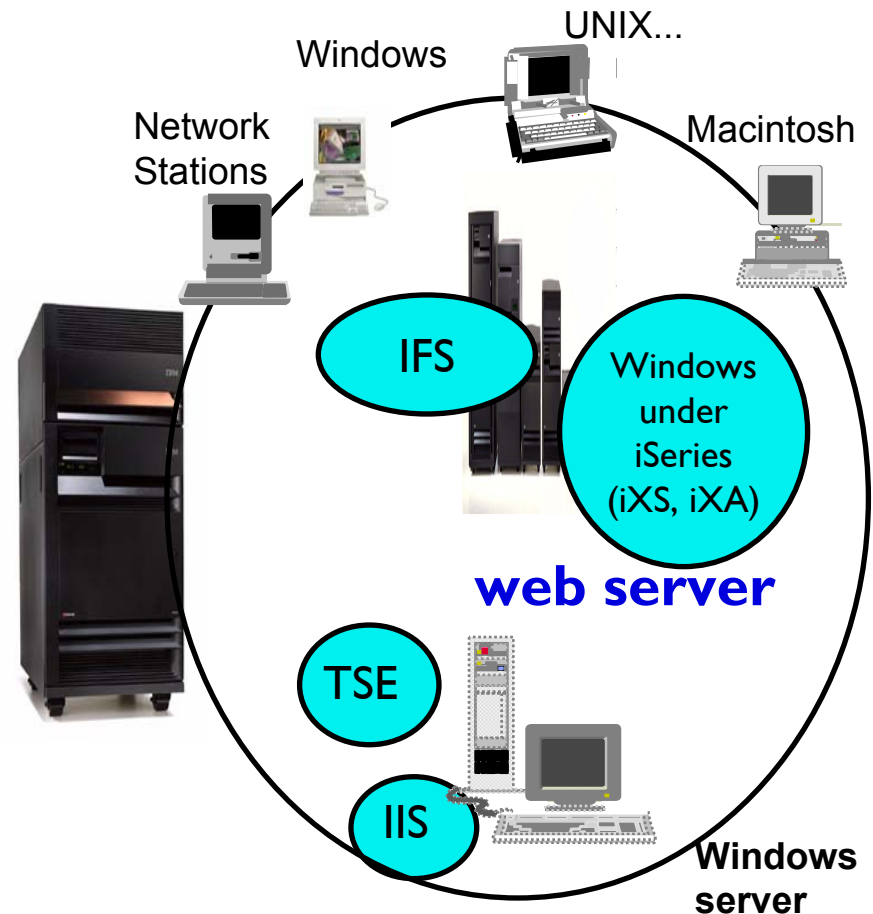
- example, an Auction House application where may need to back out transactions (ie, 2-phase commit)

Terminal Server Edition (TSE)

- System i 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. System i Access runs on server, and fulfills requests for iSeries data (ie, ODBC, OLE DB, etc)



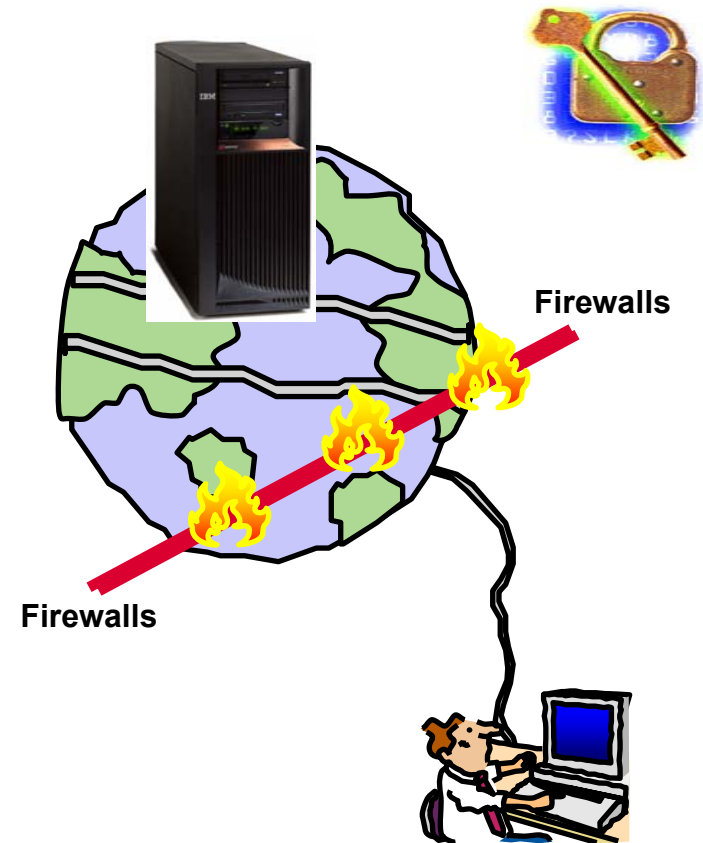
Supports leading network and security offerings...

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 System i address when on Internet



**If you do it on System i,
you can do it with
System i Access for
Windows...**

Installation: DVD in V6R1

- **Install media for the PC:**
 - **Prior to V6R1, separate PC CD for each language**
 - **V6R1 – two-DVD set with all languages and all 32-bit and 64-bit OS**

Windows Operating Systems

The V6R1 and V5R4 versions of System i Access for Windows can be installed on:

- Windows 2000
- Windows XP Professional
- Windows XP Tablet PCs
- Windows 2003 Server
- Windows Vista

64-bit Processors supported*

- Advanced Micro Devices (AMD64)
- Intel with EM64T
- Intel with Itanium



V5R3 System i Access for Windows installs on:

- Windows **NT 4.0**, 2000, XP, 2003

V5R2 System i Access for Windows installs on:

- Windows **98, ME**, NT 4.0, 2000, XP, 2003

V5R1 System i Access for Windows installs on:

- Windows **95**, 98, and ME, NT 4.0, 2000, XP

Refer to www.ibm.com/systems/i/software/access/supportedos.html for the latest information

Windows Vista:

- **Ultimate and Premium Editions are supported.**
- **V5R4 System i Access for Windows with service pack [SI25949](#) or later**
 - **PC5250 requires service pack [SI27741](#), available July 2007**
- **Refer to <http://www.ibm.com/systems/i/software/access/supportedos.html>**

and

Informational APAR II14239 linked from that page

- **Permanent restrictions: No direct console (LAN Console is supported) or SCS print drivers**
- **Workaround required for using help text**

V5R4: PC5250 (Personal Communications 5.8)

Key enhancements include:

- Support to associate printer sessions with display sessions
- A new configurable, printer session window that provides host, printer, and page setup support.
- New programming interfaces (APIs) to retrieve and modify Page Setup and Printer Setup information
- Additional bi-directional enablement
- New automation objects support for the .NET environment

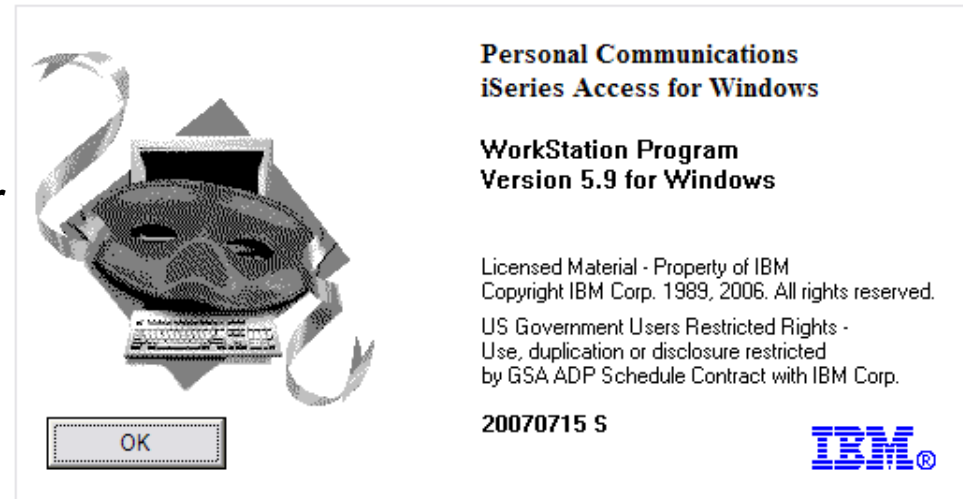


The 5250 emulator (PC5250), integrated with System i Access for Windows, is the Version 5.8 of IBM Personal Communications

V6R1: PC5250 updated (Personal Communications 5.9)

Key enhancements include:

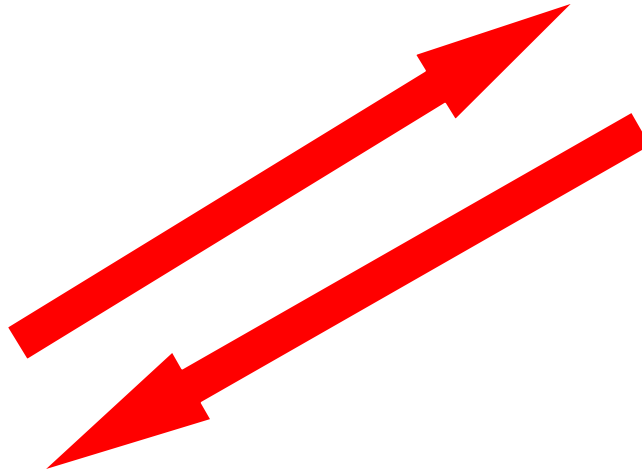
- Disable the minimize, restore, and close options of PC5250 sessions
- Print support for headers and footers on PrintScreen commands
- Support to hide menu bar, toolbar, operator information area (OIA)
- Retrieve PC550 emulator package information from the Help -> About dialog
- Overriding ShiftLock on German and Austrian keyboards
- Support an Environmental variable in Toolbar profile path
- Improved high-resolution display for English and West European languages
- Ability to disable the STRPCCMD command based on workstation keywords
- Store window size, position, and font for each workstation (.ws) profil



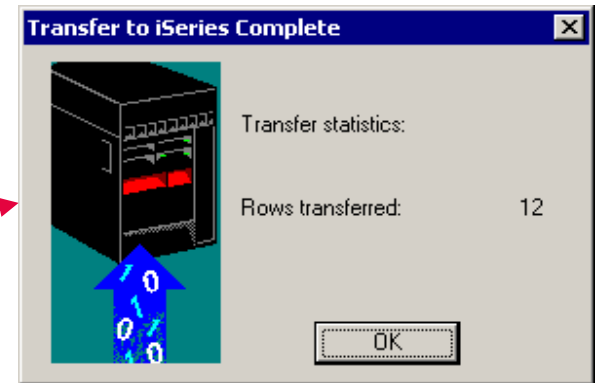
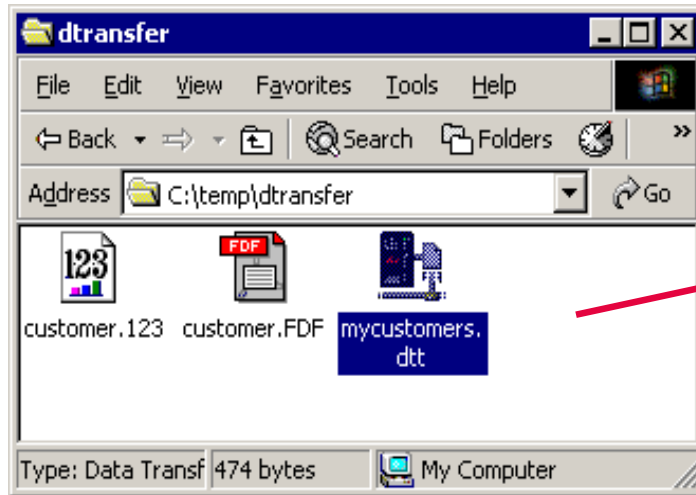
*The 5250 emulator (PC5250),
integrated with iSeries Access for
Windows, is the Version 5.9 of IBM
Personal Communications*

Data Transfer

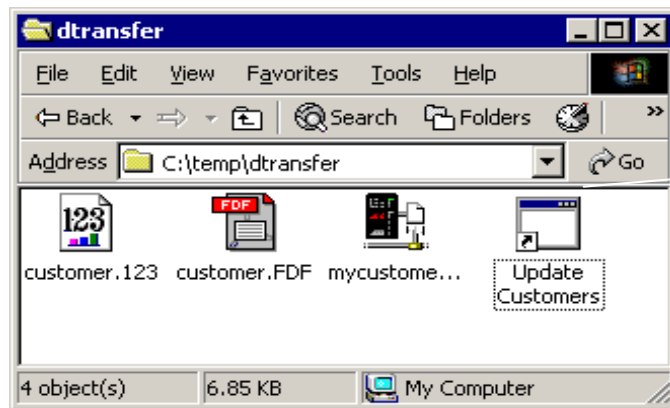
- Copy Data to i5/OS database
- Copy Data from i5/OS database



Run Data Transfer by Clicking an Icon



Double-click on an icon

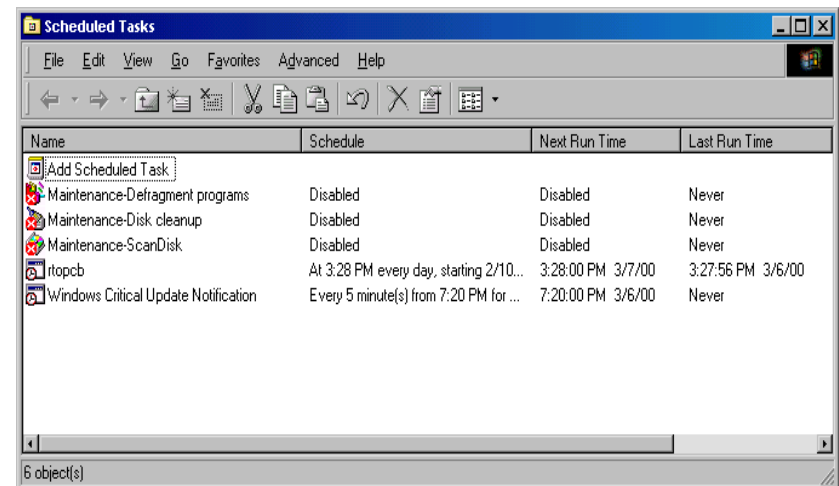


Data can be uploaded with no prompt to user

Scheduling a Data Transfer Request

- Use Access for Windows Batch Commands to create the appropriate Data Transfer request
- Using Microsoft Windows Scheduler, you could schedule System i Access for Windows Batch Transfers to run without user intervention

RTOPCB can now be scheduled to run at a given date and time



Data Transfer Enhancements – V5R4, V5R3, V5R2

V5R4 Enhancements	V5R3 Enhancements	V5R2 Enhancements
<ul style="list-style-type: none"> ▪ Support MS Excel XML Spreadsheet format ▪ Support 128-byte column names ▪ Support PC selection of an independent auxiliary storage pool (IASP) ▪ Support creating and overwriting empty query result sets ▪ Improved support for delimited names (requires V5R4 SP1) 	<ul style="list-style-type: none"> ▪ Unicode enablement / New Unicode text file type <ul style="list-style-type: none"> • Support UTF-8 and UTF-16 data in DB2 database tables ▪ Support larger decimal precision ▪ Support BINARY and VARBINARY SQL data types ▪ Support most recently used request list and last directory in Excel Add-in ▪ Date/Time fields recognized by Data Transfer and now stored on DB2 for iSeries as 'date or time' field. ▪ Option to convert numeric to character when transferring to iSeries DB ▪ Support data compression for faster transfers 	<ul style="list-style-type: none"> ▪ Support for uploading more than 256 columns of data to a database file ▪ Add-ins for Excel to upload data directly from spreadsheet ▪ Support Excel V7 (BIFF7) and V8 (BIFF8) file formats. (Excel 97 and 2000 use V8 file formats) ▪ Support Lotus 123 V9 file format (with 65,536 rows) ▪ Support numeric cells within formula (Excel, Lotus 123) ▪ Support new iSeries database functions

Data Transfer Enhancements – V6R1

- **Support of 128 byte table names**
- **New download option to open files**
- **Support for the standard DECFLOAT data type**
- **COM-based Excel Add-in that gives the capability to download/upload tables containing DECFLOAT columns when using Excel 2007**
- **Ability to set a default data type when scanning documents**
- **List file support in RXFERPCB application that allows users to run download or upload transfer requests in batch mode**
- **Support for parameter markers in the SQL "where" clause that enables users to use a single transfer request file to run several queries when only values are changing**
- **Ability to process table names using the SQL table names which allows the users to select either using meaningful SQL table names or keep using i5/OS system table names**

iSeries ODBC Driver



ODBC

Most popular database access method from a Windows application

Runs on 32-bit and 64-bit Windows O/S



Compliant with Microsoft ODBC Version 3 specification

- **PC applications can now take advantage of new functions included in the 3.5 Specification.**

ODBC Enhancements – V5R4, V5R3, V5R2

V5R4 Enhancements	V5R3 Enhancements	V5R2 Enhancements
<p>Requires i5/OS V5R4</p> <ul style="list-style-type: none"> ▪ 128-byte column names ▪ Maximum SQL statement lengths of 2,097,152 bytes or 1,048,576 characters ▪ Support for IBM Enterprise Workload Manager (eWLM) correlator ▪ Support for lock sharing between loosely coupled transactions <p>OS/400 V5R2 or later</p> <ul style="list-style-type: none"> ▪ Improved support for delimited names 	<ul style="list-style-type: none"> ▪ Support for BINARY / VARBINARY data types ▪ Support for UTF-8 / UTF-16 data ▪ Support for increased precision of decimal numbers ▪ Enhanced MTS support ▪ ANSI / ISO (American National Standards Institute / International Standards Organization) Core Level SQL standard of 1999 	<ul style="list-style-type: none"> ▪ 64K SQL Statements ▪ Additional descriptor information ▪ MTS Support (actually shipped in V5R1)

ODBC Enhancements - V6R1

- **128-byte cursor names**
- **SQL query storage limits**
- **ODBC application and QZDASOINIT system jobs association**
- **Decimal Floating Point (DECFLOAT) data type**
- **Capability to handle stored procedures compiled with differing date and time formats**
- **Ability to specify the IsolationLevel for autocommit**
- **Improved support for default values (Extended Indicator support)**
 - Enables an application to specify the column's default value should be used to insert data, instead of passing data in the parameter itself

OLE DB Provider



OLE DB

Microsoft-recommended
Access for 32-bit Windows
applications



- Record level access
- Data Queues
- Stored Procedures
- SQL
- Remote Commands
- ODBC



Visual Basic add-ins removed in V6R1

OLE DB Provider supports OLE DB 2.5

OLE DB Enhancements – V5R4, V5R3, V5R2

V5R4 Enhancements	V5R3 Enhancements	V5R2 Enhancements
<p>Requires i5/OS V5R4</p> <ul style="list-style-type: none"> ▪ 128 byte column names ▪ Maximum SQL statement lengths of 2,097,152 bytes or 1,048,576 characters ▪ Support for IBM Enterprise Workload Manager (eWLM) correlator <p>OS/400 V5R2 or later</p> <ul style="list-style-type: none"> ▪ System naming and library list ▪ Improved support for delimited names 	<ul style="list-style-type: none"> ▪ New SQL-only provider (IBMDASQL) <ul style="list-style-type: none"> • SQL commitment control using IBMDASQL • MTS support using IBMDASQL ▪ SQL <ul style="list-style-type: none"> • Custom blocking in SQL • SQL data compression • SQL package support ▪ New Record-Level Access-only provider (IBMDARLA) <ul style="list-style-type: none"> • Record-level access support for forward-only cursors and blocked reads using IBMDARLA ▪ Supports updatable cursors for the SQL dialect ▪ Database BINARY and VARBINARY data types ▪ Database larger decimal precision support ▪ Unicode support <ul style="list-style-type: none"> • UTF-8 & UTF-16 support 	<ul style="list-style-type: none"> ▪ Custom properties added <ul style="list-style-type: none"> • Force Translate (translate CCSID 65535 data) • Default Collection • Catalog Library List • Convert Date Time To Char ▪ Supports updatable cursors for the SQL dialect ▪ Supports ROW-ID ▪ 64K SQL Statements ▪ Additional descriptor information ▪ Is thread safe ▪ OLE DB provider work with Windows products, such as: <ul style="list-style-type: none"> • Visual Basic 6.0 OLE DB controls and wizards • ADO 2.5 – ships with Microsoft Windows 2000 • ADO 2.1 - ships with Microsoft IE 5.0 and Office/2000 products • An OLE DB interface is provided to support ADO recordset Seek (ADO 2.x)

OLE DB enhancements - V6R1

- **Supports setting a maximum storage on SQL queries**
- **Supports using decimal floating point data**
- **Handles errors from numeric data**
- **Truncate trailing blanks from input data**
- **Setting and passing client information to and from the database host**
 - Includes client accounting, program IDs, user IDs, application names and workstation names
- **Capability to handle stored procedures compiled with differing date and time formats**
- **Improved support for default values (Extended Indicator support)**
 - Enables an application to specify the column's default value should be used to insert data, instead of passing data in the parameter itself

iSeries .NET Data Provider



.NET

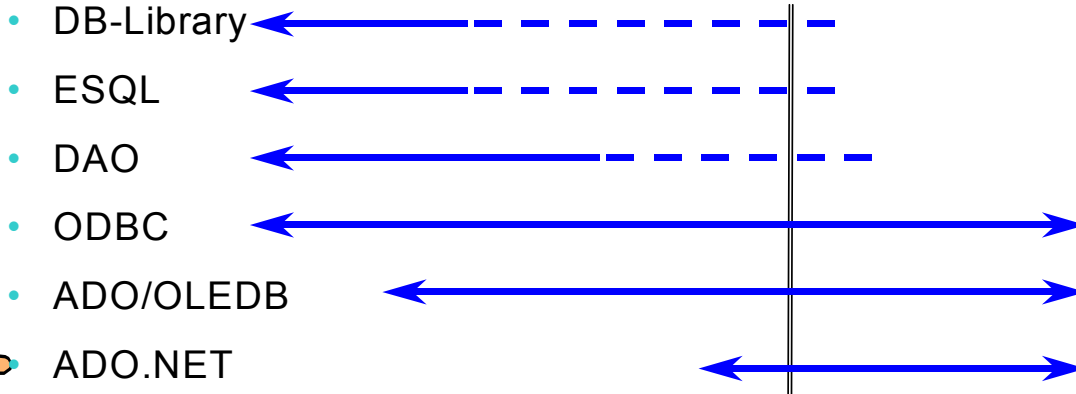
The next big wave in Microsoft technology

Runs on 32-bit and 64-bit Windows OS



Microsoft's Technology Roadmap

Today



The .NET provider is named **IBM.Data.DB2.iSeries**.

- It allows applications using Microsoft's .NET framework to access DB2 UDB for i5/OS databases.

For complete documentation of the .NET Data Provider, see IBM DB2 UDB for i5/OS .NET Provider Technical Reference.

.NET Enhancements – V5R4, V5R3

V5R4 Enhancements	V5R3 Enhancements
<p>Requires i5/OS V5R4</p> <ul style="list-style-type: none"> ▪ 128 byte column names ▪ Maximum SQL statement lengths of 2,097,152 bytes or 1,048,576 characters ▪ Support for IBM Enterprise Workload Manager (eWLM) correlator <p>Requires OS/400 V5R2 or later</p> <ul style="list-style-type: none"> ▪ System naming and library list ▪ Support for LOB data types ▪ Support for multiple active result sets per connection ▪ Customizable String processing for Char for Bit Data, Date, Time, Timestamp, Decimal, and Numeric data types ▪ Support for IntelliSense ▪ Additional sample programs ▪ Improved support for delimited names 	<p>Requires OS/400 V5R2 or later</p> <ul style="list-style-type: none"> ▪ SQL (INSERT,UPDATE, DELETE) ▪ Commitment Control ▪ Connection Pooling ▪ SQL naming ▪ Unicode ▪ Tracing ▪ Threads ▪ IASPs (multiple databases) ▪ Stored Procedure Support ▪ iSeries-specific Properties ▪ User-Defined Types <p>Supported later via SP SI15176</p> <ul style="list-style-type: none"> ▪ System Naming (/) ▪ Library List ▪ Large Objects (LOBs)

.NET Enhancements – V6R1

- **Support the ADO.NET 2.0 base class model – MANY ISVs have asked for 2.0 support!**
- **Distributed transactions using the System.Transactions namespace**
- **Multi-row blocked inserts**
- **Running in 64-bit model**
- **Decimal float and datalink data types**
- **Improved control over sending and receiving LOB data in blocks**
- **SQL query storage limit**
- **New SQL special client information registers**
- **Enhanced support for optimistic updates using row change timestamp**
- **Integration with Visual Studio 2005 to enhance design-time experience when writing applications**
- **Ability to specify the IsolationLevel for autocommit**

Integrating DB2 Universal Database for iSeries with Microsoft ADO.NET

Customers have been using the IBM DB2 UDB for iSeries for many years with data access technologies such as ODBC and OLE DB. The newest data access technology from Microsoft is called ADO.NET. Applications that use ADO.NET with the iSeries can work with several different .NET providers:

- **The IBM.Data.DB2.iSeries provider, a .NET-managed provider new to System i Access for Windows in V5R3**
- **The IBM.Data.DB2 provider, a .NET provider that works with all IBM eServer platforms in conjunction with DB2 Connect**
- **The Microsoft System.Data.OleDb provider, as a bridge to one of the OLE DB providers included with System i Access for Windows (IBMDA400, IBMDASQL, and IBMDARLA)**
- **The Microsoft System.Data.Odbc provider, as a bridge to the ODBC driver included with System i Access for Windows**

This IBM Redbook shows customers how to use ADO.NET effectively to harness the power of DB2 UDB for iSeries, showing examples, best practices, pitfalls, and comparisons between the different ADO.NET data providers.

System i Access for Windows Installer

Available for customers who prefer to use the Microsoft Windows Installer technology.

- English National Language Version 2924 only
- Can be used on Microsoft Windows XP, Windows 2000, and 32-bit version of Windows Server 2003.

The screenshot shows the IBM iSeries Access for Windows Installer Technology Preview page. The page features the IBM logo at the top left, a search bar, and navigation links for Home, Products, Services & solutions, Support & downloads, and My account. The breadcrumb trail indicates the path: IBM Systems > System i5 > iSeries Access > iSeries Access for Windows. The main content area is titled "iSeries Access" and includes a sub-header "Windows® Installer Technology Preview". The text describes the Technology Preview as an installation image using the Windows Installer technology for iSeries Access for Windows. A "Table of Contents" section lists links for Overview, What's new in this Preview?, Download the Technology Preview, Install the Technology Preview, and Feedback and report problems. The "Overview" section states that the Technology Preview is provided for customers who prefer to use the Windows Installer technology. An "Important notes" section highlights that the preview can be installed on Microsoft operating systems: Windows XP Professional, Windows 2000, and the 32-bit version of Windows Server 2003. A note at the bottom indicates that the preview cannot be installed on Linux. The page also includes a sidebar with various navigation options such as Announcements, Order/Upgrade, Products/Functions, Downloads, Service Packs (Fixes), Service Dates, Information APARs (Support Statements), FAQs, Windows(R) Operating Systems (2000/Me/XP/etc), Technical Support, Articles, IBM Library, Toolkit, iSeries Information Center, and Related links.

http://www.ibm.com/systems/i/software/access/windows/tech_preview.html

Windows Installer Technology – new in V6R1

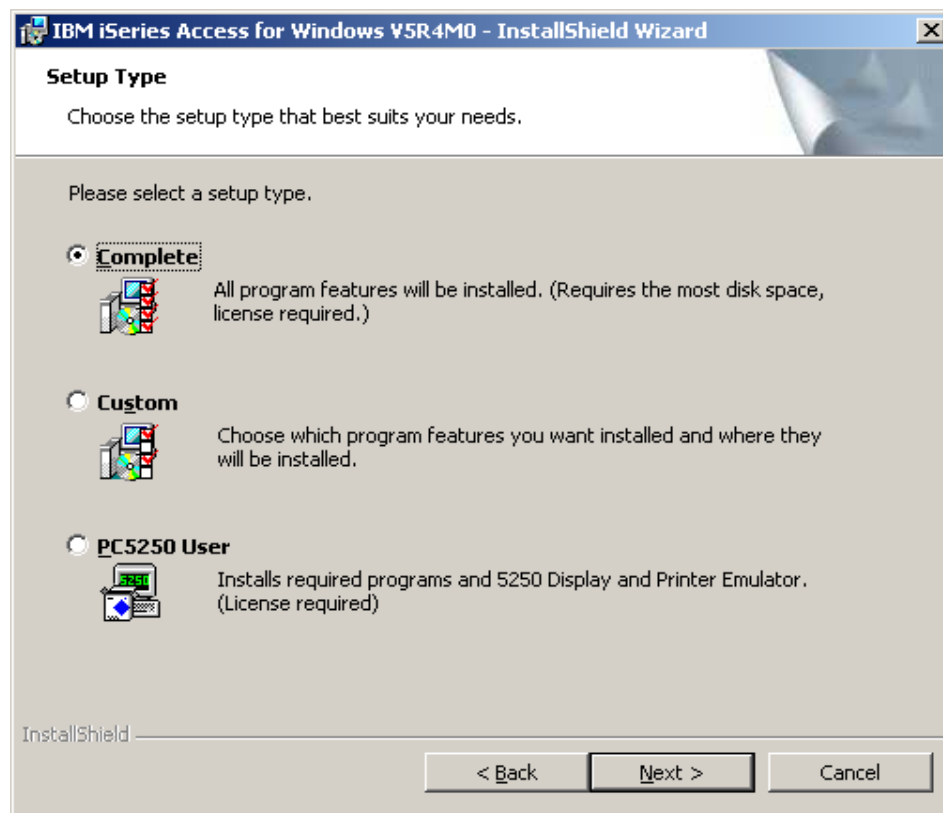
- **V6R1 System i Access for Windows adds Windows Installer capability**
 - Industry standard for installations on the Windows platform
- **Provides standard mechanisms to...**
 - manage installations
 - customize install packages with “transforms”
 - set install policies
 - install service packs
 - do silent installations more simply – no more response files!
- **Deploy to multiple desktops with several deployment systems, such as Active Directory and Systems Management Server**

What is the MSI package?

- **A Windows Installer package is made up of an MSI file and source files**
- **An MSI file is a relational database. The tables within the MSI database describe:**
 - **installation logic, such as the sequence of actions**
 - **metadata about the resources that are to be installed**
- **“Feature”:**
 - **An application’s functions are separated into features (components)**
 - **Features can be installed independently**
- **“Public properties”:**
 - **Variables used at install time that can be set by the end user through the command line or in transforms**
 - **Define installation settings, such as target directory, type of install, list of features to be installed**
- **“Transform”:**
 - **The mechanism to customize the installation**

Installation Options

- **Complete**
 - **Installs everything**
- **Custom**
 - **Allows end user to select what to install**
- **PC5250 User**
 - **Only 5250 emulation installed**

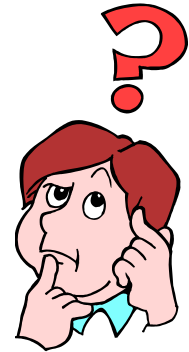


Transforms:

Customizing the installation package

Transforms

Would you like to control which System i Access for Windows features your users install?

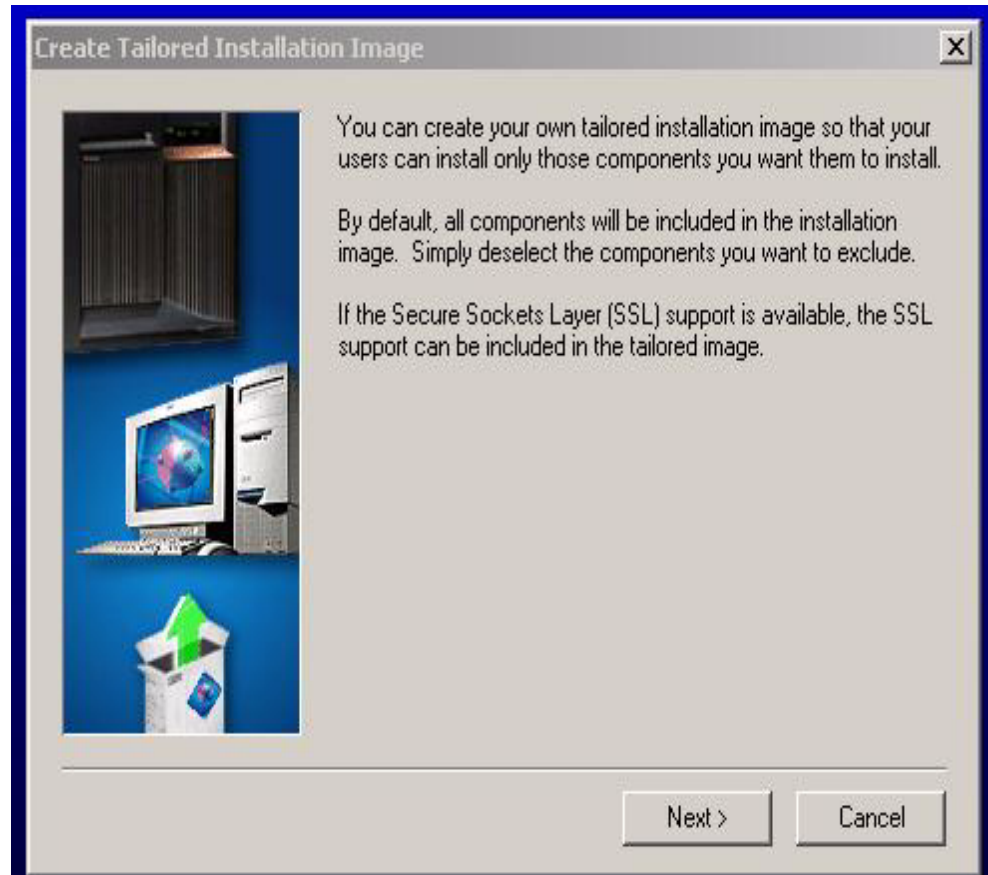


Use **Transforms** to:

- **Modify the MSI package by excluding the unwanted features**

Apply the transform to installations across your network

Users can easily install System i Access functions by **selecting a single option**



What are Transforms?

The means to customize the installation package

- A transform is a file that describes modifications to the MSI DB
 - Applied at install time
- Running the “Tailored installation wizard” is not necessary

Allow administrators to change the default settings of the installation package.

- Create customizations for different groups in the organization by defining different combinations of features.
- Pre-select features, deselect features, hide features from the features selection tree on custom installation

Many tools are available to create transforms

- InstallShield
- Microsoft Orca is available at no cost

What are Transforms?



- Transforms are applied at install time
- The original MSI file is not altered
- The transform file is saved along with the MSI file, and gets applied every time an install task is started

Steps to create your own transform

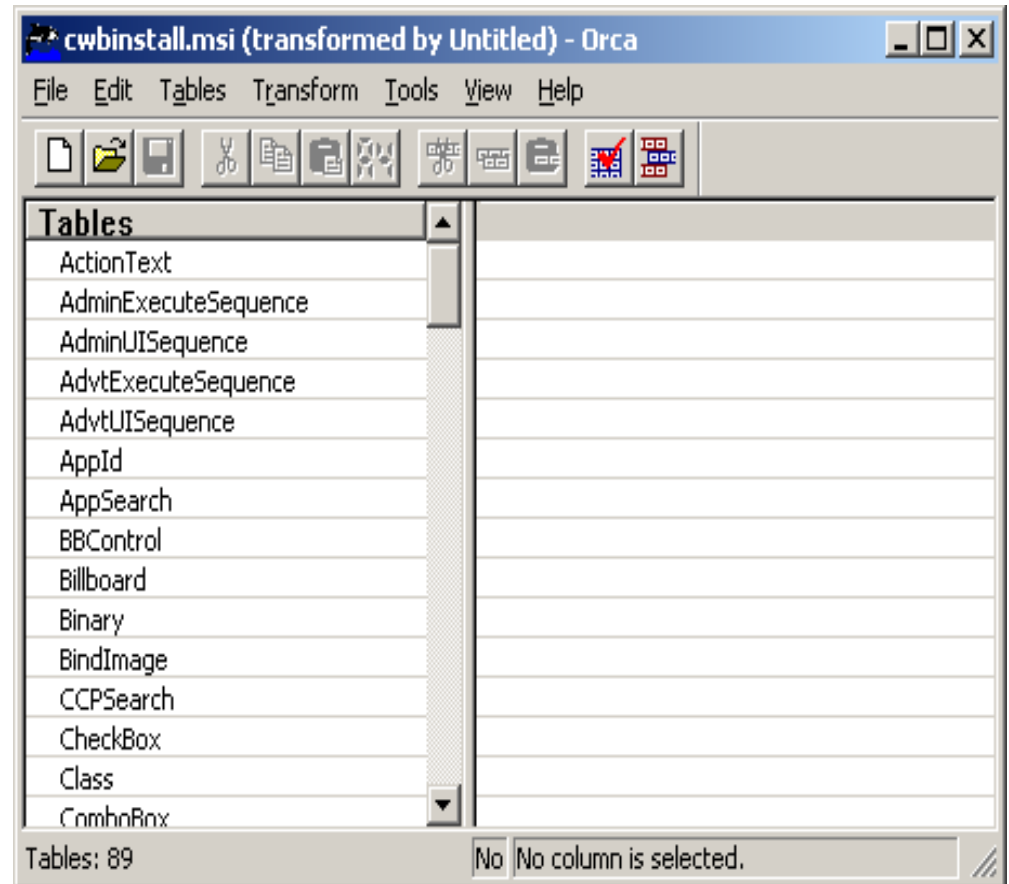
1. Open cwbinstall.msi in transform mode

Open Orca.

From the File menu, select Open and browse for [cwbinstall.msi](#).

From the Transform menu, select New Transform.

This will turn Orca into Transform mode, and now you can start modifying the MSI file.



Steps to create your own transform (continued)

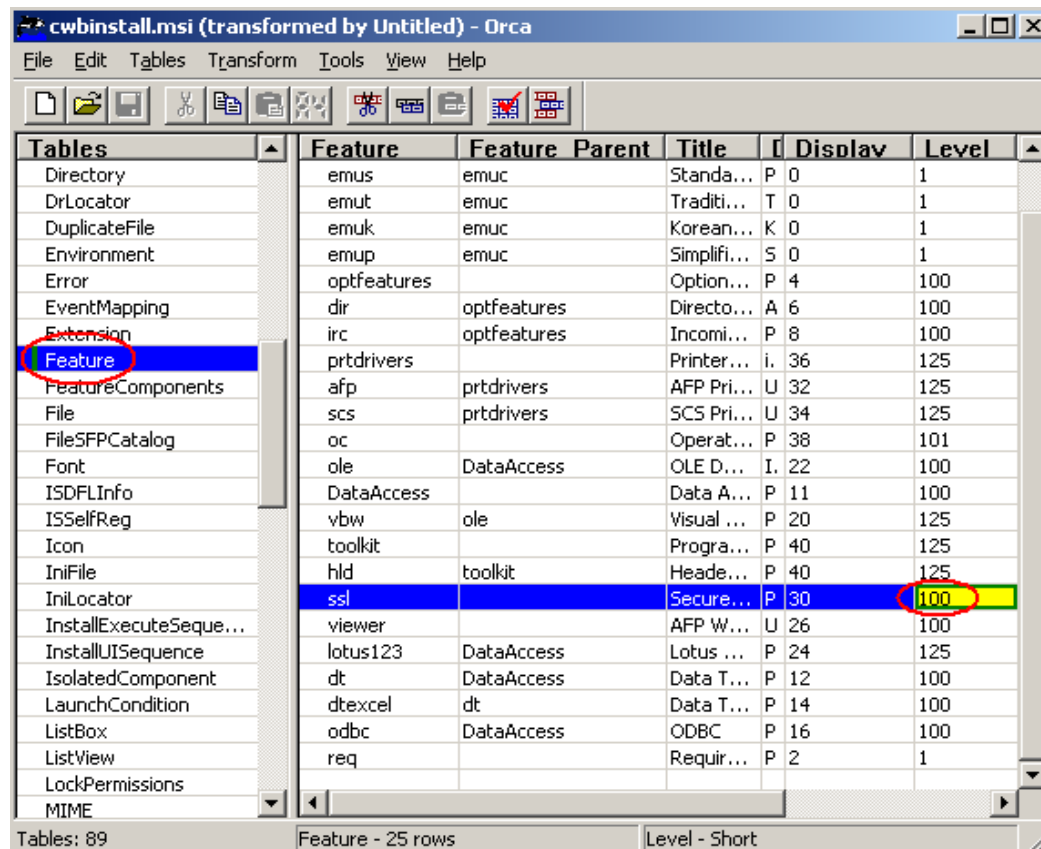
2. Modify the tables

From the left pane, select the table to modify.

In the right pane, you can modify an existing field's value, as well as add and remove rows.

Tables with modifications are indicated by a green mark next to them.

In the example, we are changing the Level of feature ssl from 125 to 100 so it gets preselected.



The screenshot shows the Orca MSI transform editor window titled "cwininstall.msi (transformed by Untitled) - Orca". The interface includes a menu bar (File, Edit, Tables, Transform, Tools, View, Help) and a toolbar. The main area is divided into two panes. The left pane, titled "Tables", lists various tables, with "Feature" selected and highlighted in blue. The right pane displays a table with columns: Feature, Feature Parent, Title, Display, and Level. The "Feature" table is selected, and the row for "ssl" is highlighted in blue. The "Level" value for the "ssl" row is 100, which is circled in red. A green mark is visible next to the "Level" column header, indicating a modification. The status bar at the bottom shows "Tables: 89", "Feature - 25 rows", and "Level - Short".

Feature	Feature Parent	Title	Display	Level
emus	emuc	Standa...	P 0	1
emut	emuc	Traditi...	T 0	1
emuk	emuc	Korean...	K 0	1
emup	emuc	Simplifi...	S 0	1
optfeatures		Option...	P 4	100
dir	optfeatures	Directo...	A 6	100
irc	optfeatures	Incomi...	P 8	100
prtdrivers		Printer...	i. 36	125
afp	prtdrivers	AFP Pri...	U 32	125
scs	prtdrivers	SCS Pri...	U 34	125
oc		Operat...	P 38	101
ole	DataAccess	OLE D...	I. 22	100
DataAccess		Data A...	P 11	100
vbw	ole	Visual ...	P 20	125
toolkit		Progra...	P 40	125
hld	toolkit	Heade...	P 40	125
ssl		Secure...	P 30	100
viewer		AFP W...	U 26	100
lotus123	DataAccess	Lotus ...	P 24	125
dt	DataAccess	Data T...	P 12	100
dtexcel	dt	Data T...	P 14	100
odbc	DataAccess	ODBC	P 16	100
req		Requir...	P 2	1

Steps to create your own transform (continued)

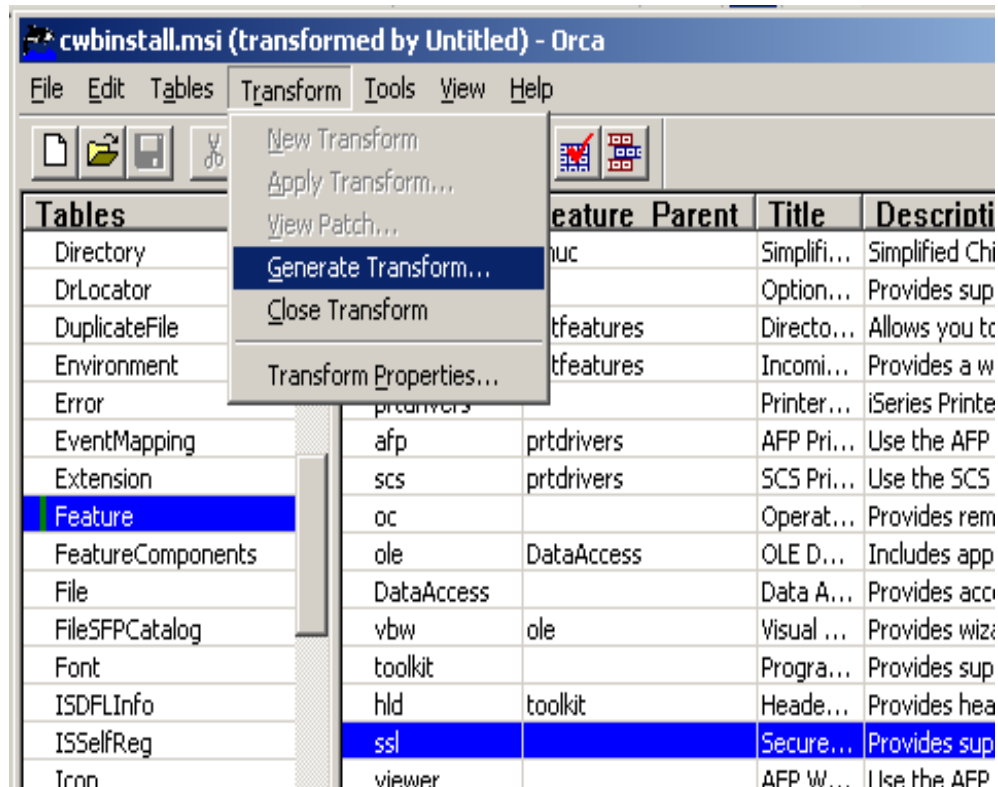
3. Generate the transform file

From the Transform menu, select **Generate Transform**.

Give your transform a meaningful name.

Transforms are created with a file extension of **.MST**.

Make sure the transform file is saved to the install image directory.



Apply the transform

Two ways to apply the transform:

1. Apply it at the command line:

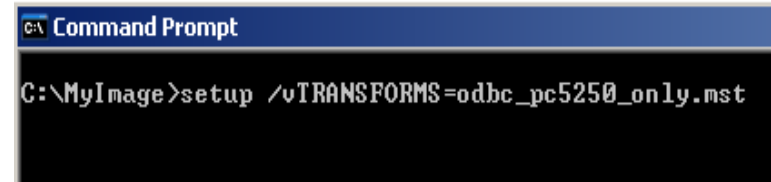
Type:

```
setup  
/vTRANSFORMS=odbc_pc5250_only.mst
```

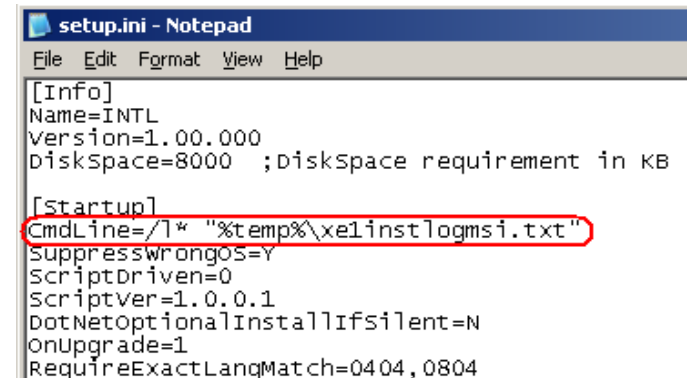
or

2. Modify setup.ini, and users will get the transform automatically:

- a. Open `setup.ini` and locate the `CmdLine` key, under the `[Startup]` section.
- b. Append the string `TRANSFORMS=odbc_pc5250_only.mst` to `CmdLine`.
- c. When user runs `setup.exe`, the transform will get applied.



```
C:\MyImage>setup /vTRANSFORMS=odbc_pc5250_only.mst
```



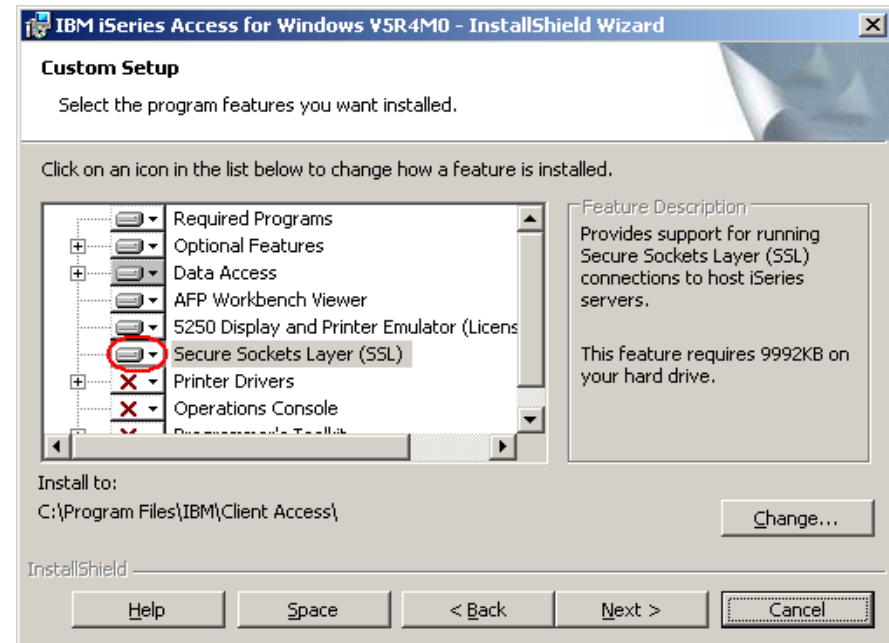
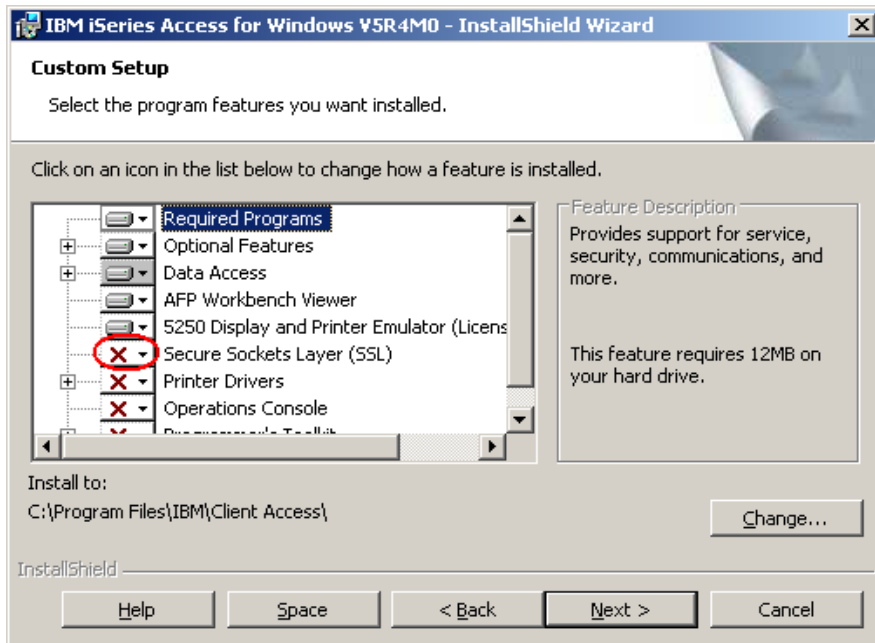
```
File Edit Format View Help  
[Info]  
Name=INTL  
Version=1.00.000  
DiskSpace=8000 ;diskspace requirement in KB  
[Startup]  
CmdLine=/1* "%temp%\xe1instlogmsi.txt"  
SuppressWrongOS=Y  
ScriptDriven=0  
ScriptVer=1.0.0.1  
DotNetOptionalInstallIfSilent=N  
OnUpgrade=1  
RequireExactLangMatch=0404,0804
```

Apply the transform (continued)

- In a command prompt window, type **setup /vTRANSFORMS=MyTransform.mst**

```
\> setup.exe
```

```
\> setup.exe  
/vTRANSFORMS=MyTransform.mst
```



Example

Administrator only wants to provide ODBC and PC5250 for a group of users

- **Create a transform that enables end users to install only ODBC and PC5250.**
- **Disable all features you don't want users to use.**
- **No need to create a tailored image. The transform can be applied to the original image.**

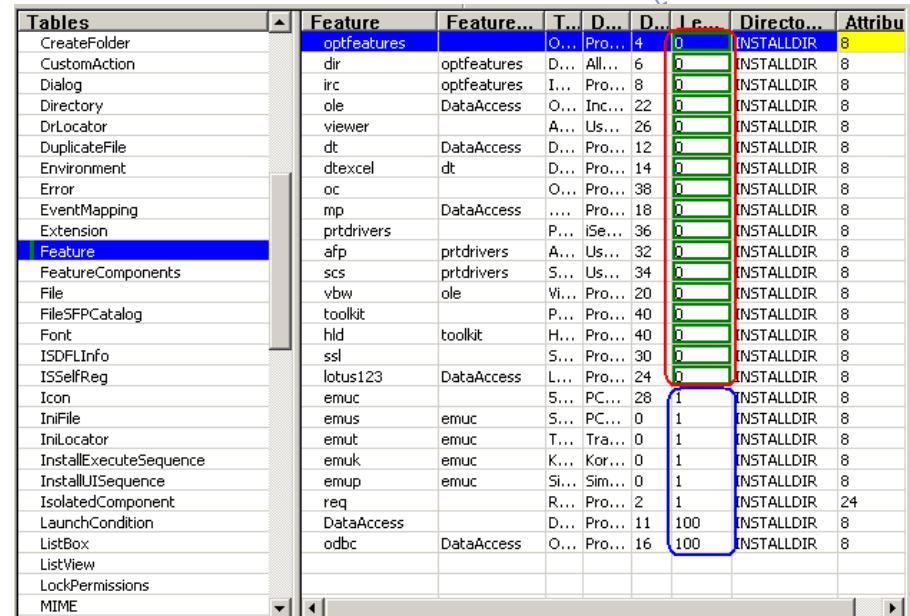
Example (continued)

1. Open cwbinstall.msi and select Transform>New Transform.
2. Open the Feature table.
3. Change the Level field to 0 for all features, except the ones you want to install:
 - req
 - emuc, emuk, emup, emus, emut
 - DataAccess
 - Odbc

Save the transform as
odbc_pc5250_only.mst

4. Apply the transform with setup.ini or on the command line

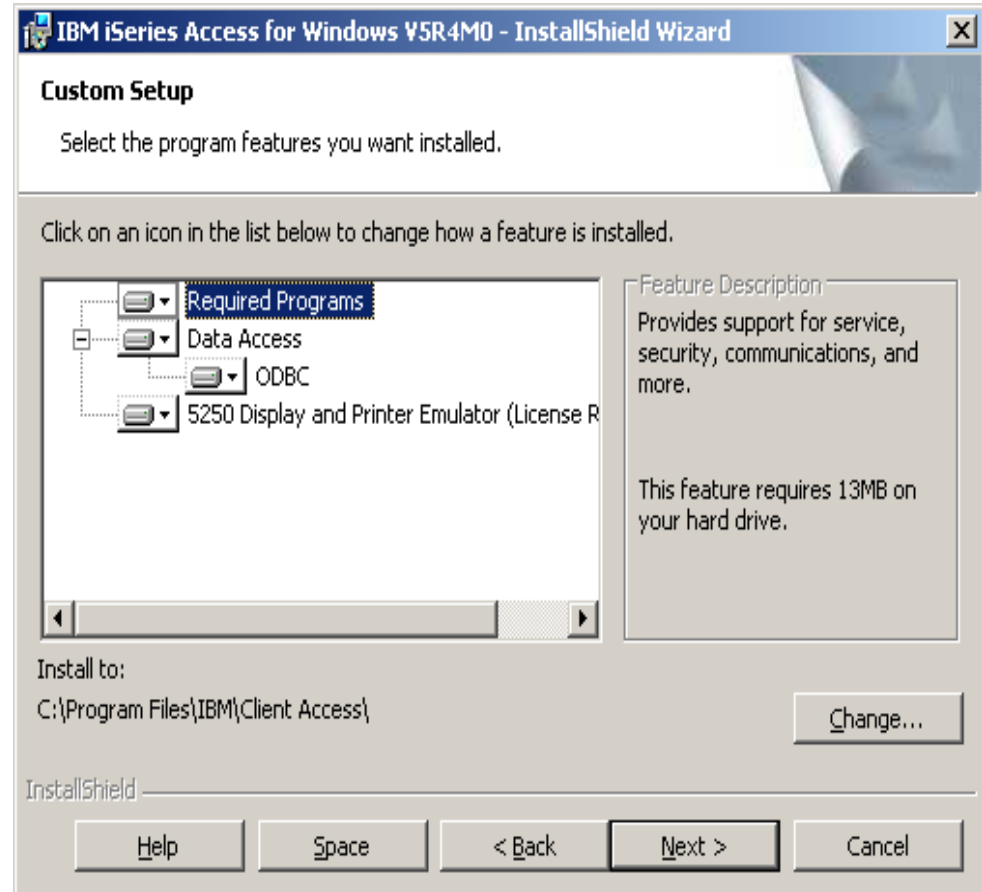
A level of 0 disables the feature



Tables	Feature	Feature...	T...	D...	D...	Le...	Directo...	Attribu
CreateFolder	optfeatures		O...	Pro...	4	0	INSTALLDIR	8
CustomAction	dir	optfeatures	D...	All...	6	0	INSTALLDIR	8
Dialog	irc	optfeatures	I...	Pro...	8	0	INSTALLDIR	8
Directory	ole	DataAccess	O...	Inc...	22	0	INSTALLDIR	8
DrLocator	viewer		A...	Us...	26	0	INSTALLDIR	8
DuplicateFile	dt	DataAccess	D...	Pro...	12	0	INSTALLDIR	8
Environment	dtexcel	dt	D...	Pro...	14	0	INSTALLDIR	8
Error	oc		O...	Pro...	38	0	INSTALLDIR	8
EventMapping	mp	DataAccess	Pro...	18	0	INSTALLDIR	8
Extension	prtdrivers		P...	iSe...	36	0	INSTALLDIR	8
Feature	afp	prtdrivers	A...	Us...	32	0	INSTALLDIR	8
FeatureComponents	scs	prtdrivers	S...	Us...	34	0	INSTALLDIR	8
File	vbw	ole	Vi...	Pro...	20	0	INSTALLDIR	8
FileSFPCatalog	toolkit		P...	Pro...	40	0	INSTALLDIR	8
Font	hid	toolkit	H...	Pro...	40	0	INSTALLDIR	8
ISDFLInfo	ssl		S...	Pro...	30	0	INSTALLDIR	8
ISSelfReg	lotus123	DataAccess	L...	Pro...	24	0	INSTALLDIR	8
Icon	emuc		S...	PC...	28	1	INSTALLDIR	8
IniFile	emus	emuc	S...	PC...	0	1	INSTALLDIR	8
IniLocator	emut	emuc	T...	Tra...	0	1	INSTALLDIR	8
InstallExecuteSequence	emuk	emuc	K...	Kor...	0	1	INSTALLDIR	8
InstallUISequence	emup	emuc	Si...	Sim...	0	1	INSTALLDIR	8
IsolatedComponent	req		R...	Pro...	2	1	INSTALLDIR	24
LaunchCondition	DataAccess		D...	Pro...	11	100	INSTALLDIR	8
ListBox	odbc	DataAccess	O...	Pro...	16	100	INSTALLDIR	8
ListView								
LockPermissions								
MIME								

Example (continued)

- Complete **option selected**: **only** enabled features will be installed.
- **Custom option selected**: **only** enabled features will be visible **in the feature selection tree**.
- **If installation is launched with basic or no user interface**, **only** enabled features will be installed.

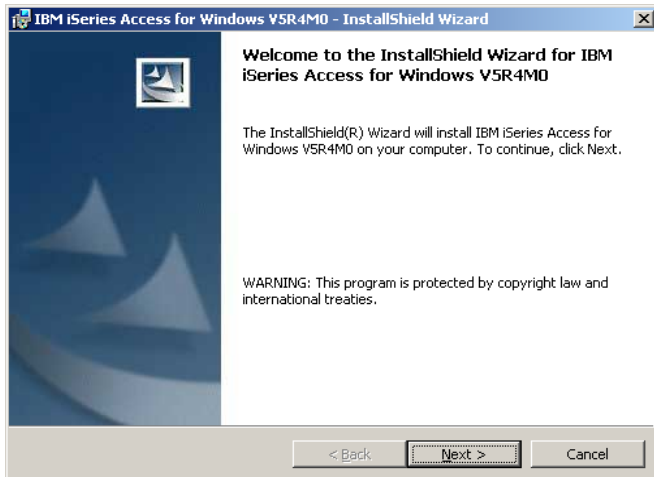


User Interface Levels

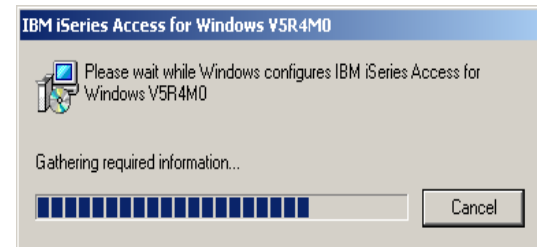
– In Windows Installer, an installation's **user interface** can have several **levels**:

<i>Level</i>	<i>Command line option</i>	<i>UILevel value</i>	<i>Description</i>
Full (default)	/qf	5	The Install Wizard is launched. User can change all installation options.
Basic	/qb	3	Only progress bar and error messages are shown. User still can cancel instalation.
Silent	/qs	2	No dialogs displayed. There's no indication about installation in progress.

Full user interface



Basic user interface



Deploy System i Access for Windows using Active Directory

System i Access for Windows can be deployed using Active Directory

Active Directory is Microsoft's directory service

- **Windows 2000 Server and Windows Server 2003**

Some of the goals of Active Directory are:

- **Centralized management of resources, services, and users on a network**
- **Access control to resources**
- **Central software distribution to PCs in the network**

Deploy System i Access for Windows using SMS

Microsoft Systems Management Server (SMS) is software to centrally managing client computers and servers.

Some features of SMS are:

- **Hardware and software inventory**
- **Software distribution**
- **Software metering**
- **Security**

SMS enables scheduled installations, deployment based on software or hardware criteria and monitoring.

Links:

- **SMS concepts:**

<http://www.microsoft.com/technet/prodtechnol/sms/sms2003/cpdg/default.mspx?mfr=true>

- **Distributing Windows Installer packages**

<http://www.microsoft.com/technet/sms/20/deplymsi.mspx>

Install from a Network Share

You can share an installation image residing on the network, either at your NetServer or a Windows share.

Your desktop users can map a drive to the network share.

Users then will run setup.exe from the network drive to start System i Access for Windows installation.

If one or more transforms must be applied:

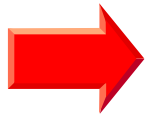
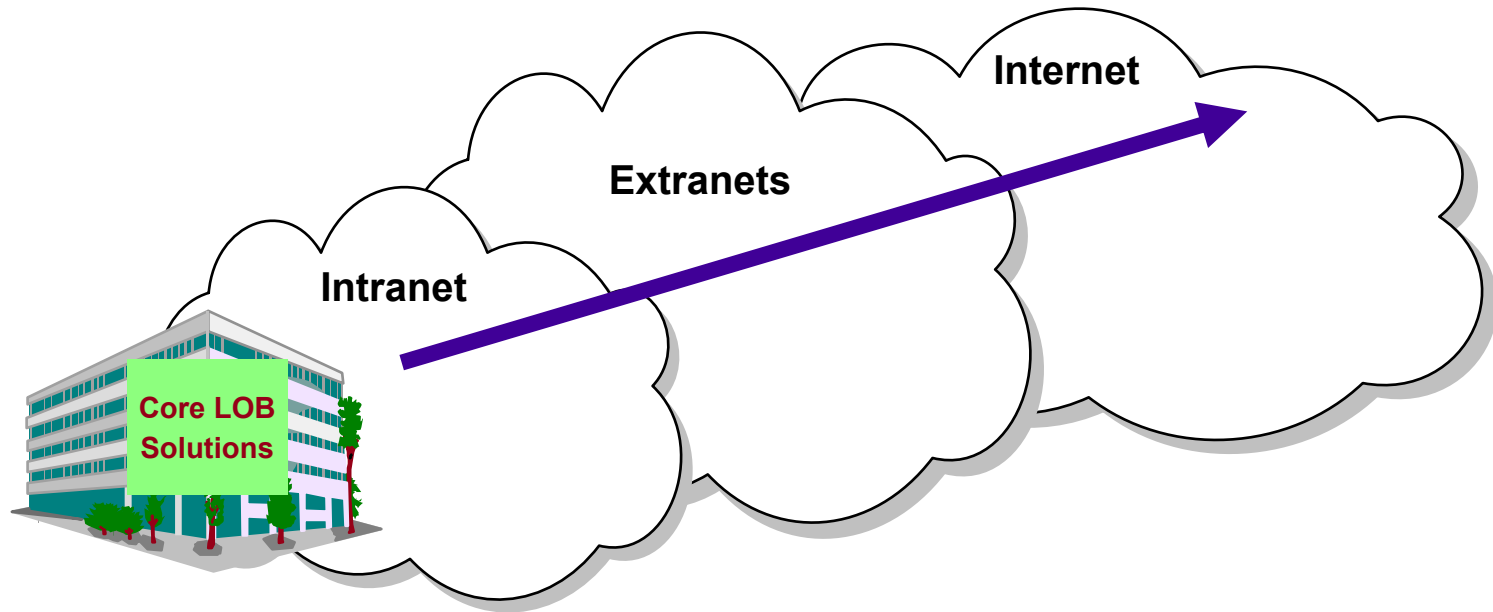
- **Make sure that the transform file(s) are located in the source directory.**
- **Two ways to apply the transform:**
 - **Users type `setup.exe /v/"TRANSFORMS=transform1.mst, transform2.mst..."`**
 - or**
 - **Modify setup.ini to include any command options in the CmdLine key.**

Summary: System i Access for Windows V6R1 Enhancements



- **Installation:**
 - Supports the Microsoft Installer Package (MSI)
 - DVD media for PC which includes all languages
 - 32-bit and 64-bit, includes Vista support (starting with V5R4)
- **.NET Data Provider supports ADO .NET 2.0**
- **ODBC, OLE DB, Data Transfer enhancements**
- **PC5250 V5.9**
- **Support over IPv6**

Extend System i 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

What is System i Access for Web?

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

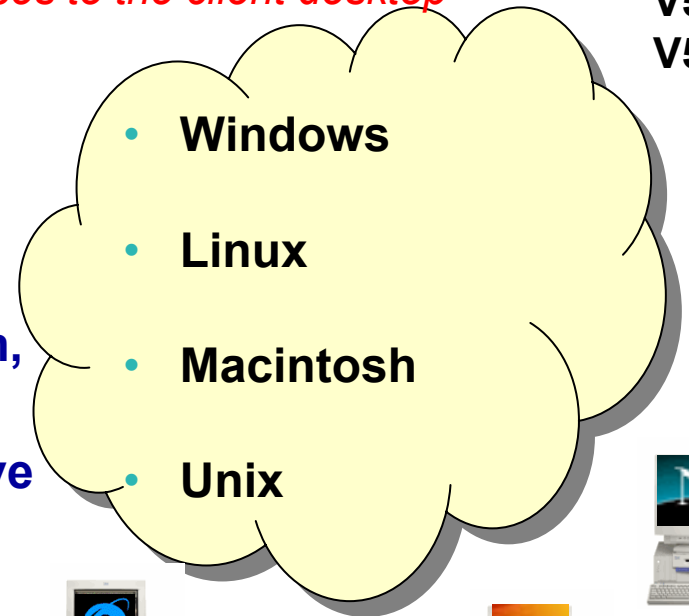
**i5/OS
V5R3
V5R4**

Provides access to iSeries through a browser

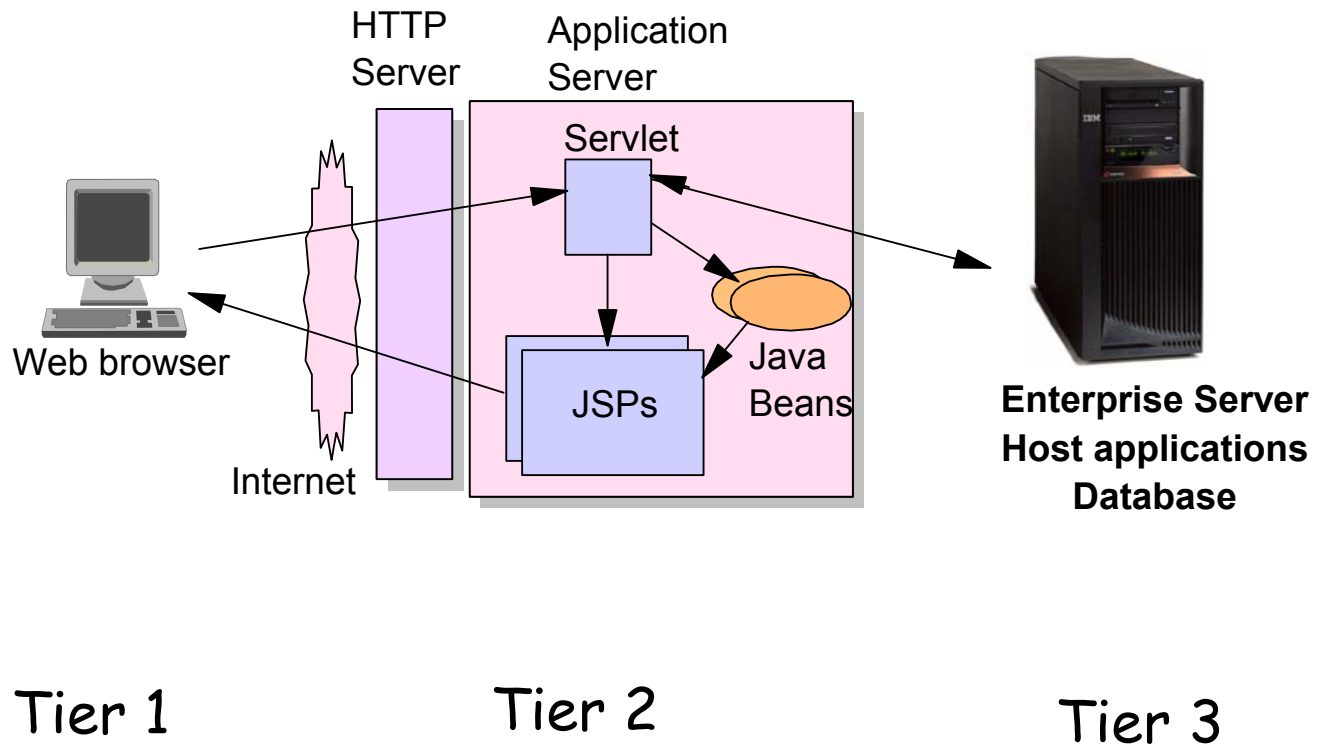
- **5250 access**
- **Access to database, integrated file system, printers, output queues, jobs**
- **Can run batch commands and send/receive messages**

It has the following advantages:

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



First you need a web application server



Supported Web Application Servers

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

- **Integrated web application server**
- **WebSphere® Application Server V6.1 and V6.0 – Express for i5/OS**
- **WebSphere Application Server V6.1 and 6.0 Base and Network Deployment**
- **WebSphere Application Server V5.1 - Express for iSeries**
- **WebSphere Application Server V5.0 - Express**
- **WebSphere Application Server V5.1 and 5.0 Base and Network Deployment Editions**
- **ASF Tomcat** (V5R4 and earlier releases)

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

- **IBM Workplace Services Express V2.6**
- **WebSphere Portal for Multiplatforms V6.0**
- **WebSphere Portal for Multiplatforms V5.1.0.1**
- **WebSphere Portal Express for Multiplatforms V5.0.2**
- **WebSphere Portal Express Plus for Multiplatforms V5.0**

PTFs required for latest web app server and portal support:

<http://www.ibm.com/systems/i/software/access/web/servicepacks.html>

Integrated Web application server

What is it? Does System i Access for Web support it?

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

- **How is it packaged?**
 - 5761-DG1 and 5722-DG1 IBM HTTP Server for i5/OS
 - Available in the DG1 group PTF
 - V5R4 SF99114 level 6 or later
 - V5R3 SF99099 level 15 or later

- **System i Access for Web support**
 - V5R4 and V6R1 System i Access for Web support the i5/OS integrated Web application server
 - V5R4 iSeries Access for Web can be installed and is supported on V5R4 and V5R3 i5/OS
 - V6R1 System i Access for Web can be installed and is supported on V6R1 and V5R4 i5/OS

Integrated Web application server

System i Access for Web within this environment

Step-by-step: Use V5R4 iSeries Access for Web within the V5R4 or V5R3 i5/OS integrated Web application server

1. Stop the Web Administration for i5/OS

- ENDTCPSVR SERVER(*HTTP) HTTPSVR(ADMIN)

2. Load/apply latest 5722-DG1 group PTF (review cover letters for any additional information)

- V5R4 SF99114
- V5R3 SF99099

3. Load/apply latest V5R4 iSeries Access for Web PTF

- SI25551 or later

4. Configure iSeries Access for Web

- QSH
- cd /QIBM/ProdData/Access/Web2/install
- cfgaccweb2 –appsvrtype *INTAPPSVR

5. Start the Web Administration for i5/OS

- STRTCPSVR SERVER(*HTTP) HTTPSVR(*ADMIN)

6. Start preconfigured HTTP web server

- STRTCPSVR SERVER(*HTTP) HTTPSVR(IWADFT)

7. Open a browser to iSeries Access for Web using preconfigured HTTP:port

- http://<system_name>:2020/webaccess/iWAMain

8. Done!

IBM Systems > System i >

WebSphere Application Server

for i5/OS

WebSphere Home
What's New
About WebSphere
Ordering
Documentation
FAQs
Business Solutions
Samples
PTFs
Performance
Coexistence
Migration
Forum
Newsletter
Related Resources

Features

WebSphere Application Server Version 6.1 for i5/OS is announced. To find out more about the new version or any other of the supported versions — please click on the links below:

Version 6.1

- [IBM WebSphere Application Server V6.1 for i5/OS](#)
- [IBM WebSphere Application Server for Developers V6.1 for i5/OS](#)
- [IBM WebSphere Application Server Network Deployment V6.1 for i5/OS](#)
- [IBM WebSphere Application Server – Express V6.1 for i5/OS](#)

Version 6.0

- [IBM WebSphere Application Server V6.0 for OS/400](#)
- [IBM WebSphere Application Server for Developers V6.0 for OS/400](#)
- [IBM WebSphere Application Server Network Deployment V6.0 for OS/400](#)
- [IBM WebSphere Application Server – Express V6.0 for OS/400](#)

Version 5.1

- [IBM WebSphere Application Server V5.1 for iSeries](#)
- [IBM WebSphere Application Server for Developers V5.1 for iSeries](#)
- [IBM WebSphere Application Server Network Deployment V5.1 for iSeries](#)
- [IBM WebSphere Application Server – Express for iSeries V5.1](#)

Version 5.0

- [IBM WebSphere Application Server V5.0 for iSeries](#)
- [IBM WebSphere Application Server Network Deployment V5.0 for iSeries](#)
- [IBM WebSphere Application Server – Express for iSeries V5.0](#)

Need directions?



→ [iSeries Developer roadmap](#)

[An Independent Analysis of the iSeries Developer Roadmap - Updated for 2006 \(1.4MB\)](#)

[The Business Benefits of iSeries Application Modernization \(183KB\)](#)

[Get Adobe® Reader®](#)

Emerging Technology

→ [Dynamic web site development for the non-technical business user.](#)

Pilot Pricing Program

→ [IBM Software Pilot Pricing Program for IBM eServer i5 520 Systems](#)



Local intranet

Performance Considerations...

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

IBM eServer Workload Estimator
Version: 2005.4.fix.1
14-Dec-05
www-912

Workload Selection | **Workload Definition** | **Selected System** | **Help/Tutorials**

- Download PDF
- Printable Version
- Choose Base System
- Modify System
- External Storage
- Call Me Now
- Edit Estimation Info
- Options
- Change Growth Factors
- Save all Workloads

Selected System

	Immediate Solution	Growth Solution
Available	~93.5%	~90.2%
HATS #1	~6.5%	~9.8%
Model/Feature:	520-8950/7450 500/30	520-8950/7450 500/30
Number of Systems:	1	1
Processor CPW:	500	500
5250 OLTP CPW:	30 (24% utilized)	30 (35% utilized)

The 520-8950/7450 can handle the defined workloads **NOW**.

It can also handle the specified growth.

System i Software Requirements



Product Number	Product Name	Option	\$
5722-SS1	V5R3 System i Access for Web: V5R2 OS/400 or V5R3 i5/OS V5R4 System i Access for Web: V5R3 and later i5/OS	Base	w/HW
5722-SS1	I5/OS - Extended Base Directory Support	3	N/C
5722-SS1	I5/OS - AFP Compatibility Fonts	8	N/C
5722-SS1	I5/OS - Host Servers	12	N/C
5722-SS1	Operating System/400 QShell Interpreter	30	N/C
5722-SS1 5722-AC3	If you plan to use Secure Sockets Layer (SSL): OS/400 Digital Certificate Manager Cryptographic Access Provider (128-bit)	34	N/C N/C
5722-DG1	IBM HTTP Server for iSeries	Base	N/C
5722-JV1	Developer Kit for Java Developer Kit for Java Version 1.2 Developer Kit for Java Version 1.3 Developer Kit for Java Version 1.4 (or later: Check WebSphere doc for required version)	Base 3 5 6	N/C N/C N/C N/C
5722-JC1	Toolbox for Java	Base	N/C
5722-TC1	TCP/IP Connectivity Utilities for iSeries	Base	N/C

System i Software Requirements (continued)

Product Number	Product Name	Option	\$
5722-XW1	System i Access Family	Base	\$
5722-XH2	System i Access for Web <ul style="list-style-type: none"> • Ships with 5722-XW1 System i Access Family • V5R3 System i Access for Web runs on OS/400 V5R2 and i5/OS V5R3 • V5R4 System i Access for Web runs on i5/OS V5R3 and V5R4 • V6R1 System i Access for Web runs on i5/OS V5R4 and V6R1 	Base	part of XW1
5722-IP1	IBM Info Print Server (Optional -- enables best PDF output: - <u>is not</u> required to view PDF output - is required for V5R4 PDF Printer support)	Base	\$

System i Software Requirements (continued)

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

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

WebSphere	http://www.ibm.com/servers/eserver/iseries/software/websphere/wsappserver/
ASF Tomcat	http://www.ibm.com/servers/eserver/iseries/software/http/
Portal V5.0.2.2	http://publib.boulder.ibm.com/pvc/wp/502/smbi/en/InfoCenter/index.html
Portal V5.1.0.1	http://publib.boulder.ibm.com/infocenter/wp51help/index.jsp
Portal V6.0	http://publib.boulder.ibm.com/infocenter/wpdoc/v6r0/index.jsp
Workplace V2.5	http://publib.boulder.ibm.com/infocenter/wseic/v2r5/index.jsp
Workplace V2.6	http://publib.boulder.ibm.com/infocenter/wseic/v2r6/index.jsp

System i Access for Web – V6R1

New look for the *Servlet* version starting in V5R4

The screenshot shows a Mozilla Firefox browser window displaying the System i Access for Web homepage. The browser's address bar shows the URL 'Homepage [LP08UT8.RCHLAND.IBM.COM] - Mozilla Firefox: IBM Edition'. The page title is 'System i Access for Web' and the user is identified as 'User: dlb System: LP08UT8.RCHLAND.IBM.COM'. The main content area features a large heading 'Welcome to System i Access for Web' and a decorative graphic of blue and black hexagons. Below this, there are several sections: 'Getting Started' with 'My Information' (links to My Folder, Printer output, Display messages, Start a 5250 session, Database requests, Browse files, Preferences), 'My View' (link to Customizing System i Access for Web), and 'Related Products' (links to WebSphere Application Server for i5/OS, WebSphere Development Studio Client for System i, and WebSphere Development Studio for System i). A 'What is System i Access for Web' section follows, describing it as a new generation of software for web access to system information and resources. Below this are sections for 'Browser Access to System i Information', 'Easy Administration', and 'Key Capabilities'. The right sidebar contains 'Rochester information' (City information, Movies, Mayo Clinic), 'Rochester weather' (SkyCam), 'Rochester news' (Post-Bulletin online, KTTC), and 'Telephone directory' (Find a person, Find a business). A left sidebar lists 'My Home Page' with links to My Folder, Print, Messages, Jobs, 5250, Database, Files, Command, Download, Customize, and Other. At the bottom, there are 'Related Links' to System i Access for Web, System i Access, System i Navigator, i5/OS Information Center, and System i Resource Center. The browser status bar at the bottom shows 'Done'.

Web site: www.ibm.com/systems/i/software/access/web

Functions you can perform with iSeries Access for Web 5761-XH2, V6R1

Print

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

5250

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

Files

- Browse Files
- File Shares
- Browse File Share

Messages

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

Database

- Tables
- My Request
- Run SQL
 - Open Office Formats
 - **** Wizards supports joins across multiple tables**
 - **** Chart SQL results**
- Copy Data to Table
- Import Requests
 - iSeries Access for Windows
 - Query Manager
 - Query/400
- Extract Server Data

Commands

- Run commands
- My commands
- Search

My Personal Folder

Jobs

- User Jobs
- Server Jobs

Customize

- Preferences
- Policies
- Settings
- Transfer configuration data

Download

Other

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

Single sign-on

- EIM (WAS authentication)
- **** Windows domain login (WAS authentication)**

**** Scheduling of tasks**

Items marked with “”
are new in the V6R1
version**



Start a 5250 Session and save it

Select 'Start Session'

1

- Provide name of iSeries you wish to connect to → can be any iSeries in the network
- Provide how you want Workstation ID handled
- Can check to Bypass additional i5/OS sign-on screen



Once you are connected, click on the 'Active' session link to save this session

2



Change look of 5250 session

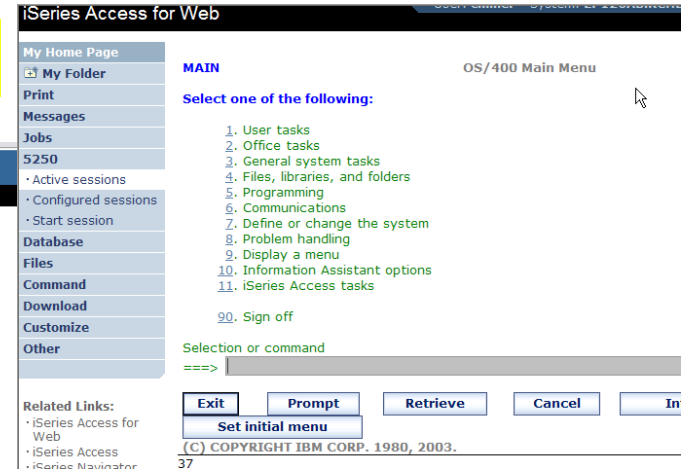
Default 'web' look

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

Removed navigation bar, put keypad on top

Selected 'traditional' view, removed navigation bar

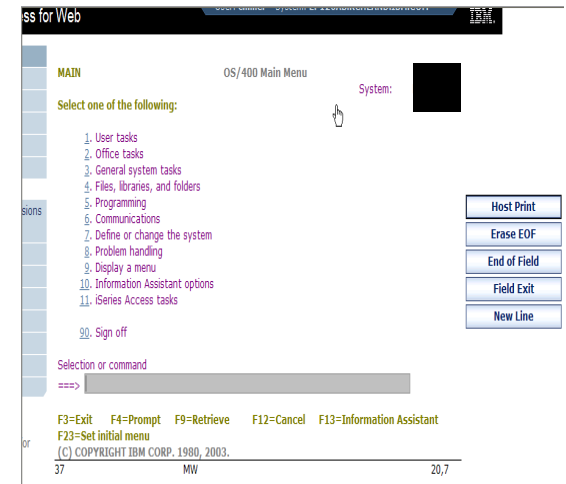
1



2



3





System i Access for Web – Database Functions

Access database tables on your iSeries server with iSeries Access for Web.

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.

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.

Import query

- Import queries generated by Query for iSeries and DB2 UDB for iSeries Query Manager.
- Imported queries can be saved into iSeries Access for Web database requests.
- Run and edit converted queries on your iSeries server just like iSeries Access for Web SQL requests.

Extract server data

- Extract server object information into a database table.

Tables – work with i5/OS database information

Servlet version

The screenshot shows the 'iSeries Access for Web' interface. At the top, it displays 'User: CMINER System: [redacted] IBM'. Below the header, there's a navigation menu on the left with options like 'My Home Page', 'My Folder', 'Print', 'Messages', 'Jobs', 'Database', 'Files', 'Command', 'Download', 'Customize', and 'Other'. The main content area is titled 'Tables' and shows a table with columns 'Table', 'Description', and 'Action'. The 'Action' column contains icons for various operations. A red arrow points from the 'Action' column header in the screenshot to a detailed view of the 'Action' icons on the right.

Table	Description	Action
BOATS.BOATS	Available BOATS	[Icons]
BOATS.BOATS1	Available boats by length	[Icons]
BOATS.PCFILES	PC files needed by BOATS WSG Demo	[Icons]
BOATS.QCLSRC		[Icons]
BOATS.QCMDSRC		[Icons]
BOATS.QDDSSRC		[Icons]
BOATS.QRNCVTLG		[Icons]
BOATS.QRPGLESRC		[Icons]
BOATS.QRPGSRC		[Icons]
QGPL.#	\$	[Icons]
QGPL.BITYPES		[Icons]
QGPL.CHADDEC		[Icons]
QGPL.CONCURTYPE		[Icons]
QGPL.CPY_INFO		[Icons]
QGPL.DAVE		[Icons]
QGPL.DECSEP		[Icons]
QGPL.DIVZERO		[Icons]
QGPL.DIVZERO2		[Icons]
QGPL.DSD		[Icons]
QGPL.DSPSFWRSC	Output file for DSPSFWRSC	[Icons]

A detailed view of the 'Action' icons, which are arranged in a grid. The icons represent various database operations: Insert (lightning bolt), Update (pencil), Quick View (document), Find (magnifying glass), Run SQL (SQL symbol), and Copy Data To Table (table with arrows).

- Insert
- Update
- Quick View
- Find
- Run SQL
- Copy Data To Table

Tables – work with iSeries database information

Servlet version

Run SQL has destination option – V5R4 and later

- **Store the output to the iSeries Integrated File System (IFS)**

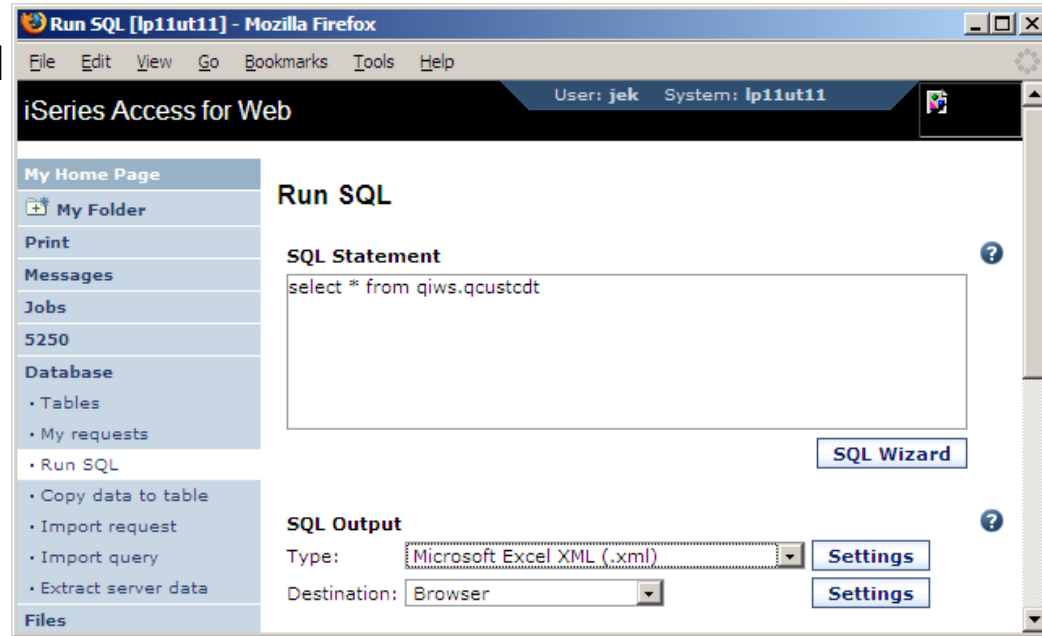
The screenshot displays the 'iSeries Access for Web' interface. At the top, it shows 'User: CMINER' and 'System:'. The main title is 'Run SQL'. On the left, there is a sidebar with a tree view containing 'My Home Page', 'My Folder', 'Print', 'Messages', 'Jobs', '5250', 'Database', 'Tables', 'My requests', 'Run SQL', 'Copy data to table', 'Import request', 'Import query', 'Extract server data', 'Files', 'Command', 'Download', 'Customize', and 'Other'. A red arrow points from the 'Files' folder to the 'Destination' dropdown menu in the 'SQL Output' section. The 'SQL Statement' field is empty. The 'SQL Output' section includes a 'Type' dropdown set to 'Preview', a 'Destination' dropdown with 'Integrated File System' selected, a 'Format' dropdown, a 'Date' dropdown set to '11/17/05', and a 'Time' dropdown set to '2:43:08 PM'. There are 'Settings' buttons for both 'Type' and 'Destination'. The 'Connection' section shows a dropdown set to 'IBM Toolbox for Java - LP126AB.RCHLAND.IBM.COM'. At the bottom, there are 'Run SQL' and 'Save Request...' buttons. The 'SQL Statement Details' section is partially visible at the bottom.

New in V6R1! Chart SQL Results Background

System i Access for Web provides support to run SQL statements and store the results in a selected file format

Historical sSupported file formats include:

- HTML
- Microsoft Excel
- PDF
- OpenDocument



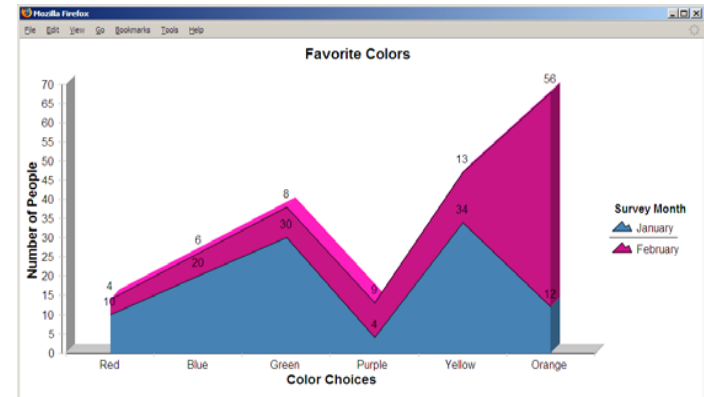
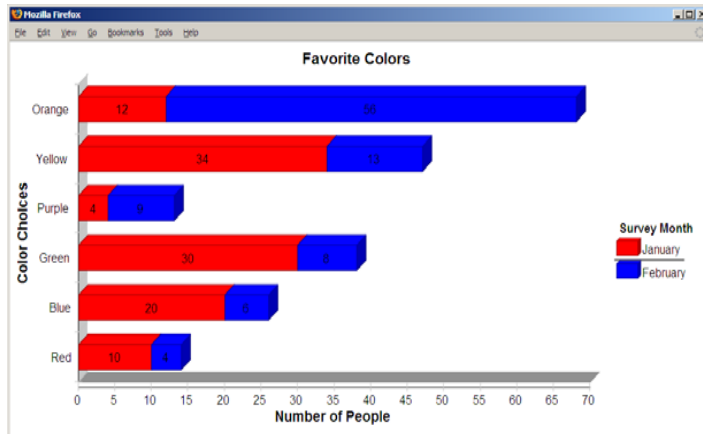
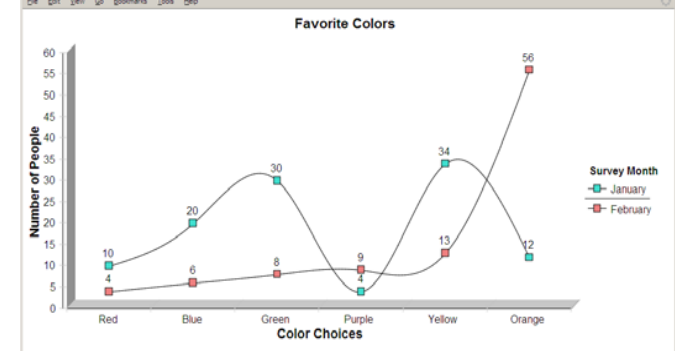
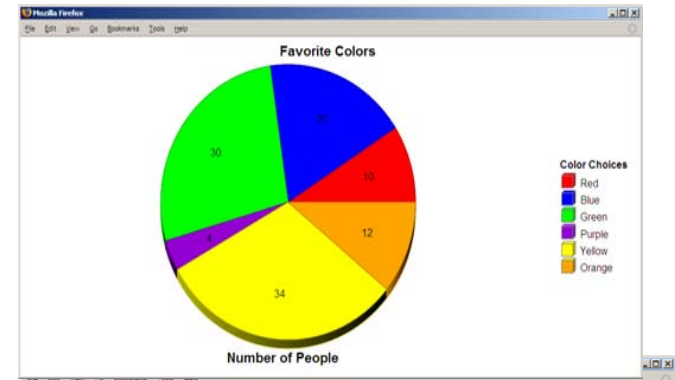
A	B	C	D	E	F	G	H	I	J	K	
CUSNUM	LSTNAM	INIT	STREET	CITY	STATE	ZIPCOD	CDTLMT	CHGCOD	BALDUE	CDTDUE	
1	938472	Henning	G K	4859 Elm	Dallas	TX	75217	5000	3	37	0
2	839283	Jones	B D	21B NW 1	Clay	NY	13041	400	1	100	0
3	392859	Vine	S S	PO Box 79	Broton	VT	5046	700	1	439	0
4	938485	Johnson	J A	3 Alpine W	Helen	GA	30545	9999	2	3987.5	33.5
5	397267	Tyron	W E	13 Myrtle	Hector	NY	14841	1000	1	0	0
6	389572	Stevens	K L	208 Snow	Denver	CO	80226	400	1	58.75	1.5
7	846283	Alison	J S	787 Lake	Isle	MN	56342	5000	3	10	0
8	475938	Doe	J W	59 Archer	Sutter	CA	95685	700	2	250	100
9	693829	Thomas	A N	3 Dove Cir	Casper	WY	82609	9999	2	0	0
10	593029	Williams	E D	485 SE 2	Dallas	TX	75218	200	1	25	0
11	192837	Lee	F L	5963 Oak	Hector	NY	14841	700	2	489.50	0.5
12	583990	Abraham	M T	392 Mill St	Isle	MN	56342	9999	3	0	0

CUSNU	LSTNAM	INIT	STREET	CITY	STATE	ZIPCOD	CDTLMT	CHGCOD	BALDUE	CDTDUE
938472	Henning	G K	4859 Elm Ave	Dallas	TX	75217	5000	3	37.00	0.00
839283	Jones	B D	21B NW 135 St	Clay	NY	13041	400	1	100.00	0.00
392859	Vine	S S	PO Box 79	Broton	VT	5046	700	1	439.00	0.00
938485	Johnson	J A	3 Alpine Way	Helen	GA	30545	9999	2	3987.50	33.50
397267	Tyron	W E	13 Myrtle Dr	Hector	NY	14841	1000	1	0.00	0.00
389572	Stevens	K L	208 Snow Pass	Denver	CO	80226	400	1	58.75	1.50
846283	Alison	J S	787 Lake Dr	Isle	MN	56342	5000	3	10.00	0.00
475938	Doe	J W	59 Archer Rd	Sutter	CA	95685	700	2	250.00	100.00
693829	Thomas	A N	3 Dove Circle	Casper	WY	82609	9999	2	0.00	0.00
593029	Williams	E D	485 SE 2 Ave	Dallas	TX	75218	200	1	25.00	0.00
192837	Lee	F L	5963 Oak St	Hector	NY	14841	700	2	489.50	0.50
583990	Abraham	M T	392 Mill St	Isle	MN	56342	9999	3	0.00	0.00

V6R1 Chart SQL results: SVG File Format

Support for new file type in V6R1

- Scalable Vector Graphics Chart (*.svg)
 - Language for describing 2D graphics in XML
 - W3C standard
- Users can store SQL results in a chart



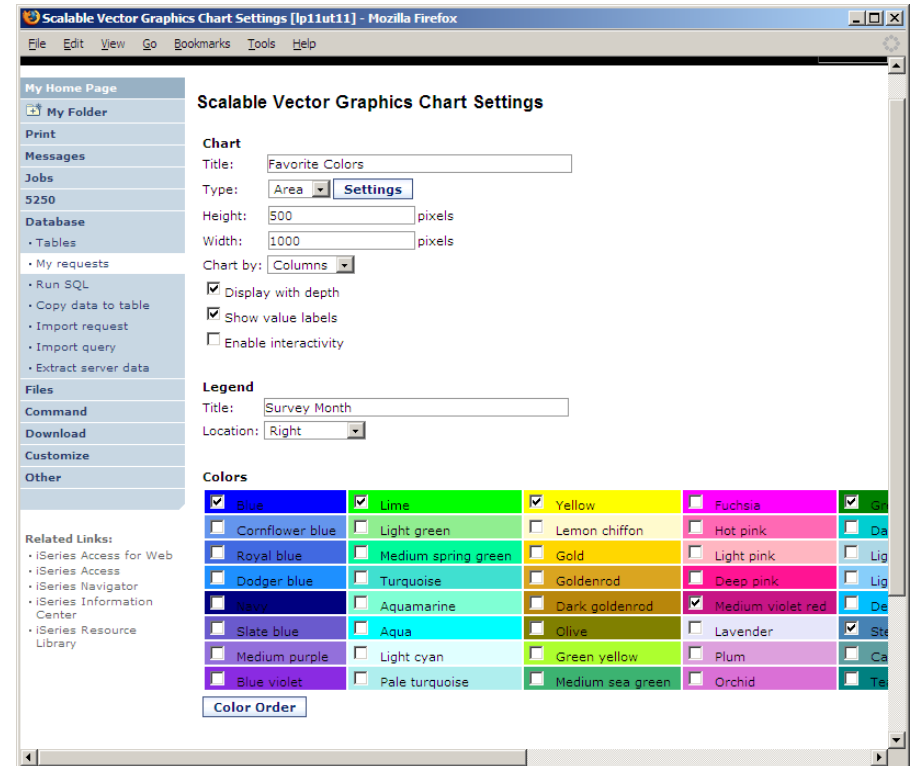
V6R1 Chart SQL Results: SVG Configuration

Many configuration options

- Chart type
 - Area, Bar, Pie, Line
- Colors
- Legend location
- Grid shown
- Chart type options
 - Bar – vertical or horizontal
 - Pie – exploded or complete
 - Line – marker shape
- Other....

Same destination options:

- Browser, mail, IFS, personal folder



Database – share data source names

Servlet version

In V5R4 and later: Within the Customize tab, Database Connections link, you can now also set up to use **WebSphere data source** names when creating database connections

- This enables many different applications running under WAS to use the same data source connections.
- *WAS data sources are pooled and managed by WAS and should scale better than our original database connections.*

iSeries Access for Web User: CMINER System: LP126AB.RCHLAND.IBM.COM

Edit Policies - Database Connections

Profile: CMINER

Default connection: IBM Toolbox for Java - LP126AB.RCHLAND.IBM.COM
Default derived from: Shipped default

Action	Connection	Derived From
	Connection: IBM Toolbox for Java - LP126AB.RCHLAND.IBM.COM Driver class: com.ibm.as400.access.AS400JDBCdriver JDBC URL: jdbc:as400://LP126AB.RCHLAND.IBM.COM;prompt=false;	Shipped default

[Add database connection](#)
Create a new database connection.

[Set default connection](#)
Set the default connection policy for this profile.

[Category list](#)
Return to the policies category list.

[Policies help](#)
View help for working with database connections.

IBM | iSeries | Service 5.4.0.05-19

Database: Import Query Requests

Servlet version

Bring your existing queries to a browser environment

Use the **Import Query** tool to bring them into System i Access for Web

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

***QMQRV and *QRYDFN are the query file types supported**

iSeries Access for Web User: CMINER System: LP126AB.RCHLAND.IBM.COM

Import Query

Specify the query file you want to import. The query contained in the query file will be converted to an iSeries Access for Web database request.

Note: The converted iSeries Access for Web database request could work differently than the original query file. Verifying the converted request is strongly recommended.

Query to Import

Query file:

Query type:

Query file CCSID:

Import Details

Query files of types *QMQRV and *QRYDFN are supported. These query files are created by Query for iSeries and DB2 UDB for iSeries Query Manager. Queries of type form, queries of type procedure, and prompted queries, are not supported. Queries containing program variables or replacement variables are also not supported.

Related Links:

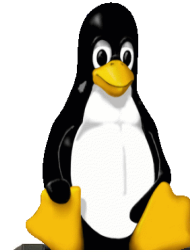
- iSeries Access for Web
- iSeries Access

Database – new spreadsheet format in V5R4 and later

New capability in both the servlet and portlet versions

The OpenOffice spreadsheet format (.ods) is now supported:

- **Servlet version: *Run SQL and Copy Data to Table***
- **Portlet version: *Dynamic SQL, SQL Query, and the new SQL Requests***



Enhancements to the Portlet version

Portlet version

Database function

- **iSeries SQL**

- Requests has been added so you can create, save, manage, and run saved SQL requests.

- **iSeries SQL Results**

- A Viewer has been added so you can view the results of running a saved iSeries SQL request.

The screenshot shows a WebSphere Portal interface with a navigation bar at the top containing 'Welcome', 'My Work', 'My Finances', 'My Newsroom', 'My iSeries', and 'My Favorites'. Below the navigation bar is a breadcrumb trail: '5250 > IFrame Portlets > Files > Print > Database > Command'. The main content area contains four portlets:

- iSeries Database Table**: A portlet with a title bar and a description: 'Use edit mode to configure this function. If edit mode is not available, contact your system administrator.'
- iSeries SQL Query**: A portlet with a title bar and a description: 'Use edit mode to configure this function. If edit mode is not available, contact your system administrator.'
- iSeries Dynamic SQL**: A portlet with a title bar and a form for entering an SQL statement. The form includes a text input field and a 'Run SQL' button.
- iSeries SQL Requests**: A portlet with a title bar and a table of saved SQL requests. The table has columns for 'Request' and 'Actions'. Above the table are buttons for 'Create Request' and 'Refresh'. Below the table is a pagination control showing 'Showing 0 - 0 of 0 Page 1 of 1'.

At the bottom of the page, there is a portlet titled **iSeries SQL Results - Viewer** with a description: 'Use the iSeries SQL Requests portlet to select a request to run.'



- My Folder
- **Print**
- Messages
- Jobs
- 5250
- Database
- Files
- Commands
- Customize
- Downloads
- Mail

Work with Printer Output

<http://<myiseries>/webaccess/iWASpool>

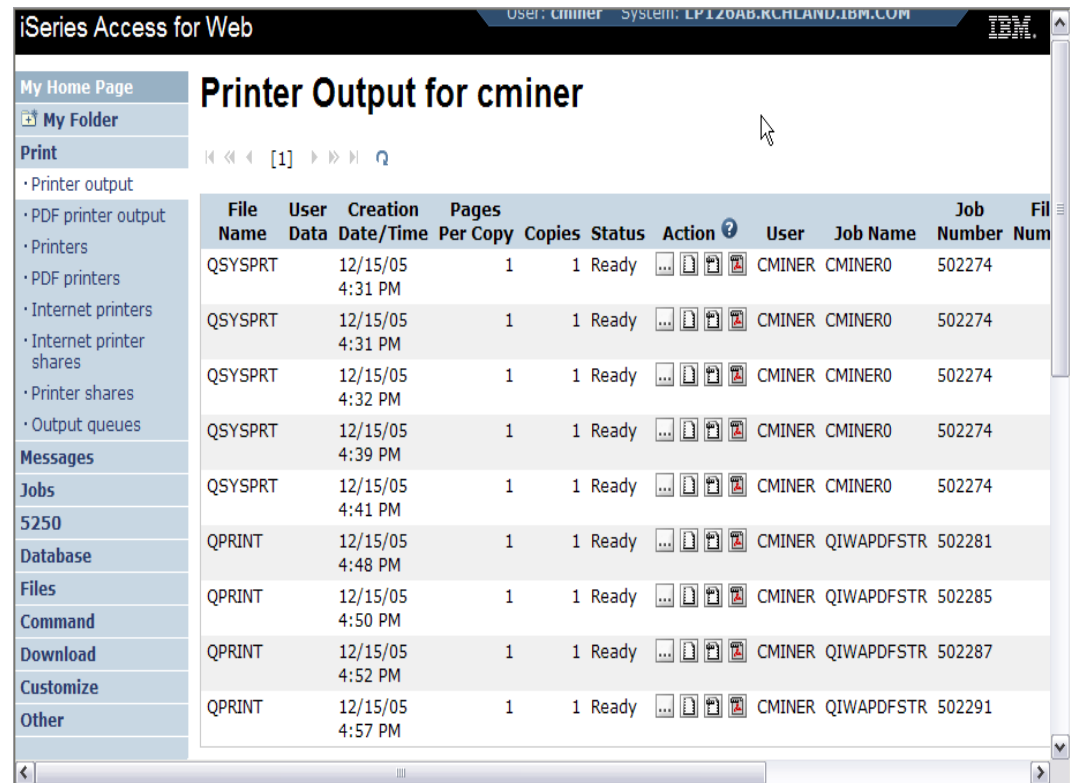
My 'printer output'

Actions include:

- Work with
- View
- View As
- View PDF

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



The screenshot shows the 'iSeries Access for Web' interface. The title bar indicates the user is 'cminer' and the system is 'LP120AB.RCHLAND.IBM.COM'. The main heading is 'Printer Output for cminer'. Below the heading is a navigation bar with a search icon and a page indicator '[1]'. The main content area displays a table of printer jobs. The table has columns for File Name, User, Creation Date/Time, Pages Per Copy, Copies, Status, Action, User, Job Name, Job Number, and File Number. The table contains 10 rows of data, all with a status of 'Ready'.

File Name	User	Creation Date/Time	Pages Per Copy	Copies	Status	Action	User	Job Name	Job Number	File Number
QSYSVRT		12/15/05 4:31 PM	1	1	Ready	...	CMINER	CMINERO	502274	
QSYSVRT		12/15/05 4:31 PM	1	1	Ready	...	CMINER	CMINERO	502274	
QSYSVRT		12/15/05 4:32 PM	1	1	Ready	...	CMINER	CMINERO	502274	
QSYSVRT		12/15/05 4:39 PM	1	1	Ready	...	CMINER	CMINERO	502274	
QSYSVRT		12/15/05 4:41 PM	1	1	Ready	...	CMINER	CMINERO	502274	
QPRINT		12/15/05 4:48 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502281	
QPRINT		12/15/05 4:50 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502285	
QPRINT		12/15/05 4:52 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502287	
QPRINT		12/15/05 4:57 PM	1	1	Ready	...	CMINER	QIWAPDFSTR	502291	

PDF Printer Output

<http://<myiseries>/webaccess/iWAPDFPrinterOutput>

Printer output **automatically** converted to PDF and placed in PDF Printer Output Queue at spool time

Actions include:

- View
- Copy to File
- Copy to Folder; Delete
- Mail

File Name	File Number	User	Creation Date/Time	Job Name	Job Number	Action
QSYSPRT	5	JOANSG	4/7/05	QPRTJOB	064814	[Icons]
QSYSPRT	1	CLARKD	4/27/05	QPADEV0018	115207	[Icons]
QSYSPRT	2	CLARKD	4/27/05	QPADEV0018	115207	[Icons]
QSYSPRT	1	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	2	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	3	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	4	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	5	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
QSYSPRT	6	CLARKD	5/2/05	QPADEV0012	122000	[Icons]
COVER_PAGE	11	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG1_3812	12	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG2_3812	13	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BG3_3812	14	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
BOX_3812	15	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
MBX_3812	16	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
IMG_3812	17	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]
HRZ_3812	19	GILBERTM	11/1/05	QPRTJOB	287159	[Icons]

Note: IBM Infoprint Server (5722-IP1) needed to use “PDF Printer Output” and “PDF Printers”

E-mail PDF output

E-mail is integrated with System i Access for Web

- Your mail server can be anywhere in your network
- Users receiving your e-mail need only an e-mail address

User selects an option in the Printer Output screen to 'e-mail PDF output'

- The PDF document is then included in the e-mail
- Sender's e-mail address filled in; user only needs to address it.

iSeries Access for Web

Convert Printer Output to PDF

From: cminer@us.ibm.com
To: louie@abc.net
cc:
bcc:
Subject: Your Invoice

Here is the invoice for the boat you have ordered.

Attachment: QSYSVRT.502274.CMINER.CMINER0.1.PDF

Access for Water

To: Joe Customer
1234 Besch Street
Hometown, CA 12345

Date: Thursday, June 13, 2002
Invoice No: 9876543
Payment Due: Monday, July 15, 2002

Description	Part No	Quantity	Price	Amount
Hunter 33.5	004356	1	\$57,900.00	\$57,900.00
Boat trailer	199234	1	\$1,800.00	\$1,800.00
Boat anchor	043993	1	FREE	\$0.00
Subtotal				\$59,700.00
Tax				7.00%
TOTAL				\$65,879.00



IFS: Perform many tasks without going to 5250 or iSeries Navigator

Create Directories

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

Can 'Work With' directories

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

The image displays three screenshots of the iSeries Access for Web interface. The top-left screenshot shows the 'Directory Contents' page for the path /home/BROWN, listing files and directories such as \$BEACH, \$BLD.JAVA, \$BLD.SHIP, \$BLD.TEST, aliciam, \$SETomcat, bin, boats, BVTFolder, and CUSTINFO. The top-right screenshot shows the 'Work With Directory' page for the same path, displaying metadata like 'Modified: 1/11/06 6:53:03 PM' and 'Owner: CMINER', along with an 'Action' menu containing options like 'Edit authority', 'Change owner of this object', and 'Change primary group for this object'. The bottom screenshot shows the 'Edit Authority' page, which includes a table of profiles and their permissions for the directory.

Profile	Read	Write	Execute	Existence	Management	Alter	Reference	Action
*PUBLIC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
BROWN	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Remove
CMINER	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Remove

Files: “Browse File Share” Link

In V5R4 and later:
Displays directory that
is identified in the
user’s Policy settings

- **Shipped Default for *PUBLIC is the QIBM folder.**
 - As QIBM is one directory that automatically ships with a ‘share’ assigned

The screenshot shows the iSeries Access for Web interface. At the top, it displays 'User: cminer System: RCHLAND.IBM.COM'. The main heading is 'Directory Contents QIBM'. Below this, there are links for 'Copy Files to Server' and 'Create Directory'. A summary line states 'Found 6 directories. Found 0 files with a total size of 0 bytes.' A table lists the contents of the directory:

Name	Size (bytes)	Type	Modified	Action
include		Directory	1/11/06 8:16:30 PM	
locales		Directory	1/11/06 8:13:53 PM	
ProdData		Directory	1/12/06 12:17:58 PM	
tempo		Directory	4/19/05 12:26:59 AM	
UserData		Directory	11/2/05 6:28:06 PM	
XML		Directory	8/17/04 11:45:11 PM	

Below the table, there is a 'Related Links' section.

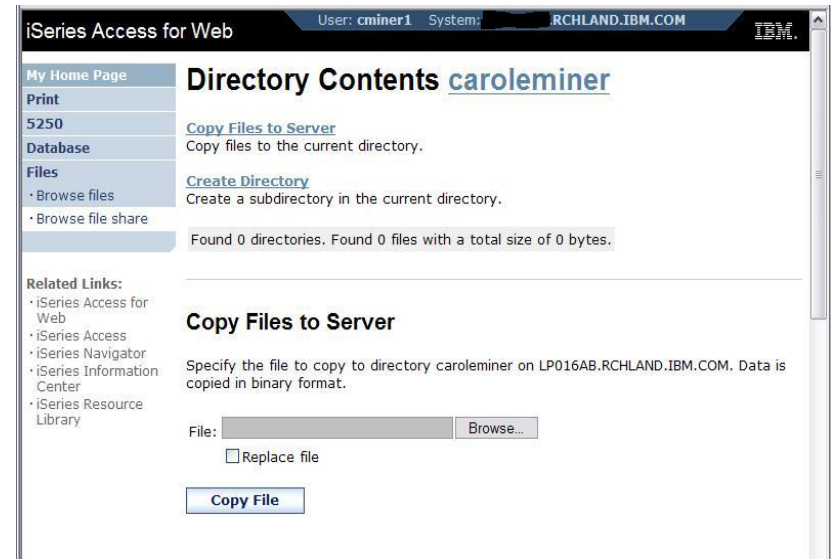
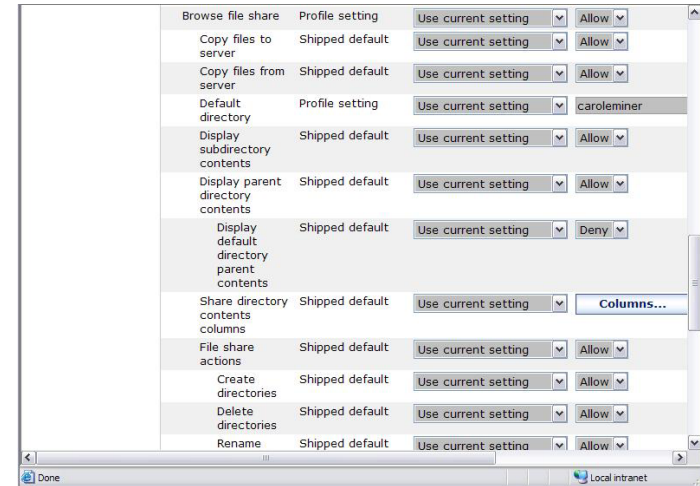
Browse File Share with Policy setting

Customize → Policies → Files

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

Advantage over 'Browse Files'

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



Enhancements to the Portlet version – Files – V5R4 and later

Portlet version

File function

- A Zip function has been added so you can zip files in the integrated file system.
- You can also add files to your zip file, extract them from an existing zip, and display the contents of a zip file in the integrated file system.

WebSphere Portal

My Portal Administration Edit my profile ? Log out

New Page Edit Page Assign Permissions

Welcome My Work My Finances My Newsroom My iSeries My Favorites

5250 IFrame Portlets Files Print Database Command

iSeries File List

Directory Contents /

Refresh

Showing 1 - 10 of 47 Page 1 of 5 Jump to page: 1

Name	Size (bytes)	Type	Modified
ASFTomcat		Directory	10/5/05 6:17:52 AM
bin		Directory	10/4/05 1:53:45 PM
dev		Directory	10/4/05 1:53:44 PM
etc		Directory	10/5/05 8:14:52 AM
home		Directory	11/16/05 9:38:49 PM
InstallShield		Directory	10/4/05 4:38:21 PM
lib		Directory	10/4/05 1:56:34 PM
PSF400		Directory	11/15/05 9:53:29 AM
QDLS		Directory	10/4/05 1:46:56 PM
QFileSvr.400		Directory	10/4/05 1:46:57 PM

Showing 1 - 10 of 47 Page 1 of 5 Jump to page: 1

Copy File to Server

File: Browse...

Replace if exists

Copy to Server

iSeries File List - Viewer

Use iSeries File List or other cooperative portlets to select a file to view.

iSeries File List - Editor

Use iSeries File List or other cooperative portlets to select a file to edit.

iSeries Zip File

To work with an existing zip file, use iSeries File List to select the zip file. To create a new zip file, use the "Create Zip File" button or use iSeries File List to select the directory in which to create the new zip file.

Create Zip File



Administration of Users

Servlet version

V5R4 and later: Administrators can now transfer System i Access for Web configuration items between i5/OS user profiles on the same system

- This is useful if you wanted to replicate a category of configuration items to a different user (using Copy action) or transfer ownership of a category of configuration items to a different user (using Move action).
- The configuration items supported are: **5250 session configurations and macros, saved commands, database requests, My Folder items, and policies.**

The screenshot shows the 'iSeries Access for Web' interface. The top navigation bar includes 'My Home Page', 'My Folder', 'Print', 'Messages', 'Jobs', '5250', 'Database', 'Files', 'Command', 'Download', 'Customize', and 'Other'. The 'Customize' section is expanded, showing 'Preferences', 'Policies', 'Settings', and 'Transfer configuration'. The 'Transfer Configuration Data' page has the following sections:

- Profiles:** 'From profile:' and 'To profile:' fields, each with a 'Browse...' button.
- Action to Perform:** Radio buttons for 'Copy' (selected) and 'Move'.
- Data to Transfer:** Checkboxes for '5250 sessions', '5250 macros', 'Commands', 'Database requests', 'Folder items', and 'Policies'.
- Transfer Data:** A blue button at the bottom.

At the bottom, there is a 'Related Links' section with links to 'iSeries Access for Web', 'iSeries Access', 'iSeries Navigator', 'iSeries Information Center', and 'iSeries Resource'. A link for 'Transfer configuration data help' is also present, with the text 'View help for transferring configuration data.'

Administration of Users

Servlet version

To copy customized profile settings from one System i to another System i, you need to use the Export function to put them in a PC file, then use the Import function to put the profile settings on another iSeries.

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

The screenshot displays the 'iSeries Access for Web' interface. At the top right, it shows 'User: CMINER' and 'System: L'. The main content area is titled 'Policies' and includes the instruction 'Specify the profile you want to edit.' Below this, there is a 'Profile:' field with 'CMINER' entered and a 'Browse...' button. An 'Edit Policies' button is also visible. The interface features a left-hand navigation menu with options like 'My Home Page', 'My Folder', 'Print', 'Messages', 'Jobs', '5250', 'Database', 'Files', 'Command', 'Download', 'Customize' (with sub-items for Preferences, Policies, Settings, and Transfer configuration), and 'Other'. Below the navigation menu is a 'Related Links' section with links to 'iSeries Access for Web', 'iSeries Access', 'iSeries Navigator', 'iSeries Information Center', and 'iSeries Resource Library'. At the bottom, there is a footer with 'IBM | iSeries | Service'.



Authentication Methods

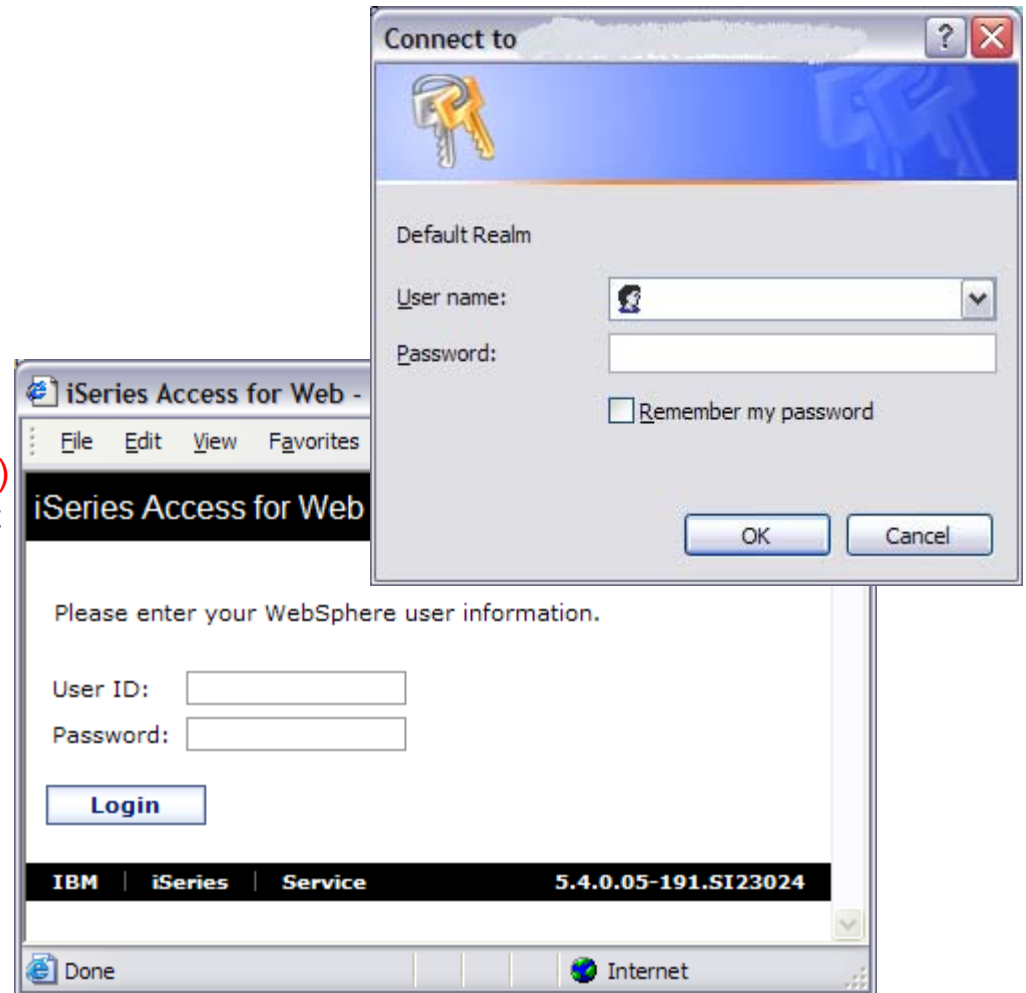
- **Authentication is verifying the identity of the user**
- **System i Access for Web supports two types of authentication**
 - **Application**
 - System i Access for Web handles the authentication
 - **Application Server – New in V5R4 and later**
 - WebSphere Application Server handles the authentication
- **Specified by the AUTHTYPE parameter on the CFGACCWEB2 command**
 - **Application: AUTHTYPE(*APP)**
 - **Application Server: AUTHTYPE(*APPSVR)**

Application Server Authentication

- **WebSphere handles authentication**
- **WebSphere credentials**
 - Typically a user ID and password
 - Can be Windows domain login information **(new in V6R1)**
 - Kerberos-based
 - Requires WebSphere Application Server V6.1
 - Authenticated with the active WebSphere user registry
- Specified by the **AUTHTYPE** parameter on the **CFGACCWEB2** command
 - Application Server Authentication: **AUTHTYPE(*APPSVR)**
- **WebSphere provides different methods of gathering credentials**
 - Applications can choose which methods to support

Application Server Authentication, continued

- **System i Access for Web supports two methods of gathering credentials**
 - HTTP basic authentication
 - User ID and password are encoded (not encrypted) in the HTTP headers and should be protected
 - Form-based authentication
 - User ID and password are clear text and should be protected
 - Kerberos-based authentication (V6R1)
 - Windows domain login information sent via Simple and Protected GSS-API Negotiation Mechanism (SPNEGO)
 - No additional prompt for user credentials
- **Specified by the AUTHMETHOD parameter on the CFGACCWEB2 command**
 - HTTP basic authentication: AUTHMETHOD(*BASIC)
 - Form-based authentication: AUTHMETHOD(*FORM)
 - Kerberos-based authentication: AUTHMETHOD(*KERBEROS)



Application Server Authentication Authorization

▪ HTTP basic authentication and Form-based authentication

- System i Access for Web uses Enterprise Identity Mapping (EIM) to map the authenticated WebSphere user identity to an i5/OS user profile
 - System i Access for Web identifies the user by the mapped i5/OS user profile
 - i5/OS user profile is used to authorize access to i5/OS resources using object level security

▪ Kerberos-based authentication

- System i Access for Web uses Kerberos-based credentials to authenticate with i5/OS
 - i5/OS uses Network Authentication Service (NAS) and EIM to map the Kerberos-based identity to an i5/OS user profile
 - System i Access for Web identifies the user by the mapped i5/OS user profile
 - i5/OS user profile is used to authorize access to i5/OS resources using object level security

Application Server Authentication Required Configuration

HTTP basic authentication and Form-based authentication

- **WebSphere with application security enabled and an active user registry to authenticate users**
- **EIM domain configuration for i5/OS to enable mapping of WebSphere user identities to i5/OS user profiles**
- **The EIM Identity Token Connector (resource adapter) installed and configured in WebSphere**
 - **Used to request identity tokens (encrypted data strings that represent the authenticated WebSphere user identity) which are input to EIM lookup operations.**

Application Server Authentication Required Configuration (continued)

Kerberos-based authentication

- **HTTP and krbsvr400 service principles created in Windows Active Directory**
 - Must be “trusted for delegation”
- **NAS configuration for i5/OS**
 - Synchronize time between i5/OS and Kerberos Key Distribution Center (KDC)
 - Home directory is required for user profiles (/home/USRPRF)
- **EIM configuration for i5/OS**
 - To enable mapping from Kerberos user identities to i5/OS user profiles
- **WebSphere Application Server V6.1 with application security enabled**
 - Windows Active Directory as active user registry for authenticating users
 - SPNEGO Trust Association Interceptor (TAI) configured with credential delegation enabled
 - JGSS Kerberos client configured
 - WebSphere Single Signon (SSO) enabled
- **Users must login to Windows domain**
- **Browser must be configured to enable Integrated Windows Authentication**
- **Note: See the System i Access for Web product Web site for more information on the required configuration**
 - <http://www.ibm.com/systems/i/software/access/web/>

5250 Sessions

5250 sessions can be started to any system running i5/OS

Must provide user profile and password on i5/OS Sign On screen

Start Session

System ?
System:
Port: 23
Code page: 37

Workstation ID ?
 Use user ID
 Specify workstation ID
 Avoid duplicates for this user
 Avoid duplicates with other users

General ?
Initial macro:
 Bypass signon
 Display HTML data in fields

Start Session

System : QINTER
Subsystem : QPADEV000C
Display :

User :
Password :
Program/procedure :
Menu :
Current library :

RELEASE: V05R04M00
DRIVER: 1500411

USE OF THIS SYSTEM IS FOR IBM MANAGEMENT APPROVED PURPOSES ONLY.
USE IS SUBJECT TO AUDIT AT ANY TIME BY IBM MANAGEMENT.

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37 6,53

5250 Session Bypass Signon

QRMTSIGN system value must be be
***VERIFY**

Select bypass signon when starting or
configuring a session

Start Session

System

System:

Port:

Code page:

Workstation ID

Use user ID

Specify workstation ID

Avoid duplicates for this user

Avoid duplicates with other users

General

Initial macro:

Bypass signon

Display HTML data in fields

Start Session

Configure New Session

General

Session: * required

Default view:

Initial macro:

Bypass signon

Display HTML data in fields

Enable advanced JavaScript functions

System

System:

Port:

**System i Access for Web must be
configured for application
authentication or application server
authentication with Kerberos for bypass
signon to be available**

- CFGACCWEB2 AUTHTYPE(*APP) ...
- CFGACCWEB2 AUTHTYPE(*APPSVR)
AUTHMETHOD(*KERBEROS) ...



New in V6R1!

Schedule tasks: Create automated task as a .jar file

The screenshots illustrate the following steps:

- 1. Build the request and save it**: The first screenshot shows a table of requests. A red box highlights the 'Schedule the task' icon in the 'Action' column for the request 'JCV61_SEL_CSTFIL'.
- 2. Select "schedule the task"**: A red arrow points from the icon in step 1 to the 'Create Automated Task' form in the second screenshot.
- 3. Create (define) the task**: The second screenshot shows the 'Create Automated Task' form with the following fields:
 - Request: JCV61_SEL_CSTFIL
 - User profile: jcook
 - Password: [masked]
 - Confirm password: [masked]
 - Output file: /JCSQLCST.ext
 - Java archive: iwATask.jarA 'Create Automated Task' button is visible at the bottom.
- 4. Completed automated task definition**: The third screenshot shows the 'Create Automated Task' page with a success message: 'Automated task created successfully.' Below the message, the task details are listed:
 - Request: JCV61_SEL_CSTFIL
 - User profile: jcook
 - Output file: /JCSQLCST.ext
 - Java archive: iwATask.jarThere are also links for 'iwATask.jar' and 'My requests'.
- 5. Review Database help to determine how to run the scheduled task**: A red box highlights the 'Database help' link in the left sidebar of the third screenshot, with the text 'View help for creating an automated task.'

- 1. Build the request and save it**
- 2. Select "schedule the task"**
- 3. Create (define) the task**
- 4. Completed automated task definition**
- 5. Review Database help to determine how to run the scheduled task**

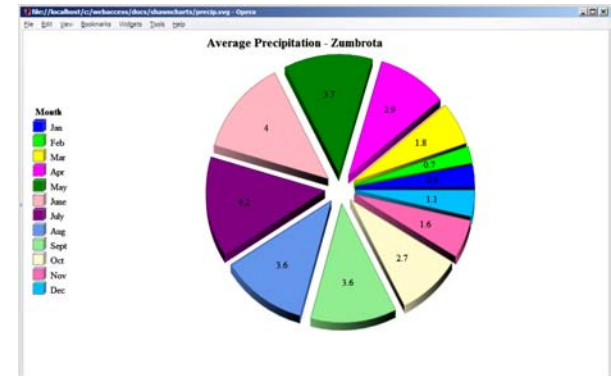
V5R4 System i Access for Web Enhancements

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

Summary: V6R1 System i Access for Web Enhancements



- **Single sign-on: support authentication using Windows domain login**
- **Chart SQL results in bar, area, line, or pie chart**
- **SQL wizard supports joins of multiple tables**
- **Automation and scheduling of tasks**
- **JSR 168 Portlets**



System i Access for Web has many entry points

Can enter at many different pages

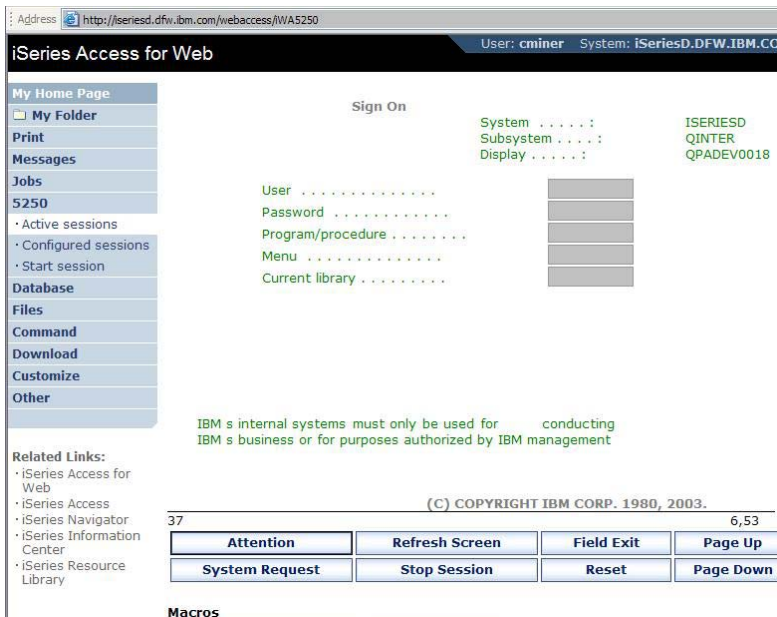
Can use navigation bar to move from function to function

<http://<myiseries>/webaccess/iWA5250>

<http://<myiseries>/webaccess/iWAMain>



<http://<myiseries>/webaccess/iWASpool>



Customized Home Page

Customized view of the Home Page

- Could be used as 'entry' point to System i

The screenshot shows a web browser window with the address bar displaying `http://iseriesd.dfw.ibm.com/webaccess/iWAHome`. The browser's address bar includes a search field and various utility icons like Smiley Central, Screensavers, Cursor Mania, PopSwatter, Games, and My Info. The main content area is titled "Access for Water" with the tagline "Supplying quality boats since 2002".

The page is organized into several sections:

- Services:** A list of links including "See boat details - 5250", "See boat details - HATS LE", "See boat details - WebFacing", "View available boats", "Order a boat", "Work with invoices", "Check messages", "Check system messages", "Administrator tasks", "Manage incoming items", "Monitor jobs", and "Download client software".
- This Week's Special:** A featured listing for a "Beautifully maintained 28 foot 1978 Carver Santa Cruz" for \$23,900, with details about its refurbishment and motor. A "here" link is provided to view the boat.
- Great Deals:** A section for bargain-conscious buyers, offering a large selection of new and slightly used boats for under \$75,000. A link is provided to "View our selection of modestly priced boats".
- Site Support:** A section encouraging user feedback, with a link to "Send us a message" and instructions on how to use a "telephone directory" for contact information.
- Weather Conditions:** A section with a link to check the "forecast" and a map of the United States showing weather conditions as of 7:00 AM.

The browser's status bar at the bottom shows "Done" and "Internet".

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

Try out System i Access for Web for yourself!

Start your browser and connect to the following web site:

<http://iseriesd.dfw.ibm.com/webaccess/iWAHome> (case sensitive)

<p>User ID = WACUST</p> <p>Password = DEMO2PWD</p>	<p>This shows the basic look of Access for Web as we ship it. You can try various functions -- including working with printer output, creating database requests, etc. Click on the 5250 tab, sign onto the iSeries, then start an RPG application called BOATS and run it.</p>
<p>User ID = BOATADMIN</p> <p>Password = DEMO2PWD</p>	<p>This is an example of how a customer might design a web page for their use. You will see that an end user could start the same BOATS application by clicking on the 5250 session, or they could have used HATS to run the application. You will also see other links that would let a user work with spoolfile information, work with IFS, run database requests, etc..</p>

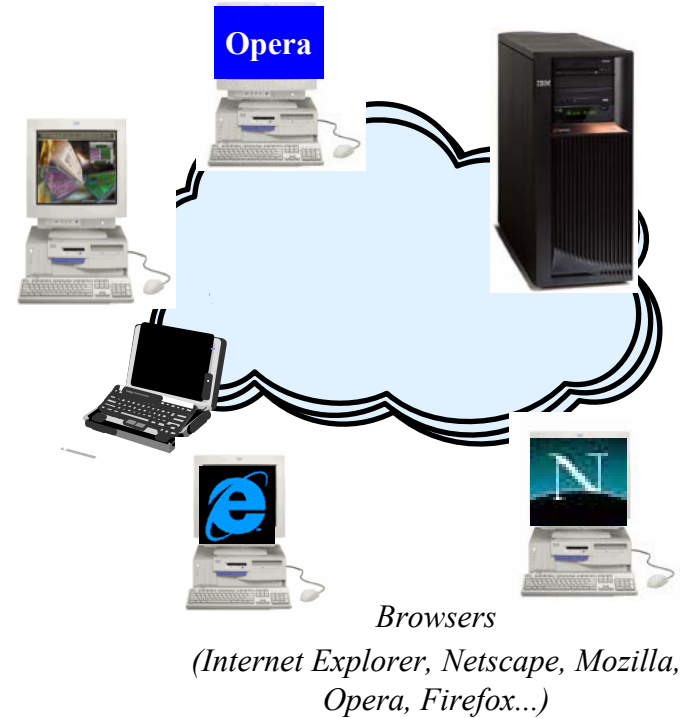
Send email to: LLHIRSCH@us.ibm.com to reset the user profiles on the system if either one gets disabled.

Summary

The way to work with your System i 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 said ‘ *a definite “got to have” product for any serious System i shop* ’



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