

IBM System i™

Session: **420017**

iSeries Access for Windows – What's New in V5R4

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

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iSeries Access for Windows sessions:

- 32MC - iSeries Access for Windows: What's New in V5R4**
- 33MI - iSeries Access Data Transfer: Tips & Techniques**
- 42MK - Performance Tune iSeries Access ODBC**
- 43MC - PC5250 Emulation: Everything You Need To Know**
- 46ME - iSeries Access in the .NET World**

iSeries Access for Linux session:

- 53ML – Creating the iSeries Linux Desktop**

Stop in EXPO for a demo...

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

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Abstract

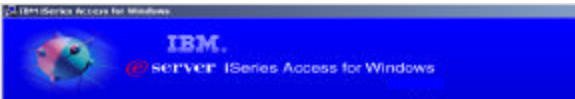
If you are a veteran iSeries Access for Windows user and want to find out what new functions have been added, then come to this session.

Come hear the enhancements that have been added in the areas of 5250 emulation, data transfer, file serving, application development, and much more.

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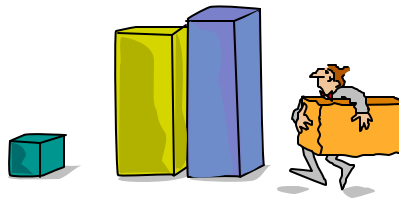
Product Information



Product Number	Version Release	Date Available	IBM Technical Support End
5722-XE1	V4R4M0	May 1999	05/31/2001
5722-XE1	V4R5M0	Aug 2000	12/31/2002
5722-XE1	V5R1M0	May 2001	09/30/2005
5722-XE1	V5R2M0	Aug 2002	04/30/2007
5722-XE1	V5R3M0	June 2004	12 months notice will be given prior to termination of support
5722-XE1	V5R4M0	Feb 2006	12 months notice will be given prior to termination of support

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Packaging & Ordering



iSeries Access Family Packaging

V5R4 5722-XW1 iSeries Access Family	V5R3 5722-XW1 iSeries Access Family	V5R2 5722-XW1 iSeries Access Family
<ul style="list-style-type: none"> iSeries Access for Windows, 5722-XE1, V5R4 iSeries Access for Web, 5722-XH2, V5R4 iSeries Access for Linux, 5722-XL1 iSeries Access for Wireless, 5722-XP1, V5R4 	<ul style="list-style-type: none"> iSeries Access for Windows, 5722-XE1, V5R3 iSeries Access for Web, 5722-XH2, V5R3 iSeries Access for Linux, 5722-XL1, V1.10 iSeries Access for Wireless, 5722-XP1, V5R3 HATS Limited Edition V5.0, 5724-F97-01 	<ul style="list-style-type: none"> iSeries Access for Windows, 5722-XE1, V5R2 iSeries Access for Web, 5722-XH2, V5R2 iSeries Access for Linux, 5722-XL1, V1.0 iSeries Access for Wireless, 5722-XP1, V5R2 HATS Limited Edition V4.0, 5724-D34-01 WebSphere Host Publisher, 5724-B81, V4.0, 5724-B81, V4.01
	<p>V5R3 customers not wanting to upgrade to i5/OS V5R4 but want the new V5R4 iSeries Access Family clients can order no-charge Feature No. 2648 of Product No. 5722-XW1</p>	<p>V5R2 customers not wanting to upgrade to i5/OS V5R3 but want the new V5R3 iSeries Access Family clients can order no-charge Feature No. 2647 of Product No. 5722-XW1</p>

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


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Integrating native Windows with iSeries

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

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



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

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Supports Microsoft operating environments...

Microsoft Transaction Services (MTS)

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

Terminal Server Edition (TSE)

- iSeries Access runs on a Windows server, and enables multiple simultaneous users (such as Network Stations, DOS, Unix, or Macintosh) work with iSeries resources

Internet Information Services (IIS)

- Provides a Web application infrastructure for Windows Servers. iSeries Access runs on server, and fulfills requests for iSeries data (ie, ODBC, OLE DB, etc)

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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
- Network Address Translation (NAT)**
 - Hides System i address when on Internet

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

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Windows Operating Systems

The V5R4 version of iSeries Access for Windows can be installed on:

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

64-bit Processors supported*

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

V5R3 iSeries Access for Windows installs on:

- Windows NT 4.0, 2000, XP, 2003

V5R2 iSeries Access for Windows installs on:

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

V5R1 iSeries Access for Windows installs on:

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

* Refer to www.ibm.com/eserver/iseries/access/supportedos.htm for detailed information on what functions support 64-bit

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iSeries Access for Windows Installer – Technology Preview

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.

Download it from www.ibm.com/eserver/iseries/access/windows

- Detailed information on the features included in this Technical Preview.

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PC5250 updated with Personal Communications 5.8

Printer Emulation

Display Emulation

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

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PC5250 Enhancements – V5R4, V5R3, V5R2

V5R4 Enhancements PC5250 V5.8	V5R3 Enhancements PC5250 V5.7	V5R2 Enhancements PC5250 V5.5
<ul style="list-style-type: none"> • Can now associate printer sessions with display sessions • A new configurable, printer session window for 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 	<ul style="list-style-type: none"> • Accessibility enhancements to the operator information area (OIA): Pop-up keypad, and Color mapping as well as visual indication of sounds • Enhanced mouse marking • Bidirectional (LamAlef) enhancements • USB Japanese 106 keyboard support • Basic_ascii print PDF and PDT 	<ul style="list-style-type: none"> • Bypass sign-on can be used with Kerberos tickets to avoid a sign-on screen • Can wrap pasted text across fields and lines without breaking in the middle of a word, or ending a line with an invalid word. • Move +/- sign before the number when copying/pasting • Added Hindi and Japanese code pages 1390/1399

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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.

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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 UTF-8 / UTF-16 data Support for BINARY / VARBINARY data types 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)

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iSeries OLE DB Provider

OLE DB

Microsoft-recommended Access for 32-bit Windows applications

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

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

plus add-ins for Visual Basic

OLE DB Provider supports OLE DB 2.5

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Visual Basic Programming Aides

- Wizards to aid in developing Visual Basic applications
- Sample programs for IE, PowerBuilder, Delphi, Visual C++, Lotus 1-2-3

add-ins for Visual Basic

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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 	<p>Unicode support</p> <ul style="list-style-type: none"> • UTF-8 & UTF-16 support <p>New SQL-only provider (IBMDASQL)</p> <ul style="list-style-type: none"> • SQL commitment control using IBMDASQL • MTS support using IBMDASQL <p>New Record-Level Access-only provider (IBMDARLA)</p> <ul style="list-style-type: none"> • Record-level access support for forward-only cursors and blocked reads using IBMDARLA <p>SQL</p> <ul style="list-style-type: none"> • Custom blocking in SQL • SQL data compression • SQL package support • Supports updatable cursors for SQL dialect <p>BINARY and VARBINARY data types</p> <p>Larger decimal precision support</p>	<p>Custom properties added</p> <ul style="list-style-type: none"> • Force Translate (translate CCSID 65535 data) • Default Collection • Catalog Library List • Convert Date Time To Char <p>– Supports ROW-ID</p> <p>– 64K SQL Statements</p> <p>– Additional descriptor information</p> <p>– Is thread safe</p> <p>– OLE DB provider works with Windows products, such as:</p> <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 <p>• An OLE DB interface is provided to support ADO recordset Seek (ADO 2.x)</p>

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iSeries .NET Provider

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

.NET
The next big wave in Microsoft technology

Microsoft's Technology Roadmap

Today

- ODBC
- ADO/OLEDB
- ADO.NET

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

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

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

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.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)

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Redbook - SG24-6440

8,000+ downloads in first 6 months!

Integrating DB2 Universal Database for iSeries with Microsoft ADO .NET

Customers have been using the IBM DB2 for i5/OS 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 i5/OS can work with several different .NET providers:

The IBM.Data.DB2.iSeries provider, a .NET-managed provider new to iSeries Access for Windows in V5R3

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

This IBM Redbook shows customers how to use ADO.NET effectively to harness the power of DB2 for i5/OS, showing examples, best practices, pitfalls, and comparisons between the different ADO.NET data providers.

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Incoming Remote Command (IRC)

- **RUNRMTCMD** is used to run a PC command from the i5/OS command line in a 5250 session
- Since it is a CL command, RUNRMTCMD may also be run from a CL program running on System i

- **CWBRXD** is the name of the program that provides and controls the Incoming Remote Command (IRC) function
 - RXD in the name stands for RemoteeXecution Daemon
 - The terms CWBRXD and IRC are used interchangeably

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V5R4	V5R3
<p>The remote program interfaces (CWBRX.H) that run on the PC have been changed to allow a more complete list of job messages to be returned.</p>	<p>A new option: /loadprof</p> <p>Allows commands to have access to the user-specific registry and environment variable settings while they are running</p> <ul style="list-style-type: none"> • Some commands require setting this option in order to work properly • This option can be saved on the Incoming Remote Command tab of iSeries Access for Windows Properties, where it is called Load user profile when command run in user context <p>For further information regarding this new option, refer to the CWBRXD and Incoming Remote Command topic in the User's Guide (use this path: Start > Programs > IBM iSeries Access for Windows > User's Guide)</p>

- The Incoming Remote Command function runs a command on the Windows PC and then routes any text output that is generated by the command back to the requesting system.
- Commands are sent to the Windows PC in the format of commands that are typed on a Windows command prompt
- The output that would normally appear in that command prompt is sent back to the requesting system
- If the command produces no output, a no output message is sent instead.
- When a command is sent from a remote system, a message is logged in the iSeries Access for Windows history log. The message information that is logged identifies the system and user ID that sent the remote command, the text of the command that was sent, and whether or not the command could run. If no user ID is specified with the command, no user ID is logged.

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iSeries Access - Programmer's Toolkit

- ✓ Installable option of Access for Windows
- ✓ Included in the icon group for Access for Windows
- ✓ Contains sample programs, and documentation
- ✓ Also contains links to header files and Windows Help files installed on your PC
- ✓ Has Internet links to more sample programs, documentation, and other helpful information

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Data Transfer

- Copy Data to DB2 for i5/OS database
- Copy Data from DB2 for i5/OS database

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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 i5/OS as 'date or time' field. • Option to convert numeric to character when transferring to DB2 for i5/OS • 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 DB2 for i5/OS database functions

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Example of Unicode Enablement – UTF8 and UTF16

DXFERUNI/MIXUTYPE

UTF8	UCS2	UTF16
ABC	ABC	ABC
εΦΩ	εΦΩ	εΦΩ
Для	Для	Для
אבג	אבג	אבג
طسذ	طسذ	طسذ

Retrieved record 7

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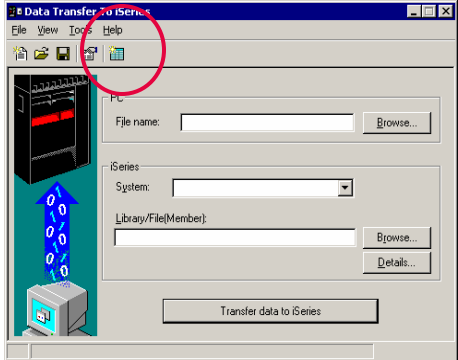
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Create iSeries Database File - Wizard

iSeries Access for Windows

You start the 'Create iSeries Database File' wizard by selecting it from the Tools menu or by clicking on its icon in the toolbar

- Plan ahead by increasing lengths if necessary.
- Do not include character and numeric data in the same column.



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Create iSeries Database File Wizard

iSeries Access for Windows

The wizard creates:

- A File Description File (FDF)
- A Database file on the server

The wizard does not do the actual data transfer to the System i



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Create Data Transfer Upload Using GUI

The PC file name

The System i where the file was created

The Library/File name of our new file

Click to transfer data to your new file

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Transfer Data to System i

Step through the wizard's GUI panels and:

- Set up the library list
- Select the PC file that contains your data
- Select the PC file type
- Select the File Description File (FDF)
- Change Data Format Options (best to skip this panel)
- Scan PC File
- View results of the Scan PC File function
- View Field Details panel
- Select the System i System Name

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Creating a Basic Data Transfer

Library: INFO
Table: CUSTOMER

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Data Transfer from iSeries

GUI for building SQL Queries

Click the Data Options button to start the Data Transfer Query Builder.

The Query Builder

- Lets you generate SQL queries without knowing SQL
- Can do Joins, Groups, and Conditional Grouping
- Builds SELECT statements

The Native SQL interface allows you to type in a free form SELECT statement.

- A list of files and columns in those files are provided to help you build your statement

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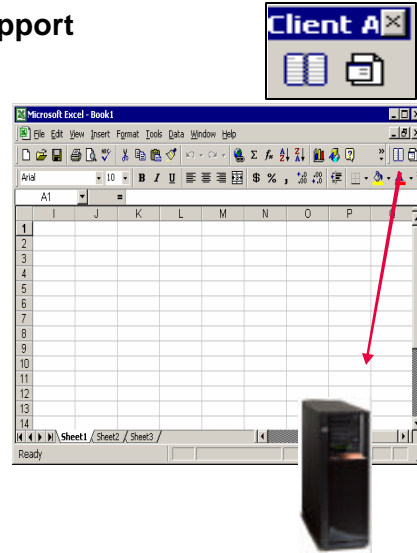
Microsoft Excel Add-in Support

Add-ins are provided for both 'Downloading' and 'Uploading' data to/from Microsoft Excel spreadsheets and the DB2 for i5/OS

Works with:

- > Microsoft Excel 97
- > Excel 2000
- > Excel XP

Use these add-ins by clicking on the Data Transfer upload or download buttons on the Excel toolbar



Viewing the results in Excel

The image shows a screenshot of the Microsoft Excel interface displaying a table of data. The table has 13 rows and 12 columns. The columns are labeled: CUSNUM, LSTNAM, INIT, STREET, CITY, STATE, ZIPCOD, CDTLMT, CHGCOD, BALDUE, and COTDUE. The data includes customer numbers, names, initials, addresses, states, zip codes, and dates.

	A	B	C	D	E	F	G	H	I	J	K
1	CUSNUM	LSTNAM	INIT	STREET	CITY	STATE	ZIPCOD	CDTLMT	CHGCOD	BALDUE	COTDUE
2	938472	Henning	G K	4859 Elm	Dallas	TX	75217	5000	3	37	0
3	839283	Jones	B D	21B NW 1	Clay	NY	13041	400	1	100	0
4	392859	Vine	S S	PO Box 75	Broton	VT	5046	700	1	439	0
5	938485	Johnson	J A	3 Alpine	VA Helen	GA	30545	9999	2	3987.5	33.5
6	397267	Tyron	W E	13 Myrtle	Hector	NY	14841	1000	1	0	0
7	389572	Stevens	K L	208 Snow	Denver	CO	80226	400	1	58.75	1.5
8	846283	Alison	J S	787 Lake	Isle	MN	56342	5000	3	10	0
9	475938	Doe	J W	59 Archer	Sutter	CA	95685	700	2	250	100
10	693829	Thomas	A N	3 Dove	Cin Casper	WY	82609	9999	2	0	0
11	593029	Williams	E D	485 SE 2	Dallas	TX	75218	200	1	25	0
12	192837	Lee	F L	5863 Oak	Hector	NY	14841	700	2	489.5	0.5
13	583990	Abraham	M T	392 Mill	Stisle	MN	56342	9999	3	500	0

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Batch Transfer Command Interface

iSeries Access for Windows

RTOPCB

- Does batch data transfers from System i to the PC

RFROMPCB

- Does batch data transfers from the PC to System i

RXFERPCB

- Does batch data transfers from System i to the PC
- Does batch data transfers from the PC to System i

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RTOPCB Example

Data Transfer from System i: Batch transfer command interface

RTOPCB [/S] [[/I] [filename [/C] [...]] | [[/I] /F list file]]

/S Show transfer statistics.

filename An iSeries to PC transfer request (.TTO or .DTF), Rumba (.RTO), or Windows 3.1 (.DT) file transfer request.

/C Process next file independent of previous file.

/I Ignore warnings.

/F Process files within list file (one filename per line).

list file A file containing a list of transfer files to process.

Examples:

RTOPCB c:\temp\test.tto

RTOPCB /S c:\temp\test.tto /C c:\temp\trans.dtf

RTOPCB /S /F c:\temp\transfer.dtf

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RFROMPCB Example

**Data Transfer to
System i: Batch
transfer command
interface**

RFROMPCB [/S] [[/I] [filename [/C] [...]] | [/I] [/F list file]]

/S Show transfer statistics.
 filename A PC to iSeries file transfer request (.TFR or .DTT),
 Rumba (.RTO), or Windows 3.1 (.DT) file transfer request.
 /C Process next file independent of previous file.
 /F Process files within list file (one filename per line).
 list file A file containing a list of transfer files to process.

Examples:

```
RFROMPCB c:\temp\test.tfr
RFROMPCB /S c:\temp\test.tfr /C c:\temp\trans.dtt
RFROMPCB /S /F c:\temp\transfer.dtt
```

RXFERPCB Example

**Data Transfer between
System i: Batch transfer
command interface**

RXFERPCB request userID password

request - Fully qualified file name of any Client Access upload or
 download request of type .DTF, .DTT, .TTO, or .TFR.
 userID - A valid i5/OS user profile for the system specified in the
 request.
 password - A valid password for the specified user profile.

Examples:

```
RXFERPCB c:\temp\upload.dtf myuserid mypassword
RXFERPCB c:\temp\download.dtt myuserid mypassword
```

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Run Data Transfer by Clicking an Icon

Double-click on an icon

Data can be uploaded with no prompt to user

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Auto-run/auto-close support

Use the Properties panel to set up Auto-Run and Auto-Close.
You get to it by getting into the Data Transfer program, then selecting File -> Properties

The options:

- Allow transfer requests to run automatically when opened
- Allow transfer requests to close after the transfer has completed

If you select both options, then it will run without user intervention

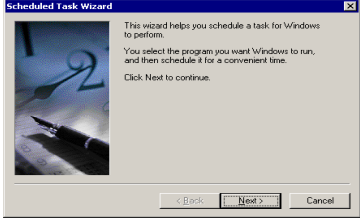
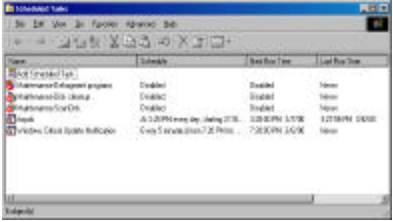
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Scheduling a Data Transfer Request

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

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

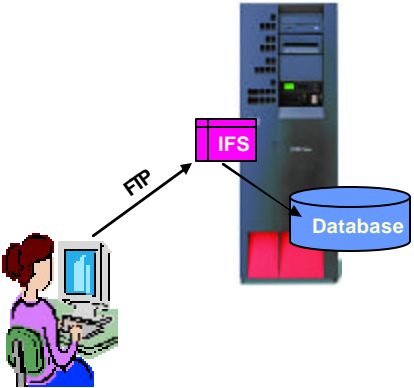
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Data Transfer Vs FTPs

Use Data Transfer rather than multi-step FTPs

- Rather than taking PC data and performing FTP to IFS then using CPYFRMPCD to get data into database format, **use Data Transfer**
- Same is true when getting data from the database to the PC (ie, CPYTOPCD)



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Data Transfer ActiveX Automation Objects

What are Active X Automation Objects?

- ActiveX Automations are re-usable objects that reside on your Windows PC.
- Many times they can be used to run an application by "remote" with a program or script.
- They work similarly to Object Linking and Embedding (OLE), used for things like inserting an Excel spreadsheet into a WordPad document. Not just cutting and paste, actually "linking" the spreadsheet into the document.
- ActiveX objects work much like this, except in the programming world.

What can they do for me?

- ActiveX automations can be used to quickly and easily perform many tasks with little or no user intervention.
- For example, a program may use the Automations for Microsoft Excel to perform various data calculations without ever bringing up the Excel interface.
- ActiveX automations can be used to create new custom interfaces over applications that have ActiveX automations.
- A few examples are Microsoft Office products, Internet Explorer, the PC5250 emulator, and various iSeries Access for Windows functions.



Data Transfer ActiveX Automation Objects

ActiveX automations are supported by many programming languages including:

- Visual Basic
- Visual Basic for Applications (used by Microsoft Office)
- Visual Basic Script (used in web pages and the PC5250 emulator)
- C++
- Java
- Lotus Script
- Many other applications and development environments

You must write program code to use these objects. Or allow some development tool to write the code for you.

You can find information on the iSeries Access for Windows ActiveX automation objects in the iSeries Access for Windows Toolkit under the ActiveX section of the Database portion of the Toolkit documentation.

IBM System i

Installing, Updating, Managing



**System i Licensed Program
– Product No. 5722-XE1**

Three versions currently supported:
V5R2M0, V5R3M0,
V5R4M0

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iSeries Access installed in iSeries IFS


iSeries Access client Install Image placed in IFS in:

- \Q\IBM\ProdData\Access\Windows\Install\Image

iSeries Access Service Pack placed in IFS in:

- V5R1 - Service Pack PTFs saved in the main install image--no extra reboot! 
- But is likely to not be latest Service Pack available 

iSeries Access installs and services other products as part of its install from IFS

- SSL Encryption Program (V5R3), iSeries Toolbox for Java, Java Runtime Environment, iSeries Navigator, EZ Setup 

iSeries Access can be used to install and service other code placed in IFS:

- iSeries Navigator Plug-ins, Add-ins

PC CD also shipped with the product 

- V5R2 - Can create Customized Install CD images

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System i NetServer

Shared Directory

`\\QIBM\ProdData\Access\Windows\InstalImage`

- QIBM ships with a "read only" share access
- Thus, all users can access iSeries Access for Windows code on System i

If installs are done from QIBM directory, end users will automatically get new service pack code and future upgrades when new code placed on System i

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Service

Strategic way to handle service for end-users

- Automatic Check Service Level
- Check Service Level can also service:
 - iSeries Navigator Plug-ins
 - Secure Sockets Layer (SSL)

Note:


In example above, there was a Mapped Drive to `W:\\<iSeries>\QIBM`, so iSeries Access for Windows filled in the rest of the address.

Could also use service Source Directory of `\\<iSeries>\QIBM` to avoid assigning a persistent drive letter mapping

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IBM System i

Install and Service Pack Tips



Make sure you have the latest Service Pack before rolling out new installs

- Roll out new clients from merged image and get new release and latest service pack in one step
- Merged install image eliminates the need for an extra reboot

Save disk space on PCs

- If a Service Pack has been well-tested, and you are confident in it, you can have your end-users install it without enabling service pack uninstall.
- This eliminates the need for an **Archive** directory containing files from the previous service level.
- RMVPTF and reinstall from install image could be used to get back to the prior service level if necessary.

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FTP Service Packs for Testing

Suggest using FTP download for validation testing

Don't place downloaded Service Pack in the System i LPP (QIBM directory, ie, \InstallImage) because:

- It will interfere with APYPTF
- Check Service Level (by default) looks in the QIBM directory for updates

Place in another directory on System i IFS or on another system or on a PC server



<http://www.ibm.com/eserver/iseres/access/casp.htm>

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Get fixes from IBM

Order Service Packs through normal IBM channel and install on System i

Cummulative PTF Package - Service Packs are included with these packages too, but may not be the latest one available

Send PTF Order (SNDPTFORD) - will send you a CD because image is too big to download over Internet

Fix Central – new in V5R3

Service Pack for iSeries	Release Level	Service Pack #	Service Pack #	Service Pack #	Service Pack #	Target for iSeries
V5R4	050401	050401	050401	050401	050401	December 01, 2005
V5R3	050301	050301	050301	050301	050301	February 9, 2007
V5R2	050201	050201	050201	050201	050201	June 8, 2005
V5R1	050101	050101	050101	050101	050101	August 01, 2002

To use these:

- Review the Software Knowledge Base Article: [Customer Connections: How to use the PTF CD](#)
- Order the PTF to install on your iSeries:

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Fix Central

<http://www-03.ibm.com/servers/eserver/support/series/fixes/index.html>

Fix Central for System i allows you to download fixes directly to the system or they can be ordered on virtual CD media that can be downloaded and loaded into an image catalog or burned to a physical CD for later use.

- Can download fixes for System i on demand.
- Can create a customized PTF package based on the operating system, features, and products installed on your system.
 - By using this feature, you only need to review the cumulative PTF packages, group PTFs (including HIPER and Database), and individual PTFs that your system currently needs.

To use these new features you must:


- For i5/OS V5R4, the functionality is built-in to the operating system.
- For i5/OS V5R3, you must install PTF [SI19413](#), and other requisites

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Install and Service Pack Tips

Keep end-users from installing a service pack until you are ready



- Text file SP.TXT placed in the service pack image directory can prevent anyone from installing the service pack until you are ready
 - 'N' as the 1st character in the file prevents install
 - 'Y' or no SP.TXT file at all will allow the install
 Second text line can contain a message to users that will appear during Check Service Level
- Same method used to prevent all end-users from upgrading via Check Service Level to a new release
- Additional control values for a merged image:
 - 'U' allows an upgrade, but stops a service pack
 - 'S' allows a service pack, but stops an upgrade

Documented in User's Guide - look in Index for 'SP'


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Installation Types

Install Options

- **Typical**
 - Not best option, as much of iSeries Navigator gets installed
- **PC5250 User**
 - Only 5250 emulation installed
- **Custom**
 - Best option, but most confusing
- **Full**
 - Installs everything
 - Has new meaning with Tailored Install function



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Perform Install for your users

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Tailored Install

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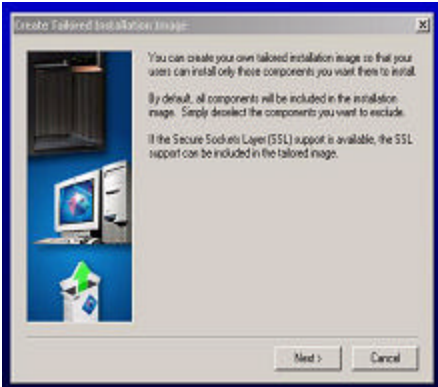
Tailored Install

Would you like to control which iSeries Access for Windows components your users install?



You can use **Tailored Install** to:

- Create a custom installation image by excluding the unwanted components from a master installation image.
- Use this customized installation image for installations across your network
- Users can easily install iSeries Access functions by selecting a single option



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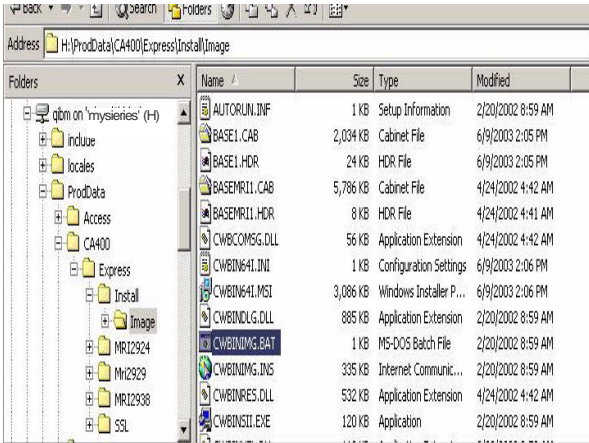
Steps to set up your own 'Tailored' Install

Find the Tailored Install Wizard

Stored in CA400/Express folder

- QIBM --> ProdData --> CA400 --> Express --> Install --> Image -->

Start **Cwbinimg.bat** program



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Run Wizard to create a Tailored Install Image

Run Tailored Install wizard

Select where you want this saved

- Could be in IFS on System i or PC server...

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Example

Build tailored install that only enables end users to install only ODBC and Printer drivers

Deselect all items you don't want users to use. Program will tell you if there is a pre-req you must install

Note: this option requires **23MB** of space.

Only want to provide ODBC and Printer Drivers for some of your users

Component	Size	License Required
Data Transfer	DK	
ODBC	256K	✓
OLE DB Providers	DK	
Lotus 123 File Format Support	DK	
AFP Workbench Viewer	DK	
Toolbox for Java	DK	
5250 Display and Printer Emulator	DK	
Secure Sockets Layer (SSL)	DK	
Printer Drivers	4314K	✓
Navigation Commands	n.v.	

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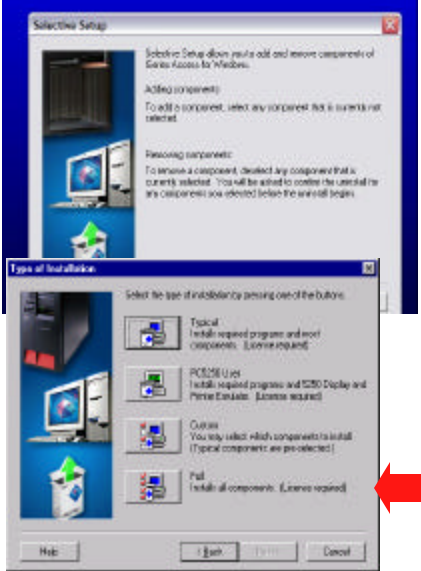
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Use Full Install

Users now simply:

- Point to Folder where the Tailored Install is
- Click on 'Setup.exe' to start the iSeries Access for Windows Install Program
- Select 'Full' install
 - Users get only the functions you created in the Tailored Install

Note: If stored on System i, you can use i5/OS authorities to identify which users or groups can access selected images



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Servicing the Tailored Install Image

Problem

- When you create the Tailored Install, the Program Temporary Fixes (PTFs) in the QIBM directory are also applied to the newly created tailored image.
- However, this tailored installation image is not updated when future PTFs are applied to or removed from System i
- Because they are in a file unknown to the host install (APYPTF) programs

Solution

1. You can recreate the Tailored Install image by pointing back at QIBM, re-running Tailored Install, and storing on top of your old image.
2. Go to iSeries Access web site and download PTFFORM. This can be used to your Tailored Image.
 - Only updates to functions in your tailored image will be updated. Thus users will not be able to run Selective Install and get additional Access for Windows functions from that directory.

For information on Tailored Install images see:
<http://publib.boulder.ibm.com/pubs/html/as400/infocenter.html> , find 'iSeries Access'
 → 'Administration' → 'Installing or migrating multiple PCs' → 'Tailored Install'

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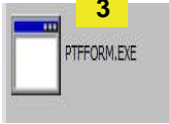
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PTFFORM

Use PTFFORM to add new Service Pack to Tailored Install image

iSeries Access for Windows (5772-XI) Release L4	Latest Service Pack PTF Number	Server Maintenance	Date PTF was Available	Installed File Date	Target for Next Service Pack
V5R4M0	SI22857	Coreq and Server Notes	February 21, 2006	02/01/2006	May 12, 2006
V5R3M0	SI21917	Coreq and Server Notes	January 27, 2006	06/07/2005	April 28, 2006
V5R2M0	SI18300	Coreq and Server Notes	November 18, 2005	08/11/2002	June 2, 2006

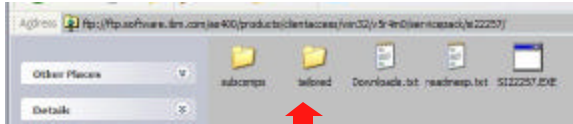
1



3

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


2



www.ibm.com/eserver/iseries/access

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Combine use of Tailored Install with iSeries Access for Web Download function


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Downloads – for file/program distribution

<http://<myseries>/webaccess/iWAPackages>

Mechanism to distribute files / programs to users
Administrator can create downloads
Management functions included for updating downloads and for controlling access to them



Name	Description	File	Size	Action
Direct Access for Linux (PDI)	Direct Access for Linux contains a 32-bit OS/400 resident and an enhanced OS/400 driver. For more information see: http://www.ibm.com/systems/iSeries/ibm.com/ibm.com	DirectAccess-510-114080.exe	3,325,790	Download
Direct Access for Linux (PFI)	Direct Access for Linux contains a 32-bit OS/400 resident and an enhanced OS/400 driver. For more information see: http://www.ibm.com/systems/iSeries/ibm.com/ibm.com	DirectAccess-510-11407000.exe	3,307,907	Download
Direct Access for Windows (QDRC)	Direct Access for Windows (QDRC) driver. See product and Data Transfer For more information see: http://www.ibm.com/systems/iSeries/ibm.com/ibm.com	DirectAccess-QDRC-510-020490.exe	81,228,014	Download
Direct Access for Windows (QDRC)	Direct Access for Windows (QDRC) resident and print driver. For more information see: http://www.ibm.com/systems/iSeries/ibm.com/ibm.com	DirectAccess-PC520-510-020490.exe	20,810,014	Download
Direct Access for Windows (QDRC)	Direct Access for Windows (QDRC) resident, print driver, QDRC driver, 32-bit Windows (PC520) resident, and Data Transfer. For more information see: http://www.ibm.com/systems/iSeries/ibm.com/ibm.com	DirectAccess-PC520-09-111-020490.exe	33,898,829	Download
Windows AFP Viewer Plug-in	The AFP Viewer plug-in lets you view AFP documents from a Web browser.	gag124a.exe	1,997,972	Download

V5R4 shipped view
Users can download Access for Linux and AFP Viewer Plug-in products

Check this out at <http://iseriesd.dfw.ibm.com/webaccess/iWAHome>,
 Userid = BOATADMIN; Password = demo2pwd

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Silent Install

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Silent Install

A way to restrict the set of initial components that an end user receives

Can be used for:

- Initial Install
- Upgrades to a new release
- Service Packs

Allows you to quickly and easily copy duplicate installations across your network

Eliminates the need for end users to have to respond to any prompts during the installation process

Can be used for upgrades, selective setup, and service packs.

- Upgrades and service packs should launch setup.exe from the install source.
- Selective Setup should launch setup.exe from the PC's ...\\Client Access directory

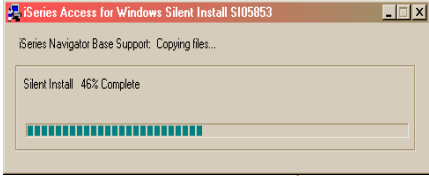
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Silent Install

Silent Install indicator

- Appears in task tray on end-user's PC during silent install
- Silent install failure leaves indicator active
- Double-clicking indicator shows failure point



Really silent!

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Using Silent Install

Create a response file

- A response file records the selections made in response to the prompts in the installation process.
- You perform the desired type of install on your PC, recording installation choices into install scripts (.iss files)
 - For example, `setup.exe -r -f1C:\MyDir\w5r2v5r3upg.iss`

Start the silent installation

- During a silent installation, the setup program will use the response file to get the information necessary to complete the installation
- Schedule or run `setup.exe` on the end-user PC's with the proper parameters specifying the response file location (or use CheckService Level)
 - For example, `setup.exe -s -f1\\iSeries\Express\Response\w5r2v5r3upg.iss -f2C:\Temp\w5r2v5r3upg.log`

Check the log file return codes to see if your install was successful

- The Log file tracks installation results. You can specify location/name of the Log file
- Silent.txt file in the ...Client Access directory lists the components installed silently and successfully

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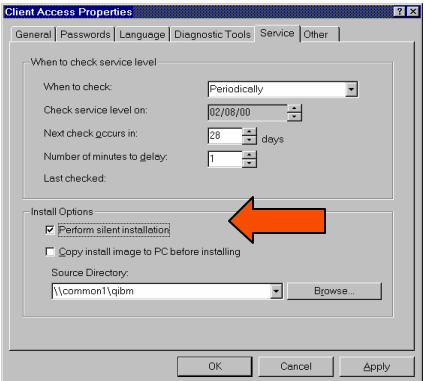
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Check Service Level for Silent Installs

Use this for Service Packs and Upgrades

Eliminates the need for confusing command line parameters, but does require specific names for the response files

- SLTSP.ISS - for service packs (This file must reside in the same directory as the service pack image)
- SLTUP.ISS - for upgrades (This file must reside in the same directory as the upgrade image)



• If rebooting automatically, consider using SCHEDCHECK parameter on `cwbackver.exe` and schedule during the middle of night. Look in online iSeries Access for Windows User's Guide index for `cwbackver` for more information on the SCHEDCHECK parameter

• If not rebooting automatically, Check Service Level will come out of silent mode and prompt user for reboot

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Errors using Silent Install

Most silent install errors involve a dialog out of order from what was recorded (-12 return code in silent log)

- The best way to debug this is to start a manual install on the failing PC and proceed through the install wizard panels until the confirm panel prior to file transfers
- The majority of the dialog errors occur prior to the confirmation panel
- See if any unexpected dialogs appear that were not anticipated during recording

Silent Install Upgrade and Service Pack Install Tip

Use **Incoming Remote Command** component of iSeries Access for Windows with Silent Install Upgrades or Silent Service Pack Installs



- **Start service on NT/2000/XP/2003 client**
 - Specify to log on as Local System Account to satisfy Administrator authority restriction needed for install
 - No need to "Allow Service To Interact With Desktop" for a Silent Upgrade or Service Pack Install
- **RUNRMTCMD on iSeries specifying setup.exe/setupsp.bat and userid/password of Administrator account on PC**
 - RUNRMTCMD
 CMD('w:\proddata\Access\Windows\install\image\setupsp.bat -s - f1\myserver\silentshare\sltsp.iss') RMTLOCNAME(PCNAME *IP) RMTUSER(PCUSER) RMTPWD(PCPASSWD)
- **REXEC from a TCP/IP client can also be used to submit setup.exe**

Silent Install Documentation

Detailed information on Silent Install is on the web in the **IBM iSeries Information Center**

Get there by going to iSeries Access web page at:

- www.ibm.com/eserver/series/access/windows
- then select *iSeries Information Center* from sidebar

Or go to:

- <http://publib.boulder.ibm.com/pubs/html/as400/infocenter.html>

Search on Silent Install



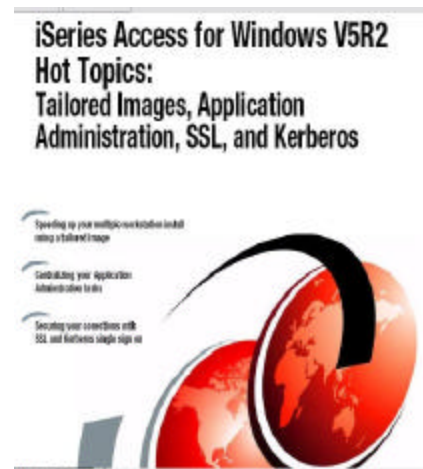
Administration

Redbook for administering iSeries Access for Windows users

- SG24-6939
- Available Feb 2004

Go out to iSeries Access for Windows web page

- www.ibm.com/eserver/series/access/windows
- Click on New Redbooks link



IBM System i

Control
 what
 functions /
 features
 of iSeries
 Access for
 Windows
 your users
 can work
 with

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Control Access to iSeries Access for Windows

<p>Policy Administration</p> <ul style="list-style-type: none"> • Based on Microsoft System Policy support • PC user has one set of policies for connectivity to all System i • Can set policies on a specific PC as well as users and groups • Can be used to 'configure' as well as restrict functions • Over 150 policies available! • Uses Microsoft System Policy Editor and Client Access Policy templates 	<p>Application Administration</p> <ul style="list-style-type: none"> • Based on OS/400 user profiles -- thus supports users and groups • User profile can roam with user (from any PC) • A user can have different profiles for different System i's • Can restrict usage of Operations Navigator functions, Client Access functions, APIs available for use by other plug-ins • Easy-to-use Operations Navigator GUI
<p>The Microsoft Way...</p> <ul style="list-style-type: none"> • Preferred method for those familiar or already using Microsoft System Policies 	<p>The System i Way...</p> <ul style="list-style-type: none"> • Preferred method for those who want to control access via i5/OS user profiles

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Using Policies: Get the Microsoft System Policy Editor

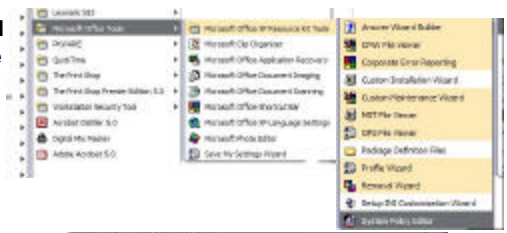

Go to Microsoft web page and download and install "Office Resource Kit"

- <http://www.microsoft.com/windows/default.aspx>
- Search on 'download system policy editor'

The Microsoft System Policy Editor is in the Office XP Resource Kit

- To find it click:
 - Start → Programs →
 - Microsoft Office Tools →
 - Microsoft Office XP Resource Kit Tools → System Policy Editor

Note: Get the Policy Editor which matches your Windows Operating System

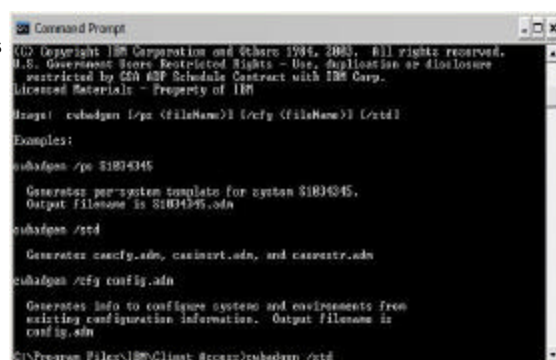
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Create iSeries Access for Windows Templates

Create iSeries Access for Windows Policy Templates that can be used with the Microsoft System Policy Editor

- Run iSeries Access for Windows CWBADGEN utility to create the templates
- CWBADGEN is in Program Files/IBM/Client Access path
- On a DOS prompt, run CWBADGEN /std to create the templates



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Create Policies (example PC5250)

Start Microsoft System Policy Editor and from toolbar select:

Options → Policy Editor → Add

- Go to the Program Files/IBM/Client Access directory and select the caeestr.adm file that was created by CWBADGEN utility and add it to the Microsoft System Policy Editor list

File → Open Registry → Local User

- Double click on the IBM iSeries Access Runtime Restrictions template
- Select PC5250 emulation and set the restrictions you wish to impose, then click OK.

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Application Administration Overview

Manage access to functions on a "per i5/OS user" basis

- iSeries Navigator
- iSeries Access for Windows functions
- Other client and host applications
- Ability to even restrict users with All Object privilege

Easy to use interface

*SECADM authority required on iSeries to manage Application Administration settings

- *ALLOBJ required for some Advanced Settings

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Application Administration

Name	Description
Basic Operations	Manage messages, printer output, printers, and jobs.
Work Management	Manage active jobs, server jobs, job queues, subsystems.
Configuration and Service	Display system inventory, work with fixes, and collect data.
Network	Manage TCP/IP and Internet support.
Security	Configure and manage security.
Users and Groups	Manage OS/400 users and user groups.
Databases	Administer DB2 UDB for iSeries.
File Systems	Work with file systems.
Backup	Schedule backups of server data.
Application Development	Work with application development tools.

Can access from Task Bar also

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Application Administration - By User or Group

Individual users and groups can be given more or less access capabilities

1. Use user or group properties
2. Click on 'Capabilities' button
3. Open 'Applications' tab

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Application Administration - by system

- Host Applications
- iSeries Navigator

Disk management is not available by default

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Notes: Registering Applications

Add and remove applications to be administered through Application Administration

- No changes can be made to the "shipped value" for access settings until the application has been registered to Application Administration
- If an application is shown in both lists on this dialog, it indicates the application has been registered on the iSeries, but there are some administrator functions for this application that are defined on this client, but are not registered on the iSeries. You can select the application and press "Add" to register the additional functions.

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Application Administration – iSeries Access

All Application Administration information is stored on System i, and roams with users when they use iSeries Access for Windows on a different PC

Can control use of the following iSeries Access for Windows functions:

- PC5250
- Data Transfer
- ODBC
- OLE DB
- Remote Program Calls
- .NET

iSeries Access for Windows

Function	Ca400 Access	Access Granted From
iSeries Access for Windows	<input checked="" type="checkbox"/>	
PC5250 Display and Printer Control	<input checked="" type="checkbox"/>	Default access
Data Transfer	<input checked="" type="checkbox"/>	Default access
Files Download from server	<input checked="" type="checkbox"/>	Default access
Files Upload to server	<input checked="" type="checkbox"/>	Default access
ODBC Support	<input checked="" type="checkbox"/>	Default access
OLE DB Provider	<input checked="" type="checkbox"/>	Default access
Remote Command - CommandL	<input checked="" type="checkbox"/>	Default access
.NET Data Provider	<input checked="" type="checkbox"/>	Default access

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Type of error message end user might receive

Policy Restriction

CWBAD1003 - iSeries Navigator Application Administration settings prevent Data Transfer (GUI Downloading) from running or completing. To change this restriction, see your administrator.

OK | Details | History Log

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Application Administration for iSeries Access for Windows

Central Settings
New in V5R2

Applies to iSeries Access for Windows functions only

Local Settings

Central Settings

Administration System

Local Settings

Local Settings

#1

#2

#3

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Application Administration - Local Settings

Local Settings

- Can reside on any System i
- Were the only type of administrative settings supported by Application Administration prior to V5R2.
- They are now called Local Settings because:
 - Each i5/OS maintains its own set of Application Administration settings.
 - When an iSeries Access for Windows client accesses multiple System i's, it will use whatever Local Settings were defined on each system it connects to...

Displays the centrally managed functions or applications available to users on this syst

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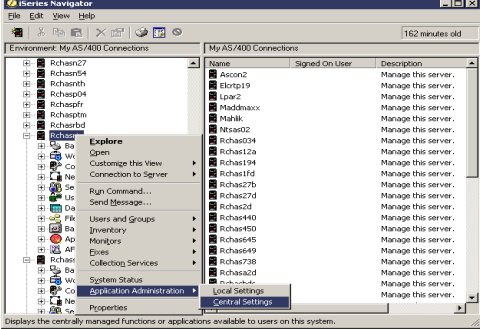
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Application Administration - Central Settings

Central Settings:

- Affect iSeries Access for Windows properties that apply to all System i's the client may access.



Central settings:

- Can only be used on i5/OS and iSeries Access for Windows V5R2 or later
- One System i must be configured as an "Administration System".
- iSeries Access for Windows clients will retrieve central settings from the "Administration System"

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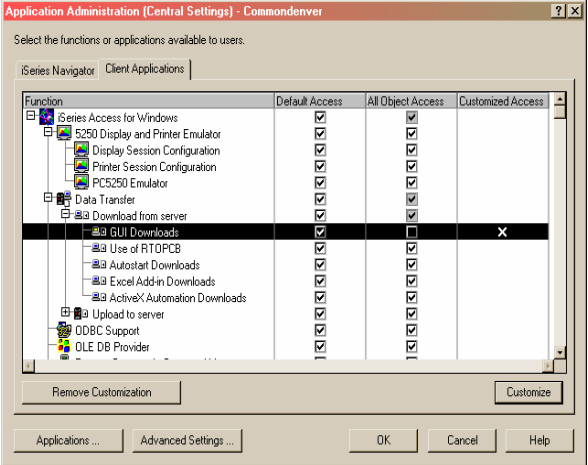
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Example – Central Settings

Will apply to all systems a user connects to in this network

This could be set for:

- All Users
- Group of Users
- Individual Users



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Central Settings - Advanced

Central Settings support Advanced Settings

This allows an administrator to customize many of the properties used by iSeries Access for Windows, such as:

- Defining a set of environments to be used by the clients
- Customize many of the connection, service, language, and password used by the clients

Application Administration (Central Settings) - Rchsrjrs

Select the functions or applications available to users.

Function	Default Access	All Object Access	Customized Access
iSeries Access for Windows	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PC5250 Display and Printer Emulator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Display Session Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Printer Session Configuration	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
PC5250 Emulator	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	X
Data Transfer	<input type="checkbox"/>	<input type="checkbox"/>	
Download from server	<input type="checkbox"/>	<input type="checkbox"/>	
GUI Downloads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Use of RTOPCB	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Autostart Downloads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Excel Add-in Downloads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
ActiveX Automation Downloads	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Upload to server	<input type="checkbox"/>	<input type="checkbox"/>	
Host File Creation	<input type="checkbox"/>	<input type="checkbox"/>	
File Creation Based on Existing Se	<input type="checkbox"/>	<input type="checkbox"/>	

Buttons: Remove Customization, Applications..., Advanced Settings..., Customize, OK, Cancel, Help

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Example of an Advanced Setting

Connections:

- Signon information
- Performance

Passwords

PC5250

Service

Environments

Plug-ins

Language

Application Administration (Central Settings) - Advanced

Service | Environments | Passwords | PC5250 | Plug-ins

Signon Information

- Use Windows user name and password, no prompting
- Use default user ID, prompt as needed
- Prompt everytime
- Use Windows principalname, no prompting

PERFORMANCE

IP address lookup frequency: Always

Where to lookup remote port: Server

Use Secure Sockets Layer (SSL) for connection

Buttons: Add, Remove, OK, Cancel, Help

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Example of an Advanced Settings

Prohibit users from defining additional environments

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Identify a "Central" System

In order to use a "Central System, you must set up a system in the network to be the "Administration system"

1. Start iSeries Navigator and point to system you want to be the Administration System
2. Right click on the system name and select "Properties"
3. Click the Administration System Tab
4. Check "Administration System" button to set the system as your Administration System

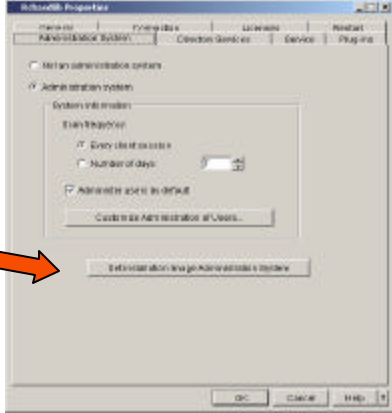
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Identify a “Central” System (continued)

The key of the Central Settings concept is to make it transparent to end users.

- You should also set up this system in your iSeries Access for Windows install image.
- Select the “Set Installation Image Administration System” button to do this.
- Then any PC user installing iSeries Access for Windows from this system will automatically be set up with this system being their “Central System”



This also saves administration costs as this is the only system in your network where you would need to install iSeries Access for Windows.

- Additionally, in the future, you would only need to apply Service Packs and new releases to this system.


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Set up PCs to know which system is “Central” System


For PCs with code already installed

- Go to each PC and open up the iSeries Access for Windows “Properties” panel.
- Go to “Administration System” tab, and set the system name for the user.



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Other Functions in iSeries Access for Windows

iSeries Navigator Operations Console EZ-Setup

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Notes: Sources of Technical Information

iSeries Access web site is <http://www.ibm.com/eserver/iseries/access>

- Contains the latest information about the entire family of Client Access products, including Client Access Express for Windows, such as late breaking news, Information APARS, FAQs, information on beta programs, how-to information, service and support, new product announcements, plus much more.
- Provides links to other important web pages, such as iSeries Navigator, Operations Console, iSeries NetServer, etc

Client Access Express for Windows Redbook (SG24-5191)

- Access online by going to Client Access web page and selecting iSeries Client Access Express for Windows: Implementing V4R4M0, SG24-5191 from main page.

iSeries Information Center

- Contains information on workshops, tools, and other technical information on topics such as Client Access, Operations Navigator, Domino for iSeries and more. Also provided is an iSeries Client Access Express Administrators Guide which has technical information on the Express client content for advanced users, such as administration and programming documentation. This can be accessed by going to the Client Access web page, then selecting 'iSeries Information Center' from main page.

iSeries Online/Softcopy Library

- Is an entire library of iSeries books organized into bookshelves, accessible on CD or on the internet. The books on the CD-ROM can be read using the IBM Library Reader program, provided on the CD-ROM.

Toolkit for iSeries Access for Windows

- Toolkit ships with Express. Install it when you install Express, or later use Selective Install to get it. It also has links to additional important programming information that is contained on the Client Access web page.
- Information on OLE DB and Visual Basic Wizards is at <http://www.ibm.com/eserver/iseries/access/oledb>
- iSeries PartnerWorld for Developers web page (<http://www.ibm.com/eserver/iseries/developer/>) then search on ODBC) contains detailed tips and techniques for developing ODBC applications.

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Web Information

iSeries Access web page has latest up-to-date information

- <http://www.ibm.com/eserver/series/access>

For Information on

- Information APARs on specific topics, such as Windows 2003 support
- Access to all Red Books and other Reference Manuals
- FAQs, Articles, links to Administrator Guide...

Select 'Additional Links'

- iSeries NetServer for information on setting up your file and print serving
- Operations Console for information on setting up a PC as your system console
- iSeries Navigator for i5/OS administration

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Requirements?

Would you like to see some other features in iSeries Access for Web?

Please submit requests for enhancements via the FITS system.

The url is:
[https://www-912.ibm.com/
/r_dir/ReqDesChange.nsf/
Request_for_Design_Change?OpenForm](https://www-912.ibm.com/r_dir/ReqDesChange.nsf/Request_for_Design_Change?OpenForm)



This really helps development get new functions into the planning process

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Summary

iSeries Access for Windows provides a single offering designed for Windows users that provides:


- High-function, easy-to-use 5250 emulator to work with iSeries applications
- A PC print server that OS/400 output can be sent to and run unattended
- Access to iSeries database and other resources from Windows applications
- Ability to use iSeries as file and print server
- Administer users and monitor/manage iSeries servers in the network

No special web application server code required

- All code runs natively on the Windows

It's all in iSeries Access for Windows

- PC5250 emulation, Data Transfer, ODBC, etc for end users and Windows programmers
- iSeries Navigator to operate and administer iSeries systems and database
- Operations Console to work with OS/400 system console
- EZ-Setup to quickly and easily set up new iSeries servers



This is the most comprehensive iSeries native Windows connectivity solution in the market

80+% of iSeries customers already using iSeries Access for Windows

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