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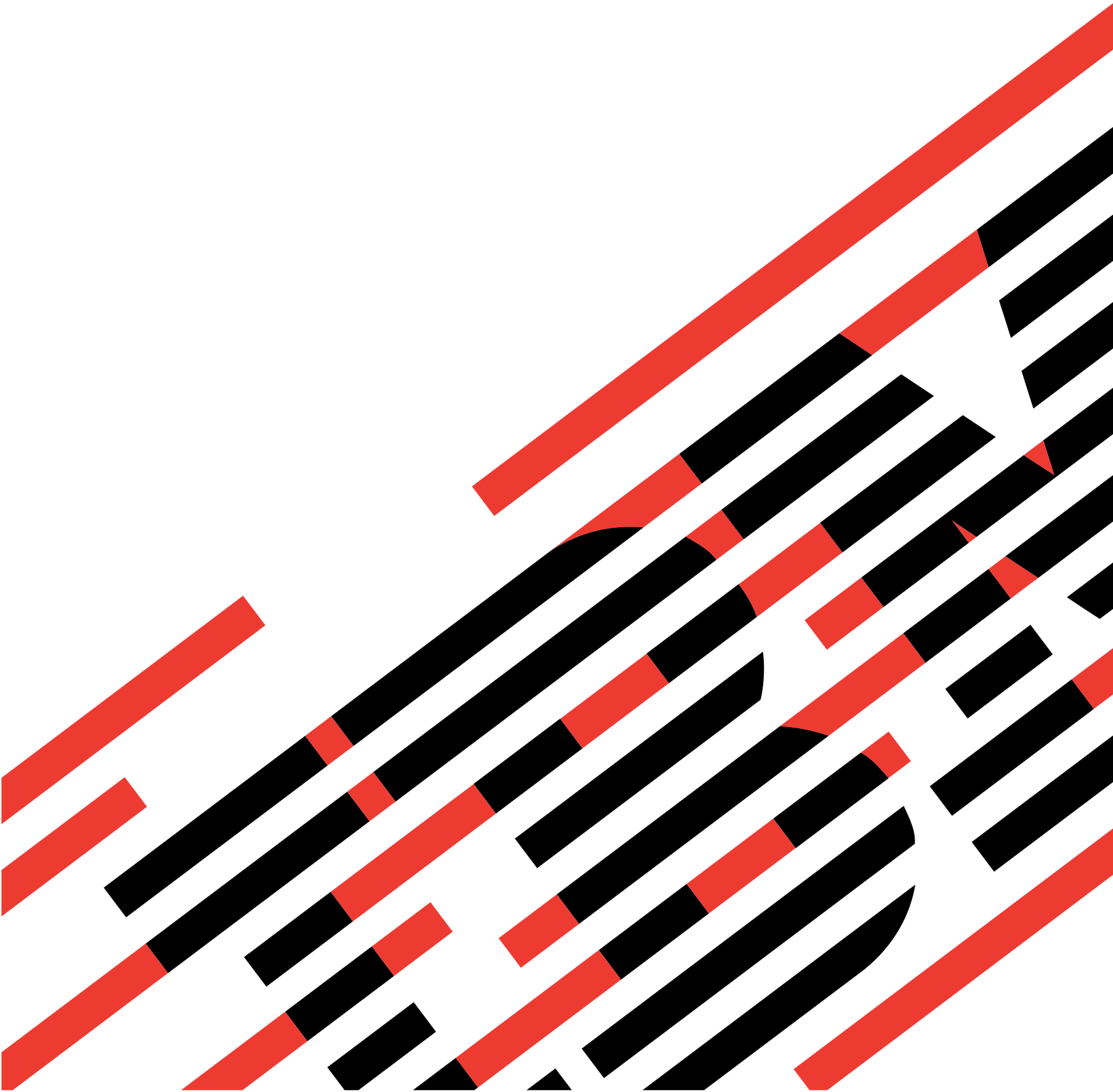
iSeries

iSeries Access for Windows installation and setup

Version 5 Release 3



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Note

Before using this information and the product it supports, be sure to read the information in Appendix A, "Notices," on page 65.

Sixth Edition (June 2005)

This edition applies to version 5, release 3, modification 0 of IBM @server iSeries Access for Windows (5722–XE1) and to all subsequent releases and modifications until otherwise indicated in new editions. This version does not run on all reduced instruction set computer (RISC) models nor does it run on CISC models.

Contents

Part 1. Introduction to iSeries Access for Windows

IBM® @server iSeries™ Access for Windows is the latest offering in the 5722-XE1 product. Pre-V5R2 versions of IBM @server iSeries Access for Windows were called Client Access Express. IBM @server iSeries Access for Windows offers a powerful set of capabilities for connecting PCs to iSeries servers. Users and application programmers can use it to leverage business information, applications, and resources across an enterprise by extending the iSeries resources to the PC desktop. Integrated graphical user interface (GUI) functions deliver increased productivity for users who access resources on iSeries servers.

iSeries Access for Windows is compatible with Windows® 2000, Windows XP, Windows NT® 4.0, and Windows Server 2003 operating systems.

IBM @server iSeries Access for Windows has the following features:

- It is a Windows client to be used over TCP/IP.
- It is a full-function client that includes many components from the pre-V5R2 product, Client Access for Windows 95/NT, such as PC5250 and data transfer (with additional enhancements).
- It can communicate with iSeries servers using a secure connection that uses Secure Sockets Layer (SSL).
- It provides a streamlined installation which also gives administrators more flexibility and control.
- It is Java-compatible.
- It uses file and print serving capabilities integrated into the iSeries Support for Windows Network Neighborhood (iSeries NetServer) function, which is included in OS/400® V4R2 (or later). This has improved overall stability and eliminated the need for daemons (background tasks) to run on the client.
- It includes an extensive number of application programming interfaces (APIs), such as APIs for ODBC, Active X, ADO, and OLE DB.

For information about using IBM @server iSeries Access for Windows in your network, see:

- iSeries Access for Windows: Install and set up
- iSeries Access for Windows: Use
- iSeries Access for Windows: Administer
- iSeries Access for Windows: Program

Part 2. iSeries Access for Windows: Installation and setup

Use this topic to install and configure iSeries Access for Windows on both the iSeries server and the PC.

Installation and configuration are necessary on both the iSeries server and the PC. This topic assumes that the system administrator will install and configure the iSeries server, while the user will install iSeries Access for Windows on the PC.

What's new for V5R3
Learn about new and changed installation and set up information for this release of iSeries Access for Windows.

Print this topic
Use this to print a PDF version of the iSeries Access for Windows installation and set up information.

License information
Learn about the licensing requirements for iSeries Access for Windows.

Set up the iSeries for installation of iSeries Access for Windows
Use this information to learn the steps to install iSeries Access for Windows and other required and optional programs on your iSeries server. Learn about:

- Installing iSeries Access for Windows on the iSeries server
- Configuring TCP/IP on the iSeries server
- Configuring iSeries NetServer on the iSeries server
- Deleting iSeries Access for Windows from the iSeries server

Set up the PC for installation of iSeries Access for Windows
Use this information to learn the steps to set up your PC for iSeries Access for Windows use, and to install iSeries Access for Windows on your PC. Learn about how to do the following:

- Set up TCP/IP on the PC.
- Configure the PC for iSeries NetServer use.
- Install iSeries Access for Windows on the PC.
- Install service packs.
- Integrate new functions into iSeries Access for Windows.
- Install or remove individual components of iSeries Access for Windows.
- Install other language versions of iSeries Access for Windows.
- Upgrade iSeries Access for Windows.
- Uninstall iSeries Access for Windows from the PC.

Related information
Find other sources of information about iSeries Access for Windows.

For an overview of iSeries Access for Windows and a description of how you can use it in your network, see the Introduction to iSeries Access for Windows.

For additional information about using iSeries Access for Windows in your network, see:

- iSeries Access for Windows: Use
- iSeries Access for Windows: Administer
- iSeries Access for Windows: Program

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

Chapter 1. What's new for V5R3

New iSeries Access for Windows installation features include:

- iSeries Access for Windows installation and setup information is now located online in the iSeries Information Center. You can now find the information formerly located in *iSeries Access for Windows - Setup* (SC41–5507) here, in the V5R3 iSeries Access for Windows topic in the Information Center.
- V5R3 iSeries Access for Windows does not allow migration from Client Access for Windows 95/NT (5722–XD1).
- For information about upgrading iSeries Access for Windows to V5R3, see "Upgrade iSeries Access for Windows" on page 55.
- At V5R3, iSeries Access for Windows cannot be installed on the Windows 98 and Windows Me operating systems.

Chapter 2. Print this topic

To view or download the PDF version, select Installation and set up of iSeries Access for Windows  (about 602 KB).

Saving PDF files

To save a PDF on your workstation for viewing or printing:
1. Right-click the PDF in your browser (right-click the link above).
2. Click **Save Target As...** if you are using Internet Explorer. Click **Save Link As...** if you are using Netscape Communicator.
3. Navigate to the directory in which you would like to save the PDF.
4. Click **Save**.

Downloading Adobe Acrobat Reader

If you need Adobe Acrobat Reader to view or print these PDFs, you can download a copy from the Adobe Web site (www.adobe.com/products/acrobat/readstep.html)  .

Chapter 3. License information for iSeries Access for Windows

IBM @server iSeries Access for Windows is a licensed program. Some components of iSeries Access for Windows require an iSeries Access Family (5722-XW1) license before you can use them. All components are installed with the iSeries Access for Windows program.

To use the iSeries Access for Windows Family licensed program (5722-XW1), you must determine the usage limit of the license, update the usage limit on your iSeries server, and enter the license key information.

The following components require an iSeries Access Family license and an OS/400 license before you can use them:

- PC5250 Display and Printer Emulation
- Data Transfer

Important: A software license key is required for iSeries Access Family 5722-XW1. iSeries Access Family is included on the V5R3 Keyed Stamped Media that comes with all OS/400 V5R3 software orders. You receive a license key if you order 5722-XW1. If you have not ordered 5722-XW1, you can evaluate the product from the keyed stamped media for 70 days. At the end of the 70-day evaluation period, the product will be disabled if you have not ordered the product and received a software license key. The software license key is an 18-digit authorization code that allows the software product and feature on the keyed stamped media to be used on a specified iSeries server.

All components other than PC5250 Display and Printer Emulation and Data Transfer components require only an OS/400 license before you can use them.

The type of installation you choose to perform determines which components are installed. Following are the types of installations you can choose and whether or not the component requires a license to install:

Note: For the PC5250 Emulation and Data Transfer components, a license is not required to install these components, but a license is required to **run** these components.

- The **Typical**, **PC5250 User**, and **Full** installation choices include components that require an iSeries Access Family license.
- With the **Custom** install choice, you can choose which components to install. Depending on the components you select, you might not be required to have an iSeries Access Family license. The setup program lists the components that require a license.

Usage limit for a license

iSeries Access for Windows clients are licensed by the number of concurrently active PCs accessing iSeries servers. A PC running iSeries Access for Windows holds a license through the duration of the licensed function plus additional time that is specified in the iSeries Access for Windows properties page. When this time expires, the license is available for another PC to use. If a PC accesses a licensed program on more than one iSeries server, that PC requires a license on each iSeries server to which it connects using a licensed function.

When using iSeries Access for Windows on a PC, more than one session to the iSeries server can be established on that PC, but only one iSeries Access Family license is used. For example, you can start many 5250 emulation or Data Transfer sessions, but the PC requires only one license.

iSeries Access for Web is another product that requires iSeries Access Family licenses. Be aware that if the iSeries Access for Web product is being used on the same PC as iSeries Access for Windows, each of those products will use a separate license. Therefore, when using both products, one PC will use a minimum of two iSeries Access Family licenses. For more information about license usage for iSeries Access for Web, see the iSeries Access for Web license information topic.

Licensing is managed at the iSeries Access Family level, not at the individual client level. Therefore, any combination of the iSeries Access for Windows and iSeries Access for Web clients is allowable up to the license limit.

To determine the iSeries Access license usage limit, do the following:

__ 1. Type the `WRKLICINF` command on the iSeries server to which you intend to connect. A list of products appears.

__ 2. Type `5` in the entry field next to the product 5722XW1, Base, Feature 5050. This will display the details for the iSeries Access Family License product, including the usage limit. The usage limit should be equal to the number of licenses that are purchased for iSeries Access Family. Any number exceeding the purchased limit violates the IBM license agreement.

Use the iSeries Access for Windows Family licensed program

To use the iSeries Access for Windows Family licensed program (5722-XW1), you must update the usage limit and enter the license key information.

To update the usage limit for the 5722-XW1 product on your server, do the following:

__ 1. Type the `WRKLICINF` command on the iSeries server to which you intend to connect. A list of products appears.

__ 2. Type `2` in the entry field next to the product 5722XW1 Base, Feature 5050. Change the usage limit to the number of licenses that you have purchased for iSeries Access. If you have purchased the processor-based option for iSeries Access, enter the value `*NOMAX` for usage limit. Entering any number that exceeds the purchased limit violates the IBM license agreement.

To enter the license key information, do the following:

__ 1. Type the `WRKLICINF` command on the iSeries server to which you intend to connect. A list of products appears.

__ 2. Type `1` in the entry field next to the product 5722XW1 Option 1, Feature 5101.

__ 3. Enter the license key information. For information about entering license key information, see “Required and optional programs to install” on page 12.

Chapter 4. Set up the iSeries for iSeries Access for Windows

To use iSeries Access for Windows, you must install and configure software on both an iSeries server and a PC. Use this information to guide you through the steps necessary to install and configure iSeries Access for Windows on the iSeries server. iSeries Access for Windows needs to be installed on your server before you can install iSeries Access for Windows service packs on your server. After installation on your server, you can install iSeries Access for Windows from the iSeries server to the client PCs.

Prerequisites to install iSeries Access for Windows on the iSeries server
This information steps you through determining which required and optional programs you should install on the iSeries server.

Install iSeries Access for Windows on the iSeries server
This information steps you through installing the required and optional programs on the iSeries server. Install the latest programming temporary fixes (PTFs) for the IBM Operating System/400 (OS/400) and for iSeries Access for Windows.

Configure TCP/IP on the iSeries server
Use this information to configure TCP/IP on the iSeries server.

Configure iSeries NetServer on the iSeries server
You can use iSeries NetServer to make the iSeries Access for Windows install image on the iSeries server available to PC users. Find configuration instructions in this information.

Remove iSeries Access for Windows from the iSeries server
To save disk space or to remove features that you no longer use, you can decide to delete features from the iSeries server. Use this information to step you through the removal of iSeries Access for Windows.

Once you have completed installing and configuring iSeries Access for Windows on the iSeries server, follow the instructions in Chapter 5, “Set up the PC for iSeries Access for Windows,” on page 19 to install iSeries Access for Windows on the PC.

To learn more about iSeries Access for Windows, see Chapter 6, “Related information,” on page 57.

Prerequisites to install iSeries Access for Windows on the iSeries server

Use this information to verify that your iSeries server meets the requirements for installing iSeries Access for Windows.

You should install all required and optional programs at the same time. Verify which programs to install in “Required and optional programs to install” on page 12.

iSeries release requirements

You can install iSeries Access for Windows V5R3M0 on OS/400 V5R2 and later, and IBM supports PC connections to servers with OS/400 V5R1 and later. If you are on an earlier release of OS/400, see Install, upgrade, or delete OS/400 and related software for instructions on upgrading your OS/400 to a supported release. There is no IBM support for connection to releases prior to V5R1. If you do need to install a new release of OS/400, be sure to follow the instructions in Install, upgrade, or delete OS/400 and related software before you continue installing iSeries Access for Windows.

Note: In order to install on the iSeries server, you need a security level of Security Officer (*SECOFR). This is the highest level of security on the iSeries server. This security level is required for installation only, not for regular use of iSeries Access for Windows.

iSeries storage requirements

Your iSeries server must have sufficient storage to install iSeries Access for Windows, or the installation cannot be completed.

Table 1. iSeries space required to install iSeries Access for Windows

Amount	Purpose
149MB	Install image
21MB*	Online help information, online User's Guide, messages
*This size is for the 2924 (English) national language version. Sizes are different for every other NLV.	

For instructions on how to check the amount of storage your server has available, see the information about evaluating disk storage needs in the Information Center under Install the OS/400 release and related software.

Required and optional programs to install

The programs you install depend on the functions you will be using in iSeries Access for Windows. As you go through this section, make note of the programs you need to install. You will need to know them to "Install iSeries Access for Windows on the iSeries server" on page 14.

Note: The iSeries Access for Windows primary language on the iSeries server is set to the first iSeries Access for Windows language that you install. However, if you install a subsequent iSeries Access for Windows language that matches the OS/400 primary language, that language will become the new iSeries Access for Windows primary language on the iSeries server.

Required licensed program options

Table 2. Required programs to install for iSeries Access for Windows

Program	Option	Description
5722-SS1	12	Operating System/400 Host Servers
5722-XE1	Base	iSeries Access for Windows
5722-XW1	Base, 1	iSeries Access Family
5722-TC1		TCP/IP Utilities
Note: Each product that you install will need to be at the latest level.		

Notes:

1. Licensed Programs 5722-XE1 and 5722-XW1 were introduced in V5R1M0 and replaced V4R4M0 5769-XE1 and 5769-XW1, respectively.
2. You only need to install iSeries Access Family 5722-XW1 Base and Option 1 if you want to use Data Transfer, PC5250 Display, or Printer Emulation.
3. 5722-XE1 does not necessarily have to be installed on your server. Nevertheless, you need to install 5722–XE1 if you want to use the following parts of iSeries Access for Windows:
   - Service Pack management
   - Secondary Language support
   - Install and Selective Setup through the iSeries server
4. To use 5722-XW1, update the usage limit for the 5722-XW1 product on your server by doing the following:
   __ a. Type the `WRKLICINF`command on the iSeries server to which you intend to connect. A list of products appears.
   __ b. Type `2` in the entry field next to the product 5722XW1 Base, Feature 5050. Change the usage limit to the number of licenses that you have purchased for iSeries Access Family. If you have

purchased the processor-based option for iSeries Access Family, enter the value *NOMAX for usage limit. Entering any number that exceeds the purchased limit violates the IBM license agreement.

5. To use V5R3 5722-XW1, enter the license key information by doing the following:
   __ a. Type the WRKLICINF command on the iSeries server to which you intend to connect. A list of products appears.
   __ b. Type 1 in the entry field next to the product 5722XW1 Option 1, Feature 5101. Enter the license key information.

   Note: ADDLICKEY values for Usage Limit and Processor Group for Feature 5101:
   - In the **Usage Limit** field on the ADDLICKEY display, always enter the value *NOMAX, as indicated on your key sheet, regardless of the usage limit entered for 5722XW1 Base (Feature 5050) when you updated your usage limit. The usage limit value of *NOMAX is required as part of the software key, but it is not a representation of the number of users licensed under a usage based license.
   - In the **Processor Group** field on the ADDLICKEY display, enter the value *ANY for a user-based license. A processor-based license will have a processor group value that corresponds to the processor group licensed.

Optional licensed programs

Secure Sockets Layer (SSL) support with iSeries Access for Windows is available. To use SSL, order and install the products from the following table. You are responsible for making sure that you are using the correct encryption for your country or region and for the countries or regions that your iSeries server does business in.

Table 3. Programs required to install SSL support on the iSeries

If you want	Then install
128-bit server encryption	5722-AC3 (Cryptographic Access Provider) 5722-SS1 - Boss Option 34 5722-DG1 (HTTP Server)

SSL support can only be installed on a PC from the iSeries server, from a peer server that contains copies of the Client Encryption installation directories, or from a Tailored Installation Image that contains SSL. If you plan on allowing users to install the following SSL product from the iSeries server, then 5722-XE1 (iSeries Access for Windows) needs to be installed on the iSeries server.

Note: The release of iSeries Access for Windows on the iSeries server must match the release of iSeries Access for Windows that is installed on the PC. If the release on the server and PC do not match, then SSL support will not show up in the selective setup component list.

Table 4. Program needed to install SSL support to the PC

If you want	Then install
128-bit client encryption	5722-CE3 (Client Encryption)

Notes:

1. If you are upgrading from V5R1 or V5R2 to V5R3M0 and you had the CE2 component installed on your PC, iSeries Access for Windows will automatically uninstall CE2 from your PC. Since CE2 is no longer available in V5R3, it will be replaced with V5R3 CE3. If you are upgrading from V5R1 or V5R2 to V5R3M0 and the installation image does not include CE3, iSeries Access for Windows will automatically uninstall CE2 or CE3 from your PC.
2. Client Encryption products (5722-CE3) contain encryption software from RSA Data Security, Inc.

Change authority

After installing the Client Encryption product on the iSeries server, you need to authorize the users to the files. To help you meet the SSL legal responsibilities, the files in 5722-CE3 are shipped so that the users are not allowed to access the files. Therefore, you must change the authority of the directory that contains the SSL files (/QIBM/ProdData/CA400/Express/SSL/SSL128) to allow users to access the files. In order to change the authority, do the following:

1. Run the `wrklnk` command.
2. Select option `9`.

For more information about configuring SSL, see the iSeries Access for Windows: Administration section of the Information Center.

Install iSeries Access for Windows on the iSeries server

The following steps guide you through installing iSeries Access for Windows (5722-XE1) and optional programs on the iSeries server. You should install all required and optional programs at this time. To determine which programs to install, see "Required and optional programs to install" on page 12.

1. Sign off all workstation users and end all connections.
2. Sign on to the iSeries server with *SECOFR authority.
3. Load the medium containing the licensed programs on the installation device. If the licensed programs are contained on more than one medium, you can load any one of them.
4. If you are installing 5722-SS1, Option 12 (Operating System/400 Host Servers), then you must put the iSeries server in a restricted state. To put the iSeries server in a restricted state:
   a. At the iSeries command prompt, type `CHGMSGQ QSYSOPR *BREAK SEV(60)` and press Enter.
   b. If the Display Messages display appears, press Enter. You will return to the iSeries command prompt.
   c. At the iSeries command prompt, type `ENDSBS *ALL *IMMED` and press Enter.
   d. The message `System ended to restricted condition` appears. Press Enter to continue.
   e. At the iSeries command prompt, type `CHGMSGQ QSYSOPR SEV(95)` and press Enter.
   f. If the Display Messages display appears, press Enter. You will return to the iSeries command prompt.

   The iSeries server should now be in a restricted state.
5. At the iSeries command prompt, type `GO LICPGM`, and then select Option 11.

   Note: For information about option 11, see Install, upgrade, or delete OS/400 and related software in the iSeries Information Center.
6. Type 1 in the Option column next to each of the licensed programs that you need to install. For a list of the programs you need to install, see "Required and optional programs to install" on page 12. Press Enter to continue.
7. The Confirm Install of Licensed Programs display appears. Press Enter to confirm your choices. The Install Options display appears.
8. Specify the following values and press Enter:

Parameter	Value
Installation Device	Name of the installation device. For example, OPT01.
Objects to Install	1
Automatic IPL	N

9. The licensed programs will now install.
   - You will see a display that indicates the status of the installation. You do not need to respond to the status display.
   - If the licensed programs that you selected are on multiple volumes, the installation program will prompt you for a new volume. Load the next media volume, press `G`, and then press Enter. If you do not have any additional media volumes, press `X`, and then press Enter.

10. When the installation completes, you will see the Work with Licensed Programs display.
    - If the installation ran successfully, you will see `Work with licensed programs function has completed`. Press F3 to return to the iSeries command prompt.
    - If the installation failed, you will see `Work with licensed programs function not complete`. See Install, upgrade, or delete OS/400 and related software to determine the problem.
11. Install the latest cumulative PTF package on the iSeries server. If you installed the latest cumulative package and you have not installed 5722-XE1, you need to install all 5722-XE1 service pack PTFs from the cumulative PTF package after installing 5722-XE1.

    For information about how to install PTFs on the iSeries server, see "Install PTFs."
12. Verify that iSeries Access for Windows installed correctly by typing `CHKPRDOPT 5722XE1` at the iSeries command prompt. If iSeries Access for Windows installed correctly, you will receive a message that CHKPRDOPT did not detect any errors.

Install PTFs

Fixes for iSeries Access for Windows are integrated into service packs, which are packaged into a program temporary fix (PTF) for delivery. You can download the latest PTF to your iSeries server to provide a more stable operating environment for the iSeries Access for Windows client, and to correct known problems. Once you have installed the PTF on your host system, you can use the check service level function to distribute service packs to client PCs. For information about the check service level function, see "When to check service level function" on page 34.

Obtain the latest PTF for installation on your iSeries server

Use the send PTF order (SNDPTFORD) command to order the PTF for your iSeries server. Since the service pack PTFs generally exceed the size limit to be sent electronically, you can receive the PTF on media by changing the Delivery Method, DELIVERY, parameter on SNDPTFORD to *ANY. (The parameter defaults to *LINKONLY.) Alternatively, use Fix Central.

You can also order a service pack CD electronically, and place it directly in the integrated file system in a Virtual Optical Device that you can install from. To use this option, you must prearrange it with IBM Service.

To learn more about these PTF ordering options, see IBM iSeries support (http://www.ibm.com/eserver/iseries/support/)  and select **Fixes** from the left menu.

For information about installing service packs on the client PC, see "Install service packs" on page 33.

Service pack PTFs update the iSeries Access for Windows installation image on the iSeries server. All installations will reflect the latest service pack level of the host iSeries server.

Note: Only users with administrator authority can perform installations, service pack updates, and upgrades to new releases. You can use the Windows Scheduled tasks feature with remote access to allow your users to do installations, service pack updates, and upgrades without administrator privileges.

Configure TCP/IP on the iSeries server

TCP/IP is a licensed program that is shipped with Operating System/400. This information assumes that you have TCP/IP installed on your iSeries server. You can find the procedure for installing TCP/IP on your iSeries server in "Prerequisites to install iSeries Access for Windows on the iSeries server" on page 11.

If you have TCP/IP already set up on your iSeries server, then you do not need to perform any additional TCP/IP configuration for iSeries Access for Windows.

Note: VPN is an option for secure remote connections. For iSeries VPN information, see Virtual private networking.

Configure TCP/IP for LAN use

If you plan on using iSeries Access for Windows over a LAN, then you must configure TCP/IP for LAN use. For information about configuring TCP/IP on your iSeries server, see TCP/IP Setup.

Configure TCP/IP for PPP or SLIP connections

If you are using SLIP or PPP to connect the PC to the iSeries server, see the topic about PPP connections for information about configuring point-to-point TCP/IP.

Configure iSeries NetServer on the iSeries server

Use this information to configure iSeries NetServer on your iSeries server. Then PC users in your network can install iSeries Access for Windows from your iSeries server.

iSeries Access for Windows uses the network drive or network printer capabilities provided by iSeries Support for Windows Network Neighborhood (iSeries NetServer), which is available with OS/400 V4R2 and later. By relying on iSeries NetServer, iSeries Access for Windows is able to take advantage of the file and print sharing capabilities integrated into Windows operating systems.

Notes:

1. Starting at V5R2M0, iSeries NetServer allows a Kerberos ticket for user authentication. Kerberos is a third-party authentication mechanism where the client proves its identity to a Kerberos server (or Key Distribution Center), and then receives a ticket in return. The client can then use that ticket to cryptographically prove its identity to other servers on the network. The Kerberos ticket is used to authenticate a user to a server rather than passing user ID and password as the authentication data. Microsoft® has added Kerberos authentication abilities to Windows 2000 and Windows XP clients.

   For more information about Kerberos tickets, see Network authentication service protocols.
2. NetServer logon server support was added at V5R1M0. For information about domain logon support from iSeries NetServer, see iSeries NetServer domain logon support.

PCs can access and benefit from iSeries NetServer without additional software. However, if you need to administer iSeries NetServer properties from your PC client, you must install the Network feature of the iSeries Navigator function in iSeries Access for Windows.

Note: To configure iSeries NetServer file and print sharing capabilities, see these instructions:

- iSeries NetServer file shares.
- iSeries NetServer print shares.

Additional configuration instructions are available at Get started with iSeries NetServer.

Configure iSeries NetServer

The following iSeries configuration is necessary if users in your network will be using file and print sharing.

Note:

- The following instructions assume that you have TCP/IP installed and configured on your iSeries server. If you do not, follow the instructions in “Prerequisites to install iSeries Access for Windows on the iSeries server” on page 11 and “Configure TCP/IP on the iSeries server” on page 15.

- The following configuration instructions require you to already have access to a PC that has iSeries Navigator installed.

To configure your iSeries server for iSeries NetServer support with iSeries Navigator, do the following:

1. Use the iSeries NetServer wizard:
   a. To open the wizard, follow these steps:
      1) Open a connection to **iSeries Navigator** on your iSeries server.
      2) Expand **Network**.
      3) Expand **Servers**.
      4) Click on **TCP/IP**.
      5) Right-click **iSeries NetServer** and click on**Configuration**.
   b. Follow the prompts provided by the wizard.

   Note: For additional information about iSeries NetServer configuration, see iSeries NetServer.
2. For easier management and resolution of TCP/IP addresses, add an entry for the iSeries NetServer to a Domain Name Server (DNS).

   Note: Configuration instructions are located in the iSeries Navigator online help and Configure and connect your PC client.
3. Changes made to your iSeries NetServer properties do not take effect until the next time iSeries NetServer is started. To start or stop iSeries NetServer:
   a. Open a connection to **iSeries Navigator** on your iSeries server.
   b. Expand **Network**.
   c. Expand **Servers**.
   d. Click on **TCP/IP**.
   e. Right-click **iSeries NetServer** and click on **Start** or **Stop**.

Remove iSeries Access for Windows from the iSeries server

To save disk space or to remove features that you no longer use, you might decide to delete features or licensed programs from the iSeries server:

1. Sign on to the iSeries server with a user ID that has security officer (*SECOFR) authority.
2. Type `DLTLICPGM` at the iSeries command prompt. Specify the following parameters and values, and use the defaults for the other parameters.

Parameter	Value
Product	5722XE1
Language for licensed program	The default value for this field is *ALL. If you want to remove a specific language, type xxxx, where xxxx is the national language version (NLV) identifier.

Note: Any optional programs for iSeries Access for Windows that you installed, such as 5722-CE3, will need to be uninstalled separately.

Chapter 5. Set up the PC for iSeries Access for Windows

Use this information to guide you through the steps necessary to install and configure iSeries Access for Windows on the PC. The system administrator must install and configure iSeries Access for Windows on the iSeries server before you can install it from the iSeries server.

Prerequisites to set up the PC for iSeries Access for Windows
Before you set up your PC, verify that it meets the prerequisite requirements to use iSeries Access for Windows.

Set up TCP/IP on the PC
Use this information to install and configure TCP/IP on your Windows operating system. TCP/IP must be correctly installed and configured before you try to connect to an iSeries server. Learn how to do the following:

- Install a network adapter or modem
- Configure TCP/IP support for the PC
- Verify the TCP/IP configuration

Configure the PC for iSeries NetServer Use
If you plan on installing iSeries Access for Windows from an iSeries server, you need to configure iSeries NetServer on your PC.

Install iSeries Access for Windows on the PC
Use this information to learn the steps to install iSeries Access for Windows on your PC. Learn how to do the following:

- Install from iSeries NetServer
- Install from a CD-ROM
- Install from a Windows network drive
- Install on multiple PCs
- Install service packs
- Integrate new functions
- Install or removing individual components
- Install other language versions

Upgrade iSeries Access for Windows
If you already have iSeries Access for Windows installed, use this information to learn how to upgrade to a newer release.

Uninstall iSeries Access for Windows from the PC
If you already have iSeries Access for Windows installed, use this information to learn how to uninstall it from your PC.

Note: Only users with administrator authority can perform installations, service pack updates, and upgrades to new releases. You can use the Windows Scheduled tasks feature with remote access to allow your users to do installations, service pack updates, and upgrades without administrator privileges.

Prerequisites to set up the PC for iSeries Access for Windows

Verify that your PC meets the following requirements. For more information, see PC requirements (www.ibm.com/eservers/iseries/access/pcreq.html) .

Table 5. PC requirements — Processor, memory, and service pack level

Operating system	iSeries Access for Windows	iSeries Access for Windows with iSeries Navigator
Windows NT 4.0	Pentium 100 MHz and at least 32 MB, Microsoft Windows NT Service Pack 6a and Microsoft Internet Explorer 5.01 or later	Pentium 850 MHz minimum and at least 256 MB, 512 MB recommended Microsoft Windows NT Service Pack 6a and Microsoft Internet Explorer 5.01 or later
Windows 2000	Pentium 133 MHz and at least 64 MB	Pentium 850 MHz minimum and at least 256 MB, 512 MB recommended
Windows XP	Pentium 233 MHz and at least 128 MB	Pentium 850 MHz and at least 256 MB, 512 MB recommended
Windows Server 2003, 32-bit PC	Pentium 133 MHz and at least 128 MB	Pentium 850 MHz and at least 256 MB, 512 MB recommended
Windows Server 2003, 64-bit PC	Pentium 733 MHz and at least 192 MB	Pentium 850 MHz and at least 256 MB, 512 MB recommended

Notes:

1. Microsoft Windows Server 2003 comes in several editions. The hardware requirements vary by edition. See Microsoft's Web site for base requirements information for all editions.
2. If you do not plan to use iSeries Navigator for anything other than managing your iSeries connections (adding, removing, and changing connection properties), it is recommended that you do not install the iSeries Navigator base component. Installing that component will result in higher memory usage when managing your iSeries connections.

Table 6. Other PC requirements

PC requirement	Value
Disk Space - Install	• **Typical** - 148 MB (approximately) • **PC5250 User** - 39 MB (approximately) • **Full** - 221 MB (approximately) • **Custom** - varies, depending on components installed
Adapter Card	A communications adapter card that supports TCP/IP.

Notes:

1. The Disk Space - Install values are approximate. For the exact values, see PC requirements (www.ibm.com/eservers/iseries/access/pcreq.html) .
2. You need 5 MB available on the drive where the Windows operating system is installed to accommodate temporary files that the iSeries Access for Windows setup program creates.

3. Additional files are downloaded from the iSeries server when you use the File Systems function of iSeries Navigator.
4. Service packs require additional space.
5. The size for a **Full** installation could be different depending on whether SSL and plug-ins are in the installation search path.

Set up TCP/IP on the PC

Use this information to configure TCP/IP on Windows 2000, Windows NT, Windows XP, and Windows Server 2003 operating systems. TCP/IP must be correctly installed and configured before you try to connect to an iSeries server.

Complete these tasks to set up TCP/IP on the PC:

- "Install a network adapter or modem"
- "Configure TCP/IP support on the PC" on page 22
- "Verify TCP/IP configuration" on page 24

Notes:

1. This information assumes that you have TCP/IP configured on your iSeries server. If TCP/IP is not configured on your iSeries server, see "Configure TCP/IP on the iSeries server" on page 15.
2. Virtual private network (VPN) is an option for secure remote connections. VPN is supported on PCs running Windows 2000, Windows XP, or Windows Server 2003, and on iSeries servers with OS/400 V5R1 and later. For iSeries VPN information, see Virtual private networking.

Install a network adapter or modem

In order to set up TCP/IP on your PC, you must have a network adapter or modem installed in your PC. If you will be connecting to the iSeries server over a LAN, then you will need a network adapter installed. If you will be connecting to the iSeries server using a serial line internet protocol (SLIP) or PPP connection from a remote location, then you will need to install a modem. For information about installing a network adapter or modem, see the manufacturer's documentation provided with the hardware. The manufacturer's documentation should also provide information about installing a driver for the hardware.

Install Dial-Up Networking on the PC

If you will be connecting to the iSeries server over a SLIP or PPP connection (using a modem), you need to install Dial-Up Networking and Remote Access Services on your PC. If you are connecting to your iSeries server over a LAN, or if you already have Dial-Up Networking installed on your PC, you can continue with "Verify TCP/IP configuration" on page 24. You can find the instructions to install Dial-up Networking and Remote Access Services at Microsoft's Web site:

1. Go to `www.microsoft.com`
2. Click **Search**
3. Enter `Dial-Up Networking` in the search field and press Enter to search.

Notes:

1. If you plan to make dial-up connections on Windows NT, it is recommended that you install Windows NT Service Pack 6a and Microsoft Internet Explorer 5.01 or later. The service pack will improve the stability of your dial-up connection.
2. If you see an unwanted Dial-Up Networking, you might either have Internet Access, or you might need to change your Dial-Up Networking configuration.
3. To get full autodial support, you need to have Internet Explorer 2.x or higher installed. Within the properties of Internet Explorer, there is a setting called "Connect to the Internet as needed." This prompt enables or disables a setting called autodial feature for the TCP/IP stack.

Configure TCP/IP support on the PC

This topic provides the steps that are necessary to configure the Microsoft TCP/IP support that is supplied with the Windows operating system.

If you are not using a domain name server (DNS), see Add the server name to the HOSTS file.

The driver required to support TCP/IP over a twinaxial connection is not shipped with iSeries Access for Windows. If you want to use a twinaxial connection, see Configure TCP/IP over twinaxial connections.

Note: For Windows NT 4.0 users, make sure that Windows NT Service Pack 6a and Internet Explorer 5.01 or later are installed.

Windows NT

To install and configure the TCP/IP network protocol on Windows NT:

1. Click **Start –> Settings –> Control Panel**.
2. On the control panel, double-click **Network**.
3. Click the **Protocols** tab.
4. Click **Add...**, click **TCP/IP**, and click **OK**.

   When you click **OK**, TCP/IP is added to the Network protocols page. Close the Network Window by clicking **OK**. You might be asked to restart your PC. Restart the PC and continue with the following steps.
5. Return to the **Control Panel** to configure the TCP/IP network protocol by clicking **Start –> Settings –> Control Panel**.
6. Double-click **Network**.
7. Click **TCP/IP**, and then click **Properties**.
   a. Click the **IP Address** tab.
   b. Click **Specify an IP address**.
   c. Enter the IP address of your PC (for example, `199.5.83.205`).
   d. Enter the Subnet Mask (for example, `255.255.255.0`).
   e. If you are using a default route, click **Gateway**, and do the following:
      1) Enter the IP address of the gateway or router in **New gateway**.
      2) Click **Add**.
   f. If you are using a domain name server, click **DNS**, and do the following:
      1) Enter the host name of your PC (for example, `cameron`).
      2) Enter the domain (for example, `acme.com`).
      3) Enter the IP address of the domain name server.
   g. If you are using a Windows Internet name server, click **WINS Address**, and do the following:
      1) Enter the primary WINS server (for example, `199.5.83.205`).
      2) Enter the secondary WINS server (for example, `199.5.83.206`).
      3) Select DNS for Windows Resolution.
      4) Select LMHOSTS Lookup.
   h. Click **OK**.
   i. You might be asked to restart your computer. Close any applications that are running, and click **OK**.

Windows 2000, Windows XP, and Windows Server 2003

To install and configure the TCP/IP network protocol on Windows 2000, Windows XP, and Windows Server 2003:

1. Click **Start –>Settings –>Control Panel**.
2. On the control panel, double-click **Network and Dial-Up Connections**.
3. Right-click **Local Area Connection**.
4. Click **Properties**.

Note: If **Internet Protocol (TCP/IP)** does not appear in the list, do the following:

a. Click **Install**.
b. Select **Protocol**, and then click **Add**.
c. Select **Internet Protocol (TCP/IP)**.
d. Click **OK**. This returns you to the *Local Area Connection Properties* window.

5. Select **Internet Protocol (TCP/IP)**, and then click on **Properties**.
6. Select **Using the Following IP Address**.

   Note: Check with your network administrator to determine the correct settings for this tab. If your PC does not automatically obtain IP and DNS addresses, do the following:

   - Enter the IP address of your PC (for example, 199.5.83.205).
   - Enter the subnet mask (for example, `255.255.255.0`).
   - Enter the default gateway (for example, `199.5.83.1`).
   - Enter the preferred DNS server (for example, `199.5.100.75`).
   - Enter the alternate DNS server (for example, `199.5.100.76`).

7. If you are using a Windows Internet Name Server, click the **Advanced** tab, select **WINS Address**, and do the following:
   a. Click **Add** .
   b. Enter the primary WINS server (for example, `199.5.83.205`).
   c. Enter the secondary WINS server (for example, `199.5.83.206`).
   d. The remaining settings should remain as the defaults.
8. Click **OK** on the **Local Area Connection Properties** window. It is not necessary to restart your PC.

Add the server name to the HOSTS file

If you are not using a domain name server, you need to add the iSeries server name with which you want to communicate to the HOSTS file. Also, add the iSeries NetServer server name to the LMHOSTS file if you are relying on iSeries NetServer for file and print serving. For instructions on updating your LMHOSTS file, see "Configure the PC for iSeries NetServer Use" on page 24.

To create or change the HOSTS file, do the following:

1. Open a command prompt.
2. Change to the directory that should contain the HOSTS file. For example:

   ```
   c:\>cd\winnt\system32\drivers\etc
   ```

   Note: The examples in this section use the `\winnt\system32\drivers\etc` directory, which is a Windows NT and Windows 2000 directory. On Windows XP and Windows Server 2003, the directory would be `c:\windows\system32\drivers\etc`. The HOSTS file must remain in this location.
3. If a file named HOSTS already exists in this directory, skip this step. Create a file named HOSTS by copying the sample file (supplied by Windows). The file is in the same directory and is called `hosts.sam`.

   For example:

   ```
   c:\winnt\system32\drivers\etc>copy hosts.sam hosts
   ```
4. Edit the HOSTS file. For example:

   ```
   c:\winnt\system32\drivers\etc>edit hosts
   ```

   Follow the instructions in the HOSTS sample file to add the IP address and name of the iSeries server to which you want to connect.
5. Save the HOSTS file.

Note: For PC5250, if you do not use a name server or hosts table, you cannot start the 5250 emulator delivered with iSeries Access for Windows. The left bottom corner of your emulation display indicates a 657 communication error (*Resolving TELNET 5250 server host-domain name*).

You can choose to use a HOSTS file if you have only a few machines using TCP/IP. This requires that you maintain an up-to-date list on each computer. When an iSeries address changes, you must change the HOSTS file entry if one exists.

Configure TCP/IP over twinaxial connections

The driver required to support TCP/IP over a twinaxial connection is not shipped with iSeries Access for Windows. You must download it from the following Web site:

`www.networking.ibm.com/525tcpip`

If you are using TCP/IP over a twinaxial connection, see Information APAR II11022 for the support statement regarding iSeries Access for Windows on this type of connection.

Verify TCP/IP configuration

You can verify that TCP/IP is set up correctly on your PC by issuing a PING command to the iSeries server:

1. Open a command prompt.
2. Type `PING` *`system`* where *`system`* is the name of the iSeries server that you want to connect to.
3. If your TCP/IP configuration is correct, you should see reply messages from the iSeries server. If you do not see these reply messages, here are some possible reasons why the PING command failed:
   a. You might be trying to PING the wrong address. Check the address of the iSeries server.
   b. You might have an incorrect IP address listed for the iSeries server in your HOSTS file or DNS entry. This occurs only when you try to PING an iSeries server by name (as opposed to the IP address). If so, try `PING` *`nnn.nnn.nnn.nnn`* where *`nnn.nnn.nnn.nnn`* is the IP address of the iSeries server that you want to connect to. You can obtain the IP address of the iSeries server from your system administrator. If that works, update your HOSTS file or DNS entry with the correct address.
   c. Incorrect LAN adapter address is set in the adapter properties on the PC.
   d. There is no physical connection to the iSeries server.
   e. The iSeries server or network name is not correct.
   f. TCP/IP is not configured correctly on the PC.
   g. TCP/IP is not installed or configured correctly, or is not started, on the iSeries server. These problems need to be addressed by the system administrator.
   h. The iSeries server is down.
   i. The iSeries server is located behind a firewall that will not allow you to PING. Try `telnet` *`systemname`*.
   j. If none of the above explain your problem, restart and go through the configuration process again.

Configure the PC for iSeries NetServer Use

This information will allow you to configure the PC as an IBM iSeries Support for Windows Network Neighborhood (iSeries NetServer) client. This section also provides information about configuring iSeries NetServer file and print shares.

Installing iSeries Access for Windows over a network can be done using iSeries NetServer. This support does not require any additional software on your PC. iSeries NetServer takes advantage of the integrated file and print sharing capability in Windows operating systems, enabled using the X/Open Company industry-standard Server Message Block (SMB) protocol.

Prerequisites to configure the PC for iSeries NetServer use

In order to configure the PC for iSeries NetServer use, you must have:

- TCP/IP configured on both the iSeries server and the PC (see “Configure TCP/IP on the iSeries server” on page 15 and “Set up TCP/IP on the PC” on page 21).
- iSeries NetServer configured on the iSeries server (see “Configure iSeries NetServer on the iSeries server” on page 16).

Configure the PC as an iSeries NetServer Client

To configure your PC for iSeries NetServer support, the steps vary depending on which operating system you are using. Go to the section below for your operating system.

1. **Check Windows NT settings:**
   a. From the Windows desktop, click **Start –> Settings –> Control Panel**.
   b. Double-click **Network**.
   c. Click on **Services** and verify that you have workstation added.
   d. Click the **Identification** tab. Make sure that you have a unique computer name and a valid domain (workgroup) name configured (preferably the same one as the iSeries NetServer).
   e. Go to the **Protocols** tab and make sure that the TCP/IP Protocol is there and is configured properly.
   f. Continue with step 4.
2. **Check Windows 2000 settings:**
   a. From the Windows desktop, right-click **My Network Places**. Then, click **Properties**.
   b. Click **Network identification**. Make sure that you have a unique computer name and a valid domain (workgroup) name configured (preferably the same one as the iSeries NetServer). Close this dialog.
   c. Right-click the **Local Area Connection** icon and click on **Properties**. Make sure that the TCP/IP Protocol is there and is configured properly.
   d. Continue with step 4.
3. **Check Windows XP/Windows Server 2003 settings:**
   a. From the Windows desktop, right-click **My Network Places**. Then, click **Properties**.
   b. Right-click **Local Area Connection** and click on **Properties**. Make sure that the TCP/IP Protocol is there and is configured properly.
   c. Continue with step 4.
4. **Check TCP/IP Support:**
   a. Open a command prompt.
   b. There are two ways to check the connectivity from the PC client to iSeries NetServer. Type the following to make sure that your PC can communicate with the iSeries NetServer.

      ```
      NBTSTAT -a iSeries-NetServer-server-name
      ```

      If the NBTSTAT command fails, verify that your IP address resolution strategy is correct by trying the following:

      ```
      PING iSeries-NetServer-server-name
      ```

   c. If your results fail, try adding an entry to the iSeries NetServer to the PC’s local LMHOSTS file.
      1) Look the \WINNT\system32\drivers\etc directory for Windows NT for the LMHOSTS file.

         Note: If you cannot find the LMHOSTS file in the specified directory, you have two options:
         - Create a new LMHOSTS file
         - Copy or rename LMHOSTS.SAM in that same directory to LMHOSTS

         Complete instructions are provided in the LMHOSTS.SAM file.
      2) Type the following to reload PC cache from the updated LMHOSTS file.

         ```
         NBTSTAT -R
         ```

   d. If you are using Windows 2000, continue to step 5. If you are using Windows XP, continue to step6 on page 26.
5. **Find iSeries NetServer and shared resources from Windows 2000:**
   a. From the Windows desktop, right-click **My Network Places**.
   b. Select **Search for Computers**.
   c. Fill in the NetServer name and select **Search Now**.

6. **Find iSeries NetServer and shared resources from Windows XP/Windows Server 2003:**
   a. From the Windows desktop, right-click **My Network Places**.
   b. Select **Search for Computers**.
   c. Fill in the NetServer name and select **Search**.

Configure iSeries NetServer file and print shares

To configure iSeries NetServer file and print sharing capabilities, see these instructions:

- iSeries NetServer file shares.
- iSeries NetServer print shares.

Additional configuration instructions are available at Get started with iSeries NetServer.

Install iSeries Access for Windows on the PC

You can install iSeries Access for Windows on a PC from an iSeries server using iSeries NetServer, from a CD-ROM, or from a Windows network drive. iSeries Access for Windows does not support installation from diskettes.

Complete the tasks appropriate to your circumstances to install iSeries Access for Windows on the PC:

- "Install iSeries Access for Windows from iSeries NetServer" on page 27
- "Install iSeries Access for Windows from CD-ROM" on page 28
- "Install iSeries Access for Windows from a Windows network drive" on page 29
- "Install iSeries Access for Windows on multiple PCs" on page 29
- "Install service packs" on page 33
- "Integrate new functions into iSeries Access for Windows and iSeries Navigator" on page 36
- "Install or remove individual components" on page 51
- "Install other language versions" on page 51

Attention: iSeries Access for Windows works with InstallShield during setup. Antivirus programs can interfere with the operation of InstallShield. You should disable any antivirus programs that are running on your PC before you install iSeries Access for Windows.

Considerations

- The AFP™ and SCS printer drivers components of iSeries Access for Windows are not digitally signed by Microsoft. If you are installing printer drivers, you must either set the driver signing option of your Windows operating system to Ignore before you begin the installation or upgrade, or install the printer drivers manually after the installation has completed. For information about the driver signing option, see your operating system's help.

  If you do not need the AFP and SCS printer drivers components, use a Typical or PC5250 installation, or use a Custom installation or a Selective upgrade and deselect the Printer Drivers component.

  If you installed the AFP and SCS printer drivers components with the Windows operating system driver signing option set to Warn or Block, you must manually install the printer driver using Microsoft's directions in their help text, specifying the c:\Program Files\IBM\Client Access\CWBAFP directory location for the AFP printer driver and specifying the c:\Program Files\IBM\Client Access\CWBSCS directory location for the SCS printer driver.
- Not all of the available installation files reside in the same directory. To find the required files, iSeries Access for Windows searches the subfolders of the ProdData directory. See "Path discovery for iSeries Access for Windows installations" on page 52 for more information.
- To install the same functions on several PCs, you might consider using the silent install feature of iSeries Access for Windows. For information about silent installation, see "Perform a silent installation of iSeries Access for Windows" on page 30.

- iSeries Access for Windows supports 64-bit versions of the ODBC and OLE DB components. The 64-bit versions do not appear as separate components, but are simply included with the 32-bit versions of these components when installed on 64–bit hardware. If you uninstall the 32-bit versions, the 64-bit versions will also be uninstalled.
- If you are installing onto 64-bit hardware, you cannot install AFP Printer Driver or SCS Printer Driver.
- Although you can install SSL on a 64–bit PC, it can only be used by the 32–bit versions of iSeries Access functions.
- For the selection of the components that you want to install, consider that there are some components of iSeries Access for Windows that do not need the Required Programs component. They include User's Guide, Lotus® 1-2-3 File Format Support, IBM Toolbox for Java™, and Programmer's Toolkit Headers, Libraries and Documentation. iSeries Access for Windows will not automatically check for new Service Packs or Upgrades to be installed on the PC, unless Required Programs was installed.
- iSeries Access for Windows does not install MDAC like it did in earlier releases. Be aware that the iSeries Access ODBC driver and iSeries Access for Windows OLE DB provider do, however, have some specific requirements on the MDAC level on your PC. Windows NT users should make sure the required MDAC level is on the PC before installing iSeries Access for Windows. Windows 2000 and later operating systems already have the required MDAC level.

  Required MDAC levels:

  – iSeries Access ODBC driver - MDAC 2.5 or later for connection pooling and MTS support
  – iSeries Access OLE DB provider - MDAC 2.5 for all functions

  If MDAC 2.5 or later is not installed, iSeries Access for Windows will not allow the OLE DB component to be installed. If you have a Typical install with an earlier version of iSeries Access for Windows, and then you want to upgrade to V5R3M0, the OLE DB component will be deleted from your PC if MDAC 2.5 is not installed before the upgrade. You can download MDAC 2.5 or later from this Microsoft Web Site: http://www.microsoft.com/data .
- To install iSeries Access for Windows on a PC that is running Microsoft Windows Terminal Server Edition or Terminal Services, follow the install instructions in Information APAR II11373. For information about obtaining APARs, see Information APARs .
- Prior to installing the .NET Managed Provider, the .NET Framework must first be on your PC. See www.msdn.com for instructions on downloading and installing the .NET Framework.

Install iSeries Access for Windows from iSeries NetServer

You must have iSeries Access for Windows installed on your iSeries before following these instructions. If you have not already done so, follow the steps in "Install iSeries Access for Windows on the iSeries server" on page 14. You must also have iSeries NetServer configured on your iSeries server and your PC configured to use iSeries NetServer before following these instructions. If you have not already done so, follow the steps in "Configure iSeries NetServer on the iSeries server" on page 16 and "Configure the PC for iSeries NetServer Use" on page 24 to set up iSeries NetServer.

To install iSeries Access for Windows from iSeries NetServer (instructions might vary depending on your Windows operating system):

1. From the Windows desktop, right-click the **My Network Places** icon, and then click **Search for Computers**.

   Note for Windows NT users: From the Windows desktop, click **Start -> Find -> Computer**.
2. Type in the iSeries NetServer name that you want to use to install iSeries Access for Windows and click **Find Now**.

   Note: If you cannot find iSeries NetServer by name, type in the IP address instead of the iSeries NetServer name. To find the IP address, perform a PING to the iSeries server as follows:

   a. Open a DOS window or Command Prompt.
   b. Type PING `system` where `system` is the name of the iSeries server that you wish to connect to.

3. Double-click the computer name when it appears. This starts the Windows Explorer.
4. Double-click **QIBM -> ProdData -> Access -> Windows -> Install -> Image -> Setup.exe** to start the setup program.
5. Once the iSeries Access for Windows setup program begins, follow the instructions and online help in the program.

   Notes:

   a. If the system administrator creates his own share point (directory shareable by remote users) to the Image directory, you will **not** be able to install SSL, add-ins, plug-ins, and secondary languages that are installed on the iSeries server during the iSeries Access for Windows installation. See the online help and Information Center for more information about SSL, add-ins, and plug-ins.

   b. If you want to change the install source for automatic service pack and release upgrades, use the **Service** page of **iSeries Access for Windows Properties** after the installation completes.

      Note: If you are installing iSeries Access for Windows for the first time, the CheckVersion function will automatically receive new service packs and new releases from the drive and directory where the initial install occurred. If your administrator plans to store service packs or new releases in a different location, you can change the source directory on the Service page of iSeries Access for Windows Properties to the location specified by your administrator.

Install iSeries Access for Windows from CD-ROM

To install iSeries Access for Windows from the iSeries Setup and Operations CD-ROM, *SK3T-4098-02*, do the following:

1. From a command line, run the command: `chgusr /install`.
2. Insert the CD-ROM into the CD-ROM drive.
3. If your CD-ROM drive is set to automatically run programs, follow these steps:
   a. Click **Install iSeries Access for Windows (V5R3M0)**.
   b. Go to step 5.
4. If your CD-ROM drive is **not** set to automatically run programs, follow these steps:
   a. Go to the root directory of the CD-ROM and double-click **launch.exe**.
   b. Click **Install iSeries Access for Windows (V5R3M0)**.
5. Once the iSeries Access for Windows setup program begins, follow the instructions and online help in the program.
6. After the setup program finishes, from a command line, run the command: `chgusr /execute`.

Notes:

1. You will not be able to install add-ins, plug-ins, and secondary languages that are installed on the iSeries server during iSeries Access for Windows installation. After the CD install completes, you can use Selective Setup to add these components. You can access Selective Setup by clicking **Start –> Programs –> IBM iSeries Access for Windows –> Selective Setup**. When Selective Setup is run, you must specify the appropriate iSeries directory. For information about determining the appropriate directory, see “Path discovery for iSeries Access for Windows installations” on page 52.
2. If you want to change the install source for automatic Service Pack and release upgrades, use the **Service** page of **iSeries Access for Windows Properties**.

   Note: If you are installing iSeries Access for Windows for the first time and you do not update the install source in iSeries Access for Windows Properties, CheckVersion will try to check the CD-ROM drive for service packs and upgrades. If you are upgrading iSeries Access for Windows and if CheckVersion is configured to check a certain directory, CheckVersion will check that directory and will not be changed to check the CD.
3. See the online help and Information Center for more information about add-ins and plug-ins.

Install iSeries Access for Windows from a Windows network drive

Your administrator can use the tailored installation function to copy all or part of iSeries Access for Windows to a network drive on a Windows system. For more information about tailored installations, see "Create a tailored installation image of iSeries Access for Windows" on page 30.

To install from this location:

1. Map a drive to the location where the installation image is located.
2. Double-click **setup.exe** to start the setup program.
3. Once the iSeries Access for Windows setup program begins, follow the instructions and online help in the program.

Notes:

1. You cannot install plug-ins, add-ins, and secondary languages that are installed on the iSeries server during installation of iSeries Access for Windows from a Windows network drive. These products and features are not packaged with iSeries Access for Windows. After the installation completes, you can use Selective Setup to add these components. When Selective Setup is run, you must specify the appropriate directory. The default directory is the last directory that was used in install or selective install.
2. To get plug-ins, add-ins or secondary languages, select the server that has these components as your source directory during Selective Setup.
3. If you want to change the install source for automatic Service Pack and release upgrades, use the Service page of iSeries Access for Windows Properties after the installation completes.

   Note: If you are installing iSeries Access for Windows for the first time, CheckVersion will automatically receive new service packs and new releases from the drive and directory where the initial install occurred. If your administrator plans to store service packs or new releases in a different location, you can change the source directory on the **Service** page of **iSeries Access for Windows Properties** to the location specified by your administrator.
4. See the online help and Information Center for more information about SSL, add-ins, plug-ins and service.

Install iSeries Access for Windows on multiple PCs

There are several ways to install iSeries Access for Windows on multiple PCs without going through all of the steps of your initial installation and setup. Additionally, you can restrict users' access to functions by selecting which components to include in an installation.

The following are several common installation methods:

Create a tailored installation image
You can create a tailored installation image by excluding the unwanted components from a master installation image. You can then use the tailored installation image for installations across your network.

Install silently
Create a response file that contains a record of your responses to prompts during an installation. You can then use this response file to control duplicate installations that do not require any user interaction.

SMS switch
You can include the installation in a .bat file containing multiple commands. Use the SMS switch to prevent the Setup.exe from closing before the setup is complete.

Notes:

1. For information about install considerations, see "Install iSeries Access for Windows on the PC" on page 26.
2. Only users with administrator authority can perform installations, service pack updates, and upgrades to new releases. You can use the Windows Scheduled Tasks feature with remote access to allow your users to do installations, service pack updates, and upgrades without administrator privileges.

Create a tailored installation image of iSeries Access for Windows

You might want to control which iSeries Access for Windows components your users can install. One way to do this is by excluding selected components from an installation image, and then distributing this tailored installation image to your users. The Tailored Installation Image wizard provides a simple interface for this function.

Start the Tailored Installation Image wizard

You can start the tailored installation wizard from the iSeries Setup and Operations CD, or by navigating to the installation image directory, \QIBM\ProdData\Access\Windows\Install\Image, and entering `cwbinimg`.

Note: If you will be including SSL in your tailored installation image, it is important that you map to the correct directory. For more information, see "Path discovery for iSeries Access for Windows installations" on page 52.

Service the installation image

Any tailored installation images are not updated when Program Temporary Fixes (PTFs) are applied to or removed from the iSeries server. You must create the installation image to get service pack updates. Alternatively, you can combine the service pack directly with your existing tailored installation image.

For instructions, go to the iSeries Access Web site (http://www.ibm.com/eserver/iseries/access)  . Click on the latest service pack. Read the instructions in the Downloads.txt file.

Distribute the installation image

The wizard allows you to specify where you want to create the tailored installation image. This location must be an empty directory, (you cannot overwrite a previous installation image) and must not be the root directory. Also, only complete installation images contain the program that creates tailored installation images. The wizard is not copied onto the user's PCs. You can also copy the tailored image to a CD-ROM. iSeries Access for Windows Setup will run automatically when the CD-ROM is inserted into the CD-ROM drive.

Note: If your iSeries server has multiple iSeries Access for Windows secondary languages, you can use any of the installed secondary languages, or the primary language on the iSeries server, as the primary language for the new installation image. Secondary languages are not available if you are running the wizard from the CD, because the CD will not contain any secondary languages.

Include Secure Sockets Layer (SSL) on the installation image

If SSL support is installed on the image you are using to create your tailored installation image, the SSL support can be included in the tailored image. If tailored install detects that the SSL product is available, SSL will be displayed in the Component Selection List. SSL will not be included in the tailored image unless selected.

Note: SSL is controlled by US Export regulations. You are responsible to ensure that the new installation image is properly controlled to meet the US Export regulations.

Perform a silent installation of iSeries Access for Windows

Silent installation eliminates the need for any user interaction during the iSeries Access for Windows set up process. A response file provides all installation information so that no dialog boxes display while installing iSeries Access for Windows. To perform a silent installation, see the following information:

- "Create response files for iSeries Access for Windows installations" on page 31

- "Start a silent installation" on page 32
- "Return codes for silent installations" on page 32

The response file contains the installation options that the system would normally prompt you for during the installation process.

Silent install indicator

Silent install has a progress indicator. The Silent Install Indicator is an icon in the task tray which will appear when a silent install is launched, and remain in the task tray as long as the install is executing. Passing the mouse over the icon will cause the Silent Install Indicator to display the percent of the install that is complete. The Silent Install Indicator can also be expanded to expose more information. When the install completes successfully, the icon will disappear from the task tray. If the install were to fail, the icon will remain and a small red triangle will appear on the icon to indicate the failure. Click on the red triangle to see the failure message.

Notes:

- If the Silent Install Indicator displays a given percentage of completion longer than you would expect, you might want to check the log file for errors.
- Often the best way to debug a silent install failure is to start the install in non-silent mode on the user PC, and see if there are any unexpected dialogs that appear prior to the Component Confirmation panel. Most silent install failures occur due to unexpected dialogs that appear prior to actual component installation file transfers.

Differences between normal and silent installations

The following table illustrates the differences between a normal and silent installation by comparing how the two types of installations handle various conditions that commonly arise during the installation process.

Condition	During a normal installation...	During silent and recorded installations...
Attempt to install a component that is restricted (by policies, dependencies, or some other restriction), or that is incompatible with a product that is already installed.	A dialog displays listing all of the components that are restricted due to these conditions. The component is not installed.	The component is not installed.
An error occurs.	Error messages display.	Error messages display during a recorded installation, but not during a silent installation. A negative number is written to the silent installation log file. This indicates that an error occurred. If you are having problems running silent installations, you might want to try running the installation interactively to rule out the possibility that the problems you are encountering are not related to silent mode.

Create response files for iSeries Access for Windows installations: A response file records the selections made in response to the prompts in the installation process. During a silent installation, the setup program will use the response file to get the information necessary to complete the installation.

To create a response file, follow these steps:

1. At the command line in the iSeries Access for Windows installation image directory on a PC, type:

   `setup -r -f1d:\dir\file.iss` to run an installation, and record the responses.

   - *-f1* is an optional parameter used to indicate an alternate response file name. If you do not use this parameter, then setup.iss records all of the installation choices. Setup.iss resides in the Windows directory, for example, C:\Windows or C:\Winnt depending on your operating system.
   - *d:\dir* is the drive and directory where you want to create the response file. If you use the *-f1* parameter, then you must specify the drive and directory along with the response file name that you want to create.
   - *file.iss* is the name of the response file that you want to create. The file extension must always be iss.
2. Complete the setup program, providing the responses you want to use during the silent installations.

After the installation is complete, the iss file that is created will look somewhat like this: "Example: Response file (setup.iss)" on page 53.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

Start a silent installation: Silent installations use a response file (file.iss) for the responses to prompts during the installation process. This eliminates the need for any user interaction during the installation process, and allows you to quickly and easily copy duplicate installations across your network. Information about the status of the silent installation can be recorded in a log file (file.log).

To start a silent installation, type the following at a command prompt in the iSeries Access for Windows installation image directory:

```
setup -s -f1d:\dir\file.iss -f2d:\dir\file.log
```

where:

- **-f1** is an optional parameter where you can specify the response file (**file.iss**) to use. If you do not use this parameter, then the installation attempts to use a default response file named setup.iss. It looks for this file in the directory containing setup.exe. **d:\dir** is the drive and directory that contains the response file that you want to use. If you use the **-f1** parameter, then you must specify the drive and directory along with the response file name.
- **-f2** is an optional parameter where you can specify the location and name for the log file that the silent installation creates. If you do not use this parameter, the installation creates a log file named setup.log and places it in the directory containing setup.exe. **d:\dir** is the drive and directory that contains the log file. If you use the **-f2** parameter, then you must specify the drive and directory along with the log file name. **file.log** is the name of the log file that you want to create.

Return codes for silent installations: To see if your silent installation was successful, look at the return codes in the log file. If you receive a return code of 0, the installation was successful. If the return code was not 0, take any action necessary to resolve the problem. You specified the name and location of the log file when you started the silent installation. You can also see additional information about failures in silent.txt in the target directory, or in cwbsilent.txt in the windows directory (Windows or Winnt) if the target directory is not yet set.

Return code	Description
0	Success
-1	General error
-2	Invalid mode
-3	Required data not found in the Setup.iss file
-4	Not enough memory available
-5	File does not exist

Return code	Description
-6	Cannot write to response file
-7	Unable to write to the log file
-8	Path to the InstallShield silent response file is not valid
-9	Not a valid list type (string or number)
-10	Data type is not valid
-11	Unknown error during set up
-12	Dialog boxes are out of order
-51	Cannot create the specified folder
-52	Cannot access the specified file or folder
-53	A selected option is not valid

For more information, see Start a silent installation.

SMS switch

You might want to invoke the installation image from a .bat file so that you can run additional commands after the completion of a silent install, and prior to a restart. Use the SMS switch to prevent setup.exe from closing before the installation is complete. This will cause the .bat file to wait until the setup is complete before moving to the next statement in the .bat file. You can use the SMS switch in conjunction with both silent and non-silent installations.

To use the SMS switch as part of a silent installation:

1. Complete the steps to create a response file in "Create response files for iSeries Access for Windows installations" on page 31.
2. To start the silent installation and SMS switch, type the following at a command prompt in the iSeries Access for Windows installation image directory:
   ```
   setup.exe -SMS -s -f1d:\dir\file.iss -f2d:\dir\file.log
   ```
   where -f1 is is an optional parameter where you can specify the response file (file.iss) to use, and -f2 is an optional parameter where you can specify the location and name for the log file that the silent installation creates.

Notes:

1. SMS must be uppercase; this is a case-sensitive switch.
2. For more information about silent installations, see "Perform a silent installation of iSeries Access for Windows" on page 30.

Install service packs

iSeries Access for Windows incorporates all code fixes into a service pack. The most recent service pack contains all the fixes from the prior service packs in addition to new fixes that are contained in the current service pack.

When a service pack PTF is applied on the server, the original iSeries Access for Windows installation image is updated. Any client that installs from this updated installation image gets the new iSeries Access for Windows release plus the service pack level at the same time.

Important: PTFs for the following components are provided independently of the iSeries Access for Windows service pack.

- Secure Sockets Layer (SSL)
- iSeries Navigator plug-ins

iSeries Access for Windows check service level will find any PTFs that you apply to the iSeries server and will download the fix. For information about the check service level function, see "When to check service level function" on page 34.

Be sure you have the most recent PTFs and service packs. You can avoid unnecessary calls to service for problems that might already have fixes, and create a more stable operating environment for your iSeries Access for Windows client. For more information about PTFs, see “Install PTFs” on page 15.

Servicing other components and third-party applications

“When to check service level function” also manages the version of other components, like SSL, and third-party applications (plug-ins and add-ins). The When to check service level function automatically checks the host iSeries server for updates to any installed components. If updates are available, the user will usually be alerted, and asked to allow the update. This opens Selective Setup in a special mode and updates the appropriate component.

Service packs are available in a PC-executable form at the following Web sites:

- The iSeries Access Service Packs page:
  `www.ibm.com/eserver/iseries/access/casp.htm`
- The IBM FTP site:
  `ftp://ftp.software.ibm.com`
  Navigate down the AS/400 directory to **as400/products/clientaccess/win32/v5r3m0/servicepack**.

Note: Only users with administrator security can perform service pack updates. You can use the Windows Scheduled Tasks feature with remote access to allow your users to do service pack updates without administrator privileges.

When to check service level function

You can use when to check service level, a function of iSeries Access for Windows, on the PC to detect updates to iSeries Access for Windows and related components on the iSeries server. To define options for checking the service level, go to the **Service** tab of **iSeries Access for Windows Properties**.

From there you can set the following parameters:

- When to have check service level run.
- A date to check service level.
- The number of days before checking service level.
- The number of minutes to delay (after logon) to check service level.

You can also create a .bat file to run check service level automatically at regular intervals.

Note: Policies might dictate what you can do with the above functions. For example, you can force the number of days before checking service level to be a certain value. Done this way, users could not alter this value.

You can also select to “Install the service pack silently” on page 35.

Set check service level properties: To set the check service level properties, do the following:

1. Double-click the **iSeries Access for Windows Properties** icon in the iSeries Access for Windows program group.
2. Click the **Services** tab.
3. Change the values that you want and click **OK**.

Note: The SCHEDCHECK parameter overrides the frequency settings. (For more information about SCHEDCHECK, see the **IBM@server iSeries Access for Windows User’s Guide**, an online help system available with the product.)

Schedule check service level: You can schedule check service level to run at regular intervals. To do this, create a .bat file that runs check service level, and then use the **at** command to specify when the batch file should run.

1. Create a .bat file that the scheduler calls.
   - To have check service level use the parameters on the iSeries Access for Windows Properties Service tab, put a line similar to the following example in the .bat file:

     ```
     c:\...\Client~1\CWBCKVER.EXE LOGIN
     ```
   - To have check service level to run whenever the schedule entry starts, put a line similar to the following example in the .bat file:

     ```
     c:\...\Client~1\CWBCKVER.EXE SCHEDCHECK
     ```
2. Use the`at` command to schedule check service level. For example:

   ```
   at 10:00/INTERACTIVE/EVERY:15 "c:\scheddir\ckverscd.bat"
   ```

   This will start check service level at 10:00 a.m. on the 15th day of every month.

Note: This example uses a .bat file named ckverscd.bat in directory c:\scheddir. Your .bat file name and the directory where you store it are your choice.

When the schedule entry starts, a command prompt window opens on your desktop. Check service level prompts the user with message boxes and installation wizards. The user interface is identical to the interface that a Windows administrator would see running check service level.

Install the service pack silently: Check the **Perform silent installation** box on the **Service** tab of **iSeries Access for Windows Properties** to do service level checks and service pack installation silently, without any user interaction. The silent service pack installation utility will use information from a response file to automatically answer prompts.

The response file is identical to the one used in silent installation, except you must specify the following name:

- `SLTSP.ISS` - for service packs (This file must reside in the same directory as your service pack **setup.exe** does)
- `SLTUP.ISS` - for upgrades (This file must reside in the same directory as your installation **setup.exe** file)

When you create your response file, you can set a parameter to restart automatically. If you set this to yes, you should set SCHEDCHECK in a scheduled job so that the silent check service version runs during the night. See the online iSeries Access for Windows User's Guide for more information about SCHEDCHECK.

If set to no, a message box appears asking the user to **OK** restarting the system.

Access scheduled tasks remotely

Because of the restrictions built into Windows operating systems, you can only upgrade service packs and iSeries Access for Windows if you signon as an administrator. You can use the scheduled tasks function of the Windows operating system with remote access to allow your users do service pack updates and iSeries Access for Windows upgrades without administrator privileges. By creating a scheduled task on your local computer and dragging the .job file to a remote computer account, a network administrator can create task files for maintenance and add them to users' computers as needed. You can send and receive task files in e-mail messages, and you can share the Scheduled Tasks folder on your computer so that users can access it remotely by using My Network Places.

To use scheduled tasks:

1. On the Windows desktop, double-click **My Computer**.
2. Double-click **Scheduled Tasks**.
3. Use the help to assist you in scheduling tasks.

Notes:

1. The remotely scheduled task will run under an administrator account on the PC. For the scheduled task to work, the same administrator user ID and password must exist on the iSeries server. If the password changes on either the PC or the iSeries, any scheduled tasks must be edited or deleted and recreated with the new administrator password.
2. If the administrator account does not exist on the iSeries, you can use a NetServer guest user profile to support any installation requests made from the PC on the administrator account's behalf. Guest user profiles can pose security risks. For information about creating guest user profiles, see Set the guest user profile for iSeries NetServer.

Integrate new functions into iSeries Access for Windows and iSeries Navigator

iSeries Access for Windows allows you to integrate and distribute new or changed sections of code, customized applications or new functions into the iSeries Access for Windows client. These new functions are called plug-ins and add-ins. You can include these functions with an iSeries Access for Windows installation or you can distribute them with Selective Setup. After installation, you can maintain them using the check service level function.

Install, uninstall, and maintain plug-ins

Plug-ins allow you to integrate new functions or applications into iSeries Navigator. These new functions become a separately installable component that typically add:

- Folders and objects to the hierarchy tree
- Choices to iSeries Navigator menus
- Property pages to the property sheet for a folder or object

For more information about plug-ins, and how you can use them, see Developing iSeries Navigator plug-ins.

Install, uninstall, and maintain add-ins

Add-ins provide a convenient way for you to distribute sections of code over your network with iSeries Access for Windows. Add-ins might consists of any combination of:

- "User-written programs"
- "Uncompressed files" on page 37
- "Product setup programs and installation images" on page 37

All add-ins require the file ADDIN.INI to describe the add-in to the iSeries Access for Windows installation, Selective Setup and Check Service Level functions.

Notes:

1. Add-ins can provide a convenient and simple method of distributing files across your network. However, if you incorporate programs or setup programs into an add-in, consider the following add-in requirements and considerations.
2. Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

User-written programs

Add-ins might contain programs that you can specify to run at different times during the installation, upgrade, or uninstall process. You can specify any number of programs to run during the following circumstances:

- Pre-installation. Programs run before add-in files that are defined in file groups are copied.
- Post-installation. Programs run after the files that are defined in the file groups are copied to the PC.

- Pre-upgrade. Programs run before any add-in files that are defined in file groups are copied.
- Post-upgrade. Programs run after the files that are defined in the file groups are copied to the PC.
- Uninstall. Programs run before the add-in files are uninstalled from the PC.

You can specify several different properties and command line arguments for the programs that run during the add-in installation, upgrade, or uninstall process. The parameters that define which program to run consist of:

- The location of the program.
- The file and extension that make up the program name.
- The command line arguments to pass into the program when it loads.
- Whether or not a return code from the program should be checked to determine whether the add-in installation, upgrade, or uninstall should continue.
- Whether or not the iSeries Access for Windows installation program should wait for the program to finish running before continuing with the add-in installation, upgrade, or uninstall.

Note: You can set the property to check the return code for the program. If you do, the iSeries Access for Windows installation program will wait for the program to finish before continuing to install, upgrade, or uninstall the add-in.

Uncompressed files

Add-ins might contain files that are to be copied from the add-in installation directory structure to the PC. These files reside in the add-ins directory.

The ADDIN.INI file shows file definitions. These definitions appear in file groups. A file group contains files that have all the following attributes in common:

- The target path on the PC
- The file overwrite property (allow an overwrite of an already existing file or no overwrite)
- The uninstall property (allow an uninstall, or never uninstall)
- The remove property (whether all files in the file group should be removed instead of copied)

Note: If you use the remove files property to remove files on the PC, ignore the file overwrite and uninstall property values for that file group.

Product setup programs and installation images

Add-ins might consist of product setup programs and installation images. The product installation image and setup program can reside in the add-in root directory or in a sub directory.

An add-in can be used to initiate the setup program for another product. The add-in does not need to define any files or file groups to be installed. You can specify the product setup program as either a PreInstallProgram or a PostInstallProgram. When the iSeries Access for Windows installation program installs the add-in, it starts the setup program for the product as defined by the add-in. If the product's installation image is within the add-in directory structure, the product's setup program will install it with the add-in.

When you use the iSeries Access for Windows Uninstall program to remove an add-in, any products that the add-in installed might not be completely removed. To uninstall that product, the add-in might have to specify an uninstall program. The iSeries Access for Windows Uninstall program can call this to remove the product from the PC.

Integrate plug-ins

Plug-ins should reside on a source directory on the host. Then you can distribute the plug-in to your users as part of the installation process, or with Selective Setup. After the installation, use Check Service Level to handle upgrades.

See Distribute plug-ins for more detailed information.

Install and unistall plug-ins

If the plug-in resides on the installation source, it appears as a sub-component of iSeries Navigator. If the plug-in does not exist on your installation source, use Selective Setup to install the plug-in after completing the installation. When you start Selective Setup, supply the location of the plug-in that you want to install (see the following table). Selective Setup will display all Plug-ins that are available for installation at the specified location. However, some optionally installable components of iSeries Access for Windows do not appear if the client and host have different versions of OS/400.

Plug-ins for iSeries Access for Windows are located in the following directories:

Plug-ins	Location
IBM	(iSeries NetServer name)\QIBM\ProdData\OpNavPlugin
Third party	(iSeries NetServer name)\QIBM\UserData\OpNavPlugin

Plug-ins for Client Access for Windows NT/95 clients are located in the following directories:

Plug-ins	Location
IBM	(iSeries NetServer name)\QIBM\ProdData\GUIPlugin
Third party	(iSeries NetServer name)\QIBM\UserData\GUIPlugin

Notes:

1. A warning message will appear if the plug-in is not explicitly supported by iSeries Access for Windows. You will still be able to install the plug-in.
2. It is recommended that you migrate your 3rd-party plug-ins to the OpNavPlugin location, identified above, since the GUIPlugin location will not be supported in future releases.

Upgrade or service plug-ins

To update a plug-in, simply copy the updated files into the plug-ins installation source directory on the host.

Check Service Level will maintain the version of the plug-in. Every time Check Service Level starts, it checks the plug-ins installation source directory on the host to see if the plug-in requires an upgrade. If the plug-in requires an upgrade, Check Version will begin the iSeries Access for Windows Selective Setup program in a special mode. Selective Setup then updates the plug-in.

For more information, see “When to check service level function” on page 34.

Integrate add-ins

You can install and uninstall add-ins during an installation, or with Selective Setup. After installing them, you can maintain them with Check Service Level. The file ADDIN.INI. describes the add-in to these functions.

Install or uninstall add-ins

To include an add-in with a iSeries Access for Windows installation, place it in the predefined directory on the server or other installation source. The iSeries Access for Windows installation and Selective Setup will look for add-ins in the following directory:

```
\QIBM\UserData\Ca400\Express\Addin\
```

For multiple add-ins, you can include additional subdirectories.

To install the add-in:

1. Start the iSeries Access for Windows installation, or run Selective Setup.
2. Navigate through the panels and install or remove any iSeries Access for Windows components.

   After you install or remove the iSeries Access for Windows components, the "Install Additional Files and Programs" dialog will appear. Any add-ins that iSeries Access for Windows finds within the predefined directory structure will appear with a check box next to it.
3. Select to place a check next to each add-in that you want to install on your PC.
4. Navigate through any remaining panels and iSeries Access for Windows will install any add-ins that you selected.

To uninstall an add-in, start Selective Setup. After displaying the component selection dialog, Selective Setup will display all the installed add-ins, which you can select for removal.

Note: Selective Setup might not remove all parts of the add-in if the add-in contains programs that write data to the PC, install more files or write values to the registry. In these cases, you need to add a program to the add-in that iSeries Access for Windows runs before it removes the add-in files. See ADDIN.INI for instructions on adding programs to the add-in.

Upgrade or service add-ins

To update an add-in, simply copy the updated files into the add-in's installation source directory on the host: `\QIBM\UserData\Ca400\Express\Addin`.

The check service level function of the Windows operating system will maintain the version of the add-in. Every time check service level starts, it checks the add-in's installation source directory on the host to see if the add-in requires an upgrade. If the add-in requires an upgrade, check version will begin the iSeries Access for Windows Selective Setup program in a special mode. Selective Setup then updates the add-in.

For more information, see "When to check service level function" on page 34.

Note: The add-in installation source must be present when check service level runs.

Identify the add-in to iSeries Access for Windows with ADDIN.INI: The key to installing, upgrading, and uninstalling an add-in using the iSeries Access for Windows installation and service functions is the ADDIN.INI file. The ADDIN.INI file describes the add-in during the installation process and to the Check Service Level function.

The ADDIN.INI file follows the normal Windows INI file conventions and syntax. The ADDIN.INI file consists of sections that contain values that are interpreted by the iSeries Access for Windows installation functions.

Many of the ADDIN.INI file sections contain values that specify paths. These can be source paths, target paths, or paths that contain programs to run. You can hard-code paths in the ADDIN.INI file. You can use a path such as C:\Program Files\IBM\Client Access to specify the iSeries Access for Windows default installation path. Since many paths can be different across PCs, you should use the pre-defined ADDIN.INI path symbols to specify paths. The path symbols that you can specify in an ADDIN.INI file are:

Path symbol	Description
WINDRIVE[\path]	Windows drive with optional path
CAEDRIVE[\path]	iSeries Access for Windows drive with optional path
CAEPATH[\path]	iSeries Access for Windows path with optional path

WINPATH[\path]	Windows path with optional path
WINSYSPATH[\path]	Windows System path with optional path
PROGRAMFILESPATH[\path]	Program Files path with optional path
COMMONFILESPATH[\path]	Common Files path with optional path
SRCPATH[\path]	Add-in source path with optional path

The Addin.ini file contains several different sections. These sections are:

1. Add-in Info section
2. File group section
3. PreInstallProgram section
4. PostInstallProgram section
5. PreUpgradeProgram section
6. PostUpgradeProgram section
7. UninstallProgram section
8. MRI29xx section

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

Add-in information section of ADDIN.INI: The Add-in Info section is a required section in the ADDIN.INI file. It contains the following values:

Value	Description	Required Value
KeyName	A unique identifier for the add-in. The KeyName value must match the add-in directory name on the installation source.	Yes
Name	The add-in name that displays on the iSeries Access for Windows installation add-in dialog. You can override this value using the MRI29xx section for a particular language.	Yes
Description	The add-in description that displays on the iSeries Access for Windows installation add-in dialog. You can override this value using the MRI29xx section for a particular language.	Yes
Version	The version number of the add-in which the add-in provider determines. Increment this value to cause the iSeries Access for Windows Check Version function to start an upgrade installation for the add-in.	Yes
FileGroup1	The name of the first file group section. There should be a section in the ADDIN.INI file with this section name.	No
FileGroupx	The name of the "x" file group section, where x is a number. You can define any number of file groups for an add-in.	No

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

File group section of ADDIN.INI: Use a File Group section to define a group of files that have particular attributes in common. The File Group section contains the following values:

Value	Description	Required Value
TargetPath	The path to copy the files in the file group to, or the path where the files are located when you specify the RemoveFiles value.	Yes
OverwriteExisting	Specifies whether to overwrite files that already exist with the same name in the TargetPath. The default value is Y (Yes).	No
NeverUninstall	Specifies whether the files that are copied to the TargetPath can be uninstalled. If you set this value to Y or Yes, then the files are not removed from the PC when the add-in is uninstalled. The default value is N (No).	No
RemoveFiles	Specifies whether the files in the file group are to be removed from the TargetPath instead of being copied from their source path. If you set the RemoveFiles value to Y or Yes, then the other file group parameters are ignored, as well as path that are specified in the file declarations. This provides a way to clean up files even if those files were installed with the NeverUninstall value set to Y or Yes. The default value is N (No).	No
File1	The file name and extension of the file to be copied or removed if the RemoveFiles value is Y or Yes. The source path for the file defaults to the SRCPATH path symbol. You can specify other source path values if you desire.	Yes
FileX	Any number of files can exist in a file group. You should associate a value with each file. File wild card values are not supported. The file identified for each file in the file group should be incremented (File1, File2, File3, and so forth).	No

Note: The TargetPath cannot be the same as the installation path or SRCPATH when copying files.

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

PreInstallProgram section of ADDIN.INI: Use the pre-install program sections to specify programs that should run before any add-in files from file groups are copied. You can define any number of pre-install programs. Define each pre-install program in its own section with the name PreInstallProgram1, PreInstallProgram2, and so forth.

The PreInstallProgram section contains the following values:

Value	Description	Required Value
Path	The path where the program resides. You should use the predefined path symbols for this value.	Yes
Program	The file name and extension of the program to run.	Yes
CmdLine	The optional command line arguments to be passed into the program when it starts. This value is dependent on the program.	No
CheckReturnCode	Specifies whether to check for a return code value when the program finishes. If the CheckReturnCode value is Y or Yes, then the Wait value will automatically be Y or Yes. If the program returns a return code that is non-zero, then the add-in installation will stop and will not be considered installed. The default value is N (No).	No

Value	Description	Required Value
Wait	Specifies whether the iSeries Access for Windows installation programs should wait for the program to finish running before continuing. This value is ignored (or internally set to Y or Yes) if the CheckReturnCode value is set to Y or Yes. The default value is Y (Yes).	No.

See Sample ADDIN.INI file) for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

PostInstallProgram section of ADDIN.INI: These sections specify programs that should run after any add-in files from file groups are copied during the initial installation of the add-in. The program runs before the PC is rebooted. You can define any number of post-install programs. Define each post-install program in its own section with the name PostInstallProgram1, PostInstallProgram2, and so forth.

Value	Description	Required Value
Path	The path where the program resides. You should use the predefined path symbols for this value.	Yes
Program	The file name and extension of the program that will run.	Yes
CmdLine	The optional command line arguments to be passed into the program when it starts. This value is dependent on the program.	No
CheckReturnCode	Specifies whether to check for a return code value when the program finishes running. If the CheckReturnCode value is Y or Yes, then the Wait value will automatically be Y or Yes. The return code that the program returns is essentially useless in this case. The iSeries Access for Windows installation programs will consider the add-in installed at this point even if the post-install programs return a non-zero return. A non-zero return code from a post-install program does not cause the installation of the add-in to stop. The default value is N (No).	No
Wait	Specifies whether the iSeries Access for Windows installation programs should wait for the program to finish running before continuing. This value is ignored (or internally set to Y or Yes) if the CheckReturnCode value is set to Y or Yes. The default value is Y (Yes).	No

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

PreUpgradeProgram section of ADDIN.INI: These sections specify programs that should run before any add-in files from file groups are copied during an upgrade of the add-in. You can define any number of pre-upgrade programs. Define each pre-upgrade program in its own section with the name PreUpgradeProgram1, PreUpgradeProgram2, and so forth.

Value	Description	Required Value
Path	The path where the program resides. You should use the predefined path symbols for this value.	Yes
Program	The file name and extension of the program to run.	Yes

Value	Description	Required Value
CmdLine	The optional command line arguments to be passed into the programs when it starts. This value is dependent on the program.	No
CheckReturnCode	Specifies whether to check for a return code value when the program finishes. If the CheckReturnCode value is Y or Yes, then the Wait value will automatically be Y or Yes. If the return code that the program returns is non-zero, then Add-in upgrade will stop, and the Add-in will not be upgraded. The default value is N (No).	No
Wait	Specifies whether the iSeries Access for Windows installation programs should wait for the program to finish before continuing. This value is ignored (or internally set to Y or Yes) if you set the CheckReturnCode value to Y or Yes. The default value is Y (Yes).	No

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

PostUpgradeProgram section of the ADDIN.INI file: These sections specify programs that should run after any add-in files from file groups are copied during the upgrade of the add-in. You can define any number of post-upgrade programs. Define each post-upgrade program in its own section with the name PostUpgradeProgram1, PostUpgradeProgram2, and so forth.

Value	Description	Required Value
Path	The path where the program resides. You should use the predefined path symbols for this value.	Yes
Program	The file name and extension of the program to run.	Yes
CmdLine	The optional command line arguments passed into the program when it starts. This value is dependent on the program.	No
CheckReturnCode	Specifies whether to check for a return code value when the program finishes. If the CheckReturnCode value is Y or Yes, then the Wait value will automatically be Y or Yes. The return code that the program returns is essentially useless in this case. The iSeries Access for Windows installation functions will consider the add-in upgraded at this point even if the post-upgrade programs return a non-zero return. A non-zero return code from a post-upgrade program does not cause the upgrade of the add-in to stop. The default value is N (No).	No
Wait	Specifies whether the iSeries Access for Windows installation programs should wait for the program to finish before continuing. This value is ignored (or internally set to Y or Yes) if the CheckReturnCode value is set to Y or Yes. The default value is Y (Yes).	No

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

UninstallProgram section of ADDIN.INI: These sections specify programs that should run before add-in files are removed during the uninstall of the add-in by the iSeries Access for Windows Uninstall program. You can define any number of uninstall programs. Define each uninstall program in its own section with the name UninstallProgram1, UninstallProgram2, and so forth.

Value	Description	Required Value
Path	The path where the program resides. You should use the predefined path symbols for this value.	Yes
Program	The file name and extension of the program to run.	Yes
CmdLine	The optional command line arguments to be passed into the program when it starts. This value is dependent on the program.	No
CheckReturnCode	Specifies whether to check for a return code value when the program finishes. If the CheckReturnCode value is Y or Yes, then the Wait value will automatically be Y or Yes. If the return code that the program returns is non-zero, then the add-in uninstall will stop, and the add-in will not be uninstalled. The default value is N (No).	No
Wait	Specifies whether the iSeries Access for Windows Uninstall program should wait for the program to finish before continuing. This value is ignored (or internally set to Y or Yes) if the CheckReturnCode value is set to Y or Yes. The default value is Y (Yes).	No

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

MRI29xx section of ADDIN.INI: The MRI29xx sections are optional. 29xx corresponds to your iSeries National Language Version. Use these sections to specify the add-in name and description text on the iSeries Access for Windows installation add-in dialog. The MRI29xx section name specifies in the language that you should use. The system will use the selected iSeries Access for Windows language if a corresponding section for that language is in the ADDIN.INI file that matches it. Otherwise, the Name and Description that are defined in the Addin Info section of the ADDIN.INI file will be used. This gives you the capability of rolling out one add-in for multiple languages, at least as far as the iSeries Access for Windows installation add-in dialog is concerned. You must provide the Name and Description for each MRI29xx section in the ADDIN.INI file.

Value	Description	Required Value
Name	The add-in name that displays on the iSeries Access for Windows installation add-in dialog. Use this value to override the Name value in the Addin Info section of the ADDIN.INI file for the language that is defined by the MRI29xx section name. The default is the name value in the Addin Info section.	No
Description	The add-in description that displays on the iSeries Access for Windows installation add-in dialog. Use this value to override the Description value in the Addin Info section of the ADDIN.INI file for the language that is defined by the MRI29xx section name. The default is the Description value in the Addin Info section.	No

See Sample ADDIN.INI file for an example.

Note: Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

Add-in implementation notes: Add-ins can provide a fairly simple means of copying files from a server to a PC. However, add-ins can become complex when they consist of programs or both product installation images and setup programs. There are several things to consider before adding programs or setup programs to an add-in. You should test any kind of add-in thoroughly in several different environments before releasing them to several PCs.

There are several things to consider if the add-in contains programs or product setup programs:

- 16-bit setups use the WinExec function to launch the specified application. 32-bit setups use the CreateProcess function. After iSeries Access for Windows setup launches the application, it searches for the window handle of the launched application. If it finds the window handle, it waits until the application window disappears before continuing.
- The iSeries Access for Windows setup might not wait until the launched application stops before continuing when using the WAIT value. If this happens, verify that the launched application does not stop until the other sub-applications it launched stop. iSeries Access for Windows setup monitors the window handle of the primary launched application. If the application passes control to a secondary application or process and then stops, the setup will continue running immediately. It will appear as if the iSeries Access for Windows setup did not wait even though the WAIT value was specified for the program in the ADDIN.INI file.
- iSeries Access for Windows setup cannot monitor an application that does not create a window. If the specified application does not create a window, the setup will continue immediately after launching the application. Note that the window for the application need not be visible, but it must exist in order for the setup to wait.
- Some applications attempt to load dynamic link libraries (DLLs) and might not run correctly if they can not locate them. Uninstall programs and iSeries Access for Windows setup must ensure that applications can find the DLLs they require. To do this, they will change to the directory containing the application executable before starting the application.
- The launched application might fail to end while the WAIT value is specified for the program in the ADDIN.INI file. If this happens, iSeries Access for Windows setup will wait indefinitely for the launched application to complete.
- iSeries Access for Windows setup launches DOS programs with a full display DOS window. To launch a DOS program with a different type of window, you must call Windows APIs directly from another 32-bit Windows application.
- Uninstalling an add-in might not remove all add-in files from the PC if that add-in launched a product setup program. To remove the product that was installed when installing an add-in, an UninstallProgram should be specified for the add-in.
- If you call a setup program for a product and it fails, you might encounter problems. iSeries Access for Windows installation programs might consider the installation successful, even though it wasn't.
- An upgrade of an add-in might require that a 16-bit setup program run when you use the iSeries Access for Windows check service level function. The 16-bit setup programs, which use the PreUpgradeInstallx or PostUpgradeInstallx sections of the ADDIN.INI file, might not run properly on all Windows platforms.

Example: ADDIN.INI: The following is an example ADDIN.INI file that demonstrates how the different sections can be put together to describe an add-in.

Notes:

1. This ADDIN.INI file does not represent a real working add-in. The comments on the right side of the table (following the ";" mark) are for clarification only; there should be no text after the real data.
2. Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

```
;-------------------------------------------------------------------------
;
;  Addin INI file sample.
;
;  The path that the Addin is installed to on the Host server
```

```
;  will be used to identify that particular Addin.  The path name
;  should be meaningful for that Addin, and it should be used
;  consistently for that Addin when it is installed on more than
;  one server.
;
;  All entries in the Addin Info section are required except for the
;  list of FileGroups to use.  That way, an Addin can be used to just
;  start a Setup program simply by specifying the Setup in one
;  of the Program sections.
;
;  Files can be installed from any path to any path as defined by
;  the following path symbols:
;
;    WINDRIVE[\path]          Windows drive with optional path
;    CAEDRIVE[\path]          iSeries Access for Windows drive with optional path
;    CAEPATH[\path]           iSeries Access for Windows path with optional path
;    WINPATH[\path]           Windows path with optional path
;    WINSYSPATH[\path]        Windows System path with optional path
;    PROGRAMFILESPATH[\path]  Program Files path with optional path
;    COMMONFILESPATH[\path]   Common Files path with optional path
;    SRCPATH[\path]           Addin source path with optional path
;    c:\whereever             A hardcoded path is OK too.
;
;-------------------------------------------------------------------------
[Addin Info]                                ; Section required

; KeyName must match the directory in which the Addin is stored on the Host
KeyName=AddinSample                         ; Unique registry identifier

Name=Addin Sample                           ; Displayed on install panel
                                            ; if current language not
                                            ; found in this file

Description=I am the Addin Sample           ; Displayed on install panel
                                            ; if current language not
                                            ; found in this file

Version=1                                   ; Increment this to trigger
                                            ; CheckVersion to initiate a
                                            ; service or upgrade of this
                                            ; Addin.  Only a Version
                                            ; value is required.
                                            ; Servicing
                                            ; can be accomplished by
                                            ; incrementing the Version
                                            ; and adding/removing the
                                            ; appropriate file groups

FileGroup1=Update these                     ; Any number of user
FileGroup2=Only add new                     ; defined file groups
FileGroup3=More files
FileGroup4=Remove these


;-------------------------------------------------------------------------
;
;  Files to be installed
;
;-------------------------------------------------------------------------
[Update these]
TargetPath=CAEPATH\Addin1                     ; Required

OverwriteExisting=Y                         ; Optional. Default to Y

NeverUninstall=Y                            ; Optional. Default to N

File1=file1.ext                             ; Default is SRCPATH
```

```
File2=SRCPATH\Update\file2.ext                  ; Any number of files


;-------------------------------------------------------------------------
;
;  More files to be installed
;
;-------------------------------------------------------------------------
[Only add new]
TargetPath=CAEPATH\Addin1
OverwriteExisting=N
File1=addfile.ext
File2=SRCPATH\Update\addfile2.ext


;-------------------------------------------------------------------------
;
;  More files to be installed
;
;-------------------------------------------------------------------------
[More files]
TargetPath=CAEPATH\Addin1\More
File1=another.ext
File2=more.ext


;-------------------------------------------------------------------------
;
;  Files to be removed if they exist
;
;-------------------------------------------------------------------------
[Remove these]
TargetPath=CAEPATH\Addin1                       ; Required

RemoveFiles=Y                                   ; The default is N.  If
                                                ; RemoveFiles=Y the other
                                                ; file group install
                                                ; parameters are ignored, as
                                                ; well as paths specified
                                                ; in the file declarations.
                                                ; This provides a way to
                                                ; clean up files even if
                                                ; those files were installed
                                                ; with NeverUninstall=Y.

File1=nomore.ext                                ; The files are in the target path

File2=alldone.ext                               ; Any number of files
                                                ; Paths are ignored on the
                                                ; files specified.

;-------------------------------------------------------------------------
;
;  Optional programs to be called before files are installed.
;
;-------------------------------------------------------------------------
[PreInstallProgram1]
Path=SRCPATH                    ; Required.  Any of the predefined path entries
Program=whatever.exe            ; Required.  Only file name used
CmdLine=                        ; Optional.  Whatever they want
CheckReturnCode=Y               ; Optional.  Defaults to N.  Install of
                                ; this addin will not continue if this is
                                ; setup to Y and the return is non-zero.
Wait=Y                          ; Optional.  Wait for program to terminate
                                ; before continuing to execute.  The default
                                ; is Y.  If CheckReturnCode=Y, then Wait=Y
```

```
                                ; is used no matter what is specified here.


;-------------------------------------------------------------------------
;
;  Optional programs to be called after files are installed.
;
;-------------------------------------------------------------------------
[PostInstallProgram1]
Path=CAEPATH\Addin1             ; Required.  Any of the predefined path entries
Program=morestuff.exe           ; Required.  Only file name used
CmdLine=                        ; Optional.  Whatever they want

;-------------------------------------------------------------------------
;
;  Optional programs to be called before files are upgraded (Version changed).
;
;-------------------------------------------------------------------------
[PreUpgradeProgram1]
Path=SRCPATH                    ; Required.  Any of the predefined path entries
Program=whatever.exe            ; Required.  Only file name used
CmdLine=                        ; Optional.  Whatever they want


;-------------------------------------------------------------------------
;
;  Optional programs to be called after files are upgraded (Version changed).
;
;-------------------------------------------------------------------------
[PostUpgradeProgram1]
Path=CAEPATH\Addin1             ; Required.  Any of the predefined path entries
Program=morestuff.exe           ; Required.  Only file name used
CmdLine=                        ; Optional.  Whatever they want


;-------------------------------------------------------------------------
;
;  Programs to be called before files are uninstalled.
;
;-------------------------------------------------------------------------
[UninstallProgram1]
Path=CAEPATH\Addin1             ; Required.  Any of the predefined path entries
Program=cleanup.exe             ; Required.  Only file name used
CmdLine=                        ; Optional.  Whatever they want
CheckReturnCode=N               ; Optional.  Defaults to No
Wait=Y                          ; Optional.  Wait for program to terminate
                                ; before continuing to execute.  The default
                                ; is Y.  If CheckReturnCode=Y, then Wait=Y
                                ; is used no matter what is specified here.


;-------------------------------------------------------------------------
;
;  MRI sections optional sections used to specify the Addin Name and
;  Description shown on the install panel.  The currently selected CAE
;  language will be used, if a section is found that matches it.  Otherwise
;  the DefaultName and DefaultDescription will be used.  This gives
;  the administrator the capability of rolling out one Addin for
;  multiple languages (at least as far as the Install panel goes).
;
;-------------------------------------------------------------------------
[MRI2924]
Name=Addin Sample
Description=I am the Addin Sample

[MRI2999]
```

```
Name=LKASJ LKJDAS                       ; Name translated to MRI2999 language
Description=LKAJASDJKSLAJSHSDH FLSH     ; Description translated to MRI2999
                                        ;    language
```

The following ADDIN.INI file can be used to install the IBM eNetwork Personal Communications 4.3 product as a iSeries Access for Windows Add-in:

```
;-------------------------------------------------------------------------
;
;  iSeries Access for Windows - PCOMM Add-in INI file.
;
;  The path that the Add-in is installed to on the Host server
;  will be used to identify that particular Add-in.  The path name
;  should be meaningful for that Add-in, and if should be used
;  consistently for that Addin when it is installed on more than
;  one server.
;
;  All entries in the Add-in Info section are required except for the
;  list of FileGroups to use.  That way, an Add-in can be used to just
;  start a Setup program simply by specifying the Setup in one
;  of the Program sections.
;
;  Files can be installed from any path to any path as defined by
;  the following path symbols:
;
;    WINDRIVE[\path]          Windows drive with optional path
;    CAEDRIVE[\path]          iSeries Access for Windows drive with optional path
;    CAEPATH[\path]           iSeries Access for Windows path with optional path
;    WINPATH[\path]           Windows path with optional path
;    WINSYSPATH[\path]        Windows System path with optional path
;    PROGRAMFILESPATH[\path]  Program Files path with optional path
;    COMMONFILESPATH[\path]   Common Files path with optional path
;    SRCPATH[\path]           Addin source path with optional path
;    c:\whereever             A hardcoded path is OK too.
;
;-------------------------------------------------------------------------

;---------------------------------------------------------------------
; IBM grants you a nonexclusive license to use this as an example
; from which you can generate similar function tailored to your own
; specific needs. This sample is  provided in the form of source
; material which you may change and use.
; If you change the source, it is recommended that you first copy the
; source to a different directory.  This will ensure that your changes
; are preserved when the tool kit contents are changed by IBM.
;
;                             DISCLAIMER
;                             ----------
;
; This sample code is provided by IBM for illustrative purposes only.
; These examples have not been thoroughly tested under all conditions.
; IBM, therefore, cannot guarantee or imply reliability,
; serviceability, or function of these programs.  All programs
; contained herein are provided to you "AS IS" without any warranties
; of any kind.  ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO THE
; IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR
; PURPOSE, ARE EXPRESSLY DISCLAIMED.
;
; Your license to this sample code provides you no right or licenses to
; any IBM patents.  IBM has no obligation to defend or indemnify against
; any claim of infringement, including but not limited to: patents,
; copyright, trade secret, or intellectual property rights of any kind.
;
;                             COPYRIGHT
;                             ---------
;            5769-XE1 (C) Copyright IBM CORP. 1999
```

```
;            All rights reserved.
;            US Government Users Restricted Rights -
;            Use, duplication or disclosure restricted
;            by GSA ADP Schedule Contract with IBM Corp.
;            Licensed Material - Property of IBM
;-------------------------------------------------------------------

;-------------------------------------------------------------------------
;
;  Addin Info
;
;  KeyName     should match the directory the Add-in is stored into on the
;                  Host.
;  Name        is the name of the Add-in if an MRI29xx section is not  provided.
;  Description is the description of the Add-in if an MRI29xx section is not
;              provided.
;  Version     is initially set to 1.  It should be incremented with each new
;              release.
;
;-------------------------------------------------------------------------
[Addin Info]

KeyName=PCOMM
Name=eNetwork Personal Communications 4.3
Description=eNetwork Personal Communications 4.3
Version=1


;-------------------------------------------------------------------------
;
;  Optional programs to be called before files are installed.
;
;  Path            the path where the program should be run from.
;  Program         the program to run.
;  CmdLine         command line parameters passed to the program.
;  CheckReturnCode specifies whether to check the return of the called program.
;  Wait            specifies whether to wait for execution to complete
;                  before continuing.
;
;  NOTE: InstallShield SETUP programs should not be passed the -SMS command
;        line parameter.  Doing so will hang the iSeries Access for Windows
;        install.  Also, InstallShield SETUP programs are only in memory
;        long enough to uncompress and start the real install program.
;        It is not possible to launch an InstallShield SETUP program and
;        suspend the iSeries Access for Windows install until the launched
;        install has finished.
;
;-------------------------------------------------------------------------
[PreInstallProgram1]
Path=SRCPATH\enu\disk1
Program=setup.exe
CmdLine=
CheckReturnCode=N
Wait=Y


;-------------------------------------------------------------------------
;
;  MRI sections optional sections used to specify the Addin Name and
;  Description shown on the install panel.  The currently selected CAE
;  language will be used, if a section is found that matches it.  Otherwise
;  the Name and Description will be used.  This gives an administrator the
;  capability of rolling out one Add-in for multiple languages (at least
;  as far as the Install panel goes).
;
;-------------------------------------------------------------------------
[MRI2924]
```

```
Name=eNetwork Personal Communications 4.3
Description=eNetwork Personal Communications 4.3


;------------------------------------------------------------------------
;
;  Uninstall program to be called by the iSeries Access for Windows
;  uninstall program which will uninstall eNetwork Personal
;  Communications
;
;  Note: This will only work if eNetwork Personal Communications
;  is installed to the default location
;  (C:\Program Files\Personal Communications) on the PC.
;
;------------------------------------------------------------------------
[UninstallProgram1]
Path=WINPATH
Program=pcsunist.exe
CmdLine=C:\WINDOWS\UNINST.EXE -fC:\Progra~1\Person~1\DelsL1.isu -y
CheckReturnCode=N
Wait=Y
```

Note: The UninstallProgram1 section in the example will only work if IBM eNetwork Personal Communications 4.3 (PCOMM) is installed to the default location on the PC. There is a better way to uninstall PCOMM: Provide a different UninstallProgram1. This new UninstallProgram1 should determine how to uninstall PCOMM based on the environment on which the PC is running. This UninstallProgram1 would call PCSUNIST.EXE and pass it the correct command line based on where PCOMM resides on the PC. For IBM eNetwork Personal Communications 4.3, this information can be obtained from the Windows registry in the key HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall\IBM Personal Communications De-install Key.

Install or remove individual components

If you have iSeries Access for Windows installed on your PC and want to install an additional component of iSeries Access for Windows, you can use Selective Setup. Selective Setup allows you to install or remove individual components of iSeries Access for Windows. To start Selective Setup:

1. From the Windows desktop, click **Start –> Programs –> IBM iSeries Access for Windows –> Selective Setup**.
2. Follow the instructions and online help that are provided by Selective Setup

Install other language versions

You can install secondary languages from an iSeries server that has both iSeries Access for Windows (5722–XE1) and the desired secondary language installed. For more information about installing secondary languages to an iSeries server, *Install, upgrade, or delete OS/400 and related software*, SC41-5120-07.

You can install secondary languages during a new installation, an upgrade, or a selective install.

To install a secondary language during a new installation:

1. Map a drive to the iSeries QIBM sharepoint (*NetServerName*\QIBM)
2. Double-click **QIBM –> ProdData –> Access –> Windows –> Install –> Image –> Setup.exe** to start the setup program.
3. Choose a **Full** installation to have all the secondary languages, along with all the other iSeries Access for Windows components installed to your PC. Choose a **Custom** installation to select which secondary languages and components you want installed to your PC.
4. Complete the wizard.

To install a secondary language during an upgrade:

1. Map a drive to the iSeries QIBM sharepoint (*NetServerName*\QIBM)
2. Double-click **QIBM –> ProdData –> Access –> Windows –> Install –> Image –> Setup.exe** to start the setup program.
3. If you had the secondary language installed in the previous version, choose the **Basic** upgrade. If you did not have the secondary language installed, choose the **Selective** upgrade to select which secondary languages and components you want to add or remove.
4. Complete the wizard.

To install a secondary language after iSeries Access for Windows has been installed:

1. Map a drive to the iSeries QIBM sharepoint (*NetServerName*\QIBM)
2. Click **Start –> Programs –> IBM iSeries Access for Windows –> Selective Setup**.
3. In Selective Setup options, type the letter of the drive you mapped to the iSeries. Click **Next**.
4. Select the secondary languages and components you want to add or remove.
5. Complete the wizard.

After you have installed the secondary language, use **iSeries Access for Windows Properties** to select the language you want to use.

Note: If decide to install the .NET Data Provider after you have installed secondary languages, you must:

1. Use Selective Setup to uninstall the secondary language.
2. Install the .NET Data Provider.
3. Use Selective Setup to install the secondary language.

For more information about Selective Setup, see “Install or remove individual components” on page 51.

Path discovery for iSeries Access for Windows installations

Since the installation files do not all reside in the same directory, the iSeries Access for Windows installation program uses a built-in path discovery function. Path discovery navigates back through the source directory until it reaches the ProdData directory. It searches through all of the subdirectories for the various installation files. You should map your drive to the iSeries server QIBM share point (*NetServerName*\QIBM) so that the various directory paths are available to the path discovery function. This will make all installable components available to the install program. However, even if you do not have all of these directories in your directory path, you can still install most iSeries Access for Windows components.

Path discovery searches the following directories:

Table 7. Function directories

Function	Location
iSeries Access for Windows components	\ProdData\Ca400\Express\Install\Image
Secondary languages	\ProdData\Ca400\Express\Mri29xx
SSL client encryption: 128 bit	\ProdData\Ca400\Express\SSL\SSL128

Note: By default, users do not have access to the SSL directories. To allow users to install these components, change the authority PUBLIC *EXCLUDE.

Table 8. Plug-in directories

iSeries Access for Windows plug-ins	Location
IBM plug-ins	\ProdData\OpNavPlugin

Table 8. Plug-in directories (continued)

Third party plug-ins	\UserData\OpNavPlugin

Table 9. Client Access for Windows 95/NT compatible plug-in directories

Client Access for Windows 95/NT, iSeries Access for Windows compatible plug-ins	**Location**
IBM plug-ins	\ProdData\GUIPlugin
Third party plug-ins	\UserData\GUIPlugin

Table 10. Add-in directories

iSeries Access for Windows add-ins	**Location**
Add-ins	\UserData\Ca400\Express\Addin

Note: You can create a share point to the **\\NetServer\QIBM\ProdData\Express\Install\Image** directory as long as your users do not require SSL, secondary languages, plug-ins or add-ins.

Example: Response file (setup.iss)

This response file is from a Custom installation with all the components selected. Your file will differ depending on the installation type, the components you select, and your national language version.

Notes:

1. BootOption=3 in the sample response file. This means that the PC automatically restarts when the installation has completed. If you do not want this to happen, reset to BootOption=0.
2. Read the Appendix B, "Code disclaimer information," on page 69 for important legal information.

```
[InstallShield Silent]
Version=v5.00.000
File=Response File
[File Transfer]
OverwriteReadOnly=NoToAll
[DlgOrder]
Dlg0=SdWelcome-0
Count=9
Dlg1=SdLicense-0
Dlg2=SdOptionsButtons-0
Dlg3=SdAskDestPath-0
Dlg4=CwbComponentDlg-0
Dlg5=SdShowDlgEdit1-0
Dlg6=SdStartCopy-0
Dlg7=SdAskOptions-0
Dlg8=SdFinishReboot-0
[SdWelcome-0]
Result=1
[SdLicense-0]
Result=1
[SdOptionsButtons-0]
Result=103
[SdAskDestPath-0]
szDir=C:\Program Files\IBM\Client Access
Result=1
[CwbComponentDlg-0]
CAOptional-type=string
CAOptional-count=3
CAOptional-0=CAOptional\DirUpdate
CAOptional-1=CAOptional\IRC
CAOptional-2=CAOptional\OUG
Unity-type=string
Unity-count=18
```

```
Unity-0=Unity\Base
Unity-1=Unity\BasicOp
Unity-2=Unity\JobMan
Unity-3=Unity\SysConfig
Unity-4=Unity\Network
Unity-5=Unity\Security
Unity-6=Unity\UserGroups
Unity-7=Unity\Database
Unity-8=Unity\USQL
Unity-9=Unity\UTS
Unity-10=Unity\FileSys
Unity-11=Unity\Backup
Unity-12=Unity\Commands
Unity-13=Unity\PackProd
Unity-14=Unity\Monitors
Unity-15=Unity\LogSys
Unity-16=Unity\AFPMan
Unity-17=Unity\Admin
DataAccess\FileTransfer-type=string
DataAccess\FileTransfer-count=2
DataAccess\FileTransfer-0=DataAccess\FileTransfer\DataXfer
DataAccess\FileTransfer-1=DataAccess\FileTransfer\Excel
DataAccess-type=string
DataAccess-count=5
DataAccess-0=DataAccess\FileTransfer
DataAccess-1=DataAccess\ODBC
DataAccess-2=DataAccess\OLEDB
DataAccess-3=DataAccess\MP
DataAccess-4=DataAccess\WK4
Emulators\Standard\PCFont-type=string
Emulators\Standard\PCFont-count=1
Emulators\Standard\PCFont-0=Emulators\Standard\PCFont\NoAddFonts
Emulators\Standard-type=string
Emulators\Standard-count=3
Emulators\Standard-0=Emulators\Standard\Base
Emulators\Standard-1=Emulators\Standard\PdfPdt
Emulators\Standard-2=Emulators\Standard\PCFont
Emulators-type=string
Emulators-count=1
Emulators-0=Emulators\Standard
PrinterDrivers-type=string
PrinterDrivers-count=2
PrinterDrivers-0=PrinterDrivers\AFP
PrinterDrivers-1=PrinterDrivers\SCS
Toolkit-type=string
Toolkit-count=3
Toolkit-0=Toolkit\Base
Toolkit-1=Toolkit\VBW
Toolkit-2=Toolkit\TJ
Component-type=string
Component-count=16
Component-0=Install
Component-1=Base
Component-2=Ub
Component-3=CAOptional
Component-4=Unity
Component-5=DataAccess
Component-6=AFPViewer
Component-7=JRE
Component-8=JAVATB
Component-9=Emulators
Component-10=PrinterDrivers
Component-11=OCI
Component-12=OpCon
Component-13=UToo
Component-14=Toolkit
Component-15=EZSetup
```

```
Result=1
[SdShowDlgEdit1-0]
szEdit1=IBM iSeries Access for Windows
Result=1
[SdStartCopy-0]
Result=1
[Application]
Name=Client Access
Version=CurrentVersion\Selectively_Installable_Components\EZ-Setup
Company=IBM
Lang=0009
[SdAskOptions-0]
Component-type=string
Component-count=1
Component-0=Add program folder shortcut to desktop.
Result=1
[SdFinishReboot-0]
Result=1
BootOption=3
```

Upgrade iSeries Access for Windows

If you have iSeries Access for Windows installed and want to upgrade to a newer release, you should be aware of the following:

- You can install additional functions or remove functions when you upgrade iSeries Access for Windows.
- Only users with administrator authority can perform upgrades to new releases. You can use the Windows Scheduled tasks feature with remote access to allow your users to do upgrades without administrator privileges.
- If the source you are using for your iSeries Access for Windows upgrade does not have a component you had installed in your earlier release of iSeries Access for Windows, then the missing component(s) will be automatically uninstalled during an upgrade.
- The CE2 component is not available at V5R3. If the install image includes V5R3 CE3, CE2 will be replaced by CE3 during the upgrade. If the install image does not include CE3, then CE2 will be automatically uninstalled from your PC.
- Since V5R2, iSeries Access for Windows has not supported mail APIs (MAPI). When you upgrade, MAPI will be automatically uninstalled from your PC. If you are upgrading from V5R1, and still use MAPI because it ties directly to the system distribution directory for storing user information, it is recommended that you migrate from using the system distribution directory to using LDAP as a directory solution.

To upgrade from iSeries NetServer, follow the installation procedure in “Install iSeries Access for Windows from iSeries NetServer” on page 27.

To upgrade from CD-ROM, follow the installation procedure in “Install iSeries Access for Windows from CD-ROM” on page 28.

To upgrade from a Windows network drive, follow the installation procedure in “Install iSeries Access for Windows from a Windows network drive” on page 29

Publish directory information to LDAP

Use iSeries Navigator to publish directory information to LDAP:

1. Open iSeries Navigator.
2. Right-click on the system name.
3. Select **Properties**.
4. Select the **Directory Services** tab.

5. Select the user information to publish to the LDAP directory server.

For details on publishing directory information to LDAP using iSeries Navigator, see Publish information to the directory server.

Publishing directory information to LDAP can also be accomplished through the use of a character-based interface. For details on publishing directory information to LDAP using a character-based interface, see this alphabetic list of APIs.

For general information about LDAP and publishing, see iSeries LDAP (http://www.ibm.com/eserver/iseries/ldap) .

Uninstall iSeries Access for Windows from the PC

To uninstall iSeries Access for Windows:

1. Save information and close running applications.
2. On the desktop, double-click **My Computer**.
3. Open **Control Panel –> Add/Remove Programs**.
4. Select **IBM iSeries Access for Windows** from the list of installed programs, and click **Change/Remove**.
5. In the iSeries Access for Windows Setup wizard, select **Uninstall**.
6. Follow the directions of the wizard.

Note: On completion, the wizard will shut down and restart your PC.

Chapter 6. Related information

Listed below are the Web sites and online help that relate to the iSeries Access for Windows topic.

Web sites

- IBM home page
  (http://www.ibm.com)
  Visit this site for information about IBM products, services, support, and downloads.
- IBM iSeries home page
  (http://www.ibm.com/eserver/iseries)
  Learn about the iSeries family of servers.
- IBM iSeries Access for Windows home page
  (http://www.ibm.com/eserver/iseries/access/expresslinks.htm/)
  Visit this site to learn more about iSeries Access for Windows.
- IBM iSeries Access home page
  (http://www.ibm.com/eserver/iseries/access)
  This Web site includes online product information about iSeries Access.
- iSeries Navigator home page
  (http://www.ibm.com/eserver/iseries/oper_nav)
  iSeries Navigator is a powerful graphical interface for Windows clients. Visit this Web site to see what iSeries Navigator functions are available for each release
- IBM software home page
  (http://www.ibm.com/software)
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- IBM@server iSeries support
  (http://www.ibm.com/eserver/iseries/support/)
  Technical support and resources for iSeries and AS/400®.
- IBM Redbooks™ home page
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  See this site for additional skills, technical know-how, and materials.
- IBM iSeries NetServer home page
  (http://www.ibm.com/servers/eserver/iseries/netserver/)
  See this site for information about iSeries NetServer.
- iSeries Access for Windows Readme file
  (www.ibm.com/eserver/iseries/access/v5r3.htm)
  See this site for important information or technical changes to the product.
- Information APARs
  (http://www.ibm.com/servers/eserver/iseries/access/caiixe1.htm)
  An information authorized program analysis report (Information APAR) is an electronic document that is used to communicate information not found in publications, online information, critical fix information, or other sources.

Online help

After installing iSeries Access for Windows, you have a valuable resource called the online **User's Guide**. This guide helps you find and correct problems and contains how-to procedures. Use the index in the guide to search for a specific topic. The User's Guide walks you through many complex situations and helps you solve most problems.

Note: You might not have the User's Guide installed if you performed a custom or 5250 User install of iSeries Access for Windows. You can install the User's Guide through Selective Setup.

Part 3. iSeries Access for Windows: Use

IBM @server iSeries Access for Windows features a variety of PC-to-iSeries server functions, applications, and enablers. Some of the features available with IBM @server iSeries Access for Windows allow you to:

- Take advantage of .NET technologies to read and retrieve data, make changes, and run SQL server commands against data objects on your iSeries server using the new V5R3M0 IBM DB2® UDB for iSeries .NET Provider.
- Use SQL statements, stored procedures, data queues, programs, and commands to develop your client/server applications, and also give you record-level access to logical and physical DB2 UDB for iSeries database files using OLE DB Providers.
- Use Incoming Remote Command (IRC) to send commands from various systems to your personal computer, that has iSeries Access for Windows installed, and run them on a target system.
- Manage, view, and print iSeries printer output using AFP Workbench Viewer & Printer Drivers.
- Transfer data between the PC client and iSeries server by using Data Transfer. (Also see iSeries Access Data Transfer Considerations).
- Take advantage of terminal emulation and printer emulation by using PC5250.
- Manage your iSeries servers with iSeries Navigator. iSeries Navigator includes Management Central for easy administration of multiple servers.
- Set up and service an iSeries server using EZSetup and Operations Console.
- Use the Open Database Connectivity (ODBC) interface to work with your database.
- Use application development resources such as Application Programming Interfaces(APIs) and related code sample programs, header files, library files, and documentation available with the Programmer's Toolkit.
- Use file and print serving capabilities through iSeries Support for Windows Network Neighborhood (iSeries NetServer).

For complete documentation on using the IBM @server iSeries Access for Windows, see the **IBM @server iSeries Access for Windows User's Guide**, an online help system available with the product.

Chapter 7. iSeries Access Data Transfer Considerations

Following are some topics that can help you successfully take advantage of the new V5R3 data transfer support:

Transferring Unicode Text Files to the iSeries

Data Transfer To iSeries tries to simplify the process of transferring Unicode Text files to the iSeries by attempting to choose the correct file encoding. Data Transfer does this by looking for a Byte Order Mark (BOM) in the first 2 or three bytes of the Unicode Text file. The BOM indicates whether the Unicode text file is encoded as UTF-8, Unicode (little endian), or Unicode big endian. If **Data Transfer To iSeries** finds a BOM in the file it will automatically change the encoding for you. If there is no BOM in the file you must manually set the 'Translate from' option on the iSeries File Details panel to the correct encoding.

Note: By default, **Data Transfer From iSeries** adds a Byte Order Mark to Unicode Text files. Other applications such as Microsoft Notepad also add a Byte Order Mark when files are saved in a Unicode format.

RXFERPCB Available for Remote Data Transfers

A new tool, RXFERPCB.EXE, has been added to iSeries Access for Windows Data Transfer to aid in remote data transfers via Incoming Remote Command and RUNRMTCMD from the iSeries. You can find RXFERPCB in the same directory in which iSeries Access for Windows was installed.

RXFERPCB is much like RTOPCB and RFROMPCB except that it allows you to specify a user ID and password on the command line. This helps to alleviate remote signon problems that are typical when trying to do remote transfers with RTOPCB and RFROMPCB. To run RXFERPCB, specify the transfer request profile name, user ID, and password. If any parameter contains embedded blanks, you must enclose it in double quotation marks. The following shows an example invocation of RXFERPCB and its parameters.

RXFERPCB request userID password

Parameters:

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

Examples:

- rxferpcb c:\transfers\payroll.dtf myuserID mypassword
- rxferpcb "d:\saved transfers\putinventory.tto" myuserID "My pass phrase"

Using V5R3M0 Data Transfer Requests with Earlier Versions of iSeries Access on Windows 9x and NT

The default transfer **Data Transfer To iSeries** (.DTT) and **Data Transfer From iSeries** (.DTF) transfer request profiles produced by the V5R3M0 version of iSeries Access Data Transfer have been updated to allow Unicode character support. As a result, these requests will not work correctly when used with earlier versions of iSeries Access (for example, release V5R1M0) when run on a Windows 9x or Windows NT platform. This is the result of a deficiency in a Windows file processing routine used by Data Transfer. Loading a default V5R3M0 transfer request in this environment produces unpredictable results. To produce a transfer request that is usable by earlier versions of iSeries Access for Windows an option was added to Data Transfer to allow you to save the request in a format compatible with earlier versions. If this behavior is required, select 'Save As...' from the **Data Transfer To iSeries** or **Data Transfer From iSeries** 'File' menu and change the 'Save as type' to a Version 1.0 (.DTT) or Version 1.2 (.DTF) format and save the request. In addition, transfer requests in Version 1.x formats will continued to be saved in that format unless the new format is specified. When re-saving a request in Version 1.x format a warning dialog will display if Data Transfer recommends you save the request in the new format. The warning dialog will also let you save the request in the new format.

Unicode Characters Might Not Display or Print Correctly on Windows NT

Data Transfer has been enhanced to provide for full support of the Unicode character set. However, in certain cases not all characters might display correctly. This problem is very common on Windows NT systems and less common on newer operating systems such as Windows 2000 and Windows XP. The simplest workaround is to choose a display or printer font that contains a more efficient set of Unicode characters or one that contains the characters you expect to see in your data. The 'Lucida Sans Unicode' font on Windows NT systems often displays more characters than the default font selected by Data Transfer. However, this font might not be available on all systems.

Part 4. Appendixes

Appendix A. Notices

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