

LAB:
System i Access for Windows - Basic

Linda Hirsch (LLHIRSCH@us.ibm.com), IBM Rochester

© Copyright IBM Corporation, 2008. All Rights Reserved

This publication may refer to products that are not currently available in your country.

IBM makes no commitment to make available any products referred to herein.

System i Access for Windows - Lab Worksheet

This worksheet contains names and addresses that you will need to complete the lab. Substitute the values containing "xx" with your team number. For example, caxx would be ca01 for Team 1. Be sure to include a leading zero if your team number is less than 10.

Environment	Variable	Value
i5/OS	User ID	caxx where "xx" is the number next to your PC. Use two digits: e.g. for "1", use "01".
i5/OS	Password	caxxpwd
i5/OS	System (Server) Name	<provided by instructor>
i5/OS	i5/OS NetServer Name	<provided by instructor>
i5/OS	Printer queue (lib/name)	PRTCaxx
i5/OS	Install and Service directory	\\<server name>\qibm
PC	Team Number	next to your PC
PC	Windows User Name	caxx
PC	Windows Password	caxxpwd
PC5250	Workstation ID Name	CAxxDSP
PC5250	Print Session ID Name	CAxxPRT

Introduction

IBM's Windows product for PC to IBM System i™ client/server computing applications is System i Access for Windows. V5R4 and V6R1 System i Access for Windows is designed for Windows 2000, XP Professional, Windows Server 2003, Vista, and later Microsoft operating systems to offer them TCP/IP connectivity to N + or - two i5/OS releases. This lab will introduce you to some of the basic functions and features of this client.

Even if you are an experienced user of System i Access for Windows, you should still follow through the sessions since the lab sessions may be interdependent. Occasionally we have you create something in one lab and use it in a later lab.

Your lab administrators have prepared a worksheet with various system names and values that you will need to complete the lab. See "System i Access for Windows - Lab Worksheet" on page 2 at the beginning of this lab guide. The instructors will give you the values for each variable on the worksheet. You will need the values on this worksheet throughout the lab, so keep it handy!

Please ask questions if you run into problems or need clarification at any time during the lab.

Good luck with the exercises!

The exercises in this lab were originally developed by the IBM International Technical Support Organization in Rochester, MN.

Table of Contents

System i Access for Windows - Lab Worksheet	Page 2
Introduction	3
Lab 1. Setting Up and Getting Started	Page 5
System i Access for Windows and i5/OS NetServer	Page 5
Task 1: Exploring the System i Access for Windows Welcome Wizard	Page 5
Task 2: Using Selective Setup	Page 6
Task 3: Service Pack Installation Options	Page 7
Task 4: Installing an System i Access for Windows Service Pack	Page 8
Lab 2. Configuring an iSeries Connection	Page 9
Task 1: Configuring an iSeries Connection	Page 9
Lab 3. Data Transfer	Page 11
Task 1: Transferring Data from the iSeries	Page 11
Task 2: Transferring Data to the iSeries	Page 11
Task 3: Using the Data Transfer Create Database File Wizard	Page 12
Task 4: Downloading data with the Excel Add-in	Page 13
Lab 4. PC5250	Page 15
Task 1: PC5250 Display Emulation Session	Page 15
Configuring a session	Page 15
Tips for using a session	Page 16
Task 2: PC5250 Printer Emulation Session	Page 16
Configuring a session	Page 16
Printer Setup Support	Page 17
Task 3: Creating a PC5250 macro	Page 18
Recording a macro	Page 19
Running a macro	Page 19
Lab 5. Using Remote Command	Page 20
Task 1: Issuing an OS/400 command from a command prompt	Page 20
Running an OS/400 command from a command prompt	Page 20
Task 2: Enabling Incoming Remote Command (IRC) on Windows	Page 20
Task 3: Issuing a remote command from the iSeries	Page 21
Appendix A. Installing System i Access for Windows	Page 23

Lab 1. Setting Up and Getting Started

Before System i Access for Windows can be used, some iSeries licensed program products (LPPs) need to be installed on the iSeries. The following LPPs are required:

- 5761TC1 or 5722TC1 - TCP/IP Connectivity Utilities for iSeries
- 5761SS1 or 5722SS1 opt. 12 - Host Servers

The following LPPs are optional, and do not need to be applied on the iSeries server for all applications:

- 5761XE1 or 5722XE1 - System i Access for Windows
 - Enables System i Access service pack PTF application on the iSeries server
 - Allows System i Access for Windows to be installed from the iSeries server
- 5761XW1 or 5722XW1 - System i Access Family
 - Required for using System i Access for Windows licensed functions: specifically, the PC5250 display and printer emulation and Data Transfer components.

These LPPs have already been installed on the IBM System i5™ servers available for the lab. They are listed only for your reference.

System i Access for Windows and i5/OS NetServer

System i Access for Windows relies on i5/OS NetServer for file and print serving functions. The full name of this function is *iSeries Support for Windows Network Neighborhood*, although the name *i5/OS NetServer* is used throughout this lab manual.

i5/OS NetServer has been available since V4R2 OS/400. It is part of OS/400 or i5/OS and not a part of System i Access for Windows. It is also not a separately installable option or product but is included with i5/OS.

i5/OS NetServer enables a System i to perform file and print serving in a Windows network without the need to install additional hardware or software on the System i. i5/OS NetServer uses the Server Message Block (SMB) protocol to communicate with the network. The underlying network protocol is NetBIOS over TCP/IP. i5/OS NetServer has already been configured and started by the instructor. In a later lab, we will show you how to set up NetServer shares through System i Navigator to share network drives and printers to your Windows PC Network.

In addition, i5/OS NetServer can be used to install System i Access for Windows on the PC from an i5/OS file share. Tasks 2 and 3 show how you can also install System i Access for Windows subcomponents and service packs using i5/OS NetServer file shares.

Task 1: Exploring the System i Access for Windows Welcome Wizard

System i Access for Windows Lab - Basic

The System i Access for Windows Welcome Wizard is a useful tool for getting familiar with System i Access for Windows. It contains information for new users and what's new in the release. This lab shows you some of the features of the Welcome Wizard and how it may be used to find information about System i Access for Windows.

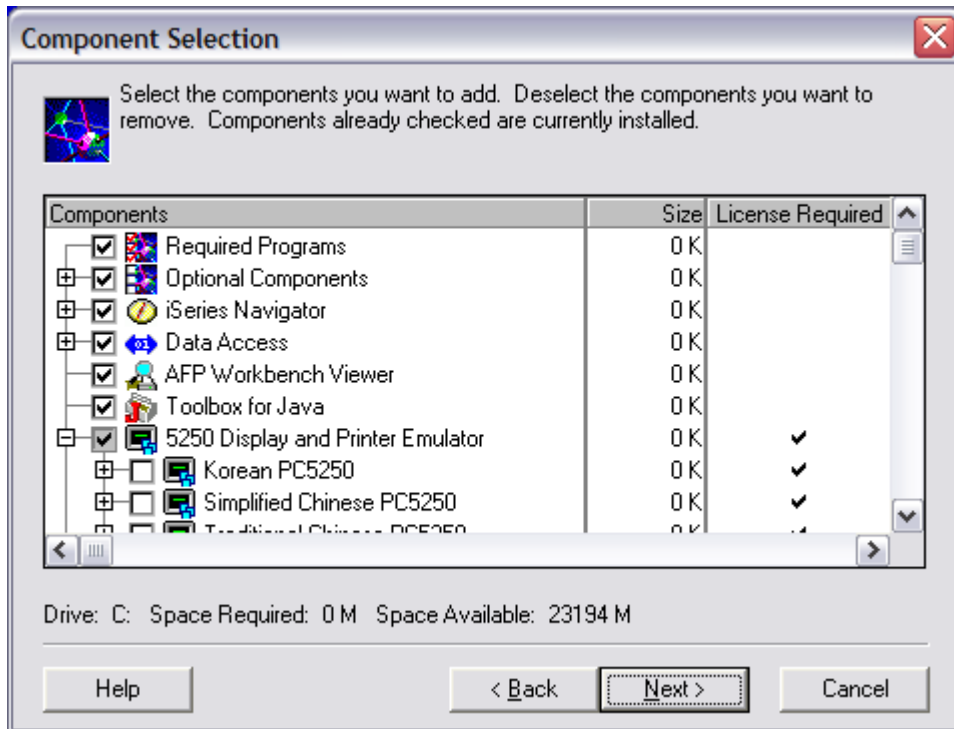
1. The Welcome Wizard should have started automatically upon starting your PC. If it is not displayed, double click on the **IBM System i Access for Windows** icon on your desktop and then double click on **Welcome Wizard** to display the welcome window.
2. If you are new to the product, select **What is System i Access for Windows**. To see a summary of functions in V5R4, select **What's New in V5R4**.
3. Explore any other sections of the welcome wizard that you may find interesting.

Task 2: Using Selective Setup

In the interest of time, System i Access for Windows has already been installed on the PC you are using. The Selective Setup application allows additional System i Access for Windows components to be installed or existing components to be removed from your PC. The following steps take you through the process of using Selective Setup. Components may be added or removed at any time after System i Access for Windows is installed on the PC.

1. Double click on the **IBM System i Access for Windows** icon on your desktop.
2. Start Selective Setup by double clicking on **Selective Setup**.
3. On the **Selective Setup** dialog, click **Next**.
4. Make sure the Selective Setup install path location matches the Install and Service directory name as provided on your lab worksheet. This directory and the installation files within it are located on the iSeries server and will be accessed using the i5/OS NetServer capability. Click **Next** to continue Selective Setup. It may take a few minutes for Selective Setup to determine which components are already installed on your PC.
5. The Component Selection panel, as shown below, contains a listing of all the components available for System i Access for Windows. Those with a check mark next to them are already installed on your PC. Those without a check mark are available to be installed on your PC.
6. Navigate the component listing to see the components installed for this lab. Do not remove components or add new components since all the components required for this lab are already installed.

System i Access for Windows Lab - Basic



7. Select **Cancel** to exit Selective Setup. On the Exit Setup dialog select **Exit Setup** to end Selective Setup.

Note: If Selective Setup is used to add additional System i Access for Windows components after a service pack has been applied, the service pack must be reapplied to get fixes for the additional components. In many cases, the additional components may not work properly until the service pack is reapplied. The next task walks you through the service pack installation process.

Task 3: Service Pack Installation Options

Service Packs contain fixes for defects found in System i Access for Windows. Service Pack installation files are normally installed as PTFs on the iSeries server by the server administrator. The IBM System i™ you are using contains the latest Service Pack available for System i Access for Windows. If the Service Pack PTFs are installed on the System i, the Service Packs can then be installed automatically, after a PC is booted and a user logged on to Windows, with a function called Check Service Level.

When you install System i Access for Windows on your PC, an entry is added to the registry that automatically starts Check Service Level. Check Service Level determines whether or not the iSeries has a more recent service pack available than what is installed on your PC. To manage Check Service Level, do the following:

1. Open the **System i Access for Windows Properties** located in the System i Access for Windows Folder or in the Windows Control Panel.
2. Select the page marked **Service**.
3. Look at the options **When to check service level**. You can specify how often Check Service Level runs or completely disable Check Service Level from running automatically. You can also delay the Check Service Level between 1 minute and 8 hours after PC startup. This helps to prevent Check Service Level from running while Windows services and other applications are still starting on your PC. Change the delay to 10 minutes.
4. Look at the **Install Options. Perform silent installation** allows a Service Pack installation without any user intervention but requires a file that controls the silent install. **Copy install image to PC before installing** is required if you try to install a Service Pack over a slow or unreliable communications link. Both options are explained in the online users guide. **Don't select any of these options.**
5. The Source directory may not be filled in with the path that should be used for Check Service Level. Make sure the Source directory contains the Install and Service directory name as provided on your lab worksheet. Note: Check Service Level will traverse the QIBM directory to find the System i Access for Windows directories that it needs.
6. Click **OK** to close System i Access Properties.

Task 4: Installing an System i Access for Windows Service Pack

Like Selective Setup, service pack installation uses the i5/OS NetServer to access the files required to install the Service Pack. System i Access for Windows can be customized to install service packs manually or automatically by checking the service pack level every specified number of days. This task uses **Check Service Level** to manually install a Service Pack on your PC. The following steps walk you through how to manually

System i Access for Windows Lab - Basic

run **Check Service Level** to see if your PC has the latest service pack. If it doesn't, Check Service Level will allow you to install the latest service pack.

1. From the Start menu select Start -> Programs -> IBM System i Access for Windows -> Service -> **Check Service Level**. This will check your service source directory for a newer Service Pack level than what is installed on your PC.
2. If your PC has the latest service pack installed you should see a message indicating that you have the same service level as the one installed on the iSeries. If so, skip to the next lab. Otherwise, follow steps 3 and 4 to go through the process of installing the service pack.
3. Click **Yes** to install the Service Pack. On the **Welcome** page, select the options **View the README file** and **Enable service pack uninstall**. Select **Next**. The readme file will display using WordPad. The Service Pack readme file contains a list of fixes in the current service pack. Review the readme file and close WordPad. Select **Next** to start copying service pack files to your PC. This process may take a few minutes to complete. Select **Finish** to end the service pack install.
4. You may or may not be prompted to reboot your PC. This depends on what files needed to be replaced by the Service Pack. Reboot if necessary. The Service Pack is now installed on your PC.

System i Access for Windows has now been successfully setup on your PC and you can continue with the next Lab exercise.

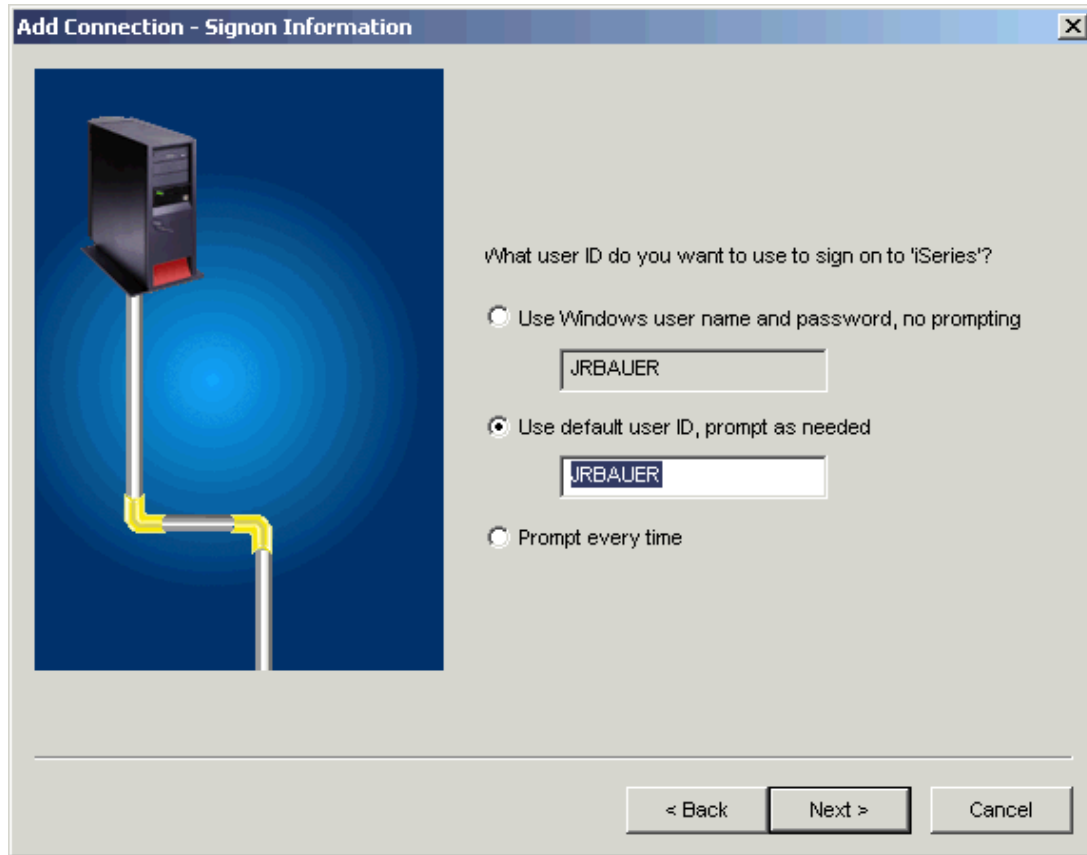
Lab 2. Configuring an i5/OS Connection

Each System i Access for Windows function will establish a connection to the server if one does not already exist. If an System i Access for Windows function is used for the first time for a System i server, the user needs to specify an System i name that is known in the TCP/IP network, or type in the IP address. The connection information is then stored in System i Navigator and is known to all System i Access for Windows functions.

In this exercise you will learn how to create an iSeries connection using System i Navigator.

Task 1: Configuring an i5/OS Connection

1. Double click on the **System i Navigator** icon on your PC desktop.
2. A message box will appear and the **Welcome to System i Navigator** wizard may start. If so, close the window.
3. If a connection to an System i hasn't been previously made, you should see a dialog indicating that no connections to System i exist. If so, continue to step 4 to add a connection to a system. If a connection was already made to system, you will see the system names listed in the left pane of System i Navigator. In this case, skip to the next Lab.
4. Select **Yes** in the message box to start creating a connection.
5. The **Add Connection** wizard starts. Enter the *server name* (from your lab worksheet) in the **Server** entry on the first page. Then click **Next**.
6. Select **Use Windows user name and password, no prompting**, as the user ID to sign on to the system, then click **Next**.



7. Click on the **Verify Connection** button.
8. A status windows display the progress of the connection verification. Once the connection is verified, click **OK**.
9. Connections to all the host servers should verify successfully. Click **OK** on the verify panel and **Finish** to close the Add Connection wizard. Your system should now display in the left pane of System i Navigator.

This exercise is now complete.

Lab 3. Data Transfer

Data Transfer is an application provided in System i Access for Windows for transferring of data between the client PC and the server. With the newest releases of System i Access for Windows, new enhancements include support for Lotus WK4 files, downloading data into a HTML template, a new data transfer wizard, support for tab delimited text files, 32K row size, and policy support have been added.

Task 1: Transferring Data from the System i

1. From the Desktop, double click on the **IBM System i Access for Windows** icon to bring up the folder, then double click on the **Data Transfer from iSeries Server** icon. This brings up the *Data Transfer from iSeries* window.
2. Select your iSeries from the *iSeries System Name* drop-down.
3. Enter **QIWS/QCUSTCDT** in the *iSeries File Name* field. You can also click on the **Browse** button to locate the file on the iSeries system.
4. Select **File** from the *PC Output Device* drop-down list. Note that you can also download to *Display*, *Hyper Text Markup Language (HTML)*, or *Printer*.
5. Enter **c:\customer.csv** in the *PC File Name* field. Click the **Details** button.
6. In the *File Details* window, select the option to **Create new file**. Select *file type* **Comma Separated Variable (CSV)**. Leave the other settings as they are and click **OK**.
7. Click on the **Transfer data from iSeries** button. You should receive a message showing the number of rows transferred when the transfer completed.
8. To save this transfer, click on **File -> Save** from the pull-down menu. Select **Desktop** as the *Save in* field and enter the file name **Task1**. Click on **Save**. This profile will be save as type: *dif (data transfer from)*.
9. Close the **Data Transfer from iSeries** window.

Note: Saving a transfer profile to the desktop creates an icon for the transfer request. This enables you to reload the transfer request easily by just double-clicking on the desktop icon. However, you can also save the transfer request to other folders and reload the request by locating it using the Windows Explorer application and double-click on it once located.

Task 2: Transferring Data to the iSeries

The Data Transfer to iSeries application allows you to replace the member data of an existing database file or create a new iSeries database file based on an existing one. In this exercise, we are going to create a new iSeries database file based on the QIWS/QCUSTCDT file, and transfer the data from the PC file created in Task 1 to the iSeries system.

1. Right mouse click on the Windows Desktop, select **New->Data Transfer to iSeries**. This brings up the *Data Transfer to iSeries* wizard. Click **Next**.
2. Enter **c:\customer.csv** in the *PC File Name* field, then click **Next**.

System i Access for Windows Lab - Basic

3. Select **Yes** to use a File Description File, then click **Next**.
4. Enter **c:\customer.fdf** as file name and click **Next**.
5. Select your **iSeries system** from the drop-down list and click **Next**.
6. Enter **CAxxLIB/QCUSTCDT1** (where **xx** is your team number) in the *Library/File(Member)* field. Click the **Next**.
7. For *Create iSeries Object* select **Create new file and member**. Click **Next**.
8. Enter some member text and click **Next**.
9. Click on the **Details** button.
10. Select **Data** file type. Enter **QIWS/QCUSTCDT** in the *Field reference file name* field. This creates a new iSeries database file based on the QCUSTCDT file in library QIWS. Leave the rest of the settings as default and click **OK**, then click **Next**.
11. Click **Finish**. This will end the wizard and bring you to the data transfer window.
12. Click the **Transfer data to iSeries** button. You should receive the message showing the numbers of rows transferred when finished.
13. Save the transfer request by clicking **File -> Save**. This profile will be saved as type: *dti (data transfer to)*.
14. Close the **Data Transfer to iSeries** window.

Task 3: Using the Data Transfer Create Database File Wizard

In Task 2, we created a new iSeries database file based on an existing iSeries database file. The Data Transfer to iSeries also offers a new wizard that allows you to create a new iSeries database file based on an existing PC file. In this exercise, you are going to create a new iSeries database file based on the customer info PC file created in Task 1.

1. Open the *IBM System i Access for Windows* folder and double click on the **Data Transfer to iSeries Server** icon.
2. In the *Data Transfer to iSeries* window, you can invoke the wizard either by selecting **Tools -> Create iSeries Database File** or clicking the **Create iSeries Database File** icon (the one that looks like a spreadsheet) from the Toolbar. When the *Create iSeries Database File Welcome* panel opens, click on the **Next** button to proceed.
3. The wizard prompts you for the name of the PC file. Enter **c:\customer.csv** in the *File name* field. You also can use the **Browse** button to locate the file. Click on **Next**.
4. By default, the wizard will automatically sense the type of the PC file (in this case, it should be **Comma Separated Variable CSV**). You can change the file type by selecting the relevant type from the drop-down list. Click **Next**.

System i Access for Windows Lab - Basic

5. You need to specify a file description file (FDF) name. By default, the wizard uses the existing **customer.fdf** file. Click **Next**.
6. If your PC file consists of date, time or decimal values, then it is important to ensure that the format used in your PC file matches those used on the iSeries system. Click the **Data Options** button to view the type of formats available. When done, click on **OK** to return to the previous panel and then click on **Next** to proceed to the next panel.
7. In order to create the database file, the iSeries needs information on the database layout. To get this information necessitates scanning the PC file to obtain the number of fields and field types needed to create the database. Click on the **Start Scan** button to begin scanning the PC file. When the scan is completed, click on **Next** to proceed.
8. A list of fields determined by the scanning is shown. You can change the field attributes by selecting the field and click the Details button. For example, you could change the generic field names Fx to something meaningful. (If you use the wizard on file types that contain headers, e. g. 1-2-3 or Excel, then the field names would be extracted from the header of the PC files.) You can also add or remove fields by right-clicking at the fields. Click **Next**.
9. Click the arrow down button and select the iSeries system name from the drop-down list. Click **Next**.
10. Enter **CAxxLIB/QCUSTCDT2** (where **xx** is your team number) in the Library/File field. This will be the file name of the new iSeries database file. Click **Next**.
11. Enter a brief description for the new iSeries database file and click **Next** to proceed.
12. Confirm your create options and click **Next** to create the database file on the iSeries system. If you need to change any of the options shown, use the **Back** button.
13. The wizard shows a message telling you that the database file was created successfully. Click **Finish**. If you receive an error message, notify the instructor.
14. You should now be back at the *Data Transfer to iSeries* window. Note that the values for each field are automatically set to those specified in the wizard. **Important!** No data has been transferred to the iSeries system at this point in time.
15. Click **Transfer data to iSeries** button to complete the transfer request. Again, a message pops up showing the number of rows transferred when the transfer completes.
16. Click **File -> Save**. Select **Desktop** for the *Save in* field and enter the file name as **Task3**.
17. Close the **Data Transfer to iSeries** window.

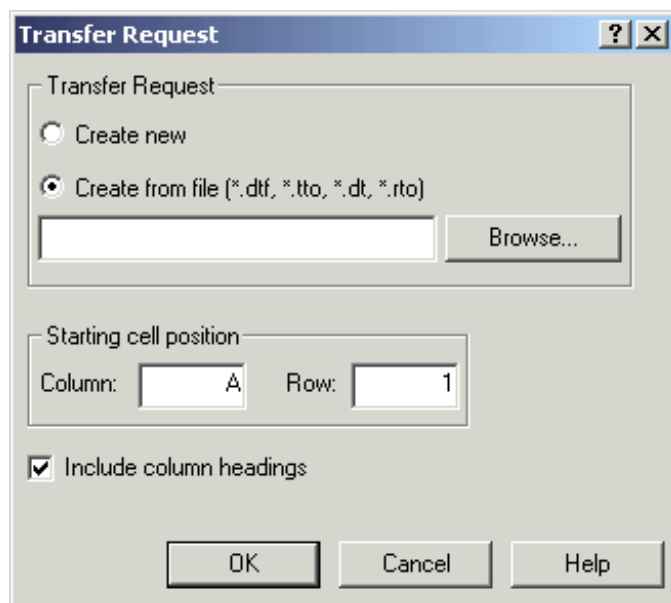
Task 4: Downloading data with the Excel Add-in

This task shows you how to use the System i Access for Windows Data Transfer Add-in for Microsoft Excel to transfer data directly from the iSeries into an Excel spreadsheet.

1. On your Windows desktop, click '**Start->Programs->Microsoft Excel**' to start Microsoft Excel.
2. Excel should have created a default workbook "Book1" when it was started, if not, select the **File** menu, click **New...** and double-click on **Workbook** to create a new workbook.
3. Select the workbook by clicking on it.

System i Access for Windows Lab - Basic

- Click on the **Data** menu and select **Transfer data from iSeries...** You'll see the following panel.



- Notice that you can either create a new transfer request or use an existing request. Choose to create a new transfer request by clicking on **Create new**.
- Click **OK** to start the create a new request.
- On the system name panel choose the iSeries server name from your worksheet. Click **Next**.
- Enter **QIWS/QCUSTCDT** as the Library/File(Member) to download. Click **Next**.
- Explore the options on the *Customize File Transfer* panel. Notice the similarities between these options and the options available in Data Transfer From iSeries. Close any option windows you may have opened. Be sure to choose cancel if you changed any options, otherwise your transfer may not run correctly.
- Click **Next**.
- On the **Save request to file** panel, leave the **File name** field empty since we do not need to store this request.
- Click **Finish**. Data will be transferred directly into your Excel spreadsheet!
- Close the Microsoft Excel application. Choose not to save the worksheet.

Lab 4. PC5250

The objective of this exercise is to familiarize you with the Personal Communications 5250 emulator that ships with System i Access for Windows. Note that you are over half way through your lab exercises and just seeing your first "green screen". Although there have been many functions added to System i Navigator, there are still occasions you will need the use of 5250 emulation screens.

Task 1: PC5250 Display Emulation Session

Configuring a session

1. Right mouse click on an empty spot on your Windows Desktop.
2. Select **New->iSeries Desktop Icon**.
3. In the pull down list, select **PC5250 Emulator** as application, then click **Next**.
4. Select the **name** of your iSeries (if it is on the pull down list, otherwise enter the name or the IP address of your iSeries). Click **Next**.
5. For **icon text**, enter the iSeries system name. Then click **Next**.
6. On the last page, click **Finish**. This will create an icon your Windows Desktop that will start PC5250



As400.as4

when you double click on it.

7. Double click on the icon you just created. PC5250 will start, and a configuration screen will come up.
8. The name of the system you will be connecting to should be in the *System Name* field. Click on **Properties**. *Properties* allows you to set up your session to use Secure Sockets Layer (SSL) if SSL has been installed on the PC. Select **Not Secured**. Click **OK** to close the *Properties* window.
9. Specify your **Workstation ID** that is given on the worksheet. The iSeries uses this Workstation ID to create and assign a dedicated virtual display device description under TCP/IP.
10. Select **Display** for the type of emulation. Then select the size of the emulation you desire. For this exercise chose **27x132**. This selection permits the session to dynamically adjust the size of the display to either 80 or 132 column as needed. (Try displaying *QPJOBLOG* or other 132-column wide spool files later on to see the dynamic adjustment of the session).
11. Select the appropriate **Host Code Page**. The default selection "37 United States" should already be selected.
12. Select the **Bypass Sign-on** checkbox. This option will allow you to bypass the iSeries sign-on screen after PC5250 establishes communications with the iSeries system.
Note: The iSeries system value *QRMTSIGN* must be set to **VERIFY* to enable this support.
13. Select the **Auto-reconnect** checkbox. This option will allow PC5250 to automatically reconnect the session to the iSeries should the session be disconnected.
14. Review the **Port number** setting. The default telnet setting for UDP and TCP/IP is **23**.

System i Access for Windows Lab - Basic

15. Click **OK** and PC5250 will establish the connection. Observe connection activity messages on the *status bar* at the bottom of the session window.
16. To save the session, select the **File** pulldown menu, then the **Save** option.

Note: Another method of saving profiles is to use the *Save on Exit* feature. This method will allow any session changes to be saved automatically on closing the session. To enable this feature, select the **Edit** pulldown menu, then select **Preferences->Exit**. Under **Save Settings on Exit**, select **Always** to enable this feature. Another useful option is **Confirm on Exit Session**. When this option is selected, PC5250 will confirm your decision to exit the session.

Tips for using a session

Setting the PC5250 cursor to a blinking block will help you easily locate where it is. To do this:

1. Select the **Edit->Preferences->Appearance** pulldown menu, then select **Display Setup** and the Display Setup window will appear.
2. Set **Shape** to *Block* and **Blink** to *Yes*. Click **OK**.

You may have noticed when PC5250 established the connection above, the status bar located at the bottom of the display window displayed a description of the connectivity activity. To display a chronological listing of these activities, do step 3.

3. Select the **View** pulldown menu, then select **Status Bar History**. The Status Bar History window will appear. Review your *Status Bar History* log.

There is an optional feature that allows the iSeries error message that normally is shown on line 24 of the display to be shown on the Status bar. To enable this feature:

1. Select the **Edit->Preferences->Appearance** pulldown menu, then select **Window Setup**. After the Window Setup panel appears, see if **5250 line 25** under the *Status Bar* box is checked and click **OK**. Any iSeries error messages you may receive during this session will now be displayed in the status bar of your PC5250 display instead of overlaying line 24.
2. Position the PC5250 cursor at the beginning of an input field in the display and press **Backspace** key. You will notice an error message on the status bar saying "Cursor in protected area of display".
3. Press the PC5250 **Reset** key (the left Ctrl key).

Task 2: PC5250 Printer Emulation Session

Configuring a session

1. Open the **Emulator** folder within the **IBM System i Access for Windows** folder on your desktop and click on the **Start or Configure Session** icon. This will bring up the *IBM Personal Communications* display. Choose **New session**.
2. Specify the name of the system you will be connecting to in the **System Name** field.
3. As **Workstation ID** use the Print session ID name in your worksheet.

System i Access for Windows Lab - Basic

4. Select **Printer** for the type of emulation then select the **Setup** button. This will bring up the *PC5250 Printer Emulation Setup* panel.
5. Review the settings on this panel. You can specify the location of the iSeries message queue to receive iSeries printer messages; choose a font for printing iSeries print files or setup **Transform Print Data** which enables *Host Print Transform* (HPR) to support printing iSeries data to PC printers. Click **Cancel** to close the setup panel.
6. Select the appropriate **Host Page Code**. The default, **037 United States**, should be selected.
7. Select the **Auto-reconnect** checkbox. This option will allow PC5250 to automatically reconnect the session to the iSeries system should the session be disconnected.
8. Review the **Port number** setting. The default telnet setting for UDP and TCP/IP is **23**.
9. Click **OK** and PC5250 will establish the connection.
10. To save the session, select the **File -> Save** option. Specify a file name, e.g. **caxxprt** (where "xx" is your workstation number), for the session profile and click **Save**.
11. The first time you save a session, PC5250 will ask you if you want to create an icon for the session to your desktop. Click **Yes**, then select the Desktop folder located under All Users and click **OK**. Click **OK** on the last confirmation message.
12. Notice that the icon created with this method looks different from the iSeries Desktop Icon we created



for the Display session.

Note: You can set up other features of the printer session by selecting the **File -> Printer Setup** or **Page Setup** option.

Printer Setup Support

PC5250 allows you to print your output to several destinations. You can:

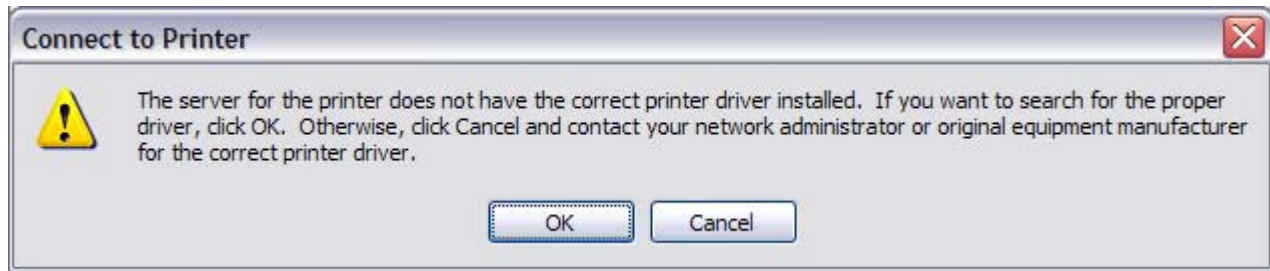
- Print to whatever printers you define under Windows.
- Print to one file and append to the file each time (*Print to Disk - Append*)
- Print to separate files with the same name but a running number extension (*Print to Disk - Separate*)

During this exercise, we will explore Printer setup options. First, we will add an iSeries printer share to the printers defined for your PC.

1. On the Windows "Start" menu, select **Printers and Faxes**. Double click on **Add printer**.
2. On "Welcome to the Add Printer Wizard", click **Next**.
3. On "Local or Network Printer", select **A network printer, or a printer attached to another computer**. Click **Next**.
4. On "Specify a Printer", select '**Connect to this printer (or to browse for a printer..)**' and for the **Name**, use `\\<server name>\prtcaxx`, entering your server name from your lab worksheet and where "xx" is your workstation number. Click **Next**.

System i Access for Windows Lab - Basic

5. If you get this dialog



then click **OK**. (If you do not get this dialog, skip to step 6.) Then on "Add Printer Wizard", for **Manufacturer** and **Printers**, leave the first item in the list selected. Click **OK**.

6. On "Default Printer", select **No** for "Do you want to use this printer as the default printer?".

7. Click **Next**. Click **Finish**.

Next you will associate the Printer Emulation Session that you created earlier in Task 2 with the iSeries shared printer that you just defined for your PC.

1. Double click on the icon you just created for your printer emulation session.
2. Select the **File -> Printer Setup** option from the pulldown menu.
3. From the *Printer Setup* panel, select the shared iSeries printer \\<server name>\prtcaxx, where "xx" is your workstation number.
4. Click on **Setup...** and note the options you have. (They depend on the printer type, of course.) Click **Cancel** when you are finished looking at the setup options.
5. Check the **Use PDT** checkbox. Note that the **Setup...** button is now gray. Instead the **Select PDT** button is now active.
6. Click on **Select PDT** and specify the correct PDT driver to use for your printer. For example, a IBM 4019 LaserPrinter that would be IBM4019.PDT. In this exercise, you can select any .PDT. Then click **OK** to finish setting up the printer.
7. Select **File->Page Setup**.
8. Look at the options available for page setup.
9. Click **OK** and then **close** the PC5250 printer session.

Task 3: Creating a PC5250 macro

In this task you will record a simple macro for use in a PC5250 emulation session. A macro is a script that can be run to perform various tasks. A macro can, for example, take you through a sequence of screens with a click of a button. A macro can also be used for things such as saving a large OS/400 command for repeated reuse. By recording a macro you are simply recording keystrokes sent to the PC5250 emulator. A recorded macro is the simplest of macros. The macro language VBScript available in PC5250 allows for much more complex operations. The System i Access for Windows Advanced lab has an example of a much more complex macro.

Recording a macro

System i Access for Windows Lab - Basic

1. Connect to the iSeries by opening the PC5250 you created in task 1.
2. Sign on to the iSeries using the user ID and password from your worksheet, then hit **Enter**.
3. Get to the OS/400 Main Menu.
4. Click on the **Actions** menu and select **Start Recording Macro...**
5. Type **runsql.mac** as the file name of the macro to Record Macro/Script as. Click **OK**. You are now recording a macro.
6. On the OS/400 Main Menu screen go to the top line of the Selection or command entry area and type **STRSQL** and hit **Enter**.
7. On the SQL entry screen type the statement **SELECT * FROM QIWS/QCUSTCDT** and hit **Enter**.
8. Click on the **Actions** menu and select **Stop Recording Macro**. Keystroke recording is now turned off and your macro is complete.
9. Hit the **F12** key to exit out of the SQL results screen. Hit **F3** to exit STRSQL. Hit **Enter** to select the default option to save and exit the SQL session.

Running a macro

1. While on the OS/400 Main Menu, place your cursor on the first position of the selection or command entry field on the bottom of your screen.
2. Click on the **Actions** menu and select **Start Playing Macro/Script...**
3. In the Macro/Script drop list choose **runsql** as the script to run and click **OK**.
4. Your script should now run STRSQL, enter the SQL statement, run the statement, and end up at the results screen.
5. Exit out of STRSQL (like you did in step 9 above), sign off the system and close your PC5250 session.

Lab 5. Using Remote Command

The objective of this exercise is to show you how easy it can be to run i5/OS or OS/400 commands right from your PC. You can do this without using System i Navigator or PC5250 emulation screen. It also shows you how to issue commands from your iSeries server to run directly on your workstation by using incoming remote command.

Task 1: Issuing an OS/400 command from a command prompt

An OS/400 command can be easily run right from your workstation. It can be run as part of a batch file, from a program, from the 'Run...' option on your start menu, or from a command prompt. The System i Access for Windows command used to issue an OS/400 command is `rmtcmd.exe`. It may be used to issue any OS/400 command where user interaction is not required.

Running an OS/400 command from a command prompt

1. Using the Windows "Start" menu, select **Start->Run...**
2. In the "Open" field type **cmd** (the Windows command prompt) and click **OK**.
3. You should see a command prompt window open on your desktop with a flashing cursor after `C:\>`.
4. Type **rmtcmd CRTLIB CAxxTMP //<system name>** (note that there is a blank space after **CAxxTMP**). Where xx is your team number and <system name> is your iSeries server name. Hit **Enter** to create a new library on the system. Sign on to the system with your iSeries user name and password if necessary.
5. You should see the message **CPC2102 - Library CAxxTMP created**. This means that the library was successfully created on the system.
6. Type **exit** to close the command prompt window.

Task 2: Enabling Incoming Remote Command (IRC) on Windows

This task shows you how to enable your workstation to accept incoming remote commands from the iSeries server. Enabling incoming remote commands allows you to issue a command from the iSeries to run on your workstation. Follow these steps to enable the System i Access incoming remote command service on your Windows desktop. Note: Other versions of Windows also support incoming remote command, but require different steps to get it enabled. The System i Access for Windows User's guide has information for enabling incoming remote command on the various Windows platforms. Search the User's guide for "Incoming Remote Command" for more information.

1. On the Windows "Start" menu select **Settings** then **Control Panel**. The Windows control panel should display on your desktop.
2. Open the **Administrative Tools** folder.
3. Double click on **Services** to open the services window.
4. Locate the **System i Access for Windows Remote Command** service in the right pane of the window.
5. Double click on it to display **System i Access for Windows Remote Command Properties**.
6. Click on the **Log On** tab.

System i Access for Windows Lab - Basic

7. Check the box next to **Allow service to interact with desktop**. This allows commands coming from the iSeries to interact with your windows desktop. The commands you normally issue may not require this option enabled. You need to enable this option for the purpose of the lab.
8. Click on the **General** tab.
9. In **Startup type**, select **Automatic**. This means that the Remote Command service will start each time Windows starts. Press the **Apply** button.
10. Click on the **Start** button to activate the service. Service status should change from Stopped to Started.
11. Click **OK**. Click the **X** button in the top right corner of the services window to close the window.
12. Your PC is now enabled to accept incoming remote commands.

Task 3: Issuing a remote command from the iSeries

This task shows you how to issue a command from the iSeries server to run on your workstation. To do this you must know the IP name or address of your workstation. It also requires that you enable System i Access Remote Command, which you did in Task 2. The steps below show you how to get the IP Address for your workstation. Follow these steps to complete this task.

1. Using the Windows "Start" menu, select **Start->Run...**
2. In the "Open" field type **cmd** (the Windows command prompt) and click **OK**.
3. You should see a command prompt window open on your desktop with a flashing cursor after **C:\>**.
4. Type **ipconfig** to get your network configuration information.
5. Locate the line **IP Address** and write the "dotted decimal" address here: ____ . ____ . ____ . ____
6. Start an emulation session. You may use the desktop icon you created in task 1 of the PC5250 lab.
7. Sign on to the iSeries with the user name and password from your worksheet.
8. From the OS/400 Main Menu, type **runrmcmd** and hit **F4** to prompt the command.
9. In the command field, enter (retaining the single quotes) **'C:\windows\system32\write.exe'**.
10. In the remote location field, enter the IP Address you wrote down in step 5. Include the decimal points between the digits. Your IP Address should look something like 10.10.10.50, although the numbers will be different.
11. In the "Type" field, enter ***IP** to use TCP/IP.
12. In the "Remote user ID" field, enter the PC user name from your worksheet.
13. Hit the **Page Down** key to see more options.
14. In the "Remote password" field, enter the PC password from your worksheet. The password is case sensitive!
15. Hit the **Enter** key to run the remote command. The WordPad application should have started on your PC. You have just used an OS/400 command to run a command on your Windows workstation!
16. Close the WordPad application and sign off and close your emulation session.

Congratulations!

You have finished the System i Access for Windows Basic lab.

Please delete any objects on your PC desktop that
you created during the lab.

Appendix A. Installing System i Access for Windows

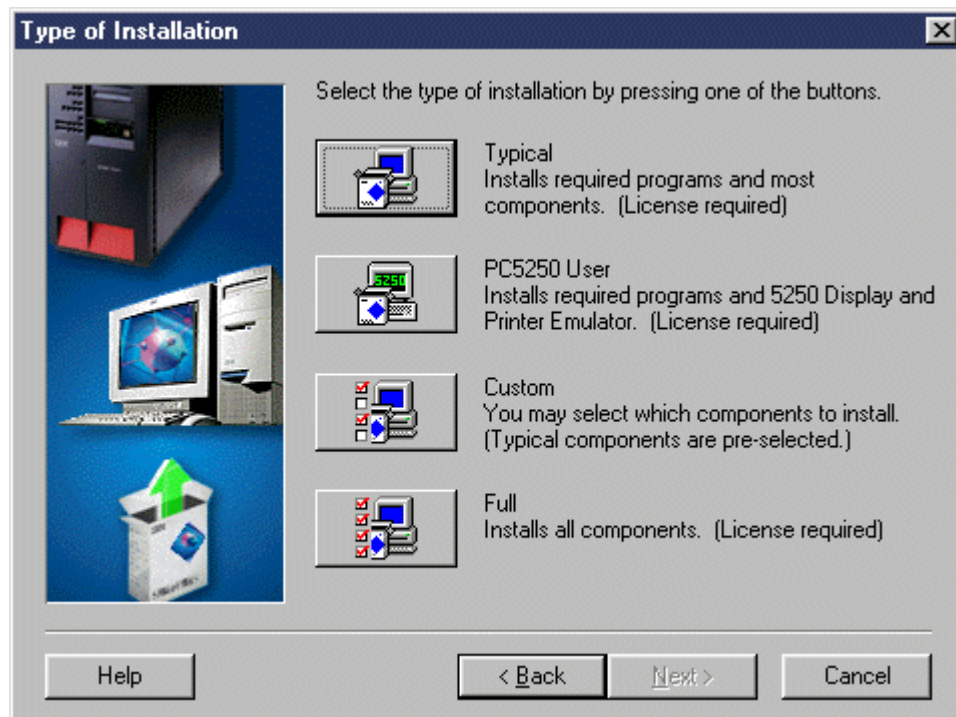
This section explains how to install System i Access for Windows on the PC using i5/OS NetServer. This section is for your reference only. System i Access for Windows has already been installed on the PC you are using for this lab, so you should NOT perform this install on your lab PC.

Prior to doing the install, you will need to make sure the LPPs listed on page 6 of your lab handout are installed on your iSeries, and that NetServer is configured and running. For information on configuring and starting NetServer, see the i5/OS NetServer home page at: <http://www.ibm.com/eserver/iseries/netserver>

1. On Windows 2000/XP: Click **Start** -> **Search** -> **For Files or Folders**. Under **Search for other items**, click on **Computers**. In the **Computer Name** field, enter the i5/OS NetServer name of your iSeries. Click on **Search Now**.
2. Double click on the i5/OS **NetServer** that was found.
3. Double click on each of the following directories: **QIBM** -> **ProdData** -> **CA400**->**Express** -> **Install** -> **Image**.
4. Start the installation by double clicking on **SETUP.EXE**.
5. After the installation wizard loads and the welcome screen is displayed, click the **Next** button.
6. Then the licensing information for the System i Access for Windows product is displayed. Click the **Yes** button to continue the install.
7. Now the type of installation can be selected by clicking on the large button to the left of the install type description.

Note: that selecting a **Typical** install will not install all of the System i Access or System i Navigator sub-components. To select which pieces are installed, click the **Custom** button.

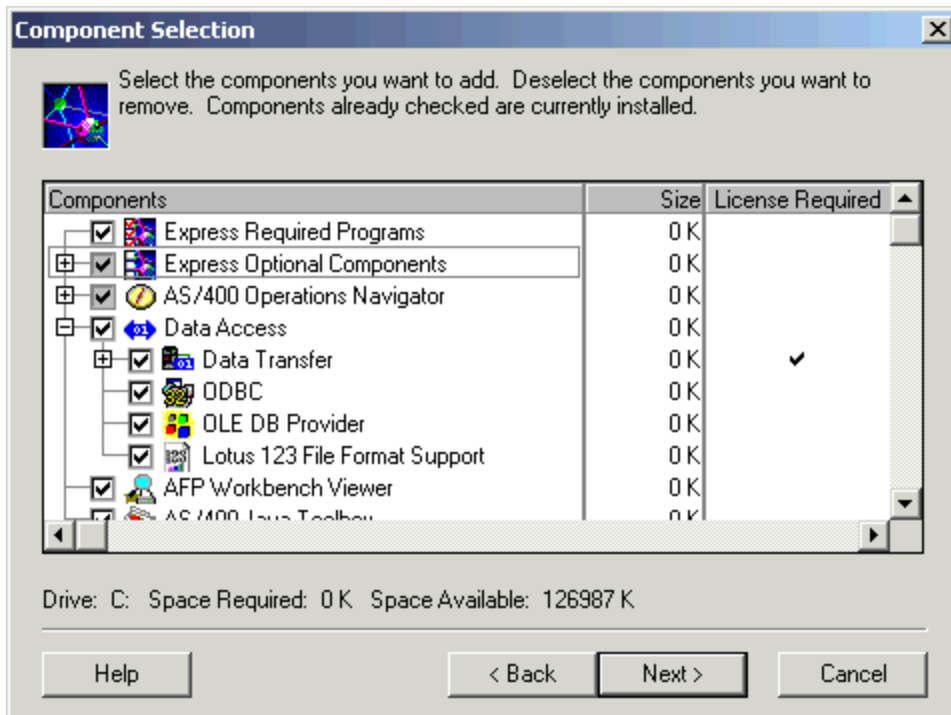
System i Access for Windows Lab - Basic



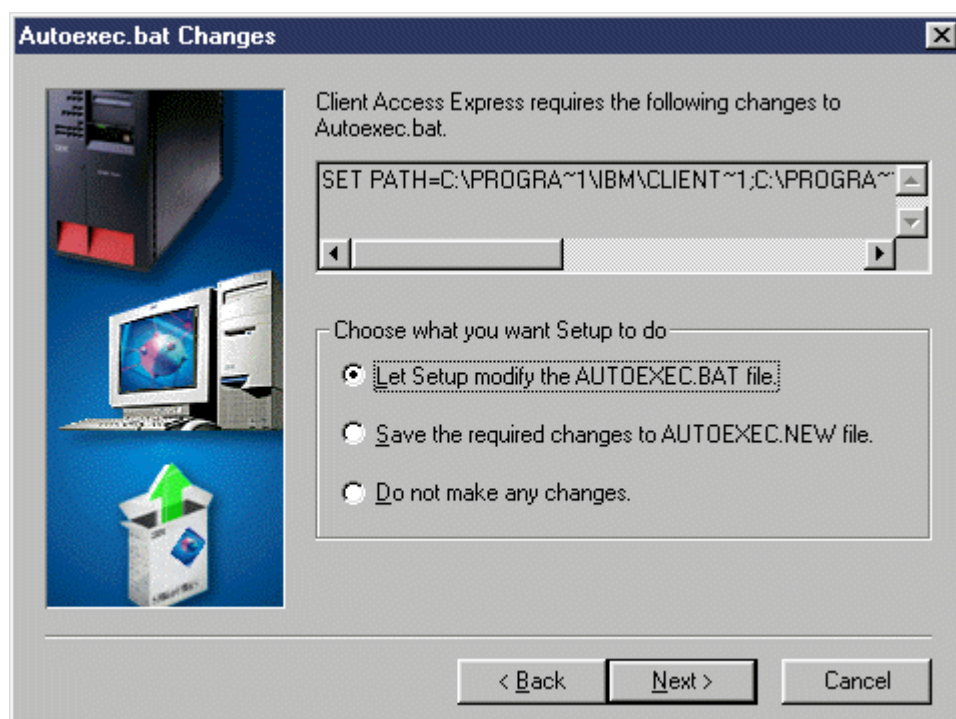
8. Now you will be prompted for the destination folder to install System i Access for Windows in. Accept the default and click the **Next** button to continue.

System i Access for Windows Lab - Basic

9. Since we chose a Custom install in step 7, the Component Selection window will now be displayed. Here you will need to select the components of System i Access for Windows to be installed.



10. To select a component for install, click to place a check mark in the box to the left of the component. To view the sub components of a component, click the '+' to the left of the box to expand the view. Once you have selected all the components to be installed, click the **Next** button to continue.
11. If you are installing System i Access for Windows on a Windows 95/98 PC, and select to install PC5250 Emulation, the AUTOEXEC.BAT Changes dialog is displayed next. (Note that V5R1 Client Access Express is the last release that supports Windows 95. V5R2 System i Access for Windows is the last release that supports Windows 98 and Me.) Since the PC5250 Emulator was selected to be installed, the Install Shield wants to add System i Access path statements. This screen is displayed to inform you that changes will be made to your **AUTOEXEC.BAT** file. Just click the **Next** button to continue the install and allow the **AUTOEXEC.BAT** file to be changed. If you are installing on Windows NT 4.0, Windows 2000, or a later Windows operating system, the path will be updated automatically.



12. You will now be asked for the name of the Program Menu Shortcut. Leave the default of **IBM System i Access for Windows** and click the **Next** button to continue.
13. Then you will be shown a synopsis of the install options you have selected up to this point. Click the **Next** button to begin copying files to your PC.
14. After all files have been successfully copied to your PC, you will be prompted with the options to Add program folder shortcut to the desktop and view the **README** file. Leave both options checked and click the **Next** button to continue.
15. Quickly browse through the **README** file and then close it.
16. Now you will be told that the setup is complete. Click the **Finish** button to complete the install. **Note:** Normally, you must reboot the PC before using System i Access for Windows. However, after a brand new install on a PC, you can first install a Service Pack (if one is available) before rebooting the PC.

TRADEMARKS

The following are trademarks or registered trademarks of the IBM Corporation in the United States, other countries, or both:

IBM AS/400 OS/400 System i System i5 iSeries DB2 i5/OS

Java and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Microsoft, Windows, and Windows NT are trademarks of Microsoft Corporation in the United States, other countries, or both.

Lotus is a registered trademarks of Lotus Development Corporation and/or IBM Corporation.

Other company, product, and service names may be trademarks or service marks of others.