Agilent IO Libraries Suite 15.0 or higher

Installation and Configuration Instructions for use with the Agilent ChemStation Rev. B.04.02 or higher

Agilent Technologies

Notices

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In This Guide ...

This manual describes how to install and use the IO Libraries Suite 15.0.

1 Installing the Agilent IO Library Suite and Drivers

This chapter outlines the installation of the IO Library Suite which is necessary to control 82350 A/B GPIB cards as well as 82357 A/B USB-GPIB Interfaces. Secondly it outlines the installation and the configuration of these Cards and Interface Drivers.

2 Upgrading Existing IO Libraries

This chapter explains how to upgrade from existing IO Libraries to IO Libraries Suite

3 Additional Information regarding the Agilent IO Library Suite

This chapter outlines the changes made by the installation, and lists IO Services and Processes.

4 Installation troubleshooting

This chapter gives support in case of installation problems. In addition it gives instructions how to change or remove your installation.

5 Agilent IO Libraries Suite 15.0 Documentation

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1 Installing the Agilent IO Library Suite and Drivers

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Install the GPIB Cards / USB-GPIB Interfaces Drivers 11

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This chapter outlines the installation of the IO Library Suite which is necessary to control 82350 A/B GPIB cards as well as 82357 A/B USB-GPIB Interfaces. Secondly it outlines the installation and the configuration of these Cards and Interface Drivers.

Prerequisites

To use the GPIB 82350A or 82350B Card, or the 82357 A/B USB-GPIB Interface, it is necessary to install or upgrade the corresponding driver and configuration software, located in the \IO_Libs directory on the Agilent ChemStation DVD or the Agilent GPIB Libraries for Instrument control CD-ROM. To install IO Libraries suite 15.0 proceed according to the steps described in this manual.

The Agilent ChemStationB.04.02 and greater requires version 15.0 of IO Libraries Suite. These libraries are supported under Windows XP Professional.

Be sure to follow the correct installation description.

NOTE Before installing the GPIB Interface Driver, verify that this communication component is supported for your instrument in use. Refer to manual *Installing your ChemStation* of your appropriate instrument or to the table below.

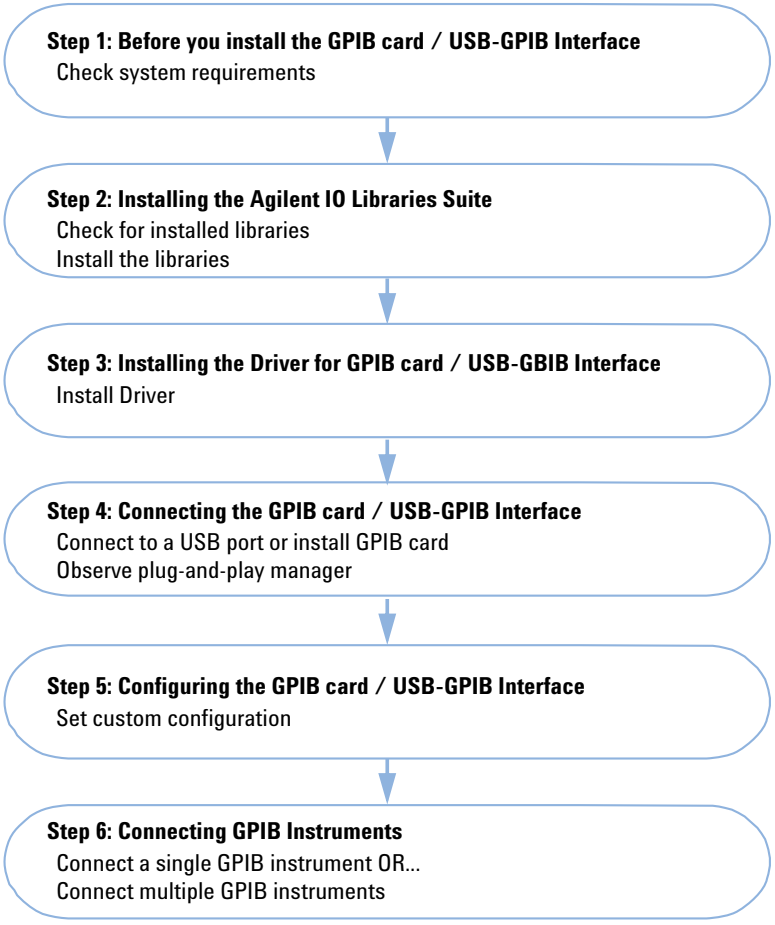
Table 1 Supported devices with the 82350 A/B GPIB Card

Instrument	Supports 82350A GPIB Card	Supports 82350B GPIB Card
1600 Capillary Electrophoresis	Yes	Yes
7100 Capillary Electrophoresis	No	No
Agilent 1200/1100 modules	No	No
Agilent 4890 D GC	No	Yes
Agilent 5890 II GC	No	Yes
Agilent 6850 GC	No	No
Agilent 6890A / 6890 Plus GC	No	Yes
Agilent 6890N / 7820 / 7890A GC	No	No
Agilent A/D Systems	No	No
Agilent LC/MS and GC/MS Systems	No	No

Table 2 Supported devices with the 82357 A/B GPIB Interface

Instrument	Supports 82357A GPIB Interface	Supports 82357B GPIB Interface
1600 Capillary Electrophoresis	Yes	Yes
7100 Capillary Electrophoresis	No	No
Agilent 1200/1100 modules	No	No
Agilent 4890 D GC	No	Yes
Agilent 5890 II GC	No	Yes
Agilent 6850 GC	No	No
Agilent 6890A / 6890 Plus GC	No	Yes
Agilent 6890N /7820 / 7890A GC	No	No
Agilent A/D Systems	No	No
Agilent LC/MS Systems	No	No
Agilent GC/MS Systems	No	No

Installing the IO Library Suite 15.0



To establish the communication to your instrument using the IO Library suite, you need to perform the following steps:

1 Install IO Library Suite *before* connecting any USB-GPIB Interface or installing any new GPIB card. Otherwise disconnect your devices and remove the USB-GPIB Interfaces from your PC.

2 Re-connect your device and initialize/install your GPIB card/ USB-GPIB Interface Drivers.

3 Start the Agilent Connection Expert to configure your connection see "Configure the 82350 A/B GPIB Card or the 82357 A/B USB-GPIB Interface" on page 25.

NOTE You must have administrator privileges to install the IO Library Suite and to run the Agilent Connection Expert later for configuration.

NOTE IO Libraries Suite 15.0 requires Microsoft Visual C++ Redistributable to be installed prior the installation of the application. If the Microsoft Visual C++ Redistributable is not present, it will be installed by the IO Library Suite automatically, before starting the IO Library Suite installation.

NOTE IO Libraries Suite 15.0 requires Microsoft Framework 2.0 to be installed prior the installation of the application. If the Microsoft Framework 2.0 is not present, it will be installed by the IO Library Suite automatically, during the IO Library Suite installation. You will only need to install the .NET Framework once, even if you remove and reinstall or upgrade your 15.0 later.

1 Disconnect any USB/GPIB interface connected to your PC. Do not install any 82350A/B GPIB card prior the installation of the IO Library Suite.

2 Close all other applications on your PC.

3 Using the Windows Explorer, locate and start IOLibSuite_15_0_MR_EXE.exe in the IO_Libs directory of your ChemStation DVD. If Microsoft C++ Redistributable is not present, the InstallShield comes up and will list the application as requirement. Press **Install** to start the installation of the Microsoft C++ Redistributable.

   The IO Suite InstallWizard Welcome Screen is displayed afterwards.

4 Click **Next** and on the upcoming License Agreement Screen, accept the License Agreement and than click **Next** to continue the upgrade.

5 Select **Typical** for the installation type and press **Next** to continue.

6 On the upcoming window, verify the path statements for the installation and press **Install** to start the installation process. The system will start now installing the files to your disk. If the Microsoft .NET Framework has not

previously been installed on your PC, you will see the .NET Framework files being copied onto your computer. The Microsoft .NET Framework provides necessary infrastructure for Agilent IO Libraries Suite utilities.

7 The 15.0 have been successfully installed now. Leave the screen with **Finish**. You will see the IO Control icon in the taskbar notification area of your PC screen. (The taskbar notification area is where the clock is usually displayed).

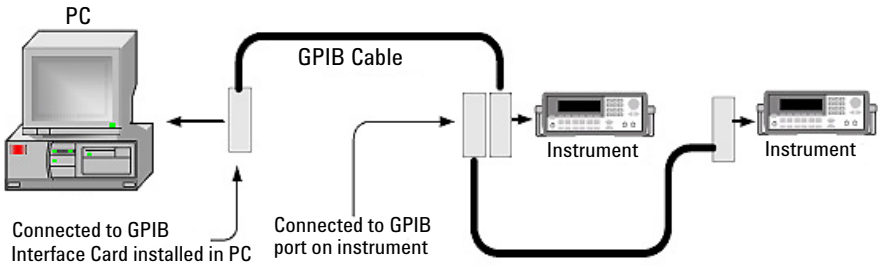
Figure 1 Finish Device Driver Installation in Windows XP

8 Reboot your PC.

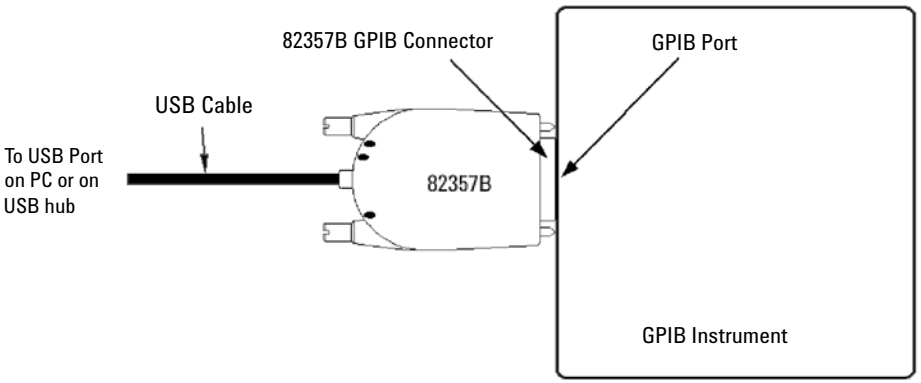
Install the GPIB Cards / USB-GPIB Interfaces Drivers

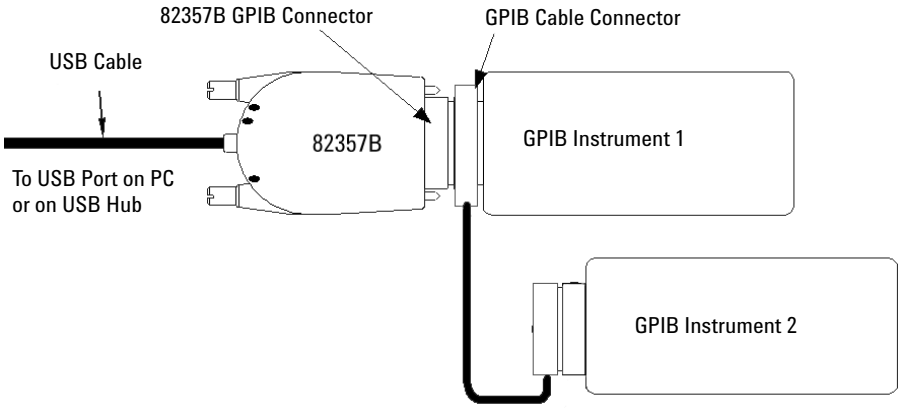
This section outlines the initialization and installation of the various drivers in use with Agilent ChemStation.

- 82350 A/B GPIB cards (only driver installation necessary): see Figure on page 11.



- 82357 A/B USB-GPIB Interfaces (initialization and installation necessary): The USB Interface device needs to be plugged into the GPIB connector (see Figure on page 11)





NOTE Depending on your PC and previously installed software/hardware, the driver initialization and installation procedure may slightly differ compared to the outline in this document. Please compare the screens carefully.

1 Connect your 82357A/B USB-GPIB Interface or built-in the 82350 A/B GPIB card into your PC. Leave your instrument switched off.

2 As Windows XP Professional starts after power cycling, a tool tip will notify about new hardware (GPIB card or USB-GPIB Interface) and the **Found New Hardware Wizard** will open. Select **Option 2** and click **Next** (see Figure 2 on page 13).

Figure 2 Found New Hardware Wizard

The New Hardware Wizard will display the new detected hardware:

- Agilent Technologies 82350 PCI GPIB

- Agilent Technologies 82357 USB- GPIB Interface

3 Select **Option 2** and click **Next** (see Figure 3 on page 14).

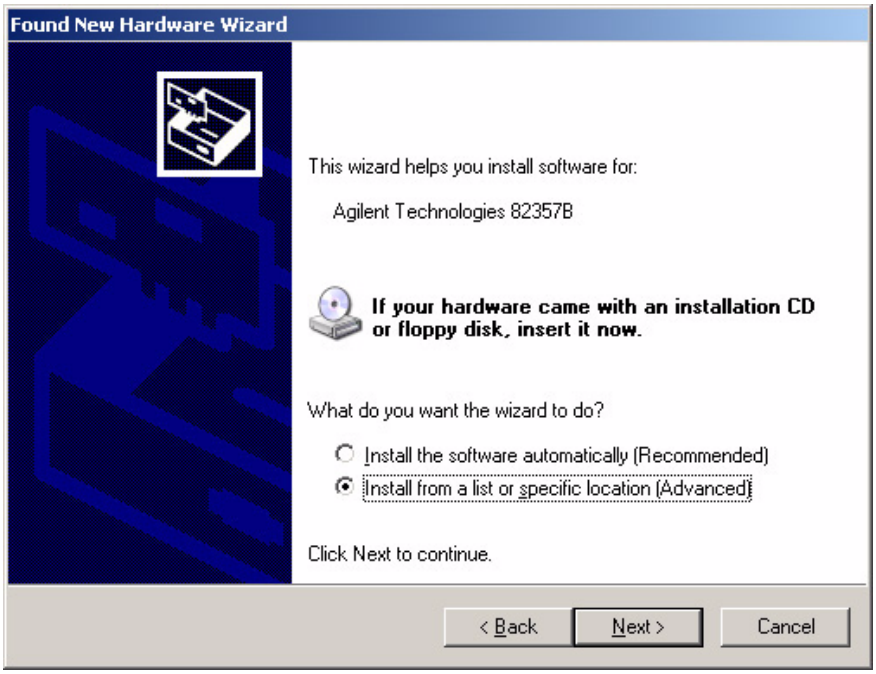


Figure 3 Found New Hardware Wizard

4 The New Hardware Wizard will now search for the correct drivers of the newly found hardware. Select the option **Don't search. I will choose the driver to install**, and click **Next** (See Figure 4 on page 15).

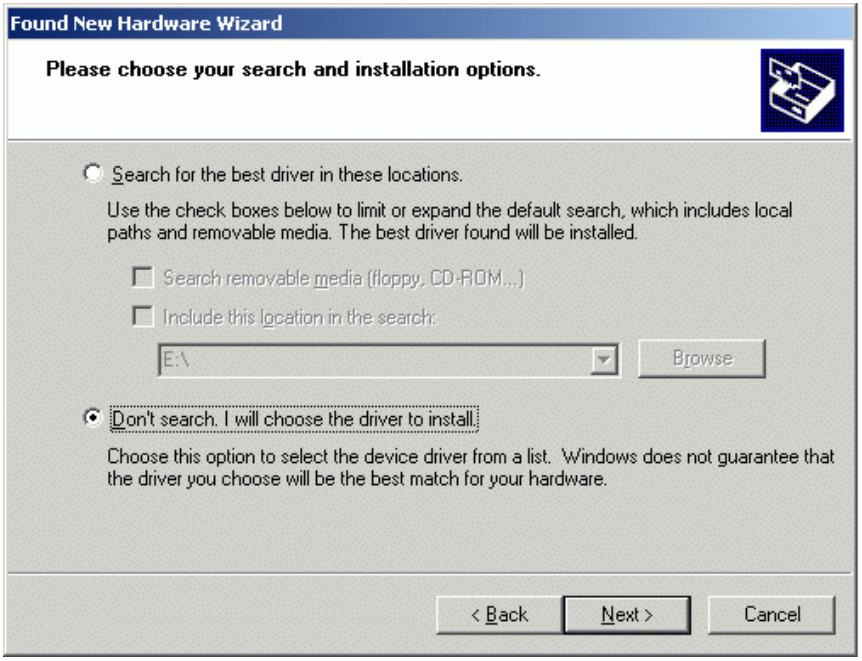


Figure 4 Install Hardware Device Drivers

5 Select 82350 PCI or 82357 USB-GPIB (depending on your used hardware) and click **Next**. The initialization of the device driver will start.

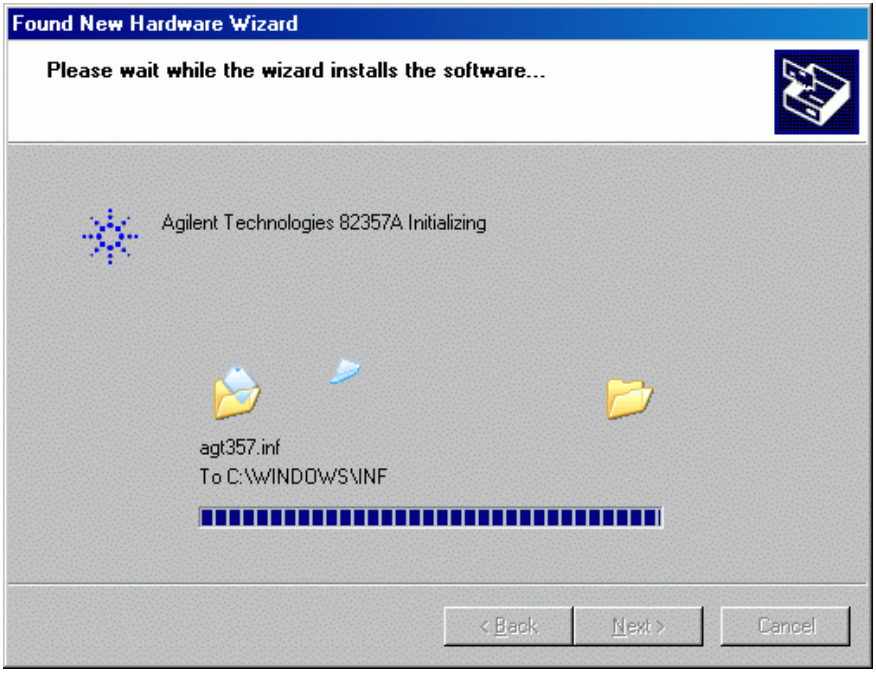


Figure 5 Driver Initialization of the 82357A/B USB-GPIB Interface

6 On the completion screen of the hardware wizard select **Finish** (see Figure 6 on page 17).

- If installing a 82350 A/B GPIB card, the user will get a notification in the task bar that the hardware is installed and ready to use. In order to configure your 82350A/B GPIB card, you need to start the Agilent Connection Expert (see Figure 6 on page 17).
- In case of the 82357 A/B USB-GPIB interfaces, the USB-GPIB interface requires a driver initialization and driver installation. The InstallShield will take care of this action for the user.

  Continue with step 7.

Figure 6 Finish Installation USB-GPIB interface

7 The hardware wizard detects now the USB-GPIB device a second time and the **Found New Hardware Wizard** starts again.

8 Select **Yes, now and every time I connect a device** and click **Next** (see Figure 7 on page 18).

Figure 7 Found New Hardware Wizard Windows XP, second detection

9 Select **Install from a list or specific location (Advanced)** and click **Next** to start the installation (see Figure 8 on page 19).

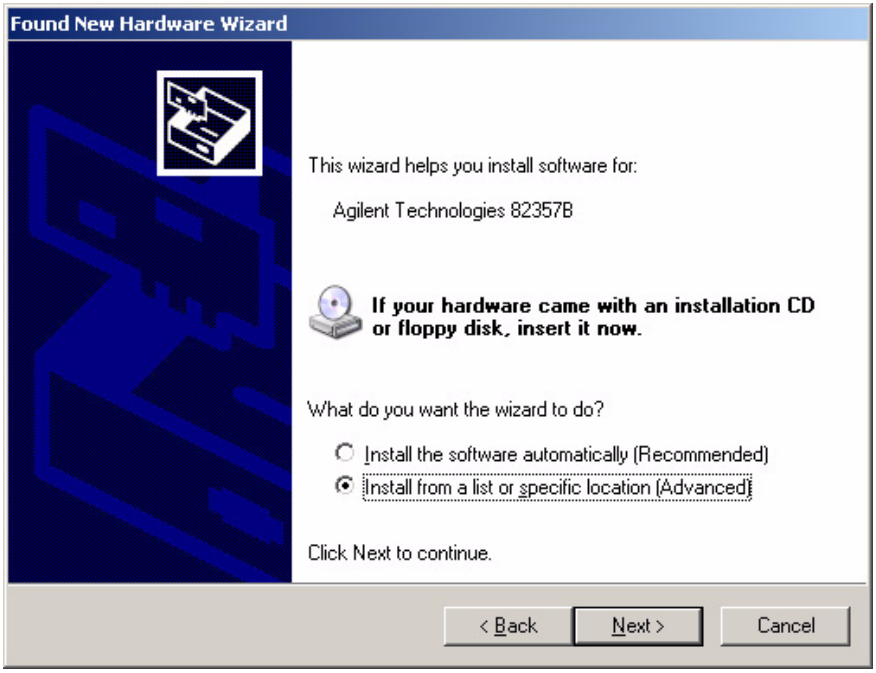


Figure 8 Found New Hardware Wizard Windows XP, second detection

10 The New Hardware Wizard will now search for the correct drivers of the newly found hardware. Select the option **Don't search. I will choose the driver to install**, and click **Next** (See Figure 4 on page 15).

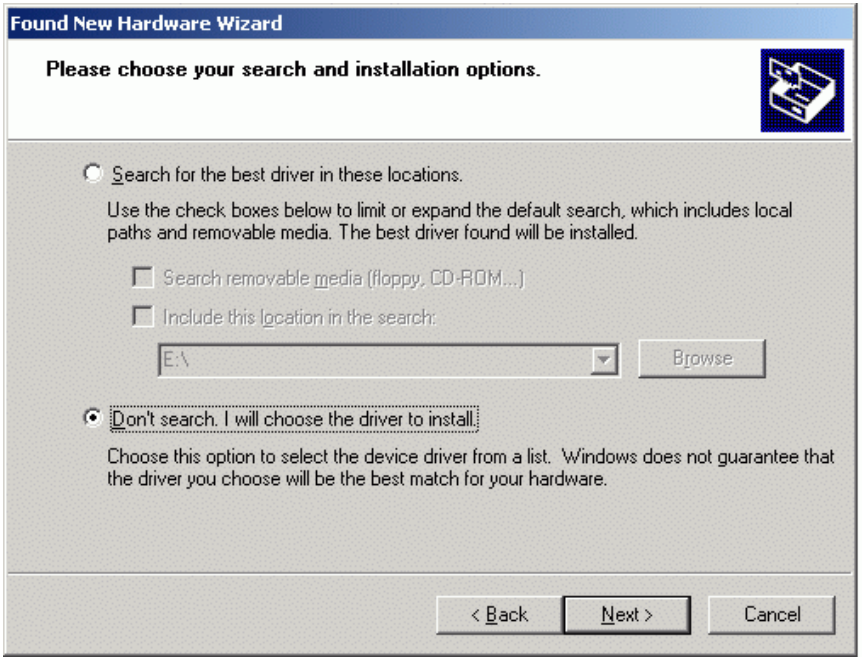


Figure 9 Install Hardware Device Drivers

11 Select 82350 PCI or 82357 USB-GPIB (depending on your used hardware) and click **Next**. The initialization of the device driver will start.

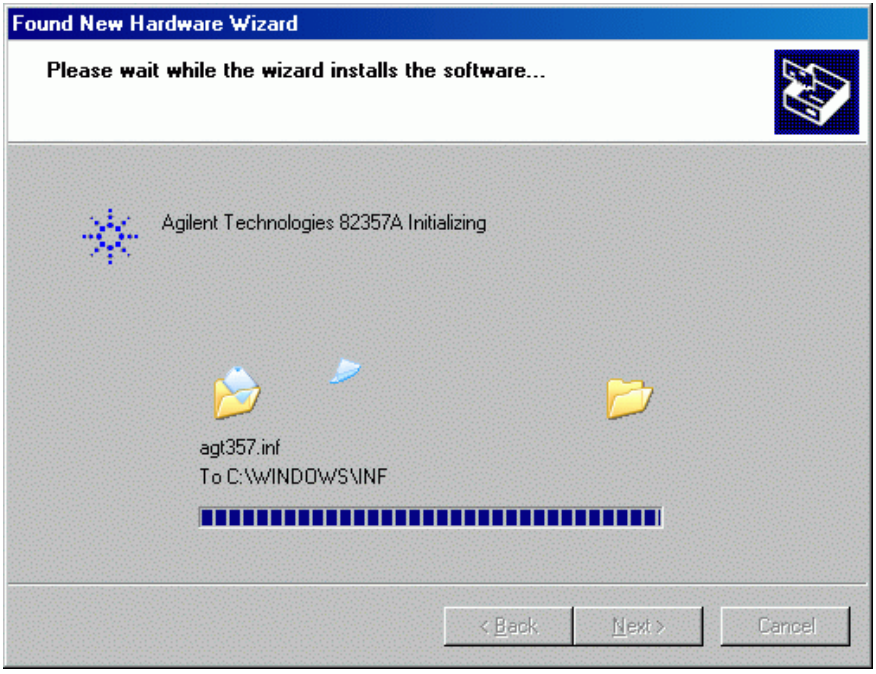


Figure 10 Driver Initialization of the 82357A/B USB-GPIB Interface

12 If you install a 82357B USB-GPIB Interface device the system will perform a Hardware Logo test for Windows XP systems. Proceed the installation by clicking **Continue Anyway** (see Figure 11 on page 22). The installation of the device driver continues.

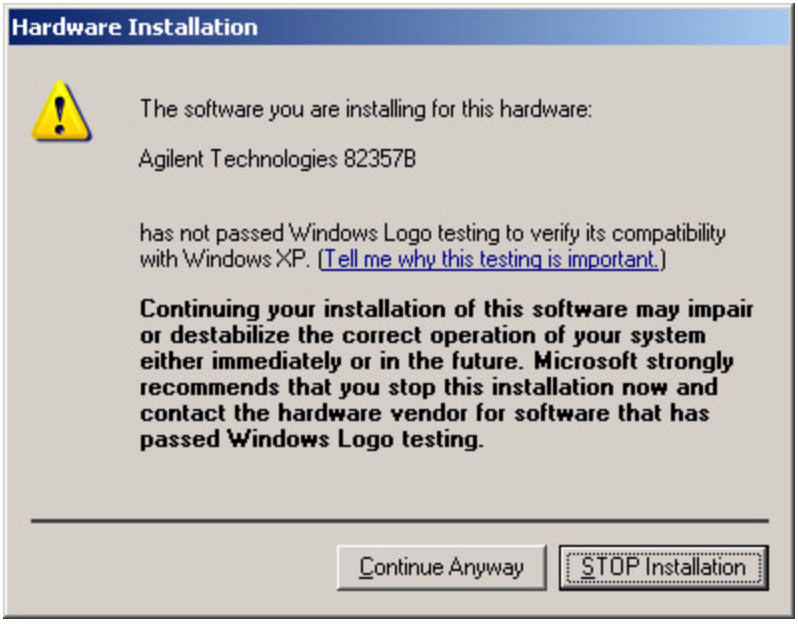


Figure 11 Hardware Installation Logo Test

13 The system installs the 82357A/B USB-GPIB Interface device. This might take some seconds (see Figure 12 on page 23).

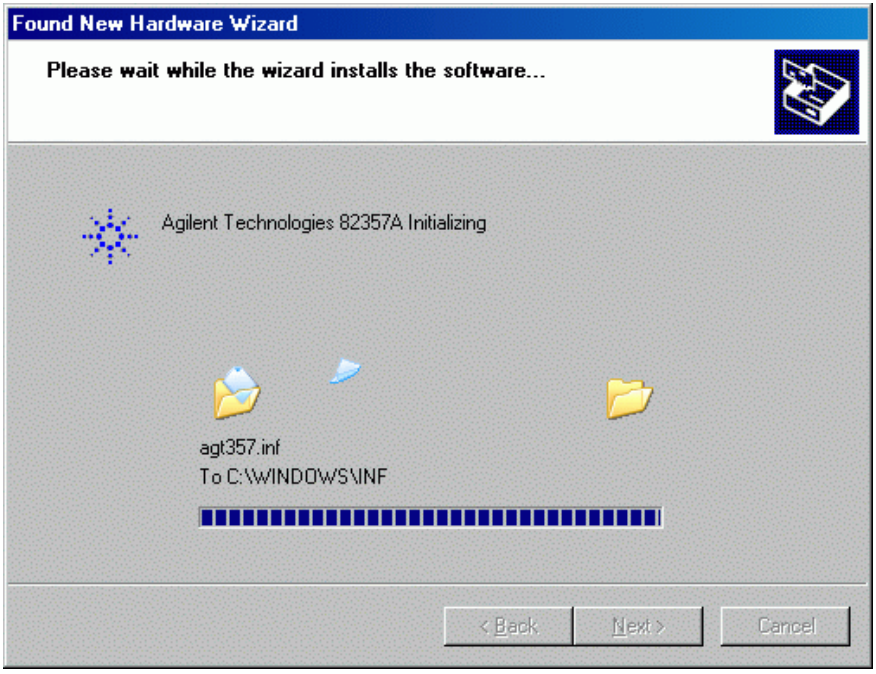


Figure 12 Installing the 82357A/B USB-GPIB Interface, second detection

14 Select **Finish** to end the installation. In order to configure your 82357A/B USB-GPIB interface, you need to start the Agilent Connection Expert after you rebooted your PC (see "Configure the 82350 A/B GPIB Card or the 82357 A/B USB-GPIB Interface" on page 25).

Figure 13 Finish Installation USB-GPIB interface

Configure the 82350 A/B GPIB Card or the 82357 A/B USB-GPIB Interface

The Agilent Connection Expert is a software utility that helps you to quickly get your instruments connected to your PC and troubleshoot connectivity problems. You can use Connection Expert to:

- Configure instrument I/O interfaces
- Automatically discover instruments that are connected to your PC or to your local area network (not recommended for ChemStation Instruments)
- Browse the structure and connections of your test system (including your PC, instruments, and interfaces)
- Detect and troubleshoot connectivity problems in your system

NOTE

Starting the Agilent Connection Expert the system autodetects all available devices. This can lead to connection issues using the Electrophoresis System. Please follow the outline steps in this document and do not use the available **Refresh all** function.

1 Start the Connection Expert by clicking the IO Control (IO icon in the Windows notification area), and click **Agilent Connection Expert** (see Figure 14 on page 26).

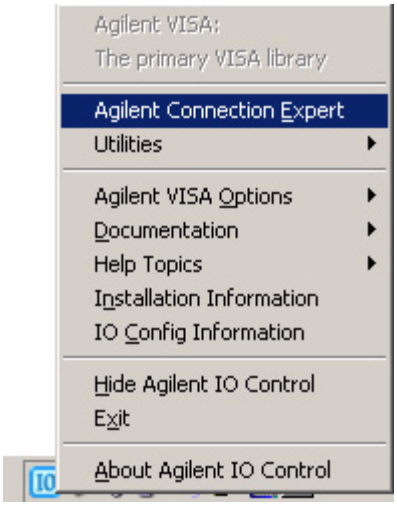


Figure 14 Run Connection Expert

2 Close the Welcome Screen of the Connection Expert.

The Connection Expert automatically detects most interfaces and instruments, and will assign names and other default configuration settings. You can click on them to see their properties (displayed in the right-hand pane). In order to use it with ChemStation controlled instruments, the interfaces and devices need to be configured manually for proper communication.

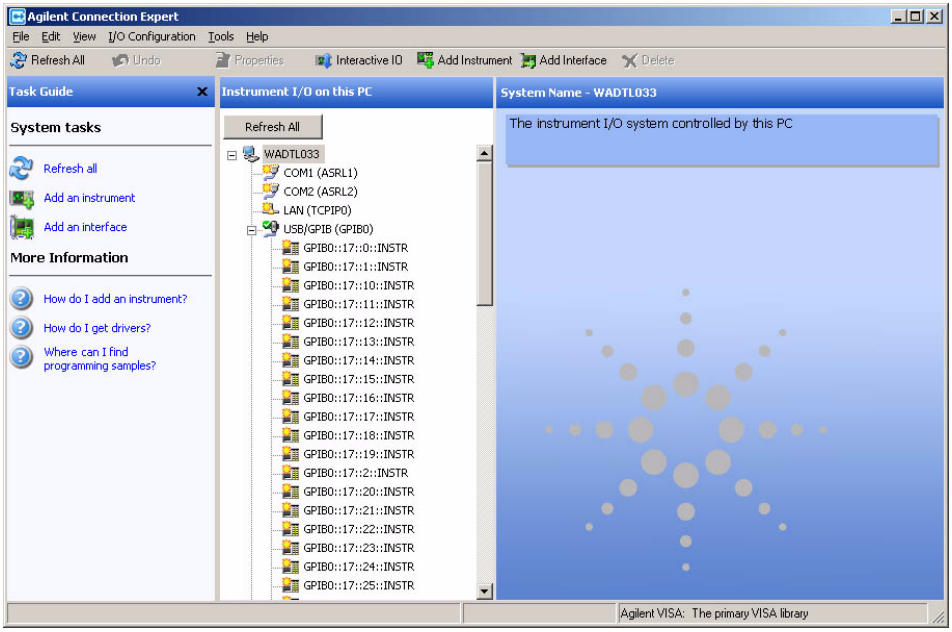


Figure 15 Connection Expert with online instrument automatically configured

If your GPIB Instrument is switched on, the Connection Wizard automatically detects the online instrument and assigns the default configuration.

In case of the Capillary Electrophoresis, this assignment is not correct. The connection needs to be established manually. Leave this instrument turned off! This prevents the assignment of incorrect default configuration.

3 In the section **Instrument I/O of this PC** all currently available communication ports are listed. Select the first port, e.g. COM 1 and press delete (using the Task Guide, Menu Bar or the right mouse-click function). Please remove ALL available ports one after the other.

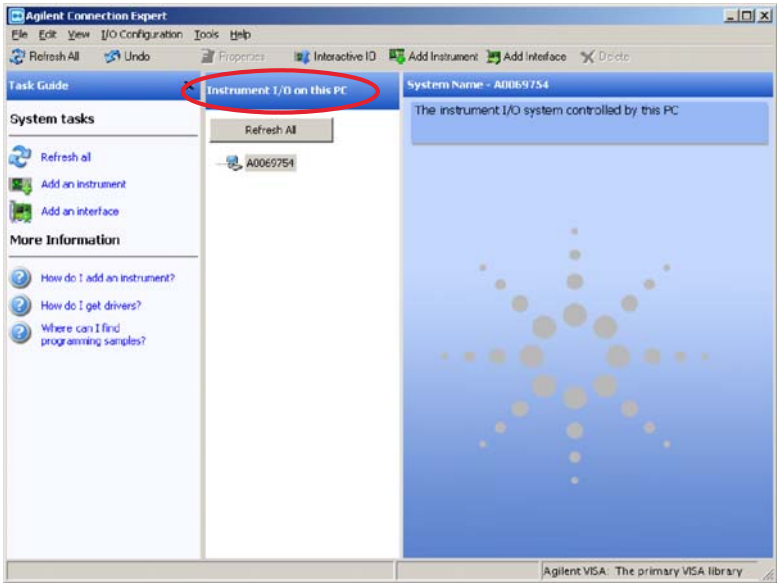


Figure 16 Connection Expert after deleting all available ports

4 In the section **System Task** select **add an Interface**.

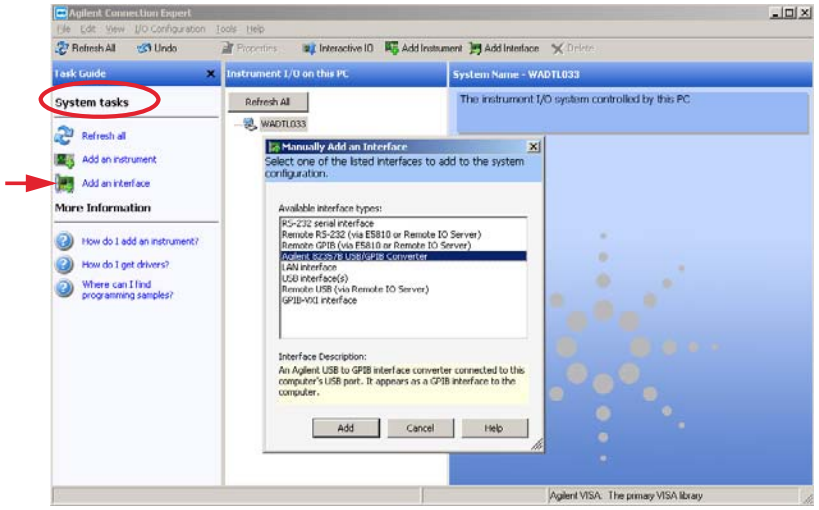


Figure 17 Connection expert: Manually Add an Interface

5 Select your interface type from the list of available interface types and press **Add**. Using ChemStation Instruments the following interface types are supported:

- Agilent 82357A USB/GPIB Converter
- Agilent 82357B USB/GPIB Converter
- Agilent 82350A GPIB Card
- Agilent 82350B GPIB Card

NOTE If you are not sure, if your instrument supports the mentioned interfaces, please consult Chapter 1.

The next window allows to modify the configuration of the chosen interface.

6 Continue with option a) below for the 82350A/B GPIB cards, and with option b) for the 82357A/B USB-GPIB Interface.

a For the 82350A/B GPIB cards, see Figure 18 on page 30.

- Set the **GPIB address** to
  30

- set the **SICL Interface ID** to
  `hp82341`
- check the **System controller** box
- deselect the **Auto-discover instruments connected to this interface** option
- press **OK** to finish the configuration.

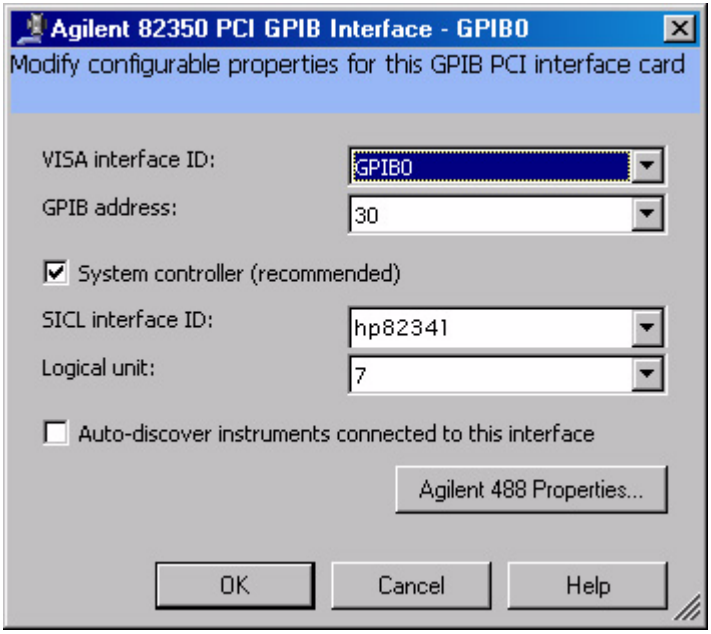


Figure 18 Configuration Parameter 82350A/B GPIB Card

b For the 82357A/B USB-GPIB Interface, see Figure 19 on page 31.

- Set the **GPIB address** to
  `30`
- set the **SICL Interface ID** to
  `hp82341`
- deselect the **Auto-discover instruments connected to this interface** option
- press **OK** to finish the configuration.

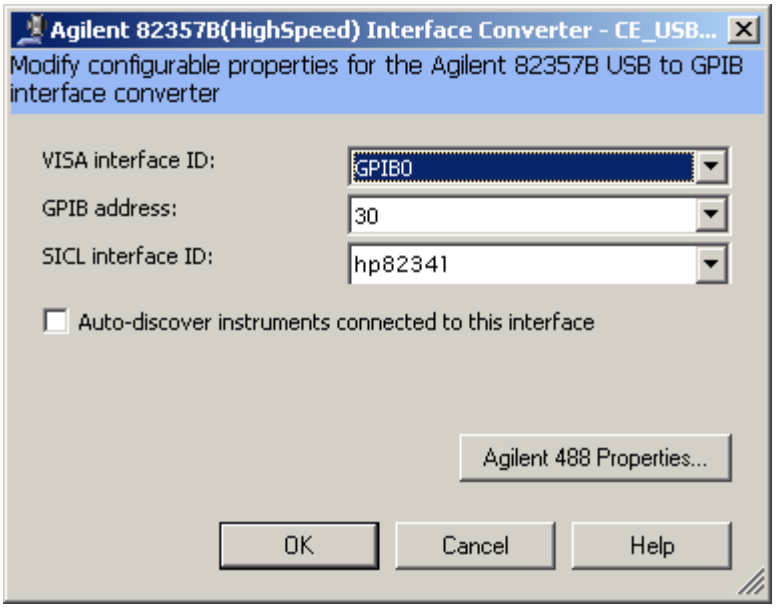


Figure 19 Configuration Parameter 82357A/B USB/GPIB Interface

7 Locate your interfaces and GPIB cards in the explorer pane. You can click on them to see their properties. It is possible to rename the labels of the interfaces and GPIB cards. You can observe their state, and it is also displayed in the right-hand pane if communication to the interface or instrument has been successfully established, it will be in the *Verified* state, denoted by a green check mark.

8 The configuration of your interfaces or GPIB card is now finished. Exit or close **Agilent Connection Expert** and reboot your PC.

9 Switch your instrument on, and configure your Instrument using the ChemStation Configuration editor, as described in the manual *Installing your ChemStation*, before starting the Agilent ChemStation Program.

2
Upgrading Existing IO Libraries

Upgrading IO Libraries to the IO Library Suite 34

This chapter explains how to upgrade from existing IO Libraries to IO Libraries Suite

Upgrading IO Libraries to the IO Library Suite

You can check the existence of an previous version of IO Libraries either by the IO icon in the left-hand site in the task bar, or click **Start > Programs** and look for the **Agilent IO Libraries** or **Agilent IO Libraries Suite** program group. If this group is displayed, click **Agilent IO Libraries > IO Control** to display the IO icon. Click the icon and click **About Agilent IO Libraries Control** to display the installed version. Before you are upgrading to IO Libraries Suite from a previous version of IO Libraries, you must remove the instruments and interfaces listed below. This step is necessary in order for these devices to obtain the correct drivers to work with Agilent IO Libraries Suite.

- Disconnect any Agilent 82357 USB/GPIB interfaces from your PC
- GPIB cards can remain installed on your PC

After disconnecting your devices, please follow the outlined steps like listed below.

NOTE The IO Library Suite requires Microsoft Visual C++ Redistributable to be installed prior the installation of the application. If the Microsoft Visual C++ Redistributable is not present, it will be installed automatically, before starting the IO Library Suite installation.

NOTE The IO Library Suite requires Microsoft Framework 2.0 to be installed prior the installation of the application. If the Microsoft Framework 2.0 is not present, it will be installed automatically, during the IO Library Suite installation.

1. Close all other applications on your PC.
2. Using the Windows Explorer, locate and start IOLibSuite_15_0_MR_EXE.exe in the IO_Libs directory of your ChemStation DVD. If Microsoft C++ Redistributable is not present, the InstallShield comes up and will list the application as requirement. Press **Install** to start the installation of the Microsoft C++ Redistributable.

   The IO Suite InstallWizard Welcome Screen is displayed afterwards.
3. Click **Next** and on the upcoming License Agreement Screen, accept the License Agreement and then click **Next** to continue the upgrade.
4. Select **Typical** for the installation type and press **Next** to continue.

5 On the upcoming window, verify the path statements for the installation and press **Install** to start the installation process.

6 During the installation process the InstallWizard will check for older versions of the IO Library or IO Library Suite. If older versions are present, the older version will be de-installed automatically. The user will be notified on the screen and the installation of the IO Library Suite will proceed immediately. If the Microsoft .NET Framework has not previously been installed on your PC, you will see the .NET Framework files being copied onto your computer. The Microsoft .NET Framework provides necessary infrastructure for Agilent IO Libraries Suite utilities, as well as for .NET programming tools and many other applications. You will only need to install the .NET Framework once, even if you remove and reinstall or upgrade your IO Libraries Suite.

7 When the installation is complete, leave the screen with **Finish**.

Figure 20 Finish Device Driver Installation in Windows XP

8 Reboot your PC to initialize the IO Libraries Suite 15.0 with the GPIB card, or USB/GPIB Interface. Please follow the initialization steps and configuration steps listed in "Upgrading Existing IO Libraries" on page 33.

3
Additional Information regarding the Agilent IO Library Suite

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IO Control Services and Processes 39

This chapter outlines the changes made by the installation, and lists IO Services and Processes.

What has been changed by the Installation?

ChemStation requires a full installation of the IO Libraries Suite, therefore the whole library packages including SICL and VISA were installed and several program icons were created. In addition, an Agilent IO Control was created.

During installation, the Agilent IO Libraries Suite program group was created (see Figure 21 on page 38).

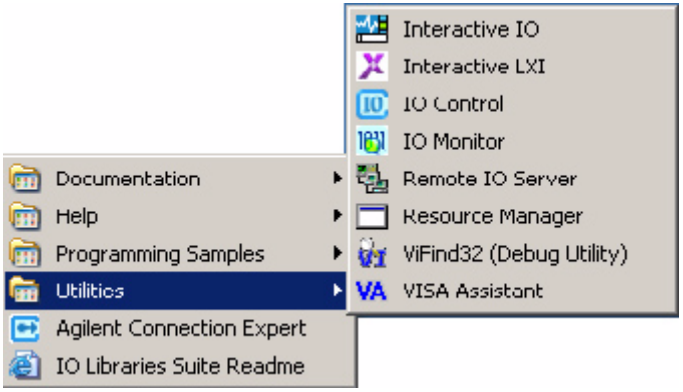

Figure 21 Agilent IO Libraries Suite program group

Table 3 Agilent IO Libraries Suite Program Items

Program item	Contains / opens
Documentation	PDF User Guides etc. for SICL, VISA, etc.
Help	Help Files for all Program items
Programming Samples	Programming examples for Excel, Visual Basic 6, Visual Basic .NET, etc.
Agilent Connection Expert	Opens the Agilent Connection Expert. Use to configure your connection interface
IO Libraries Suite Readme	Opens IO Libraries Suite Readme
Utilities	Lists the available IO Libraries Suite Utilities

IO Control Services and Processes

NOTE The services and processes listed below are present for plain ChemStation configuration. Additional services and processes (Agilent.TMFFramwork) are present depending on your configuration (e.g. remote Services).

The following table lists the IO Control related services and processes,

The following table lists the IO Control related services and processes,

- present after the installing the IO Control
- present during online connection to a GPIB Interface
- present during online connection to a USB/GPIB Interface

Table 4 IO Control Services

Service	Present after/during
Agilent IO Libraries Service	after installation

Table 5 IO Control Processes

Process	Present after/during
Agilent.TMFramework.Connectivity. AgilentIOLibrariesService.exe	after installation
Agilent.TMFramework.Connectivity. NkoServer.exe	after installation
hsicltsk.exe	Online Session of ChemStation for GPIB and USB/GPIB

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This chapter gives support in case of installation problems. In addition it gives instructions how to change or remove your installation.

Installation Troubleshooting

If you encounter problems while installing the IO Libraries Suite, the following steps may help.

1. Close or cancel all **InstallShield Wizard** and other *Agilent IO Libraries Suite* windows. Exit any other applications on your system.
2. Browse to the IO_Libs folder of your ChemStation DVD and double-click to run IOLibSuite_15_0_MR_EXE.exe.

   This restarts the installation process.
3. If you see the standard **InstallShield Wizard**, step through the installation process as described in this chapter.
4. If you see **Modify**, **Repair**, and **Remove** options, select **Repair**.

   This will reinstall all installed features of IO Libraries Suite.
5. If this does not solve the problem, restart the installation again, select **Remove**, and then reinstall the product.

“Error 1935” when Installing Microsoft .NET Framework

The Agilent IO Libraries Suite 15.0 utilities require Microsoft .NET Framework 2.0. If the .NET Framework is not already installed on your PC, the IO Libraries Suite installation process will attempt to install it. There is a known issue that can cause you to receive an “Error 1935” error message during this .NET installation. For steps to resolve this error, go to http://www.microsoft.com and search on "Error 1935". Follow the instructions given by Microsoft to resolve the error.

Problems with Plug and Play option GPIB cards

Operation systems using Plug and Play may show problems during the installation of the appropriate drivers for the GPIB (PCI) cards.

In order to overcome plug and play related problems please follow the steps below to install the card successfully.

1 If already installed, uninstall the Agilent IO Libraries Suite 15.0 from **Control Panel > Add/Remove Programs**.

2 Remove the GPIB Interfaces (if installed) listed under the Device Manager and shut down the computer. For Windows XP: in the Control Panel, double-click **System > Hardware Tab > Device Manager > GPIB Interfaces**

3 Physically remove the GPIB card from the computers PCI interface.

4 Restart the computer and log on to the system. Install the Agilent IO Libraries Suite 15.0. Do not configure the card this time and shut down your computer.

5 Re-insert the GPIB card and boot the computer.

The **New Hardware Found** wizard will indicate that a PCI card is found.

6 In the New Hardware Found window, select the second choice to search from a list of known devices. In this list, select the option for Agilent Technologies, since the IO Libraries Suite 15.0 is already installed.

NOTE If the **New Hardware Found** wizard does not run, check the device manager to verify that the GPIB interface is listed and installed correctly.

7 To configure the GPIB card please follow the instructions stated in "Configure the 82350 A/B GPIB Card or the 82357 A/B USB-GPIB Interface" on page 25 of this booklet.

8 Click the icon to start the Agilent IO Control and choose **Agilent Connection Expert**.

Problems with Plug and Play option using 82357A/B USB-GPIB Interface

Operating systems using Plug and Play may show problems during the installation of the appropriate drivers for the USB-GPIB Interface.

In order to overcome problems related to Plug and Play, please follow the steps to install the card successfully.

1 Verify the status of the USB-GPIB Interface in the Device Manager: **Start > Settings > Control Panel**, double-click **System > Hardware Tab > Device Manager > GPIB Interfaces**.

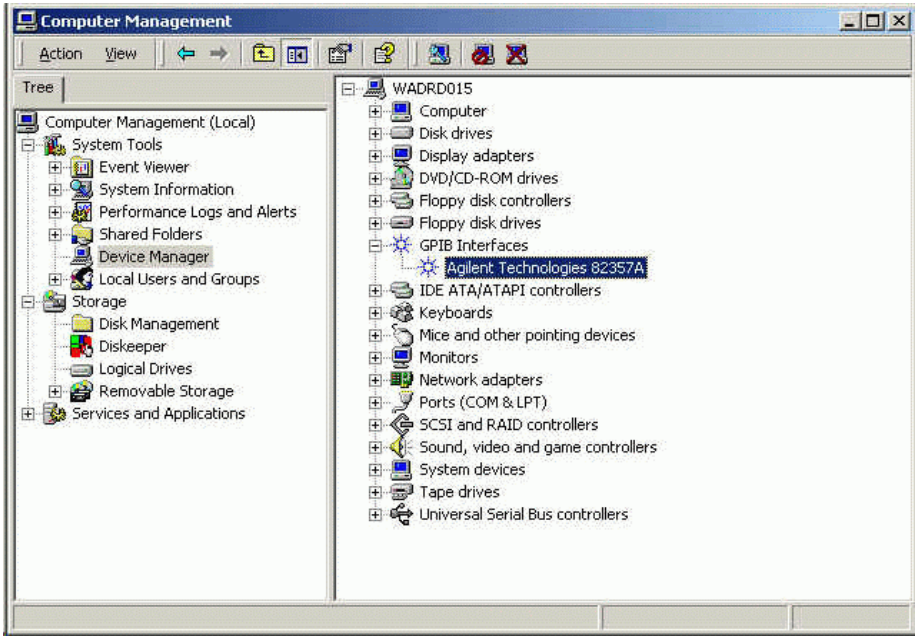

Figure 22 Device Manager Windows XP USB-GPIB Interface, correctly installed

2 If a yellow exclamation mark is attached to the USB-GPIB Interface (see Figure 23 on page 45) the driver needs to be installed a second time as in "Install the GPIB Cards / USB-GPIB Interfaces Drivers" on page 11.

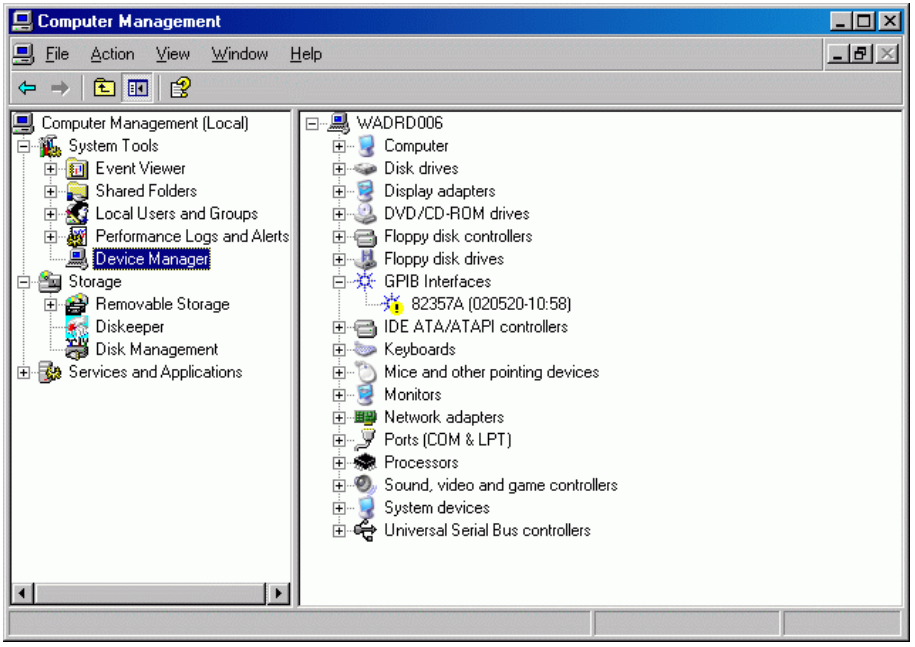

Figure 23 Device Manager Windows XP after first installation of USB-GPIB Interface

3 After the second installation, the system detects the USB device automatically and allows you to configure the device properly. Start the **Agilent Connection Expert** to configure your GPIB connection.

4 Start the IO Config Utility by clicking on the Icon , and choose **Agilent Connection Expert** to configure your GPIB Interface (see "Configure the 82350 A/B GPIB Card or the 82357 A/B USB-GPIB Interface" on page 25).

5 From the list of available interface types, choose the **82357 USB to GPIB**.

Changing Your Installation or Removing IO Libraries Suite

1. Click **Start > [Settings] > Control Panel > Add or Remove Programs**
2. Select **Agilent IO Libraries Suite**
3. Click **Change/Remove**
4. Select the action you want to take:
   - **Modify**: Adds, replaces, or removes selected features. You can change your installation from primary to side-by-side or from side-by-side to primary by using this option. You can also use this to install manuals or sample code if you did not initially install them.
   - **Repair**: Reinstalls all features.
   - **Remove**: Removes the product from your PC.

5 Agilent IO Libraries Suite 15.0 Documentation

Instructions on how to access additional documentation

Online Help is easily available whenever you use the Connection Expert software. Just click **Help > Help Topics** or press the F1 key. To access the online help without running Connection Expert, click the **IO Control** , click **Documentation** and then **IO Libraries Suite Help**. The online help will appear on your screen in a new window.

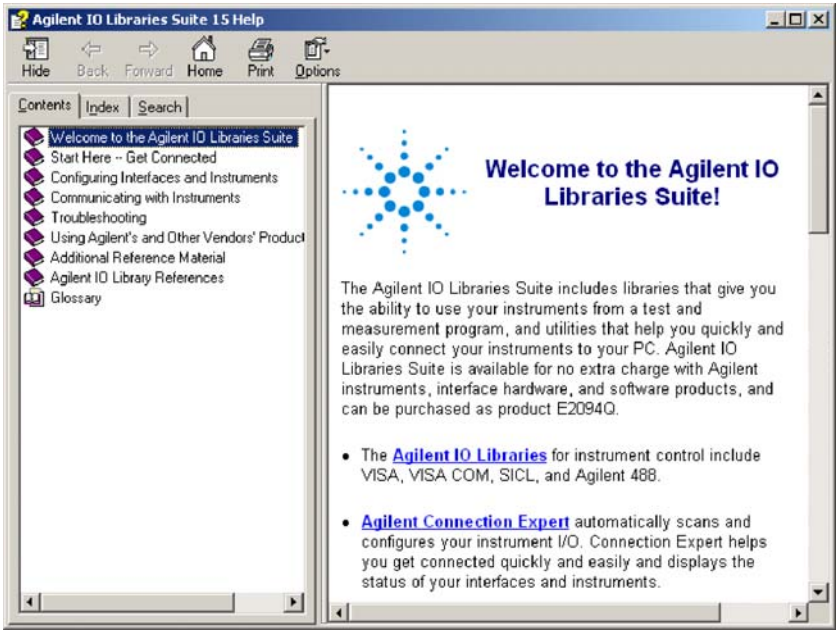

Figure 24 Agilent IO Libraries Suite 15.0 Help

The Task Guide

The *Connection Expert task guide* appears in the left-most pane of the **Connection Expert** window. The choices listed in the task guide are based on what you have selected in the explorer pane (the middle pane of the Connection Expert window). The purpose of the task guide is to point you to common tasks and useful information.

Other Documentation

The table below lists documentation that may be helpful to you as you connect and control your instruments.

6 Agilent IO Libraries Suite 15.0 Revision History

Where to Find Information on Past IO Libraries Revisions

A full matrix of information about past product revisions, including PC operating system support and physical interface support, is available in the *Agilent IO Libraries Suite Online Help* under Additional Reference Material. The most current information will always be provided on the Web at

- http://www.agilent.com/find/iolib_osmatrix for operating system support information, and
- http://www.agilent.com/find/iolib_revmatrix for general revision information.

What Happened to IO Config?

The Agilent IO Libraries tool called IO Config has been replaced by *Connection Expert* in Agilent IO Libraries Suite 15.0. Connection Expert is an integrated utility that provides all the software you need to quickly establish and verify connections to your instruments. Connection Expert provides an explorer view of your test system, as well as being the central console for instrument connectivity and interface configuration. All the functionality of IO Config is now available in Connection Expert. The IO Config utility is provided in IO Libraries Suite for backward compatibility only. The supported configuration utility for IO Libraries Suite 15.0 is *Connection Expert*.

IO Libraries Suite 15.0 installs the *unsupported* IO Config utility as bin\iocfg32.exe in the installation directory (by default, C:\Program Files\Agilent\IO Libraries Suite). VISA Assistant is still installed as part of Agilent IO Libraries Suite, but for most users, it has been replaced by the Interactive IO utility, which can be accessed from Connection Expert or from the IO Control. Interactive IO provides a simpler, more intuitive way to send commands to

instruments and read the returned results. The discovery and tree view features of VISA Assistant are replaced and improved upon by Connection Expert.

Some capabilities of VISA Assistant are not yet available in the Interactive IO utility. These include:

- memory I/O for VXI and GPIB-VXI interfaces
- reading and writing of VISA attributes
- association of VXI plug-and-play drivers to instruments

If you need these capabilities, you can start the VISA Assistant utility by clicking the **IO Control** and then **VISA Assistant**, or by clicking **Tools > VISA Assistant** on the Connection Expert menu.

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In This Book

This manual describes how to install and use the IO Libraries Suite 15.0.

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