Release Notes:
PowerChute® *plus* Version 5.2.3 for Windows NT®, Windows® 2000, and Windows® XP

These release notes supplement the *User's Guide: PowerChute® plus for Windows NT®, Windows® 2000, and Windows® XP* (**pcwntug.pdf**) and the *Installation Guide: PowerChute® plus for Windows NT®, Windows® 2000, and Windows® XP* (**pcwntig.pdf**). See the notice pages of those PowerChute *plus* version 5.2.3 manuals for relevant trademark information.

These release notes have the following major sections.

- **How to Comment on PowerChute plus Documentation**

- **Changes Introduced with Version 5.2.x**

- **Hardware Requirements**

- **Software Requirements**

- **Disconnecting a UPS for Upgrades and Manual Reboots**

- **Software Versions Supported for PowerChute plus Shutdown Features**

- **Cross-Router Monitoring from a Dial-up Server**

- **Name Change for UPS Service**

- **PowerChute plus Event Numbers in the Operating System Event Viewer**

- **How to Configure UPS Monitoring for Windows Terminal Server**

- **Known Software Problems and Their Avoidance**

- **No "Last Saved by Autorecover" Document**

- **Troubleshooting the "No Comm" Status**

- **APC Worldwide Technical Support**

How to Comment on PowerChute *plus* Documentation

To comment on any of the documentation provided for installing and using PowerChute *plus*, do one of the following:

- Go to **http://www.apc.com/go/direct/index.cfm?tag=swdocsurvey** or click the link **click here** at the bottom of any page of the HTML help. Then fill out the brief documentation survey provided.

- Send e-mail to **feedback@apcc.com**.

Your comments assist APC in improving the accuracy and usability of its documentation.

Changes Introduced with Version 5.2.*x*

PowerChute *plus* version 5.2.3 supports the following features:

- Support for Windows 2000 and Windows XP.

- The option to install PowerChute *plus* as a stand-alone, non-networked, UPS monitoring application to monitor only the UPS attached to your local workstation. Choosing this installation option causes PowerChute *plus* to bypass the "Monitor Server" dialog box in which you choose the computer system whose UPS you want to monitor. You can change your choice at any time after installation by editing the **Pwrchute.ini** file. For more information, see the *Installation Guide* (**pcwntig.pdf**) and the section **[Communication]** in **Appendix B** of the *User's Guide* (**pcwntug.pdf**).

- An APC Product Registration Wizard that you can use for online product registration of both hardware and software products, either at the end of the PowerChute *plus* installation or at any later time through the operating system **Start** menu. (From the **Start** menu choose, in order, **Programs**, **PowerChute plus**, and **APC Product Registration**.

Also note the following about PowerChute *plus* version 5.2.*x*:

- **Beginning with PowerChute *plus* version 5.2, Windows NT version 3.51 is no longer supported**.

- On both Windows NT, version 4.0, Windows 2000, and Windows XP, PowerChute *plus* version 5.2.3 supports these features:

  - Integration with Systems Management Server (SMS)® of Microsoft® Corporation

  - The APC shutdown support for third-party workstation and server applications listed in **Software Versions Supported for PowerChute plus Shutdown Features**.

- On Windows NT, version 4.0, PowerChute *plus* version 5.2.3 supports these features:

  - Integration with Desktop Management Interface (DMI)® of Intel.®

  - Integration with Compaq Insight Manager (CIM)® (with software that you can download from APC's Web site at **http://www.apc.com**).

Hardware Requirements

PowerChute *plus* requires the following hardware from American Power Conversion:

- Either a smart-signaling or simple-signaling UPS manufactured by American Power Conversion.

    - PowerChute *plus* supports these smart-signaling UPSs: Smart-UPS, Smart-UPS DP, Symmetra *Power Array*, Matrix-UPS, PowerStack, and Back-UPS Pro models 280 (BP280S), 420 (BP420S), and 650 (BP650S). Only a UPS in smart-signaling mode can access the full functionality of PowerChute *plus*.

    - PowerChute *plus* supports Back-UPS models, which run in simple-signaling mode only. A UPS in simple-signaling mode can access only a subset of the features available with PowerChute *plus*.

- One custom UPS 9-pin serial interface cable, shipped with each APC smart-signaling UPSs. (A 940-0020B cable for simple-signaling UPSs is available for Back-UPS models that have serial ports in an upgrade kit you can obtain from APC.) See the following table for the part number of the smart-signaling cable required for each UPS type:

UPS Type	Required Serial Interface Cable
Symmetra *Power Array*	940-1524C
Back-UPS Pro (model 280, 420, or 650)	940-0095B
Smart-UPS 2U Rack Mount models	940-0024C or 940-1524C
Any other APC smart-signaling UPS	940-0024C

You must provide the following hardware:

- A computer with an Intel®-compatible processor.

- An available RS-232 serial port dedicated to the UPS

PowerChute *plus* supports but does not require a mouse.

Software Requirements

PowerChute *plus* version 5.2.3 requires one of the following operating systems running on a computer with an Intel-compatible processor:

- Windows NT Server, Version 4.0, Service Pack 6 (or above)

- Windows NT Workstation, Version 4.0, Service Pack 6 (or above)

- Windows 2000 (Professional Server, Advanced Server, or Datacenter Editions), Service Pack 2

- Windows XP Home and Professional

- Microsoft BackOffice® Small Business Server, Version 4.5

Note: You cannot run the PowerChute plus User Interface Module for Windows NT, Windows 2000, and Windows XP on a Windows 95, Windows 98, Windows, or Windows for Workgroups operating system.

Disconnecting a UPS for Upgrades and Manual Reboots

During upgrades and manual reboots, the operating system sends character strings to the serial ports. In some cases, a UPS in smart-signaling mode can erroneously interpret these characters as an instruction to switch to battery operation or to perform a runtime calibration. Such an unnecessary switch to battery power reduces battery runtime and could cause the failure of an installation or upgrade that is being performed or cause the system to shut down if the battery has insufficient run time remaining.

Operating System Upgrades

Microsoft recommends that you disconnect the communications cable from your UPS serial port before upgrading your operating system release. This precaution applies to APC UPSs.

PowerChute *plus* Upgrades from Version 5.1 or Earlier

If you are upgrading to PowerChute *plus* version 5.2.3 from version 5.1 or earlier, disconnect the communications cable from your UPS serial port before you perform any manual reboot of your system after removing the older version of PowerChute *plus*. Then reconnect the cable before installing version 5.2.3.

This precaution is unnecessary if you are upgrading to PowerChute *plus* version 5.2.3 from version 5.2, 5.2.1, or 5.2.2. You can perform a manual reboot safely without disconnecting the UPS cable.

Software Versions Supported for PowerChute *plus* Shutdown Features

When installing PowerChute *plus*, you can choose to install automated shutdown support for various applications and servers of other manufacturers.

The following table shows the software versions of these applications and servers that PowerChute *plus*, through testing, has been shown to shut down effectively. For information on shutdown of versions higher than those listed, contact **APC Worldwide Technical Support**, as listed at the end of these release notes.

Feature Selected at Installation	Product to Be Shut Down
`IIS Shutdown` as a subcomponent of `BackOffice Shutdown`	Internet Information Server®, version 4.0 (Microsoft Corporation)
`SNA Server Shutdown` as a subcomponent of `BackOffice Shutdown`	SNA Server®, version 4.0 (Microsoft Corporation)
`Exchange Shutdown` as a subcomponent of `BackOffice Shutdown`	Microsoft Exchange Server®, version 6.5 (Microsoft Corporation)
`SQL Server Shutdown` as a subcomponent of `BackOffice Shutdown`	SQL Server®, version 7.0 (Microsoft Corporation)
`SMS Shutdown` as a subcomponent of `BackOffice Shutdown`	Systems Management Server®, versions 1.2 and 2.0 on Windows NT, and version 2.0 on Windows 2000. An SMS version is unavailable for use with Windows XP. (Microsoft Corporation)
`Netscape Shutdown` as a subcomponent of `3rd Party Plug-ins`	Netscape Enterprise Server®, version 3.6; Netscape Commerce Server®, version 1.0; Netscape Communications Server®, version 1.0; or Netscape Fast Track®, version 2.0 (Netscape Communications Corporation)
`Notes Shutdown` as a subcomponent of `3rd Party Plug-ins`	Versions 4.65 and 5.0 of Lotus Domino® (Lotus Development Corporation)

Cross-Router Monitoring from a Dial-up Server

If you log in to a Remote Access Server (RAS) and start PowerChute *plus*, the "Monitor Server" dialog box does not list any servers available to monitor unless the RAS is configured to broadcast via User Datagram Protocol (UDP) to other servers on the network. On large networks, configuring the RAS to broadcast to all servers is impractical because it greatly increases network traffic. Without such broadcasts, PowerChute *plus* cannot provide you, as a dial-up server client, a list of servers available to monitor, but you can connect to a known server by entering the server name in the **Server:** field of the "Monitor Server" dialog box. If you do not enter the name of a known server, PowerChute *plus* continues to display the message `Searching for active servers`

Name Change for UPS Service

Installing PowerChute *plus* version 5.2.3 renames the operating system's **UPS Service** to **UPS - APC PowerChute plus**. The name change takes effect at the first reboot after the installation.

If you later remove PowerChute *plus* version 5.2.3 from your system, the name **UPS - APC PowerChute plus** reverts to **UPS Service**, but not until the first reboot after the removal.

PowerChute *plus* Event Numbers in the Operating System Event Viewer

Windows NT, Windows 2000, or Windows XP identifies each PowerChute *plus* **event text** as a separate event, with a separate number, rather than displaying the PowerChute *plus* event number (ID code) for the event.

See **Appendix G, Operating System Event Viewer** in the *PowerChute® plus for Windows NT®, Windows® 2000, and Windows® XP* (**Pcwntug.pdf**) for a list of the event numbers used by the Windows NT, Windows 2000, or Windows XP event viewer.

How to Configure UPS Monitoring for Windows Terminal Server

After you install PowerChute *plus* on a server that uses Windows Terminal Server software, you must perform additional configuration tasks on both the server and the client computers. See **How to Configure UPS Monitoring for Windows Terminal Server** in Chapter 4 of the *User's Guide: PowerChute® plus for Windows NT®, Windows® 2000, and Windows® XP* (**Pcwntug.pdf**) for instructions.

Known Software Problems and Their Avoidance

The following sections describe known software problems in this release and, where possible, instructions on how to avoid them.

- **Microsoft® Chat Disabled by PowerChute plus Default Port Settings**

- **PowerNet Agent with Stand-Alone Option Causes Error Messages**

- **Failed COM Port Detection During Installation**

- **Rebooting to Remove "PowerChute plus" from the Start Menu**

- **Incomplete Removal of PowerChute plus If Components Were Installed Separately**

- **PowerChute plus Installation Problem When Lotus Domino® Is Running**

- **Environmental Monitoring Card Problem**

- **Display Problems after Installing Microsoft Office 95 or Microsoft Office 97**

- **Paging Failure When Another Program That Uses Modems Is in Standby Mode**

- **Limitations in Using IPX/SPX for Remote UPS Monitoring**

- **No UPS On Bypass Event When Symmetra Power Array Is Overloaded**

- **Smart-UPS DP Issues**

Microsoft® Chat Disabled by PowerChute *plus* Default Port Settings

Problem or Issue: The three ports that PowerChute *plus* uses to operate are the same ports that Microsoft Chat requires for its operation. Therefore, after you install PowerChute *plus*, you will be unable to use Microsoft Chat.

Solution: After you install PowerChute *plus*, add new port settings in the **Pwrchute.ini** file to override the default settings that interfere with Microsoft Chat.

Caution:
If you change the PowerChute plus port settings to enable Microsoft Chat on a server, you must then make the same change on all Windows NT, Windows 2000, or Windows XP servers and workstations that will be monitored by that server. The servers or workstations to be monitored must be running a 5.x version of PowerChute plus. Changing the PowerChute plus port settings on a server to enable Microsoft Chat will disable that server's ability to monitor Windows 95 or Windows 98 workstations. Do not attempt to change the port settings on a Windows 95 or Windows 98 workstation.

To override the default port settings of PowerChute *plus* so that Microsoft Chat can operate, perform the following steps:

1. On the server that will be performing UPS monitoring, use an ASCII text editor to open the **Pwrchute.ini** file in your PowerChute *plus* installation directory.

2. Find the section heading `[Network]`.

3. Under the `[Network]` section heading, add the following three lines:

   ```
   NETTCPSOCKETADDRESSPOLL=9950
   NETTCPSOCKETADDRESSALERT=9951
   NETTCPSOCKETADDRESSBINDERY=9952
   ```

4. Save your changes and exit the text editor.

5. Repeat this procedure on each Windows NT, Windows 2000, or Windows XP server or workstation to be monitored by the server in **Step 1**.

PowerNet Agent with Stand-Alone Option Causes Error Messages

Problem or Issue: During a custom installation of PowerChute *plus*, the installation program allows you to select two options that are incompatible:

- In a custom (or a typical) installation, you can disable remote monitoring, which is enabled by default. Clearing the **Disable Remote Monitoring** check-box installs PowerChute *plus as* a stand-alone, non-networked, UPS monitoring application to monitor only the UPS attached to your local workstation,

- In a custom installation you can install PowerNet Agent for use in remote monitoring.

Choosing the incompatible options causes no error messages during installation, but later, when you use PowerChute *plus*, you receive messages indicating that the **powernet.dll** file is missing.

Solution: For stand-alone operation, you can choose to ignore the error messages, or you can edit the **Pwrchute.ini** file in your PowerChute *plus* installation directory to eliminate them. In the section `[Communication]`, change `TcpIp = no` to `TcpIp = yes`, but do not change `Network = yes`, and restart the UPS Service.

To enable remote monitoring that you disabled during installation on a networked computer, see **[Communication]** in **Appendix B** of the *User's Guide: PowerChute® plus for Windows NT®, Windows® 2000, and Windows® XP*.

Failed COM Port Detection During Installation

Problem or Issue: The installation program asks Would you like to automatically search all COM ports for an APC UPS? If you respond yes, in some cases the installation program fails to identify the Communications Port even if the UPS is connected properly. If this problem occurs, the **COM Port** drop-down list box is blank. You are therefore not able to select the correct communications port manually.

Solution: To correct this problem, perform these steps:

1. Make sure **UPS Type** is selected correctly, leave the **COM Port** box blank, and click **Next>** to continue the installation.

2. After the installation, if UPS communication is not established, do the following:

   a. Start PowerChute *plus*.

   b. In the "Monitor Server" dialog box, choose the server or workstation on which you performed the installation.

   > *Note:*
   > *If you disabled remote monitoring as you performed the installation, the User Interface Module will connect directly to your local computer, and this step is unnecessary.*

   c. On the PowerChute *plus* main screen, select the **Communication Parameters...** menu option on the **Configuration** menu.

   d. In the "Communication Parameters" dialog box, select the correct COM Port for UPS communication.

Rebooting to Remove "PowerChute plus" from the Start Menu

Problem or Issue: If you remove PowerChute *plus*, version 5.2.3, the **PowerChute plus** option may remain on the **Programs** sub-menu of the operating system's **Start** menu.

Solution: If you encounter this problem, reboot the system to remove the menu item.

Incomplete Removal of PowerChute *plus* If Components Were Installed Separately

Problem or Issue: The **Add/Remove Programs** option of Windows NT, Windows 2000, or Windows XP can remove only the components of PowerChute *plus* that you installed in your most recent installation. This limitation can cause an incomplete removal of PowerChute *plus* if you installed components at separate times. For example,

- You perform a "custom" installation and select the UPS Monitoring Module but not the User Interface Module the first time you install PowerChute *plus.*

- Later you perform a reinstallation to add the User Interface Module.

- Eventually, a new version of PowerChute *plus* is released, and you attempt to use **Add/Remove Programs** to remove your existing version in preparation for installing the new version. The removal will be incomplete. Only the User Interface Module will be removed because it was the only component installed during your most recent PowerChute *plus* installation.

Solution: If you want to add components to PowerChute *plus* but also want the option to uninstall PowerChute *plus* automatically at a later time, do not use the procedure described as a reinstallation in the *Installation Guide: PowerChute® plus for Windows NT®, Windows® 2000, and Windows® XP* (**pcwntig.pdf**). Instead first remove PowerChute *plus* completely, and then perform a new "custom" installation to select all components that you want. (You may want to save a back-up copy of your **pwrchute.ini** file so that you can easily copy any customized settings into your new **.ini** file.)

PowerChute *plus* Installation Problem When Lotus Domino® Is Running

Problem or Issue: If you attempt to install PowerChute *plus* on a system that is running Lotus Domino as its Lotus Notes server, the installation program becomes unresponsive.

Solution: Always shut down Lotus Domino before installing PowerChute *plus* for Windows NT, Windows 2000, and Windows XP. If you already attempted to install PowerChute *plus* with Lotus Domino running, use the CTRL-ALT-DELETE key sequence to exit the installation program, then shut down Lotus Domino, and begin the installation again.

Environmental Monitoring Card Problem

Problem or Issue: If the attached probe of an Environmental Monitoring Card (SmartSlot Measure-UPS II) is a temperature probe only, an invalid value rather than no value is reported for humidity. The invalid value, reported by PowerChute *plus*, is 4 or lower. The correct value is reported for ambient temperature.

PowerChute *plus* correctly reports ambient temperature and humidity from an attached temperature and humidity probe of an Environmental Monitoring Card.

Display Problems after Installing Microsoft Office 95 or Microsoft Office 97

Problem or Issue: If your workstation screen display is configured for 640 by 480 pixels and 256 colors, installing Microsoft Office 95 or Microsoft Office 97 can cause a display problem for PowerChute *plus*. The problem occurs if you install PowerChute *plus* without either version of Microsoft Office on your system, reboot your system, later install Microsoft Office 95 or Microsoft Office 97, and again reboot your system. Performing that sequence of actions may cause the PowerChute *plus* user interface to display with fonts too large for the screen.

Solution: Open the operating system **Control Panel** and select the **Fonts** option. The operating system searches for all fonts on the system and writes them to the registry, correcting the display problem.

Paging Failure When Another Program That Uses Modems Is in Standby Mode

Problem or Issue: If another program that uses the same modem as PowerChute *plus* is running in standby mode, waiting for someone to dial in, PowerChute *plus* paging fails when it cannot gain control of the modem to dial out.

Limitations in Using IPX/SPX for Remote UPS Monitoring

Problem or Issue: If you are running the User Interface Module of PowerChute *plus* version 5.1 or later, you can use the IPX/SPX protocol to connect to a remote UPS Monitoring Module **only** if that UPS Monitoring Module is also version 5.1or later. If you attempt to connect to a UPS Monitoring Module of an earlier version, the User Interface Module terminates abnormally.

No UPS On Bypass Event When Symmetra *Power Array* Is Overloaded

Problem or Issue: PowerChute *plus* does not issue a **UPS On Bypass** event when a Symmetra *Power Array* switches to bypass mode because of an output overload. (When the equipment load exceeds 105% of a Symmetra *Power Array*'s rated load capacity and the Symmetra *Power Array* is running on-line, it switches to bypass mode until the overload condition is corrected.)

Solution: PowerChute *plus* issues the **UPS Output Overload** event to warn you that the Symmetra *Power Array* is overloaded. When that event occurs, check the front panel display of the Symmetra *Power Array* for a message indicating that it is in bypass mode.

Smart-UPS DP Issues

The following problems and issues occur when you use PowerChute *plus* with a Smart-UPS DP:

*   **External Battery Packs Field Applies to All Battery Packs**

*   **Incorrect Battery Voltage Displayed**

*   **UPS Wakeup Delay (Capacity) Not Supported**

*   **Sensitivity Field Not Supported**

*   **Invalid Output Voltage Selection Displayed**

External Battery Packs Field Applies to All Battery Packs

Problem or Issue: For a Smart-UPS DP, the **External Battery Packs** field in the "UPS Operating Parameters" dialog box, applies to **all battery strings, both internal and externa**l.

Solution: The value in the field does not change automatically when a battery string is added or removed. You must enter all changes. To ensure accurate runtime calculation, use the field as follows:

*   Enter 02 if you have the SUDPBP1 external battery pack. (The value designates one internal and one external battery string.)

*   Enter 03 if you have the SUDPBP2 external battery pack. (The value designates one internal and two external battery strings.)

*   Use the default value 01 if you have no external battery cabinet. (The value designates the internal battery string only.)

Incorrect Battery Voltage Displayed

Problem or Issue: In the Battery Volts bar graph, PowerChute *plus* displays incorrect battery voltage for a Smart-UPS DP. The displayed value is 1/8 of the actual battery voltage.

Solution: Multiply the displayed battery voltage by 8 to obtain the actual battery voltage

UPS Wakeup Delay (Capacity) Not Supported

Problem or Issue: The Smart-UPS DP does not support setting a minimum battery capacity for restarting your system. The **Wakeup Delay (Capacity)** field should be disabled in PowerChute *plus* for this UPS type. The Smart-UPS DP can recharge its batteries only after it restarts.

Solution: Do not attempt to change the value for the **Wakeup Delay (Capacity)** field with a Smart-UPS DP. Instead, when configuring the **Low Battery Signal Time** for a Smart-UPS DP, specify extra runtime to be conserved at system shutdown.

Sensitivity Field Not Supported

Problem or Issue: The Smart-UPS DP automatically regulates voltage and therefore does not use the **Sensitivity** field in the "UPS Operating Parameters" dialog box, but the field is not disabled. Choosing a value other than `Auto Sensitivity` has no effect.

Invalid Output Voltage Selection Displayed

The **Nominal UPS Output** field in the "UPS Operating Parameters" dialog box displays 225 as one of the selections. This selection is invalid for a Smart-UPS DP, and, if selected, reverts to 230. Valid values are 220, 230, and 240. For a Smart-UPS DP, you can change the value in this field only when no equipment load is being supported.

No "Last Saved by Autorecover" Document

Microsoft Office XP can save two versions of previously-saved, open documents when an abnormal condition causes a Microsoft Office XP application to close.

- Last Saved by User
- Last Saved by Autorecover

When the WorkSafe feature of PowerChute *plus* is enabled, WorkSafe automatically saves and closes any previously-saved, open documents as part of the process of safely shutting down the system in response to a power failure. However, only "Last Saved by User" versions of saved documents will appear in the "Document Recovery" pane. This "Last Saved by User" document is the version that was saved by the WorkSafe feature, not the version previously saved by the user.

Note:
The Document Recovery feature in Microsoft Office XP, and the WorkSafe feature in PowerChute plus can only save documents that have been previously saved. Data in untitled (unsaved) documents will be lost.

Troubleshooting the "No Comm" Status

Use this section to resolve PowerChute *plus* No Comm status, displayed in the **Status** field on the main screen and recorded in the event log as Unable to communicate with UPS. No Comm status occurs if, after the UPS Service has started, PowerChute *plus* is unable to communicate properly with the UPS.

The following sections explain how to check the serial port cable type, port settings, system resource settings, and proper installation of PowerChute *plus* to establish communications with the UPS:

- **Serial Port Checks**
- **APC Accessory Check**
- **Pwrchute.ini File Check**

Serial Port Checks

Perform three checks related to the serial port (communications port), explained in **Serial Cable Check**, **Serial Port Settings Check**, and **Serial Port Connection Check**.

Serial Cable Check

Make sure the proper **serial cable** connects the UPS serial port and the system serial port. **Hardware Requirements** lists the cables supported for each UPS model.

After the proper cable is attached, stop and restart the UPS service. If the system is still unable to communicate with the UPS, read the sections that follow.

Serial Port Settings Check

Check the **port settings** for the serial port PowerChute *plus* is using, as follows:

- On Windows NT, use the **Ports** icon in the operating system **Control Panel**, then click **Settings...**

- On Windows 2000 or Windows XP, use the **System** icon in the operating system **Control Panel**. Then select the **Hardware** tab in the "System Properties" dialog box, click **Device Manager**, and click **Ports...**

The following table shows the correct settings:

Parameter	Setting
Baud Rate (Bits Per Second)	2400
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	Xon/Xoff
Advanced... button dialog box	The check box **FIFO Buffer Enabled** (on Windows NT) or **Use FIFO Buffers** (on Windows 2000 or Windows XP) should not be selected.

Serial Port Connection Check

Check the **serial connection** between the UPS and the operating system by means of terminal emulation.

Note:
The following procedure is not relevant for a Back-UPS, which uses the 940-0020B cable.

Hyperterminal Check

Perform these steps to check the serial connection to your UPS:

1. Exit from the PowerChute *plus* user interface, and stop the UPS service.

2. From the **Start** menu on the Desktop:

    -   On Windows NT, click: **Start** => **Programs** => **Accessories** => **Hyperterminal**, and then click **HyperTerminal**.

    -   On Windows 2000 or Windows XP, click: **Start** => **Programs** => **Accessories** =>**Communications** => **Hyperterminal**, and then click **HyperTerminal**.

3. In the "Connection Description" dialog box, type a name and then click OK.

    If the message `...must install a modem` appears, ignore it and continue.

4. In the "Connect To" dialog box, choose `COM1` or `COM2` from the **Connect Using** field, and click OK.

5. In the "Port Settings" dialog box, the fields should be at `2400` baud rate (bits per second), `8` data bits, no parity, and `1` stop bit, with flow control at `Xon/Xoff`.

6. When a blank screen appears, press the **Shift** and **Y** keys. The screen should then display the letters `SM`.

7. Press the **Shift** and **A** keys. The UPS should beep and flash its front panel LEDs, and the screen should display `OK`.

See **Explanation of Terminal Checking** for more information.

Explanation of Terminal Checking

If the screen displays `SM`, indicating Smart Mode, PowerChute *plus* is able to communicate through the COM port you are checking.

If the screen does not display SM, but the UPS beeps and flashes when you press the **Shift** and **A** keys, the UPS can receive signals, but cannot send them because of one of the following conditions:

•   The UPS's ability to transmit signals back to your computer is broken.

•   The interface cable is faulty.

•   The computer's serial port cannot receive signals. Possible causes are an interrupt conflict or a malfunctioning serial port.

If the screen does not display SM, try the same steps to check the serial connection from another computer or, alternatively, from the same computer using a different UPS.

APC Accessory Check

See the following table to make sure that any APC accessory device in the expansion slot of the UPS or attached to the UPS serial port is configured properly.

Accessory	Part No.	Configuration
Network Management Card	AP9616	The card must be fully configured with the SNMP Agent running.
Web/SNMP Management Card	AP9606	The card must be fully configured with the SNMP Agent running.
SmartSlot SNMP Adapter	AP9605, AP9603	The adapter must be fully configured with the SNMP Agent running.
Out-of-Band Management Card (SmartSlot Call-UPS II)	AP9608	No configuration is required.
APC UPS Interface Expander	AP9607	If PowerChute *plus* is monitoring the UPS by using one of the serial ports on the interface expander card, perform these steps: 1. Use the 940-0020B cable to connect the serial port on the Share-UPS to the serial port on the system. 2. Re-install PowerChute *plus*, choosing Back-UPS as the **UPS Type** during the installation. If PowerChute *plus* is used to monitor the built-in UPS serial port, no configuration is required.
SmartSlot Relay I/O Module	AP9610	No configuration is required.
Environmental Monitoring Card (SmartSlot Measure-UPS II)	AP9612T, AP9612TH	No configuration is required.
Share-UPS	AP9207	If PowerChute *plus* is monitoring the UPS by using one of the basic ports on the Share-UPS, perform these steps: 1. Use the 940-0020B cable to connect the serial port on the expander card to the serial port on the system. 2. Re-install PowerChute *plus*, choosing Back-UPS as the **UPS Type** during the installation. If PowerChute *plus* is used to monitor the advanced port on the Share-UPS, no configuration is required. See the *Share-UPS Owner's Manual* to determine which ports are basic and which port is advanced.

Pwrchute.ini File Check

In the **Pwrchute.ini** file in your PowerChute *plus* installation directory, make sure that the first two lines under the [Ups] section match the appropriate example below, in which *x* is the number of the communications port to which the serial cable is attached.

If the cable 940-0024C, 940-1524C, or 940-0095B is being used, the lines must be as follows:

```
SignallingType = Smart
PortName = COMx
```

If the cable 940-0020B is being used, the lines must be as follows:

```
SignallingType = Simple
PortName = COMx
```

APC Worldwide Technical Support

Technical support for this or any other APC product is available at no charge. You can contact APC Technical Support in any of the following ways:

- Use an APC web page.

    - **http://www.apc.com** (Corporate Headquarters)

      Connect by links to APC web pages for specific countries and regions, each of which provides technical support information.

    - **http://www.apc.com/support/**

      Submit technical support requests.

- Contact the APC representative or other distributor from whom you purchased your UPS or APC software application for information on how to obtain local technical support.

- Contact a local or regional APC Technical Support Center by telephone or e-mail.

    - For e-mail addresses and local, country-specific, technical support telephone numbers worldwide, click **Contact** on the home page of APC's corporate web site, **http://www.apc.com**.

    - For e-mail addresses and technical support telephone numbers of major APC regional technical support centers, use the following list:

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