



Release Notes

PowerChute Business Edition

SFPCBE705

Contents

Introduction	1
Installation Overview	2
System Requirements for Installation	2
APC Hardware Requirements for Installation	4
Installation Issues	5
Operational Issues	13
Network Communications Issues When a DNS Server Cannot Be Reached	13
Limited Users on Windows® XP	13
SNMP Service	13
UPS Self-Tests Not Always Logged	13
Console Does Not Clear Event	14
Change User Name/Password is Grayed Out	14
Stand by Mode Prevents the Agent from Working	14
Out-of-Band Management Access Causes Comm Lost Event	14
iKernel.exe Application Error	14
Stand by Can Cause Unscheduled Shutdowns	14
Spring Daylight Savings Changes Scheduled Shutdowns	15
"R2" missing in About dialog box	15
Application Data Collection Feature	16
Server Node Limits	17
Third-Party Software	18

Introduction

Before you install and use APC PowerChute Business Edition, read the important information presented in this help. It's mainly about installing the product, but also covers everyday operation, application data collection, server nodes, and third-party software.

Note:

This help sometimes uses PowerChute to represent PowerChute Business Edition, for example, PowerChute Server instead of PowerChute Business Edition Server.

Installation Overview

Uninstall other APC PowerChute applications before trying to install PowerChute Business Edition. These applications include PowerChute *plus*, PowerChute Personal Edition, and PowerChute Network Shutdown.

During the installation, you will do the following:

- Install the **PowerChute Business Edition Agent** at each UPS-protected computer that you wish to manage with the PowerChute software. These computers must meet the requirements identified in the following sections:
 - [APC Hardware Requirements for Installation](#)
 - [UPS Communications Cable Requirements](#)
 - [PowerChute Business Edition Agent Requirements](#)

Note: If the computer uses an unsupported UPS, or an incorrect UPS communications cable, you may not be able to complete the PowerChute Agent Setup, because the PowerChute Agent will not be able to communicate properly with the UPS.
- Install the **PowerChute Business Edition Server** at a computer that meets the operating system, processor, and memory requirements identified in [PowerChute Business Edition Server Requirements](#).
- Install the **PowerChute Business Edition Console** at the computers that you wish to use to monitor your UPS-protected systems. Those computers must meet the display-quality requirements identified in [PowerChute Business Edition Console Requirements](#).

System Requirements for Installation

You can install *any* PowerChute Business Edition component on a computer that uses one of the following operating systems and service packs:

Supported Operating Systems for every PowerChute component

English	Japanese	Service pack
Windows® 2000 Server/ Professional/ Advanced Server	Windows® 2000J Server/ Professional/ Advanced Server	4
Windows® XP Professional	Windows® XPJ Professional	2
Windows Server™ 2003, Standard/ Enterprise/ Web/ Small Business Server/ Standard x64 Edition/ Enterprise x64 Edition	Windows Server™ 2003J, Standard/ Enterprise/ Web/ Small Business Server/ Standard x64 Edition/ Enterprise x64 Edition	1

Supported Operating Systems for every PowerChute component

English	Japanese	Service pack
Windows Server™ 2003 R2, Standard/ Enterprise/ Standard x64 Edition/ Enterprise x64 Edition	Windows Server™ 2003 J R2, Standard/ Enterprise/ Standard x64 Edition/ Enterprise x64 Edition	-

You can install the PowerChute Agent, *though not the other PowerChute components*, on the following operating systems:

Supported Operating Systems for PowerChute Agent only

English	Japanese
Red Hat® Enterprise Linux® AS/ ES/ WS v3.0, 4.0	Red Hat® Enterprise Linux® AS/ ES/ WS v3.0, 4.0
Red Hat® Enterprise Linux® AS/ ES/ WS v3.0, 4.0, for 64-bit AMD64/Intel EM64T	Red Hat® Enterprise Linux® AS/ ES/ WS v3.0, 4.0, for 64-bit AMD64/ Intel EM64T
Turbolinux® 8.0 Server, 10 Server; 10 Server x64 Edition	Turbolinux® 8.0 Server, 10 Server; 10 Server x64 Edition
SUSE® Linux® Professional 9.2, 9.3, 10	-
SUSE® Linux® Enterprise Server 9 for x86	SUSE® Linux® Enterprise Server 9 for x86
SUSE® Linux® Enterprise Server 9 for AMD64 & Intel EM64T	SUSE® Linux® Enterprise Server 9 for AMD64 & Intel EM64T
-	MIRACLE LINUX v3.0J, 4.0J, 4.0J for x86-64
Novell® NetWare® 6.0, 6.5	-
Solaris™ 9, 10	Solaris™ 9, 10

The computer must be connected to a TCP/IP network and meet the requirements identified in the following sections.

- [PowerChute Business Edition Agent Requirements](#)
- [PowerChute Business Edition Server Requirements](#)
- [PowerChute Business Edition Console Requirements](#)

PowerChute Business Edition Agent Requirements

The PowerChute Agent has the following processor and memory requirements:

Requirement	Minimum	Recommended
Processor	Pentium® III 500 MHz	Pentium III 600 MHz
RAM	128 MB	128 MB

PowerChute Business Edition Server Requirements

The PowerChute Server has the following processor and memory requirements:

Requirement	Minimum	Recommended
Processor	Pentium® III 600 MHz	Pentium III 700 MHz
RAM	256 MB	256 MB

PowerChute Business Edition Console Requirements

The PowerChute Console has the following processor, memory, and display-quality requirements:

Requirement	Minimum	Recommended
Processor	Pentium® III 500 MHz	Pentium III 600 MHz
RAM	128 MB	128 MB
Display Resolution	800 x 600	1024 x 768 (or higher)
Display Color Depth	16-bit color	24-bit true color

APC Hardware Requirements for Installation

For information about the UPS and Environmental Monitor models that can be used with PowerChute Business Edition, see:

- [Supported UPS Models](#)
- [UPS Communications Cable Requirements](#)
- [Supported Environmental Monitors](#)

Supported UPS Models

In addition to any UPS that shipped with the software, the PowerChute Business Edition Agent can manage the following UPS models.

- A newer model Smart-UPS, USB-compatible Smart-UPS, Smart-UPS On-Line

Note: A Smart-UPS that uses SU as part of its model number is supported—for example, SU700 for a Smart-UPS 700. A Smart-UPS that uses AP as part of its model number is not supported—for example, AP600.

USB communication with USB-capable Smart-UPS models is possible on Windows 2000, Windows XP, and Windows 2003.

- A Back-UPS which uses a serial cable to connect to the PowerChute Agent's host computer.
Simple signaling is also supported through a Share-UPS or Interface Expander that uses a serial cable to connect with the host computer.
- Back-UPS Pro

UPS Communications Cable Requirements

The PowerChute Agent communicates with the UPS through a communications cable which connects to the UPS and a communications port at the PowerChute Agent's computer.

UPS Model	Communications Cable
Back-UPS	940-0020B (simple-signaling)
Back-UPS Pro	940-0095A 940-0095B
Smart-UPS	940-0024C (smart-signaling)
Any USB-compatible Smart-UPS	940-0117A
Share-UPS	940-0020B (Basic port connection) 940-0024C (Advanced port connection)
Interface Expander	940-0020B (simple-signaling)

Supported Environmental Monitors

The PowerChute Agent can manage and report on the status of the Environmental Monitoring Card (AP9612TH).

The monitor must be firmware revision S or later.

Installation Issues

This section discusses the issues and problems that can occur while installing PowerChute Business Edition.

PowerChute plus Installed Messages

You cannot use PowerChute Business Edition and PowerChute *plus* on the same computer. When you attempt to install any PowerChute Business Edition component and Setup detects that PowerChute *plus* is installed, one of the following messages will appear, depending on the PowerChute *plus* version.

Message	Description
Setup has detected a version of PowerChute plus, which must be removed before PowerChute Business Edition Setup can continue. Would you like to remove PowerChute plus? (If you answer no, Setup will exit.)	If you click Yes, Setup will automatically uninstall the existing 5.x version of PowerChute <i>plus</i> ; If you click No, the installation will abort.
Setup has detected a version of PowerChute plus. Please uninstall that product and rerun setup	Setup cannot uninstall the existing 4.x version of PowerChute <i>plus</i> . You must uninstall PowerChute <i>plus</i> before you can install any PowerChute Business Edition component.

Installation Error Messages

The following messages, which are listed alphabetically, may occur while using Setup to install a PowerChute Business Edition component.

Note:

If the information in the following table does not help you to correct the Setup failure, contact [APC Technical Support](#) for assistance.

Message	Description
Could not stop the UPS service. Please reboot and retry setup.	Setup failed to stop the native Windows 2000/ XP/ 2003 UPS service. Reboot the computer before you attempt to install the PowerChute Agent again.
Error encountered while installing the <Agent or Server> service. Please reboot and retry setup.	Setup failed to install the PowerChute service. Make sure that no PowerChute files are already installed, and that the computer uses a supported operating system (see System Requirements for Installation), before you attempt the installation again.

Message	Description
Error <identification> on attempt to load dll: <dll identification>.	Setup failed to load the identified DLL. Make sure that the computer uses the correct operating system (see System Requirements for Installation) and meets the PowerChute Business Edition Agent Requirements , before you attempt the installation again.
Failed to load necessary resource.	Setup cannot load the resources (DLL resources, native InstallShield resources, etc.) needed to install the PowerChute component. Make sure that the computer has sufficient memory available (see System Requirements for Installation) before you attempt the installation again.
Password is not 3-16 characters long.	Use a Password that has at least three characters, but no more than sixteen.
PowerChute Business Edition requires administrator privileges to install and run. Please log off and rerun Setup using an administrator-privileged account.	You must have administrative access to the computer before you can install any PowerChute component.
Setup could not determine if the select path is valid. Please select a directory on the local hard drive.	You cannot install PowerChute on a network drive, floppy disk drive, zip drive, or any other drive except the local hard-disk drive.
Setup failed to restart the Native UPS service. You must manually restart the service or reboot to enable power protection.	Setup cannot restart the Windows 2000/ Windows XP UPS service which Setup stopped in order to install the PowerChute Agent. Restart this service manually or by rebooting the computer.
The two passwords must match to proceed.	You cannot install the PowerChute component until your Password and Confirm entries match.
User name is not 3-16 characters long.	Use a User name that has at least three characters, but no more than sixteen.

Setup Does Not Automatically Detect the System's UPS

This section describes how to correct the problems that could cause the setup program to fail to detect the system's UPS.

- Windows 2000/ XP/ 2003 serial communications:
<http://www.apc.com/go/direct/index.cfm?tag=keyclickstagewin2k>
- Windows 2000/ XP/ 2003 USB communications:
<http://www.apc.com/go/direct/index.cfm?tag=keyclickstageUSB>
- Linux communications:
<http://www.apc.com/go/direct/index.cfm?tag=keyclickstagelinux>

During Setup, a **UPS Type and Communication Port** screen will appear under the following circumstances:

- You clicked **No** when asked if you wanted to search all communications ports for the UPS. In this case, you can either select the **UPS Type** and **Port** settings from the drop-down lists, or, if the system uses a smart-signaling UPS, you can click **Run Detect** to have Setup search for the UPS.

Note: Setup cannot automatically detect a Back-UPS, a simple-signaling Back-UPS Pro, an Interface Expander, or a Share-UPS that uses its Basic port to connect to the system.

- You clicked **Yes** to have the communication ports searched, but Setup failed to detect the UPS.
 - If the system uses a simple-signaling UPS (Back-UPS or simple-signaling Back-UPS Pro), an Interface Expander, or a Share-UPS that uses its Basic port to connect to the system, use the **UPS Type** and **Port** drop-down lists to identify the UPS and the communication port, and click **Next >** to continue.
 - If the system uses a smart-signaling UPS, click **Run Auto Detect** to have Setup search for the UPS again.

If the system uses a smart-signaling UPS, and Setup fails to detect that UPS device after you click **Run Auto Detect** in the “UPS Type and Communication Port” display, the following problems can all prevent Setup from discovering that UPS.

- Another service, such as a terminal emulator, is using the communications port to which the UPS connects. Stop any service that is using the communications port, or connect the UPS to another communications port, and then click **Run Auto Detect** to have Setup search for the UPS again.
- The UPS is not using the 940-0024 smart-signaling serial cable or a standard USB cable to connect to the system. See [UPS Communications Cable Requirements](#).
- The UPS connects to a USB port that is not enabled in the computer BIOS.
- The UPS connects to a communications port that uses an incorrect UPS communications setting. See [Serial Port Settings](#) if you use a serial port, as distinct from a USB port.
- A problem exists in the connection between the UPS and the computer. See [UPS Communications Link](#).

- The UPS is used with an AP9603 or AP9605 SNMP Adapter, or an AP9606 Web/SNMP Management Card, and that device is either not fully configured, or it is not running its SNMP agent.

Serial Port Settings

This section is only relevant if you use a serial, as distinct from a USB, port to connect your UPS communications cable. Access the settings for the serial port to which the UPS might attach, as follows:

For Windows 2000, XP, and 2003, from the Control Panel choose the following, in the order given:

- **System**
- **Hardware** tab
- **Device Manager** button
- **Ports** icon

The settings should be as follows:

Parameter	Setting
Baud Rate (Bits Per Second)	2400
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	Xon/Xoff

Also, use the **Advanced...** button to make sure that the **Use FIFO Buffers** (Windows 2000/ XP/ 2003) setting is disabled.

UPS Communications Link

Although the following procedure describes how to use HyperTerminal to check the connection between a smart-signaling UPS and the computer's supported Windows operating system, you can use any terminal-emulation program.

1. Make sure that no other service is using the communications port.
2. Open the HyperTerminal program. Go to the Communications folder (**Start> Programs (All Programs for XP) > Accessories> Communications**) and click the **HyperTerminal** icon.
3. In the "Connection Description" dialog box, type the name you wish to use to identify the HyperTerminal connection, and click **OK**.

Note: If the message "...must install a modem" appears, disregard it.

4. In the “Connect To” dialog box, select the serial port that the UPS uses from the **Connect Using** field, and click **OK**.
5. In the “Port Settings” dialog box, the fields should have the following settings:
 - 2400 baud rate (bits per second)
 - 8 data bits
 - no parity
 - 1 stop bit
 - flow control at Xon/Xoff
6. When a blank screen appears, type a capital Y. If the screen displays the letters, SM (Smart Mode), there is no problem with the serial communications link; if SM is not displayed, go to step 7.
7. Type a capital A. If the screen displays OK, and the UPS beeps and flashes its front-panel LEDs (unless the UPS does not have an alarm or front-panel LEDs), the UPS can receive signals, but it 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 in step 6 above, replace the serial cable. If that does not correct the problem, isolate the problem to the computer or the UPS, by using the above procedure to check the serial connection between the UPS and another computer, or between the same computer and a different UPS.

Compatibility of Basic and Deluxe Versions

PowerChute has Basic and Deluxe versions. In order to function properly, the three components of PowerChute—the Agent, the Server, and the Console—must *all* be either Basic or Deluxe.

In addition, you cannot upgrade a Deluxe version with a Basic version and vice versa. For example, you cannot upgrade the Basic version 6.1 of PowerChute with the 6.3 Deluxe version.

Order of Upgrading Components

When upgrading PowerChute, install the PowerChute components in this order: 1) Agent, 2) Server, and 3) Console. This applies to a manual upgrade, that is, when **Product Update** is disabled.

Characters Not Allowed in User Names and Passwords

In user names and passwords, you cannot use a colon (:), a quotation mark ("), a question mark (?), an asterisk (*), an ampersand (&), a space (), or double- and single-byte Japanese characters. You can use a single quotation mark (').

Uninstalling PowerChute Business Edition

The following issues can arise when uninstalling PowerChute Business Edition:

- If you uninstall PowerChute from your system, your native Windows UPS Service will be restored, but you must configure it to start automatically.

From the **Windows Service** dialog box, double-click the **Uninterruptible Power Supply** service. Set the **Startup Type** to Automatic if you want the service to start when your system starts. Select **Start** to start the service immediately.

- After removing PowerChute, you might need to remove some files and folders manually. Check for the default folder called `\program files\APC\PowerChute Business Edition` or the non-default folder you had specified during the installation (e.g. `c:\apc`) and delete it, including its contents, if it still exists.

If PowerChute is the only APC product installed, you can also delete the `APC` folder.

- The following message might occur when you attempt to uninstall a PowerChute Agent.

Message	Description
Error encountered while removing the Agent service. Please reboot after setup exits.	Setup failed to remove the PowerChute Agent service. The service is either hung up or not installed.

- On Windows 2003 Web Edition ONLY, some files are not deleted when you uninstall. This does not damage your computer system.
- If a PowerChute Business Edition event is open in the Windows Event Viewer while you are uninstalling the PowerChute Agent, you might get a misleading error message shown below (which states "installed" instead of "uninstalled"):
"InstallShield Wizard installed PowerChute Business Edition properly. Please restart computer before using the program".

Installing Older Versions

If you have PowerChute Business Edition on your computer, the system should prevent you from installing older versions of the software. However, sometimes the preventive mechanism does not function properly. Don't install older versions of PowerChute Business Edition on top of new versions as it can cause both a corrupt installation and undeleted files which are not used.

Upgrading the Server and Console without Upgrading the Agents

If you upgrade the server and console components of PowerChute v6.1.x without upgrading the agents, the agents will not function normally. They will have a status of Network Communication Lost and you will not be able to configure or change any setting in device properties.

We recommend that you upgrade all the agents when you upgrade the server and console.

Installation backs up the default.cmd and default.sh files

When you install a PowerChute upgrade, any existing **default.cmd** (Windows) or **default.sh** file (Linux and Solaris) is backed up and named **_default_backup.bak**. It is placed in the same **cmdfiles** directory.

Upgrading with rpm, PowerChute Agent displays OS as Linux kernel version

If you upgrade PowerChute on **Linux** using `rpm -u`, then the Console sometimes specifies the operating system as the Linux Kernel version number, i.e. 2.4.21-20.EL. To fix this, run `config.sh` (stored in the Agent installation directory).

Incompatibility message with Windows Server 2003 x64 Editions

When installing the PowerChute **Agent** on Windows Server 2003 x64 Editions in USB mode, a dialog warns that: "The software you are installing...has not passed Windows Logo testing to verify its compatibility with this version of Windows." You can ignore this warning.

Power Restore event e-mails and notifications don't work

If you upgrade from a previous version of PowerChute and are using 4G UPS's, e-mails and notifications do not get sent for the **Power Restore** event. You can avoid this by reapplying the profile; in the Console help file, see **The Configuration Profile - How to Reapply the Configuration Profile**.

Operational Issues

This section discusses the issues and problems that can occur while actually using PowerChute Business Edition.

Network Communications Issues When a DNS Server Cannot Be Reached

You might experience network communications problems from the PowerChute Business Edition Agent, Server and Console if:

- your network does not have a DNS server OR
- your local system has been recently disconnected from the network OR
- there is a network issue between the local system and the DNS server

It might also happen if you are running a peer-to-peer network or a stand-alone system.

If you are experiencing problems, do the following to have PowerChute use IP addresses instead of attempting to resolve hostnames with the DNS server:

1. Open the PowerChute Console.
2. Select **Preferences** in the **View** menu.
3. Select the “Network” tab.
4. Disable (uncheck) the **Resolve Hostnames** option.
5. Click **Apply**.

Limited Users on Windows[®] XP

The PowerChute Console is not designed for use by the **Limited Users** mode of operating with Windows XP. Limited Users will not be able to execute the console.exe program.

SNMP Service

PowerChute relies on your system's SNMP Agent to send SNMP traps. You have an SNMP option in the PowerChute Console even if your system does not have an SNMP service.

Note:

PowerChute does not support SNMP on Linux or Solaris.

UPS Self-Tests Not Always Logged

UPS Self-Test events are not always logged in the PowerChute Event Log.

Self-tests initiated from the front panel of the UPS are never logged. Sometimes, self-tests initiated by PowerChute or by APC accessories are not logged.

Console Does Not Clear Event

When connected to a Back-UPS, the **Time On Battery Threshold Exceeded** event displays on the PowerChute Console after the event condition has ended.

Check the Event Log for the current status.

You can clear the event from the Console in three ways:

- Stop and then restart the PowerChute Agent.
- Reboot the OS.
- Temporarily change the UPS port. In **Device Properties - Communications - UPS Communications**, change the port, click **Apply**. Now change the port back to what it was and click **Apply**.

Change User Name/Password is Grayed Out

The Console greys out the **Change User name/ Password** option (making it unavailable) when monitoring an Agent whose version number is prior to 6.1.0 (e.g. the Solaris 6.0.2 Agent). When the Agent is removed from the Console, this option becomes available again.

Stand by Mode Prevents the Agent from Working

The PowerChute Agent Windows service does not work when the computer is in Stand by mode.

Out-of-Band Management Access Causes Comm Lost Event

When an Out-of-Band Management card tries to obtain information from a UPS, it can cause the PowerChute Agent to log a **UPS Communication Lost** event, and subsequently a **UPS Communication Established** event.

iKernel.exe Application Error

After uninstalling either the PowerChute Agent or Server on Windows XP, you might see a dialog box called **iKernel.exe - Application Error** with this error:

The instruction at "0x771c741a" referenced memory at "0x00163b60". The memory could not be "read". Click on OK to terminate the program.

To fix this, download a patch from the Microsoft Web site and install it. The Web page for the download is: <http://www.microsoft.com/downloads/details.aspx?FamilyID=9cf87cda-c7f3-41a2-8ea3-cc4f03ff0e31&DisplayLang=en>. The name of the Microsoft article on the Web page is "Issue with DirectX May Cause DVD Players To Not Work", but it is still relevant to this problem.

Stand by Can Cause Unscheduled Shutdowns

If your Windows computer is on Stand by when a shutdown has been scheduled (through the **Shutdown Schedule** command), the shutdown will occur after the computer comes out of Stand by. This is true even if the time scheduled has already passed.

For example, say you have scheduled a shutdown for 7 p.m. to 7 a.m. If your computer goes on Stand by at 5 p.m. and resumes at 9 a.m., you will then see notification that an administrative shutdown began at 7 p.m., and a minute later your computer will shut down and turn on again twelve hours later.

Spring Daylight Savings Changes Scheduled Shutdowns

If your operating system automatically pushes forward your computer clock in Spring, any scheduled shutdowns occur one hour later also.

For example, say you have scheduled a shutdown from 4 a.m. to 6 a.m. If daylight savings occurs that evening and your operating system automatically changes the time, then your shutdown occurs from 5 a.m to 7 a.m.

In these circumstances, you can restart your PowerChute server but *not* your agent or any of the server services before the scheduled shutdown ends (7 a.m. in the example).

Note:

This does not occur with the Fall/ Autumn clock change.

"R2" missing in About dialog box

While running PowerChute on Windows Server 2003 R2 x64 Edition, the **About PowerChute Business Edition** dialog box is missing the "R2".

Application Data Collection Feature

The first time you use the PowerChute Business Edition Console, you will be asked if you want to enable the program's application data collection feature. You can also use the **Data Collection** tab in the "Preferences" dialog box to enable or disable it, at any time.

When enabled, PowerChute tracks the program features that you use, like dialog boxes, menus, icons, etc., and UPS information like model number and runtime and then periodically transmit this usability data back to APC. This information helps APC understand how you use PowerChute, with the goal of improving future versions of this, and other APC products.

The application data collection feature does not send back any personal information, nor does it send back information about your network, your equipment, or any other applications that you use.

Note:

Due to the way internet communications work, your IP address is included in the information that APC receives. However, APC does not save that information.

Server Node Limits

There is no limit to the number of PowerChute Agents, PowerChute Servers, or PowerChute Consoles that you can actually install on your network.

The 5-node (Basic) and 25-node (Deluxe) limits denote the maximum number of PowerChute Agents *that can be managed by a single PowerChute Server*. Or, put another way, the maximum number of UPS's *that you can monitor from a single Console*.

The Deluxe version, therefore, gives you the great convenience of monitoring up to 25 UPS's through one Console.

You can identify the node limit for a PowerChute Server by using the PowerChute Console to access the **About** command in the **Help** menu.

Third-Party Software

Portions of this software are Copyright © 1993 - 2001, Chad Z. Hower (Kudzu) and the Indy Pit Crew - <http://www.nevrona.com/Indy/>

Portions of this software are Copyright © 1997, 1998 by François PIETTE - <http://www.overbyte.be>

Portions of this software are Copyright 1989, 1991, 1992 by Carnegie Mellon University
Derivative Work - 1996, 1998-2000 Copyright 1996, 1998-2000 The Regents of the University of California.

All Rights Reserved

Portions of this software are Copyright (c) 2001, NAI Labs. All rights reserved.

[Copyright \(c\) 1998-2001 The OpenSSL Project. All rights reserved.](#)

Copyright (c) 1998-2001 The OpenSSL Project. All rights reserved.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgment:
“This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (<http://www.openssl.org/>)”
4. The names “OpenSSL Toolkit” and “OpenSSL Project” must not be used to endorse or promote products derived from this software without prior written permission. For written permission, please contact openssl-core@openssl.org.
5. Products derived from this software may not be called “OpenSSL” nor may “OpenSSL” appear in their names without prior written permission of the OpenSSL Project.
6. Redistributions of any form whatsoever must retain the following acknowledgment:
“This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)”

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT “AS IS” AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR

ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young (eay@cryptsoft.com). This product includes software written by Tim Hudson (tjh@cryptsoft.com).

Original SSLeay License -----

/ Copyright (C) 1995-1998 Eric Young (eay@cryptsoft.com) All rights reserved.

This package is an SSL implementation written by Eric Young (eay@cryptsoft.com). The implementation was written so as to conform with Netscape's SSL.

This library is free for commercial and non-commercial use as long as the following conditions are adhered to. The following conditions apply to all code found in this distribution, be it the RC4, RSA, lhash, DES, etc., code; not just the SSL code. The SSL documentation included with this distribution is covered by the same copyright terms except that the holder is Tim Hudson (tjh@cryptsoft.com).

Copyright remains Eric Young's, and as such any Copyright notices in the code are not to be removed. If this package is used in a product, Eric Young should be given attribution as the author of the parts of the library used.

This can be in the form of a textual message at program startup or in documentation (online or textual) provided with the package.

Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. All advertising materials mentioning features or use of this software must display the following acknowledgement:
"This product includes cryptographic software written by Eric Young (eay@cryptsoft.com)"
The word 'cryptographic' can be left out if the routines from the library being used are not cryptographic related:-).
4. If you include any Windows specific code (or a derivative thereof) from the apps directory (application code) you must include an acknowledgement:
"This product includes software written by Tim Hudson (tjh@cryptsoft.com)"

THIS SOFTWARE IS PROVIDED BY ERIC YOUNG "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE AUTHOR OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL

DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

The licence and distribution terms for any publicly available version or derivative of this code cannot be changed, i.e., this code cannot simply be copied and put under another distribution licence [including the GNU Public Licence.

Index

Numerics

2000/ 2003 - versions supported iii

A

agents

not upgrading xiii

APC hardware requirements v

Application Data Collection feature xvii

B

Back-UPS v, vi

event not cleared xv

Back-UPS Pro vi

Basic version xi

C

Change User name/Password

grayed out xv

Communication Lost

caused by Out-of-Band Mgm xv

communications cable requirements vi

compatibility with Windows message xiii

config.sh xiii

Configuration Profile xiii

Console and Back-UPS event xv

D

default.cmd xiii

default.sh xiii

Deluxe version xi

Display Color Depth v

Display Resolution v

E

e-mails not working xiii

Event Log and self-tests xiv

H

hardware requirements v

I

Installation

Failure Messages vii

Issues vi

Overview iii

installation

older versions xii

Interface Expander v, vi

L

license restrictions xviii

Limited Users in XP xiv

limits of nodes xviii

Linux kernel version xiii

logo testing xiii

N

NetWare iii

Network Communication Lost xiii

Network Communications Issues When a DNS

Server Cannot Be Reached xiv

node limits xviii

Novell Netware iii

O

operating system xiii

operating systems supported iii

Operational Issues xiv

Out-of-Band Management

causes Comm Lost event xv

P

password

characters not allowed xii

Port field ix

Power Restore event xiii

PowerChute

Agent and Stand by xv

Agent requirements v

and SNMP xiv

Basic and Deluxe compatibility xi

Console requirements v

installing xi

installing older versions xii

Server requirements v

uninstalling xii

upgrading xi

R

R2 missing xvi

Red Hat Linux iii

rpm xiii

Run Auto Detect ix

S

Serial Port Settings x

Setup Does Not Automatically Detect the System's
UPS viii

Share-UPS v, vi

Smart-UPS v, vi

Smart-UPS On-Line v

SNMP xiv

Stand by and PowerChute Agent xv

Supported Environmental Monitors vi

Supported UPS Models v

SuSE Linux iii

system requirements iii

T

Third-Party Software xix

Turbolinux iii

U

uninstalling xii

upgrading xi

UPS communications cable requirements vi

UPS Communications Link x

UPS models supported v

UPS self-tests not logged xiv

UPS Type ix

UPS Type and Communication Port screen ix

Index

USB-compatible v

user name

characters not allowed xii

W

Windows

Stand by xv

Windows Server 2003 x64 Editions xiii

Windows versions supported iii

Windows XP

Limited Users and PowerChute xiv

X

XP iii