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*"We serve 1,600 institutional clients around the world, primarily corporate and governmental pension funds, university endowments, and charitable foundations. Headquartered in San Francisco with offices in the world's important market centers, Barclays Global Investors is capable of both investing worldwide and serving the special needs of clients in any locality.*

*"APC's PowerChute® plus adds a lot of helpful features. The event logging is quite detailed and provides a lot of useful information. In addition, PowerChute plus notifies the administrator of many conditions like failed battery or completion of testing through paging, e-mail and other alerts. The alerts are even broken out between users and administrators. Another great feature is PowerChute plus' native hooks into Microsoft BackOffice to make sure your apps get shut down the way you want them to. In addition, it hooks into Compaq's Insight Manager, which is very important for us."*

**Matthew Hart**  
Manager, NT Systems  
Barclays Global Investors

# APC UPS Management Solutions

Increase the value of your initial investment in APC uninterruptible power supplies (UPS) with APC UPS management solutions. Our software is specifically designed to help you efficiently manage the growing number of power protection devices on your network. Save time and reap the benefits of more effective network management with APC's comprehensive line of power management solutions.

**PowerChute plus**—Award-winning UPS Management application providing notification, configuration, logging, and graceful OS shutdown

**APC Network Management Card featuring PowerChute Network Shutdown**—The premier solution for the management and graceful shutdown of multiple servers

**APC PowerChute Inventory Manager**—Enterprise-level reporting and inventory management of APC devices

**APC PowerNet Manager**—Providing certified integration with today's leading network and enterprise management systems



For more information, visit APC's Web site at [www.apc.com](http://www.apc.com) or call your local APC office

# PowerChute® *plus*

APC's PowerChute *plus* software dramatically enhances the reliability of your computer system and its applications by automatically protecting system and data integrity during a power crisis. PowerChute *plus* software lets you monitor and control any APC UPS with a serial interface port.

## Power Crisis Management

### Unattended and Scheduled System Shutdown and Automatic Reboot

If during an extended power outage the UPS system battery drains before an operator can shut down the computer system properly, the system crashes as if no UPS were present. PowerChute *plus* software ensures that an unattended system stores its data safely and shuts down gracefully before backup battery power is exhausted.

PowerChute *plus* can be configured to automatically power down a system when it is not in use (at night or on weekends) and reboot the system before the work day or week begins. This feature provides added system security and an electrical energy cost savings of up to 76% based on a typical 40-hour workweek.

### Plan For and Control Crisis Situations with Event Handling Capability

Network administrators can customize each UPS unit's response to power events and environmental hazards, so that crisis situations can be planned for and controlled before they impact uptime or threaten data. For each power or environmental event (sag, outage, dangerous temperatures, and over 20 others) administrators have the option of choosing up to 7 response actions. The most important of these responses—safe, automatic server shutdown and reboot—protect against crashes, security violations, and unnecessary server use.

PowerChute *plus* can instruct the server to run any executable file in response to a power event. This ensures that applications such as databases are properly closed to avoid data corruption, and that the applications are ready for immediate use when power returns.

To maximize uptime and data security, and minimize response-and-repair time, PowerChute *plus* immediately notifies selected individuals by e-mail or pager when a power event occurs. By customizing message intervals, administrators can tailor a response to suit any environment and any user application. Automatic logging facilitates the quick identification of problem trends requiring corrective action.

### UPS Power Quality and Event Logging

UPS status changes, power disturbances, and environmental problems can be time-stamped and documented in both the standard server-error log and the UPS power-events log. Administrators can diagnose UPS/power problems and perform corrective action before uptime is affected.



## PowerChute *plus* Features

- Customize UPS response to power events
- Schedule weekend/evening system shutdown for significant utility cost savings
- Instruct server to run specific applications in response to a power event

## Proactive UPS Management

### Scheduled UPS Self-tests

PowerChute *plus* can schedule a Smart-UPS, Matrix-UPS, or Symmetra Power Array to perform periodic self-tests. Monitoring the functionality of the UPS ensures that problems such as weakened batteries are detected before they impact uptime. Scheduled testing increases network reliability by automatically informing administrators via e-mail or pager whenever a battery needs replacement or a UPS requires servicing.

### Automatic UPS battery conservation

If a UPS shuts down the server, but is unable to turn off its own electrical outlets, the server will continue to drain the UPS batteries until they are discharged. If power comes back and then flicks off again, the depleted UPS will be unable to power the load and the server will crash on start-up. PowerChute *plus* turns off the UPS's power outlets, conserving the battery for subsequent power outages and decreasing recharge time.

### UPS Parameter Configuration

It is impossible to ensure that every server and UPS in your network receives uniform power and is exposed to stable environmental conditions. Being able to fine-tune your equipment to respond appropriately to variations in power levels, temperature, or humidity fluctuations is imperative.

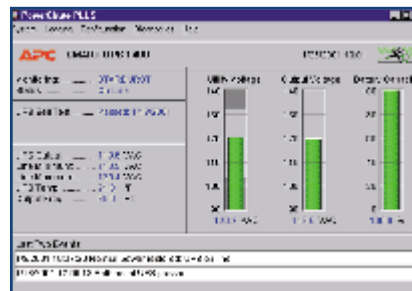
If your power supply is prone to minute but frequent variations, PowerChute *plus* allows you to adjust the high/low transfer parameters so your UPS doesn't continuously switch to battery mode. You can also customize the UPS wake delay to ensure the batteries are sufficiently charged before the server automatically reboots. These and other configuration points help maintain maximum secure uptime in even the most unpredictable environments.

## Management Platform Integration

### Server Management Solutions

Network administrators can manage APC UPSs directly from their server management software. APC's PowerChute *plus* seamlessly integrates with a number of the top server management applications including:

- *Compaq Insight Manager and Compaq Insight Manager XE*
- *IBM Netfinity Manager*
- *HP TopTools*
- *Dell Network Node Manager SE*
- *Microsoft SMS*
- *Intel LANDesk Server Manager*



Main screen: PowerChute *plus* for Windows 2000

# APC Web/SNMP Management Card

UPS network interface card provides standards-based management of UPSs in rack, computer room, and data center environments. APC's Web/SNMP Management Card lets you manage APC UPSs using multiple open standards: Telnet, HTTP, SNMP, and WAP (WML). The Web/SNMP Management Card is certified for and tightly integrated with Enterprise Management products.



Web/SNMP Management Card (AP 9606)

## SNMP-based Management

Comprehensive SNMP-based management of all major network management systems is available using APC's PowerNet Manager software (see back cover).

## Ease of Installation

SNMP-based management features include the BOOTP Enabled Card and Configuration Utility Card. The BOOTP Enabled Card facilitates the assignment of the IP address, Subnet Mask, and Gateway to Card by a BOOTP server. The Configuration Utility Card (10 BaseT Ethernet only) also allows an administrator to save a standard configuration file. This configuration file can then be downloaded via a BOOTP server over the network to mass configure Web/SNMP Management Cards.

## Web-based Management

Through Web-based management you can monitor and configure APC UPSs to shut down/reboot your computer systems, receive e-mail alerts, and view the event log. With a web-enabled mobile phone you can also check the status of most APC's Smart-UPSs and Matrix UPSs.

## Security and Self-tests

Built-in security employs advanced authentication using the MD5 Algorithm (10 BaseT Ethernet only). Schedulable, periodic self-tests monitor UPS functionality.

## Event Handling

SMTP e-mail capability automatically e-mails the network administrator in the event of a power outage or bad battery. On-board event logging for all UPS application firmware modules allows administrator to record and view power and system events. Based on a configurable, event security level, the network administrator can select which events will trigger notification to which e-mail/trap recipients. The card stores an event log that can be viewed via the Web or downloaded via FTP.



Comprehensive, Web-based UPS monitoring, configuration, and control.

# PowerChute Network Shutdown

APC's PowerChute Network Shutdown works in conjunction with the APC Web/SNMP Management Card to provide graceful, unattended shutdown of multiple computer systems over a network. Administrators can configure PowerChute Network Shutdown software via a browser-based interface, and customize command files to run on each server in the event of an unattended shutdown. Scalable architecture supports a virtually unlimited number of client systems.

For applications that require dedicated serial connections rather than network-based connections, an alternative approach is to use PowerChute *plus* in conjunction with the Share-UPS and Interface Expander products.



Graceful shutdown of multiple servers over the network

# PowerChute Inventory Manager v2.0

## Detailed UPS inventory information instantly at hand

Whether you have 12 UPSs spread throughout a building or 10,000 APC devices scattered across the world, APC's PowerChute Inventory Manager lets you capture, organize, and assess vital information concerning your APC devices.

Which UPSs need new batteries? Which UPSs failed a self-test? What is the firmware revision of the MasterSwitches in each branch office? PowerChute Inventory Manager lets you answer all these questions and more. Simply launch the application and click on any of the predefined reports.

## New Features

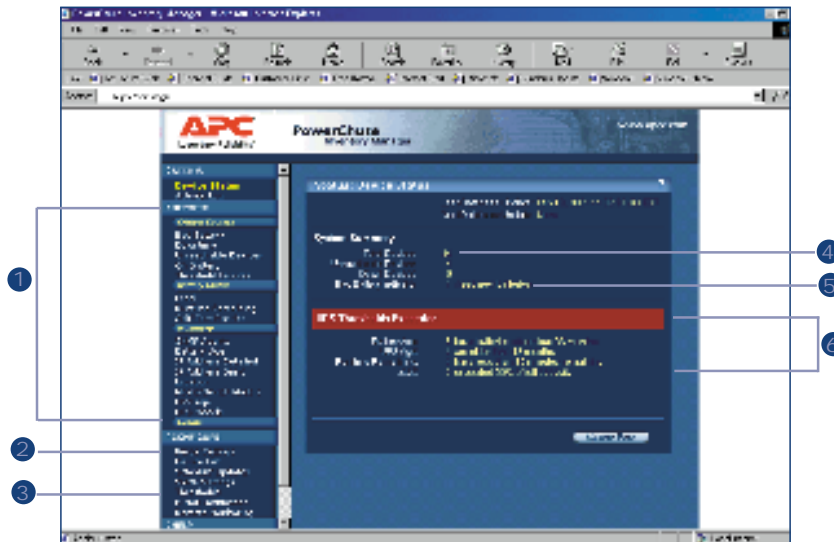
APC has updated its award-winning PowerChute Inventory Manager software with a number of new and exciting features including:

- User definable UPS thresholds
- Automatic e-mail notification when UPS variables fall outside user-defined thresholds
- Downtime Report outlines total time on battery and total amount of downtime incurred during a user-defined timeframe
- Expanded support for APC devices now includes support for UPSs, MasterSwitches, Network Management Cards, Environmental Monitoring Cards, and PowerChute SNMP Agents
- Attractive new user interface



*Device Status page: Instant summary of critical devices*

1. Click on any of the predefined reports for instant access to detailed information concerning your APC devices.
2. Automatic e-mail notification when UPS variables fall outside user-defined thresholds
3. Convenient scheduled operation allows data to be gathered during off-peak periods to optimize network performance



4. Total number of APC devices found on the network
5. Number of UPSs reporting bad batteries
6. Updated count of UPSs which have fallen outside user-defined thresholds



### Proactive Battery Management

Proactive battery management eliminates a major risk of downtime by facilitating timely battery replacement. The Bad Battery Indicator Status Report provides a complete listing of all APC UPSs requiring a new battery. Clicking on the "Contact APC for Replacements" link at the top of the report will automatically forward the battery information to APC so we can send replacements to you.

### On-demand UPS Runtime and Load Reporting

After adding new computer equipment, it can be costly for network administrators to assume they still have sufficient runtime. Batteries wear with age and repeated use due to power events. PowerChute Inventory Manager proactively manages your company's power/runtime strategy through reportage on the UPS load and UPS runtime.

### UPS/Battery Age Reporting

Having the age of your network's APC UPSs and batteries at your fingertips is invaluable during annual budgeting. The Battery and UPS Age reports lets you know how many and what type of batteries may need to be replaced in the coming year, and flags any UPS that may be in need of replacement due to age.

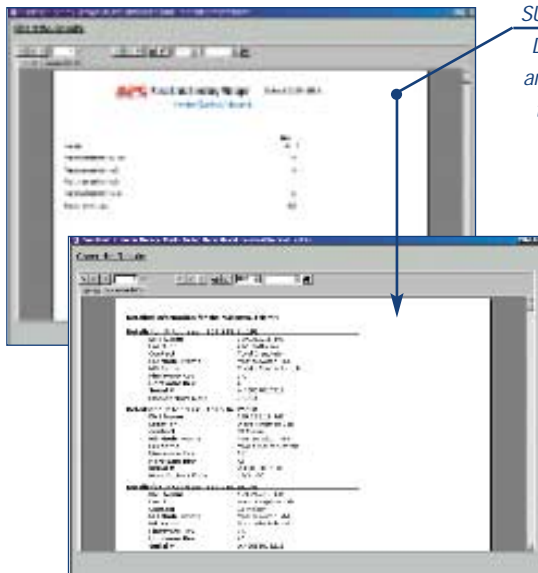
### User-Defined Thresholds (New feature)

- Tell PowerChute Inventory Manager what UPS variables are important to you and the software will automatically email you a report outlining the details of any device that falls outside these thresholds.

### Integration with APC Power Management Devices (New feature)

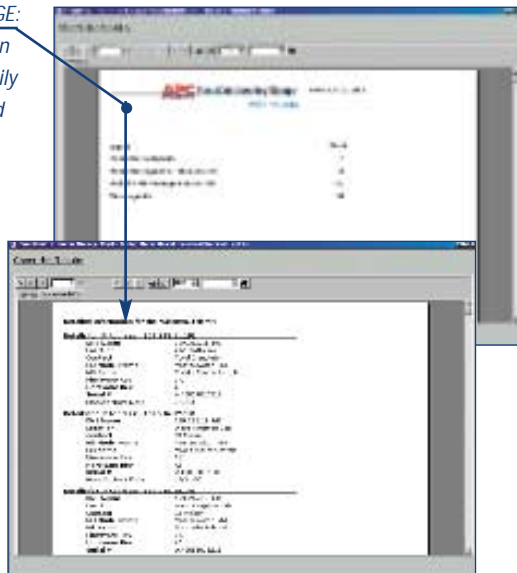
- Expanded support for a wide range of APC Devices, including APC's MasterSwitch family and Web/SNMP Management Cards.

APC MasterSwitch Report



SNMP Agent Report

*SUMMARY PAGE:  
Double click on  
any device family  
to get detailed  
information.*



# APC PowerNet Manager—Complete Enterprise Power Management

APC's PowerNet Manager lets enterprise administrators easily identify where problems occur so that solutions can be quickly executed. By providing clear and comprehensive power-related information at the enterprise management console, PowerNet Manager helps you reduce downtime and maximize your investment in power protection.

## PowerNet Manager—Graphical, Intuitive Power Management User Interface for Enterprise Management Platforms

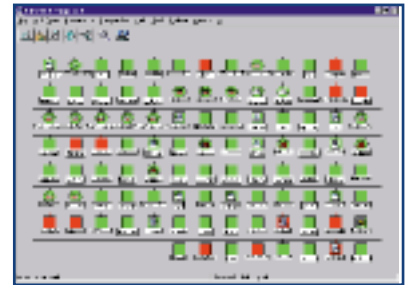
Control UPSs and manage the power in your worldwide network without navigating through the MIB browser using MIB variables. PowerNet Manager is a graphical power management application that runs on top of the enterprise management console, collecting UPS/power status information from APC PowerChute SNMP agents and SNMP Management Cards.

UPS/power status information is graphically displayed in a window on your NMS station for fast problem diagnosis. Icons, strip charts, and bar graphs make it easy to visually determine UPS and power status at a glance. You can also initiate a shutdown and reboot of the UPS, connected server, and internetworking equipment from your PowerNet Manager console. PowerNet Manager supports a wide range of network and enterprise management systems including:

- HP OpenView NNM
- Tivoli NetView
- CA Unicenter TNG
- Cabletron Spectrum
- HP OpenView for Windows
- Novell ManageWise
- SunNet Manager

## PowerNet Event Adapter for Tivoli Enterprise

The Event Adapter converts APC's SNMP traps into events that are reported in the Tivoli Enterprise Console (TEC). The PowerNet Event Adapter for TEC has been certified by Tivoli at the Foundation Level.



HP OpenView: APC devices are represented by APC icons on the map.



PowerNet Manager can be launched from the network map.



APC's quality system is certified by ISO 9002 standards



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