Chloride Connectivity Solutions
MopUPS® Software connectivity solutions

Software for UPS monitoring and safe shutdown of computers running Microsoft Windows, Unix, or Open Systems.

MopUPS Express
Used in stand alone PC or LAN Server applications with local administrators. Provides on-screen UPS status, data, event logging, and controlled shutdown of a single Microsoft® Windows® computer.

MopUPS Professional
Used in applications where one or more servers on a single UPS require graceful shutdown during extended power failures. Professional networking capabilities include e-mail event messaging, remote administration, remote monitoring integration with ManageUPS CIO and shutdown of multiple Windows servers via remote log-in over TCP/IP. Supports selected Windows, Linux, and Unix operating systems.

MopUPS Professional P/R Edition - for Parallel/Redundant UPS Systems
Serves as a central monitoring station for parallel UPS system. UPS status information is retrieved via TCP/IP network connection to ManageUPS net adapters.
Perfect for server clusters and blade servers powered by redundant UPSs. P/R monitors redundant server UPS and remote UPS powering SANs, switches, routers or other IT infrastructure that servers may depend on. Notifies when load levels or module faults threaten UPS redundancy or availability of remote network resources. Run MopUPS P/R on one or two hosts in a server set and control shutdown of remaining servers via integrated Network Shutdown Controller. Supports selected Windows, Linux, Unix operating systems.

MopUPS NSA (Network Shutdown Agent)
MopUPS NSA is used when centralized shutdown of multiple computers simplifies configuration and setup. MopUPS NSA listens on the network for shutdown notification from the Network Shutdown Controller in MopUPS P/R (shared parallel UPSs) or ManageUPS Net (shared single UPS). Supports selected Windows, Linux, Unix operating systems.
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<th>Question</th>
<th>MopUPS Express</th>
<th>MopUPS Professional</th>
<th>MopUPS P/R Edition</th>
<th>MopUPS NSA (Network Shutdown Agent)</th>
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</thead>
</table>
| OS Support | • Intel based system  
• Vista, Windows 7, Windows (NT4/2000/XP) | • Intel Based Systems  
– MopUPS Professional for RedHat (6.8)  
– MopUPS Professional for RedHat (ES 3/4/5)  
– MopUPS Professional for RedHat Fedora Core 6  
– MopUPS Professional for SUSE 8/10  
• Risco/Sparc Based Systems  
– MopUPS Professional for AIX (4.3.3/5.x)  
– MopUPS Professional for HP-UX 11.11  
– MopUPS Professional for Solaris 5  
– MopUPS Professional for Solaris 8-10 | • Intel Based Systems  
– MopUPS Professional for Windows 2000/XP/2003/Vista  
– MopUPS Professional for RedHat 9/ES  
– MopUPS Professional for RedHat 9/ES 1/Sh4  
– MopUPS Professional for SUSE 8/10  
• Non Intel Based Systems  
– MopUPS Professional for Solaris Intel 10 | • Intel Based Systems  
– MopUPS NSA for RedHat 9/ES  
– MopUPS NSA for RedHat 9/ES IA64  
– MopUPS NSA for SUSE 8/10  
– MopUPS NSA for Solaris Intel 10  
– MopUPS NSA for Solaris SPARC 8-10 |
| Bundled UPS* | Desk Power, ONePlus UPS  
• Active, Synergy S II Series, ON Series Universal Mount, Agility | Serial UPS Monitoring requires dedicated computer serial port.  
• Serial UPS Monitoring requires dedicated computer serial port.  
• Network Monitoring requires TCP/IP ethernet connection and ManageUPSnet Adapter.  
• Network SMTP server for email messaging on non Unix/Linux systems.  
• Email notification using SMTP server configured for open mail relaying  
• Hardware and software dependencies.  
• Installation requires user account with Administrator rights (root login).  
• USB on Desk Power Series and Active Series UPSs supported in Windows 2000/XP/2003 with use of USB Driver.  
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• X-Windows libraries required for Unix and Linux installations. | Serial UPS Monitoring requires dedicated computer serial port.  
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• Network Monitoring requires TCP/IP ethernet connection and ManageUPSnet Adapter.  
• Network SMTP server for email messaging on non Unix/Linux systems.  
• Email notification using SMTP server configured for open mail relaying  
• Installation requires user account with Administrator rights (root login).  
• UPS Monitoring requires TCP/IP ethernet connection and ManageUPSnet Adapter on each UPS module that are routable from the IP of the MopUPS host system.  
• X-Windows required for Unix and Linux installations.  
• Windows installations require MSI Installer support | Installation requires user account with Administrator rights (root login).  
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### MopUPS Features

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<td><strong>Features</strong></td>
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<tr>
<td>Safe system shutdown.</td>
<td>• Remote Management Site power and UPS status information can be access securely from any computer on your IP based network when MopUPS Professional is being used as a stand alone software that is connected directly to the UPS. View event history and voltage logs for trend analysis. View UPS system status in real time for situational decision support. Access is based on User Authentication with 128bit MD5 encryption.</td>
<td>• Power Management Centralized graphical view utility view MopUPS services and network shutdown agents on remote systems.</td>
<td>• Authenticated Login MopUPS NSA is a light version of the MopUPS service that does not monitor a UPS but listens for shutdown command from a password authenticated remote MopUPS service.</td>
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<td>• Remote Messaging</td>
<td>• Easy navigation between Module, System, and Host level views provided convenient real time status viewing for situational decision support.</td>
<td>• Localized Script Execution MopUPS NSA can be configured to call a script on its host computer before executing OS shutdown.</td>
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<td>Keeps you informed anywhere – fault and recovery messages are sent via SNMP Trap or email. Body of email will include URL for quick link back to UPS Web page. Many pager systems will forward email to your wireless pager - so you can be informed anywhere.</td>
<td>• Intuitive view utility charts power data graphically and sorts event history log entries by date/time, event origin, or event type for simplified trend analysis.</td>
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<td>Safe Network Shutdown Coordinated shutdown for networked computers on a shared power source</td>
<td>• Remote Messaging Keeps you informed anywhere – fault and recovery messages are sent via SNMP Trap or email. Body of email will include URL for quick link back to UPS Web page. Many pager systems will forward email to your wireless pager - so you can be informed anywhere.</td>
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<td>MopUPS provides several network-shutdown methods for flexibility, simplicity, and reliability to automate unattended emergency shutdowns.</td>
<td>Safe Network Shutdown Coordinated shutdown for networked computers on a shared power source</td>
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<td>Safe System Shutdown Preserve data integrity and minimize recovery delays with automated system shutdown. MopUPS monitors the UPS for power fail, low battery, or other events that jeopardize computer power – and initiates controlled system shutdown.</td>
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<td>Scripting Engine (Unix/Linux) Write custom installation and configuration scripts for your multiple system installations or for continued program management.</td>
<td>Scalability Network license mechanism lets you add licensed services as needed - add modules as needed, add systems as needed. Adjust system redundancy settings from N+0 to N+N. Manage multiple dependencies when servers depend on remote storage or other network infrastructure elements powered by separate UPS.</td>
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<td>System Security Username/Password, port selection, and IP Filtering options let you define the security level you need to secure remote access from the GUI or network shutdown service. Username and Password authentication uses 128bit MD5 encryption when these keys are passed over the network.</td>
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**Note:** To download any of the MopUPS products go to [http://connectivity.chloridepower.com](http://connectivity.chloridepower.com) and click on products.
ManageUPS® NET Adapter connectivity solutions

Secure Power Always

ManageUPS P Series - Full Featured Management Adapters for UPS and Environment

ManageUPS NET P Series adapters provide: embedded WEB server for configuration and information access, SNMP agents for UPS and Environment Sensor, data/event Logging, e-mail Event Messaging, Network Shutdown Controller, DHCP client for automatic configuration, FTP server for network update of firmware and configuration files via ManageUPS DCU. Environment Sensor and/or MODBUS Server (slave) options can be ordered in the packages below, or added later in the field.

**P Series Options**

**ManageUPS NET Adapter +E - Environmental Sensor Option**

ManageUPS +E models includes 1 Environment Sensor module and 5 meter Blue Bus cable. Additional sensors (sold separately) can be added to cover multiple zones.

**ManageUPS Net Adapter +B - MODBUS Option**

ManageUPS +B simplifies integration of Chloride UPS systems with building monitoring and automation systems via MODBUS RTU, MODBUS/TCP or JBUS protocols.

ManageUPS VP Series - SNMP/WEB Management Adapters for single-phase UPS

The VP Series is designed for single-phase UPS applications that do not require Environment Monitoring or MODBUS RTU options. All other aspects, the VP Series provides the same functions as the full-featured P Series: SNMP/WEB, data/event Logging, e-mail Event Messaging, Network Shutdown Controller, DHCP configuration and network update of firmware and configuration files via ManageUPS DCU. VP Series hardware platform is limited to Ethernet connectivity only.
## ManageUPS Net Adapter & ManageUPS Net VP

### Requirements
- Network connection is 10/100 Base-T Ethernet - Ethernet Class 1 (DIX) packet format 802.3u Compliant - Compatible w/FastEthernet full/half duplex
- Web interface requires a W3C standards compliant web browser
- Automatic network configuration requires a DHCP Server
- E-mail requires SMTP Server
- SNMP trap requires SNMP trap receiver
- Log functions work best with access to NTP (network time) server.

### Features
- **DHCP Network Configuration**
  Supports automatic configuration of IP settings using the DHCP protocol. DHCP server must be located on the same local network as the ManageUPS.

- **Multiple Networked Access Methods**
  Site power and UPS status information can be accessed securely from any computer on your network. View UPS system status in real time for situational decision support. Access via Telnet, SNMP, or Web Browser.

- **Network Shutdown**
  ManageUPS Network Shutdown Controller calls shutdown of computers running MopUPS NSA (Network Shutdown Agent) or RCCMD. Multiple schedules allow for graceful load shedding during extended outages to preserve battery autonomy for the most critical loads.

  ManageUPS UPS Status Server allows computers running MopUPS Professional or MopUPS Special Edition for Parallel or Redundant Systems to share UPS status information. This allows server group administrators to tailor their own automated power-fail-response scenarios.

  Both methods can be used simultaneously, and in various combinations to allow complete flexibility in tailoring sophisticated power-fail-response plans for a wide range of operating systems.

- **Security**
  Telnet, Web, and SNMP servers can be individually disabled. SNMP server uses communities to restrict access. Web, Telnet and FTP servers have username and password access control. Web server uses basic HTTP authentication. Passwords used for Network Shutdown authentication are encrypted via MD5.

- **Serviceability**
  Allows firmware or configuration files to be updated over the network for simple maintenance. Using ManageUPS DCU for simplified updating and version management.

- **Event and Data Logging**
  On-board “flash drive” holds log files of UPS events, system events, & UPS data. WEB interface allows convenient log viewing utility and quick-link download button. Log files can also be retrieved via FTP.

- **Event Messaging**
  UPS events can trigger SNMP trap and/or e-mail event messages. E-mail message options include long, short and short-no-subject format options for easy forwarding via SMS or wireless handheld devices.

- **SNMP Agents**
  Embedded SNMP Agent conforms to SNMP RFC’s – RFC1213 (MIB II) and RFC1628 (Standard UPS MIB).

- **Simplified Network Configuration via DHCP and ManageUPS DCU**
  Deploy-first, configure remotely – or configure first, then deploy. You choose what works best for your situation.

- **No need for cumbersome serial port setup and text menu configuration via terminal emulators in a staging area. Use ManageUPS DCU (Discover and Configuration Utility) to automatically discover ManageUPS adapters on your LAN – or search for them on your WAN – and quickly navigate to key settings WEB pages. Change network parameters to fixed IP settings if your network policy prefers manual IP administration.**

- **ManageUPS accepts network parameters automatically via DHCP (RFC2131 & RFC2136 for DDNS).**
  In LANs without DHCP servers, ManageUPS negotiates a “link-local” address.

- **OnBoard Help**
  Help files for parameter definition and configuration assistance are on board – "?” links are context-sensitive and open html-help files in a separate window.
ManageUPS CIO Software

- Visualize incident locations
  Multi-level Pin-Map feature helps you visualize the location of UPS with alarm conditions. Alarm View lists all devices by type of active alarm.

- Manage alarm storms
  Some incidents, such as power fail or network fail, can be localized or broad-based - affecting multiple UPS connections simultaneously. ManageUPS CIO can reduce these incidents to a single alarm notification summarizing the number and identities of affected UPS.

- Simple to install and set up
  Install ManageUPS CIO on a central server to continuously monitor UPS attached to the network. Automated discovery mechanisms make it easy to populate the UPS asset list in minutes.

- Flexible to use
  All List Views are easily sorted on any column for easy review and analysis. Groups and SmartGroup features simplify analysis and report generation tasks. The folders feature lets you organize Groups and SmartGroups to reduce clutter. Enable secure remote access to the monitored inventory from other computers on your network using the browser-like GUI application.

- One click device navigation
  Right click on any device icon or list entry to open the device detail page or access the device WEB server.

- One tool for all ups
  ManageUPS CIO is the one management tool for all your UPS assets. Monitor Chloride UPS products or 3rd party UPS.

- BACnet over IP support
  This additionally licensed feature enables information from ManageUPS-CIO server to be retrieved by the BMS (Building Monitoring System) via BACnet IP Protocol. The BMS can then send selective information to required personnel or other management systems.
### ManageUPS CIO Software

#### Requirements
- **UPS Agent Compatibility**
  - Chloride ManageUPS net adapter (UPS)
  - Chloride ManageUPS +E net adapter (UPS & Environment Sensors)
  - Chloride MopUPS software (Proxy Agent for Low Power UPS)
  - 3rd party UPS SNMP adapters (RFC1628 standard UPS MIB or Powernet UPS MIB)

- **Hardware Requirements**
  - Server class 32-bit x86 (Intel compatible) computer
  - 1GHz CPU
  - 1GB RAM
  - Ethernet network adapter

- **Email Notification**
  - Email notification using SMTP server configured for open mail relaying

#### Features
- **Multi-level Pin-Map**
  Helps visualize problem locations. Map level backgrounds are any image files (JPG, GIF, PNG). Use any combination of Geographic Maps (starter set included), Floor plans, Visio drawings, even digital photos of specific installations.

- **Alarm View**
  Automatically organizes devices by current alarm type. Acknowledge alarms to reset their Pin Map representation to normal.

- **Smart Groups**
  Rules-based container for inventory analysis and condition monitoring with e-mail change notification.

- **Groups**
  A container for organizing assets manually - for standard reports or quick view of specific asset sub-sets.

- **Folders**
  Containers for organizing Groups, Smart-Groups and other Folders to help minimize clutter.

- **Add Devices**
  CIO makes it easy to build a UPS asset list - CIO automatically discovers UPS on the local LAN segment – simple search utility finds UPS on remote sub-nets.

- **Print Reports**
  Send formatted reports to a printer or PDF writer for archive or sharing with others.

- **Export**
  Export lists from any list view to CSV files for further analysis via spreadsheet or archive database.