

---

**Belkin**

**Automatic Power Management  
Software**

**User's Manual**

---



---

---

# Table of Contents

<b>Belkin</b> .....	<b>1</b>
<b>Automatic Power Management Software</b> .....	<b>1</b>
<i>User's Manual</i> .....	<i>1</i>
<i>Table of Contents</i> .....	<i>i</i>
<b>Chapter 1 Belkin Automatic Power Management Software Introduction</b> .....	<b>1</b>
<i>Belkin Automatic Power Management Software profile</i> .....	<i>1</i>
<i>Belkin APM Software structure</i> .....	<i>1</i>
Agent .....	1
Monitor .....	1
Tray Icon .....	1
<i>Belkin APM Software functions &amp; advantages</i> .....	<i>3</i>
<b>Chapter 2 Installing, Starting &amp; Uninstalling of Belkin APM Software</b> .....	<b>4</b>
<i>System requirements</i> .....	<i>4</i>
<i>Platforms supported by Belkin APM Software</i> .....	<i>4</i>
<i>Installing Belkin APM Software</i> .....	<i>5</i>
<b>GUI mode environment</b> .....	<b>5</b>
Windows platform .....	5
Mac OS X platform.....	6
Other operating systems .....	7
<b>Consoling mode environment</b> .....	<b>7</b>
<i>Start / stop Belkin APM Software</i> .....	<i>7</i>
Windows Vista.....	7
Other Windows.....	8
Mac OS X.....	9
Linux and UnixWare .....	9
<i>Uninstall Belkin APM Software</i> .....	<i>10</i>
Windows operating system .....	10
Mac OS X system .....	12
Linux and UnixWare system.....	12
<b>Chapter 3 Belkin APM Software User Interface</b> .....	<b>13</b>
<i>Belkin APM Software manage window</i> .....	<i>13</i>
UPS status bar .....	13
<i>Menu and Dialog</i> .....	<i>14</i>
<b>System Menu</b> .....	<b>14</b>
Auto Search UPS.....	14
Administrator .....	14
Administrator Password Settings.....	15
Communication Port Settings .....	15
<b>Log Menu</b> .....	<b>15</b>
Event Log Viewer .....	15
Data log Viewer .....	16
Record Setting.....	16

---

<b>UPS Menu .....</b>	<b>18</b>
UPS Control Parameters .....	18
Event Action .....	20
Shutdown Settings .....	21
UPS Self-Test.....	23
UPS Test Manager.....	23
UPS OnOff Manager.....	24
Schedule Viewer.....	25
<b>Tools Menu .....</b>	<b>25</b>
Broadcast Message Settings.....	25
Email Settings .....	26
SMS Setting.....	27
Send message .....	28
Pager Setting.....	28
<b>Monitor Menu .....</b>	<b>29</b>
Monitor Remote UPS .....	29
<b>Preference Menu .....</b>	<b>30</b>
Bottom image .....	30
Temp .....	30
Date Format .....	30
Advance Settings .....	31
<b>Language Menu.....</b>	<b>32</b>
Language .....	32
<b>Chapter 4 How to do .....</b>	<b>33</b>
<i>Realizing the assigned COM port .....</i>	<i>33</i>
<i>Realizing the broadcasting message in the LAN.....</i>	<i>34</i>
<i>Realizing the UPS self-test schedule.....</i>	<i>34</i>
Adding new UPS self-test tasks .....	34
Modifying UPS self-test task.....	36
Removing set UPS self-test tasks .....	36
<i>Realizing the UPS OnOff Manager.....</i>	<i>37</i>
Adding new UPS OnOff tasks.....	37
Modifying set UPS OnOff tasks .....	38
Removing the UPS OnOff task .....	39
<i>Realizing the network shutdown function.....</i>	<i>39</i>
Configuring Shutdown Settings .....	40
Adding new agent IP address .....	40
Configuring Shutdown Remote Agents.....	40
Configuring Shutdown alarm Parameters.....	41
<i>Modifying UPS control parameters .....</i>	<i>42</i>
<b>ON-LINE UPS:</b> .....	<b>42</b>
<i>Realizing system administrator and password .....</i>	<i>44</i>
Configuring system administrator .....	44
Modifying the system administrator password .....	44
<i>Realizing sending event message via email.....</i>	<i>45</i>

---

---

<b>Configuring Email Settings</b> .....	<b>45</b>
SMTP Server Setting.....	45
Receiver Email Address.....	45
Send Message.....	46
<i>Realizing sending event message via SMS</i> .....	<i>46</i>
<b>Events supported</b> .....	<b>46</b>
<b>Configuring Email Settings</b> .....	<b>47</b>
Another method to select Event Code .....	47
Please refer to .....	47
<i>Realizing sending event messages by pager</i> .....	<i>48</i>
<b>Events supported</b> .....	<b>48</b>
<b>Configuring the Pager Setting</b> .....	<b>48</b>
Please refer to .....	49
<i>Realizing telemonitoring UPS in the LAN (same network)</i> .....	<i>49</i>
<b>Precondition</b> .....	<b>49</b>
<b>Configuration</b> .....	<b>49</b>
Remote Control Permission Switch .....	49
Monitoring UPS systems.....	50
<i>Realizing UPS remote control in the WAN (different network)</i> .....	<i>51</i>
<b>Precondition</b> .....	<b>51</b>
<b>Configuration</b> .....	<b>51</b>
Remote Control Permission Switch .....	52
Monitoring UPS systems.....	52
<b>Appendix A Glossary Explanation</b> .....	<b>I</b>
<b>Appendix B Belkin APM Software Event Table</b> .....	<b>II</b>

---



---

# Chapter 1

## Belkin Automatic Power Management Software

### Introduction

## Belkin Automatic Power Management Software profile

Belkin Automatic Power Management Software (Belkin APM Software) is a UPS monitoring software which supports both stand alone computers and network (including LAN / Internet) connected computers.

Belkin APM Software monitors the intelligent UPS and safeguards computer systems from unexpected crash when power fails. With Belkin APM Software, users are able to monitor and configure the UPS on any computers in the network. With this software, one UPS can protect computers in network with security simultaneously, including shutting down system in security, saving application data and shutting down the UPS when AC power fails.

## Belkin APM Software structure

Belkin APM Software is composed with components: Agent, Monitor and Traylcon.

Note: The concrete meaning of Agent refer to Appendix A - glossary explanation

### Agent

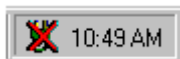
The core component of Belkin APM Software runs as a system service in the background. Also communicates with the UPS, logs events, notifies users of events and arranges actions according to user's requirement and shutdowns the system when necessary. Agent can be managed by Monitor.

### Monitor

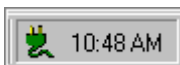
The user interface of Belkin APM Software. Relying on Agent, it gathers real-time UPS information, UPS status, server information and allows user to set the UPS parameters. It works on any computer in the LAN.

### Tray Icon

The management tool of Belkin APM Software, and works in Windows platform only. It shows on the system tray. Traylcon has two different icons for displaying current Agent status. Please refer the listed table below for the status illustration:

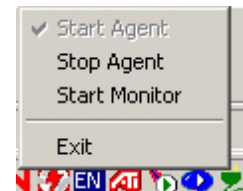


The Agent is stopped.



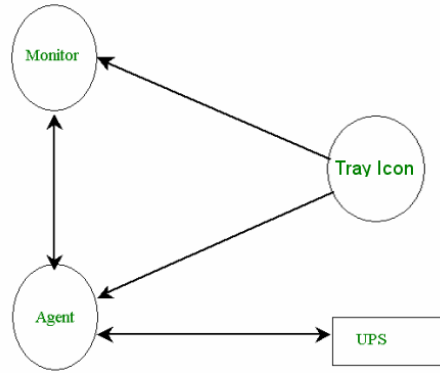
The Agent is running.

A short cut menu pops up when right-clicking on the icon on the system tray.



---

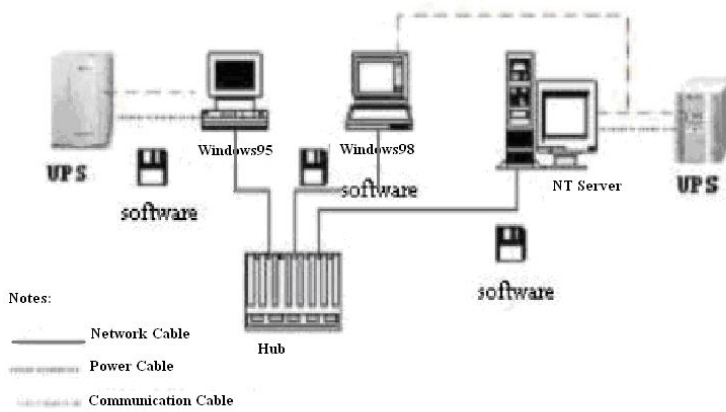
The relationship between Agent and Monitor.



Belkin APM Software Application Range of stand alone computers.



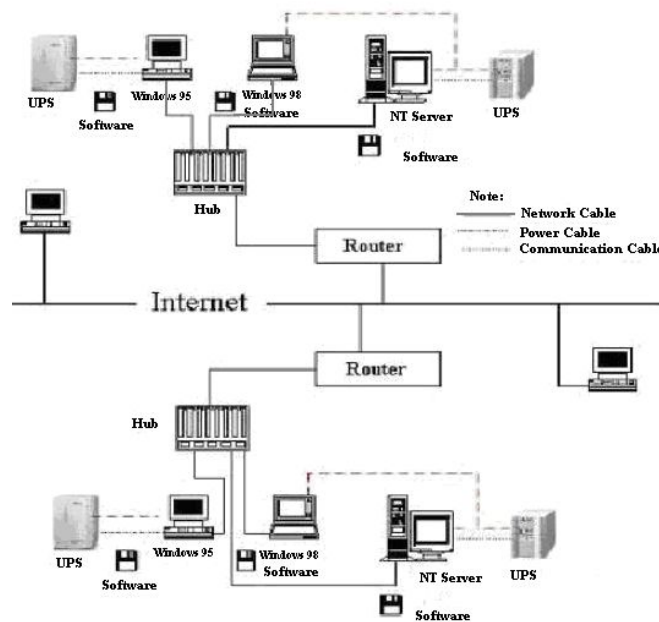
Application in the LAN.





---

Application on the Internet.



## Belkin APM Software functions & advantages

- When the Agent starts, it will run continuously to protect your equipment in every minute. To uninstall is easily and clearly with no trace. This software will not increase spend on system and is a Green software. You can have a full view of all the information, including utility power, UPS, loads and battery and the information will be listed in the same window.
- Auto searching and telemonitoring any UPS in LAN.
- Manual searching and telemonitoring any UPS in Internet.
- Security protection: The system administrator can set the password to prevent damage from others. Only the system administrator has the authority of full access, while other users have the authority of view only.
- Data auto protection: It can close most of the running applications and save the related files.
- Time turning on and off the UPS: It can give maximum protection to your computer system.
- Time self test of the UPS: It provides the maximum protection to your UPS system.
- Network shutdown: It supplies your network system the maximum protection.
- Data logging (including UTILITY POWER, UPS, LOAD and BATTERY) and event logging: The system administrator can carry out the UPS system daily maintenance.
- Flexible means of information transfer allows the user to control the UPS status at anytime and anywhere. Important information will never be missed because of the change of time and place.
  - Broadcasting messages to every user in the network.
  - Sending messages via pager.
  - Sending messages by EMAIL.
  - Sending messages via mobile phone sending SMS.

---

# Chapter 2

## Installing, Starting & Uninstalling of Belkin APM Software

### System requirements

- 128 MB RAM of memory at least (256MB is recommended)
- 256 colors and 800 \* 600 resolution or above display is recommended
- 160 MB of disk space or above
- An available communication port (RS-232 Serial Port or USB port) is needed while connecting to UPS with a special connecting cable.
- For Mac OS X, Linux or Unix operating system, the user must have the access authority as the administrator
- TCP/IP protocol must be installed to support network management and the port 2099 should be opened in the firewall.

### Platforms supported by Belkin APM Software

The following operating system (OS) is arranged by the alphabetical order:

- AIX 4.3.3, 5.1, 5.2
- Compaq Tru64 Alpha
- FreeBSD x86
- HP-UX 11.x, 11i.x
- Linux
- Mac PPC OSX
- SCO UnixWare 7.1.1, 7.1.3, SCO Unix 8.0, and SCO OpenServer 5.0.6, 5.0.7
- SGI Irix 6.5.x
- Solaris / Sparc 2.6, 7, 8, 9 , and Solaris / Intel 2.6, 7, 8, 9
- Windows XP / 2003 / 2000 / ME / 98 / NT 4.0 (SP6) / Vista.

---

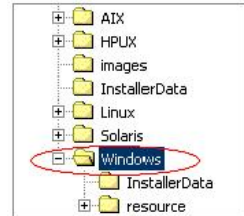
# Installing Belkin APM Software

**Note:** The installation must be started with “root” account in Linux and Unix systems. After installing, you must restart the system before running the Belkin APM Software.

Enter the correct directory of the CD-ROM according your OS and PC type.

## GUI mode environment

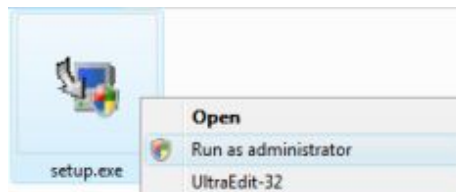
Insert the Belkin APM Software CD; find the OS of your computer under the CD directory.



### Windows platform

1. Enter the directory: **WindowsDisk1\InstData\VM** in the address bar, run **setup.exe** to start the installation.

Notice: In Vista, you should run setup.exe as administrator. Right click on the setup icon, then select “Run as administrator”. If a “user account control” dialog pops up, then select “Allow”.

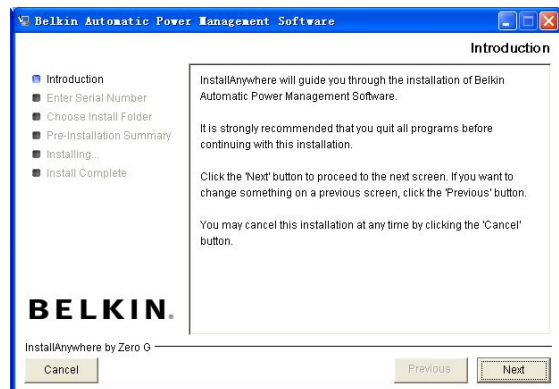


in Vista

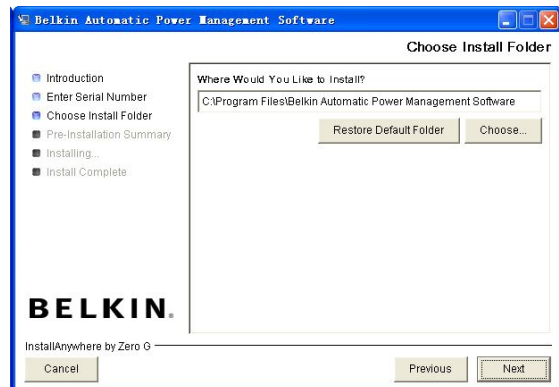


In other Windows

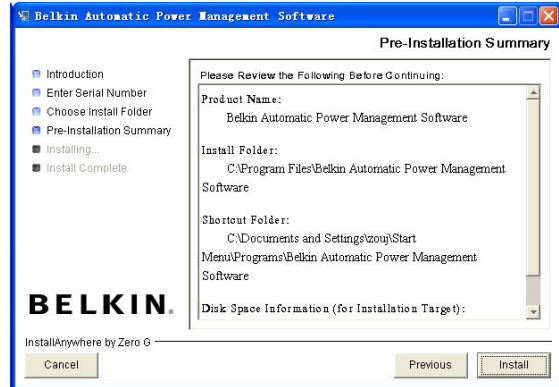
2. Read the introduction, and click **NEXT** to continue.



3. Select a folder directory to install Belkin APM Software.  
(Refer to installing directory in the following )



- Review the Pre-installation Summary, and click **Install** to start the installation.



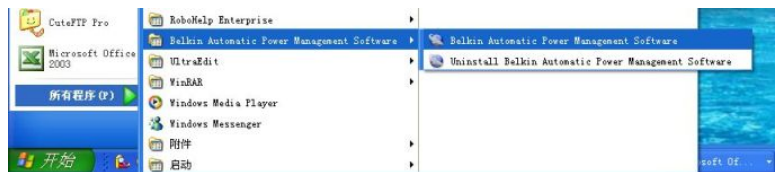
- To stop the installing, click **Cancel** to stop.



- Click **Done** when the installation is complete.



- Belkin APM Software application can be found in the Start menu > Programs.



### Mac OS X platform

- Enter the directory: **\MacOSX\Disk1\InstData** in the address bar, and double click the **setup.app** to start the installation.

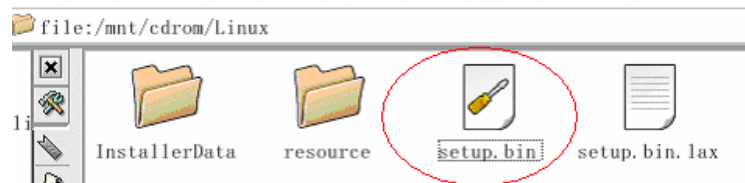


2. Enter the Administrator name and password, and click **OK**.



## Other operating systems

1. Execute `./setup.bin` to carry out the installation. Notice: If you can't install on CD directly, please try to copy the content of CD to your disk, then install.



## Consoling mode environment

Enter the directory according to the OS and run **setup\_console.bin** to start the installation program.

Read the information provided, and then press **ENTER** to continue the installation. Click **Done** when the installation is complete. Reboot the Linux and Unix system after installation.

The installation will set environment variables for Belkin APM Software in `/etc/profile` file (details see "Set environment variable" below). Rebooting the system will apply the settings.

**Note:** For UnixWare platform, make sure JRE1.3.1 has been installed in your system, and then enter the `/GenericUnix` directory to start the setup. Only in Linux and Unix platform, you can use the consoling mode environment.

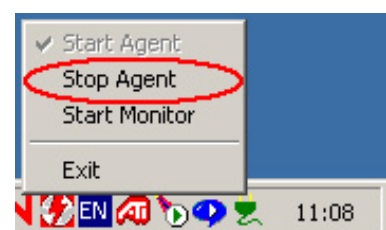
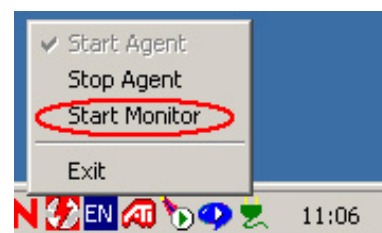
## Start / stop Belkin APM Software

### Windows Vista

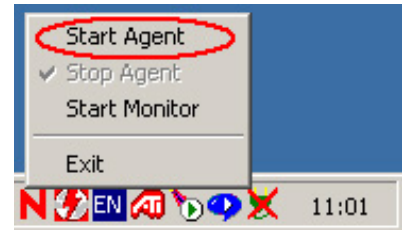
When the computer boots up, the Belkin APM Software will run automatically. You can see the green icon on the system tool bar when you log on.

To start the Monitor, right click the Belkin APM Software tray icon, and select **Start Monitor**, or double click the icon.

- To stop the Agent, right click the Belkin APM Software tray icon, and select **Stop Agent**.



- To start the Agent again, right click the Belkin APM Software tray icon, and select **Start Agent**.



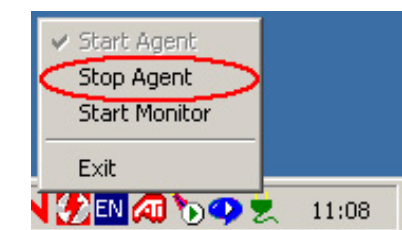
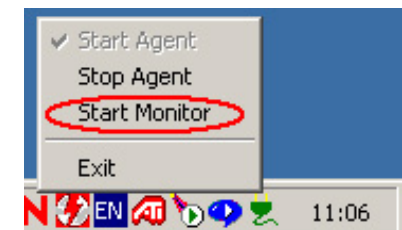
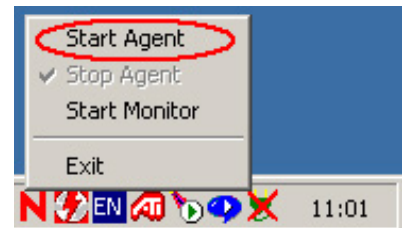
To exit, right click the Belkin APM Software tray icon, and select **Exit**. Once you exit it, you should restart the computer to start it automatically. But if you have administrator privilege, you can start it again without restart. There are two steps: the first to start the agent, open the “Services” from the “Start menu” > “Control Panel” > “Administrative tools”, and find the service “BelkinAPMmonitor”, right click on it, select “Start”. The second to start Trayicon, click the Belkin APM Software form Start menu > Program \ Belkin Automatic Power Management Software

## Other Windows

Run the Belkin APM Software form Start menu > Program \ Belkin Automatic Power Management Software to start the TrayIcon and Agent.



- The Agent can be start by right clicking on the Belkin APM Software icon on the system tool bar and select **Start Agent**. For Windows OS, the Agent can be start up automatically when the computer boots up.
- To start the Monitor, right click the Belkin APM Software tray icon, and select **Start Monitor**.
- To stop the Agent, right click the Belkin APM Software tray icon, and select **Stop Agent**.

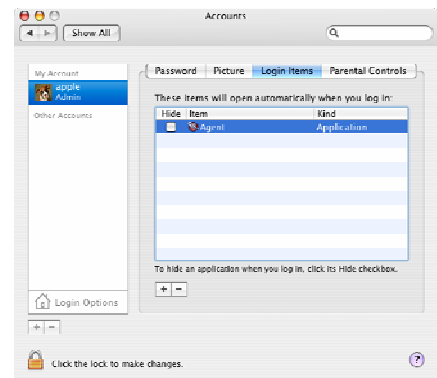


---

## Mac OS X

Set Agent to be auto started when the OS boots up:

Open **System Preferences > Accounts > Login items**, and click the **+** icon to add the **Applications / Belkin Automatic Power Management Software / Agent** as auto login item.



- To start the Agent, double click the executable agent link in **Applications / Belkin Automatic Power Management Software /** directory.
- The Agent can also be started by enter the installing directory and execute the command **./agent start**.
- To start the Monitor, double click the executable monitor link in **Applications / Belkin Automatic Power Management Software /** directory.
- The Monitor can also be started by enter the installing directory and execute the command: **./monitor**.
- To stop the Agent, enter the installing directory and execute the command: **./agent stop**.

## Linux and UnixWare

- To start the Agent, enter the **/opt/upspilot** in the address bar and execute the command: **./agent start**.
- To start the Monitor, enter the **/opt/upspilot** in the address bar and execute the command: **./monitor**.
- To stop the Agent, enter the **/opt/upspilot** in the address bar and execute the command: **./agent stop**.



---

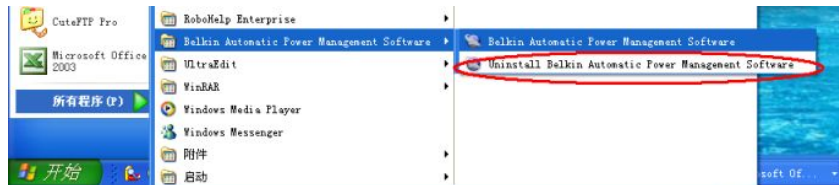
# Uninstall Belkin APM Software

Note: Before uninstall Belkin APM Software, all Belkin APM Software program must be stopped first. Otherwise the uninstalling can not be run completely.

## Windows operating system

1. There are two ways of uninstalling Belkin APM Software:

- a. Click directly on the **Uninstall Belkin Automatic Power Management Software** from the **Start menu > Belkin Automatic Power Management Software**. Notice: in Vista, make sure you have administrator privilege, right click and select "Run as administrator".

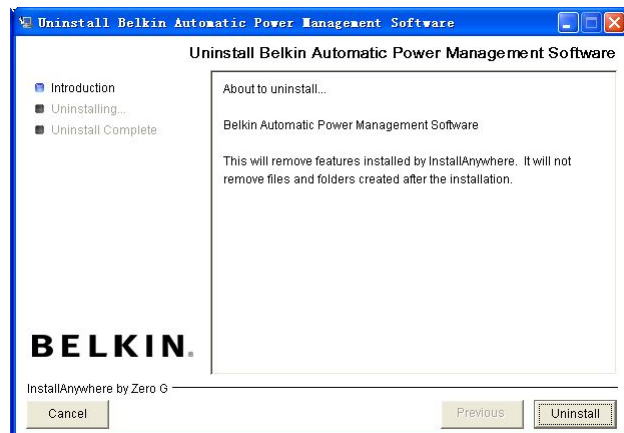


- b. Use the **Add / Remove Program** under Control Panel, Select **Belkin Automatic Power Management Software**, and click the **Change / Remove** button.



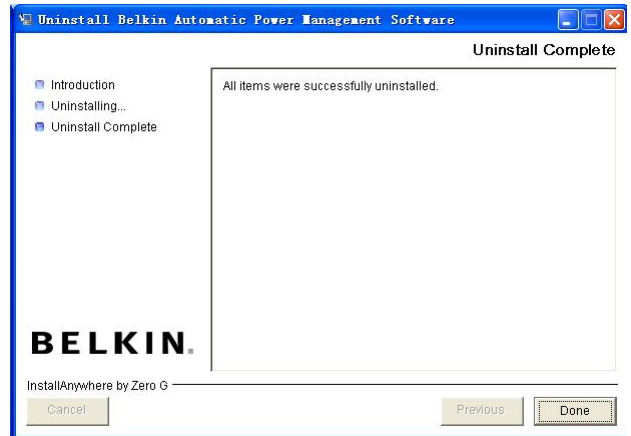
2. The Uninstall Program will pop up a prompt, and click **Uninstall** to start the uninstalling.

To exit the uninstall, click **Cancel**.





- 
3. Click **Done** when the uninstall completes.



---

## Mac OS X system

1. Open the Terminal from Applications > Utilities > Terminal , enter the installation directory (**/opt/upspilot** by default) and execute the command: **sudo ./Uninstall**.
2. Enter the system account password when it prompts. The installation will be carried out with super user privilege and can completely uninstall all the files.
3. If you just execute the **./Uninstall** command , the installation may not has the permission to uninstall all the files.

## Linux and UnixWare system

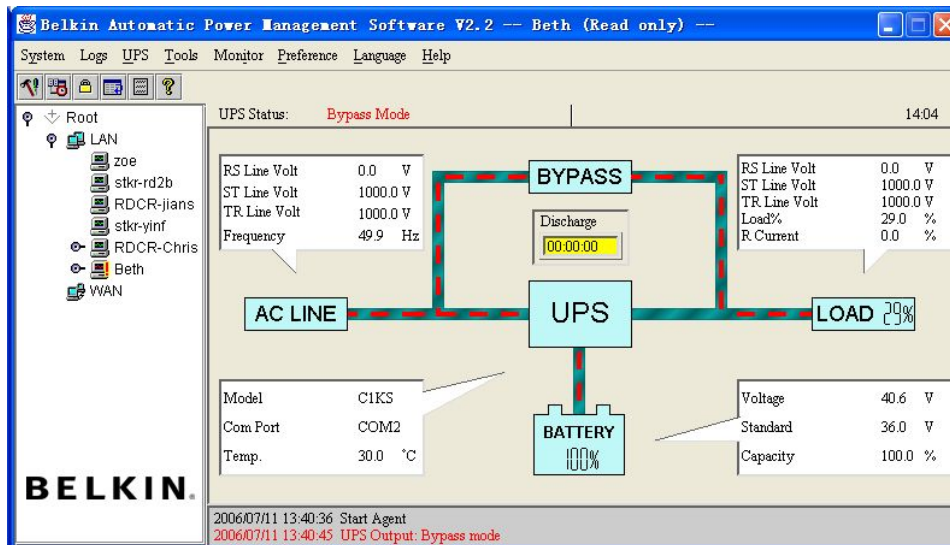
Open the Terminal, enter the **/opt/upspilot** directory and execute command: **./Uninstall**.

# Chapter 3 Belkin APM Software User Interface

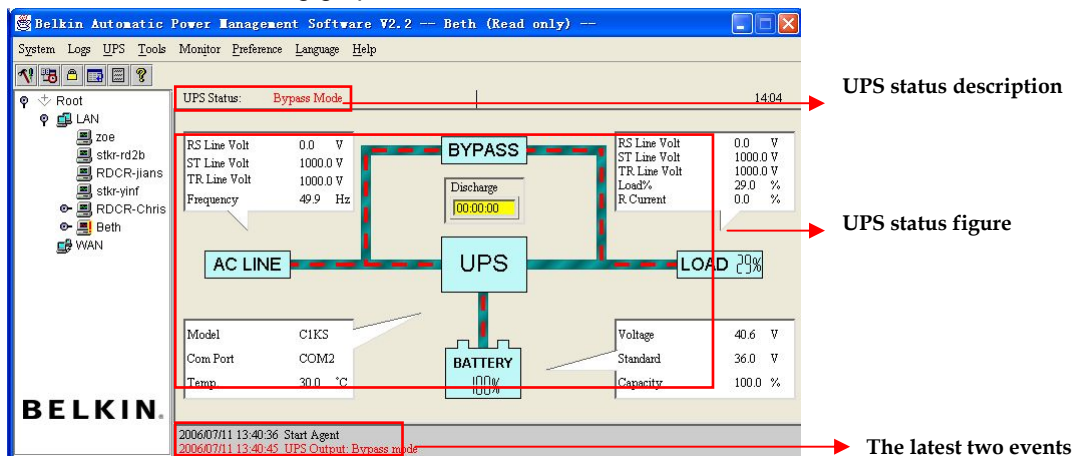
## Belkin APM Software manage window

Belkin APM Software Monitor shows "Belkin Automatic Power Management Software Manager" window which lists all Agents within the LAN.

There is a tree menu on the left side of the window that lists all hierarchical items, such as Root, networks, the Agents, the COM port, or USB port and the UPS models. By clicking any of them, the user can expand or collapse the associated list of sub-items.



If you select one of the UPS model from the UPS List, the detailed information will be displayed on the right column. See the following graphic for detailed illustration.



## UPS status bar

Five elements are in the Ups status figure: AC LINE, BYPASS, UPS, BATTERY, and LOAD. Each part connects with the power cord.

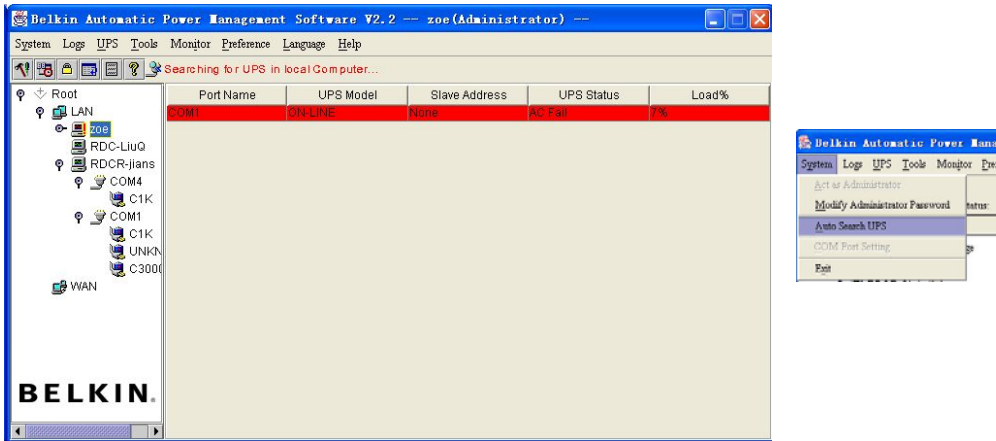
---

# Menu and Dialog

## System Menu

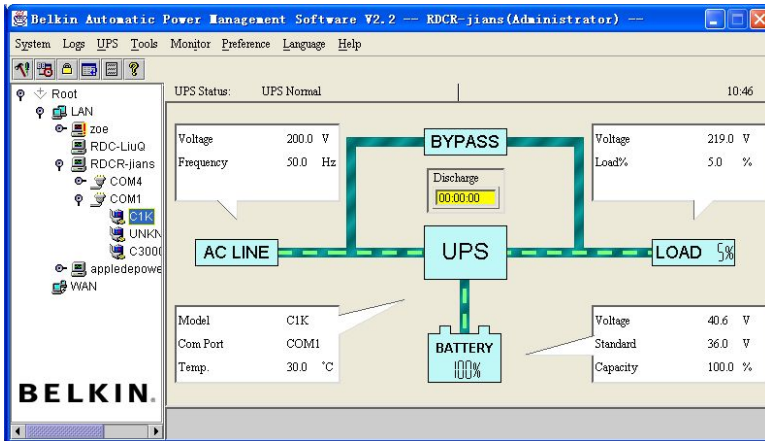
### Auto Search UPS

To open this option, selects **Auto Search UPS** from **System** menu, and Belkin APM Software starts searching for the UPS connection with the computer's serial port.



By clicking the item under the tree menu, the user is able to get the information as below:

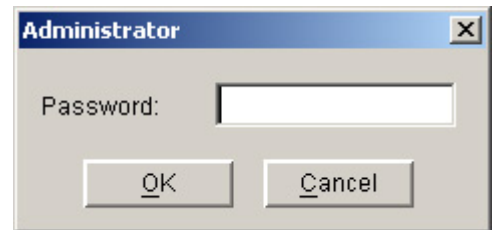
1. All computers running Belkin APM Software Agent in the LAN.
2. UPS COM port or USB port.
3. The UPS model and Agent connecting information.
4. The Agent status and user connecting information.



### Administrator

To open this option, selects **Act as Administrator** from **System** menu. Enter the administrator password in the dialog box and then click **OK**. If the entry is not correct, a prompt pops up to give the warning message. Or users can get the administrator access right and set up the Agent.

**Note:** Default password is blank.



---

## Administrator Password Settings

To open this option, select **Modify Administrator Password** from **System** menu.

Administrator password only can be set or changed by super user on local machine. If you are not a super user, the Administrator prompt pops up and tell to log in as an administrator first.

Users need to enter a new password in the **New Password** line and re-enter the new password again to confirm the password. If the passwords are not consistent with each other, a prompt pops up to notify the consistency problem and request to enter the new password again. Click **OK** when the entry is done. Now the new password is applied.

Leaving the password blank enable full administrator privileges to all users. It means that anyone can have full access without logging in as an administrator. So ,if you want users to have full administrator privileges only by logging in, set the password non-blank.



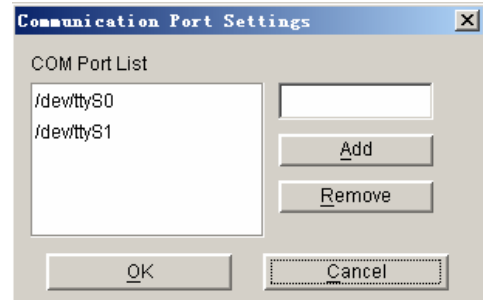
## Communication Port Settings

To open this option, select **Communication Port Settings** from the **System** menu.

For Linux and Unix platform, the Belkin APM Software is not able to auto detect the Serial Port Devices. If the System has a Serial Port that not being found in the default setting table, you must add it manually in the "Communication Port Settings" window before using it. To add a new COM port, enter the port in the blank column first and then click **Add**.

Read the followed table for detailed information on Serial Port Devices setting:

Platform	Serial Port Devices
AIX	/dev/tty0 /dev/tty1
FreeBSD	/dev/ttyd0 /dev/ttyd1
HP-UX	/dev/tty0p0 /dev/tty1p0 /dev/tty0p1 /dev/tty0p2
Linux	/dev/ttyS0 /dev/ttyS1.
Solaris	/dev/ttya /dev/ttyb
Tru64	/dev/tty00 /dev/tty01
UnixWare	/dev/tty1A /dev/tty2A



**Note:** If **OK** is not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to *on page 14* for detailed information.

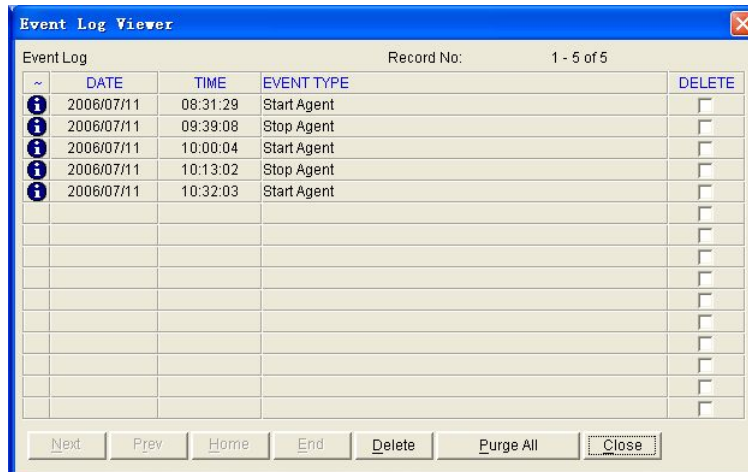
## Log Menu

### Event Log Viewer

Three methods to open the Event Log Viewer:

1. Selects **Event Log** from **Logs** menu,
2. Click buttons from the toolbar,
3. Click **View log** button of Event Log in the **Record Setting** window.

Then the **Event Log Viewer** pops up, which shows a list of history events.



### Deleting an event:

Check in the **DELETE** column on the event which you wish to delete, and click **Delete** at the bottom of the window.

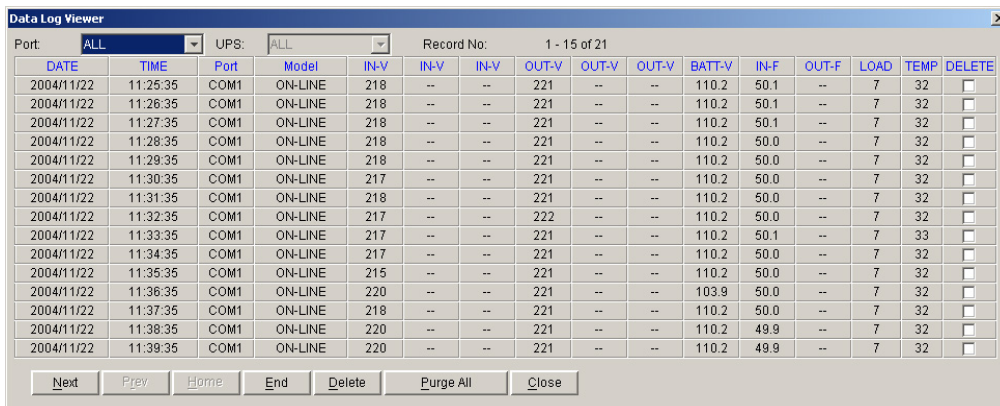
### Deleting all events:

Click **Purge All** at the bottom of the window to delete all events.

**Note:** If **Delete** or **Purge All** is not available, which means your access authority of the current Agent is “Read Only”, and can’t carry out the operation. To log in as an administrator, refer to *on page 14* for detailed information.

## Data log Viewer

To open this option, selects **Data Log Viewer** from the **Logs** menu, or click **View log** button of Data Log in the **Record Setting** window, and the Data Log Viewer pops up to show history data. Users can click **Next**, **Prev**, **Home** and **End** to display the data log.



### Deleting a data log:

Check in the **DELETE** column on the data log which you want to delete, and click **Delete** at the bottom of the window.

### Deleting all events:

Click **Purge All** at the bottom of the window to delete all events.

**Note:** If **Delete** or **Purge All** is not available, which means your access authority of the current Agent is “Read Only”, and can’t carry out the operation. To log in as an administrator, refer to *on page 14* for detailed information.

## Record Setting

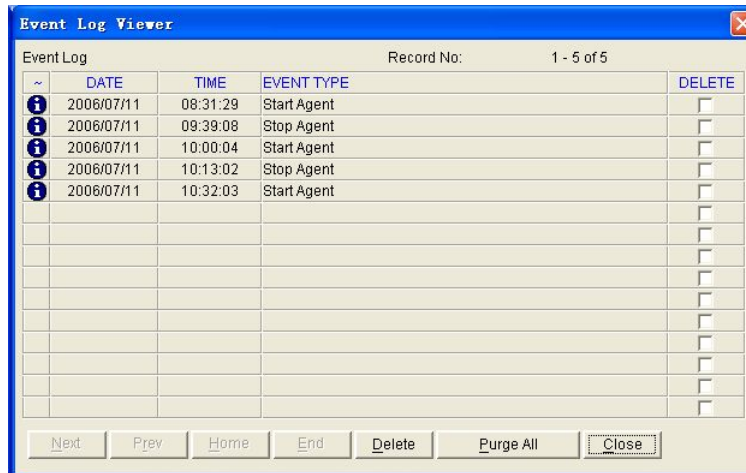
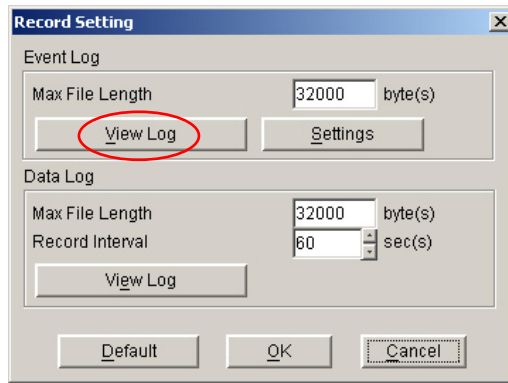
Event Log and Data Log are contained in this setting.

### Event Log

To open this option, selects **Record Setting** from the **Logs** menu.

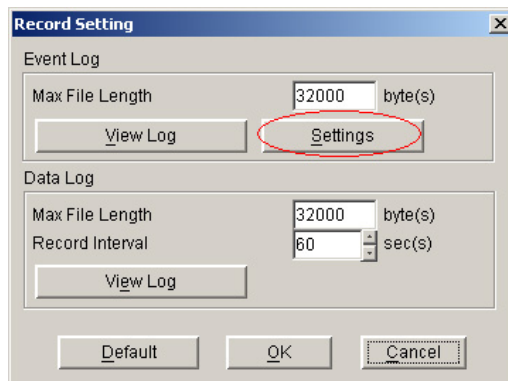
The default value of the maximum file length of Event Log Viewer is 32KB (The maximum value is 1MB)

Click **View Log** to open **Event Log Viewer**.

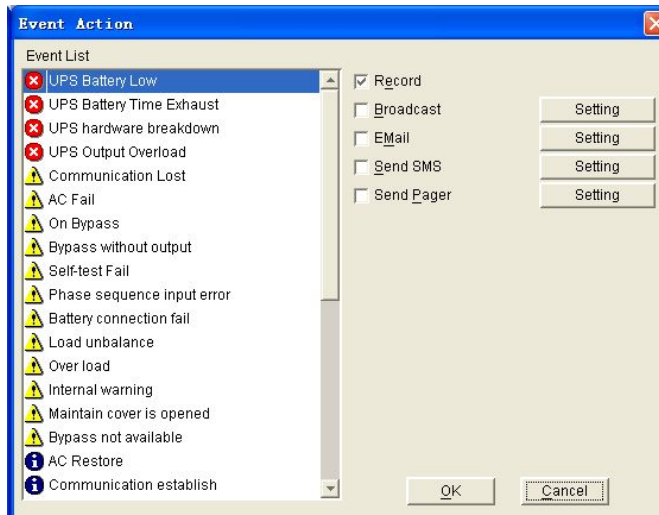


### Data Log

To open this option, clicks **Settings** of Event Log in Record Setting window.







The default **Max File Length** in Data Log is 32KB (the maximum is 1MB).

The default **Record Interval** in Data Log is 60 second (the maximum is 3600 seconds).

Click **View Log** to open Data Log dialog.

DATE	TIME	Port	Model	IN-V	IN-V	IN-V	OUT-V	OUT-V	BATT-V	IN-F	OUT-F	LOAD	TEMP	DELETE
2004/11/22	11:25:35	COM1	ON-LINE	218	--	--	221	--	110.2	50.1	--	7	32	<input type="checkbox"/>
2004/11/22	11:26:35	COM1	ON-LINE	218	--	--	221	--	110.2	50.1	--	7	32	<input type="checkbox"/>
2004/11/22	11:27:35	COM1	ON-LINE	218	--	--	221	--	110.2	50.1	--	7	32	<input type="checkbox"/>
2004/11/22	11:28:35	COM1	ON-LINE	218	--	--	221	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:29:35	COM1	ON-LINE	218	--	--	221	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:30:35	COM1	ON-LINE	217	--	--	221	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:31:35	COM1	ON-LINE	218	--	--	221	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:32:35	COM1	ON-LINE	217	--	--	222	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:33:35	COM1	ON-LINE	217	--	--	221	--	110.2	50.1	--	7	33	<input type="checkbox"/>
2004/11/22	11:34:35	COM1	ON-LINE	217	--	--	221	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:35:35	COM1	ON-LINE	215	--	--	221	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:36:35	COM1	ON-LINE	220	--	--	221	--	103.9	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:37:35	COM1	ON-LINE	219	--	--	221	--	110.2	50.0	--	7	32	<input type="checkbox"/>
2004/11/22	11:39:35	COM1	ON-LINE	220	--	--	221	--	110.2	49.9	--	7	32	<input type="checkbox"/>
2004/11/22	11:39:35	COM1	ON-LINE	220	--	--	221	--	110.2	49.9	--	7	32	<input type="checkbox"/>

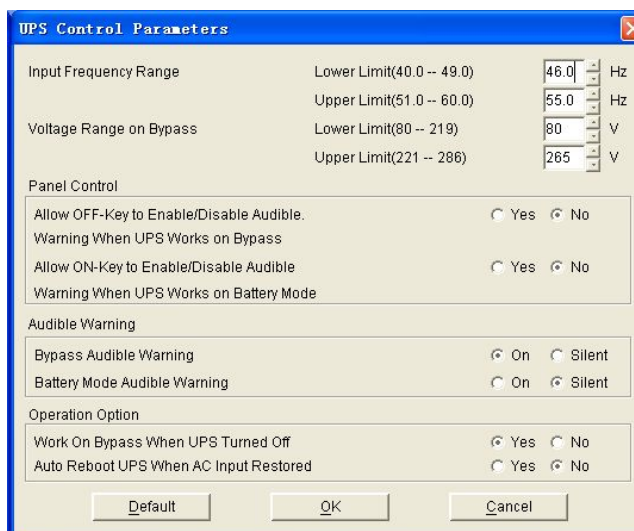
**Note:** Click **Default** and all parameters in this page will return default value. If the **OK** is not available, which means your access authority of the current Agent is “Read Only”, and the parameters can’t be changed. To log in as an administrator, refer to *on page 14* for detailed information.

## UPS Menu

### UPS Control Parameters

To open this option, selects **UPS Control Parameters** from **UPS** menu.

Read the followed table for detailed information on UPS Control Parameters setting.

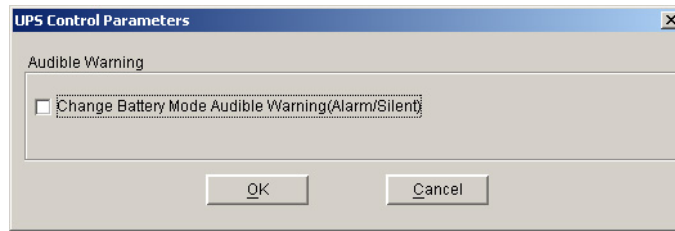




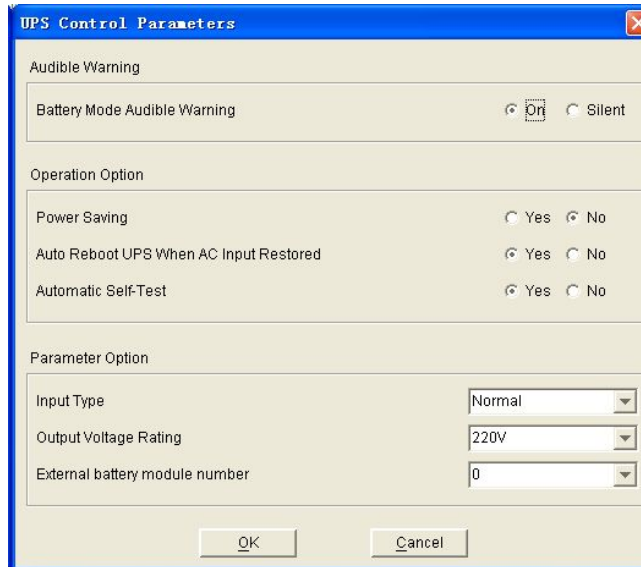
Parameter	Unit	Maximum	Minimum	Default
Upper limit of input frequency on bypass	Hz	60.0 (for 50Hz system) 70.0 (for 60Hz system)	51.0 (for 50Hz system) 61.0 (for 60Hz system)	54.0 (for 50Hz system) 64.0 (for 60Hz system)
Lower limit of input frequency on bypass	Hz	49.0 (for 50Hz system) 59.0 (for 60Hz system)	40.0 (for 50Hz system) 50.0 (for 60Hz system)	46.0 (for 50Hz system) 56.0 (for 60Hz system)
Upper limit of input voltage on bypass	V	286 (for 1~3K 220V UPS) 132 (for 1~3K 110V UPS) 261 (for 6~20K UPS)	221 (for 1~3K 220V UPS) 110 (for 1~3K 110V UPS) 231 (for 6~20K UPS)	264 (for 1~3K 220V UPS) 132 (for 1~3K 110V UPS) 261 (for 6~20K UPS)
Lower limit of input voltage on bypass	V	219 (for 1~3K 220V UPS) 110 (for 1~3K 110V UPS) 209 (for 6~20K UPS)	80 (for 1~3K 220V UPS) 40 (for 1~3K 110V UPS) 140 (for 6~20K UPS)	80 (for 1~3K 220V UPS) 50 (for 1~3K 110V UPS) 176 (for 6~20K UPS)
ON button can control battery mode audible warning	-	-	-	Yes
OFF button can control bypass mode audible warning	-	-	-	Yes (for 1~3K UPS) No (for 6~20K UPS)
Do audible warning when on bypass mode	-	-	-	Yes
Do audible warning when on battery mode	-	-	-	Yes
Restore line mode when AC restored	-	-	-	Yes
Work on bypass when UPS turned off	-	-	-	No (for 1~3K UPS) Yes (for 6~20K UPS)

**Note:** Press **Default**, all parameters in this page will return to default value.

For regular LINE-INT UPS, users can enable / disable the battery mode alarm audible warning in this window.



For special LINE-INT UPS, read the followed table for detailed information.



Parameter	Value
Battery Mode Audible Warning	Yes – Allows audible warning in battery mode. No – Keeps silence in battery mode.
Power Saving	Yes – If the loading is light, the system will shut down UPS in 5 minutes when AC Fail. No – UPS won't be shut down until battery backup time exhausts.
Auto Reboot UPS When AC Input Restored	Yes – Enables auto-restart. No – Disables auto-restart.
Automatic Self-Test	Yes – Enables automatic self-test. No – Disables automatic self-test.
Input Type	Normal – Accepts normal AC line range. Wide range – Accepts wide AC line range. Generator – Accepts generator's output.
Output Voltage Rating	110V, 120V, 127V, 220V, 230V, or 240V.
External battery module number	Only long time discharged model has this selection, the number is from 00 to 10.

**Note:** If **OK** is not available, which means your access authority right of the current Agent is “Read Only”, and you can't change the settings here. To log in as an administrator, refer to **on page 14** for detailed information.

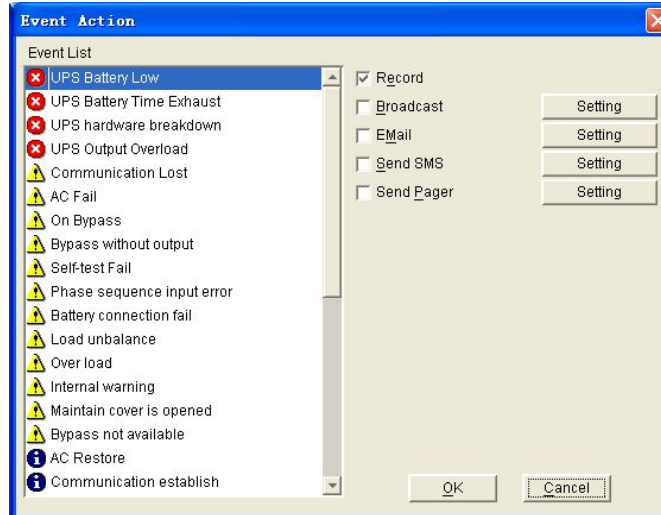
### Event Action

To open this option, selects **Event Action** from the **UPS** menu or button in the toolbar. In **Event Action** window, users can select which action to be carried out to when certain event occurs. Users can select

Record, Broadcast, Email, Send SMS or Send Pager as the warning message.

Events are divided into three types of icons:

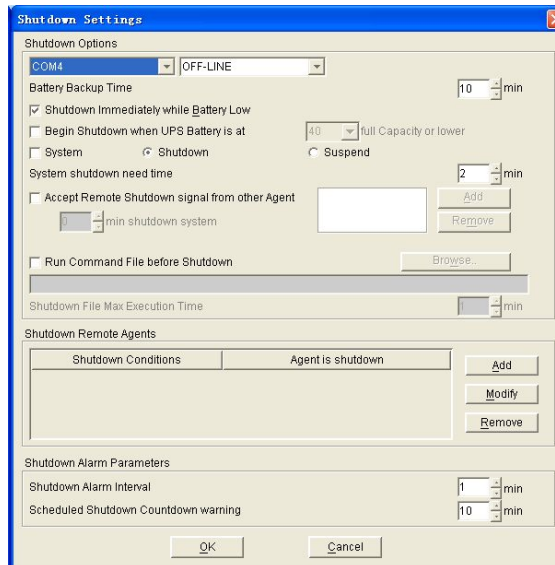
- Severity (red),
- Warning (yellow), and
- Message (blue)



**Note:** To use **Email** function, you must setup an available SMTP server. For detailed information please refer to “How to realize sending event message by e-mail”.

### Shutdown Settings

To open this option, selects **Shutdown Parameter** from the **UPS** menu.



Read the followed table for detailed information about **Shutdown Options** in Shutdown Settings.

Parameter	Unit	Maximum Value	Minimum Value	Default	Remark
Battery backup time	Minute	4320	1	10	The time that the UPS battery is able to supply power when utility power fails.
Shutdown immediately while battery low	—	—	—	Yes	When this check box is selected and battery low event occurs, Agent will shut down the UPS immediately, otherwise the shutting down time will be controlled by battery back up time.

Parameter	Unit	Maximum Value	Minimum Value	Default	Remark
Begin shutdown When UPS Battery X full capacity or lower	—	—	—	40	When this check box is selected and battery's capacity is lower than X%, Agent will shut down the UPS.
Shutdown System	—	—	—	No	When this option is selected, system will shutdown while the assigned UPS is being turn off.
Suspend System	—	—	—	No	When this item is selected, system disk will suspend to shutdown sequence. This function only can be carried out on some Windows platforms and hibernate support must be enabled from <b>/Control Panel / Power Options / Hibernate</b> .
System shutdown need time	Minute	99	1	2	The time needed to shutdown the system, which is from the beginning of shutting down till the end of that.
Remote Shutdown by Agent	—	—	—	No	If enabled, the system will be able to shutdown by a specified Agent.
Min shutdown system	Minute	4320	0	0	When receiving the specified agent's shutdown signal, the set minutes will be delayed and then shutdown the system.
Run Command File before Shutdown	—	—	—	N/A	The Agent will run the specified file and then shut the system down. If this parameter is not available, the Agent will not shutdown the system.
Shutdown File Max Execution Time	Minute	60	1	1	Before the system shuts down, the set time will be needed to execute the specified file.
Shutdown remote Agents' Conditions	—	—	—	—	The condition can be <b>UPS be shutdown</b> or <b>The time on battery exceeds setting time</b> .
Agents be Shutdown	—	—	—	—	When shutdown is complete, the Agent will send shutdown signal to the assigned remote agents.
Shutdown Alarm Interval	Minute	60	1	1	The interval that Agent pops up an alarm message before shutting down.
Start Warning before Scheduled Shutdown	Minute	60	1	10	If user has setup schedule shutting down, an audio warning message will be heard.

**Note:** If **OK** is not available, which means your access authority right of the current Agent is "Read Only", and you can't change the settings here. To log in as an administrator, refer to **on page 14** for detailed information.

For example, the Battery Backup Time is set to 3, System shutdown need time is set to 2, then click the OK. Once AC failed, a warning dialog which noticed shutdown appeared, the value of the time in the warning dialog is 3 minutes initially which equals battery backup time, then count down. 3 minutes later, the time in the warning dialog is 0, and then the software will send an shutdown command to UPS. 2 minutes later, the output of UPS in off.

It takes 2+3=5 minutes totally to shutdown the output of UPS.

For "Run command file before shutdown" option, check it and select a bat, script, .exe or other file, then before the shutdown, the software will execute or open it for you.

---

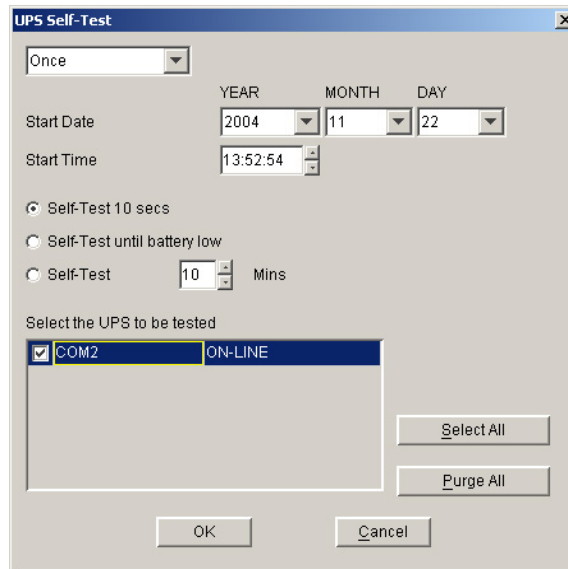
## UPS Self-Test

To open this option, selects **Battery Self-Test Now** from **UPS** menu.

In this window, users can select from three different types of test:

- Self-Test for 10 seconds,
- Self-Test until battery low,
- Self-Test for xx minutes.

The time range for this item is from 1 to 99 (minutes).



**Note:** If **OK** is not available, which means your access authority right of the current Agent is “Read Only”, and you can’t change the settings here. To log in as an administrator, refer to *on page 14* for detailed information.

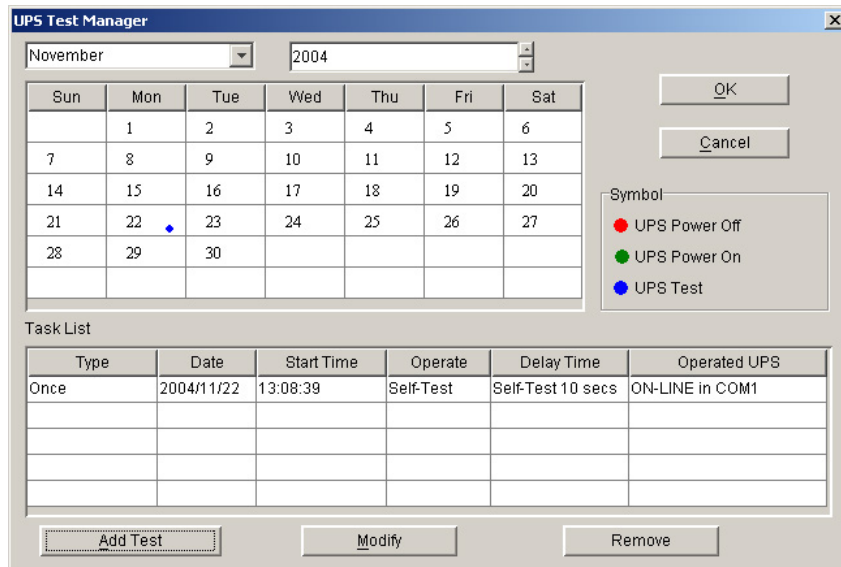
## UPS Test Manager

To open this option, selects **Battery Self-Test Schedule** from **UPS** menu. **UPS Test Manager** can be used to display and setup UPS self-test task. There are two types of the task: **Once** or **Monthly**.

UPS self-test can be set as

- UPS self test for 10 seconds,
- UPS self test to battery low, or
- UPS self test for the appointed time.

The time range for this item is from 1 to 99 (minutes), and the default value is 10 (minutes).



Two parts are in the UPS Test Manager window, **Calendar** and **Task List**. All UPS self-test and UPS OnOff tasks are shown in the calendar. The red dot presents the **Power Off** action, the green dot presents the **Power On** action and the blue dot presents the UPS test task. Click **Add Task** to add a new self-test task into the schedule.

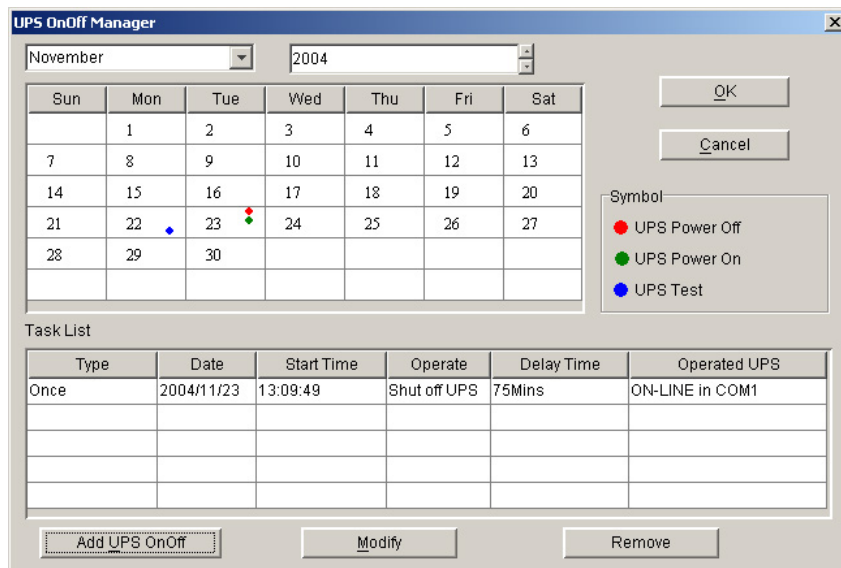
If you select any of the UPS self-test tasks from the task list, the selected task can be modified by click **Modify** at the bottom of the window, and the task can be also removed by clicking **Remove**.

**Note:** If **OK**, **Add Test**, **Modify** and **Remove** are not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to **on page 14** for detailed information.

### UPS OnOff Manager

To open this option, selects **UPS OnOff Schedule** from **UPS** menu. UPS OnOff Manager can be used to display and set UPS OnOff tasks. Two methods to set this manager: **Once** or **Weekly**.

The UPS power off time range (from shutdown to turning on next time) can be set from 1 to 9999 (minutes). For example, the longest power off time is 6 days 22 hours and 39 minutes. The input range for the year is 2002-2035. UPS OnOff Manager contains **Calendar** and **Task List**. All UPS self-test and UPS OnOff tasks are shown in the calendar. The red dot presents the **Power Off** action, the green dot presents the **Power On** action and the blue dot presents the UPS test task. Click **Add UPS OnOff** to add a new self-test task into the schedule.



---

Users can add new weekly and special time UPS Power On/Off tasks by clicking **Add UPS On/Off** at the bottom of the window.

If you select any of the UPS self-test tasks from the task list, the selected task can be modified by clicking **Modify** at the bottom of the window, and the task can be also removed by clicking **Remove**.

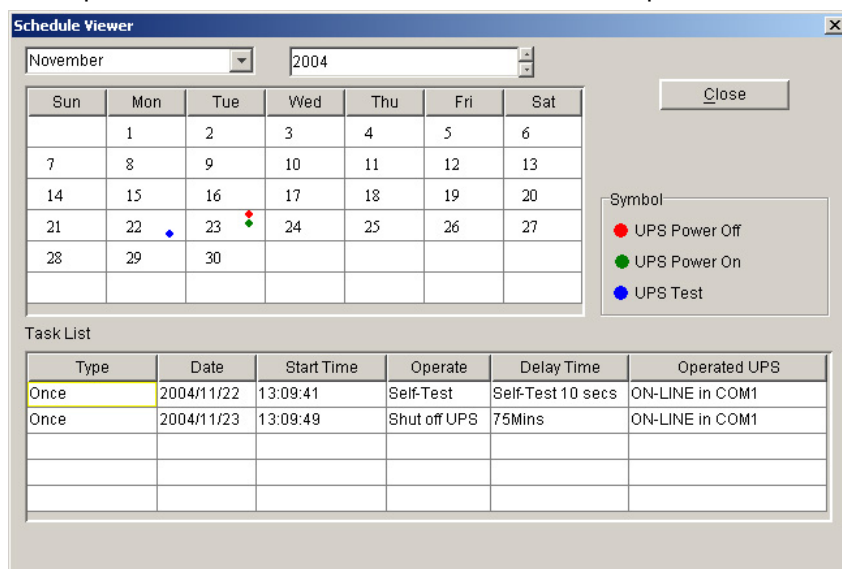
**Note:**

1. **The set UPS self-test task and UPS Power On/Off tasks can't interfere with each other.**
2. **If OK, Add Test, Modify and Remove are not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to *on page 14* for detailed information.**

### Schedule Viewer

To open this option, selects **View Schedule** from **UPS** menu.

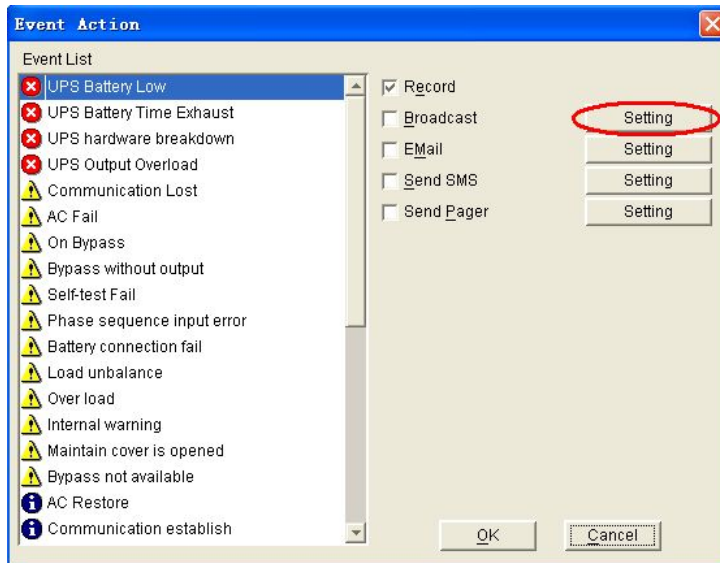
This function is used to show the set UPS Power On/Off and self-test tasks. The window contains Calendar and Task List. Only the tasks in the current month are displayed in the list. The red dot presents the **Power Off** action, the green dot presents the **Power On** action and the blue dot presents the UPS test task.



## Tools Menu

### Broadcast Message Settings

To open this option, selects **Broadcast Setting** from **Tools** menu, or click Setting of Broadcast item in the window.



All users will be listed under **Broadcast To**. A specified user must be assigned if the broadcast message needs to be sent. Adds or removes a user by clicking **Add** or **Remove** on the right in the window.

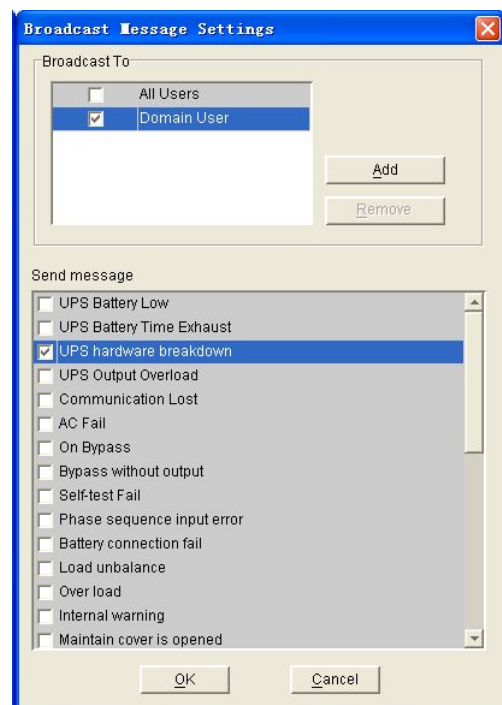
**Note:** All Users and Domain User item can't be deleted. All Users means all computers in the LAN. Domain User means computers in the same domain with local Agent.

**Send Message** list box contains all types of messages. Selects or unselects a message by checking in front of the item.

**Note:**

1. This setting is only available in **Windows OS**.
2. If **OK**, **Add Test**, **Modify** and **Remove** are not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to *on page 14* for detailed information.

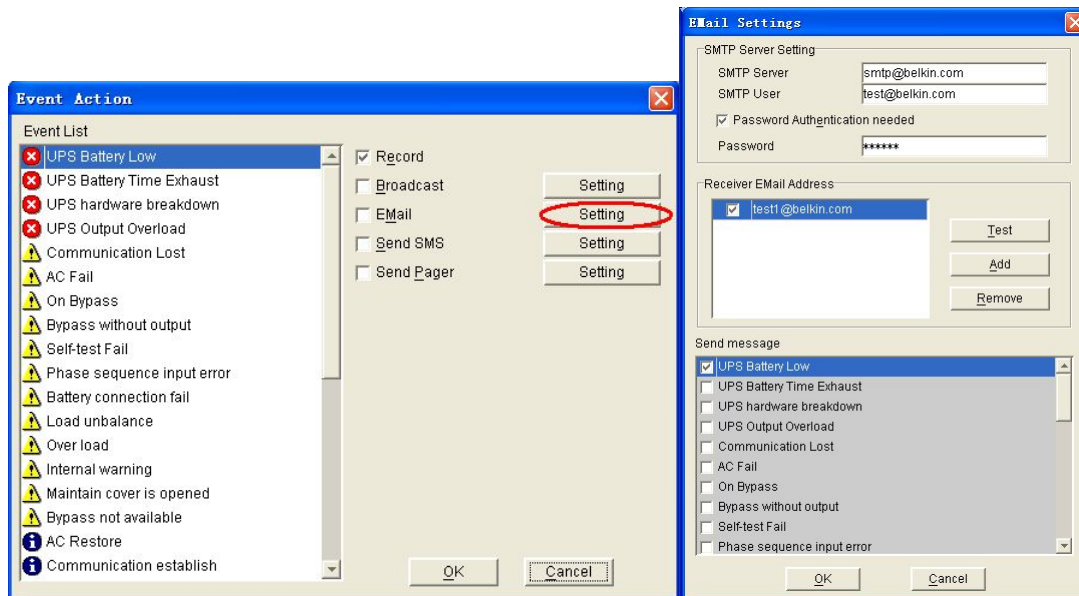
To receive broadcast message, **Winpopup** in Windows 95 / 98 and **Messenger Service** in Windows NT / 2000 must be enabled. In Vista, because of the cancel of Messenger Service, the message can not be received.



### Email Settings

To open this option, selects **Email Settings** from the **Tools** menu, or click **Setting** of Email item in the window.





The **SMTP Server Settings** of Email Settings are listed below:

- |                    |   |
|--------------------|---|
| <b>SMTP Server</b> | Enter a mail account server, which is used to send mails. This will be different from the Network provider. E.g.: smtp.belkin.com |
| <b>SMTP User</b>   | Enter the complete mail address of a user here. E.g.: test@belkin.com   |
| <b>Password</b>    | Enter the password that assign by your Network provider.  |

**Receiver EMail Address** contains all mail addresses which will receive the email message. To add a new email address, click **Add**. To delete a mail address, click **Remove**. To test if a selected mail address will receive the assigned message successfully, click **Test**.

**Send Message** list box contains all types of messages. Selects or unselects a message by checking in front of the item.

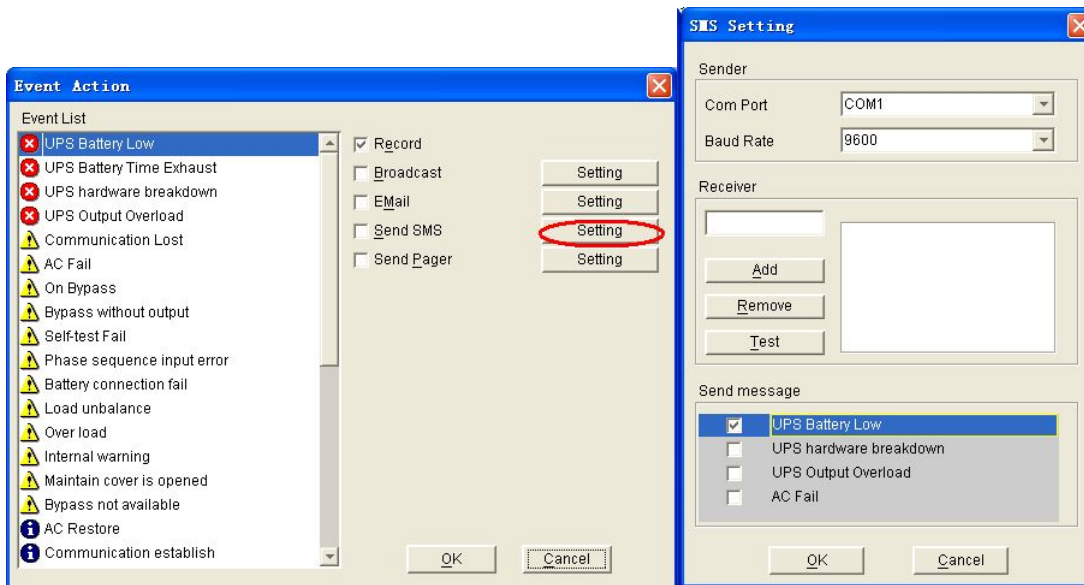
Default setup of all entries will be empty, and it can only be set in the local Agent.

**Note:**

1. If you want to send emails via Internet, you must have a SMTP account number in the Internet.
2. If **OK** is not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to *on page 14* for detailed information.

### SMS Setting

To open this option, selects **SMS Setting** from the **Tools** menu, or click **Setting** of **Send SMS** in the window.



To configure SMS setting, read the contents below:

**Sender**

SMS is sent via GSM modem or mobile phone which connects to your computer. Users need to select the **COM port** which is being used by GSM Modem or mobile phone. Then set baud Rate of this COM port.

**Receiver:**

The mobile phone numbers which will receive the SMS.

- To add a phone number, enter the number first and then click **Add**.
- To delete a number, select a number from the phone number list and click **Remove**.
- To test if the SMS sending will be success or not, select a phone number from the list, and click **Test**.

*Send message*

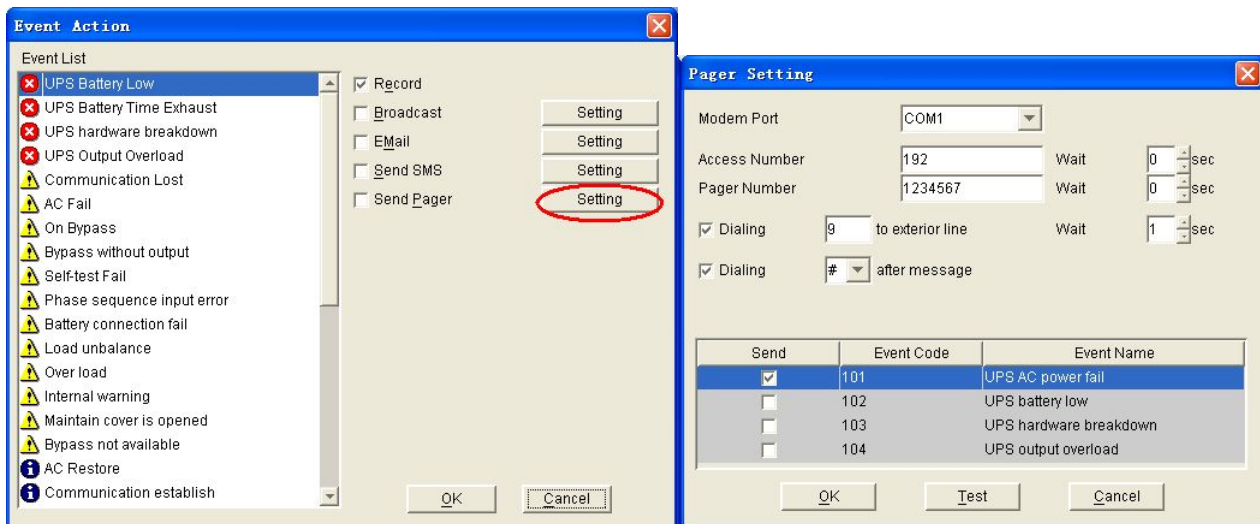
**Send Message** list box contains all types of messages. Selects or unselects a message by checking in front of the item.

**Note:** If **OK** is not available, which means your access authority of the current Agent is “Read Only” and the settings can’t be changed. To log in as an administrator, refer to *on page 14* for detailed information.

*Pager Setting*

To open this option, selects **Pager Setting** from the **Tools** menu, or click **Setting** of **Send Pager** item in the window.

**Note:** To configure the pager setting, users must have **full access** authority.



Item	Description
Modem Port	Select the COM port which is connecting to the modem recently.
Access Number	For some pager service, a delay is needed between dialing access number and Pager Number.
Pager Number	For some pager service, a delay is needed between dialing pager number and message code.
Dialing number to exterior line	For extension line, it is always necessary to dial a specified number and delay a specified time to access Exterior Line.
Dialing number after message	For some pager service, dialing a specified number to end message code is needed.
Event Code	The event code is dialed as the message code and will be displayed on pager.

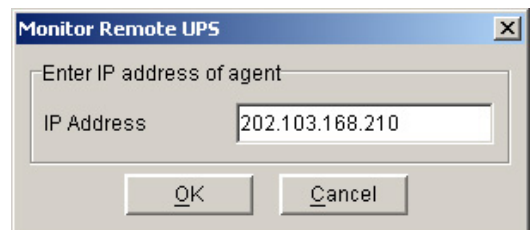
**Note:** If **OK** is not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to *on page 14* for detailed information.

## Monitor Menu

### Monitor Remote UPS

To open this option, select **Monitor Remote UPS** from the **Monitor** menu.

Enter the IP address of an Agent to be monitored and click **OK**. If the agent exists, the information will be displayed under the WAN directory in the tree menu in Belkin APM Software Manager.



- Note:**
1. The maximum of remote agent can be monitored is **32**.
  2. If Belkin APM Software can't communicate with a remote agent within **6** minutes, this agent will be deleted automatically.

You can manually delete a remote agent by selecting the agent node under "WAN", and then click the

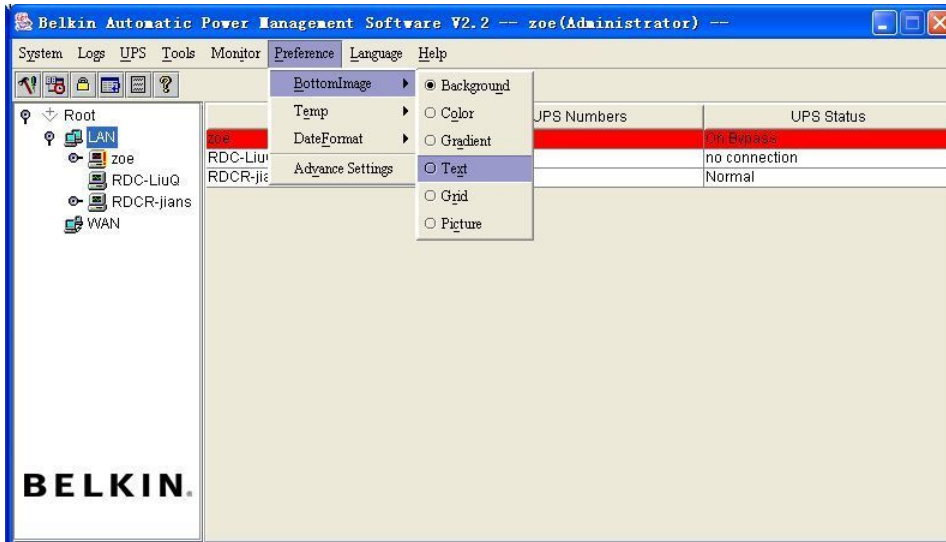
---

mouse right button to show a delete pop up menu, select **Delete** to remove it.

## Preference Menu

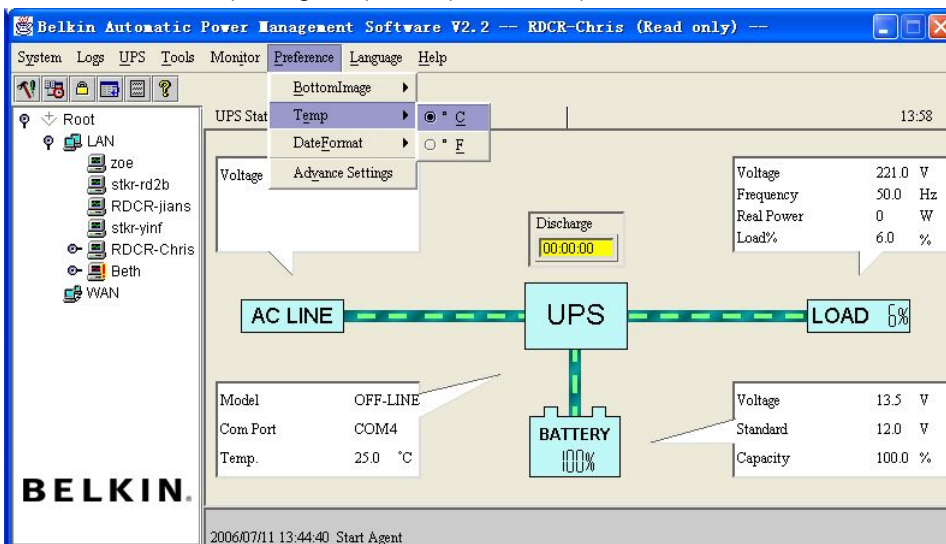
### *Bottom image*

To open this option, selects **BottomImage** from the **Preference Menu**.



### *Temp*

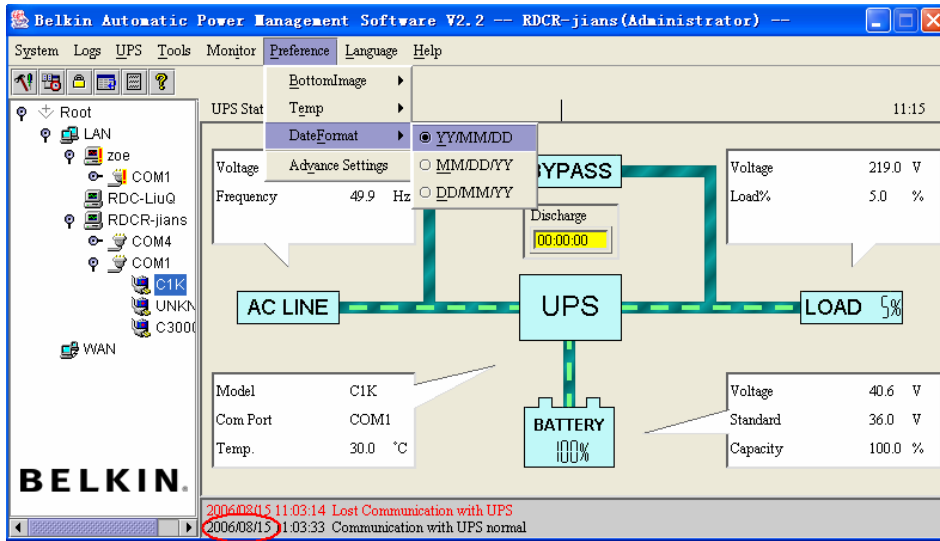
To open this option, selects **Temp** from the **Preference menu**, and selects which type of temperature you want to show on the interface: **C** (Centigrade), or **F** (Fahrenheit).



### *Date Format*

To open this option, selects **DateFormat** from the **Preference Menu**.

Y represents the year, M represents the month, and D represents the date.



### Advance Settings

To open this option, selects **Advance Settings** from the **Preference** menu.

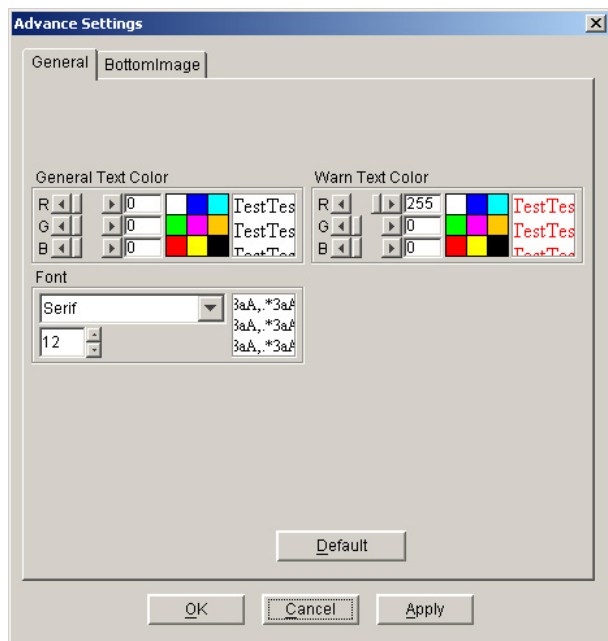
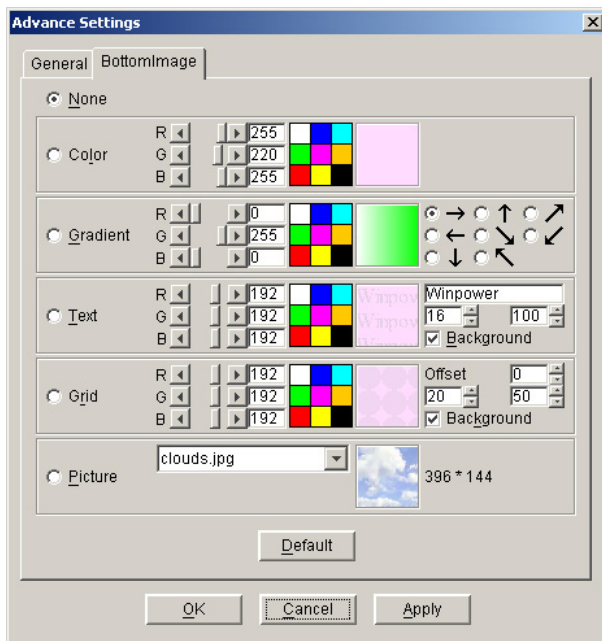
#### The General Tab

You can set the color of general text, the color of warn text, and the font.

#### The BottomImage Tab

If you click **None** on the top of this tab, the interface bottom image

In this tab, users can set the **Color**, **Gradient**, **Text**, and **Grid** color of the Belkin APM Software interface. Users can also set a preferred image as the bottom image. Click Picture, and select an image file from the pull-down menu.



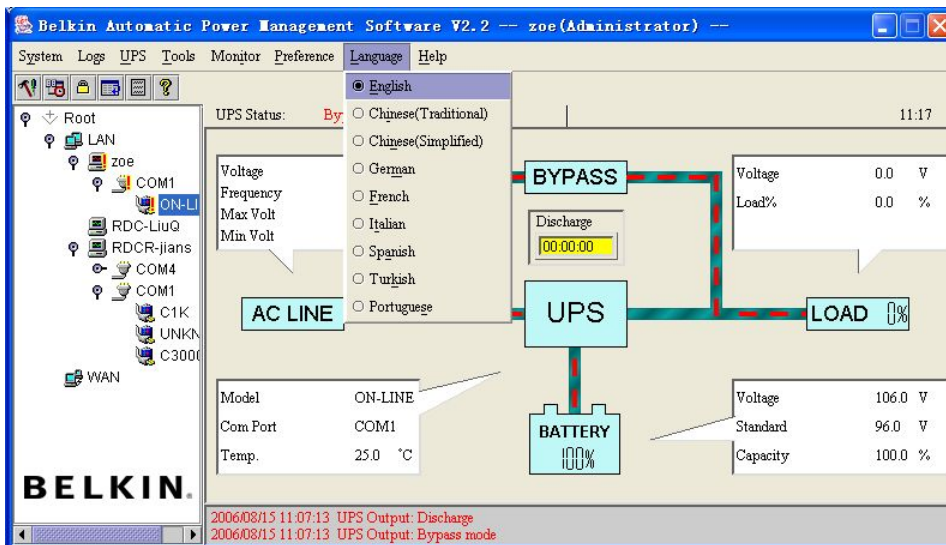
**Note:**

1. If you click “Default” button, the parameters in this view will be turned into default value.
2. If **OK** is not available, which means your access authority of the current Agent is “Read Only” and the settings can’t be changed. To log in as an administrator, refer to *on page 14* for detailed information.

## Language Menu

### Language

Users can change the interface language from the **Language** menu. English, Chinese(Traditional), Chinese(Simplified), German, French, Italian, Spanish, Turkish or Portuguese is available.



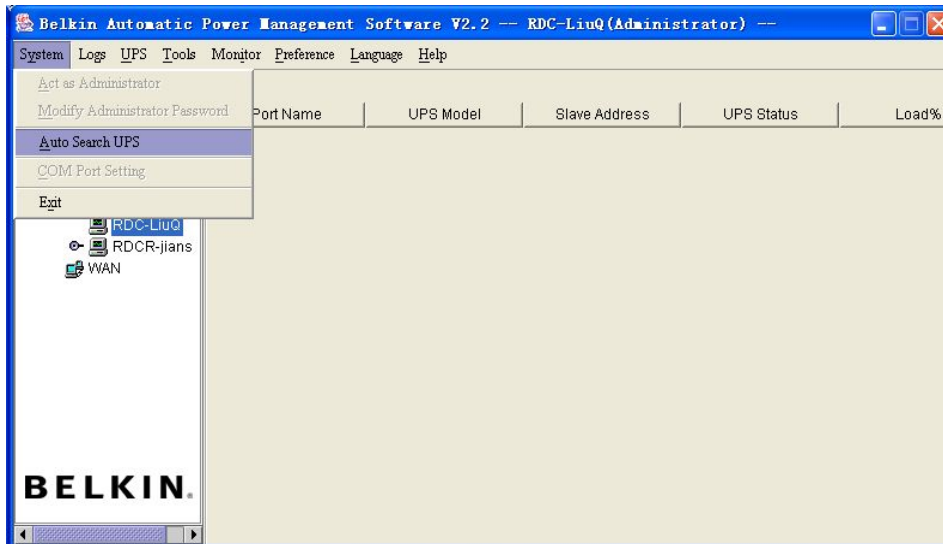
---

# Chapter 4

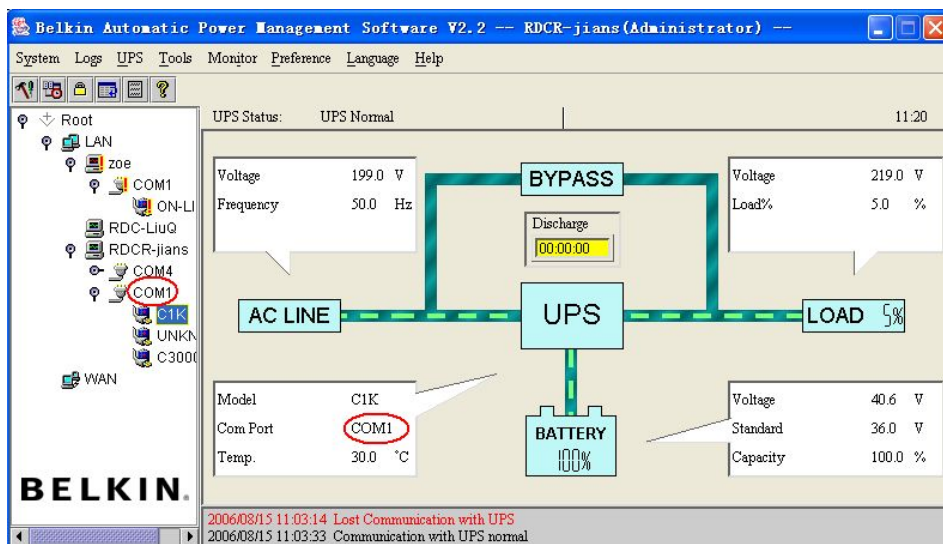
## How to do

### Realizing the assigned COM port

When the PC with Belkin APM Software has multiple serial ports, the Belkin APM Software allows the user to change the current used serial ports of the UPS via **Auto search UPS** under the **System** menu.



There is a tree menu in the left column to display a hierarchical list of items, such as Root, networks, the Agents, the COM port and the UPS models. By clicking an item, the user can expand or collapse the associated list of submenus.



When selecting a UPS model, the **Manager** Window shows detailed information about the UPS in the right column.

#### Note:

1. It will take more time when starting the Agent for the first time, for it communicates with the UPS for the first time. The software will keep records of a certain UPS model. When the Agent runs the second time, the Belkin APM Software will start according to the previous record, and the boots-up speed will be much faster.
2. To change the UPS COM port, the model, or slave address, selects **Auto Search UPS** from the **System** menu.



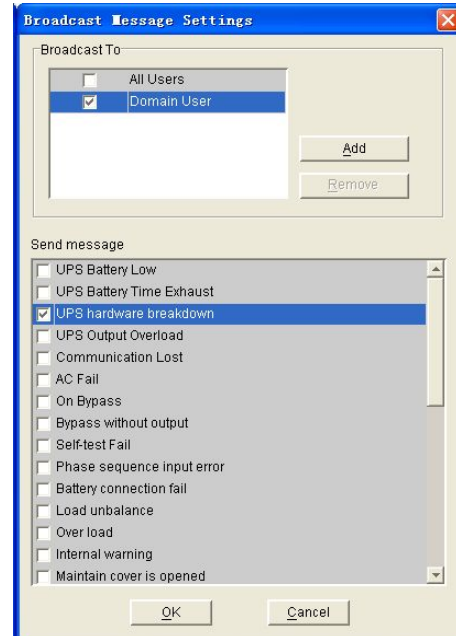
---

## Realizing the broadcasting message in the LAN

Belkin APM Software has the function of sending the event message to customers in time via Windows Message service. Please refer to

Broadcast Message Settings on page 25 for detailed information, or refer to the Appendix B, Belkin APM Software Event table.

- All Users**      The assigned messages will be sent to all PCs in the same Network with the host PC, whether it's in the same domain or not. With reference to the range of broadcasting, there are altogether three options: all users, Domain users and special users.
- Domain User**      The assigned messages will be sent to PCs in the same NT domain with the host PC.
- Special Users**      The assigned messages will only be sent to certain appointed user(s).  
To add or remove a user, please refer to ***Broadcast Message Settings on page 25.***



There are three group lists for **Broadcast to** column:

**Note:** For detailed operation of how to broadcast messages, please refers to

**Broadcast Message** Settings **on page 25.**

## Realizing the UPS self-test schedule

To open this option, selects **UPS Test Manager** in **Battery Self-Test Schedule** from the **UPS** menu.

### Adding new UPS self-test tasks

To add a new UPS self-test task:

1. Click on the empty **Task List** first and then click **Add Test** at the bottom of the window.
2. Click **OK** when the adding is complete.



UPS Test Manager

November 2004

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

OK

Cancel

Symbol

- UPS Power Off
- UPS Power On
- UPS Test

Task List

Type	Date	Start Time	Operate	Delay Time	Operated UPS

Add Test

Modify

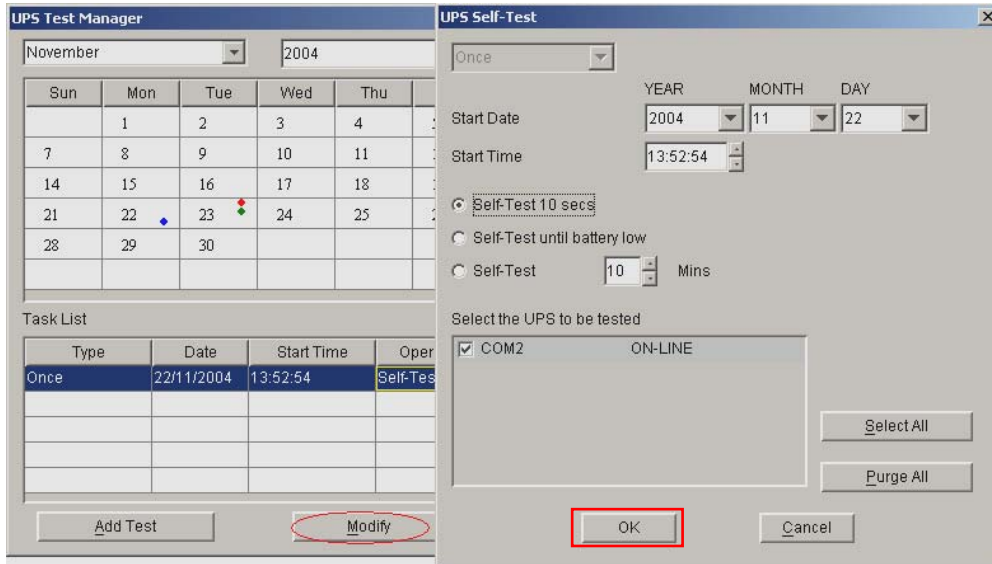
Remove

---

## Modifying UPS self-test task

To modify a set task:

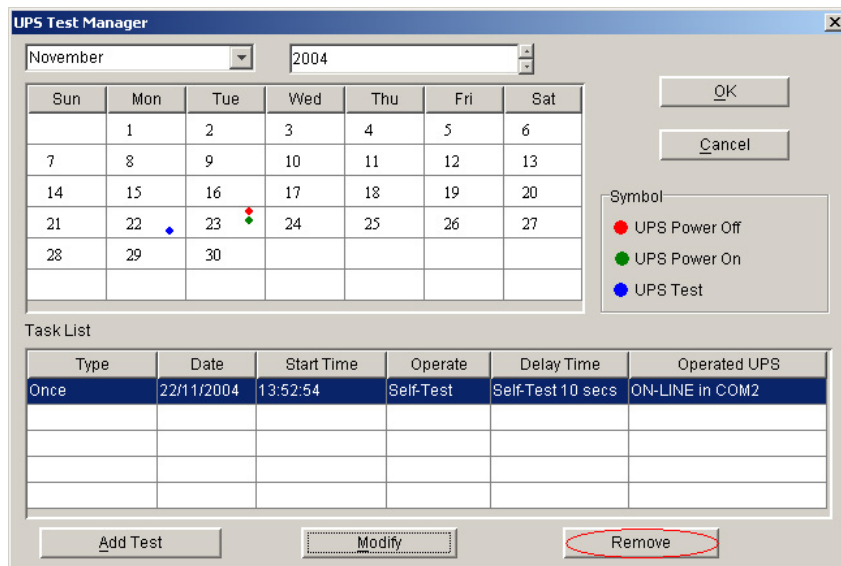
1. Select one set UPS self-test task from the **Task List** area, and click **Modify** at the bottom of the UPS Test Manager window. The **UPS Self-Test** window pops up.
2. Click **OK** to save the modification, or **Cancel** to exit.
3. Click **OK** in the UPS Test Manager window to complete modifying a set task.



## Removing set UPS self-test tasks

To remove a set UPS self-test task:

Select a set task in the **Task List** area, and then click **Remove** at the bottom of the window. The selected item will be deleted.

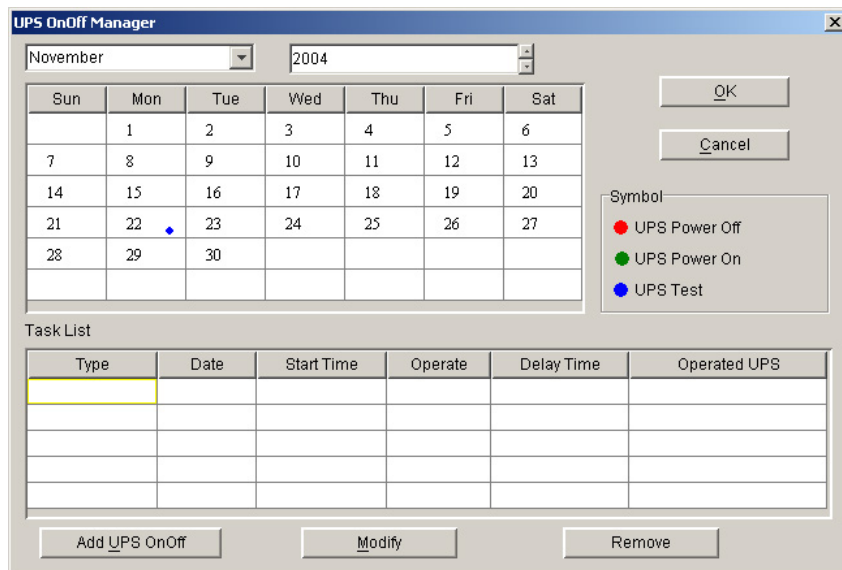


**Note:** If **OK** is not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to *on page 14* for detailed information.

---

# Realizing the UPS OnOff Manager

To open UPS OnOff Manager, select **UPS OnOff Manager** from the **Control** menu.

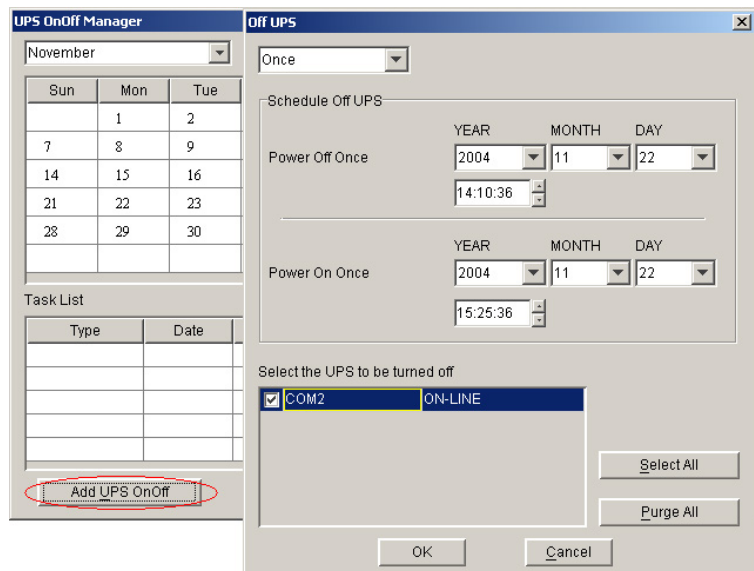


**Note:** If **OK** is not available, which means your access authority of the current Agent is “Read Only” and the settings can’t be changed. To log in as an administrator, refer to *page 14* for detailed information.

## Adding new UPS OnOff tasks

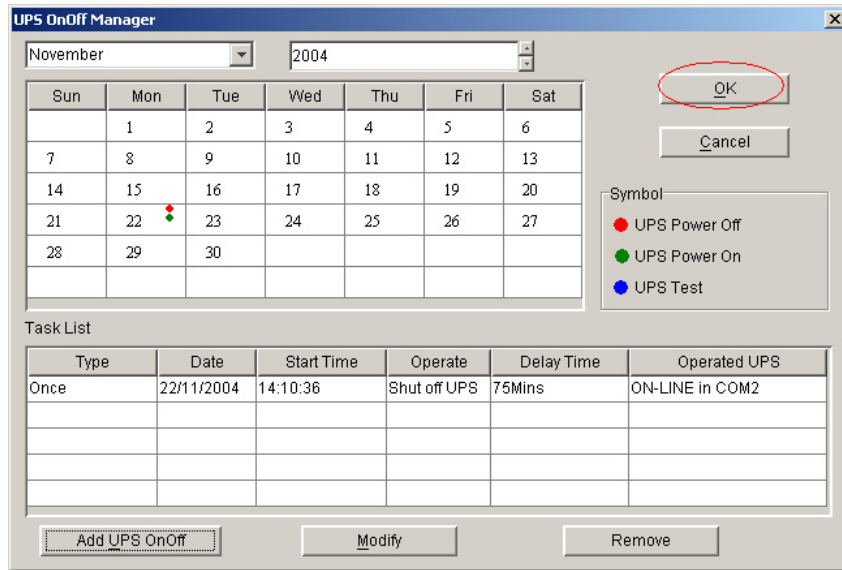
To add a new UPS OnOff task:

1. Click on the empty **Task List** first and then click **Add UPS OnOFF** at the bottom of the window. The **Off UPS** window pops up.
2. Select **Once** or **Weekly** as the cycle of UPS OnOff from the pull-down menu.
3. Set up the **Power Off Once (Weekly) / Power On Once (Weekly)** time in the Schedule off UPS area.



**Note:** Any new UPS OnOFF task can’t conflict with the set UPS self-test and UPS OnOff tasks.

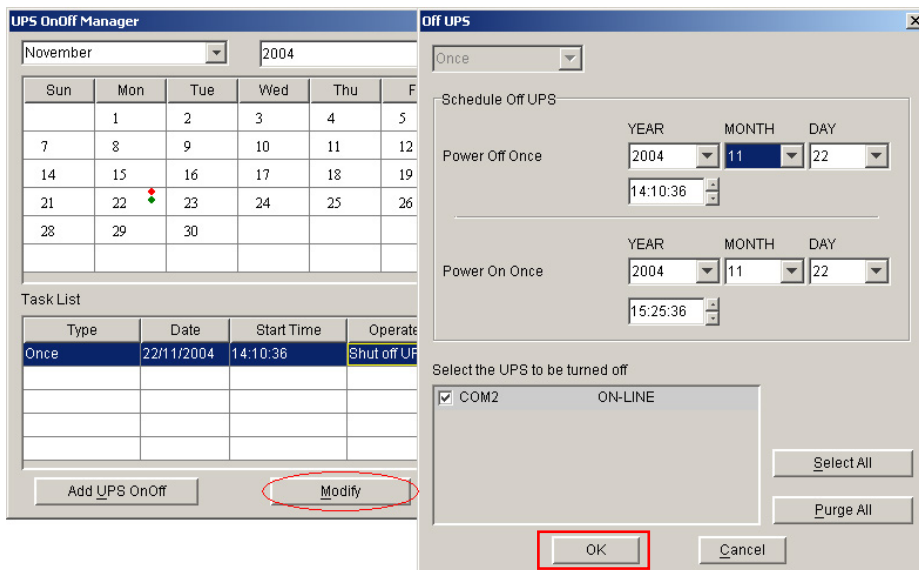
- To save this new task, click **OK**. Or click **Cancel** to exit this window.
- Click **OK** in the UPS OnOff Manager window to complete adding a new OnOff task.



## Modifying set UPS OnOff tasks

To modify a set task:

- Select one set UPS OnOff task from the Task List, and click **Modify** at the bottom of the UPS OnOff Manager window. The **Off UPS** window pops up.
- After the modification is done, click **OK** to confirm.
- Click **OK** in the UPS OnOff Manager window to complete modifying a set OnOff task.

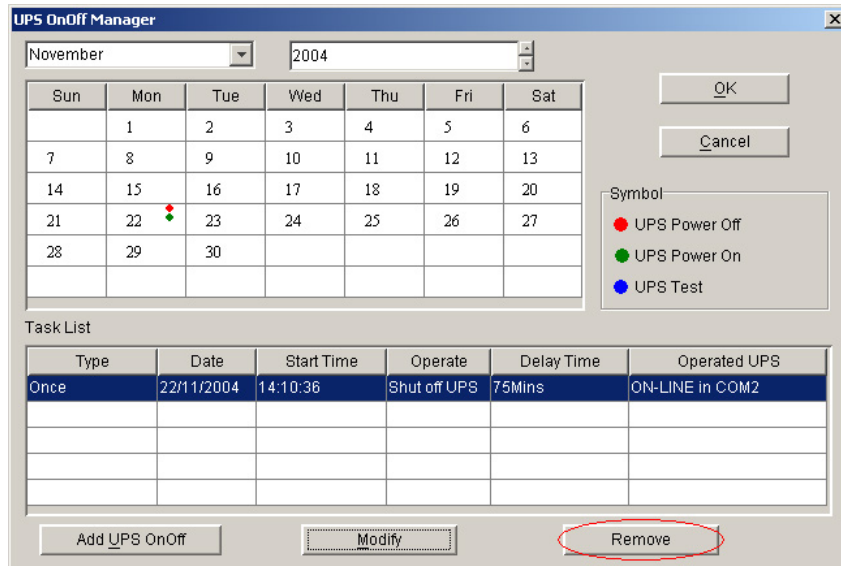


---

## Removing the UPS OnOff task

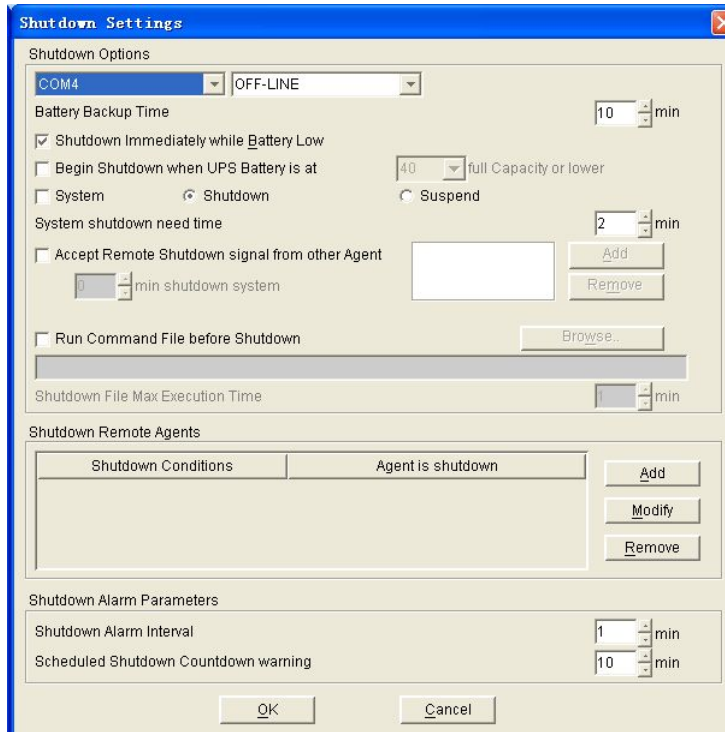
To remove a set UPS OnOff task:

Select a set task in the **Task List** area, and then click **Remove** at the bottom of the window. The selected item will be deleted.



## Realizing the network shutdown function

To open this option, select **Shutdown Parameter** from the **UPS** menu, and the **Shutdown Settings** window pops up.



---

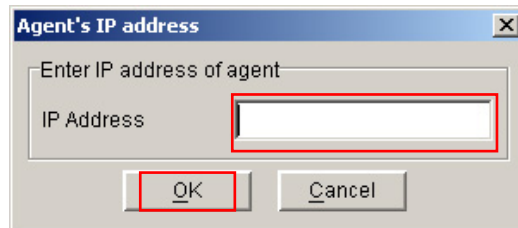
## Configuring Shutdown Settings

### *Adding new agent IP address*

To add a new Agent IP:

1. Click **Add** in the **Shutdown Options** section and then enter the IP address in Agent's IP address prompt.
2. Click **OK** at the bottom of this prompt to save this new Agent IP.

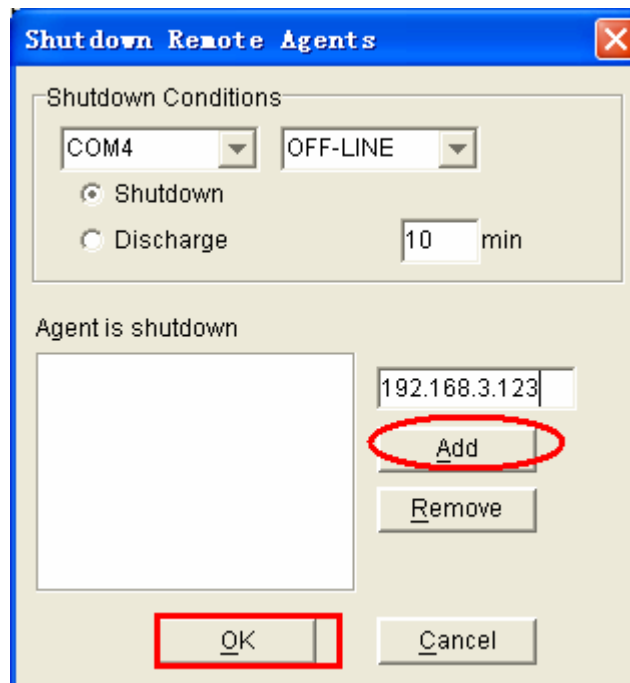
When local agent receives a specified agent shutdown signal, the system will be shut down in a set delay time.



### *Configuring Shutdown Remote Agents*

To add a new shutdown remote agent:

1. Click **Add** in the **Shutdown Remote Agents** section and a Shutdown Remote Agents prompt pops up.
2. Set the conditions options from the pull-down menu, and from which agent to be shut the system down.
3. Click **OK** in this prompt to save the setting.



---

## Configuring Shutdown alarm Parameters

### Shutdown options

<b>Battery backup time</b>	The time the UPS battery is able to supply power when utility power fails.
<b>Begin shutdown When UPS Battery X full capacity or lower</b>	When this check box is selected and battery's capacity is lower than X%, Agent will shut down the UPS.
<b>Shutdown immediately while battery Low</b>	When this item is enabled and battery low event occurs, Agent will shut down the UPS immediately, otherwise the shutting down time will be controlled by battery back up time.
<b>Shutdown system</b>	When this check box is selected, System will be shutdown while the appointed UPS is being turn off.
<b>Suspend system</b>	When this item is enabled, the system will be suspended via disk in shutdown sequence. This function is only for certain Windows platforms and hibernate support must be enabled from <b>/Control Panel/Power Options/Hibernate</b> .
<b>System shutdown need time</b>	The time needed to shutdown the system, which is from the beginning of shutting down till the end of that.
<b>Remote shutdown by Agent XX min shutdown system</b>	When this item is enabled, the system will be shut down by other Agent. When receiving the specified agent shutdown signal, the set time (minutes) will be delayed to shutdown system.
<b>Run command file before shutdown</b>	Before system shutting down, Agent can execute a file, if this parameter is not available; Agent will not begin to shut down the system until the "Execution file before system shutting down" ends.
<b>Shutdown file Max execution time</b>	Before system shutting down, the time to be needed to execute the shutdown file.
<b>Shutdown Remote Agents</b>	
<b>Shutdown remote Agents Conditions</b>	The condition can be "UPS be shutdown" or "The time on battery exceeds setting time".
<b>Agents be shutdown</b>	When shutdown condition is satisfied, Agent will send shutdown signals to the appointed remote Agent.

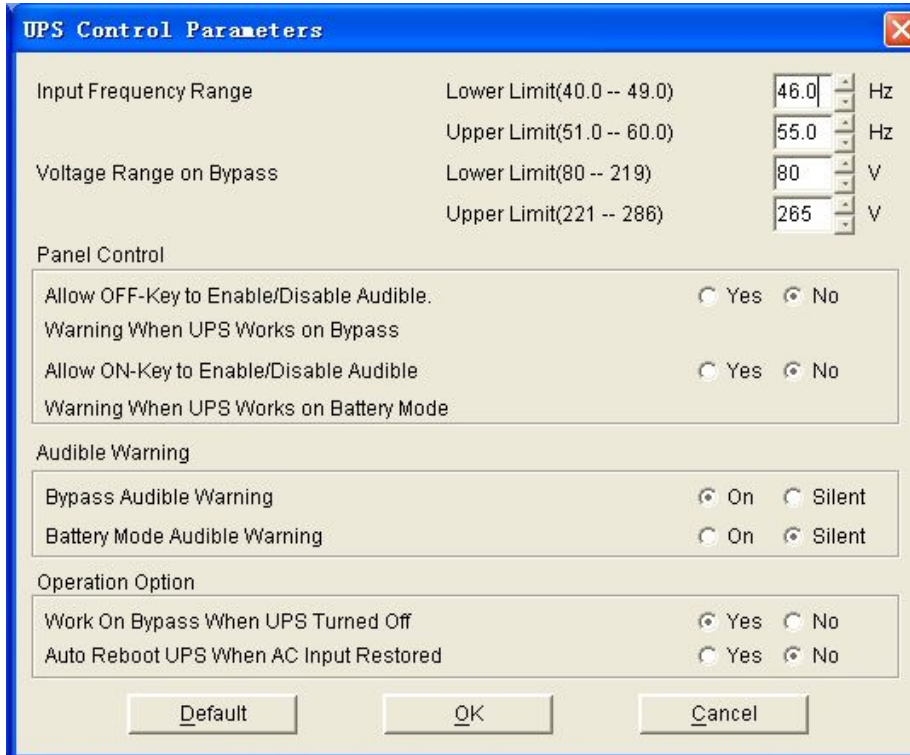
### Shutdown Alarm Parameters

<b>Shutdown alarm interval</b>	The interval that Agent pop up an alarm message before shutting down.
<b>Start warning before scheduled shutdown</b>	If the user has set a schedule shutting down, AGENT will sound alarm prior to the set time.

# Modifying UPS control parameters

## ON-LINE UPS:

To open this option, select **UPS control parameters** from the **UPS** menu. The **UPS Control Parameters** window pops up.



Read the table followed for detailed information.

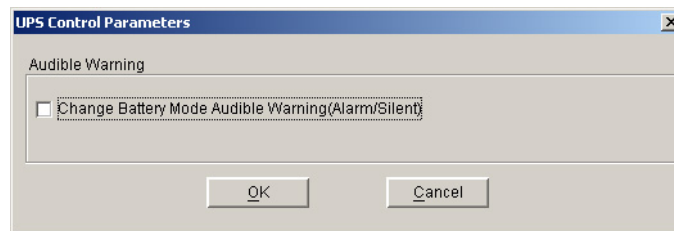
Options	Explanation
The limit value of the input frequency	When the frequency of the utility power is out of this range, UPS will count it abnormal and switch to battery supply.
The limit value of the bypass voltage	When UPS supplies in bypass mode, if the utility voltage is out of this range, UPS will cut off bypass output
Allow OFF-Key to enable / disable audible warning when UPS works on bypass	When <b>Yes</b> is enabled: UPS is supplied by bypass, users can turn off the bypass audible alarm (beep once every 2 minutes) by pressing OFF button on the UPS panel for one time, and pressing one more time to recover it. When <b>No</b> is enabled: the "OFF" button on the UPS panel cannot be used to control bypass audible alarm on/off.
Allow ON-Key to enable / disable audible warning when UPS works on battery mode	When <b>Yes</b> is enabled: UPS is supplied by batteries, users can turn off the audible alarm (beep once every 4 seconds) supplied by batteries by pressing "ON" button on the UPS panel for one time, and pressing one more time the audible alarm can be turned on again. When <b>No</b> is enabled: the "ON" button on the UPS panel cannot be used to control the audible alarm supplied by batteries on/off.
Bypass audible warning	When <b>Yes</b> is enabled: UPS is supplied by bypass, it is allowed to have bypass audible alarm. When <b>Silent</b> is enabled: UPS is supplied by bypass, it is not allowed to have audible alarm, at this time the "OFF" button on the UPS panel cannot turn on the bypass audible alarm.



Options	Explanation
Battery mode audible warning	<p>When <b>Yes</b> is enabled: UPS is supplied by batteries, it is allowed to have audible alarm of battery supply.</p> <p>When <b>Silent</b> is enabled: UPS is supplied by battery, it is not allowed to have audible alarm of battery supply. At this time the “ON” button on the UPS panel cannot turn on the audible alarm of battery supply.</p>
Work On Bypass When UPS Turned Off	<p>When <b>Yes</b> is enabled: UPS is not turned on, it is in the mode of bypass supply.</p> <p>When <b>No</b> is enabled: UPS is not turned on, no bypass output is offered.</p>
Auto Reboot UPS When AC Input Restored	<p>When <b>Yes</b> is enabled: UPS is shutdown for the backup time is exhausted or the battery is in low capacitance, once the utility power is recovered, UPS can restart automatically to the normal operating mode.</p> <p>When <b>No</b> is enabled: the utility power is recovered, UPS cannot restart automatically but in the mode of being not turned on.</p>

- Click **OK** button to save changes.
- Click **Cancel** to exit the prompt.
- Click **Default** to return all settings to default setting.

For ON-LINE UPS, user can enable / disable battery mode alarm audible through this prompt.



- Click **OK** button to save changes.
- Click **Cancel** to exit the prompt.

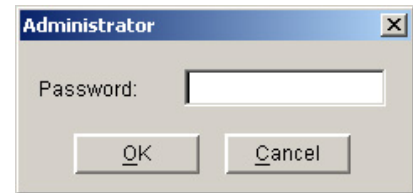
**Note:** If **OK** is not available, which means your access authority of the current Agent is “Read Only” and the settings can’t be changed. To log in as an administrator, refer to *on page 14* for detailed information.

---

## Realizing system administrator and password

### Configuring system administrator

To open this option, select **Act as Administrator** from the **System** menu. The Administrator prompt pops up.



Enter the system administrator password in the prompt and click **OK**, and then the user logs in as an administrator. If the password is not correct, an alert prompt will popup.



### Modifying the system administrator password

To open this option, select **Modify Administrator Password** from the **System** menu. The Administrator Password Settings pops up.

1. Enter the new password in the first empty line, and then enter the password again in the second empty line. Two entries must be exactly the same.
2. Click **OK** to save the new password.



**Note:** If **OK** is not available, which means your access authority of the current Agent is "Read Only" and the settings can't be changed. To log in as an administrator, refer to *on page 14* for detailed information.

---

# Realizing sending event message via email

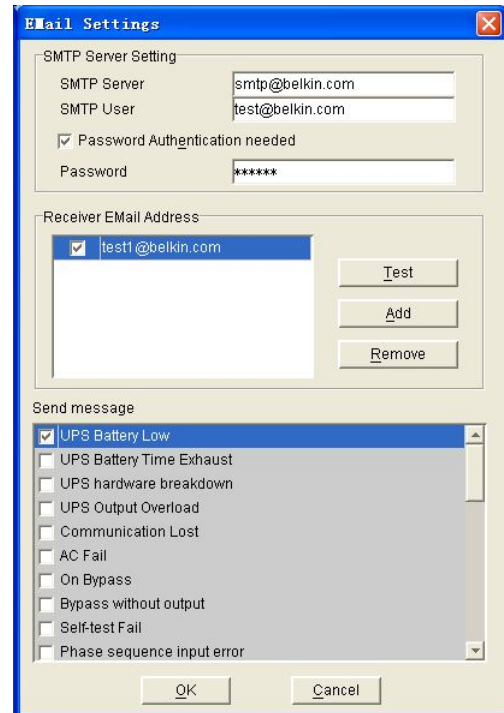
## Configuring Email Settings

### SMTP Server Setting

To configure email settings:

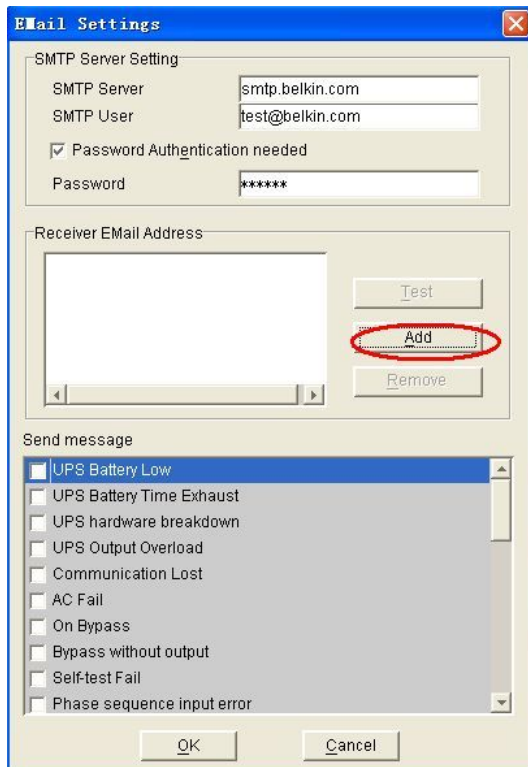
Select **E**Mail **S**etting from the **T**ools menu. The EMail Settings prompt pops up.

- SMTP Server: The SMTP server address,
- SMTP User: The account for logging in the server.
- If SMTP mail server need password authentication, users need to enter a valid password.

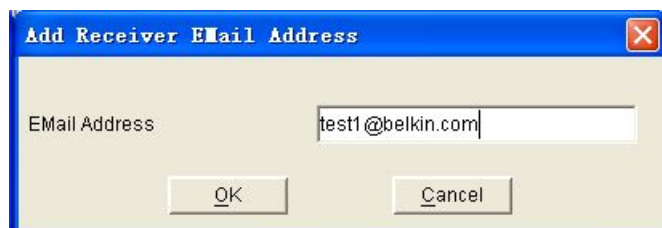


### Receiver Email Address

Click **A**dd in the Receiver Email address section, an **A**dd Receiver EMail Address prompt pops up. Enter the receiver's mail address and click **O**K to save it.



- To Test if the mail address is valid or not, click Test.
- To delete a mail address, select a set receiver email address from the list and click Remove.

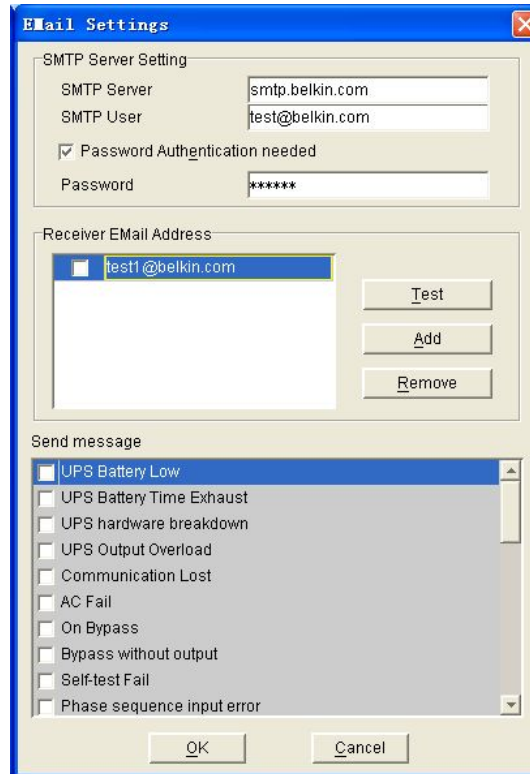


---

## Send Message

1. Select one or more listed event from the send message section.
2. Select a receiver from the Receiver Email Address list.
3. Click OK at the bottom of the window to save the setting.

When the selected events occur, the message will be sent via the assigned mail address.



## Realizing sending event message via SMS

### Events supported

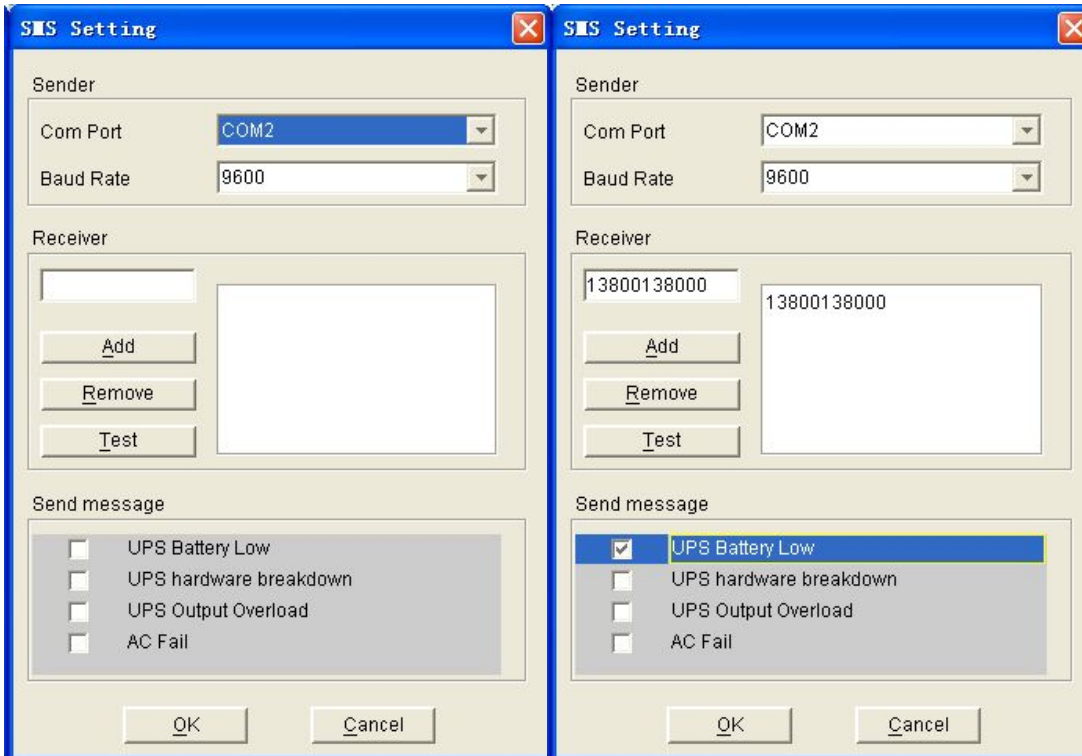
Only the following five events occur and the assigned messages will be sent:

- UPS Battery Low
- UPS Fail
- UPS Output Overload
- AC Fail
- AC Restore

---

## Configuring Email Settings

To open this option, select **SMS Setting** from the **Tools** menu. The **SMS Setting** prompts pops up.



### Sender

SMS is sent through GSM modem or mobile phone which connects to your computer. Users should select COM port which is being used by GSM Modem or mobile phone and then set Baud Rate of this COM port.

### Receiver

The mobile phone number will receive the SMS. It can be one or more.

If the events that selected occur, Belkin APM Software will send the short message to all phone numbers listed in the **Receiver** list.

### *Send message*

1. Select one or more listed event from the **Send Message** section.
2. Click **OK** at the bottom of the window to save the setting.

### *Another method to select Event Code*

### *Please refer to*

SMS Setting on page 27 for detailed information.

---

# Realizing sending event messages by pager

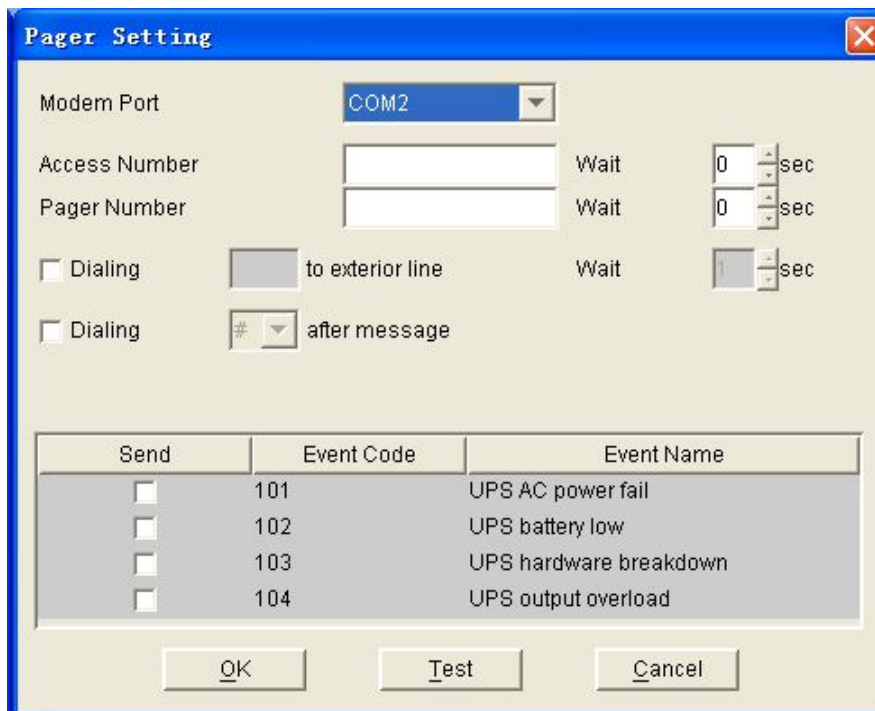
## Events supported

Only the following four events are occurred and the assigned events will be sent:

- UPS AC fails
- UPS low battery
- UPS hardware failure
- UPS output overload

## Configuring the Pager Setting

To open this option, select Pager in Pager setting from the Tools menu. The Pager Setting prompt pops up.



Read the followed table for detailed information on pager setting.

Item	Description
Modem Port	Selects a COM port which is being used by the modem.
Access Number	The station number that the pager joined. The waiting time is the time delayed between dialing paging station number and pager number. For some pager service, a delay is needed between dialing access number and message code. The delay time will be different from paging stations.
Pager Number	The number of the pager that accepts the communication. The waiting time is the time delayed between dialing pager number and message code. For some pager service, a delay is needed between dialing pager number and message code. The delay time will be different from paging stations.
Dialing number to exterior line	For extension line, it is always necessary to dial a specified number and delay a specified time to access Exterior Line.

Item	Description
Dialing number after message	For some pager service, need to dial a specified number to end message code.
Event Code	The event code is dialed as the message code and will be displayed on pager.

When all options are set, click OK at the bottom of the window to save the changes.

#### Another method to select Event Code

*Please refer to*

Pager Setting on page 28 for detailed information.

## Realizing telemonitoring UPS in the LAN (same network)

### Precondition

To realize telemonitoring any UPS in the LAN within the same network, the computers require to setup Belkin APM Software, and the TCP/IP protocol in their communication protocol.

### Configuration

Make sure the network works smoothly. Run the Command Prompt and test with network command PING.

```

Command Prompt
Microsoft Windows [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>ping 192.168.1.221

Pinging 192.168.1.221 with 32 bytes of data:

Reply from 192.168.1.221: bytes=32 time<10ms TTL=128
Reply from 192.168.1.221: bytes=32 time<10ms TTL=128
Reply from 192.168.1.221: bytes=32 time<10ms TTL=128
Reply from 192.168.1.221: bytes=32 time<10ms TTL=128

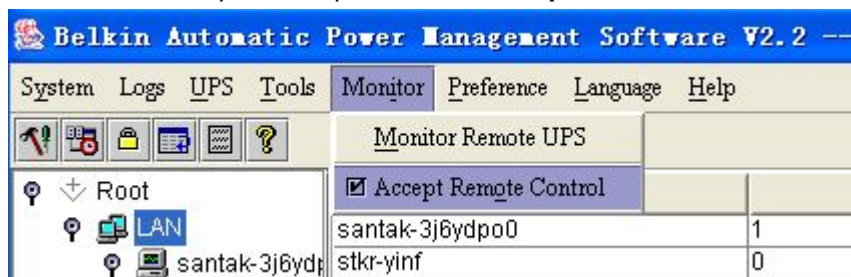
Ping statistics for 192.168.1.221:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>

```

#### Remote Control Permission Switch

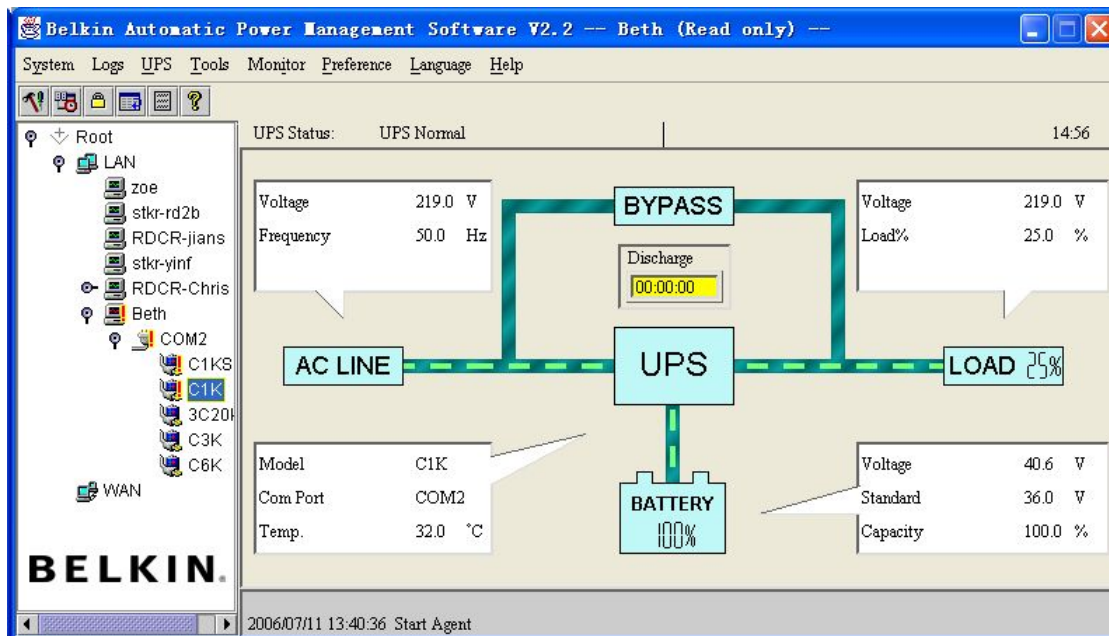
This is a selectable menu item. To open this option, select **Accept Remote Control** from the **Monitor** menu.





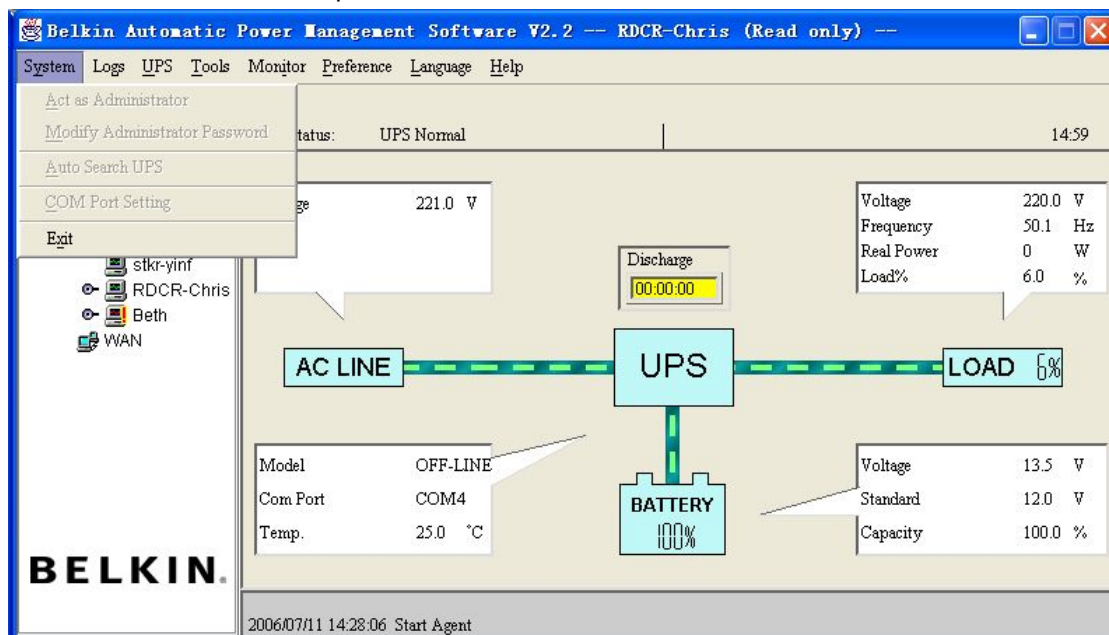
## Monitoring UPS systems

You can select the UPS from the tree menu on the left side of the window.



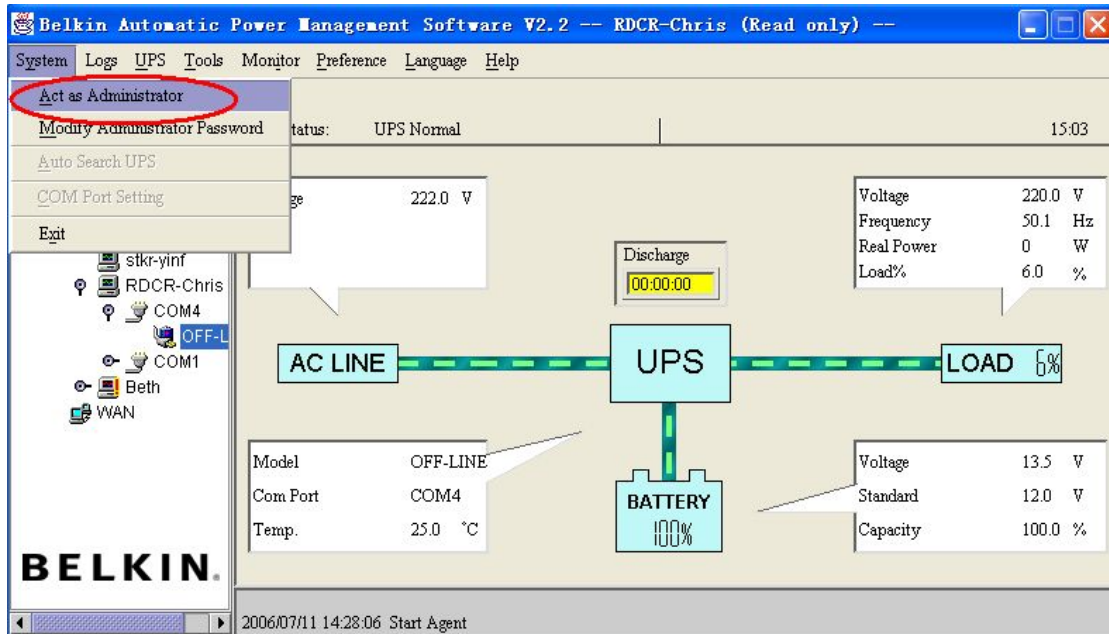
If the Remote Accept Control Permission Switch is off, you can only monitor but not control.

The submenu **Act as Administrator** of the menu **System** is gray and cannot be selected. Unless the user logs in as an administrator, or the operation can't be carried out.





If the Remote Control Permission Switch is on, you can monitor and control this UPS. The submenu Act as Administrator in the System menu is black and can be selected. Under this circumstance, the user is able to log in as an administrator and carry out all operations.



## Realizing UPS remote control in the WAN (different network)

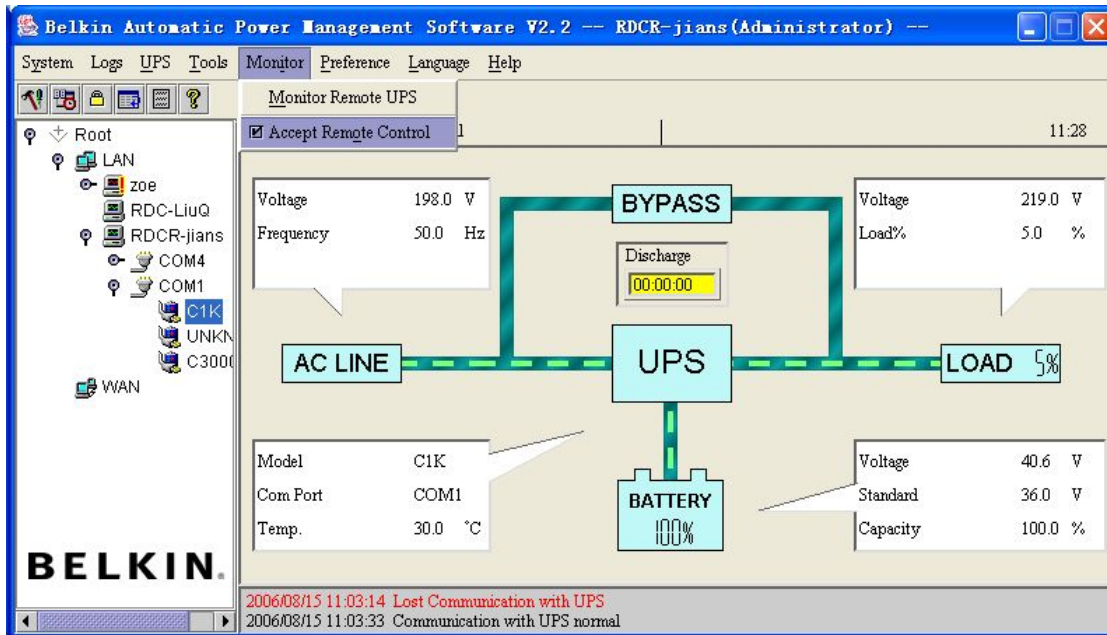
### Precondition

To remote control UPS in the LAN in different network, the computers require to setup Belkin APM Software, and the TCP/IP protocol in their communication protocol.

### Configuration

## Remote Control Permission Switch

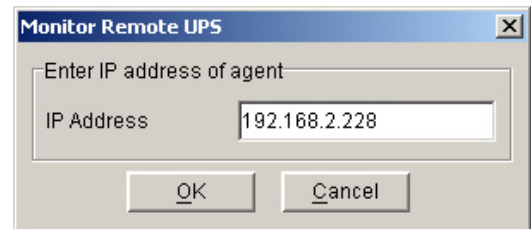
This is a selectable menu item. To open this option, select **Accept Remote Control** from the **Monitor** menu. The IP address is 192.168.2.228.



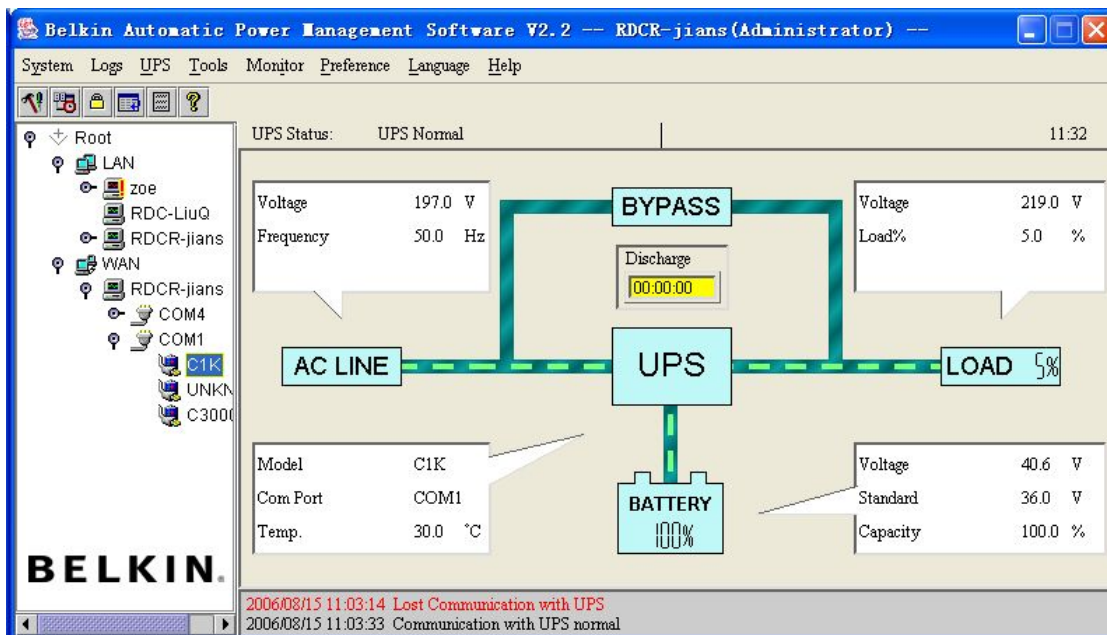
## Monitoring UPS systems

To open this option, select **Monitor Remote UPS** from the **Monitor** menu.

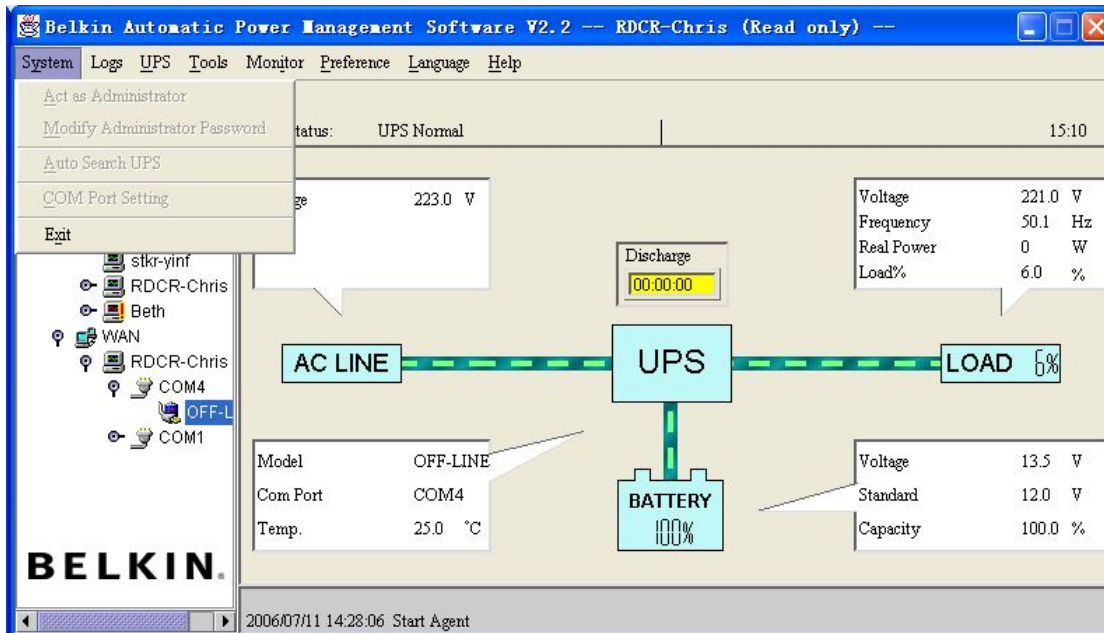
Enter a name of a computer or an IP address in the Monitor Remote UPS prompt. Click OK to save the setting.



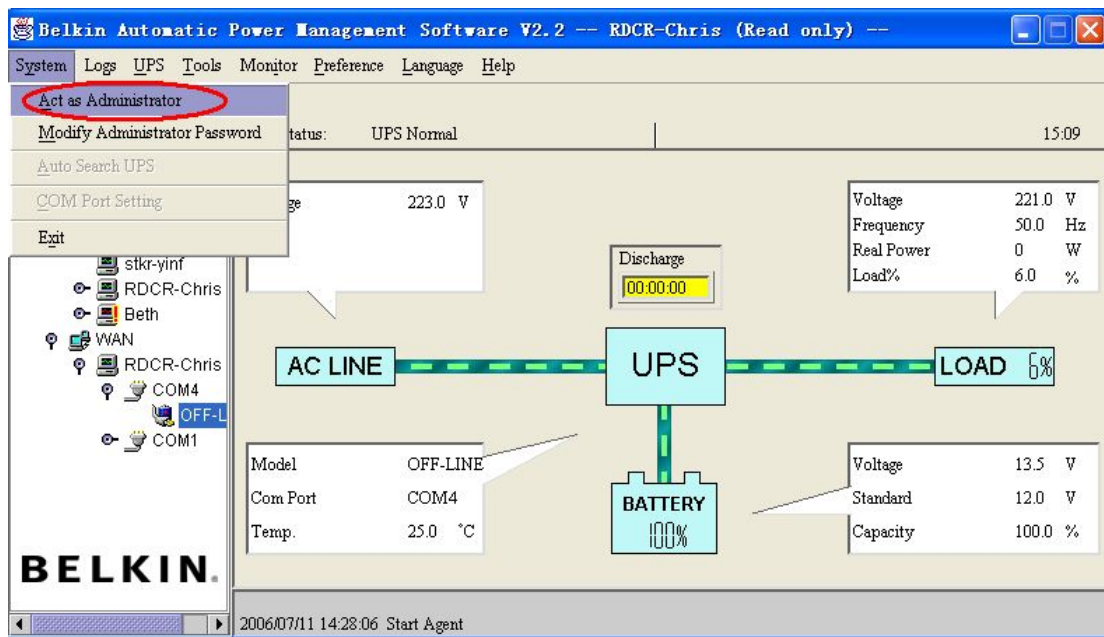
Now the assigned UPS can be found in the WAN.



If the Remote Control Permission switch is off, the user can only monitor but not control. The submenus are in gray and can't be selected.



If the Remote Control Permission Switch is on, the user not only can monitor also can control the UPS settings. The submenus are in black and can be selected.





---

# Appendix A

## Glossary Explanation

<b>Agent</b>	Agent is a background application of the Windows/Unix/Linux operating system
<b>Battery Backup Time</b>	Indicate the time that battery supplies power when utility power fails. After this time is used up, the Agent begins to shutdown the opened application.
<b>Over load</b>	UPS load is more than 100%~110% rated load.
<b>Remote Shutdown by Agent</b>	Local Agent will shutdown in shutdown delay time after the specified Agent Shutdown.
<b>UPS battery backup time exhausted</b>	Indicates when UPS AC fails, battery supply time has exceeded the "battery backup time" which has been set ("Battery backup time" can be set in the "Shutdown parameter" dialog of Belkin APM Software).
<b>UPS battery low</b>	When Utility Power fails and battery supplies power, if the battery voltage is lower than a certain value (refer to UPS Specification), UPS will send a warning tone at intervals of once 1 second for battery low.
<b>UPS output overload</b>	UPS load is more than 100% Rated load.
<b>UPS self test</b>	After UPS' supply mode is switched from utility power mode to battery mode and work on for a period of time, return to utility power mode again. The purpose of self test: First is to check if it can supply normally in battery mode; second is to make the battery discharge once termly (as every month), which is helpful for the battery maintenance and can prolong the battery's service life.
<b>Self test failure</b>	Indicates that it is found out that it is not able to supply power normally in battery mode via self test.
<b>Shutdown alarm interval</b>	Indicate after the shutdown warning begins (include time shutdown warning and AC fail shutdown warning), interval of each warning.
<b>Shutdown file max execution Time</b>	The time for closing the running applications before shutdown system.
<b>Start Warning before Scheduled Shutdown</b>	If user has set time shutdown, Belkin APM Software will begin warning at this time earlier than shutdown.
<b>Supply power in Bypass mode</b>	For the reason of UPS not on or the hardware fault, the input will not pass the inverter of UPS, but output directly. At this moment, if AC fails, UPS will not startup backup battery to supply, so the output will also out of electricity.
<b>System shutdown need time</b>	The time for system shutdown, is also the time from system begin shutdown to turn off UPS outlet

## Appendix B

# Belkin APM Software Event Table

Serial Number	Event Description	Type of Message	Remarks
1	UPS Battery Low	Serious	Can be set as no shutdown system through "Shutdown parameter"
2	UPS Battery Time Exhaust	Serious	Can set battery backup time through "Shutdown parameter"
3	UPS Fail	Serious	
4	UPS Output Overload	Serious	Output load is more than 110%
6	Communication Lost	Warning	The connection of communication cable is not good, or communication port fault.
7	AC Fail	Warning	
8	On Bypass	Warning	UPS will be switched to bypass mode for the reason of overload, hardware fault and so on. Online UPS is also in bypass mode when it is off, at this time UPS has no protection function.
9	Bypass without output		
10	Self-test Fail	Warning	
11	Phase sequence input error	Warning	Three-phase UPS support
12	Battery connection error	Warning	Three-phase UPS support
13	Load unbalance	Warning	Three-phase UPS support
14	overload	Warning	
15	Internal warning	Warning	Three-phase UPS support
16	Maintain cover is open	Warning	
17	AC Restore	Information	.
18	Communication Established	Information	.
19	Agent Start	Information	.
20	Agent Stop	Information	.
21	System be shutdown	Information	.
22	System be Shutdown by Other Agent	Information	Set the Agent need to be in response to through "Shutdown parameter".
23	Special date Close UPS	Information	.

Serial Number	Event Description	Type of Message	Remarks
24	Weekly Close UPS	Information	.
25	Self-test Start	Information	Self-test begins immediately.
26	Self-test cancel	Information	.
27	Self-test End	Information	.
28	Special date Self-test Start	Information	.
29	Special date Self-test Cancel	Information	.
30	Special date Self-test End	Information	.
31	Monthly Self-test Start	Information	.
32	Monthly Self-test Cancel	Information	.
33	Monthly Self-test End	Information	.