PowerWalker ViewPower

User Manual

Management Software for Uninterruptible Power Supply Systems

Table of Contents

1. ViewPower Overview

1.1. Introduction

ViewPower is UPS management software which is perfect for home users and enterprises. It can monitor and manage from one to multiple UPSs in a networked environment, either LAN or INTERNET. It can not only prevent data loss from power outage and safely shutdown systems, but also store programming data and scheduled shutdown UPSs.

1.2. Structure

ViewPower includes ViewPower service, GUI (user interface) and ViewPower icon.

ViewPower service is the core of ViewPower software. It's a system program running in the back end. It will communicate with UPS, record event, notify users with events, and execute command according to users' request.

GUI is operated in Browser and communicated with back-end program. Users can monitor UPSs for real-time status, information and modify UPS setting parameters via GUI.

ViewPower icon is managing tool for ViewPower software. When ViewPower is activated, there is an orange plug icon located in taskbar. It also will display pop-up dialog for current UPS status.

NOTE1: Tray icon only exists under Windows OS.

NOTE2: Supported browser: Internet Explorer, Mozilla, Firefox, Netscape Navigator, Google chrome, Safari, Opera, Avant Browser, and Deepnet Explorer.

1.3. Applications

- Monitor and manage the local UPS connected to local computer
- Monitor and manage other UPSs (with software installed) in LAN
- Remote monitor and manage other UPSs via INTERNET from remote PC (with software installed)

1.4. Features

- Allows control and monitoring of multiple UPSs via LAN and INTERNET
- Real-time dynamic graphs of UPS data (voltage, frequency, load level, battery capacity)
- Safely OS shutdown and protection from data loss during power failure
- Warning notifications via audible alarm, pop-up screen, broadcast, mobile messenger, and e-mail
- Scheduled UPS on/off, battery test, programmable outlet control, and audible alarm control
- Password security protection and remote access management

2. ViewPower Install and Uninstall

2.1. System Requirement

- 512 MB physical memory at least (1 GB is recommended)
- 1 GB hard disk space at least
- Administrator authority is required
- More than 16-bit colors and 800 x 600 or above resolution display is recommended
- TCP/IP protocol must be installed for network management
- An available communication port (RS232 serial port or USB port) is needed
- Platforms supported by software are listed below:
  - Windows 2000/XP/2003/Vista/2008/2012 (32-bit & x64-bit)
  - Windows 7 / 8 (32-bit & x64-bit)
  - Windows SBS 2011
  - Linux RedHat 8, 9
  - Linux RedHat Enterprise AS3, AS5, AS6 (32-bit)
  - Linux RedHat Enterprise AS6 (64-bit)
  - Linux RedHat Enterprise 5.2 (32-bit & 64-bit)
  - Linux SUSE 10 (32-bit & 64-bit)

- Linux Cent OS 5.4 / 6.3 (32-bit & 64-bit)
- Linux Ubuntu 8.X, 9.X, 10.X (32-bit)
- Linux Ubuntu 10.X (64-bit)
- Linux Ubuntu 12.04 (32-bit & 64-bit)
- Linux Mint 14.1 (32-bit & 64-bit)
- Linux Fedora 5
- Linux OpenSUSE 11.2 / 12.3 (32-bit & 64-bit)
- Linux Debian 5.x, 6.x (32-bit)
- Linux Debian 6.x (64-bit)
- Mac OS 10.5 (x32-bit)
- Mac OS 10.6 / 10.7 / 10.8 (x64-bit)
- Mac OS 10.9.1 – 10.9.5
- Solaris 10 for x86

2.2. Software Install

Step 1 Insert the software CD into CD ROM. Will display the installation menu, or you can run autorun.exe to start the installation in CD directory. Refer to the diagram 2-1.

Diagram 2-1

Step 2 PC will show the following screen as Diagram 2-2. Then Click "install" button to start the installation.

Diagram 2-2

Step 1 After clicking install, it will display the installation in process. Refer to the diagram 2-3.

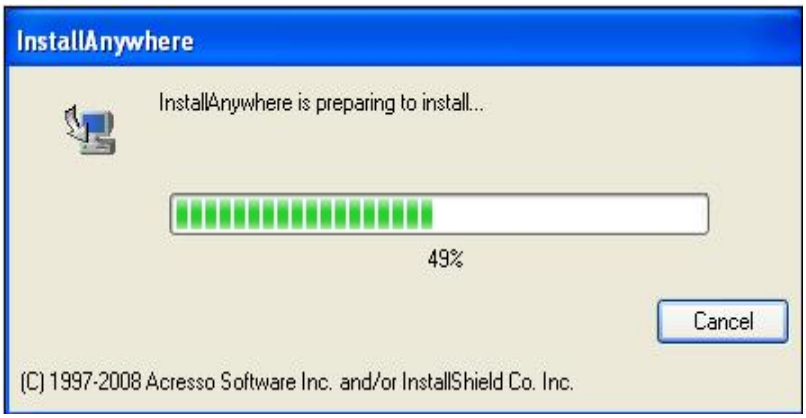


Diagram 2-3

Step 2 Choose wanted language and click "OK" as diagram 2-4.

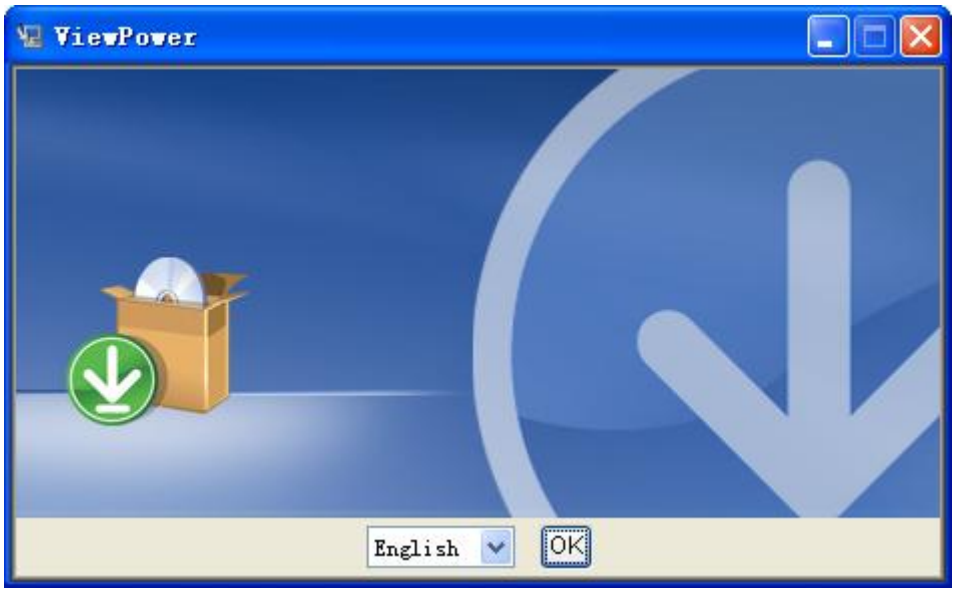


Diagram 2-4

Step 3 Click "Next" to proceed to the next screen as Diagram 2-5.

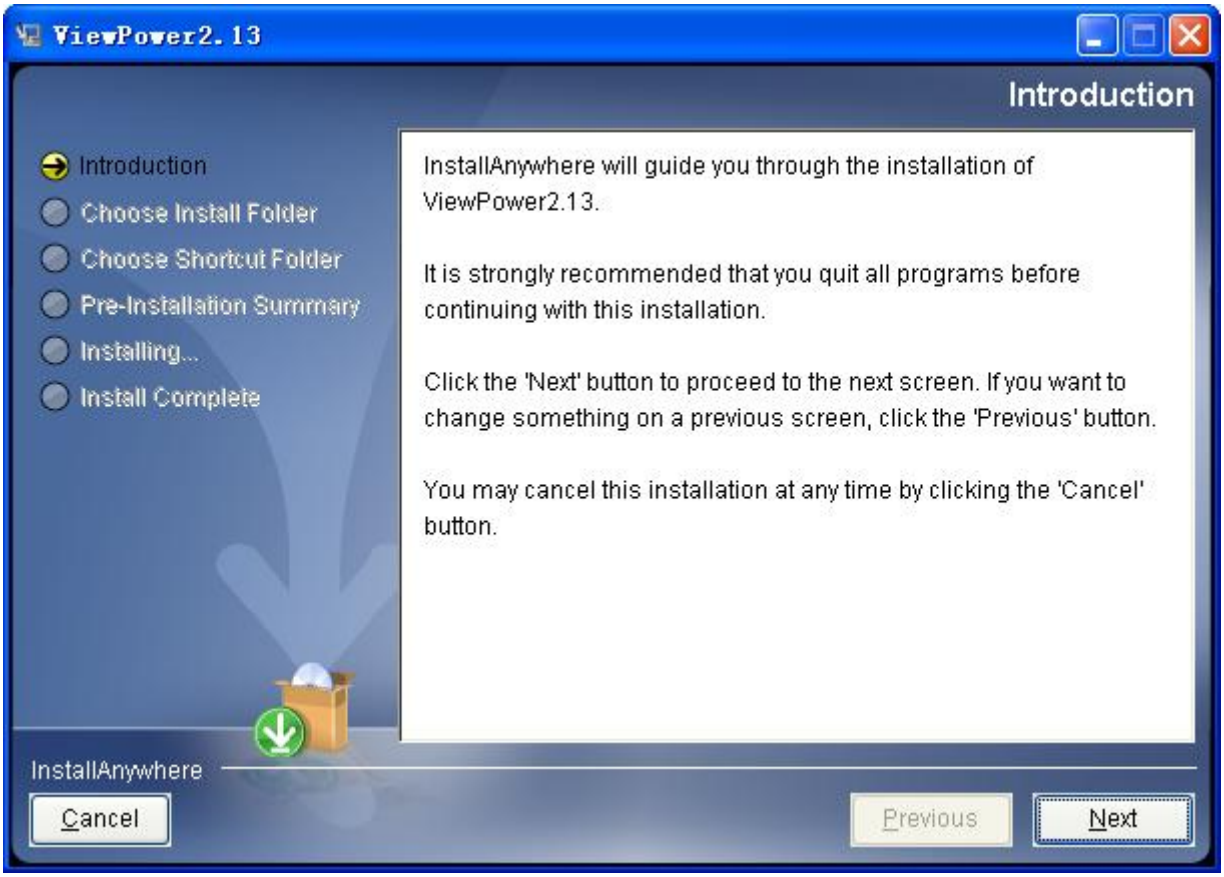


Diagram 2-5

Step 4 Click "Choose" button to change the default folder. After choosing the installed folder, click "Next" button. Refer to the following diagram 2-6.

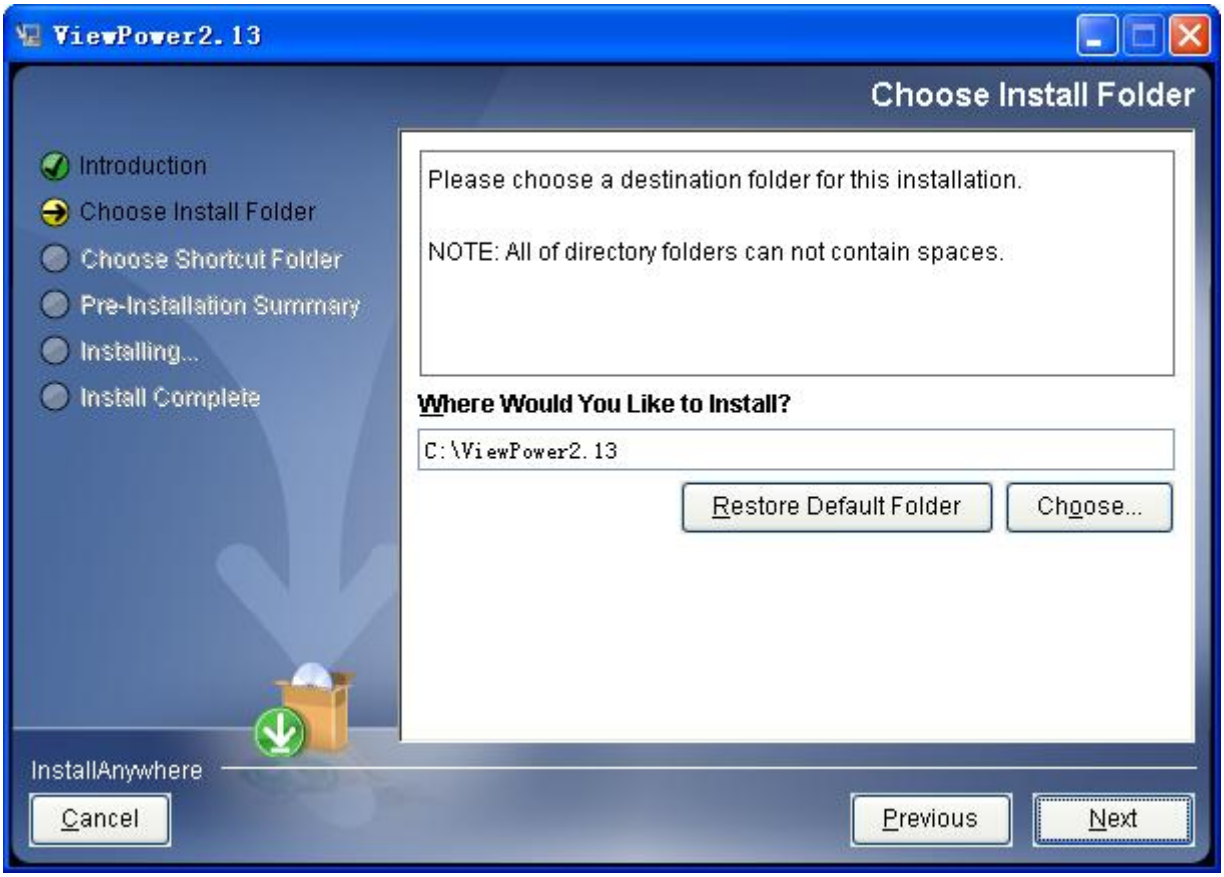


Diagram 2-6

Step 5 Choose the shortcut folder and click "Next" button. Refer to the following diagram 2-7.

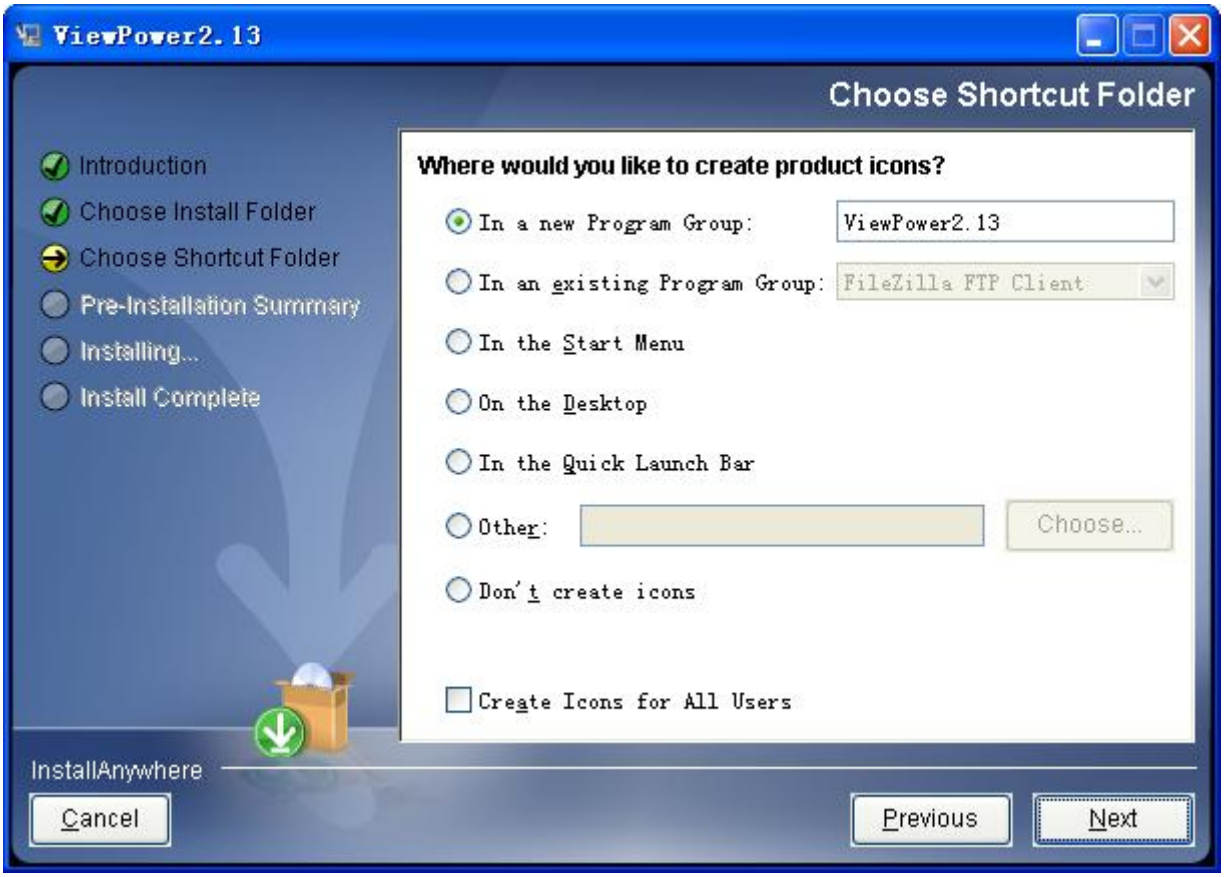


Diagram 2-7

Step 6 It will display the software summary before installation. Click "Install" button to start the installation and refer to Diagram 2-8.

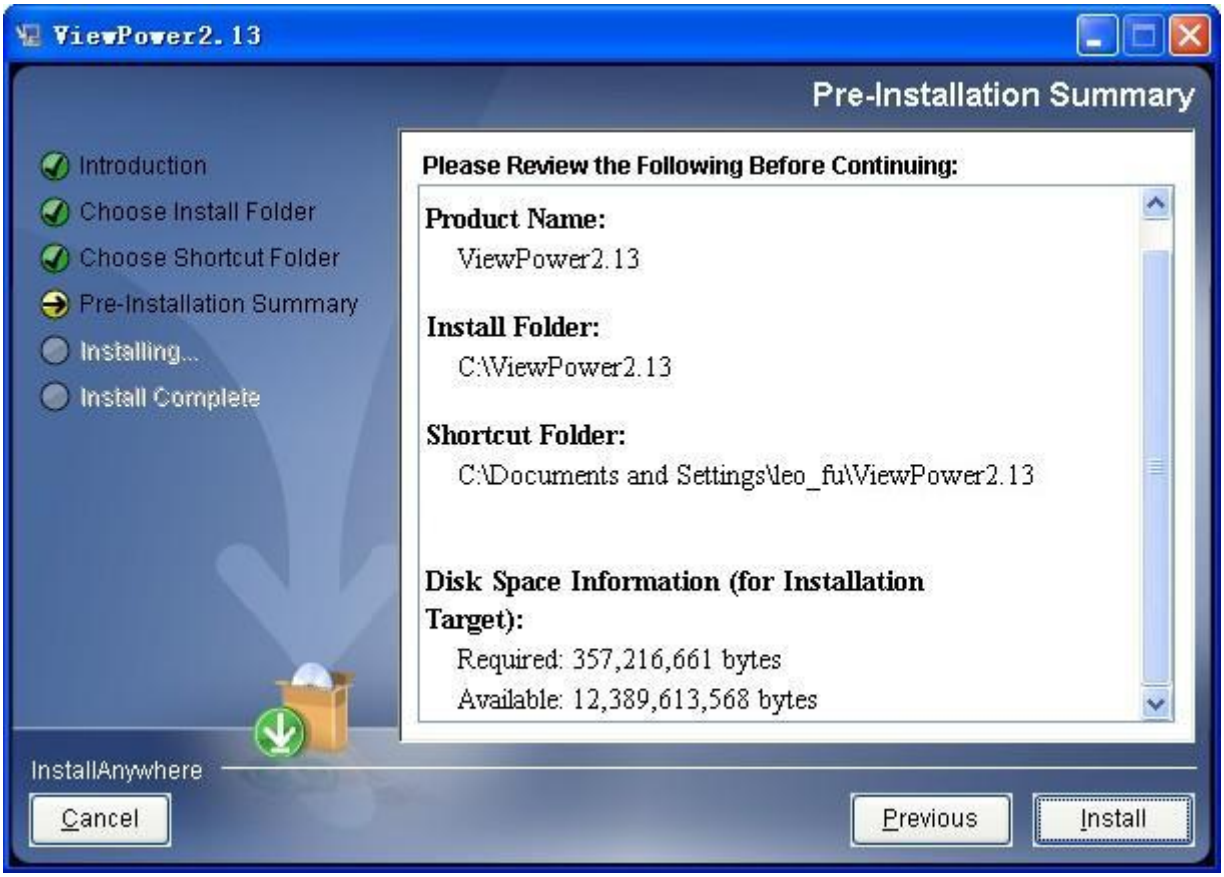


Diagram 2-8

Step 7 Click "Done" button to confirm the installation completely.

Refer to Diagram 2-9.

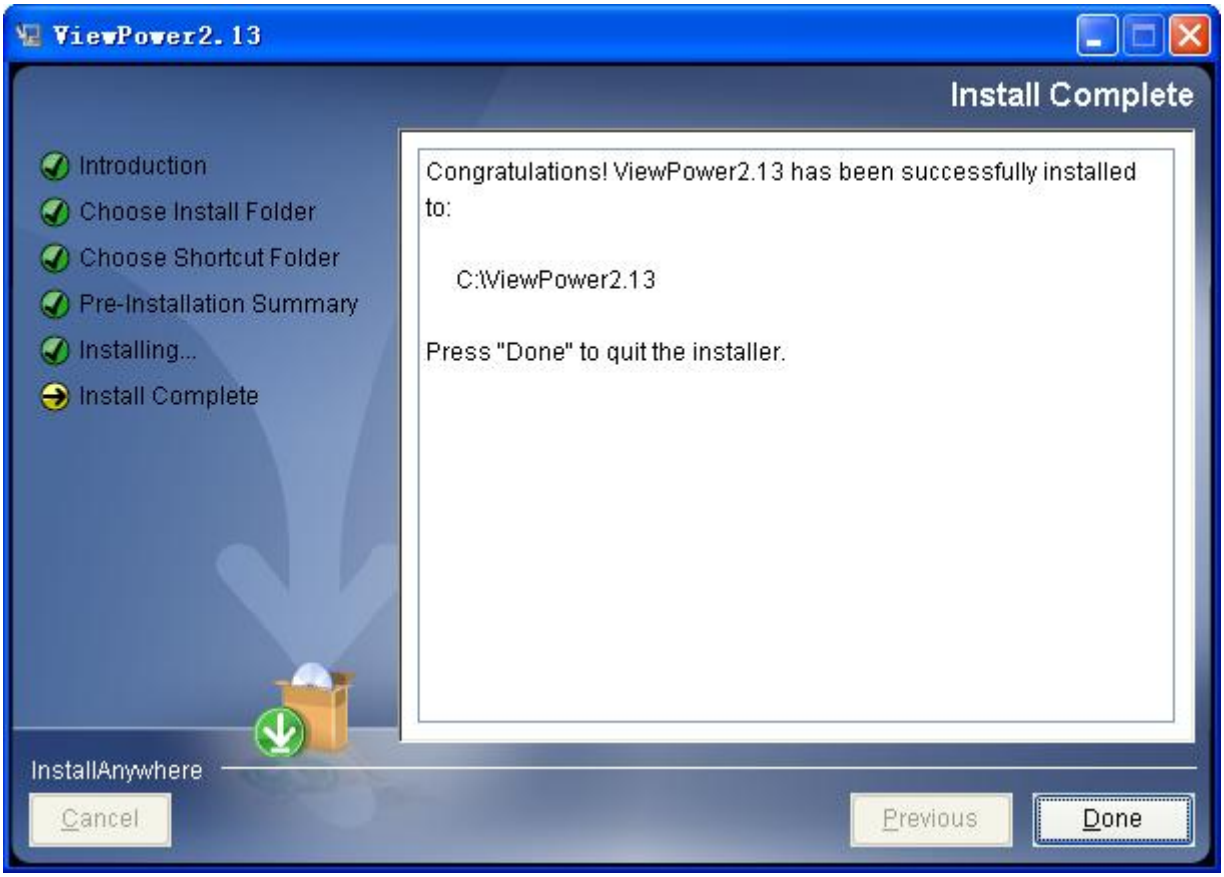


Diagram 2-9

Note: Please uninstall the previous version before install the new version software. If installed ViewPower is detected during installation, it will remind users to uninstall old version first. Refer to Diagram 2-10.

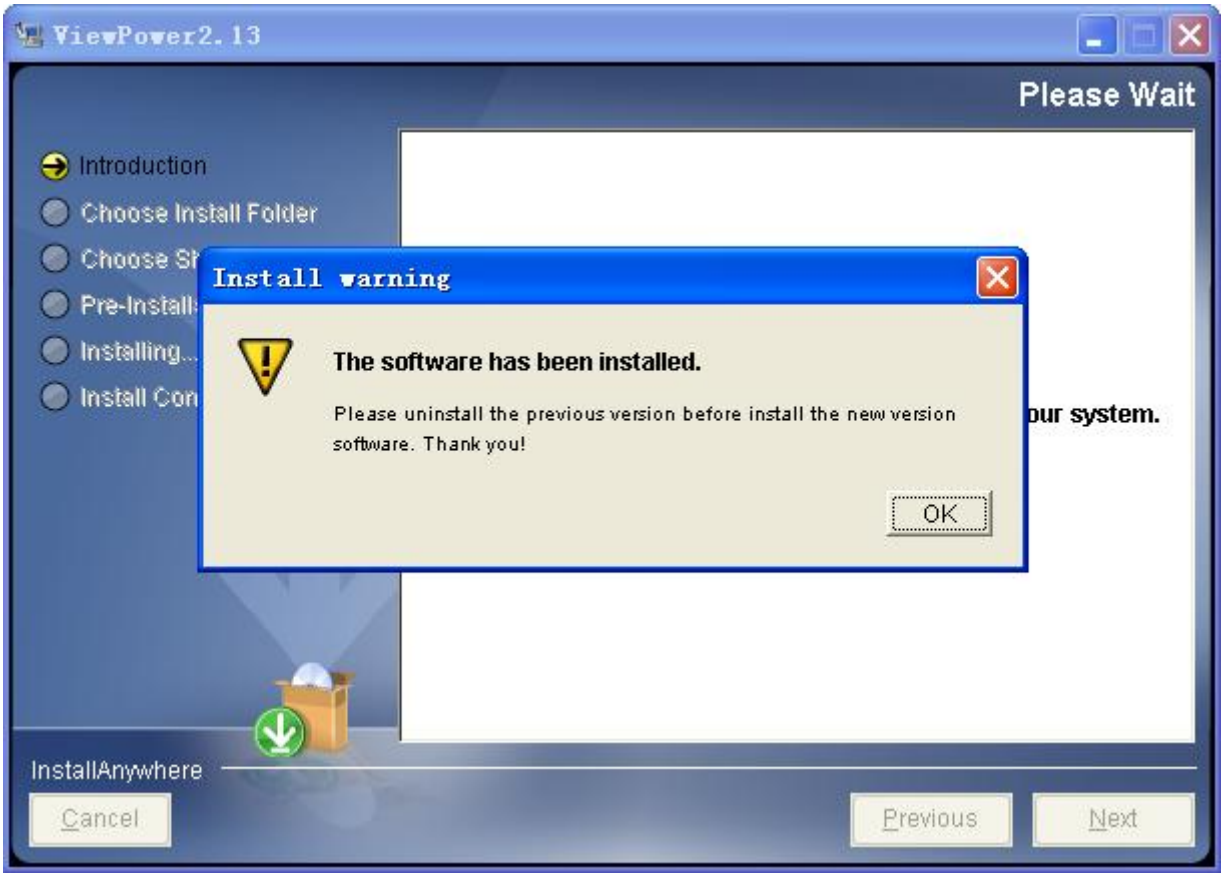


Diagram 2-10

2.3. Software Uninstall

Note: Before uninstall software, you must stop all software programs first and then log in as "Administrator"! Otherwise it can't be uninstalled completely.

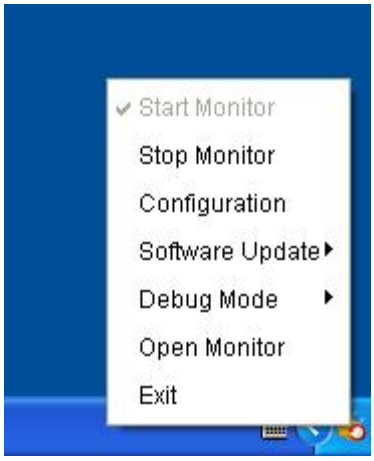
Please choose Start >> All Programs >> ViewPower >> Uninstall. Then follow the on-screen instruction to uninstall the software.

3. Service Tray Application

The Installer will leave a shortcut icon on your desktop. Simply click the shortcut. Then it will start the software and display an orange plug icon located in taskbar. To launch the GUI, double click the plug icon or choose "Open Monitor" by clicking right button of the mouse. Refer to below diagram.

Or, use the Start Menu method; Start >> All Programs >> ViewPower >> ViewPower

Shortcut icon 



ViewPower icon

3.1. Start Monitor

This software will be automatically activated when installing it as service application. At this time, users can remote monitor the UPS through web browser even though users do not login in operation system.

If service application can not be registered successfully when starting up service tray service, it will automatically activate monitoring application. If it's failed or stopped manually, simply click "Start Monitor" to activate it.

"Start Monitor" will check if monitoring application is registered as service application. If it's successfully, this software will be activated from service mode. If not, this software will be activated as monitoring mode. Users can identify the application mode from tray icon as below:

- Monitoring application is not activated successfully:
- Monitoring application is activated as service mode:
- Monitoring application is activated as application mode:

3.2. Stop Monitor

Click "Stop Monitor" to stop monitoring application.

3.3. Configuration

3.3.1. Port Modification

If port conflict occurs, you may modify value of tray port. The default setting for tray port is listed as below (Refer to section A in Diagram 3-1):

- Web Service port: 15178
- Web service shutdown port: 8005
- AJP port: 8009

You may modify the value of tray port to any number between 0 to 65536. If value entry is used, the system will remind users to enter another number again.

NOTE1: Please do NOT modify port value unless port conflict occurs. This modification will affect remote monitoring website. For example, if changing web service port to 15177, then the remote monitoring website will change to：
http://xxx.xxx.xxx.xxx:15177/ViewPower

NOTE2：To avoid possible conflicts, please do NOT enter value with less than 4 digits.

3.3.2. ViewPower Start And Exit Setting

Refer to section B in Diagram 3-1 for the detailed configuration of ViewPower start and exit setting:

- Server startup type: If "Auto" is selected, the software will automatically start up when PC is turned on. If "Manually" is selected, users have to manually start the ViewPower software.
- Exit to stop monitoring: If selected, it will completely exit software without monitoring service. If unselected, it will continue monitoring service in the back end even though exit from software.

3.3.3. Software Upgrades

Refer to section C in Diagram 3-1 for the detailed configuration for online upgrade:

- Specify the URL for update files: This is the directory to online update software. Please do not change it unless it's instructed by software vendor.
- Save files to: The directory to save files.
- Online auto-update: If selected, it will automatically check if there is any new version launched online every 1 hour.
- If applying online upgrade, please follow below for configuration:

1. Select "Apply the proxy configuration";
2. Enter IP address and port of server;
3. If ID identification is requested, select "Enable authentication" and enter User Name and Password.

- Connection test: Click this button to test if all configurations are set up well.

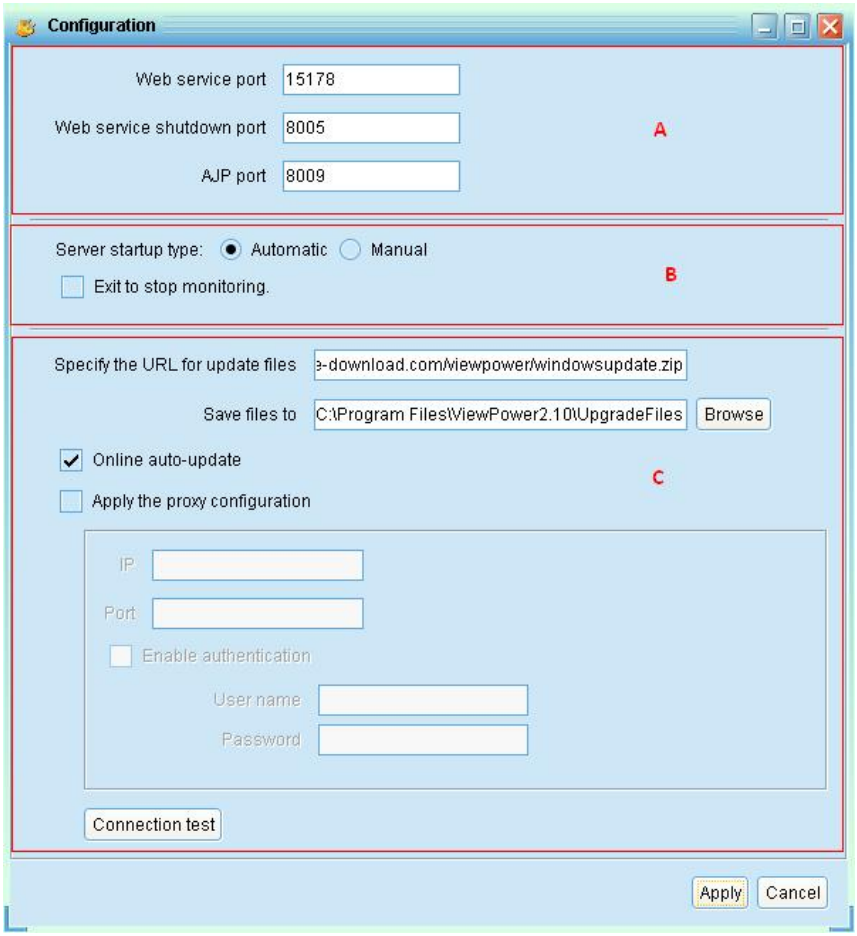


Diagram 3-1

3.3.4. Configuration Saved

Click "Apply" button to save all changes in Configuration page. Click "Cancel" to stop the change.

3.4. Software Update

Software update includes online update and manually update:

- Online Update:

  Click "Online Update" to search the latest software version. If there is new version, it will automatically download and update. Refer to Diagram 3-2：

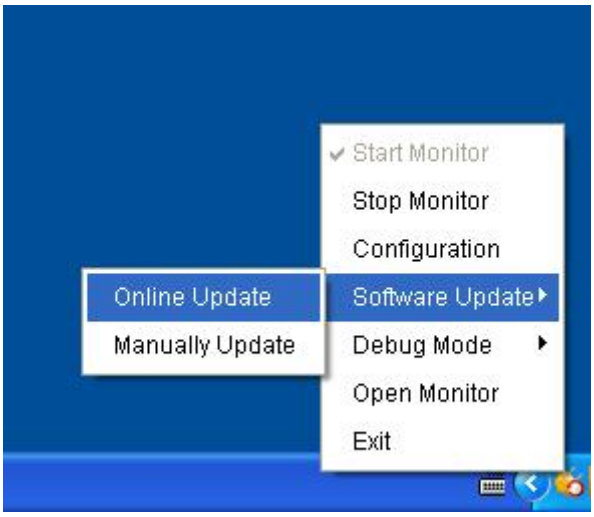


Diagram 3-2

- Manually Update:

  Users can manually update the software. Follow below steps：

  1. Click "Manually Update" from function menu. Refer to Diagram 3-3.

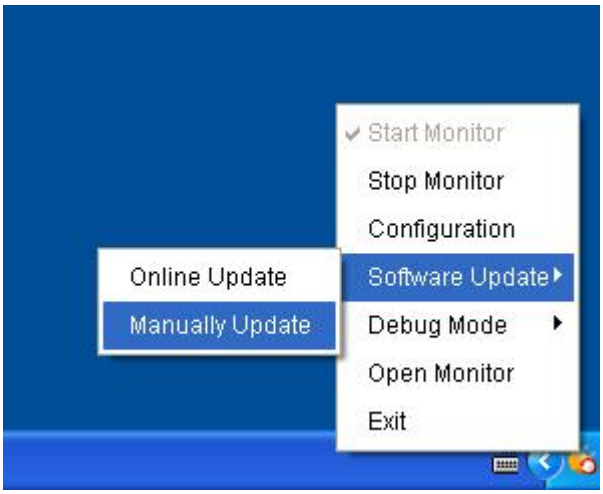


Diagram 3-3

  2. Click "Browse" to choose file directory. And then click "Upgrade" to upgrade software. Refer to Diagram 3-4.

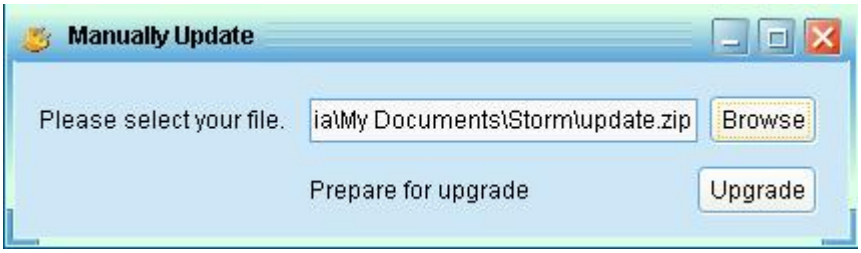


Diagram 3-4

3.5. Debug Mode

If debug mode is activated, the software will record process of UPS searching and communication result into log so that it can be analyzed when communication failure occurs.

- Start: Click "Start" to activate debug mode. Refer to Diagram 3-5. Click "Stop" to stop recording. Refer to Diagram 3-6.

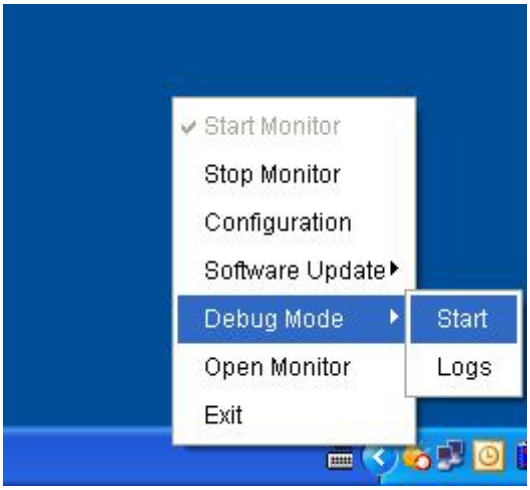


Diagram 3-5

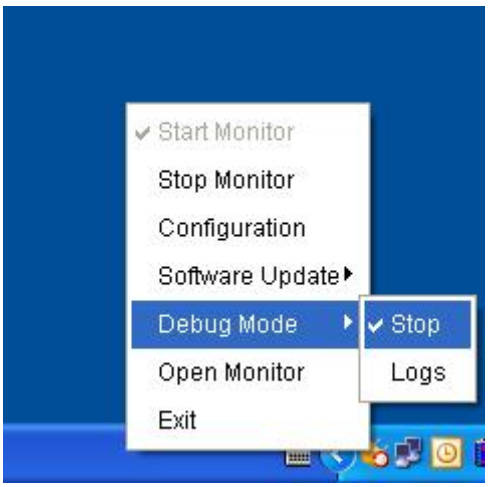


Diagram 3-6

- Logs: Click "Logs" to check the log records. Refer to Diagram 3-7.

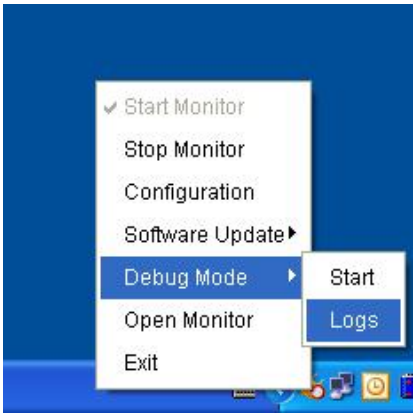


Diagram 3-7

3.6. Open Monitor

Click "Open Monitor" to open monitor page.

3.7. Message Board

Users can check message board for event list. Refer to Diagram 3-8：

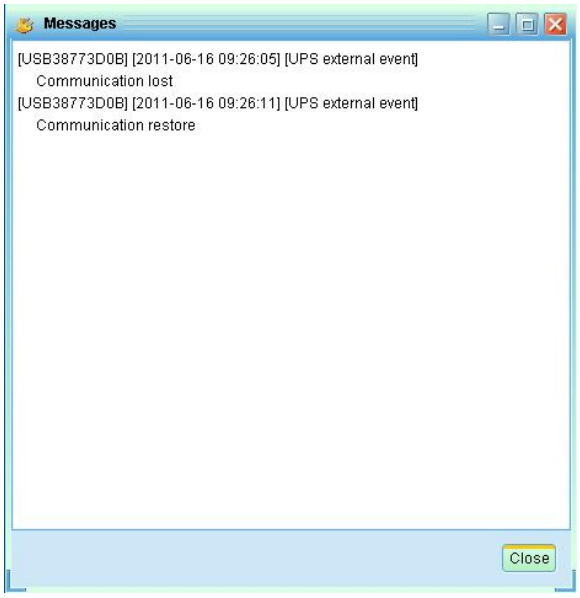


Diagram 3-8

3.8. Exit

Click "Exit" to exist service application

4. ViewPower GUI Interface

The GUI has five sections as marked in the illustration below:

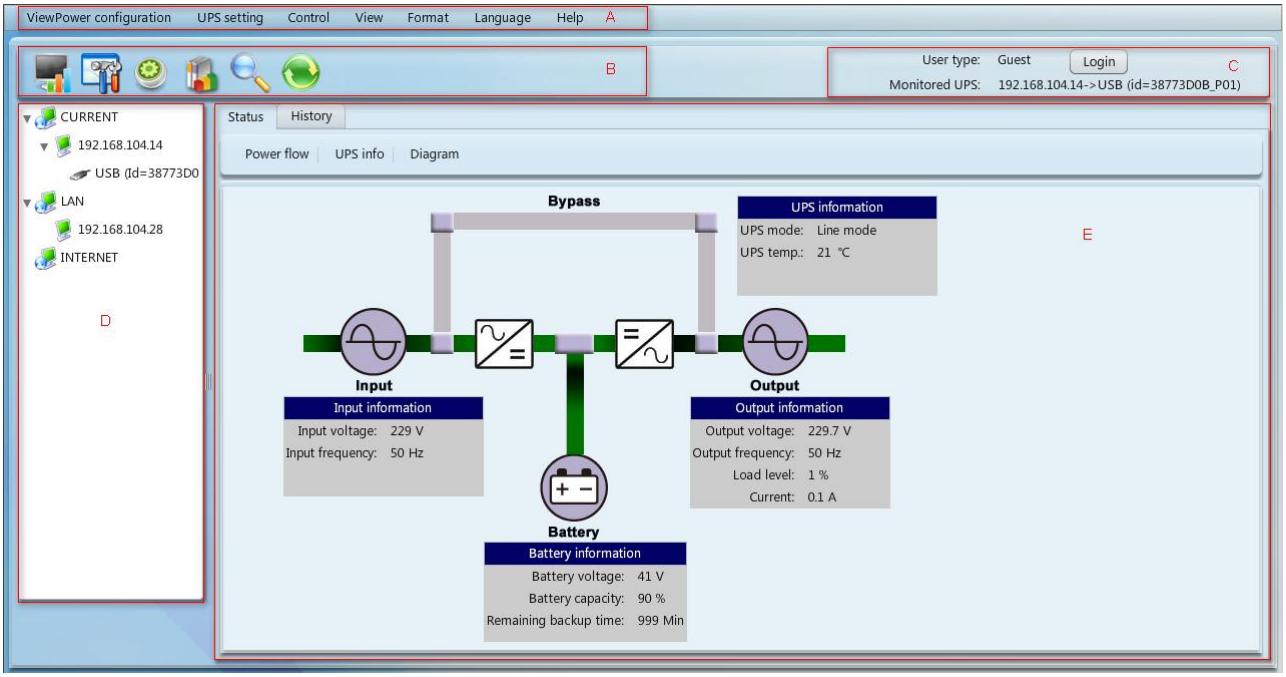


Diagram 4-1

A. Function Menu offers complete tool-set for navigating and setting the GUI.

B. Shortcut Menu provides short cuts to more commonly used functions.

C. Current Monitoring Information displays user ID and monitored UPS name.

D. UPS Navigation indicates all UPS locations in networked environment.

E. Main Window contains information and/or controls that change with each function menu or shortcut menu selected.

4.1. Refresh

Click the Refresh icon  to refresh screen (Refer to Diagram 4-2).

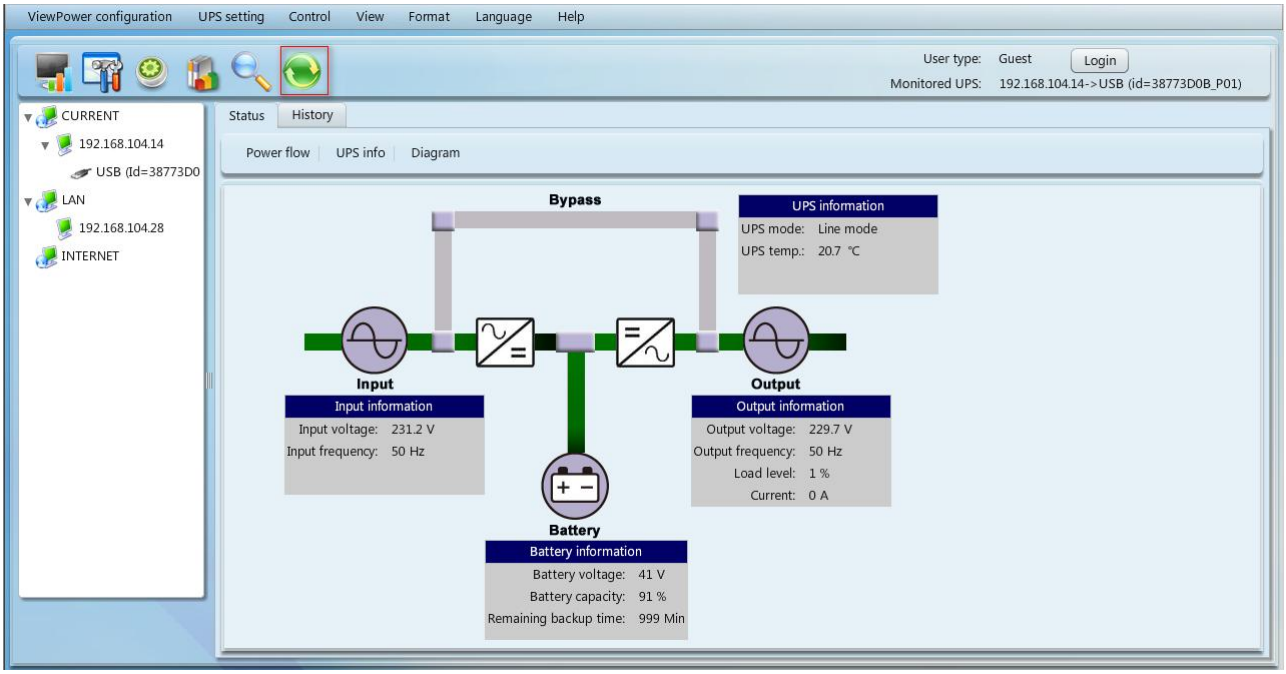


Diagram 4-2

4.2. UPS Searching

Step 1 Click the UPS Searching icon  to search UPS devices in LAN or INTERNET.

Step 2 Click the UPS search icon  (Refer to Diagram 4-3).

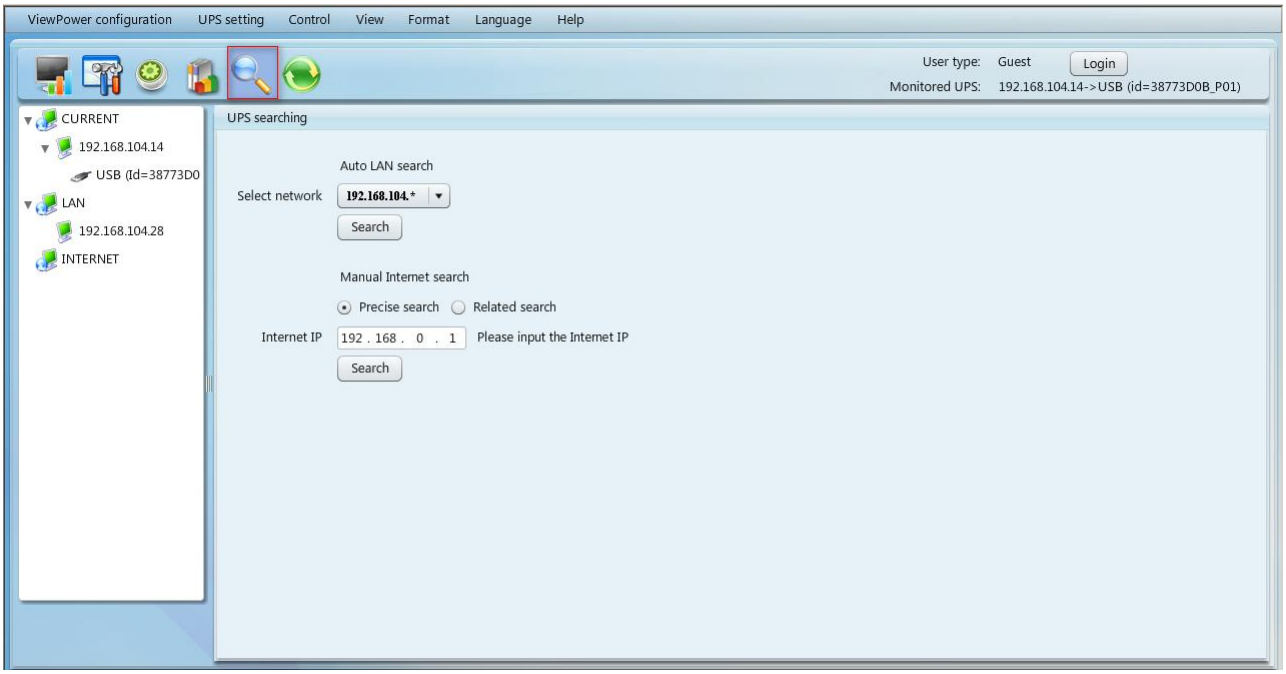


Diagram 4-3

- **Auto LAN search:** Select the web segment from ComboBox, and then click the "Search" button as required.

- **Manual Internet search:**

1. Precise search: Enter designated IP address, and then click the "Search" button for searching.
2. Related search: Enter IP address ranging, and then click "Search" button to start the searching.

   Note: The duration of searching in related search is different based on the provided range of IP addresses.

4.3. UPS Navigation

It displays all UPSs found through UPS searching function.
CURRENT means physically connected local PC and UPS device
LAN means connected PCs and UPS devices in local area network
INTERNET means connected PCs and UPS devices in wide area network
NOTE: The definition of LAN and INTERNET depends on the local PC location.

4.3.1. Monitored UPS Information

Select one UPS from UPS navigation and it will display complete UPS information in main window. Refer to Diagram 4-4.

- UPS rated information includes rated VA, rated output voltage, rated output frequency, rated output current and rated battery voltage.
- Battery information includes battery group numbers.
- Purchasing information means UPS purchasing date, battery purchasing date, warranty for UPS and warranty for battery.

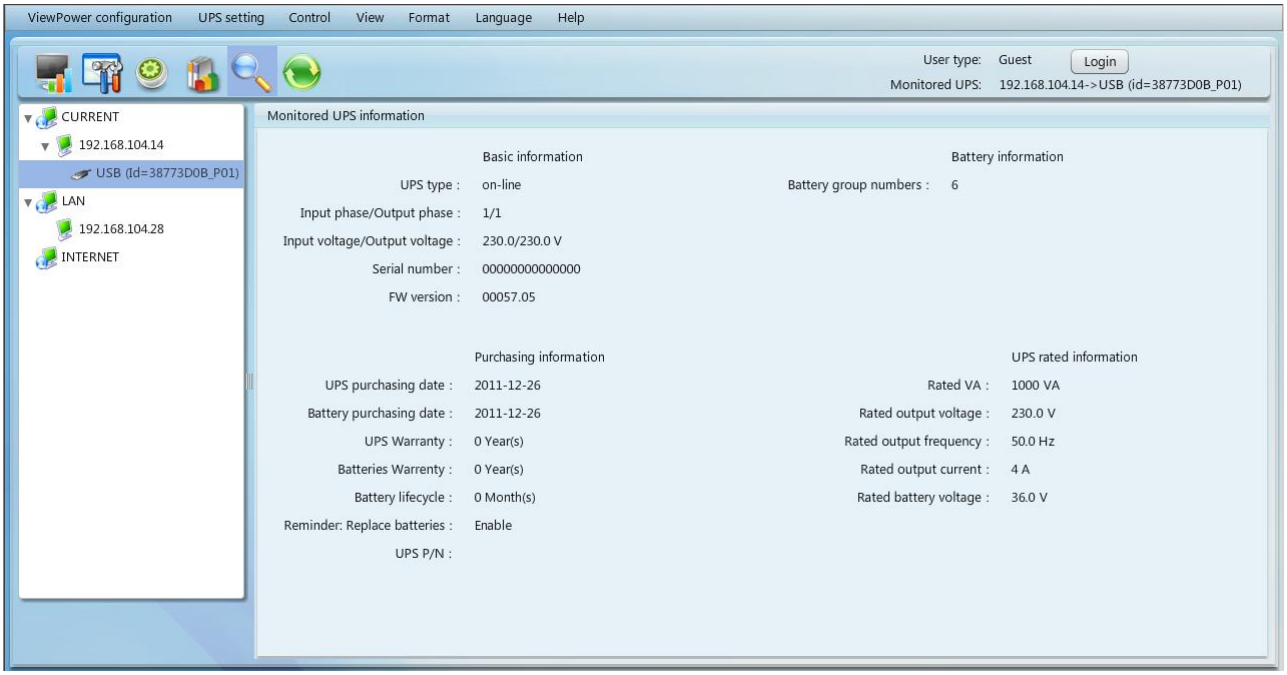


Diagram 4-4

NOTE: This display screen may be different for different types of UPS.

4.3.2. UPS Remote Control & Monitor

If you want to control and set up the remote UPS, you must log in as an administrator. There are two ways to remote monitor UPS:

- Method one: Double click any UPS from LAN or INTERNET and it will pop up a message window to confirm the monitoring action. Refer to below diagram 4-5.

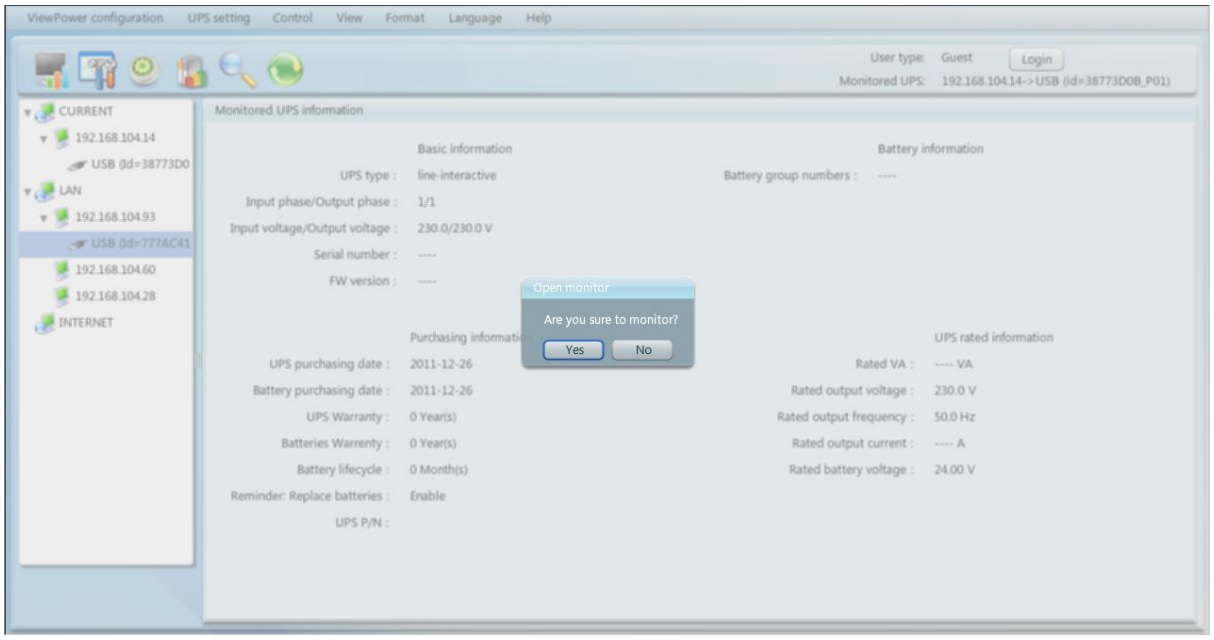


Diagram 4-5

Select "Yes" and it will open another new window to display remote UPS information. Refer to Diagram 4-6.

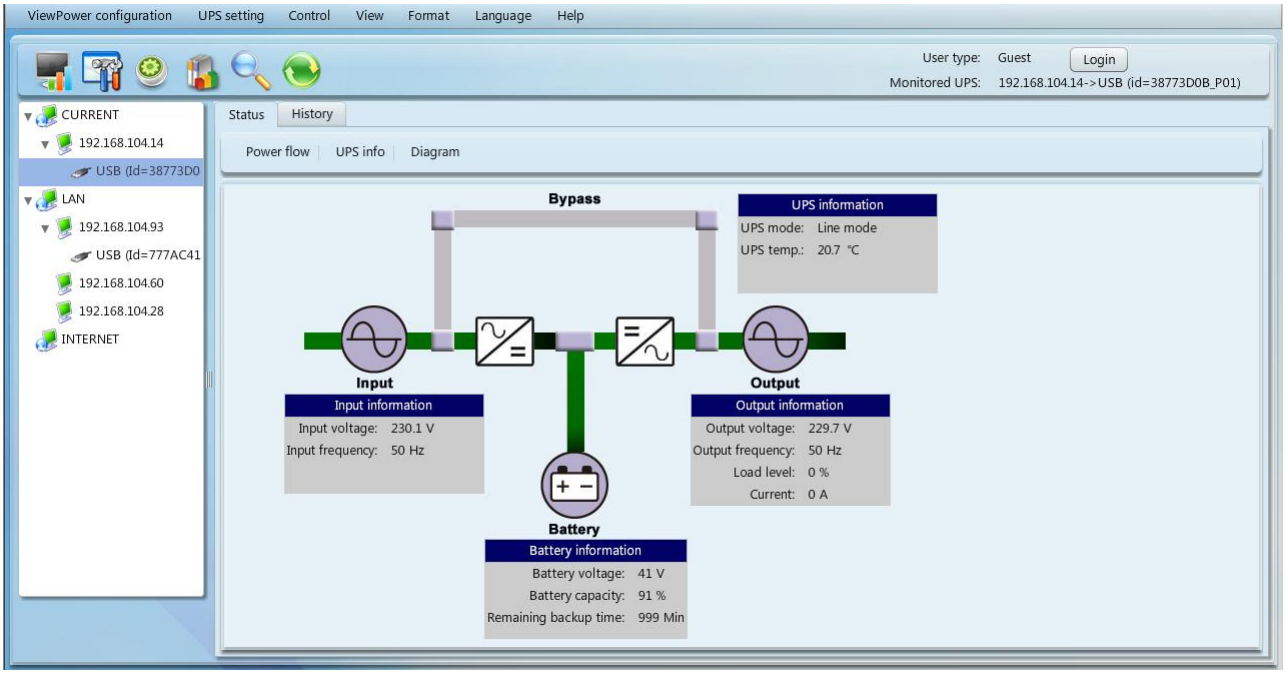


Diagram 4-6

NOTE: This display screen may be different for different types of UPS.

- Method 2: Open browser and enter the remote PC IP address and 15178. For example, remote PC IP address is 202.16.53.142.

  Please enter http://202.16.53.142:15178/ViewPower in browser. Refer to Diagram 4-7

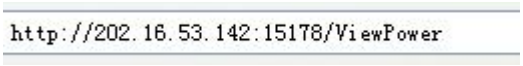


Diagram 4-7

5. ViewPower Function Menu

5.1. ViewPower Configuration

5.1.1. Password Configuration

It's password configuration for administrator only. Before operating and configuring the software, please login first and modify the password. The default password is "**administrator**" at first log in. Users can only browse UPS status and information as Guest status without login as an Administrator. Guest can NOT control or executive any

setting.

Step 1 Select ViewPower Configuration>>Password. Refer to Diagram 5-1.

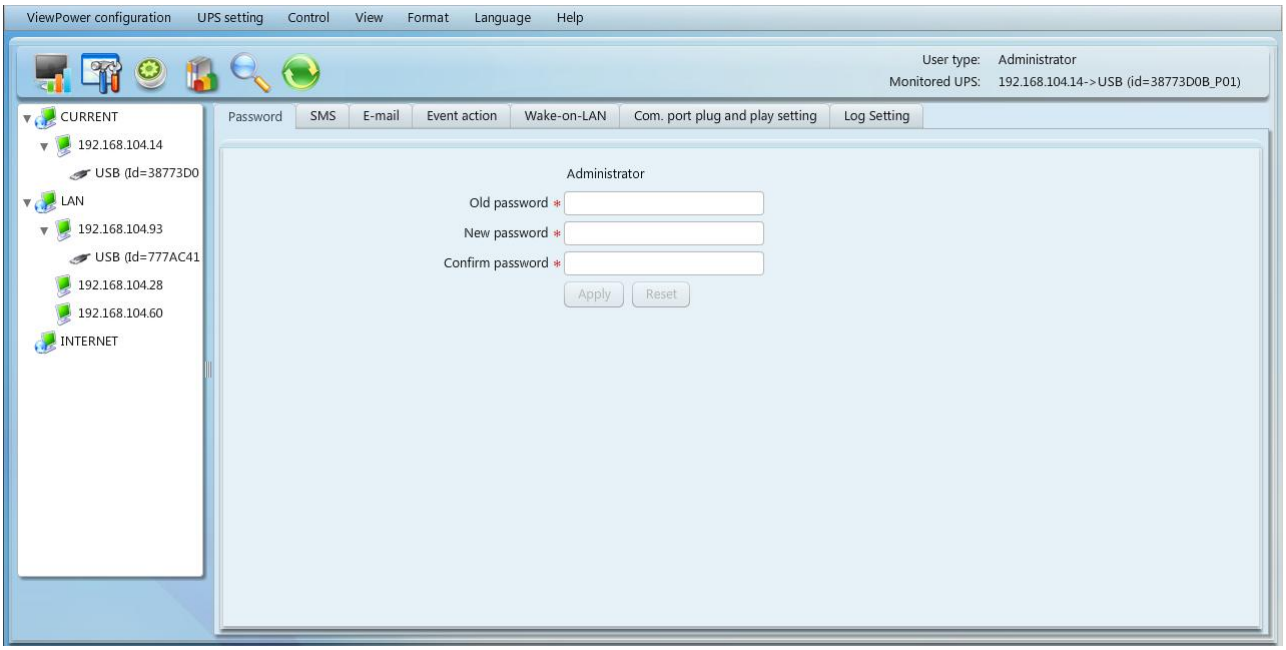


Diagram 5-1

Step 2 Enter old password, new password, and retype new password in confirm password column to modify password for administrator. (The password should be at least 6 digits) Then click "Apply" button to successfully modify password for administrator.

NOTE1: Simply click "Login" button on the top right corner to log in the software.

NOTE2: If password is forgotten, it's necessary to re-install the software.

5.1.2. SMS Configuration

It's for entering SMS receiver list. In the event of an alarm condition occurring, a message about UPS status will be sent to the specified users via mobile phone. For the event receiving list, please configure in "Event Action" column (refer to section 5-1-4).

Step 1 Choose ViewPower Configuration >> SMS. Refer to Diagram 5-2.

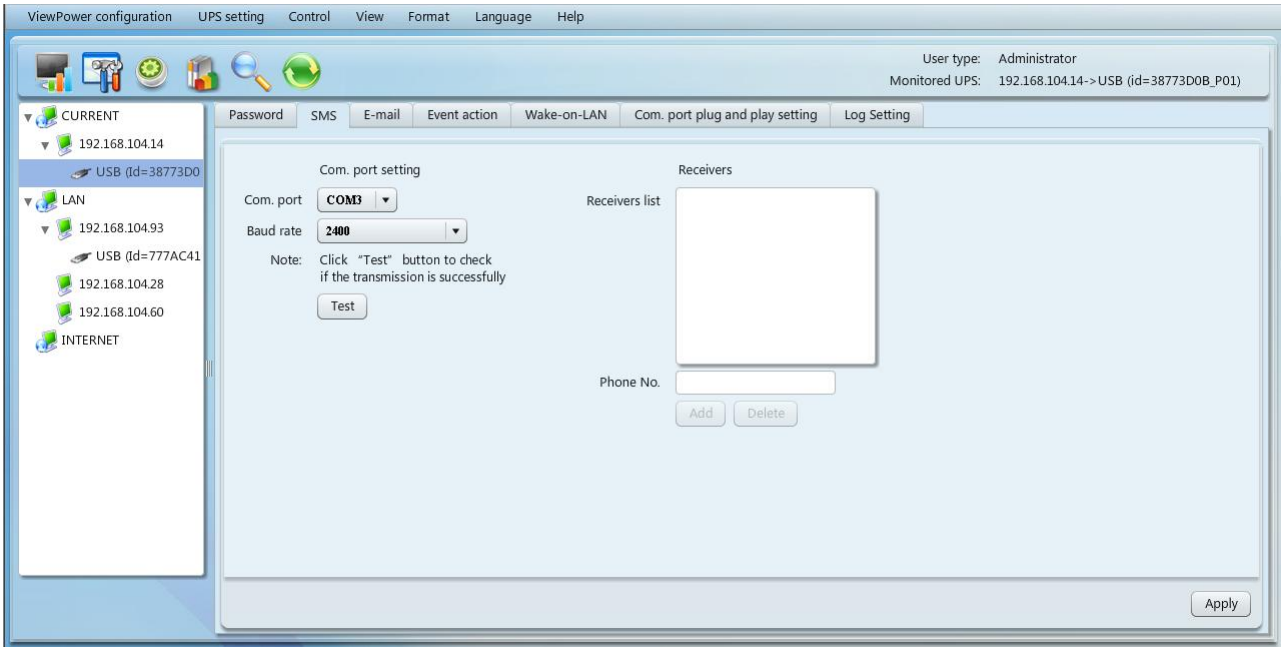


Diagram 5-2

Step 2 Select communication port and baud rate.

Step 3 Enter mobile phone numbers in "Phone no." column and click "Add" button to add phone no. in Receivers List. To delete numbers, simply select phone no. from "Receivers list" and click "Delete".

Step 4 Click "Apply" button to save all changes. The "Test" button can be used to send test SMS to confirm the correct operation. If all parameters are set up correctly, system will send a test message to all receivers and pop up a successful message. (Refer to Diagram 5-3) Otherwise, it will pop up a failure dialog to indicate there is an error for parameter setting. (Refer to Diagram 5-4)

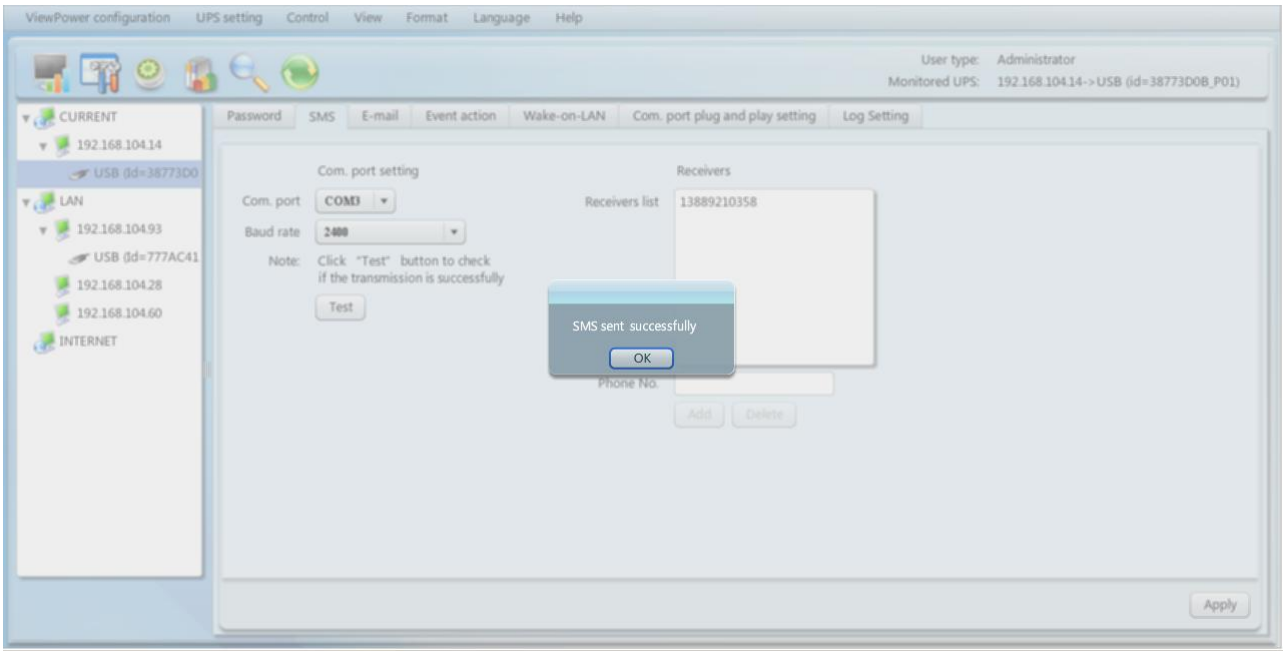


Diagram 5-3

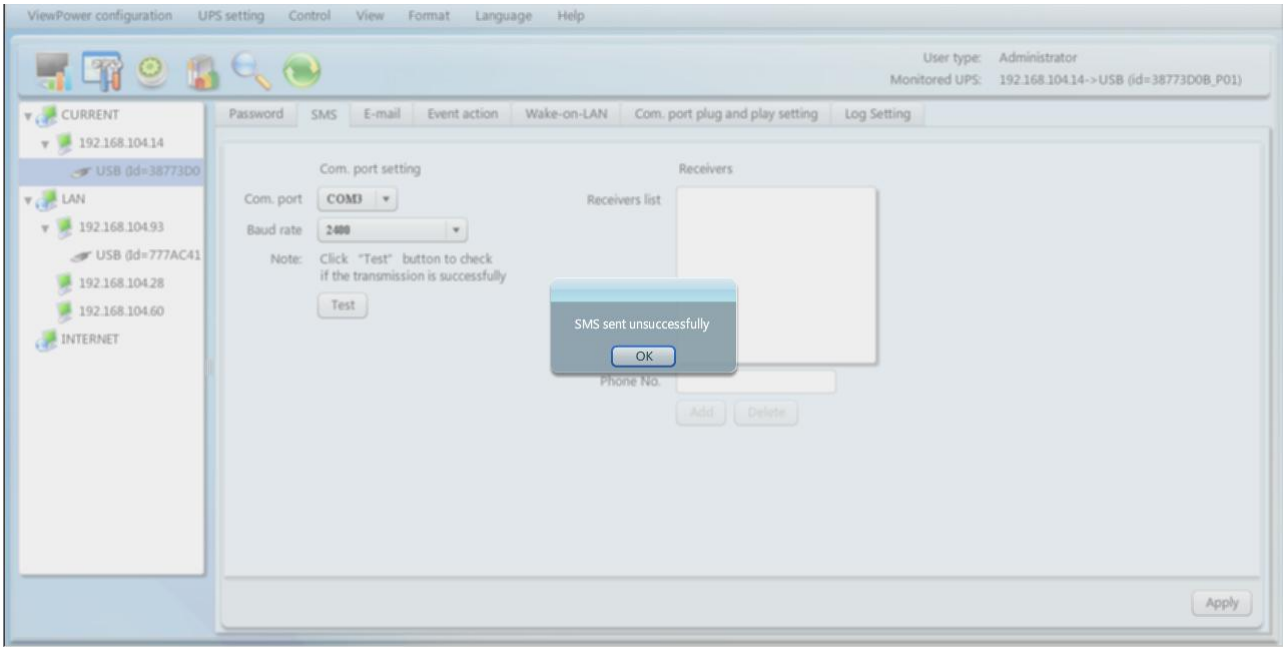


Diagram 5-4

NOTE: It's required to plug-in GSM Modem if sending SMS to mobile phone.

5.1.3. E-mail Configuration

This feature enables the configuration to send alarm mail by SMTP server. For the event receiving list, please configure in "Event Action" column (refer to section 5.1.4).

To use this function, the e-mail service must be correctly configured in the computer. All values in this function page are default empty. This action can't be executed without the SMTP information, e-mail account and password. Besides, the sender account should be

allowed for SMTP/POP3 forwarding.

Step 1 Select ViewPower Configuration >> E-mail. Refer to Diagram 5-5.

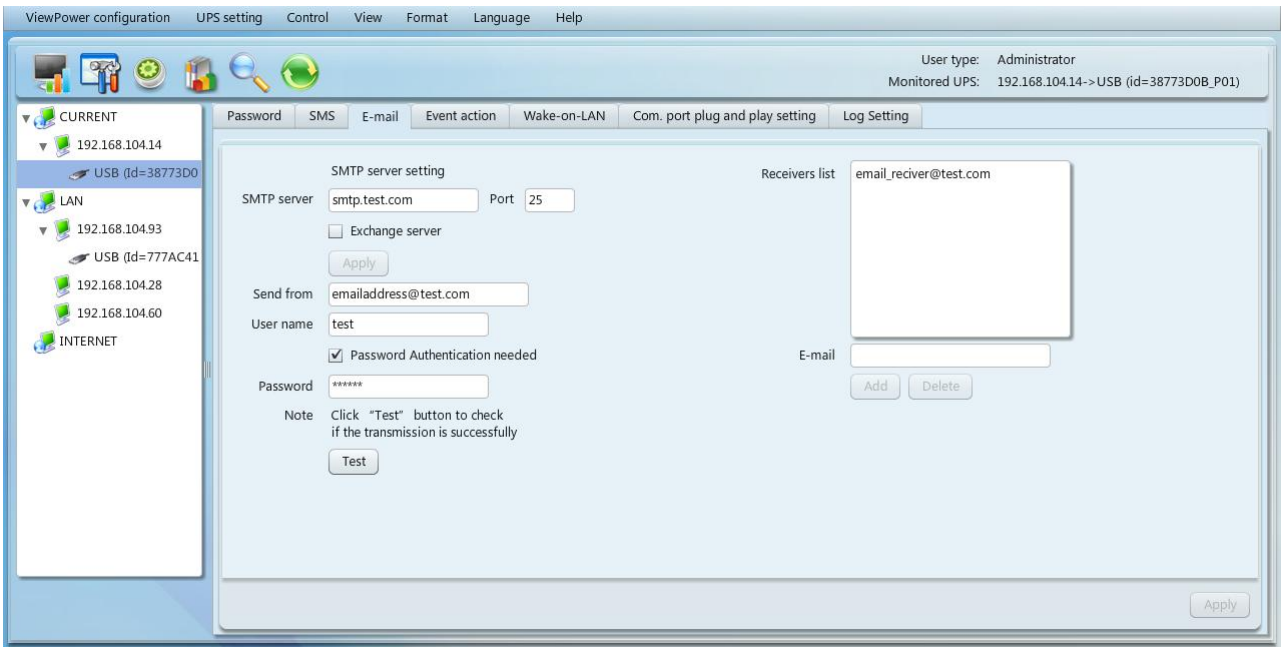


Diagram 5-5

Step 2 Enter SMTP server, SMTP port, Send from E-mail address, User name and password. Click checkbox of password authentication needed for password verify.

NOTE: If using Exchange Server for mailbox system, it's required to configure Exchange server domain name in SMTP sever and select "Exchange server". Then, click "Apply" button.

Step 3 Enter correct e-mail accounts in E-mail column. Then, click "Add" to add into receivers list. To delete e-mail account, simply select accounts from Receivers list and click "Delete" button.

Step 4 Click "Apply" to save all changes. The "Test" button can be used to send a test e-mail to all receivers to confirm correct operation. When the test e-mails are successfully sent to specific recipients, it will pop up a successful message on operated PC. Otherwise, it will pop up a failure dialog to indicate there is an error for parameter setting.

5.1.4. Event Action Configuration

It's to configure response actions for UPS events. Software provides six response actions after events occur.

1. Event record: It will record event to data log in software after events occur. This function is default selected.

2. Computer alarm: Computer will beep to remind users after events occur. This function is only available for Windows OS.

3. Warning dialog (local): It will pop up a message dialog around the software orange plug icon in taskbar after events occur. This function is default selected.

4. Broadcast: It will send the event message to all PCs with software installed in LAN network.

5. SMS: It will send the event message to specific mobile phone numbers after events occur.

6. E-mail: It will send the event e-mail to assigned e-mail accounts after events occur.

Step 1 Select ViewPower Configuration >> Event Action. Refer to Diagram 5-6.

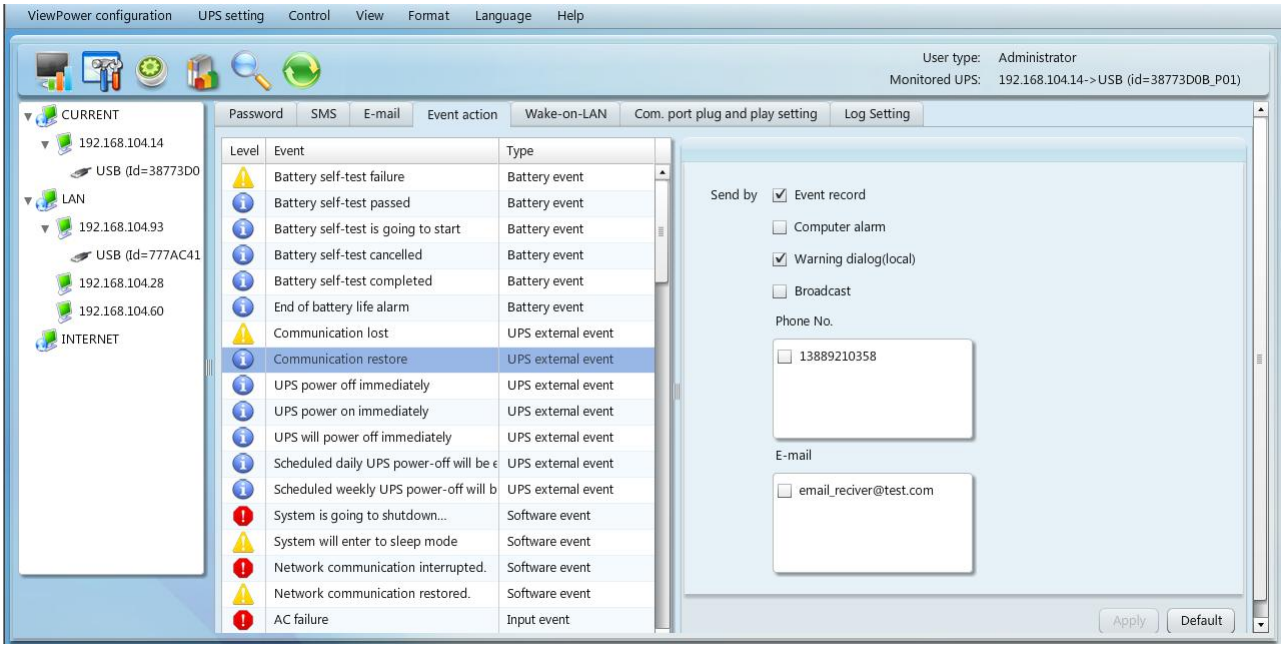


Diagram 5-6

NOTE: The displayed event list may be different for different types of UPSs.

Step 2 Select a specific event from "Event List" and then action method page will be

active on the right-hand column.

Step 3 Select desired action methods by clicking checkbox.

Step 4 Click "Apply" button to save all configurations.

NOTE1: When editing receiver list in SMS or e-mail columns, it's necessary to refresh the event action page to reload the updated receiver list.

NOTE2: It is requested to have following requirements for successful broadcast.

1. All receiving PCs must have installed software.
2. It's only able to send the message to the PCs in LAN found in UPS Navigation.

5.1.5. Wake-on-LAN

It will manage the list for wake on LAN and test the function.

After adding MAC address of remote PCs into MAC list, it will allow remote control the PCs. However, it's also required to have hardware support for remote PCs to implement this function.

Step 1 Select ViewPower Configuration >> Wake-on-LAN. Refer to Diagram 5-7.

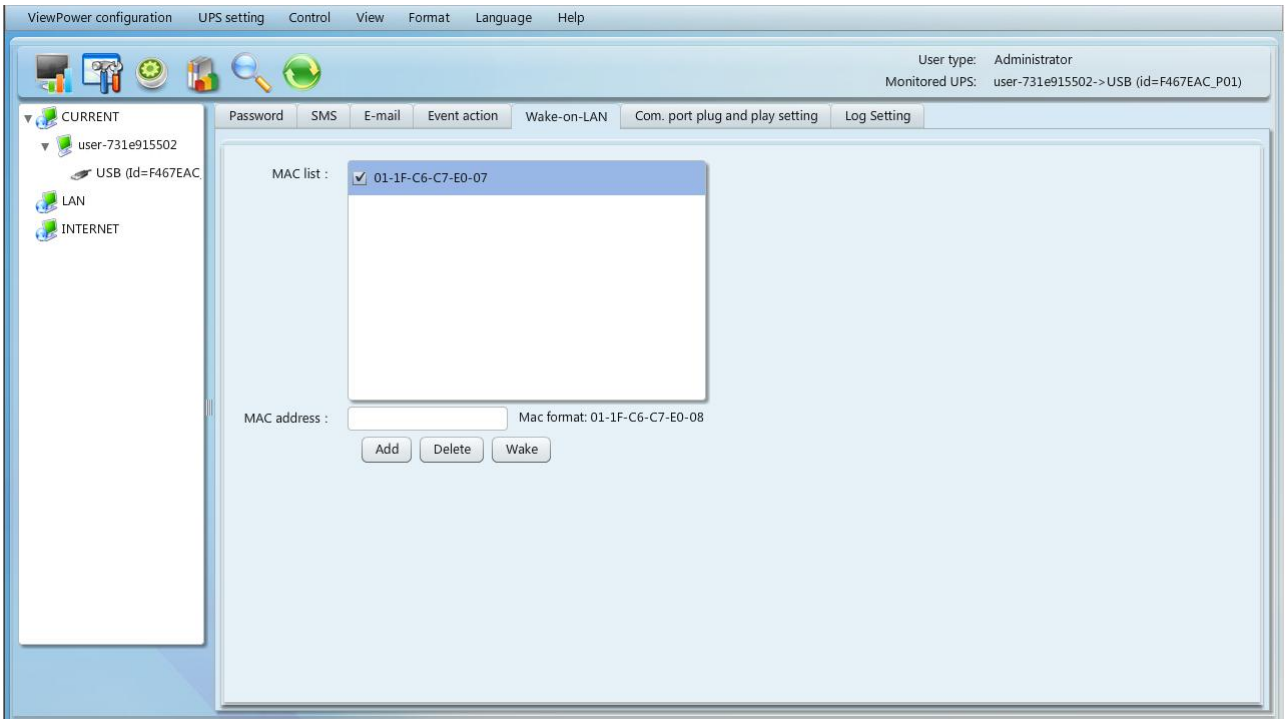


Diagram 5-7

Step 2 Add: Enter MAC address and click "Add" button to add in MAC List.

Delete: Select one from list and click "Delete" button.

Test: Select one from list and click "Test" button. Then, it will execute Wake-on-LAN test.

NOTE: The example of MAC address format: 01-1F-C6-C7-E0-08.

5.1.6. Com. Port Plug And Play Setting

To real-time monitor UPS device, the software will scan each com. port anytime. In this way, it will occupy com. port. This function will release some com. ports which not connect to UPS devices. To avoid any improper operation, in-used com. ports will display in disabled grey icons. Users can select "Enable" or "Disable" to control whether to scan com. port or not. If it's allowed to scan, it will be listed in screen. Then, users can select "Allow scanned" or "forbid scanned" to re-scan or release com. ports based on their requirements.

Step 1: Select ViewPower configuration>>Com. port plug and play setting. Refer to Diagram 5-8.

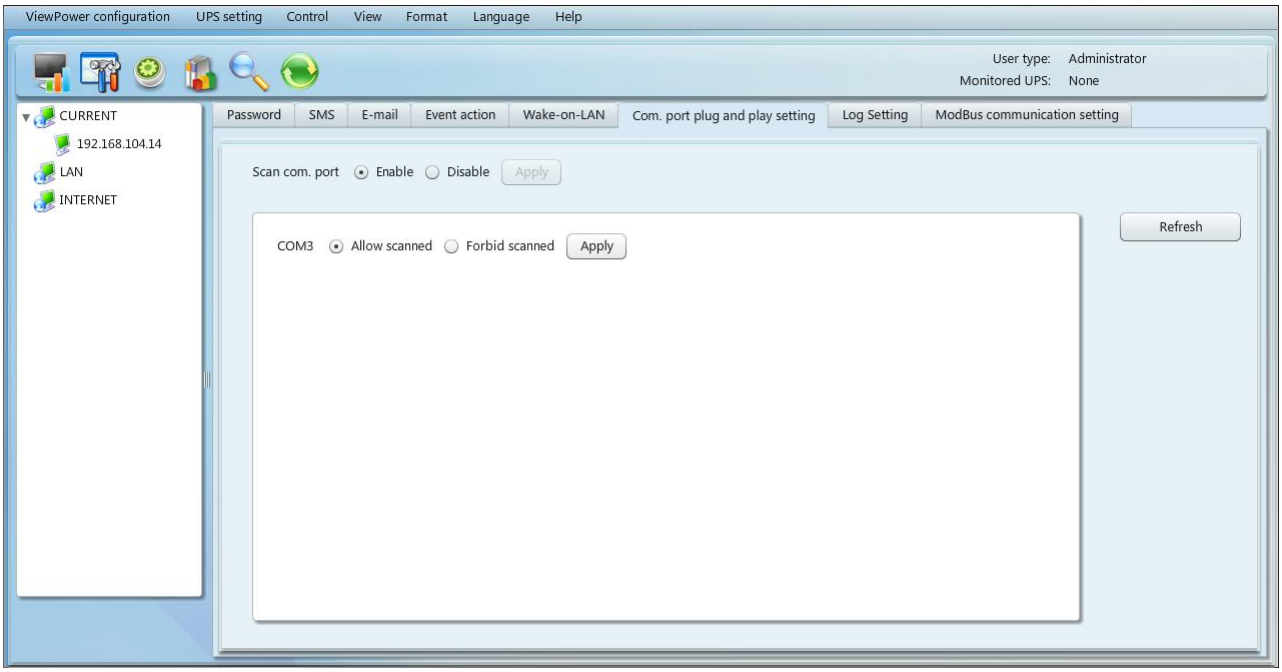


Diagram 5-8

Step 2: Click "Refresh" to reload the status of com. ports.

Step 3: Click "Forbid scanned" to stop scanning on this com. port. Click "Allow scanned" to start scanning on this com. port.

5.1.7. Log Setting

Users can set up Record Interval, The max. number of logs for historical data and The max. number of logs for historical events according to real situation.

Record interval: indicated how long to record data. The setting range for "Record internal" is 30~600 seconds. It will effect history data displayed under View –> History.

The max. number of logs for historical data: indicated how many data logs will be saved in history. The setting range is 100000~100000000. It will effect displayed data under View –> History.

The max. number of logs for history events: indicated how many event logs will be saved in history. The setting rang is 100000~100000000. It will effect displayed data under View -> Event log.

Step 1 Select ViewPower configuration>>Log setting. Refer to Diagram 5-9.

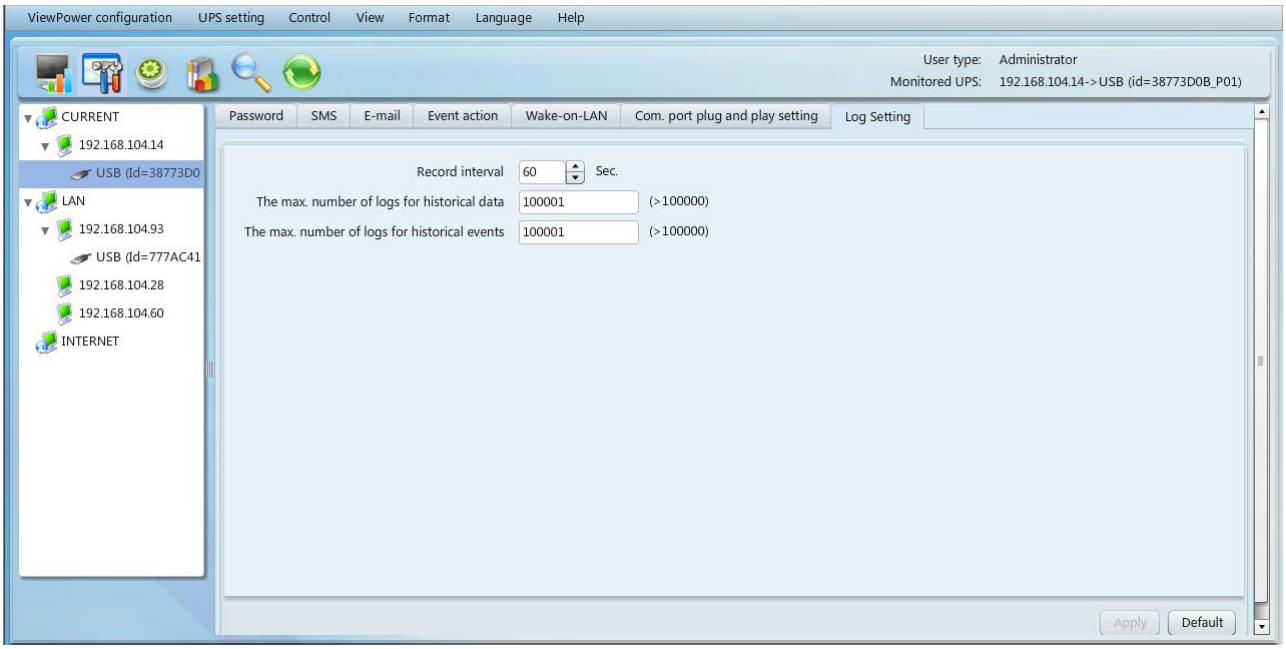


Diagram 5-9

Step 2 Enter value in the column.

Step 3 Click "Apply" button to save all settings.

Step 4 Click "Default" button to recover the default setting.

5.1.8. ModBus Communication Setting

It will display all connected PCs through ModBus.

Step 1 Select ViewPower configuration>> ModBus Communication Setting

Refer to Diagram 5-10.

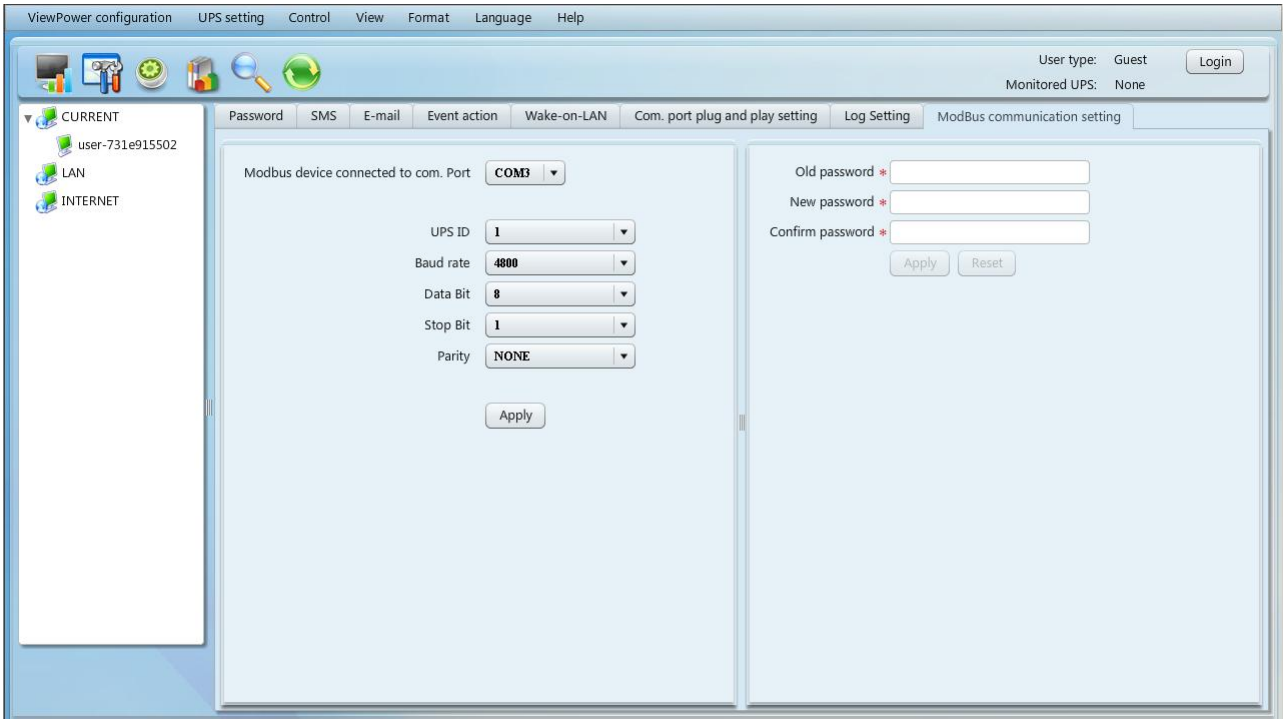


Diagram 5-10

Step 2 Password setting/change menu for ModBus.

NOTE: Some UPS models are requested to have password control in unit. Therefore, real-time control will be only available when the ModBus password is the same to the UPS password.

Step 3 Com. port setting:

The default ID for nominated com. port is 1.

Selectable baud rates are 1200, 2400, 4800, 9600 and 19200. The default setting is 4800.

Selectable data bit is 7 and 8. The default setting is 8.

Selectable stop bit is 1 and 2. The default setting is 1.

Supported parity is ODD parity, even parity and NONE. The default setting is NONE.

NOTE: This function is only available for the UPS with ModBus communication port.

5.2. UPS Setting

5.2.1. Local Shutdown

It's shutdown setting for local PC which is directly connected to monitored UPS with

communication port. This configuration enables system shutdown of local PC or to remote shut down PCs which are powered by monitored UPS.

Step 1 Select UPS Setting >> Local Shutdown or click shortcut icon. Refer to Diagram 5-11.

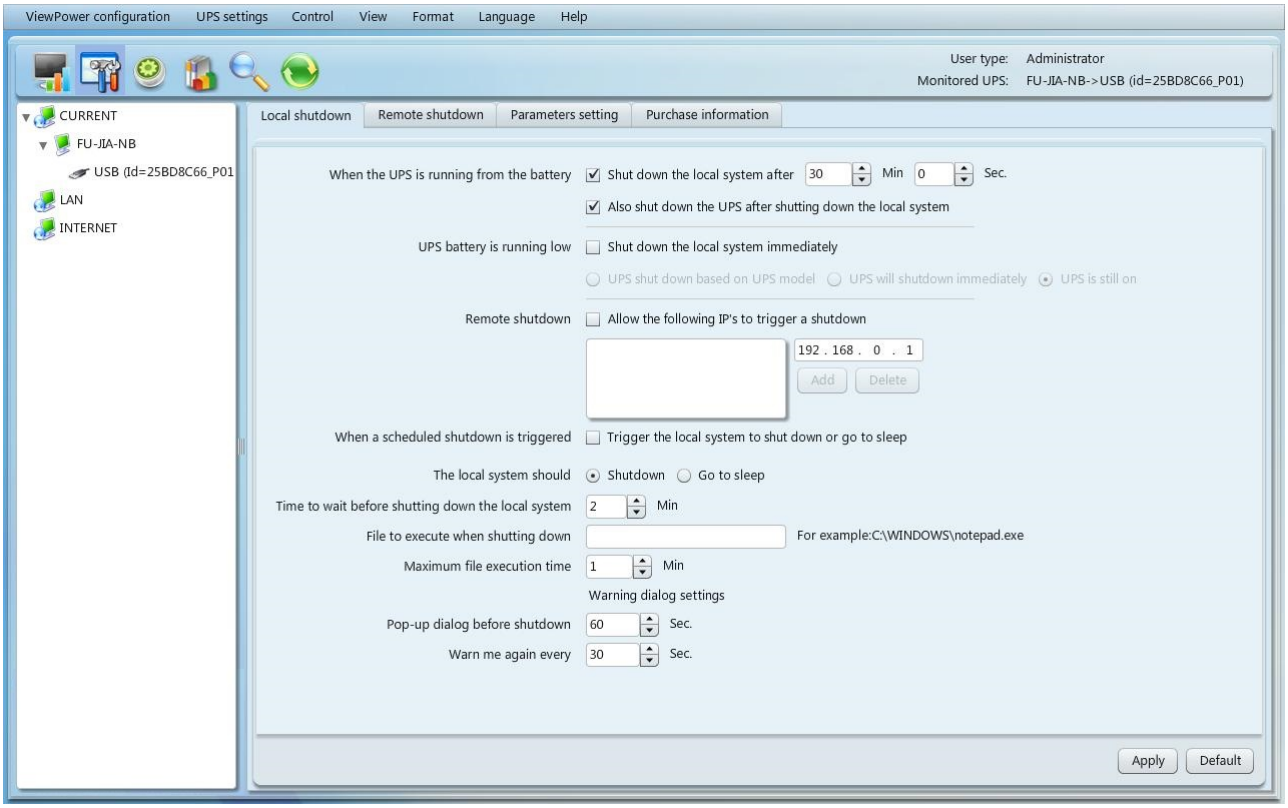


Diagram 5-11

NOTE: This screen may be different for different types of UPSs.

Step 2 Select shutdown conditions and power-off options, set delay time to shutdown system.

Step 3 Enter time for pop-up dialog before shutdown and warning interval in Warning Dialog Setting area.

Step 4 Click "Apply" button to save all data.

NOTE: Click "Default" button to recover the default setting.

Conditions:

- When the UPS is running from battery, shut down local system after xx min xx sec: When clicking the checkbox, local PC will start to shut down after monitored

UPS works on battery mode for xx min xx sec time. The maximum setting number for minutes is 999 and for seconds is 59.

- Also shut down UPS after shutting down the local system: When clicking this checkbox, monitored UPS will shut down after local system shuts down. The UPS shutdown time will be later than system complete shutdown time. The default setting is clicked. But users can choose to shut down the system without shutting down the monitored UPS by unclicking this checkbox.
- When UPS battery is running low, shut down the local system immediately: When clicking this checkbox, local PC will shut down when monitored UPS battery is running low.
    1. UPS shut down based on UPS model: Only ≥3KVA standard UPS model will automatically shut down. However, long-run models and UPSs with above 5KVA will remain on.
    2. UPS will shutdown immediately: UPS will shut down immediately no matter what kind of UPSs.
    3. UPS is still on: UPS will remain on until battery is running out.
- Remote shutdown: When clicking the checkbox, local PC accepts shutdown command from designated remote PCs. Please enter IP address of remote PCs in blank column and click "Add" button to add into list.
- When a scheduled shutdown is triggered, local system will shut down or go to sleep: When clicking this checkbox, the local system will shut down or go to sleep before monitored UPS is scheduled to power off. The default setting is clicked. Please also refer to section 5.3.2. Schedule On/Off for UPS scheduled shutdown setting.
    - ✓ Shutdown: When clicking the checkbox, the selected system will shut down. The default setting is clicked.
    - ✓ Go to sleep: When clicking the checkbox, selected system will suspend the system instead of a normal shutdown. But this function is only supported by Windows 2000 or higher on supported hardware.

Time to wait before shutting down the local system: Enter the waiting time to

shut down the operating system. The value range is from 1 to 99 minutes.

File to execute when shutting down: Enter the path of execute file.

Maximum file execute time: Enter the waiting time to execute file.

Warning Dialog Setting:

- Pop-up dialog before shutdown: Timer setting for pop-up warning dialog displayed in local PC. Local PC will pop up a warning dialog before system starts to shut down. The range is from 1 to 999 seconds.
- Warn me again every x sec.: Reminding dialog interval setting. This setting is also applied for UPS shutdown because of power failure. The range is from 1 to 999 seconds.

5.2.2. Remote Shutdown

This configuration is to remote shut down specific PCs which are powered by monitored UPS.

Step 1 Select UPS Setting >> Remote Shutdown. Refer to Diagram 5-12.

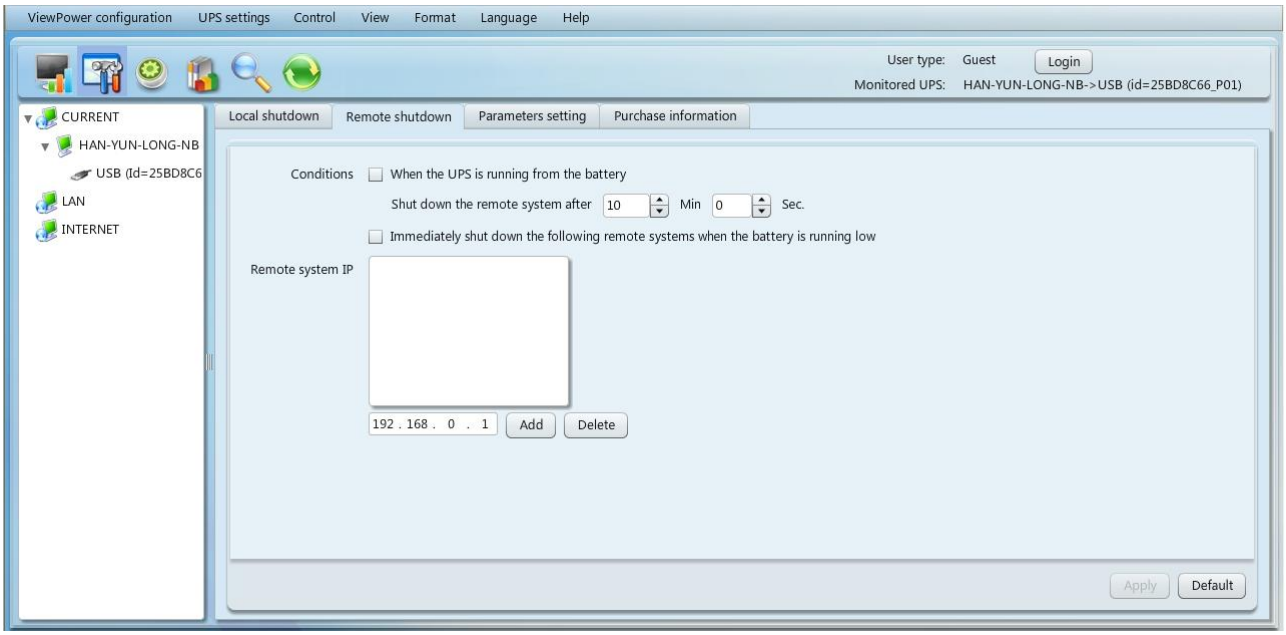


Diagram 5-12

Step 2 Select remote shutdown conditions.

Step 3 Add/Delete remote system IP address.

Step 4 Click "Apply" button to save all data.

NOTE: Click "Default" button to recover the default setting.

Conditions:

- When the UPS is running from battery, shut down the remote systems after xx min xx sec: When clicking the checkbox, remote systems which are powered by monitored UPS will shut down after monitored UPS running on battery mode for xx min xx sec. The maximum setting number for minutes is 999, and for seconds is 59.
- Immediately shut down the following remote systems when the battery is running low: When clicking the checkbox, remote systems which are powered by monitored UPS will shut down when monitored UPS is at low battery level.

5.2.3. Parameter Setting

Some UPS functions can be set and changed via software. Parameter setting includes backup time setting for P1, battery number setting, voltage and frequency range setting for bypass mode, and voltage range setting for ECO mode.

Step 1 Select UPS Setting >> Parameter Setting. Refer to Diagram 5-13.

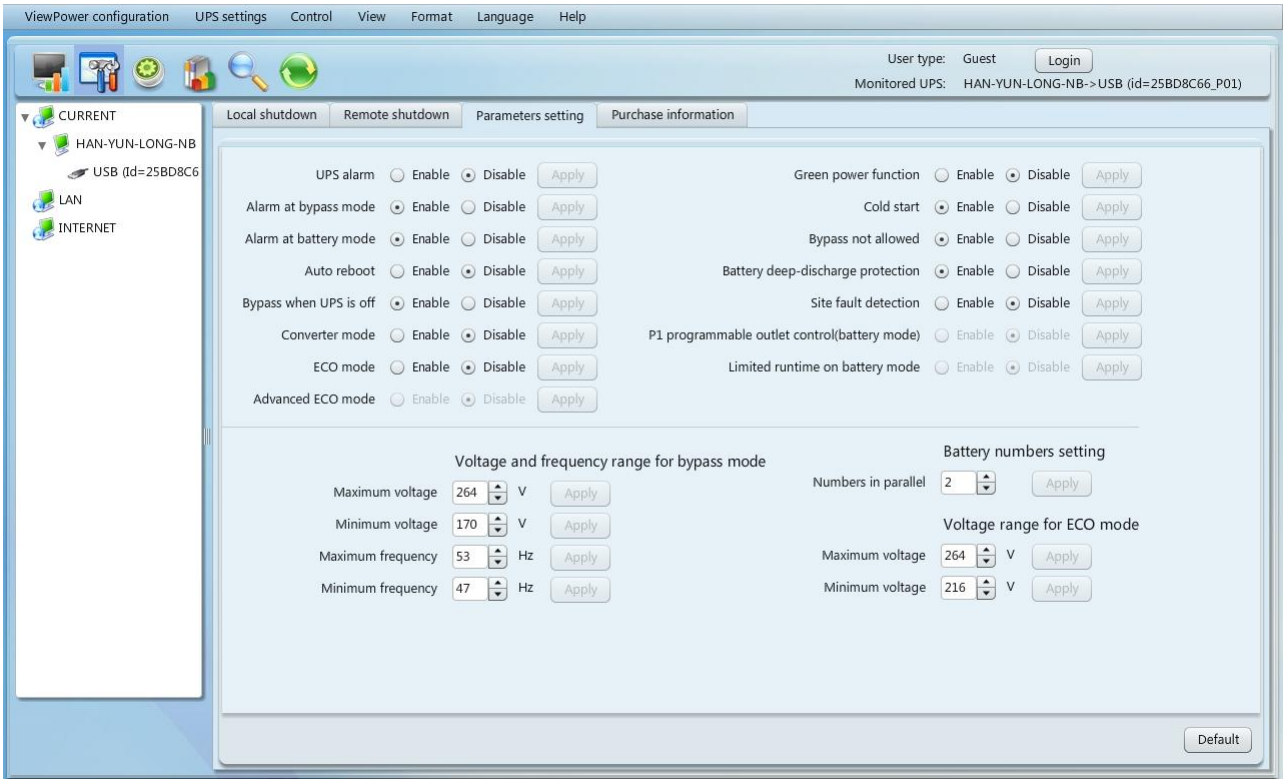


Diagram 5-13

NOTE: This screen may be different for different types of UPSs.

Step 2 Select the functions by clicking "Enable" or "Disable" button. Or change the numbers by clicking up-down arrows or modify the numbers directly in the number column.

Step 3 Click "Apply" button to save the settings. Each function setting is saved by clicking each "Apply" button.

NOTE1: Any functions which are not supported by UPS will not be able to access.

NOTE2: Click "Default" button to recover the default setting.

- UPS alarm: If enabled, UPS alarm will be activated. Vice versa.
- Alarm at bypass mode: If enabled, UPS alarms when it's working at bypass mode. Vice versa.
- Alarm at battery mode: If disabled, UPS will not alarm when it's working at battery mode. Vice versa.
- Auto reboot: If enabled, UPS will auto restart when AC is recovering. Vice versa.
- Bypass when UPS is off: If enabled, AC power will directly provide power to connected devices when UPS is off. Vice versa.
- Converter mode: If enabled, the UPS will operate in converter mode. Vice versa.
- ECO mode: If enabled, the UPS will operate in ECO mode when input voltage is within acceptable range. Vice versa.
- Advanced ECO mode: If enabled, the UPS will operate in advanced ECO mode when input voltage is within acceptable range. Vice versa.
- Green power function: If enabled, the UPS will cut off if detecting no load connected. Vice verse.
- Cold start: If disabled, the UPS can be turned on only when AC is normally connected to UPS. Vice versa.
- Bypass not allowed: If enabled, the UPS will not transfer to bypass mode under any conditions. If disabled, the UPS will be allowed to transfer to bypass mode according to UPS internal setting.
- Battery deep-discharge protection: If enabled, the monitored UPS shutdown in accordance with the condition of battery and load on battery mode to protect battery. Vice versa.

- Site fault detection: If enabled, the monitored UPS will beep when the input neutral and hot wires are reversed. Vice versa.
- P1 Programmable outlet control (battery mode): If enabled, when UPS is running at battery mode, it will cut off P1 outlets after backup setting time arrive. If disabled, UPS will provide continuous power to P1 outlets until the battery is running out.
- Limited runtime on battery mode: If enabled, users can set limited backup time for P1 outlets when UPS is on battery mode.
- Battery numbers setting:
  - Numbers in parallel: set battery numbers in parallel.
- Voltage and frequency range for bypass mode: Set acceptable voltage and frequency range in bypass mode.
  - Maximum and minimum voltage: When UPS is on bypass mode and input voltage is out of setting range, UPS will enter battery mode.
  - Maximum and minimum frequency: When UPS is on bypass mode and input frequency is out of setting range, UPS will enter battery mode.
- Voltage range for ECO mode: Set acceptable voltage range for ECO mode.

5.2.4. Purchasing Information

Users can enter UPS purchasing date, battery purchasing date, UPS warranty time, battery warranty time, battery lifecycle, battery replacement reminder.

Step 1 Select UPS Setting >> Purchasing Information. Refer to Diagram 5-14.

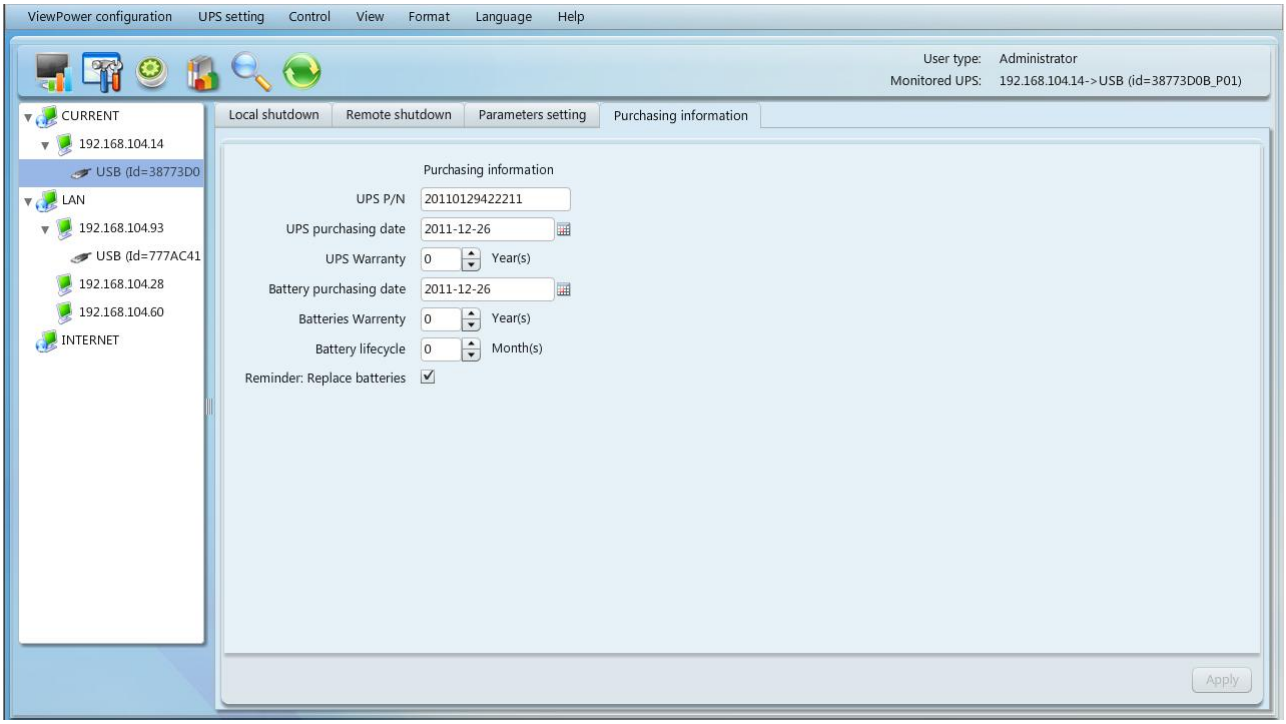


Diagram 5-14

Step 2 Please fill out purchasing information.

Step 3 Click "Apply" button to save all data.

5.3. Control

5.3.1. Real-time Control

Step 1 Select Control >> Real-time Control or click shortcut icon  . Refer to Diagram 5-15.

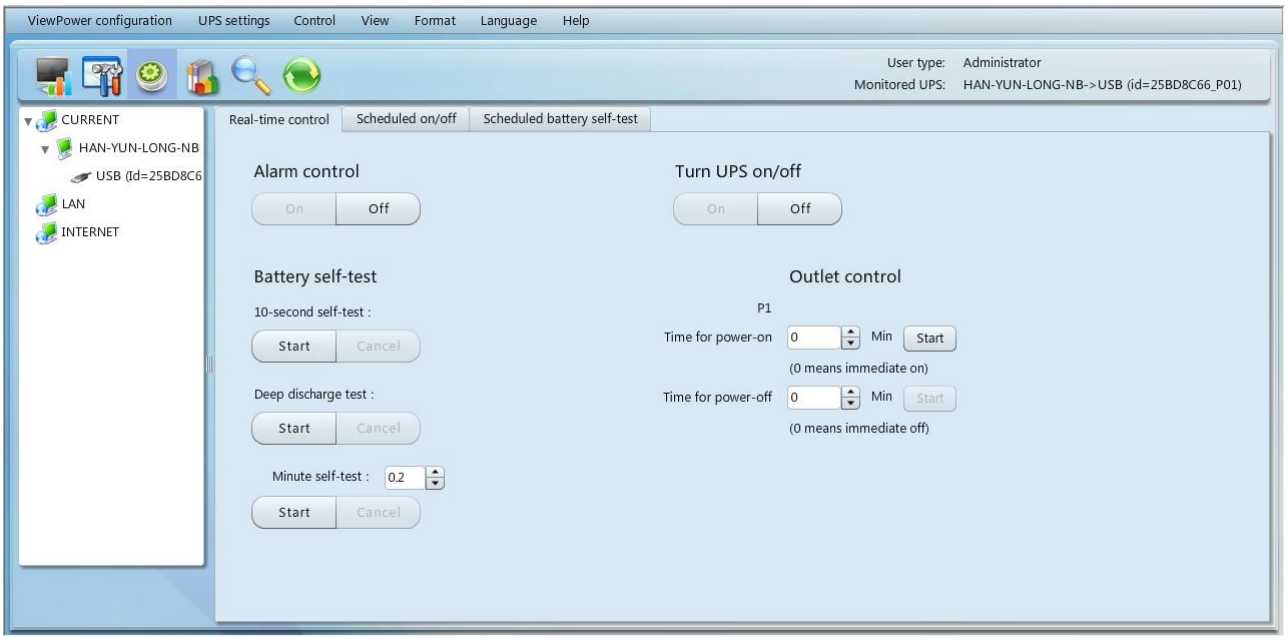


Diagram 5-15

NOTE: This screen may be different for different types of UPSs.

Step 2 Choose real-time control function by clicking "Start" button on each function section.

You can real-time control the UPS by executing following operation:

- Alarm control: Click "On" to turn on the UPS alarm and "Off" to turn off the UPS alarm immediately.
- Turn UPS On/Off: Click "On" to turn on the UPS and "Off" to turn off the UPS immediately.
- Battery Self-Test: Software offers three types of battery self-test: 10-second self-test, deep discharge test, and self-defined test. If self-defined test is selected, please also enter the test duration. Simply clicking "Start" button from each type. It will execute the self-test immediately.
- Outlet Control: It will cut off P1 outlets when setting time arrives. When entering 0 in timer column and click "Start" button, it will cut off outlets immediately when UPS works in battery mode.

5.3.2. Scheduled On/Off

Scheduled UPS on/off can be executed once, daily, weekly. In "Scheduled On/Off Setting", users can set up UPS on/off timer.. It is recommended to set only one action in

the same time. If multiple actions have been set at the same time, some of these actions may be ignored. Any actions which are not supported by the UPS will be ignored.

NOTE: Be sure to click checkbox of "shutdown trigger" in section 5.2.1 Local shutdown. Otherwise, this schedule on/off can't be executed well.

Step 1 Select "Control" >> Scheduled On/Off. Refer to Diagram 5-16.

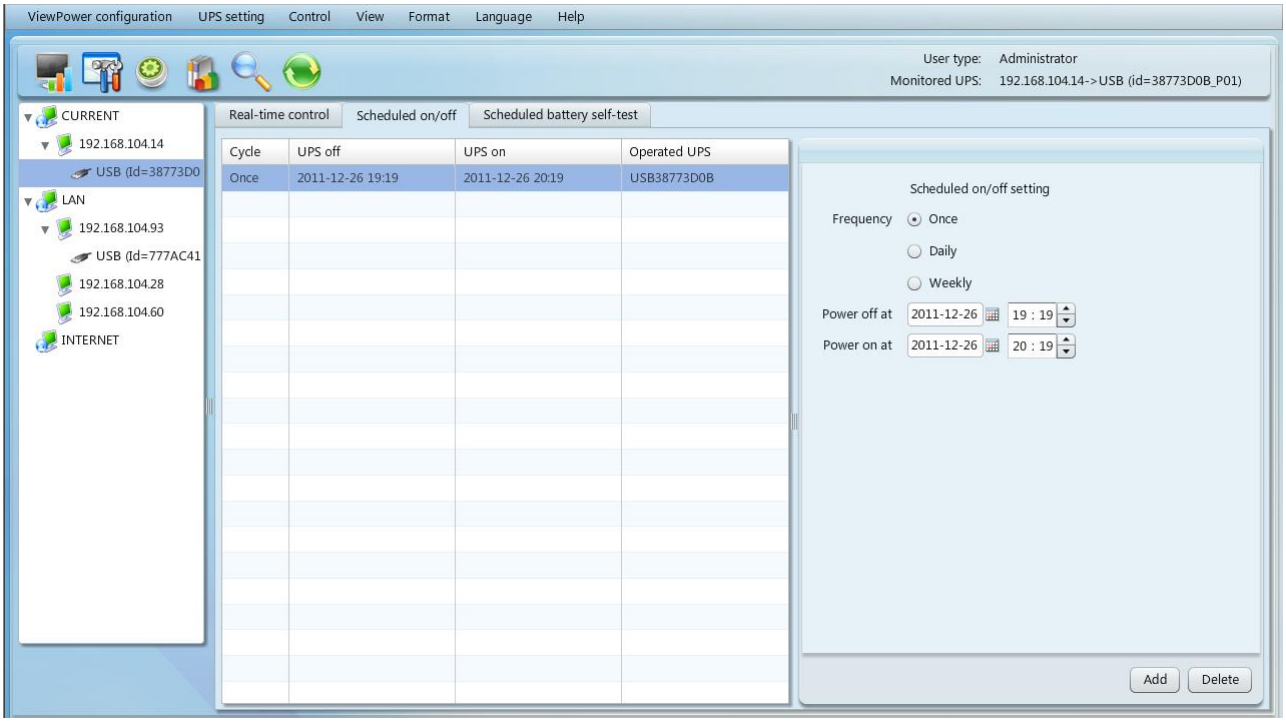


Diagram 5-16

Step 2 Set frequency and on/off timer on the right column.

NOTE: Rules for setting time.

Daily schedule – Power-off time should be earlier than power-on time. It is only applied to set power-on and power-off time within the same day.

Weekly schedule –Power-off time should be earlier than power-on time. It is only applied to set power-on and power-off time within the same week.

Step 3: Click "Add" to add task. If task is successfully set, it will display on the task table on the left-hand side. Select specific task and click "Delete" button to delete the task.

5.3.3. Scheduled Battery Self-Test

Scheduled battery self-test can be executed once, daily, weekly, or monthly. In the

window of “Scheduled Battery Self-Test Setting”, users can choose time parameters. It is recommended to set only one action in the same time. If multiple actions have been set at the same time, some of these actions may be ignored. Any actions which are not supported by the UPS will be ignored.

Step 1 Select Control >> Battery Self-Test. Refer to Diagram 5-17.

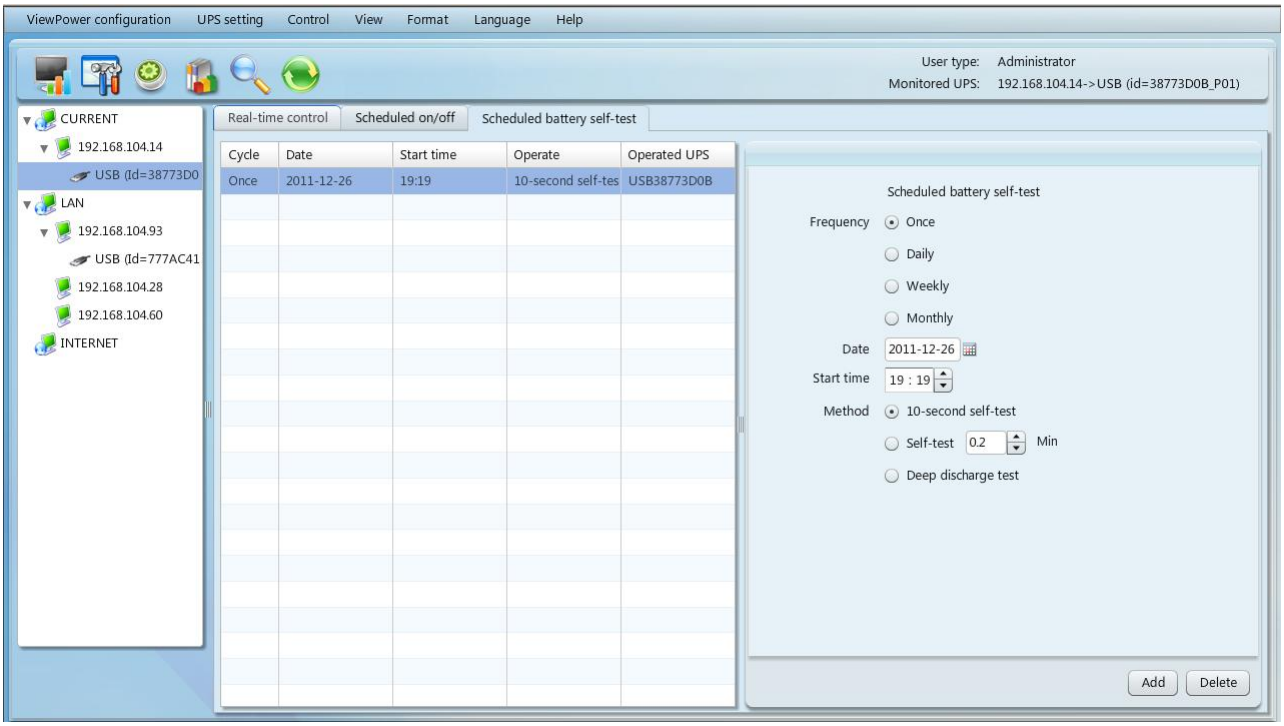


Diagram 5-17

Step 2 Select frequency, method and time parameters.

There are three self-test methods:

- 10-second self-test: Battery will discharge for 10 seconds.
- Self-test: Users can set battery discharge time for self-test.
- Deep test: This test will let battery discharge until it’s in low battery level.

Step 3 Click “Add” to add task. If task is successfully set, it will display on the task table on the left-hand side. Select specific task and click “Delete” button to delete the task.

5.4. View

5.4.1. Status

(i) Power Flow

In the Power Flow window, it's shown the internal dynamic working scheme of the UPS. Green/black flow means OK and working. Grey bar means that the object is present but not in use at the moment. There are four information blocks to display details for input, output, UPS and battery information.

- Input information includes input voltage and input frequency.
- Output information includes output voltage, output frequency, load level, and output current.
- UPS information includes UPS mode, UPS temperature.
- Battery information includes battery voltage and battery capacity.

Select View >> Status >> Power Flow or click shortcut icon  . Refer to Diagram 5-18.

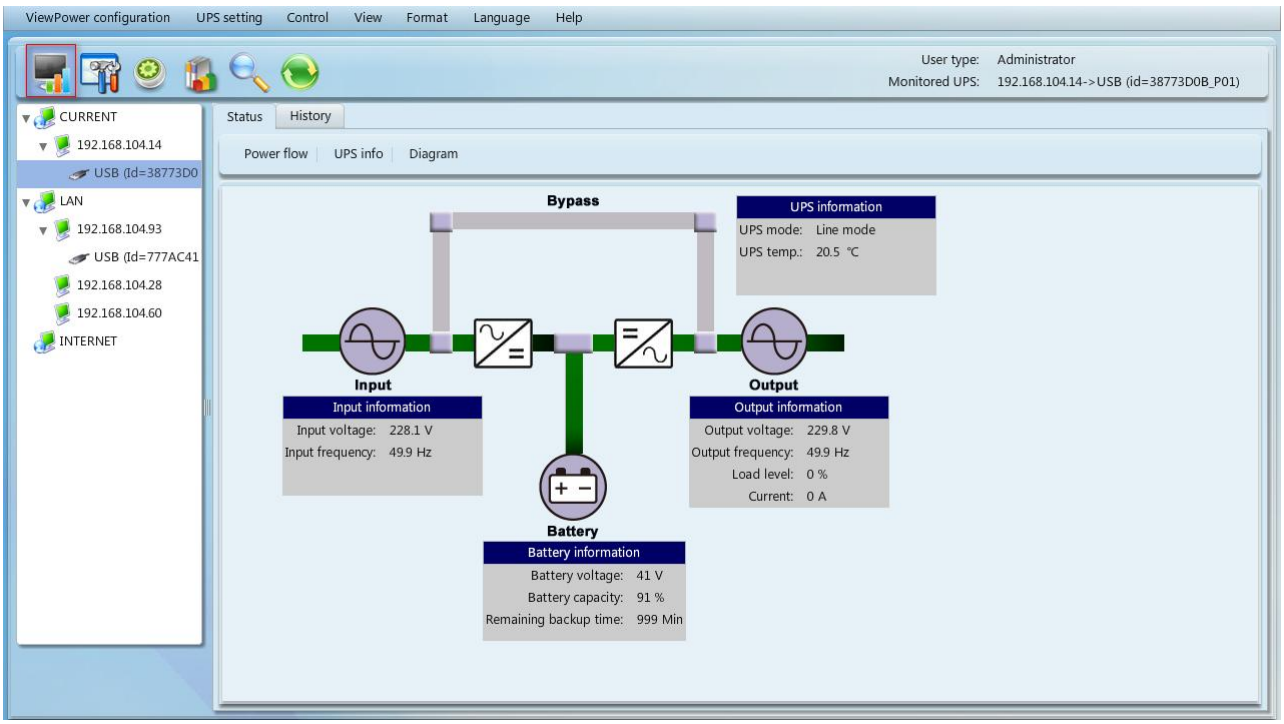


Diagram5-18

NOTE: This screen may be different for different types of UPSs.

(ii) UPS Info

Select View >> Status >> UPS Info. Refer to Diagram 5-19.

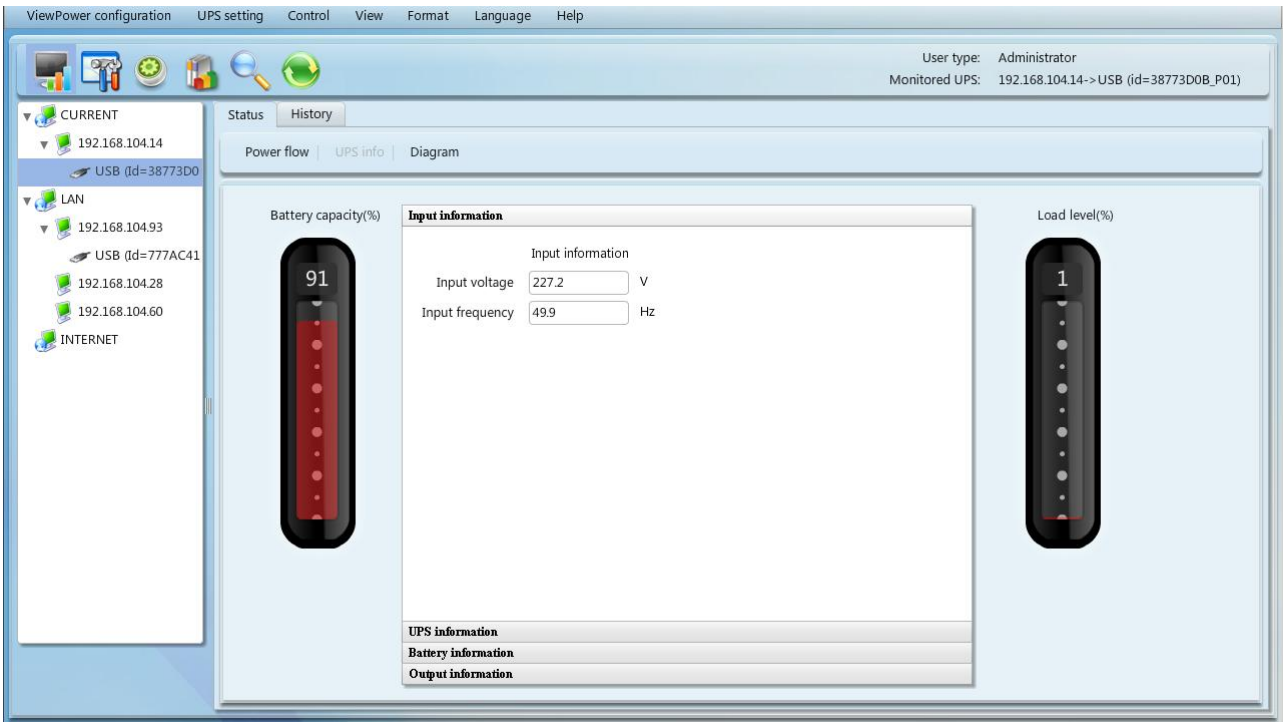


Diagram 5-19

NOTE: This screen may be different for different types of UPSs.

In the UPS Info window, it's shown detailed UPS real-time information.

(iii) Diagram

In the Diagram window, it's shown real-time monitored UPS data including voltage, frequency, load, battery, temperature information in diagram.

Step 1 Select View >> Status >> Diagram. Refer to Diagram 5-20.

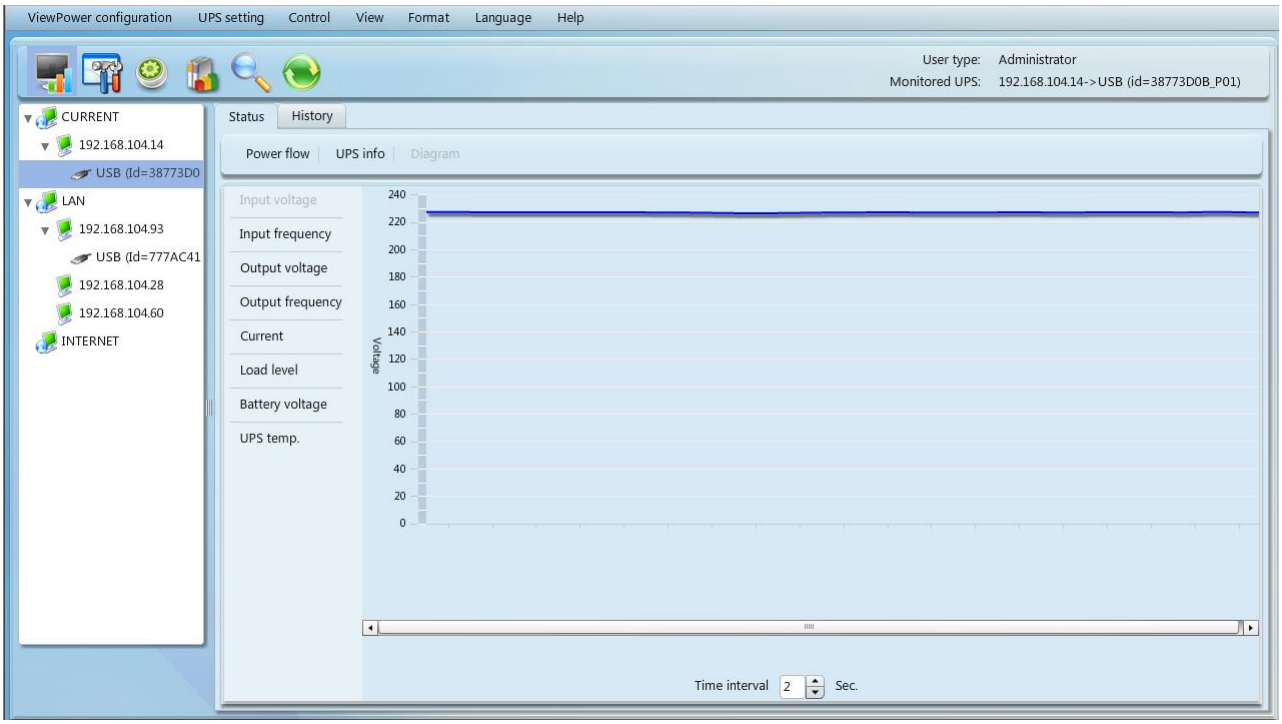


Diagram 5-20

NOTE: This screen may be different for different types of UPSs.

Step 2 Select monitoring parameters on left-hand tab to switch diagram display.

- Input voltage monitoring shows any change for input voltage.
- Output voltage monitoring shows any change for output voltage.
- Input frequency monitoring shows any change for input frequency
- Output frequency monitoring shows any change for output frequency.
- Load level monitoring shows any change for connected load level
- Battery capacity monitoring shows any change for connected battery capacity.
- UPS temp. Monitoring shows any temperature change for monitored UPS.

Step 3 Time interval setting, It displays real-time data changes in certain interval. To change time interval in X-axis of diagram, simply click up-down arrows and then click "Refresh" icon to get the updated diagram with new setting interval. Refer to Diagram 5-20

5.4.2. History

(i) Event Log

In the Event Log window, it's shown all history events. Users can analyze the history

data and improve the current electricity environment according to history data.

Step 1 Select View >> History >> Event Log. Refer to Diagram 5-21.

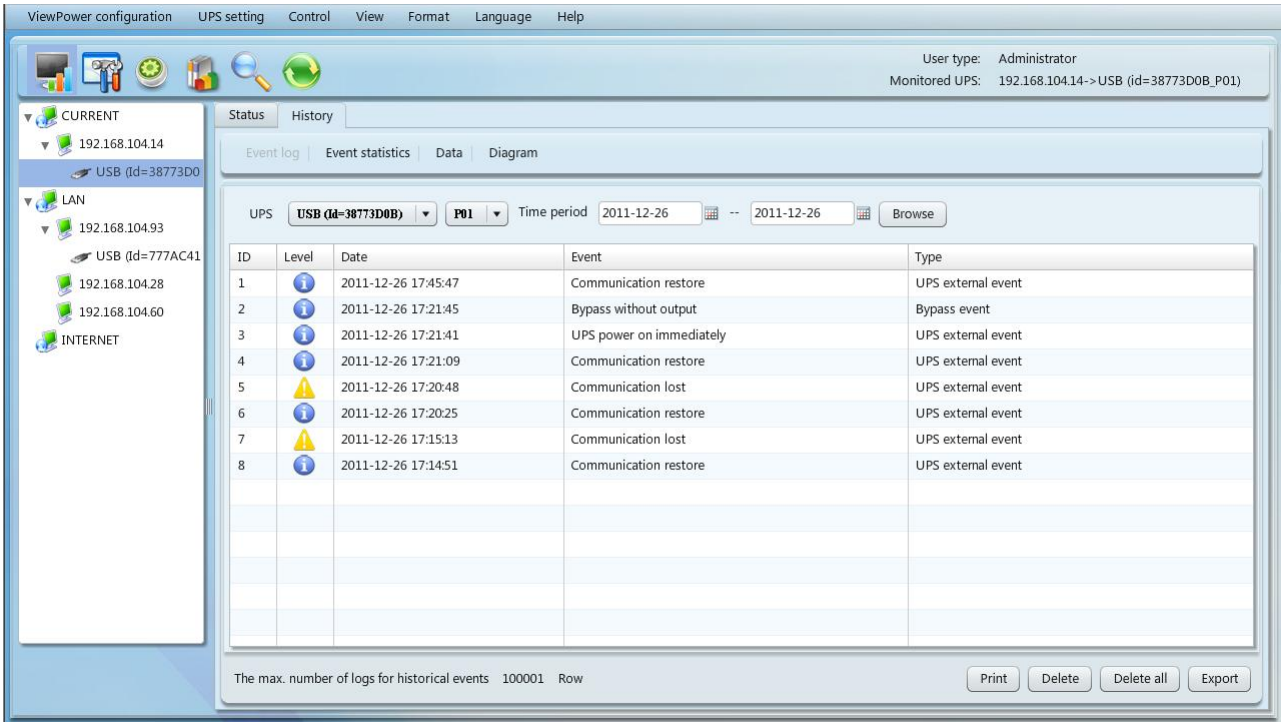


Diagram 5-21

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select time period by clicking calendar icon. Then click "Browse" button to get list of all history events during selected period time.

Step 4 Print/Delete/Export function keys

- **"Print"**: Click "Print" button to print the current event log.
- **"Delete/Delete All"**: To delete specific event, simply select that event and then click "Delete" button. Or click "Delete All" button to delete all history events on the listed table.
- **"Export":** Click "Export" button to save listed table to local PC in .CSV file.

(ii) Event Statistics

It will list down and provide all event statistics for UPSs with software installed based on time period A and time period B, and the change percentage [= 100*(B/A – 1)%].

NOTE: Event types include UPS internal event, bypass event, battery event, software event, load event, input event, parallel system event and communication event.

Step 1 Select View >> History >> Event Statistics. Or click shortcut icon  . Refer to Diagram 5-22.

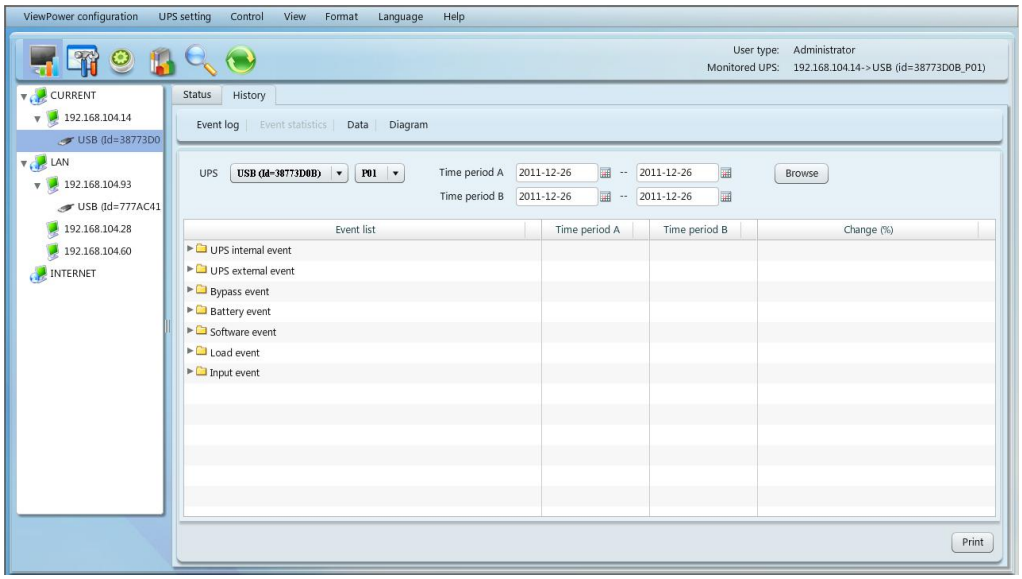


Diagram 5-22

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select two periods from clicking "calendar" icon. Then click "Browse" button. The result statistics will be listed in below table according to event types. Refer to Diagram 5-23.

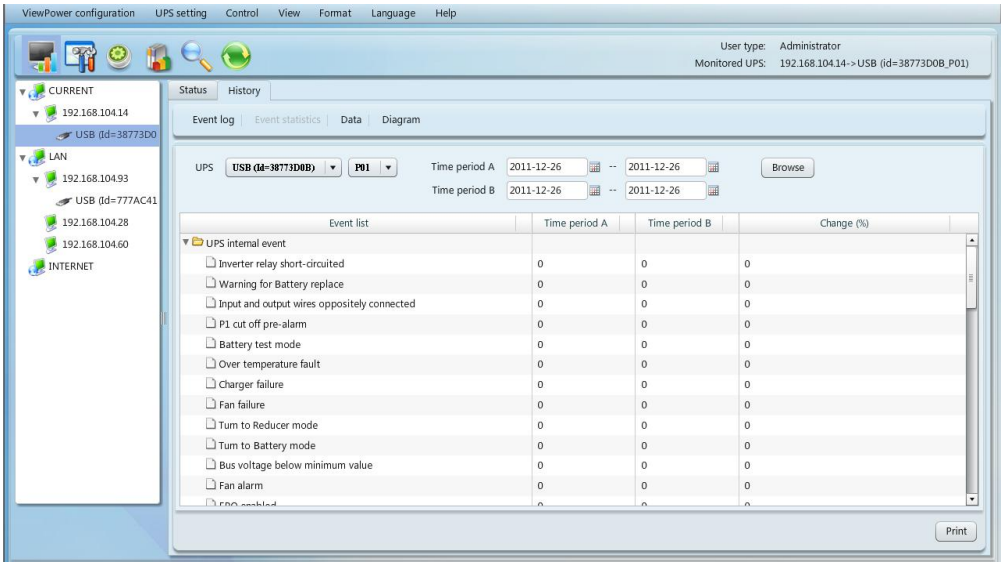


Diagram 5-23

Step 4 Click "Print" button to print event statistics.

(iii) Data

In the window of Data, it shows UPS power data in figures during selected period time. Software also offers print, save as, and delete functions.

Step 1 Select View >> History >> Data. Refer to Diagram 5-24.

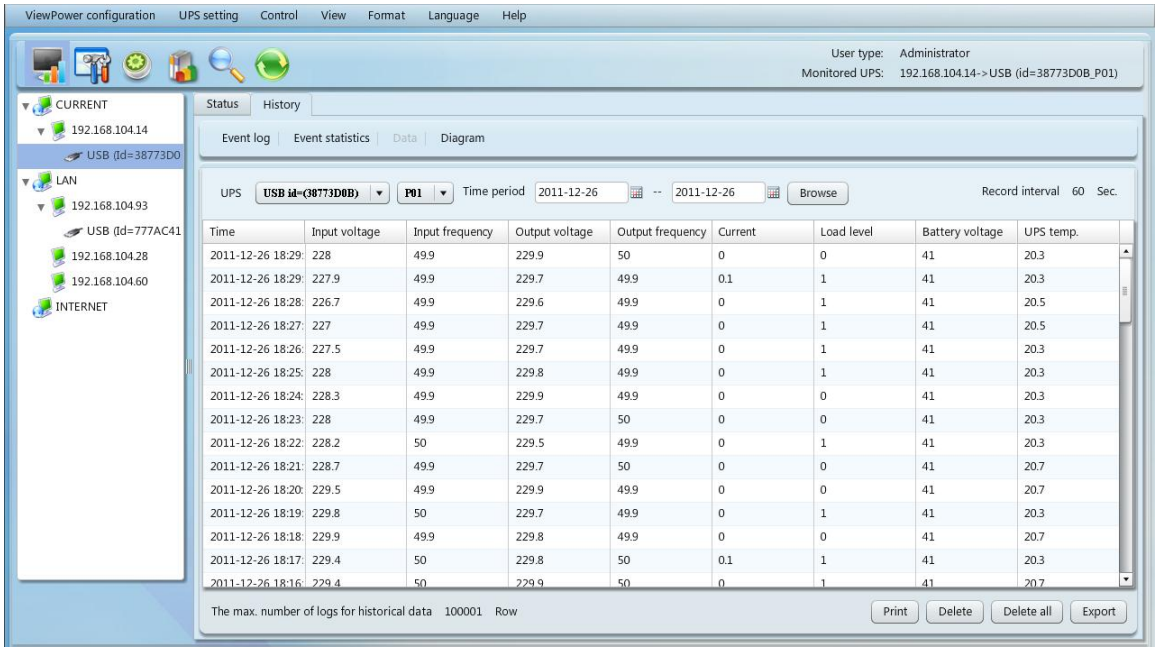


Diagram 5-24

NOTE: This screen may be different for different types of UPSs.

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select the starting time and ending time by clicking calendar icon. Then click "Browse" button to get the data table.

- **"Print":** Print the listed data table.
- **"Delete":** Select specific data and click "Delete" button to delete the record.
- **"Delete All":** Click "Delete All" button to delete all records on the listed table.
- **"Export":** Click "Export" button to save listed table to local PC in .CSV file.

(iv) Diagram

In the Diagram window, it shows UPS power data in diagram during selected period time. UPS power data includes input voltage, output voltage, input frequency, output frequency, load level, battery capacity, and UPS temperature.

Step 1 Select View >> History >> Diagram. Refer to Diagram 5-25.

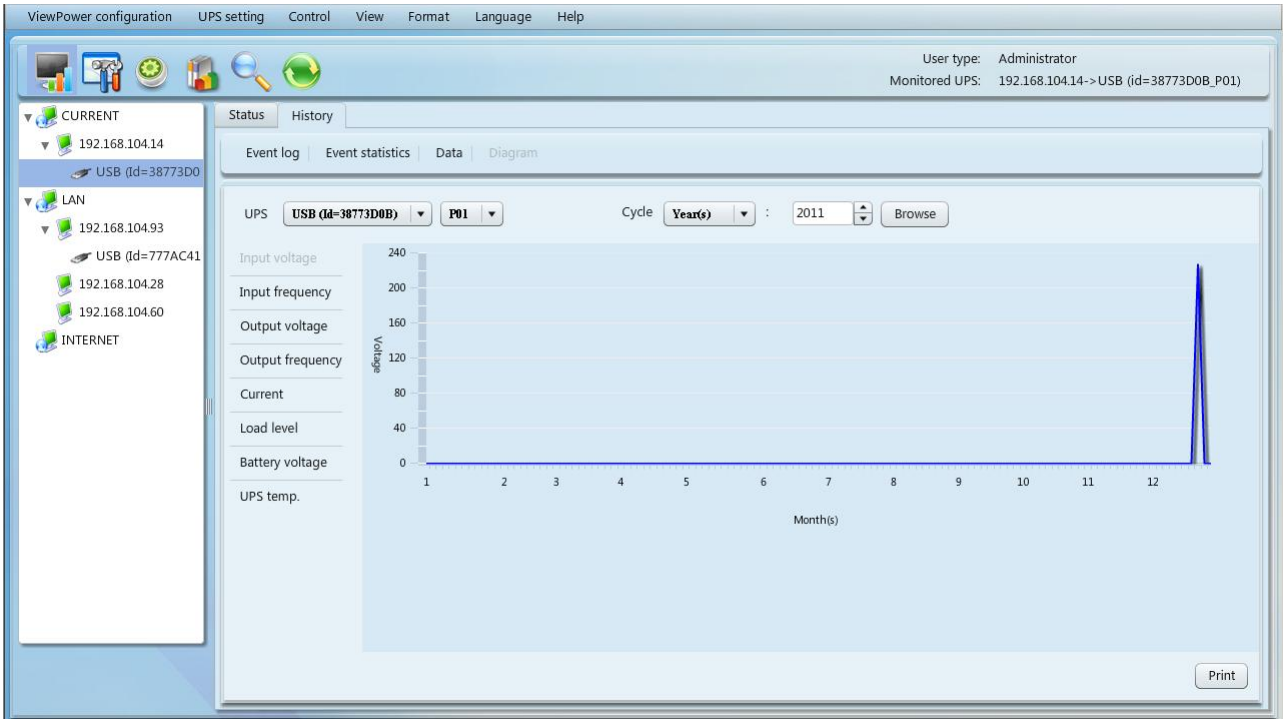


Diagram 5-25

NOTE: This screen may be different for different types of UPSs.

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select cycle and period time. Then click "Browse" button to get the diagram.

Step 4 Select monitoring parameters on left-hand tab to switch diagram.

5.5. Format

Temperature Unit: There are two temperature units for selecting: Centigrade and Fahrenheit. Default setting is centigrade.

Date Format: There are nine formats for date display:

YYYY-MM-DD,YYYY/MM/DD,YYYY:MM:DD,MM-DD-YYYY,MM/DD/YYYY,MM:DD:YYYY,

DD-MM-YYYY,DD/MM/YYYY,DD:MM:YYYY. Default setting is YYYY-MM-DD.

5.6. Language

Currently, software offers thirteen languages for selection:

- √ Chinese(Simplified)
- √ Chinese(Traditional)
- √ English
- √ German
- √ Italian
- √ Polish
- √ Portuguese
- √ Russian
- √ Spanish
- √ Ukrainian
- √ French
- √ Turkish
- √ Czech

5.7. Help

- **About**: Click "Help" menu and select "About" item. It represents the copyright information about software
- **Help**: Click "Help" menu and select "Online help" item. It will open the help manual. Before operating software, please read manual carefully.

Appendix A: Glossary

- **Local PC (system):** The local PC (system) is physically connected to UPS with communication port.
- **Remote PCs (systems):** The remote PCs (systems) are physically powered by UPS without communication port connection.