UPSentry 2012

User Manual

Doc. Version 01.02

Date: 03/02/2016

About this manual

This manual contains information on installation and operation of the UPSentry 2012 software.

Save this Manual

This manual contains instructions and warnings that should be followed during the installation, operation and storage of this product. Failure to heed these instructions and warnings will void the product warranty.

Contents

1. Overview 2

1.1 Features 2

1.2 OS Support 3

2. Installation/ Uninstallation 4

2.1 For Windows System 4

2.1.1 Installation Process 4

2.1.2 Uninstallation Process 7

2.2 For Linux System 8

2.2.1 Installation Process 8

2.2.2 Uninstallation Process 9

3. Console Configuration 10

3.1 Console Menu 10

4. Operation in Windows 12

4.1 Web Monitor 12

4.2 Property 13

4.2.1 Language: 13

4.2.2 HTTP: 13

4.2.3 HTTPS: 14

4.2.4 Login Account: 14

4.3 Show Countdown 15

4.4 Cancel Countdown 15

4.5 Pause Notify Message 15

4.6 Stop Service 16

5. Web Interface 17

5.1 Run a Web Browser 17

5.2 Monitor >> Information >> Summary 18

5.3 Monitor >> Information >> Battery 19

5.4 Monitor >> Information >> In/Out/Bypass 19

5.5 Monitor >> Information >>Identification 20

5.6 Monitor >> Information >>Status Indication 20

5.7 Monitor >> Information >>Power Module 21

5.8 Monitor >> Information >>ShutdownAgent 21

5.9 Monitor >> History >>Event Log 22

5.10 Monitor >> History >>Data Log 23

5.10.1 Observe by Day 23

5.10.2 Observe by Month 24

5.10.3 Observe by Year 24

5.10.4 Observe by User Defined 25

5.11 Monitor >> History >>Configure 26

5.12 Device >> UPS >>Configure 27

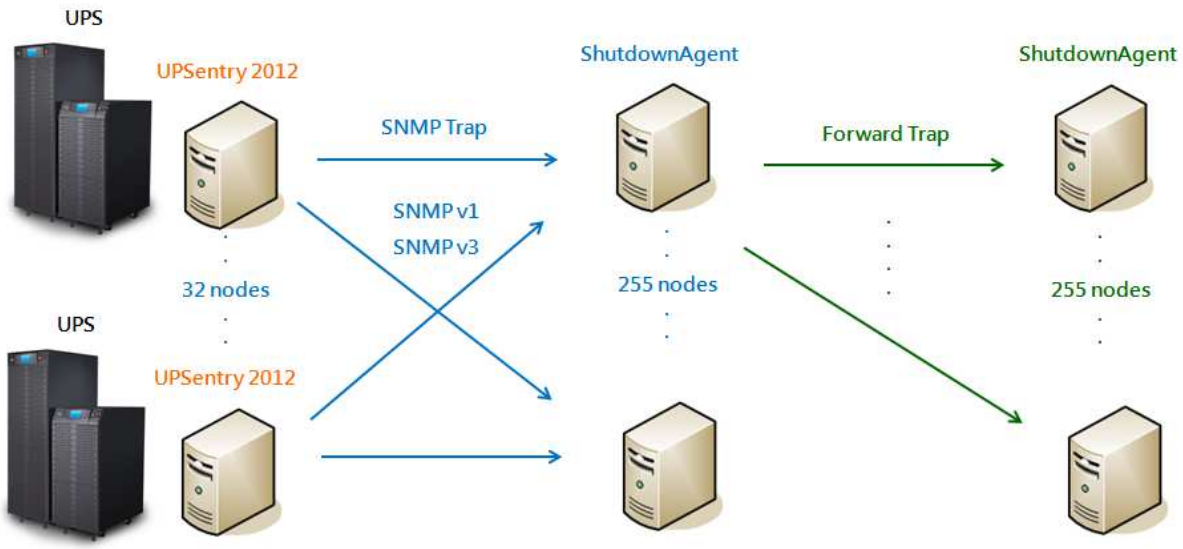
5.13 Device >> UPS >>Control 29

5.14 Device >> UPS >>Event Level 30
5.15 Device >> Management >> Communication 30
5.16 Device >> Management >> Configure 31
5.17 Device >> Management >> Control 32
5.18 Device >> Management >> Weekly Schedule 34
5.19 Device >> Management >> Specific Schedule 34
5.20 Device >> Notification >> SNMPv1 Access 35
5.21 Device >> Notification >> SNMPv3 USM 36
5.22 Device >> Notification >> SNMP Trap 36
5.23 Device >> Notification >> Mail Server 38
5.24 Device >> Notification >> SMS 38
5.25 Device >> Notification >> Wake On LAN 39
5.26 System >> Administration >> Information 40
5.27 System >> Administration >> Login User 40
5.28 System >> Administration >> Web 41
5.29 System >> Administration >> Batch Configuration 42
6. 2008 Server Core Setup for UPSentry 2012 44
7. XenServer Setup for UPSentry 2012 46
7.1 Install PV driver for Guest OS 46
7.2 Configure UPSentry 2012 for Xen 46
8. Linux KVM Setup for UPSentry 2012 48
8.1 Install libvirt Tools for KVM 48
8.2 Configure UPSentry 2012 for KVM 48
9. Work with the ShutdownAgent 2012 50

1. Overview

The **UPSentry 2012** is a power monitoring and control software that communicates with a UPS to retrieve the UPS information and protects the operating system which is supplied power by the UPS during power events (Such as input power fail). Using a Web Browser, you can easily obtain the current UPS status, configure your shutdown strategy and view the countdown to shutdown information. **UPSentry 2012** also has the ability to notify the device managers through e-mail and SMS.

UPSentry 2012 works with multiple ShutdownAgent 2012 to protect a large number of hosts which are powered by the UPS.



1.1 Features

1. Work with ShutdownAgent 2012 to protect a large number of hosts: Each **UPSentry 2012** can connect up to 255 ShutdownAgent 2012. Each ShutdownAgent 2012 can forward the received SNMP trap to up to 255 ShutdownAgent 2012.
2. Support RS232 protocol to monitor and control the connected UPS.
3. Support USB to monitor and control the connected UPS.
4. Support SNMPv1, v2c and v3 trap.
5. Support SMS for mobile notification.

6. Support SNMPv1, v3 server access for monitoring **UPSentry 2012** status and configure shutdown parameters.
7. Provide web interface through HTTP and HTTPS.
8. Has the ability to send e-mail and SMS to notify the user and device manager.
9. Support scheduling shutdown, restart and battery test.
10. Provide the batch configuration to deploy settings at a finger click.
11. Support console configuration for basic system parameters setup.
12. Support 32/64 bit software programs.

1.2 OS Support

Windows XP-sp2, Vista, 7, 8, 10
Windows 2003, 2008, 2012
Windows 2008 Server Core, Hyper-V 2008 R2
Orcale Linux 7.1
Linux OpenSUSE 11.4
Linux ubuntu 10.04
Linux Fedora 3.1.9
CentOS 5.8
Citrix XenServer 6.0.0
Linux KVM

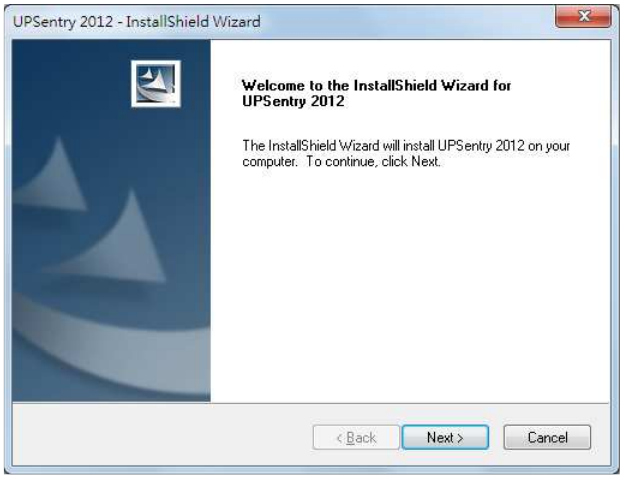
2. Installation/ Uninstallation

2.1 For Windows System

There are 2 of setup programs: UPSentry-2012-Setup(win32).exe and UPSentry-2012-Setup(x64).exe. One is for 32 bit Windows operating system and the other is for 64 bit Windows operating system.

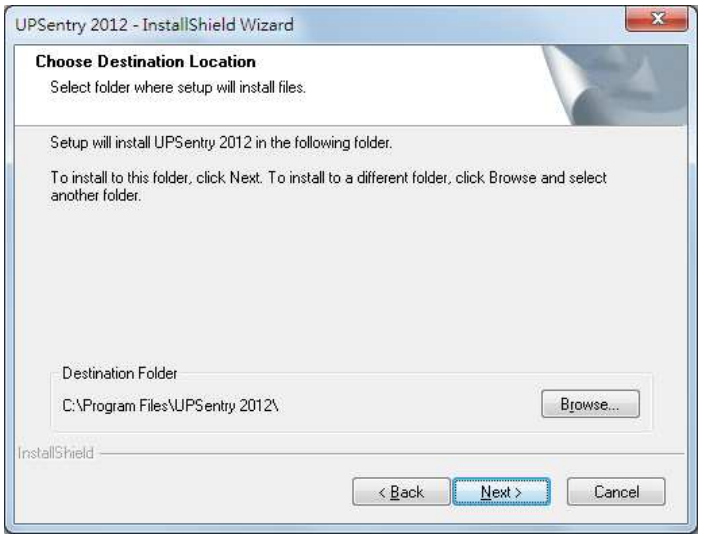
2.1.1 Installation Process

1. Execute the UPSentry-2012-Setup(xxx).exe to run the setup program.
2. Press the "Next" button to continue the installation or press the "Cancel" to stop the installation.

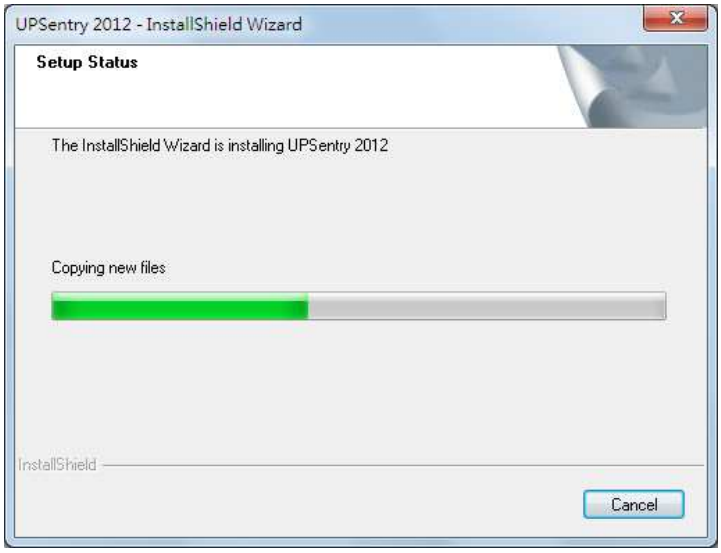


3. Read the license agreement and then press the "Yes" button to accept the license agreement and continue with the installation or press the "No" button to cancel the installation.

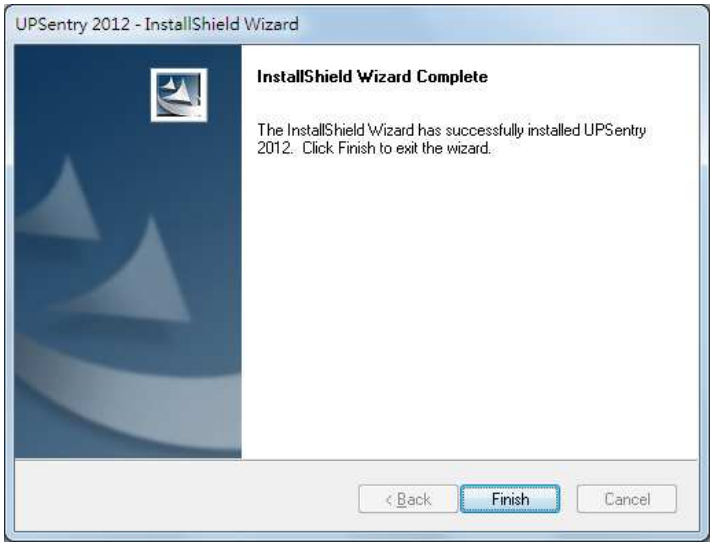
4. At this stage you can change the destination location by pressing the "Browse" button or just press the "Next" to install the software in the default location.



5. Now the setup program is ready for your confirmation to start copying the related program files. Press the "Install" button to install the software to the destination location in your hard drive.
6. Now the setup program is copying the files and show the progress.



7. After complete the installation, press the "Finish" button to exit the installation process.



8. Once the installation is complete, UPSentry 2012 will automatically start he service program and add an icon to the task bar. A dialog box will pop up to ask if you want to configure the basic parameters via console. If you are not operate a Windows server core operating system then you can ignore this. Just press "No" to finish the installation. Press "Yes" to launch the console configuration in the shell mode. See chapter 3 for more details.

The **UPSentry 2012** software is comprised of two modules:

A **Service** module (**UPS Service: UPS-Service.exe**), which runs in the background as a Service and communicate with the UPS through the assigned serial port.

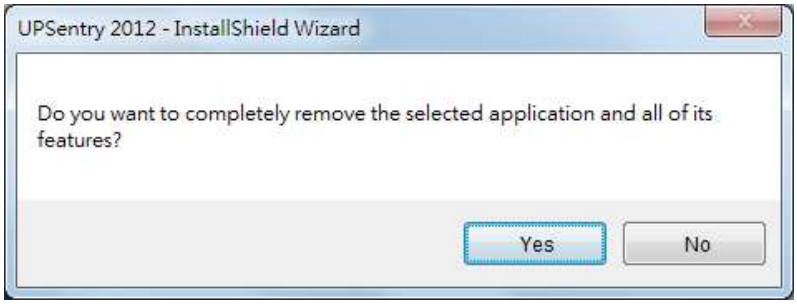
A **Status** module (**UPS-Status.exe**), which enables you to control and configure the software through drop down menus and dialog boxes. It also allows you to launch the web browser and login automatically to monitor, configure and control the software.

After finishing the installation, the setup program will create a **UPSentry 2012** association with the following shortcuts:

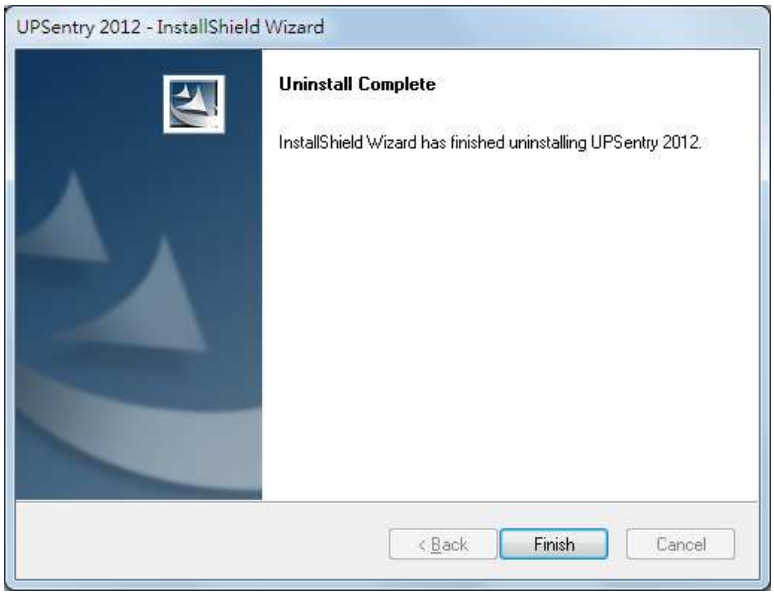
- **Console Configure**: To launch the UPS-Config.exe for you to quickly configure the basic communication parameters.
- **Uninstall**: To remove the **UPSentry 2012** from your hard disk, the configuration data will still be kept in the installed directory.
- **User Manual**: The user manual in PDF format.
- **Web Monitor**: The major user interface of **UPSentry 2012**, used to monitor and configure the software.

2.1.2 Uninstall Process

1. Select Uninstall from the **UPSentry 2012** program folder to start the un-install process. Or Use the Add/Remove Program in the Control Panel.
2. Press the "OK" button to confirm removing all of the application from the hard drive or the "Cancel" button to cancel the uninstall process.



3. Press the "Finish" button to complete the uninstall process.



2.2 For Linux System

2.2.1 Installation Process

1. Please login to the Linux system and change to the root account:

   ```
   su root
   ```

2. Copy the uc2012-linux.tar.gz to the /tmp directory:

   ```
   cp uc2012-linux.tar.gz /tmp
   ```

3. Change your working directory to /tmp:

   ```
   cd /tmp
   ```

4. Uncompress the uc2012-linux.tar.gz:

   ```
   gunzip uc2012-linux.tar.gz
   ```

5. Extract the uc2012-linux.tar:

   ```
   tar xvf uc2012-linux.tar
   ```

6. Run the install script:

   ```
   ./install
   ```

```
+---------------------------------------------+
|  UPSentry 2012 for Linux                    |
|  Copyright (c) 2012 Delta Electronics, Inc.  |
|  All Rights Reserved.                       |
+---------------------------------------------+

Do you want to install the UPSentry 2012? [y|n]
```

7. Press ‘y’ to start the installation process:

```
+-------------------------------------------+
|  UPSentry 2012 for Linux                  |
|  Copyright (c) 2012 Delta Electronics, Inc.  |
|  All Rights Reserved.                     |
+-------------------------------------------+

The destination directory is /usr/local/upsentry.

Copying files ..............
Install service link.

UPSentry 2012             0:off  1:off  2:off  3:on   4:off  5:on   6:off

Starting UPSentry 2012(upsentryd) ... done

Do you want to configure the UPSentry 2012 right now? [y/n]
```

8. Now the UPSentry 2012 has been installed in the following directory /usr/local/upsentry/ and the service program starts up automatically. Press ‘y’ to launch the /usr/local/upsentry/configure program to configure the basic networking parameters for UPSentry 2012 or press ‘n’ to finish the install process.

Please see chapter 3 for more information if you want to configure the basic networking parameters.

2.2.2 Uninstall Process

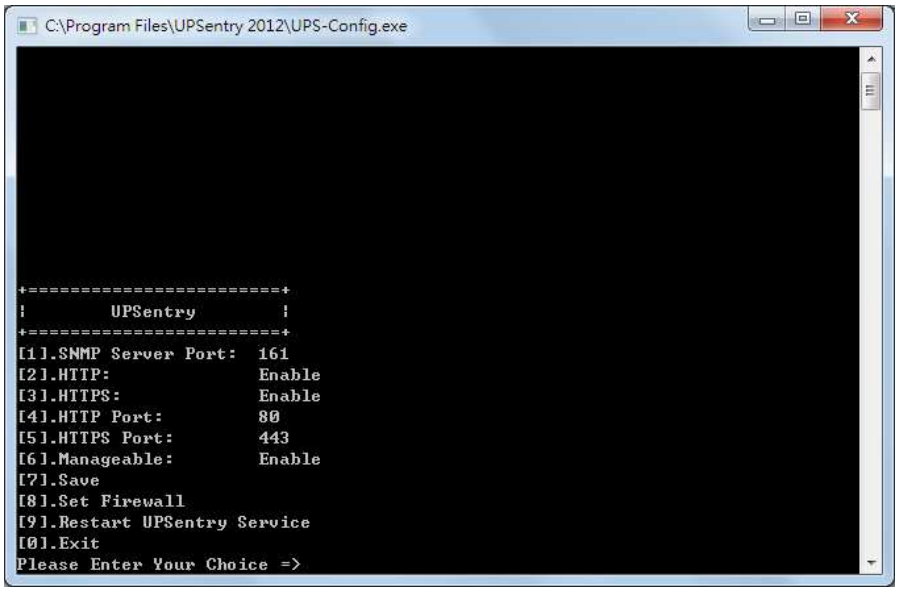
1. Please login to the Linux system and change to the root account:
   su root
2. Change your working directory to /usr/local/upsentry:
   cd /usr/local/upsentry
3. Run the uninstall script to remove UPSentry 2012:
   ./uninstall
4. Press ‘y’ to start the uninstall process.

3. Console Configuration

The configuration program is design to do the basic configuration for UPSentry 2012 in the shell mode. The software can be launched at the end of the installation process or you can go to the installed directory to launch it manually.

For Windows it is locateed in "C:\Program Files\UPSentry 2012\UPS-Config.exe"

For Linux it is installed in "/usr/local/upsentry/configure"



3.1 Console Menu

No.	Function	Description	Default
1.	SNMP Server Port	The UDP port for replying SNMP get/set commands	161
2.	HTTP	Enable or disable the HTTP protocol	Enable
3.	HTTPS	Enable or disable the HTTPS protocol	Enable
4.	HTTP Port	The TCP port for HTTP	80
5.	HTTPS Port	The TCP port for HTTPS	443
6.	Manageable	Allow the management software to manage UPSentry 2012	Enable
7.	Save	Save the configured parameters to config.ini	

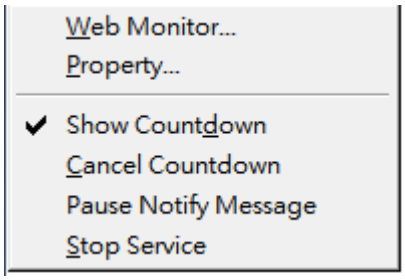
8.	Set Firewall	Insert or remove the firewall rule for the UPSentry 2012. This option is provided for quickly testing the network communication. The firewall settings may be recovered after the OS reboots.	
9.	Restart UPSentry Service	Restart service program to apply the changes	
0.	Exit	Exit the configuration program	

4. Operation in Windows

After the installation, UPSentry 2012 places an icon in the task bar to indicate the status of the monitored UPS.

Icon	Description
	Normal
	Service stop
	UPS on battery mode
	UPS battery low
	UPS on bypass mode
	UPS disconnect

To show the pop up menu, please move the cursor over the UPSentry 2012 icon and then click the mouse button:



4.1 Web Monitor

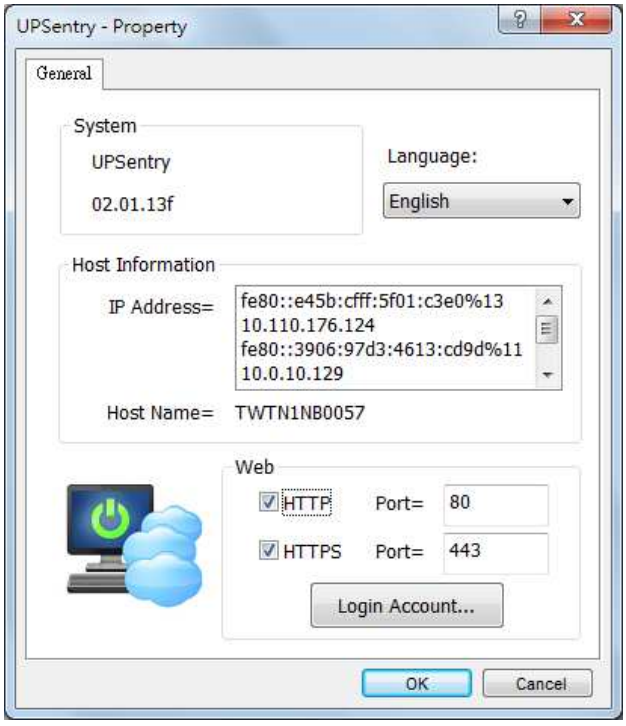
UPSentry 2012 implemented a web engine to provide the web interface to interact with the end customers. You can monitor and configure the software through the web interface.

Select the **Web Monitor** menu from the menu to launch the default web browser, if your login account in the Windows system belongs to the local Administrators group then UPSentry 2012 will login to its web engine automatically as the administrator privilege. If you connect a web browser from a remote PC then you have to login with the proper account and password.

For more detailed information about the web operation, please refer to the chapter 5.

4.2 Property

Selecting the **Property** menu provides another way to configure the basic parameters of UPSentry 2012. From the General page you can observe the software version number, IP addresses and host name.



4.2.1 Language:

Select the supported language from this option.

4.2.2 HTTP:

The HTTP port can be enable/ disabled and assigned a different number. The default value is enabled and port 80.

If you have changed the HTTP port number from 80 then you have to key in the URL as the following:

http://192.168.1.100:8001

where 192.168.1.100 is the ip address of the PC which UPSentry 2012 was installed and the 8001 is the port number which you assigned.

NOTE: Please check the Windows firewall setting if the HTTP connection is refused.

4.2.3 HTTPS:

The HTTPS port can be enable/ disabled and assigned a different number. The default value is enabled and port 443.

If you have changed the HTTPS port number from 443 then you have to key in the URL as the following:

https://192.168.1.100:4430

where 192.168.1.100 is the ip address of the PC which UPSentry 2012 installed and the 4430 is the port number which you assigned.

NOTE: Please check the Windows firewall setting if the HTTPS connection is refused.

4.2.4 Login Account:

UPSentry 2012 implements 3 levels of authentication for the web login as follows.

Administrator:

Has sole right to modify the UPSentry 2012 system settings.

Device Manager:

Does not permit to change the system settings but has the ability to modify the device-related settings.

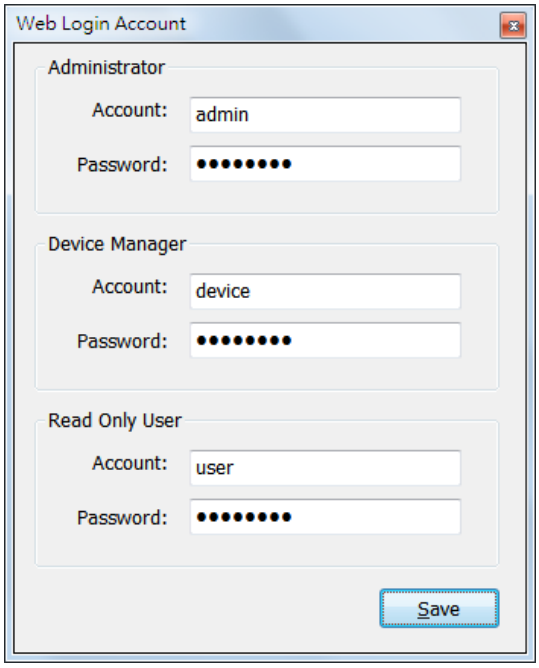
Read Only User:

Does not have the rights to change any of the system or device-related settings. The Read-Only User is only permitted to observe the UPSentry 2012 status.

The following is the default account and password list, please note that they are case-sensitive.

	Account	Password
Administrator	admin	password

Device Manager	device	password
Read Only User	user	password



4.3 Show Countdown

Select the Show Countdown menu to display the countdown windows when UPSentry 2012 starts counting down the OS shutdown delay.

4.4 Cancel Countdown

Select the Cancel Countdown menu during the counting down to stop the shutdown process. To resume the shutdown process, please de-select the Cancel Countdown menu item to continue counting down the OS shutdown delay.

In addition to de-select the Cancel Countdown menu to continue the countdown process, when the shutdown event changes the software will start a new countdown process.

4.5 Pause Notify Message

Selecting the Pause Notify Message will stop the next pop-up notification message. The notification will resume the next time the status changes.

4.6 Stop Service

Selecting the Stop Service menu will stop the UPSentry 2012 service module. To restart the service, uncheck the Stop Service menu.

5. Web Interface

5.1 Run a Web Browser

To connect to UPSentry 2012 from the same PC where UPSentry 2012 is installed, select the Web Monitor from the task bar menu. UPSentry 2012 will open your default web browser and if you are the Administrator you will be automatically logged in.

UPSentry 2012 allows a maximum of 16 users to be logged in at the same time.

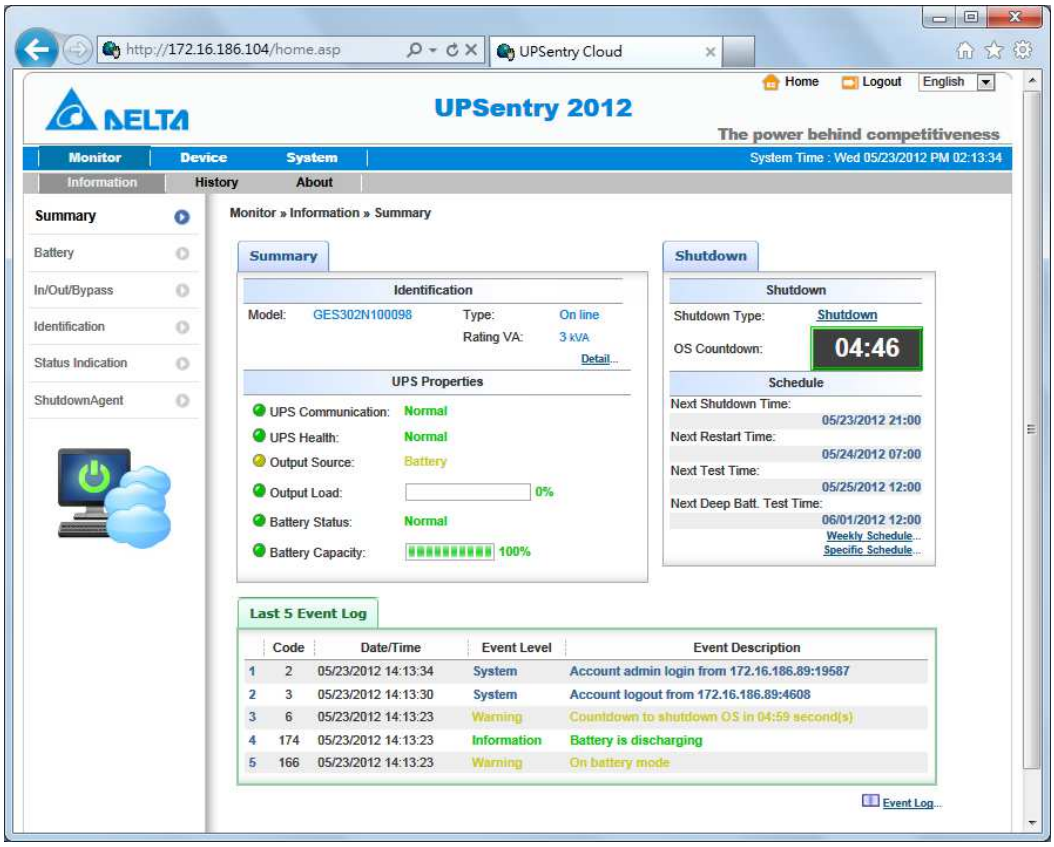
You can also connect a web browser from a remote PC. Start your Web Browser. Enter **http: //host_name** or **http: //ip_address** in the address bar for the plain text web transmission or **https: //host_name** or **https: //ip_address** for the encrypted web transmission. If you have changed the port number of HTTP or HTTPS then please enter **http: //host_name:port_number** or **http: //ip_address:port_number** in the address bar for the plain text web transmission or **https: //host_name:port_number** or **https: //ip_address:port_number** for the encrypted web transmission

UPSentry 2012 will then ask your account and password. After keying in the correct **account** and **password**, the **UPSentry 2012 Home Page** will appear on the screen.

Note: UPSentry 2012 will logout the user automatically if there is no any data transmission through HTTP/HTTPS for more than 30 minutes.

5.2 Monitor >> Information >> Summary

This web page includes the information of identification, shutdown status, UPS status and the last 5 event logs.



Identification

Display the UPS model, serial number, UPS type and rating VA.

Shutdown

Display the shutdown type (Shutdown, Power Off, Hibernate) and the countdown time to shutdown the OS in second.

UPS Properties

List the major UPS properties for monitoring the UPS health, output and battery status.

Schedule

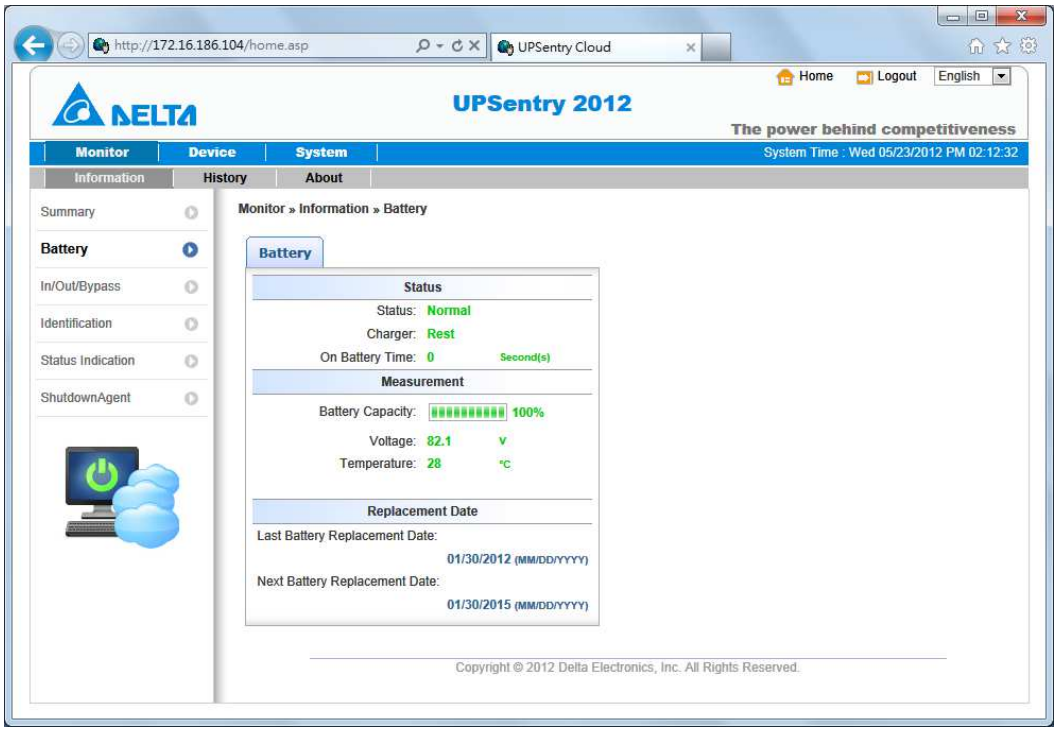
Calculate the nearest time to shutdown, restart, do the 10 seconds test and deep battery test in 1 month from weekly schedule and specific schedule.

Last 5 Event Log

Show the last 5 event logs, if you want to see more event log please visit the Event Log page.

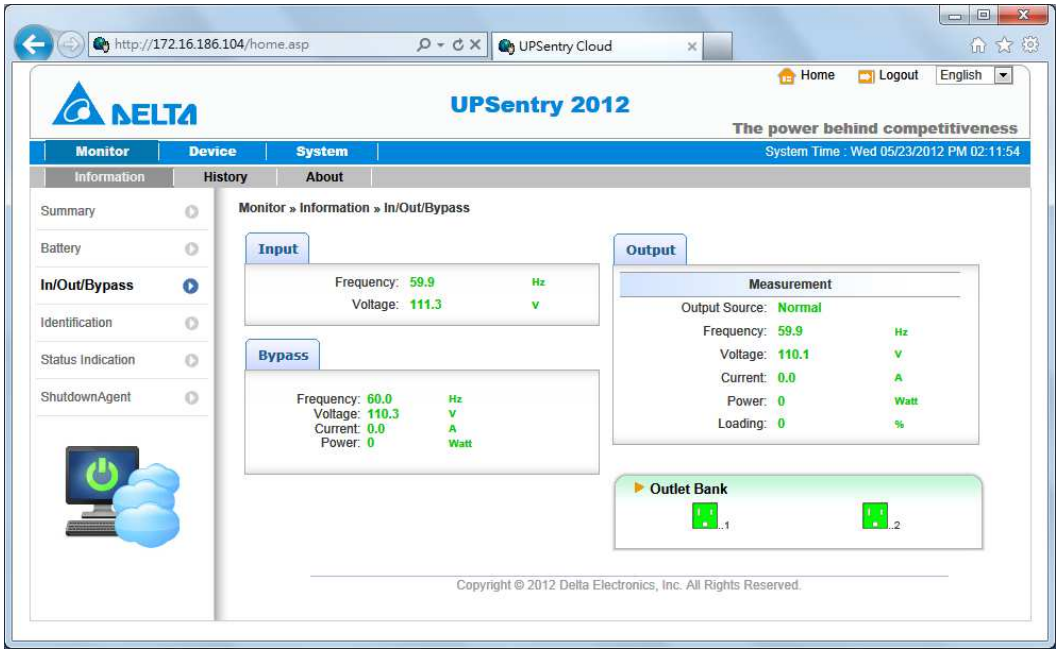
5.3 Monitor >> Information >> Battery

Go to **Monitor** >> **Information** >> **Battery** to view the information of Battery Status, Battery Measurement, Battery Cabinet and Replacement Date.



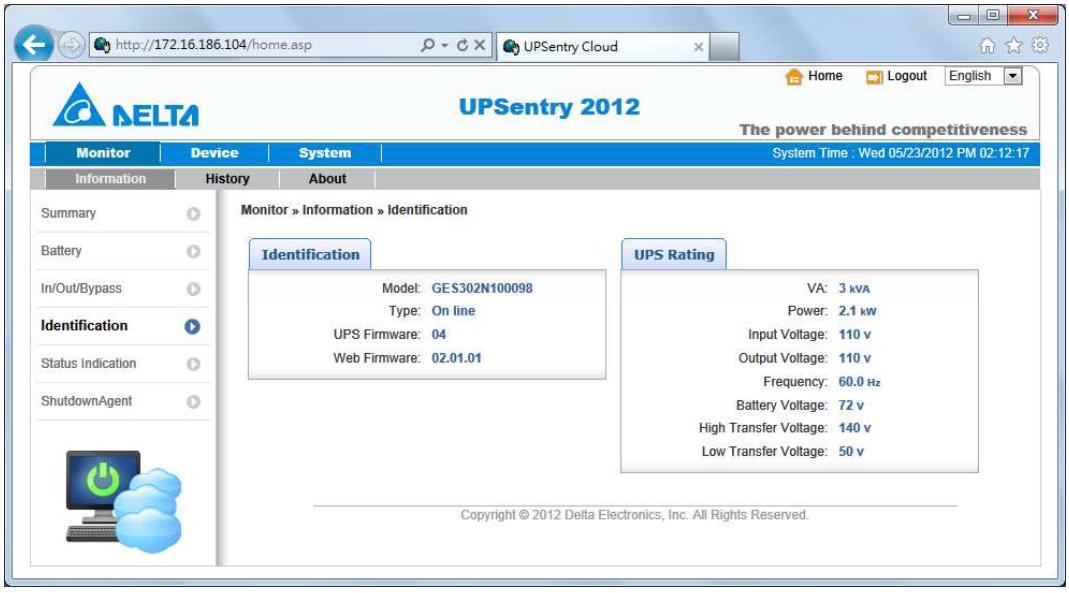
5.4 Monitor >> Information >> In/Out/Bypass

Go to **Monitor** >> **Information** >> **In/ Out Parameters** to view the information of Input Measurement, Bypass Measurement and Output Measurement.



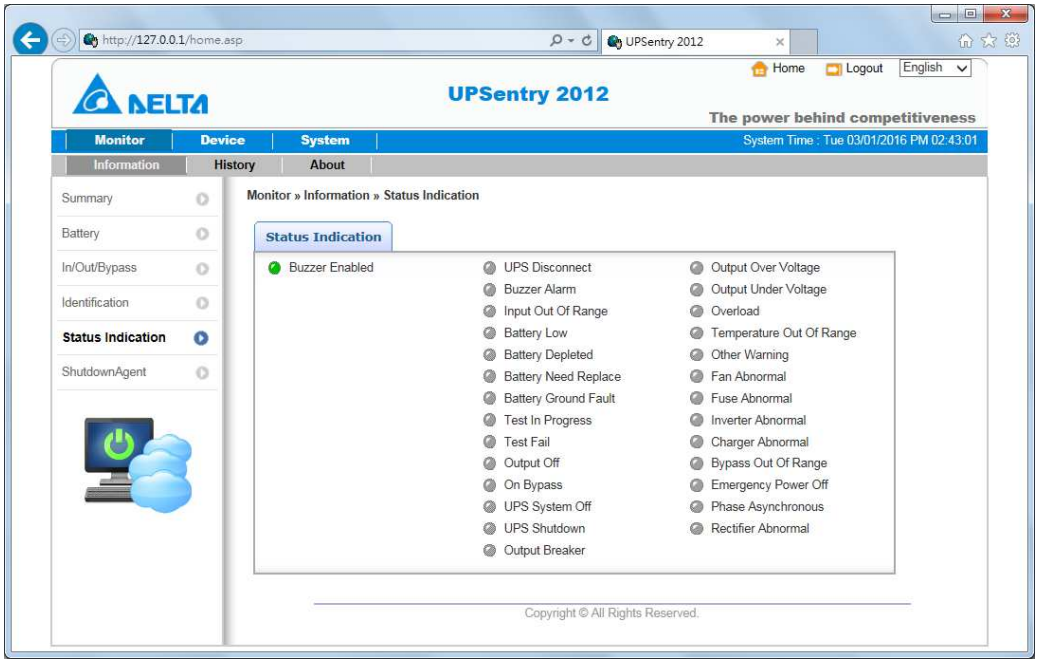
5.5 Monitor >> Information >>Identification

Go to **Monitor** >> **Information** >> **Identification** to view the information of Identification and UPS Rating.



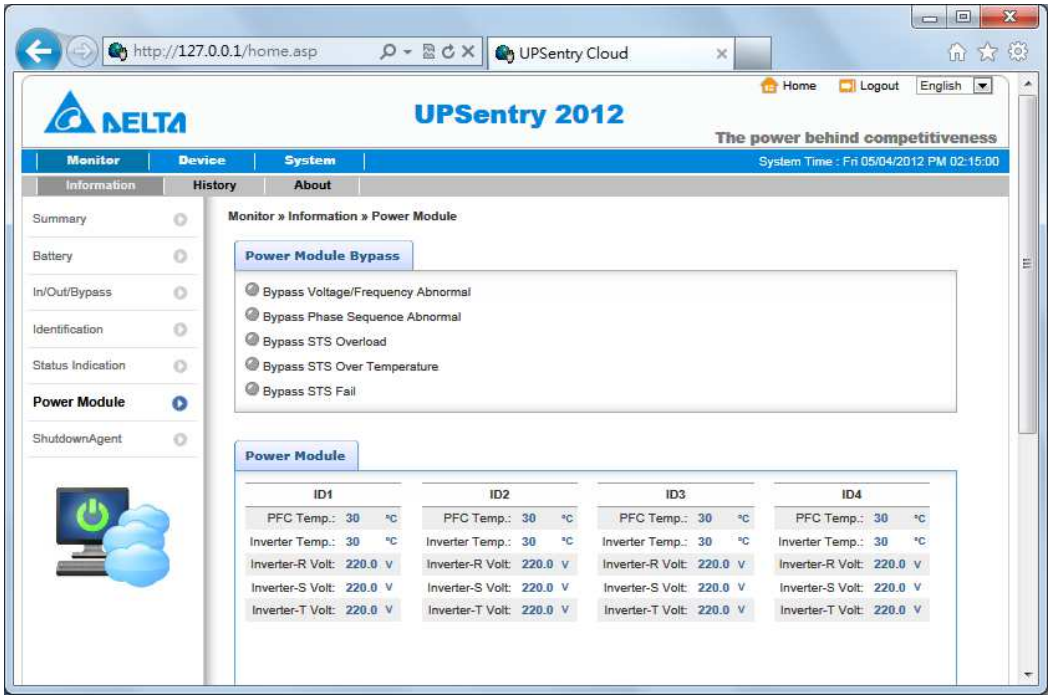
5.6 Monitor >> Information >>Status Indication

Go to **Monitor** >> **Information** >> **Status Indication** to view the information of UPS status.



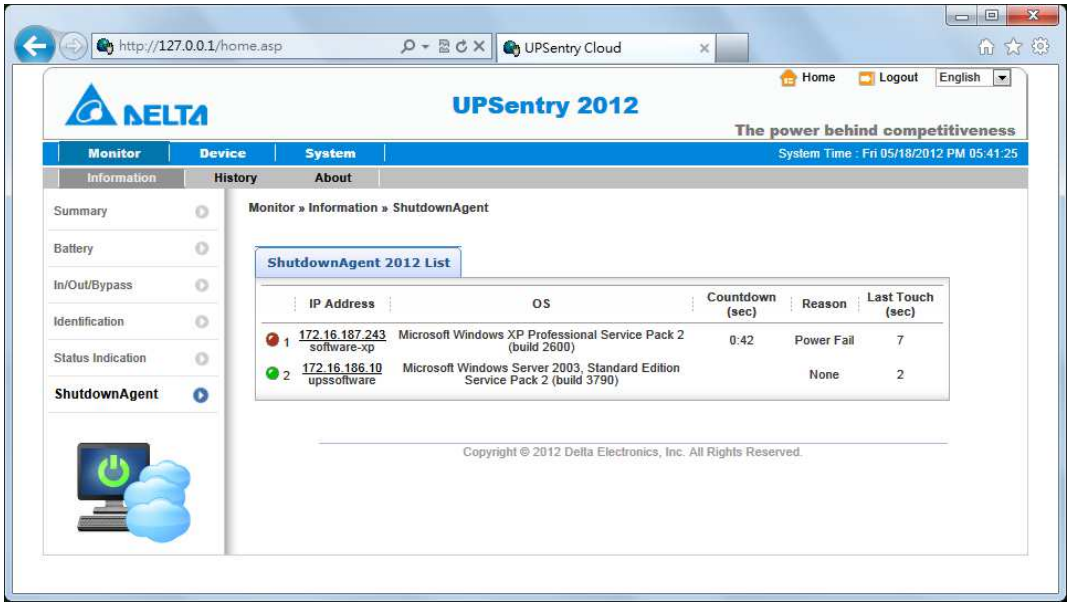
5.7 Monitor >> Information >>Power Module

Go to **Monitor** >> **Information** >> **Power Module** to view the information of Power Module Bypass and Power Module ID1/ 2/ 3/ 4. Please note that this page only appears when your UPS has designated power modules.



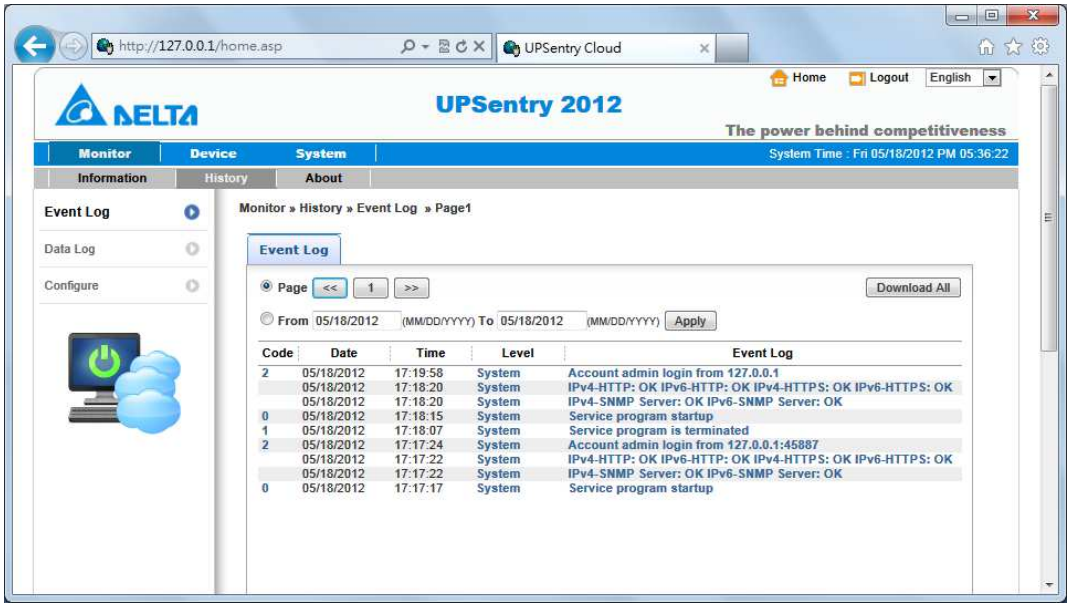
5.8 Monitor >> Information >>ShutdownAgent

This web page collects all of the ShutdownAgent 2012 which you assigned to work with UPSentry 2012 to protect a group of servers.



5.9 Monitor >> History >>Event Log

Go to **Monitor** >> **History** >> **Event Log** >> Page 1/ 2/ 3/ 4 to see events that occur. The existing ones are overwritten when the maximum number of entries (10,000) is reached. You can also download the entire event log archive (event_log.csv) recorded during an assigned period of time on your computer.



Date: The date when the event occurred.

Time: The time when the event occurred.

Level: The Event Level of the event occurred.

Event Log: The description of the event that occurred.

Download Event Log from UPS

The UPSentry 2012 sends a request to the UPS, collects the event logs saved in the UPS, and replies to the user through network. Please note that this option only appears when the UPS supports this function, and the event logs saved in the UPS may be different from the event logs saved in the UPSentry 2012.

5.10 Monitor >> History >>Data Log

This web page lets you observe the history values by the a single date, a month, a year and a user defined period of time. You can also download the history data by clicking the "Download" button.

5.10.1 Observe by Day

Click on the top **Day** tab to observe the history values by a specified date.

Date Text Box:

Click on the Date text box to pop-up a calendar to pick up a date to observe the history values for the connected UPS.

Line Chart:

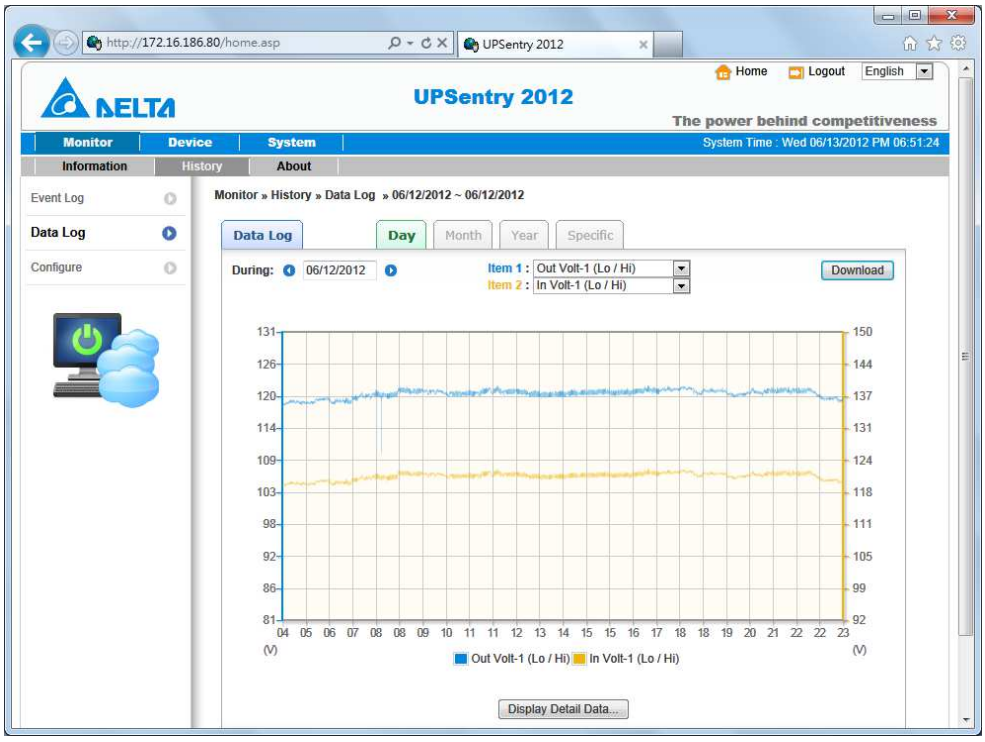
Each color of line indicates the choose value item. Move your mouse over the line to display the time and associated value.

Color Boxes:

Click on the color boxes of items to disable drawing the line, click them again to enable drawing the line.

Download:

To export the energy data to a .csv file.



5.10.2 Observe by Month

Click on the top **Month** tab to observe the history values by a specified month.

Date Text Box:

Click on the Month text box to pop-up a calendar to pick up a month to observe the history values for the connected UPS.

Line Chart:

Each color of line indicates the choose value item. Move your mouse over the line to display the time and associated value.

Color Boxes:

Click on the color boxes of items to disable drawing the line, click them again to enable drawing the line.

Download:

To export the energy data to a .csv file.

5.10.3 Observe by Year

Click on the top **Year** tab to observe the history values by a specified year.

Year Text Box:

Click on the Year text box to pop-up a calendar to pick up a year to observe the history values for the connected UPS.

Line Chart:

Each color of line indicates the choose value item. Move your mouse over the line to display the time and associated value.

Color Boxes:

Click on the color boxes of items to disable drawing the line, click them again to enable drawing the line.

Download:

To export the energy data to a .csv file.

5.10.4 Observe by User Defined

Click on the top **Specific** tab to observe the history values by a period of time.

Date Text Box:

Click on the Date text box to pop-up a calendar to pick up a range of date then press the **Apply** button to observe the value items.

Line Chart:

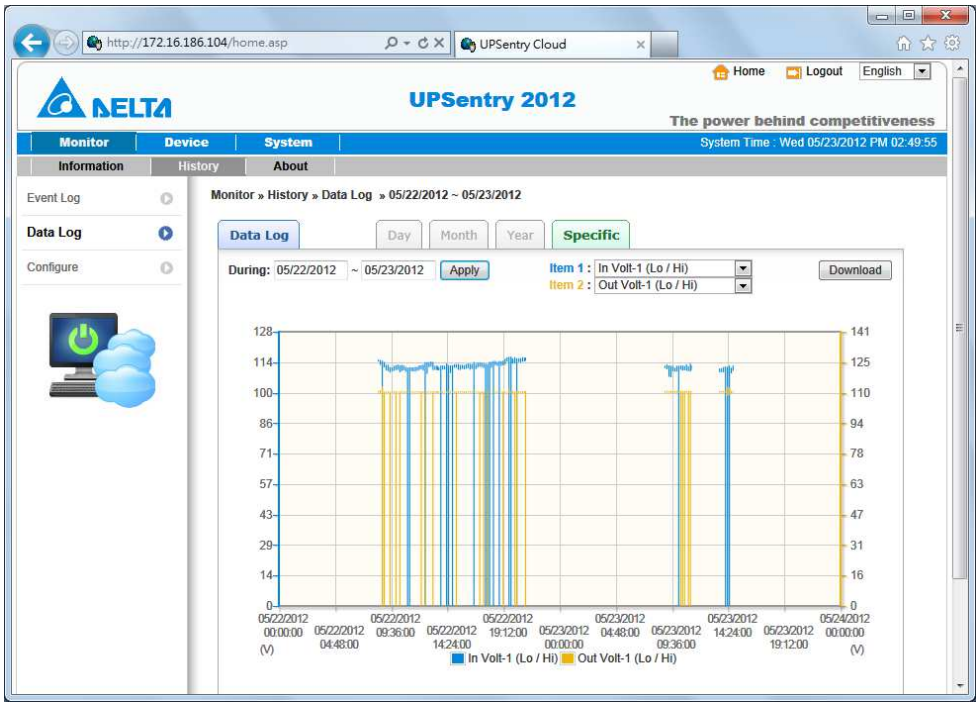
Each color of line indicates the choose value item. Move your mouse over the line to display the time and associated value.

Color Boxes:

Click on the color boxes of items to disable drawing the line, click them again to enable drawing the line.

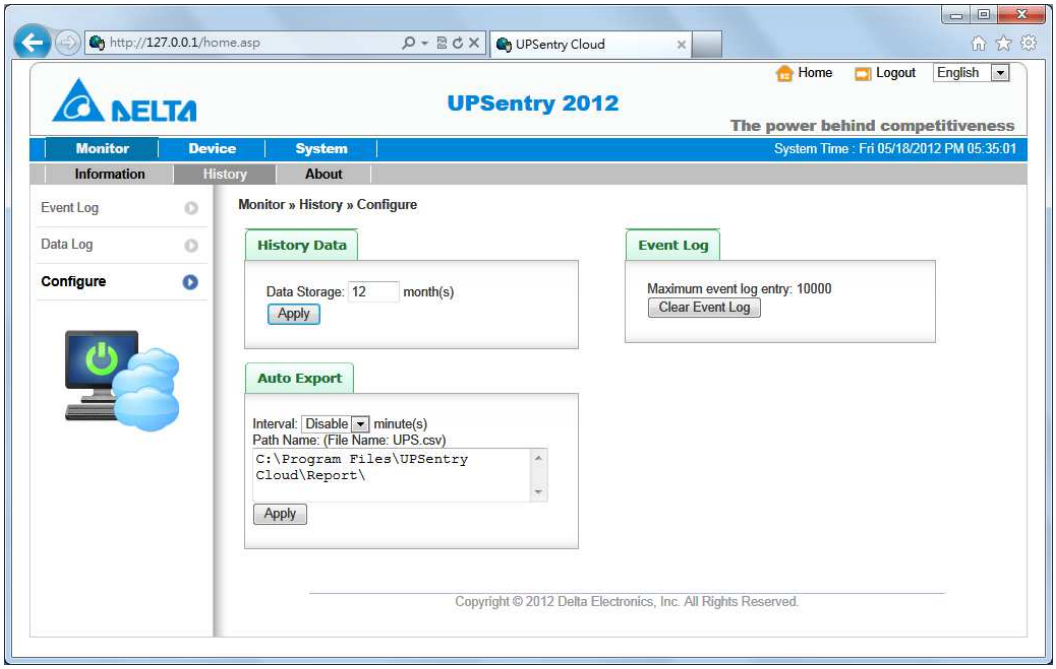
Download:

To export the energy data to a .csv file.



5.11 Monitor >> History >>Configure

Go to **Monitor** >> **History** >> **Configure** to clear the history data logs and event logs. You can also assign the Save Data Interval.



Clear Event Log: To clear the whole data log.

Data Storage: To assign the months to save data log.

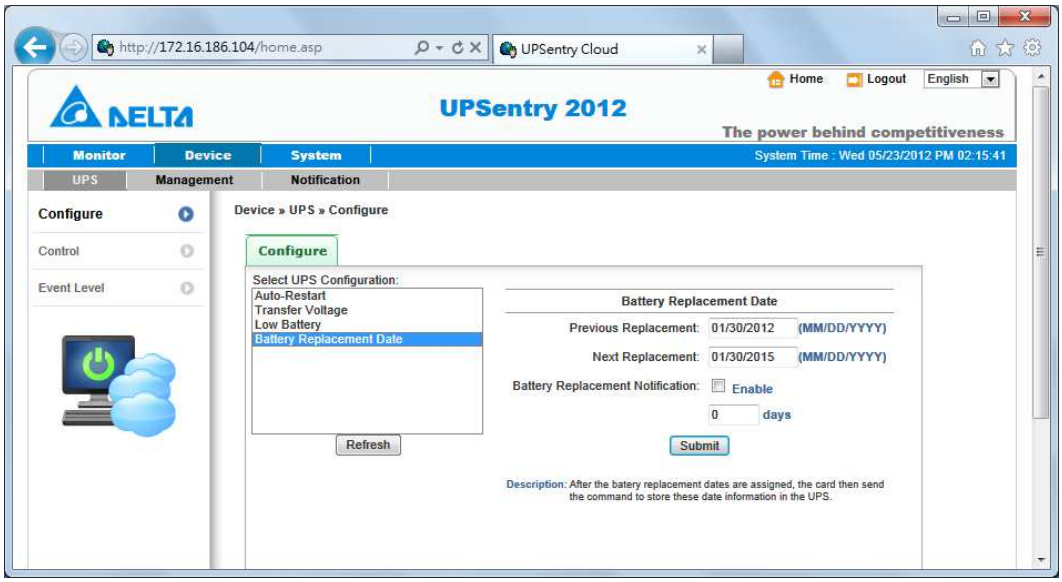
Auto Export: To save the UPS data in the specified directory by the assigned interval. The software creates the "UPS.csv" to export the inverter data.

Interval: The interval to append the UPS data to the file.

Path Name: The directory for UPSentry 2012 to create the related file.

5.12 Device >> UPS >>Configure

Go to **Device** >> **Management** >> **Configure** to configure the UPS. The configuration values are saved in the UPS or in the UPSentry 2012 and these values change UPS operation. The configuration items include the following.



Please note that different UPSs may support different configuration options.

Auto Restart

After you click **Submit** to confirm your auto restart setup, the UPSentry 2012 will send the command to the UPS to enable auto restart.

UPS Buzzer

After you click **Submit** to confirm your buzzer setup, the UPSentry 2012 will send the command to the UPS to enable buzzer.

Voltage Sensitivity

After you set up your voltage sensitivity (there are Normal, Reduced, and Low selections) and click **Submit**, the UPSentry 2012 will send the command to the UPS to enable the UPS' s voltage sensitivity function.

Transfer Voltage

After you click **Submit** to confirm your transfer voltage setup, the UPSentry 2012 will send the command to the UPS to enable the relevant functions.

Low Battery

This configuration saves the setup values in the UPSentry 2012 and compares with the values received from the UPS. If the received battery level is lower than the assigned one, the UPSentry 2012 will trigger a low-battery alarm.

Battery Replacement Date

After you set up battery replacement dates, the UPSentry 2012 will send the command to the UPS and save the information in the UPS.

External Battery Pack

After you click **Submit** to confirm your external battery pack setup, the UPSentry 2012 will send the command to the UPS and save the external battery pack quantity in the UPS.

Bypass Transfer Frequency

After you set a tolerance of bypass transfer frequency and confirm your setup, the UPSentry 2012 will send the command to the UPS. If the UPS transfers to bypass mode and the bypass frequency is out of the tolerance, output will be turned off and critical loads will be protected.

Bypass Transfer Voltage

After you set a tolerance of bypass transfer voltage and confirm your setup, the UPSentry 2012 will send the command to the UPS. If the UPS transfers to bypass mode and the bypass voltage is out of the tolerance, output will be turned off and critical loads will be protected.

Periodic Auto Test

This configuration is used to set up battery test time. After you confirm your setup, the UPSentry 2012 will send the command to the UPS and save the setup in the UPS. When the test time is due, the UPS will automatically perform the battery test.

Output Dry Contacts

After you click **Submit** to confirm your setup of output dry contacts, the

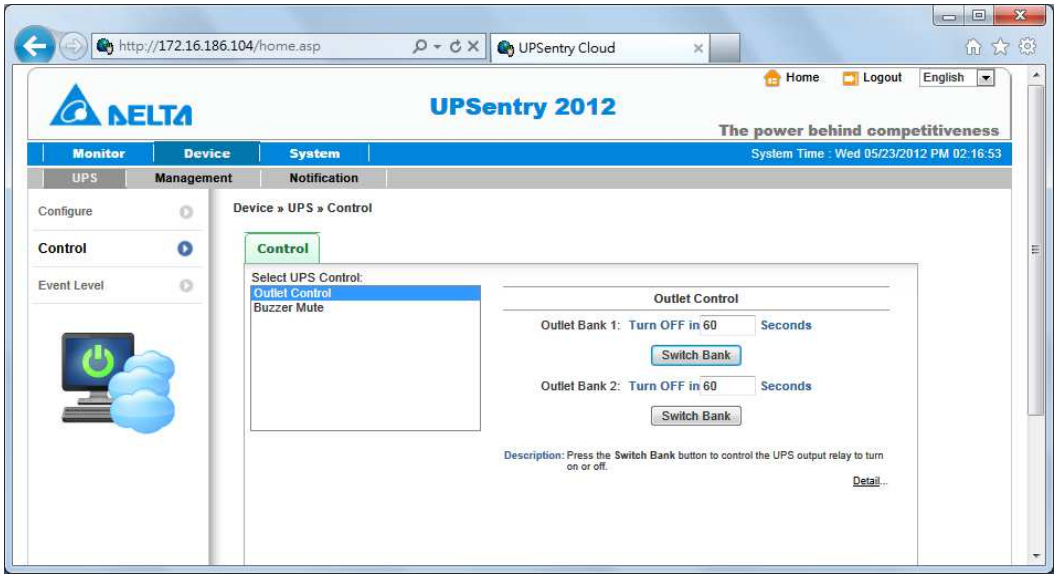
UPSentry 2012 will send the command to the UPS, save the values in the UPS, and report the current UPS' s status.

Customerized Battery Test

This configuration lets you set the battery voltage and test time to check the battery. If the battery can sustain the assigned test time during discharge and the battery voltage is higher than the assigned value then the test is passed.

5.13 Device >> UPS >>Control

Go to **Device** >> **Management** >> **Control** to configure relevant control commands. After you click **Submit**, the UPSentry 2012 will send the according commands to the UPS to enable relevant functions. The control items include the following.



Battery Test

After you select the battery test type and click **Submit**, the UPSentry 2012 will send the command to the UPS to enable the battery test accordingly.

Outlet Control

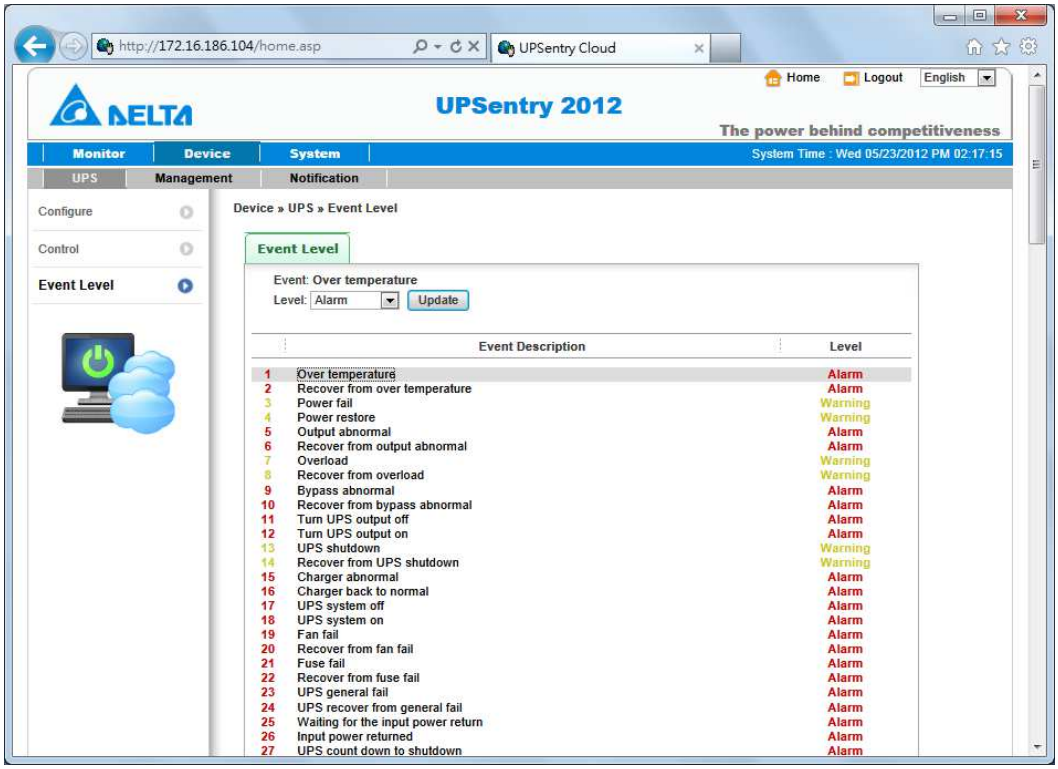
Press the **Switch Bank** button to control the UPS output relay (on or off).

Buzzer Mute

Provide an interface for you to mute the UPS buzzer during alarming, the buzzer will resume to alarm next time when the power event occurs.

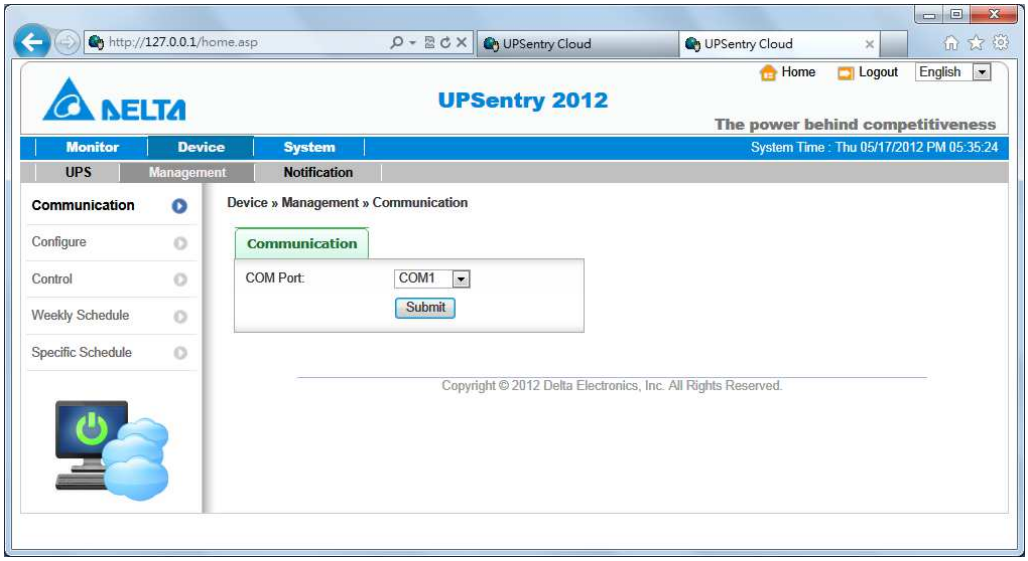
5.14 Device >> UPS >>Event Level

Go to **Device** >> **UPS** >> **Event Level** to set up a level for an event. If you want to receive an event notification, please refer to *5.22 Notification - SNMP Trap* and *5.23 Notification - Mail Server.*



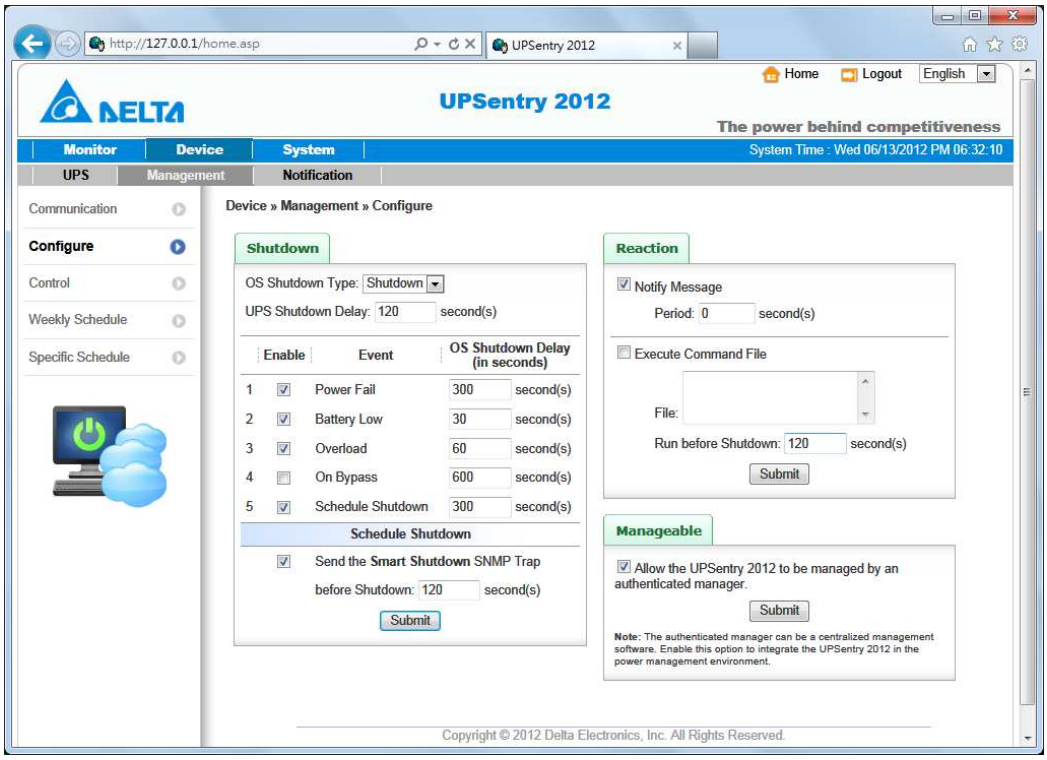
5.15 Device >> Management >> Communication

Select a serial interface from this web page to communicate with the UPS. The default value is Auto-Scan, UPSentry 2012 will detect the connected UPS automatically and keep the searched port in the configuration file.



5.16 Device >> Management >> Configure

This page is used to configure the major functions, they are: Shutdown, message notify, Run external command and manageable.



Shutdown

Select the **Shutdown Type** to determine the way to shutdown the operating system. There are **Shutdown**, **Power Off** and **Hibernate** types and the default value is Shutdown.

Now we should continue to determine the shutdown delay time for the following 5 power events: Power Fail, Battery Low, Overload, On Bypass and Schedule Shutdown. If the power events recover during countdown then the operating system will cancel the shutdown process, the host will not be shutdown.

Reaction

Enable the **Notify Message** to pops up a message box once UPSentry 2012 detects there is an UPS event change. Assign the period value to report the message periodically, set a 0 to the Period will show the message only once.

Enable the **Execute Command File** to run an assigned external file before shutdown. Set a value to the **Run Before Shutdown** to inform UPSentry 2012 when to launch the assigned executable file.

Manageable

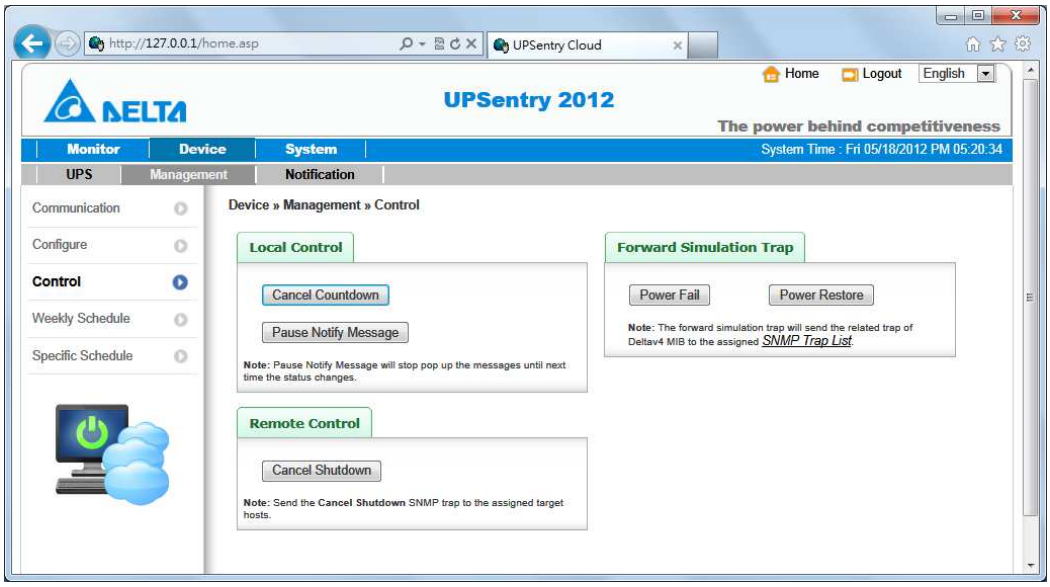
Select the **Allow the UPSentry 2012 to be managed by an authenticated manager** option to let the UPSentry 2012 reply the query from any authenticated manager. The authenticated manager can be a centralized management software. After collecting the UPSentry 2012 and ShutdownAgent information, the authenticated manager can provide a comprehensive list of all of the UPSentry 2012 and ShutdownAgent.

In fact, the authenticated manager communicate with the UPSentry 2012 through SNMPv3 with the first default account in the SNMPv3 USM list. If the **Allow the UPSentry 2012 to be managed by an authenticated manager** option is enabled then the permission of "manager" account changes to "Read/Write", otherwise the permission is "Disable".

The default setting of Allow the UPSentry 2012 to be managed by an authenticated manager option is "enabled"

5.17 Device >> Management >> Control

This page is used to configure the major functions, they are: Shutdown, wessage notify, Run external command and manageable.



Local Control

Press the "Cancel Countdown" button during the countdown shutdown process to stop counting down. Press the button again to resume the shutdown process.

In addition to select the Resume Countdown menu item to continue the countdown process, when the shutdown event changes will start a new countdown process.

Press the "Pause Notify Message" to pause the notification message. The message will resume again when the UPS status changes.

Remote Control

Press the "Cancel Shutdown" button to send the Cancel Shutdown trap to all of the SNMP Trap target hosts to stop the shutdown process.

Forward Simulation Trap

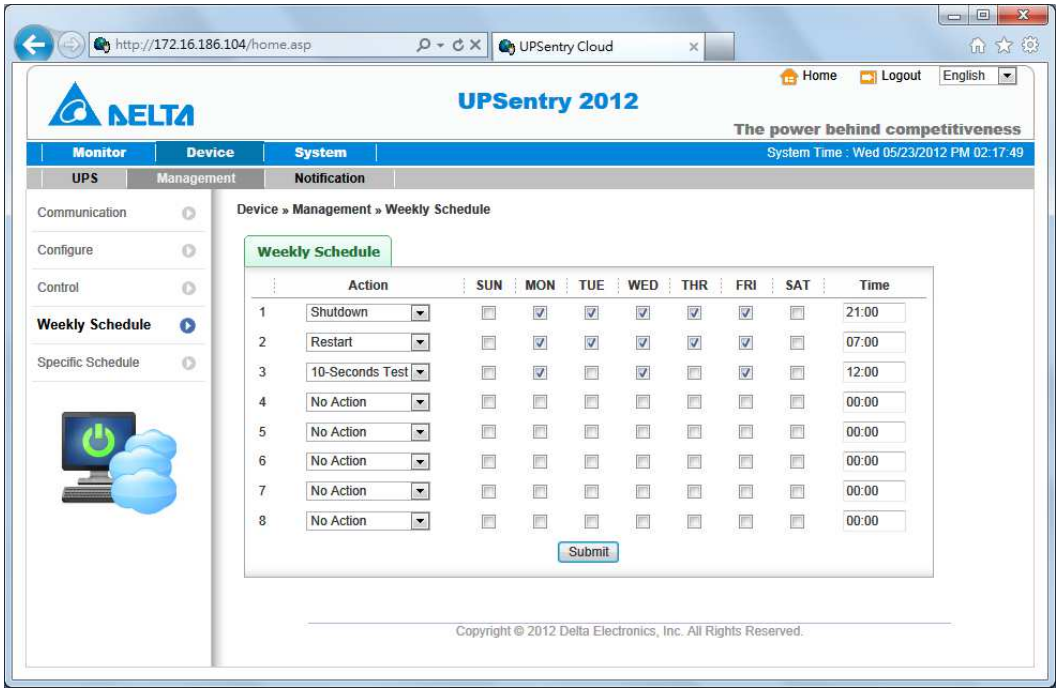
Press the "Power Fail" button to send the simulated power fail SNMP trap to the assigned Trap target IP addresses.

Press the "Power Restore" button to send the simulated power restore SNMP trap to the assigned Trap target IP addresses.

5.18 Device >> Management >> Weekly Schedule

Go to **Device** >> **Management** >> **Weekly Schedule** to arrange a weekly schedule for the UPS. You can select **No Action, Shutdown, Restart, 10-Second Test**, and set up what day and what time you want the action to be executed.

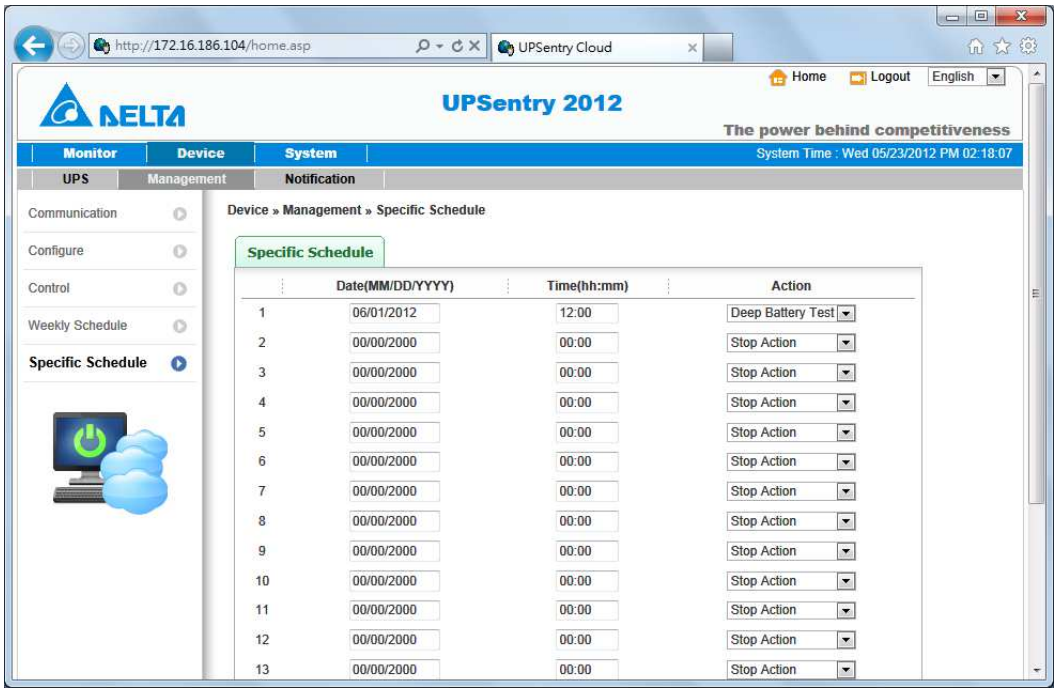
Note: The priority of a specific schedule is higher than the weekly schedule.



5.19 Device >> Management >> Specific Schedule

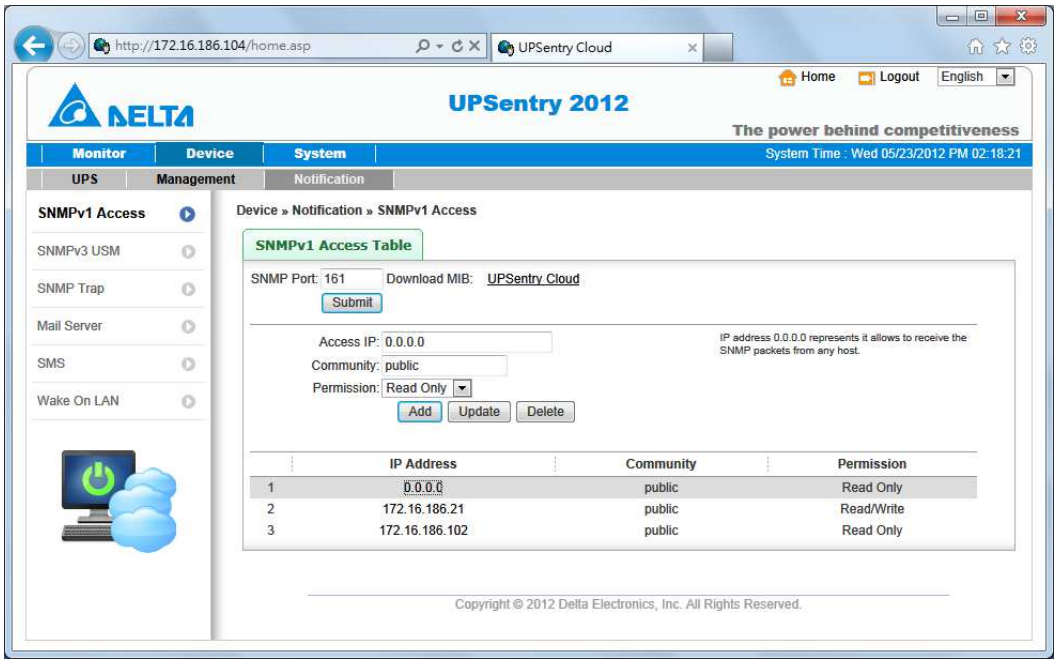
Go to Device >> Management >> Specific Schedule to arrange a specific schedule for the UPS. You can set up a specific date (MM/ DD/ YYYY) and time (hh:mm) for a specific action (Stop Action, Shutdown, Restart, 10-Second Test, Deep Battery Test).

Note: The priority of a specific schedule is higher than the weekly schedule.



5.20 Device >> Notification >> SNMPv1 Access

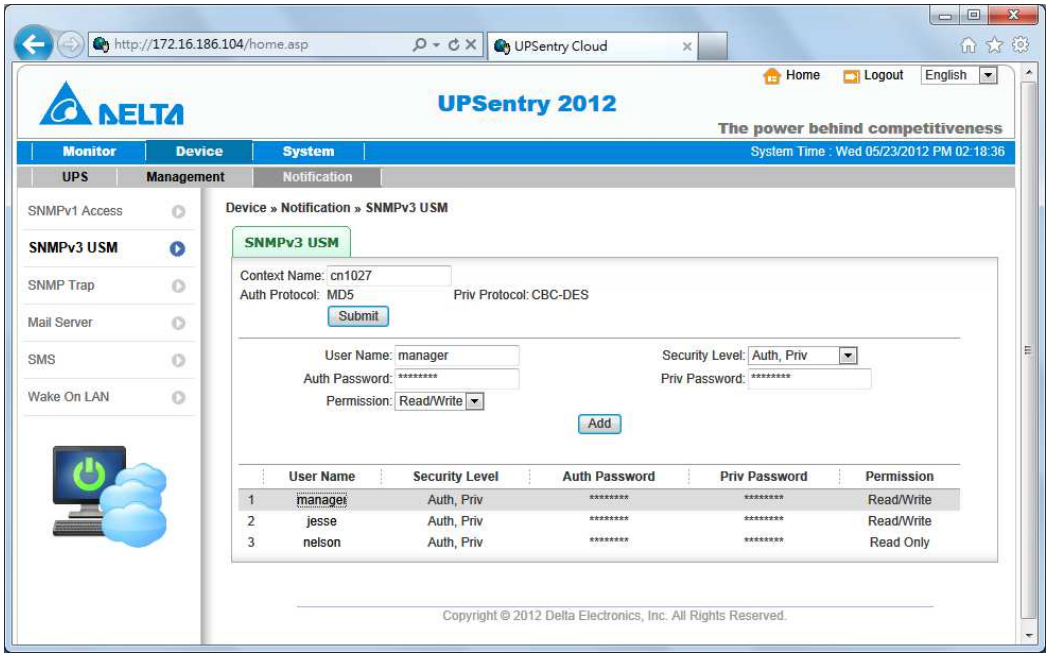
The UPSentry 2012 supports SNMP protocol and SNMP NMS (Network Management System), which are commonly used to monitor network devices for conditions that call for administrative attention. To prevent unauthorized access, you can specify the NMS IP addresses that are allowed to access, their community strings and access levels. The maximum number of IP entries is 255.



5.21 Device >> Notification >> SNMPv3 USM

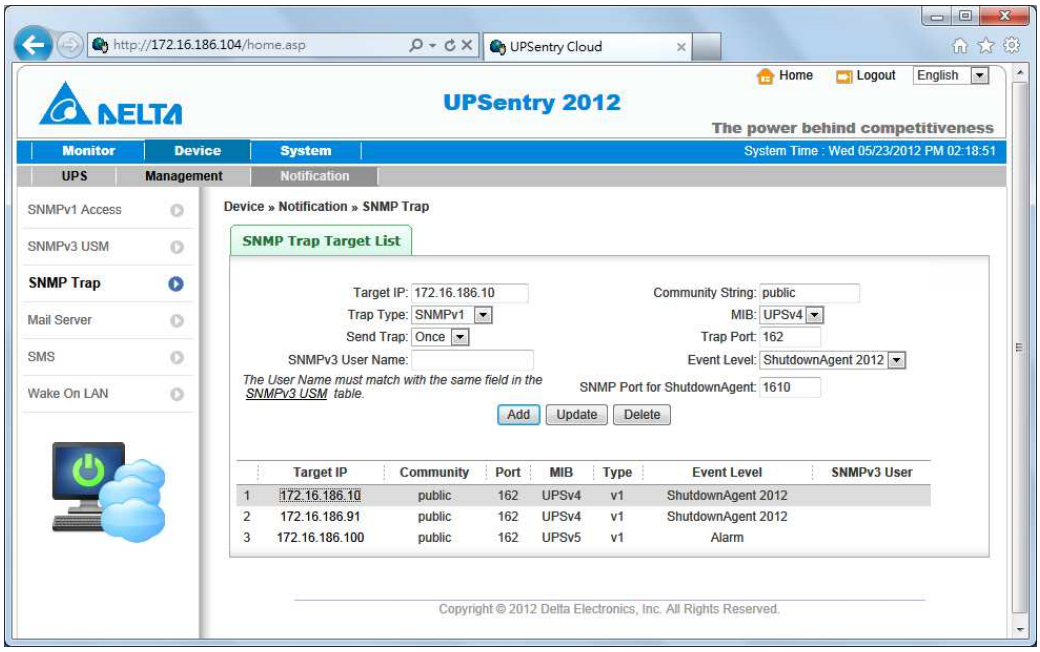
SNMPv3 offers features such as the encryption of packets and authentication to improve security. The SNMPv3 USM (User Session Management) allows you to assign 32 User Names whose access is granted via SNMPv3 protocol. You can also define their respective Security Levels, Auth Passwords, Priv Passwords and Permission.

The first one account cannot be deleted, to disable it please go to the **Device** >> **Management** >> **Configure** web page then uncheck the manageable option.



5.22 Device >> Notification >> SNMP Trap

SNMP Trap alerts users to event occurrences in your monitored environment. To enable SNMP Trap, you must add Target IP addresses to the Target IP list. Specify the Community String, Trap Type, MIB, SNMPv3 User Name(If the Trap Type is SNMPv3), UDP port, and Event Level, and click **Add**. If you wish to update or delete a Target IP address, specify the IP address in the Target IP list, and click **Update** or **Delete**. You can add up to 255 SNMP trap target hosts in the list.



Note: The UPSentry 2012 provides SNMPv1, v2c and v3 traps to satisfy most of customers' environments. If you use the SNMPv3 trap, please provide one of the user names in the SNMPv3 USM table.

You can determine what event notifications should be sent to the Target IP(s) from **Event Level**. Three Event Levels are listed as follows:

Information: All event notifications are sent to the target address.

Warning: Both Warning and Alarm event notifications are sent to the target address.

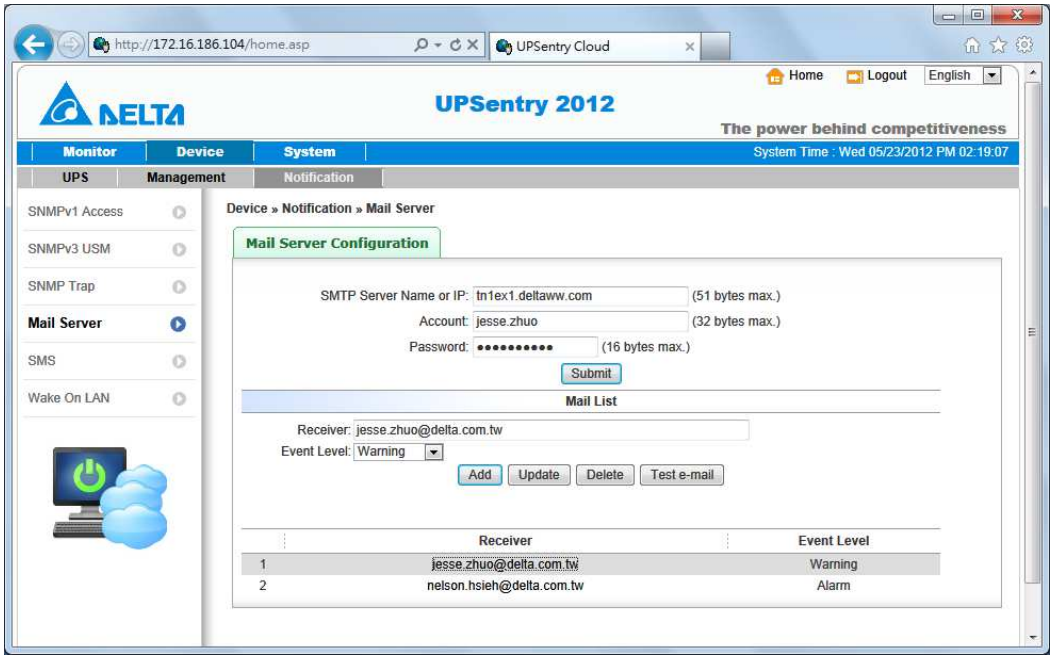
Alarm: Only Alarm event notifications are sent to the target address.

You can go to **Device** → **Management** → **Event Level** to change the event level.

ShutdownAgent 2012: All of the power events will be sent to the assigned ShutdownAgent to inform the complete current UPS status and state. Meanwhile, UPSentry 2012 collect all of the ShutdownAgnet 2012 information through the SNMPv3 "manager" account then display them in the Monitor >> Information >> ShutdownAgent web page.

5.23 Device >> Notification >> Mail Server

The user can set up the SMTP Server and the e-mail receiver so the designated recipient can receive the e-mail notification from the UPSentry 2012 whenever a power event occurs.



SMTP Server: This is the hostname of a SMTP Mail Server used to send the email message from the UPSentry 2012.

Account: The SMTP server login account.

Password: The Mail Server' s login password belong to the assigned account.

Add, Update, Delete: Add, edit or remove the email address that you wish the UPSentry 2012 to send an e-mail to.

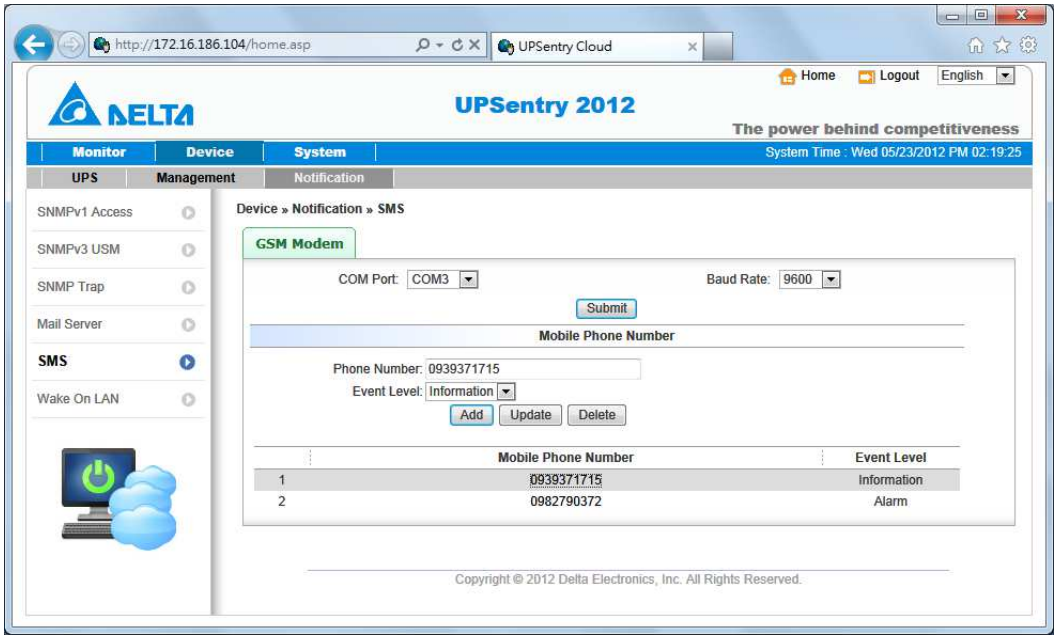
5.24 Device >> Notification >> SMS

To send the SMS message to your mobile phone, you have to connect a GSM modem to your computer through a RS232 COM port. UPSentry 2012 send the SMS through AT command by PDU format. Any GSM modem that support the following 3 AT commands will be able to work with UPSentry 2012:

```
AT
AT+CMGF
AT+CMGS
```

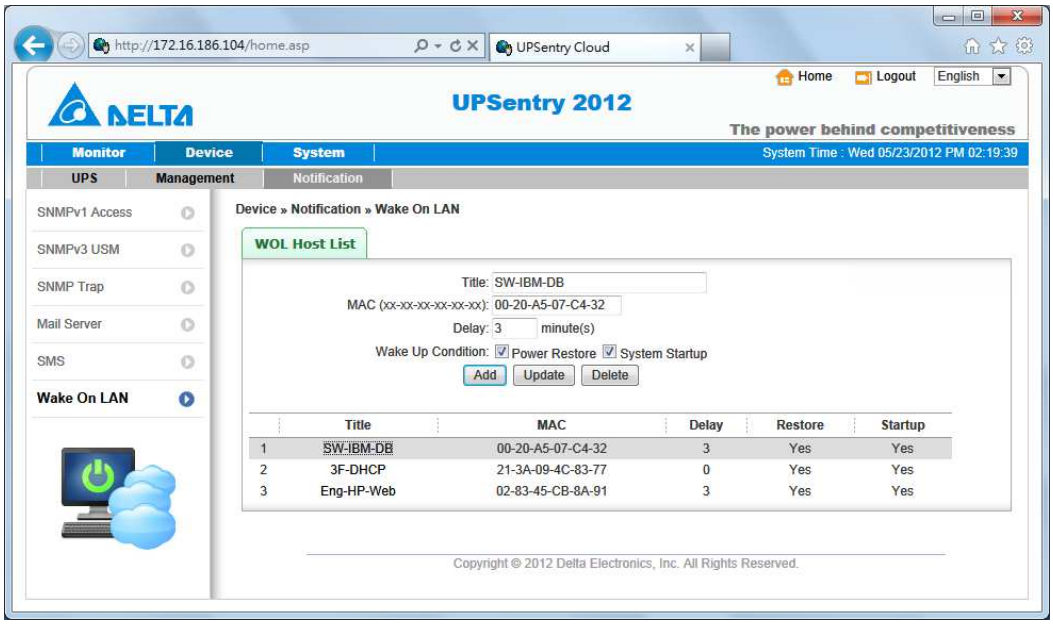
GSM Modem: You have to assign a COM port which is physically connect to the GSM modem.

Mobile Phone Number: Add, edit or delete the mobile phone numbers in the list.



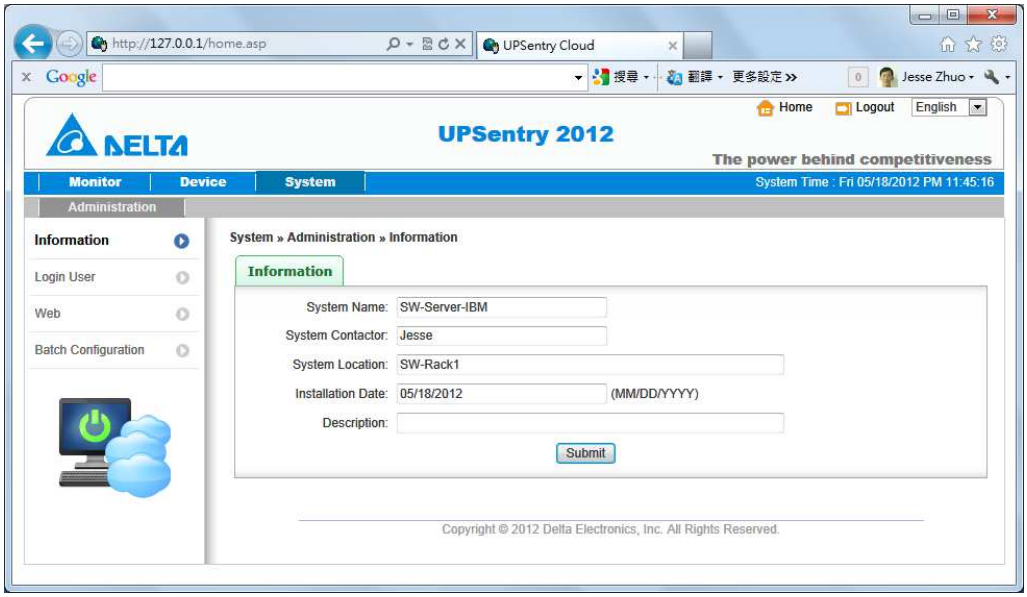
5.25 Device >> Notification >> Wake On LAN

Wake On LAN function can start up clients' PCs from network with MAC address, and you can set up at maximum 256 MAC addresses. The configuration can wake up clients' PCs after power restores or the UPSentry 2012 starts up



5.26 System >> Administration >> Information

Here to assign the system information for the UPSentry 2012, including Installation Date, Location and Description.



5.27 System >> Administration >> Login User

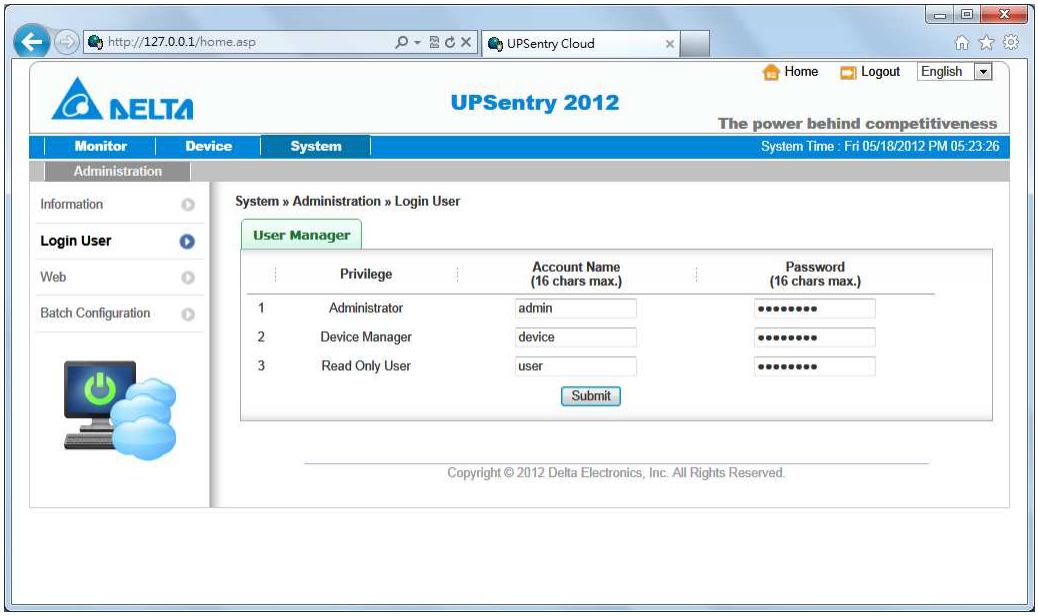
You can manage the login authentication for web interface by assigning 3 different level of users' account and password.

The access permission for the account types are listed as follows:

Administrator: Permitted to modify all settings.

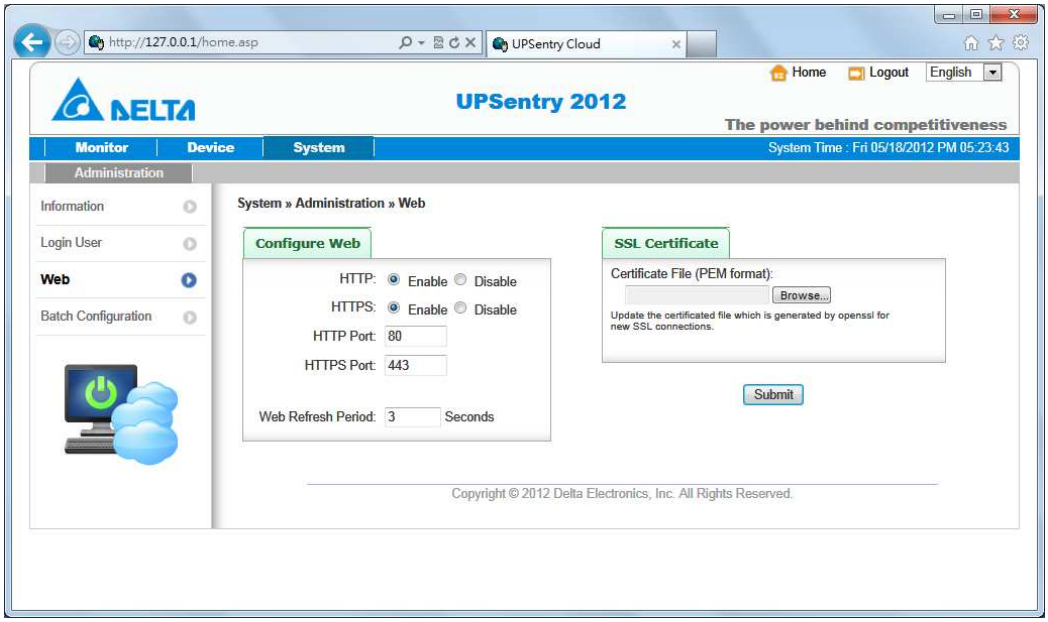
Device Manager: Permitted to modify device-related settings.

Read Only User: Only permitted to observe UPSentry 2012 status.



5.28 System >> Administration >> Web

This menu lets the administrator enable or disable the HTTP/HTTPS communication protocols available in the UPSentry 2012.



HTTP:

Enabling or disabling the HTTP connection with the UPSentry 2012.

HTTPS:

Enabling or disabling the HTTPS connection with the UPSentry 2012.

HTTP Port:

The user may configure HTTP protocol to use a port number other than standard HTTP port (80).

HTTPS Port:

The user may configure HTTPS protocol to use a port number other than standard HTTPS port (443).

Web Refresh Period:

The period of time to update the monitoring web pages. The range is 1~9999 seconds.

SSL Certificate:

To ensure connection security between the UPSentry 2012 and the connecting workstation, SSL certificate can be used to encrypt and secure the integrity of transmitting data.

Certificate File: This allows you to replace your own SSL certificate file. The UPSentry 2012 supports PEM format which is generated by OpenSSL. Click **Choose File** to upload a certificate file.

5.29 System >> Administration >> Batch Configuration

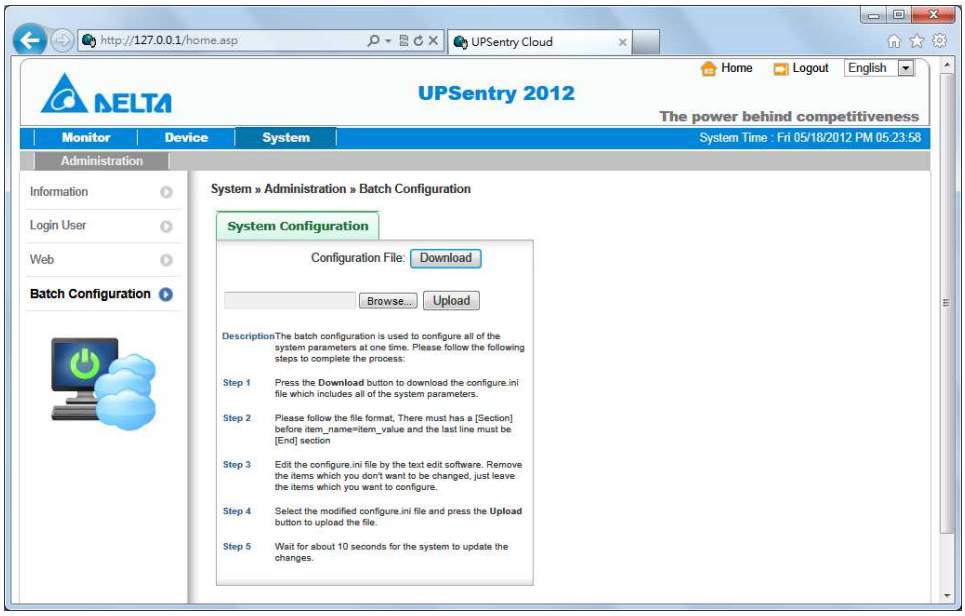
The UPSentry 2012 provides batch configuration to allow quick and effortless setup on multiple UPSentry 2012 hosts. You can duplicate settings by downloading the configuration file from the UPSentry 2012 that you have successfully configured, and upload the configuration files on other hosts.

Download:

Download the config.ini for you to store or edit the configuration file.

Upload:

Upload the configuration file to UPSentry 2012 to apply the change immediately.


http://127.0.0.1/home.asp
UPSentry Cloud
Home
Logout
English
DELTA
UPSentry 2012
The power behind competitiveness
Monitor
Device
System
System Time : Fri 05/18/2012 PM 05:23:58
Administration
Information
Login User
Web
Batch Configuration
System » Administration » Batch Configuration
System Configuration
Configuration File:
Download
Browse...
Upload
Description
The batch configuration is used to configure all of the system parameters at one time. Please follow the following steps to complete the process:
Step 1
Press the Download button to download the configure.ini file which includes all of the system parameters.
Step 2
Please follow the file format, There must has a [Section] before item_name=item_value and the last line must be [End] section
Step 3
Edit the configure.ini file by the text edit software. Remove the items which you don't want to be changed, just leave the items which you want to configure.
Step 4
Select the modified configure.ini file and press the Upload button to upload the file.
Step 5
Wait for about 10 seconds for the system to update the changes.

6. 2008 Server Core Setup for UPSentry 2012

While installation the UPSentry 2012 in the 2008 server core, it requires the following commands to transfer the file and add some rules for firewall.

1. Disable firewall:

   netsh advfirewall set allprofiles state off

2. Enable firewall:

   netsh advfirewall set allprofiles state on

3. Add a remotely shared directory:

   net use e: \\<ip address>\e

4. Open the SNMP Trap UDP 162

   netsh advfirewall firewall add rule name="SNMPTrap" protocol=UDP dir=out localport=162 action = allow

5. Open SNMP Server UDP 161

   netsh advfirewall firewall add rule name="SNMPServer" protocol=UDP dir=in localport=161 action = allow

6. Open the HTTP TCP 80

   netsh advfirewall firewall add rule name="HTTP" protocol=TCP dir=in localport=80 action = allow

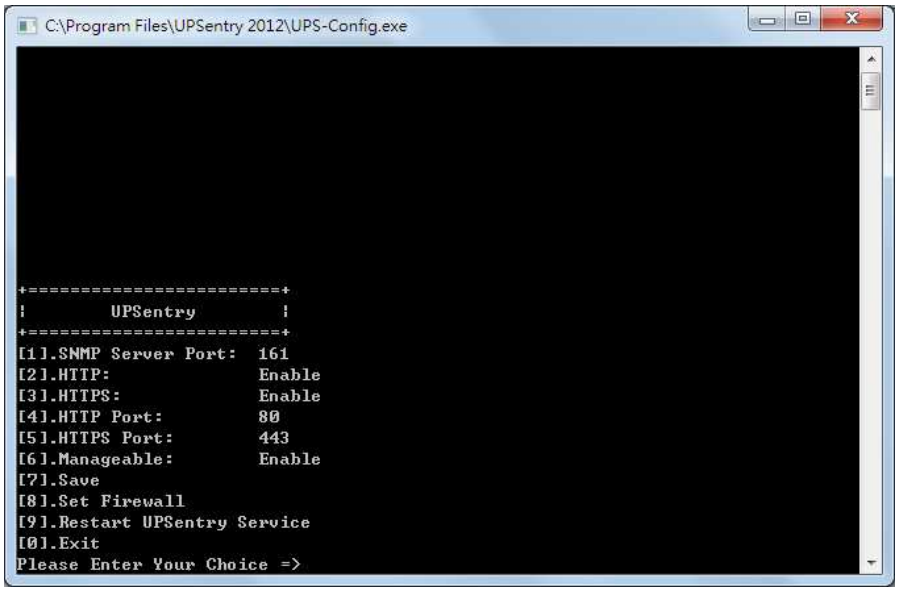
7. Open HTTPS TCP 443

   netsh advfirewall firewall add rule name="HTTPS" protocol=TCP dir=in localport=443 action = allow

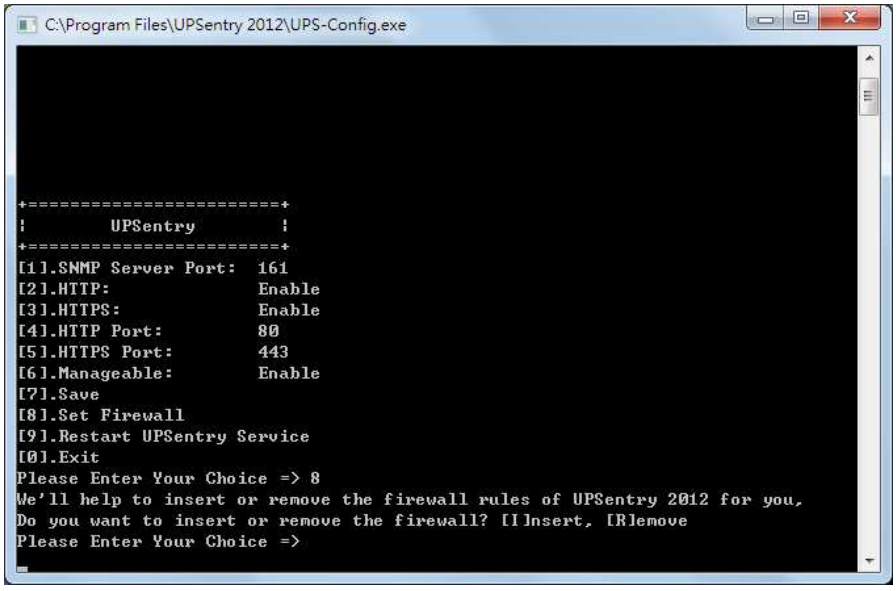
Firstly, put the UPSentry-2012-Setup(x64).exe setup file in the 2008 server directory. If there is no CD-ROM you can set the "Disable firewall" command, "Add a remotely shared directory" command then copy the file from your PC to the 2008 server. Don't forget to set the "Enable firewall" command when complete.

Secondly, follow the chapter 2 to install the UPSentry 2012 in the 2008 server. The last step is use the open HTTP/HTTPS, SNMP Trap/Server port commands to open the necessary which you want.

You can easily run the UPS-Config.exe to configure the basic networking parameters for the web and SNMP network protocols after installation.



Select [8] to help you to insert or remove a firewall rule for the UPSentry 2012.



7. XenServer Setup for UPSentry 2012

To install the UPSentry 2012 in theCitrix XenServer, please see 2.2 For Linux in chapter 2 Installation/ Uninstallation.

To configure the basic networking parameters including the Xen firewall, please see chapter 3 Console Configuration.

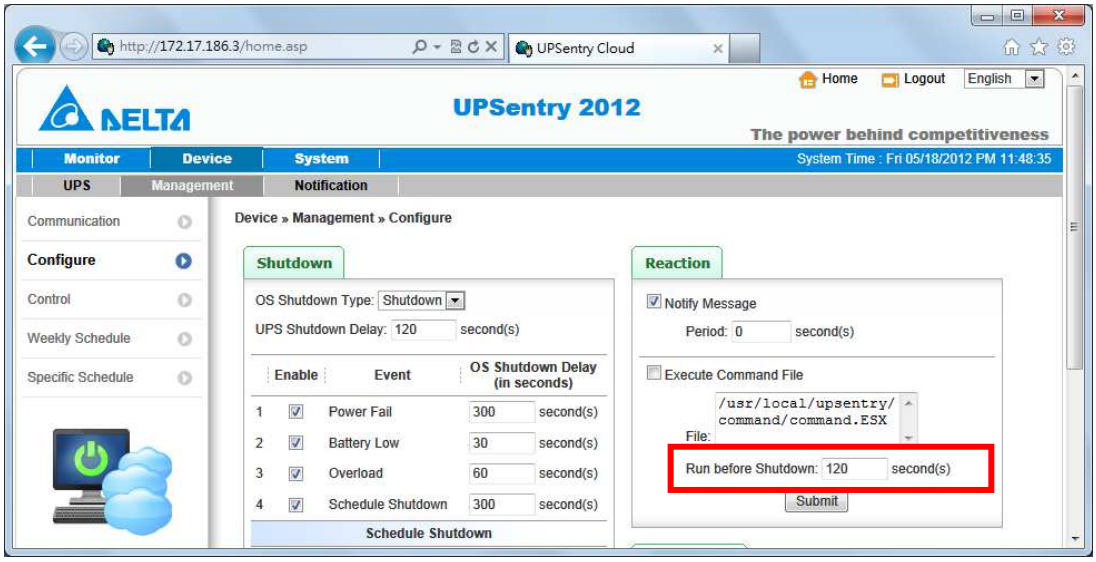
7.1 Install PV driver for Guest OS

To shutdown the guest OS from XenServer, you need to install the PV driver for all of them so as to inform the guest OSes shutdown smoothly.

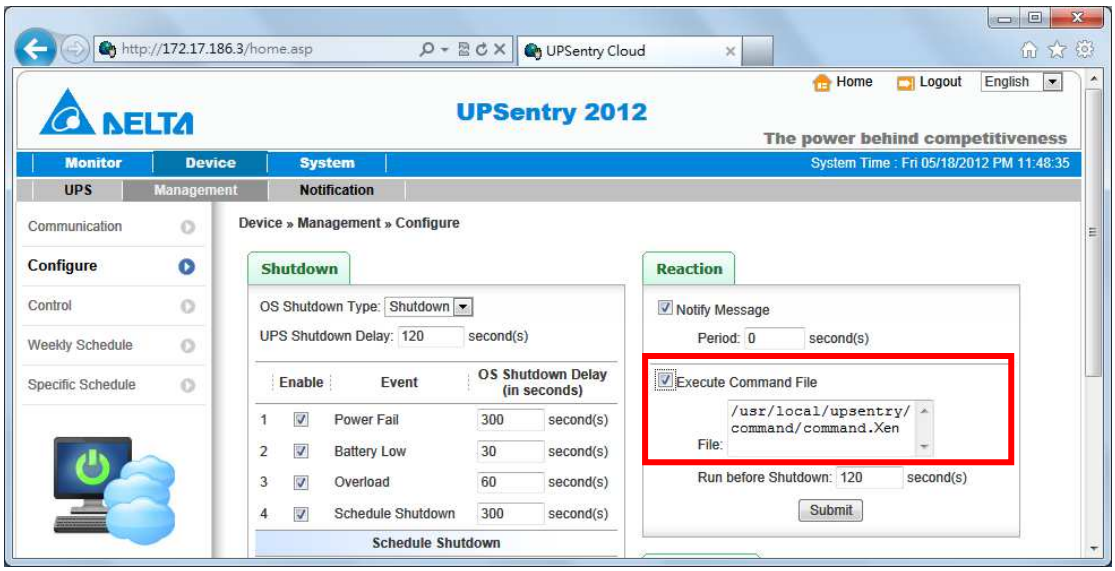
7.2 Configure UPSentry 2012 for Xen

The only thing that you need to do is to estimate the period of time during shutdown all of the guest operating systems which run in the XenServer. Then

1. Login to the web interface of UPSentry 2012 and the account level should greater than or equal to device manager.
2. Goto the Device >> Management >> Configure web page and fill the estimated time in the **Run Before Shutdown** field of the **Reaction** group.



3. We have built the **command.Xen** script file to shutdown the guest OSes, so you have to change the file name from command.ESX to command.Xen in the Execute Command File. Please then check the Execute Command File checkbox to enable shutdown the guest OSes.



4. Press **Submit** button to update your changes.

8. Linux KVM Setup for UPSentry 2012

To install the UPSentry 2012 in the Linux server, please see 2.2 For Linux in chapter 2 Installation/ Uninstallation.

To configure the basic networking parameters including the firewall, please see chapter 3 Console Configuration.

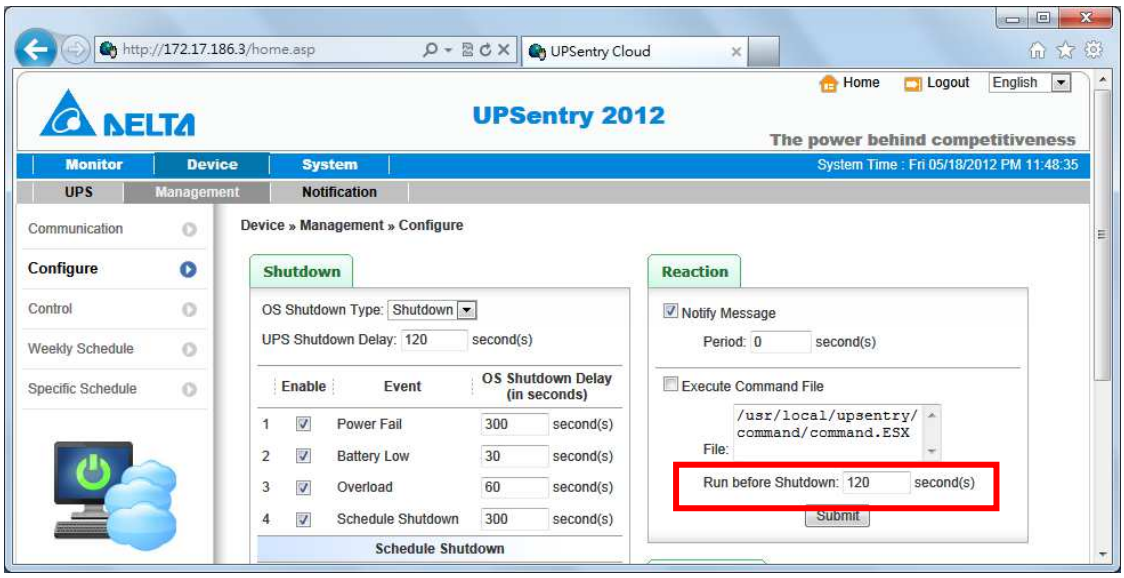
8.1 Install libvirt Tools for KVM

To shutdown the guest OS from Linux server, you have to install the libvirt. UPSentry 2012 calls the virsh to shutdown the running guest OSes.

8.2 Configure UPSentry 2012 for KVM

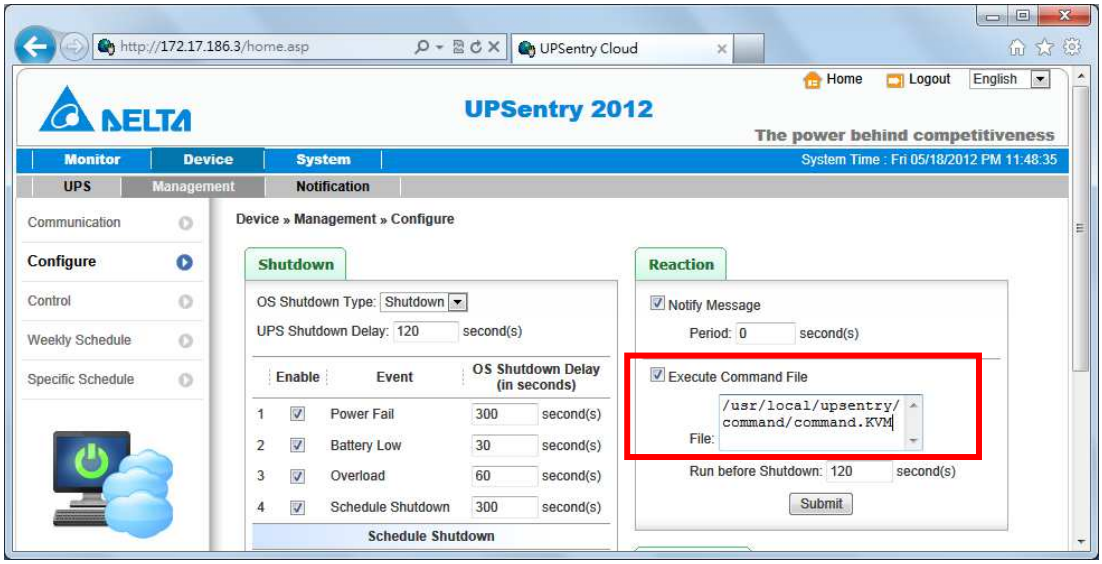
The only thing that you need to do is to estimate the period of time during shutdown all of the guest operating systems which run in the KVM server. Then

1. Login to the web interface of UPSentry 2012 and the account level should greater than or equal to device manager.
2. Goto the Device >> Management >> Configure web page and fill the estimated time in the **Run Before Shutdown** field of the **Reaction** group.



3. We have built the **command.KVM** script file to shutdown the guest OSes, so you have to change the file name from command.ESX to command.KVM

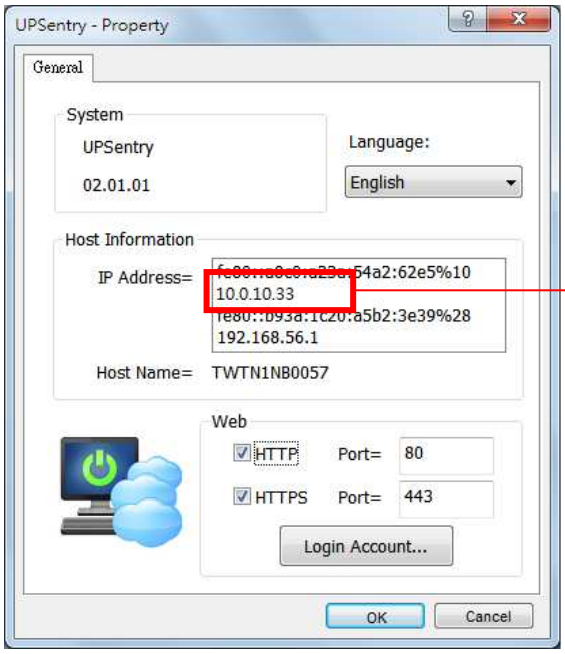
in the Execute Command File. Please then check the Execute Command File checkbox to enable shutdown the guest OSes.



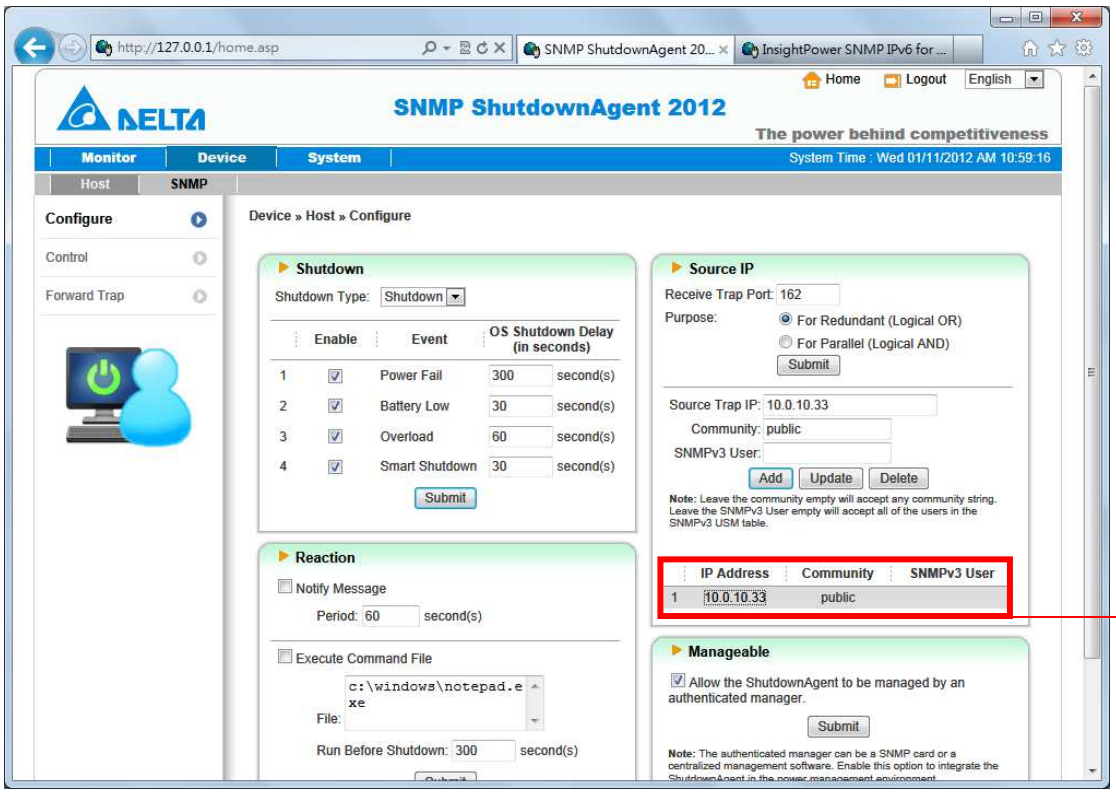
4. Press **Submit** button to update your changes.

9. Work with the ShutdownAgent 2012

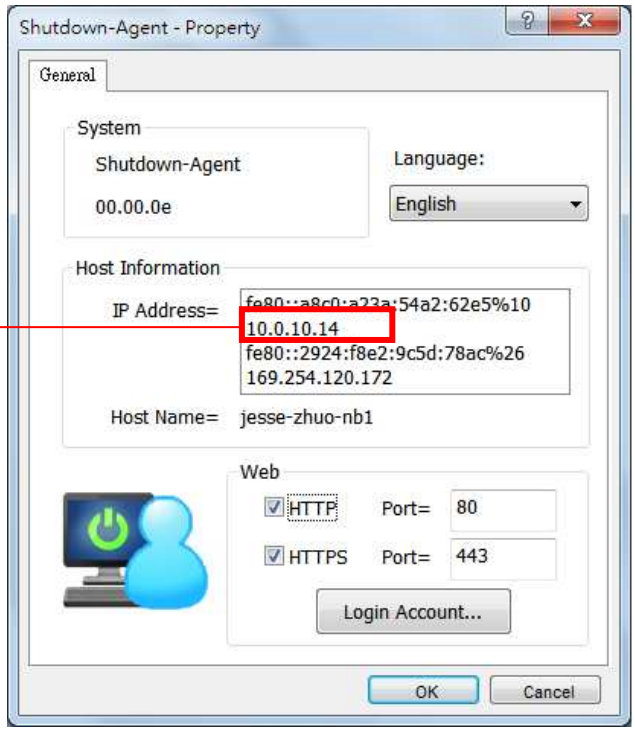
1. Open the UPSentry 2012 property from Windows task bar to get the IP address of the server.

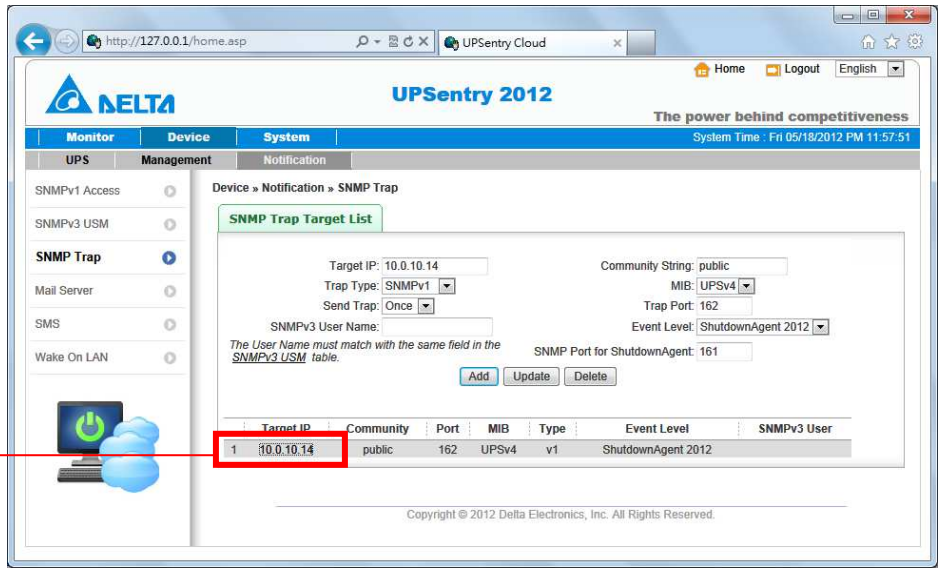


2. Login to the ShutdownAgent 2012 web and add the SNMP IP address and the trap port as the following to receive the SNMP trap from the UPSentry 2012.



3. Open the ShutdownAgnet 2012 property from Windows task bar to get the IP address of the server.



4. Back to the UPSentry 2012 web page, add the IP address of ShutdownAgent 2012 to the SNMP Trap table. Please select the "ShutdownAgent 2012" for the Event Level and UPSV4 or UPSv5 as the Trap MIB.

5. If you enable the manageable option in the ShutdownAgent then you can observe all of the shutdown status, countdown timer and shutdown reason from the UPSentry 2012. The web page is on the Monitor >> Information >> ShutdownAgent.