

Intelligent PDU Web Interface

User's Manual

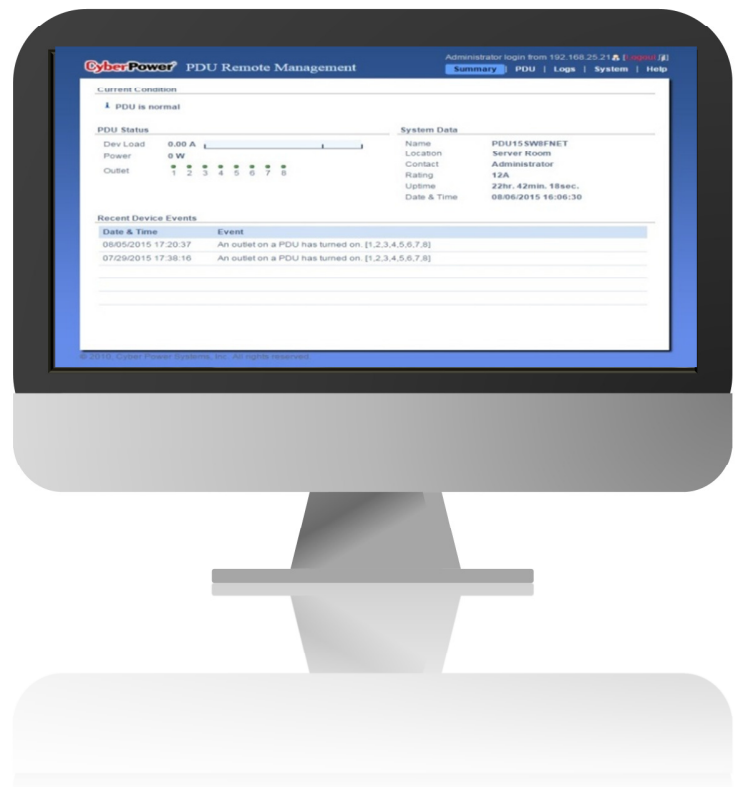


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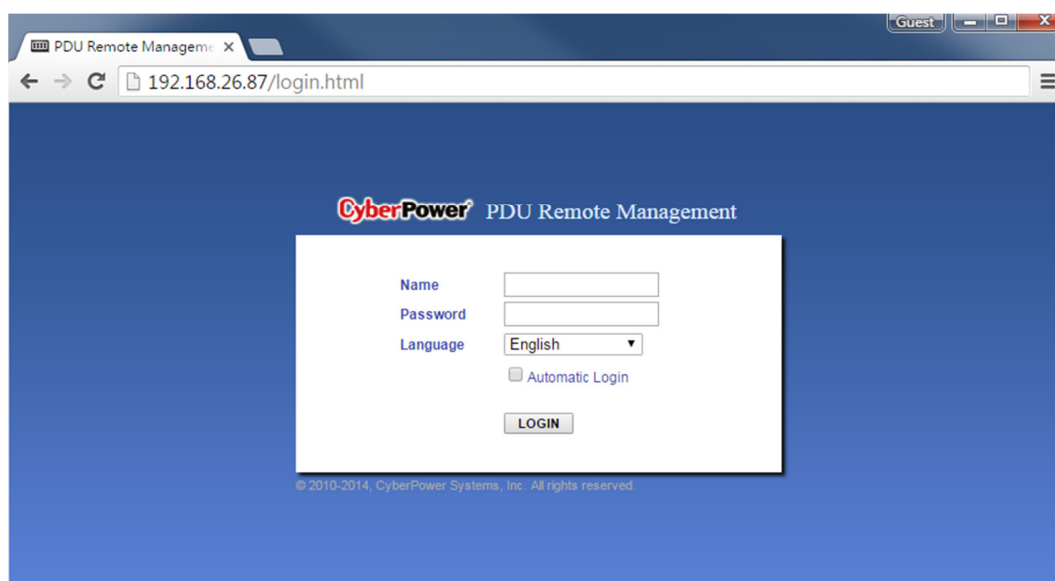
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1. Introduction

1.1 Brief Introduction to Web Interfaces

The CyberPower Power Distribution Unit Web Interface gives users all the features they need to configure, manage, and monitor the PDU via a Web browser. With this easy-to-navigate interface, users can monitor the load level, manage the outlets, set power alerts, and complete many other tasks in an intuitive manner.

1.2 How to Log In



1. Open a Web browser.
2. Enter the IP address of the CyberPower PDU in the Browser Address Bar, and then press ENTER.
Note: For the IP address, users can refer to the LCD screen of the PDU.
3. Enter the information for the **User Name** and **Password** fields.
There are two types of user accounts.

Account Type	Default User Name	Default Password	Authorization
Administrator	cyber	cyber	View, access, and control all the settings, including enabling/disabling the Viewer account.
Viewer	device	cyber	View all the settings.

4. In the **Language** field, select **English** or **French**, and click **LOGIN** to open the [Summary Tab](#).

1.3 General Setting

These are the basic settings for the PDU.

1.3.1 Date and Time Setting

The date and time can be set manually or synchronized with a NTP (Network Time Protocol) server. All time-related configurations are based on this setting. See **System Tab > General > Date & Time**.

System Tab > General > Date & Time

Item	Definition
Current Settings	
Date & Time	The current date and time.
Status	Whether the date and time setting is updated by manual input or by the NTP (Network Time Protocol) server.
Next NTP Update	Synchronizes with Update Interval .
System Time Configuration	
Time Zone	The options for the time zone.
Using NTP Server	*Primary NTP Server: Users enter the IP address/domain name of the NTP server and choose local time zone based on their

Item	Definition
	<p>location.</p> <p>*Secondary NTP Server: Users enter the IP address/domain name of the NTP server and choose local time zone based on their location.</p> <p>*Update Interval: The frequency for updating the date and time from the NTP server.</p> <p>Select the Update right now option to update immediately.</p>
Manual Setup	<p>*Date: Enter the date in the designated format.</p> <p>*Time: Enter the time in the designated format.</p>

1.3.2 Daylight Saving Time

Users adjust the clock daylight saving time according to their location. See [System Tab > General > Daylight Saving Time](#).

System Tab > General > Daylight Saving Time

CyberPower PDU Remote Management Administrator login from 192.168.28.62 [Logout]

Summary | PDU | Logs | **System** | Help

Daylight Saving Time

DST Configuration

☒ Disable

☐ Tradition US DST time (Second Sunday in March to First Sunday in November)

☐ Manual DST Date Time

Start: 02:00, the Second, Monday, of March

End: 02:00, the First, Monday, of November

Apply Reset

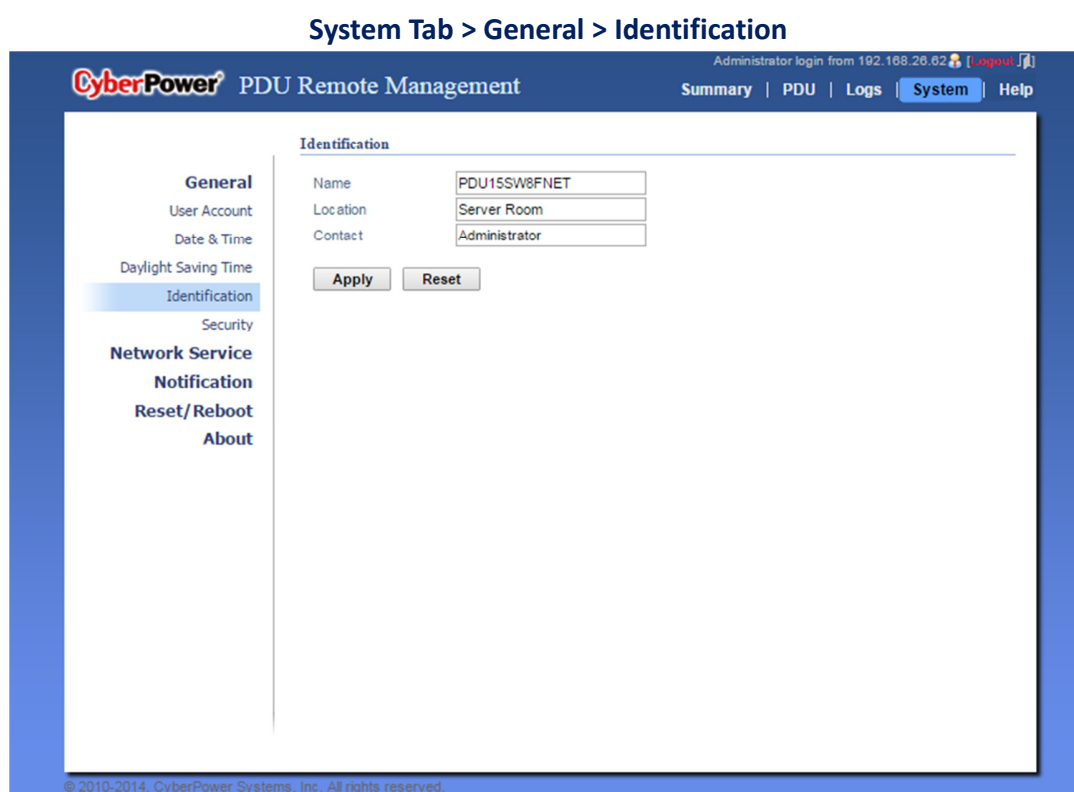
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Item	Definition
DST Configuration	
Disable	Disable the DST function.

Item	Definition
Traditional US DST Time	Start from the second Sunday in March to the first Sunday in November.
Manual DST Date Time	Select the start/ end time using the dropdown menu.

1.3.3 Device Identification

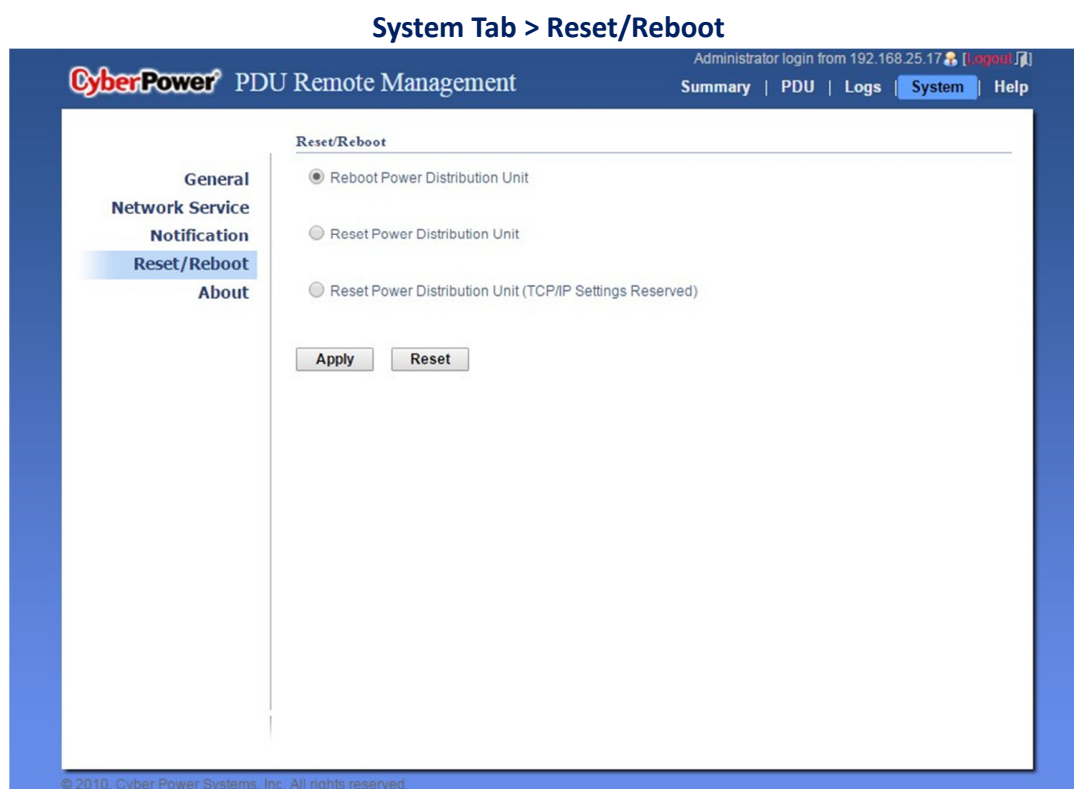
Users assign the device's name, location, and the person to contact about issues. See [System Tab > General > Identification](#).



Item	Definition
Name	The name entered by the user to identify the PDU.
Location	The PDU location entered by the user.
Contact	The person to be contacted about issues. Entered by the user.

1.3.4 Device Reset/Reboot

Users can reboot the PDU or reset all the settings to defaults. See [System Tab > Reset/Reboot](#).



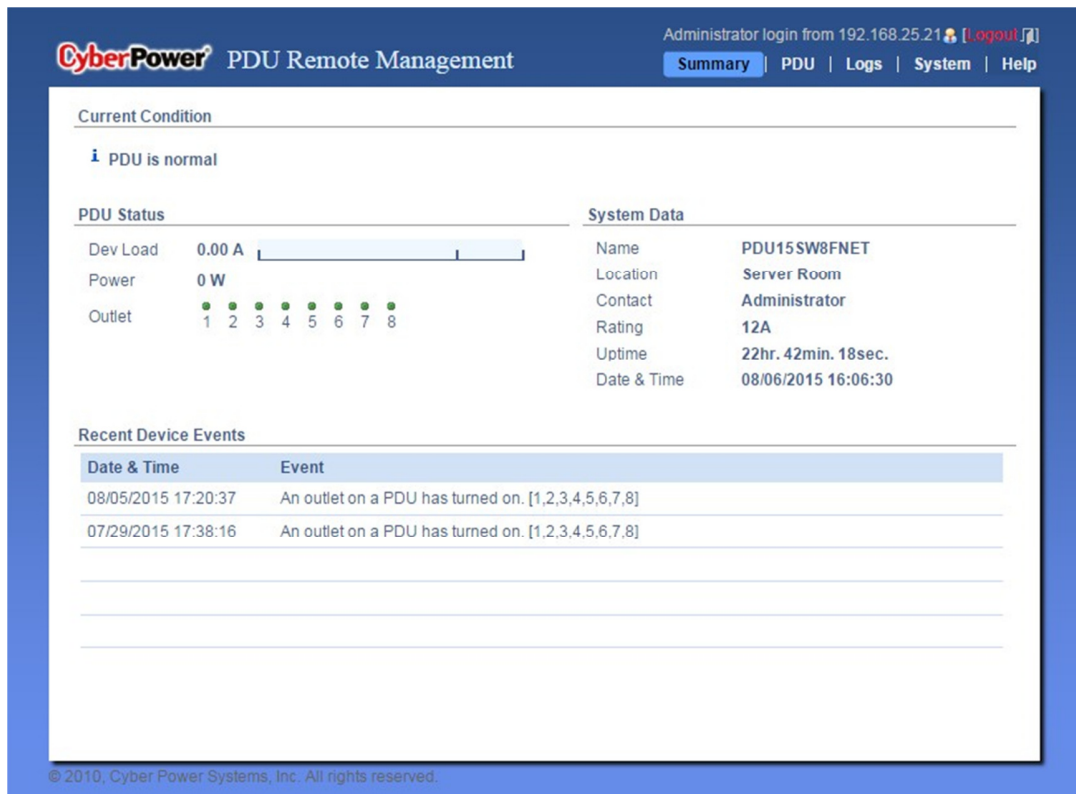
Item	Definition
Reboot Power Distribution Unit	Restart the PDU without changing the outlet state.
Reset Power Distribution Unit	Reset the PDU to its factory default setting and restart it. This action does not change the outlet state.
Reset Power Distribution Unit (TCP/IP Settings Reserved)	Reset the PDU to its factory default setting while reserving the TCP/IP settings, and restart the PDU. This action does not change the outlet state.

2. Advanced Power Management

2.1 Remote Monitoring

Users can see real-time readings of PDU vitals such as device load, power consumption, and outlet status for an overview of the current PDU status. See [Summary Tab](#) and [PDU Tab > Status](#).

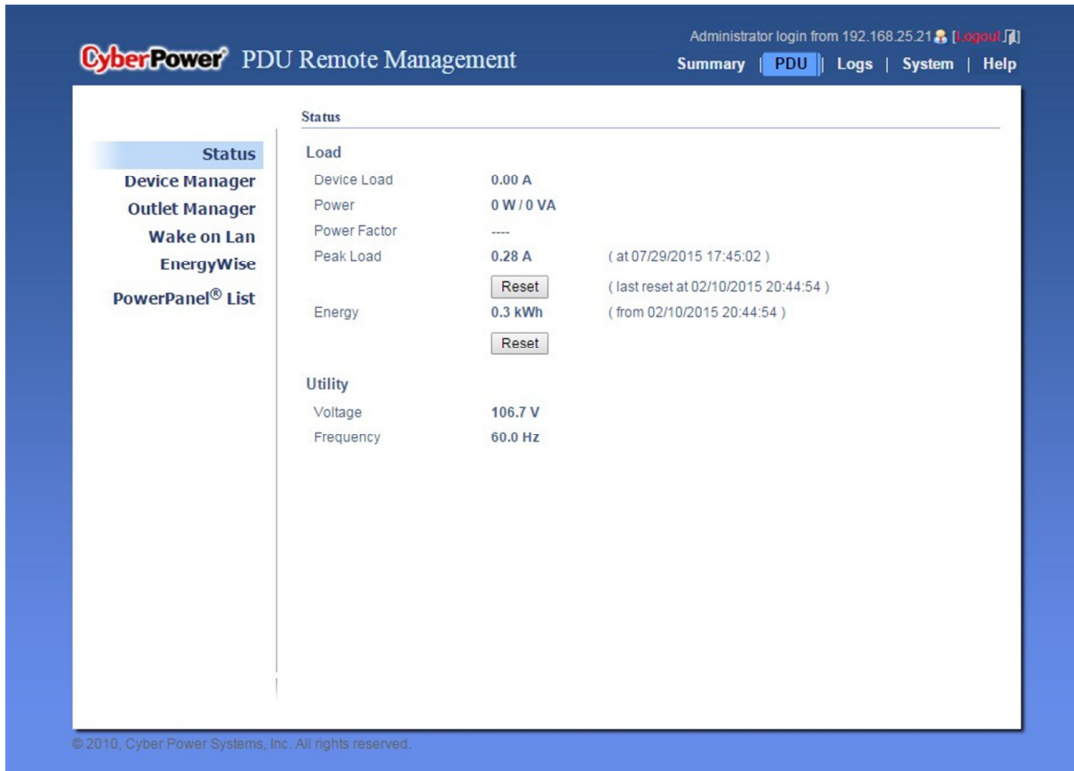
Summary Tab



Item	Definition
Current Condition	Operating condition of the PDU.
PDU Status	
Dev Load	Load current of the device, measured in Amps.
Power	Load power of the device, measured in Watts.
Outlet	The on/off status of each outlet. The green light icon indicates that the outlet is on and providing power. This light will go off when the outlet turns off.
System Data	
Name	The name entered by the user to identify the PDU. See System > General > Identification .

Item	Definition
Location	The location of the PDU, entered by user. See System > General > Identification .
Contact	The person accountable for the maintenance of the PDU. Entered by the user. See System > General > Identification .
Rating	Current rating of the PDU, measured in Amps.
Uptime	The amount of time the system has been working since it was turned on.
Date & Time	System time of the PDU. For configuration settings, see System > General > Date & Time .
Recent Device Events	A list of the most recent five device events. All events are related to the configuration change.

PDU Tab > Status



CyberPower PDU Remote Management

Administrator login from 192.168.25.21 [Logout]

Summary PDU Logs System Help

Status

Load

Device Load 0.00 A

Power 0 W / 0 VA

Power Factor ----

Peak Load 0.28 A (at 07/29/2015 17:45:02)

Reset (last reset at 02/10/2015 20:44:54)

Energy 0.3 kWh (from 02/10/2015 20:44:54)

Reset

Utility

Voltage 106.7 V

Frequency 60.0 Hz

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Item	Definition
Load	
Device Load	Load current of the connected device(s), measured in Amps.
Bank Load**	Load current of the bank, measured in Amps.
Power	Load power of the connected device(s), measured in Watts and Volt-Amperes.
Power Factor	Load power factor of the connected device(s).
Peak Load	Maximum load current recorded and the time of occurrence. Click Reset to set the value to zero.
Energy	Total energy consumed by the connected device(s) from the reset date, measured in kWh. Click Reset to set the value to zero.
Utility	
Voltage	Voltage of the utility power.
Frequency	Frequency of the utility power.

**Only available for some models.

2.2 Visible Power Consumption

With comprehensive energy measurement data, users can gain more visibility to the total power usage of a power strip, as well as estimate the energy cost and CO2 emissions. The energy-trend report also helps users analyze their power utilization and to review the history of power conditions. See [Logs Tab > Status Records](#), [Logs Tab > Graphing](#), [Logs Tab > Energy Records](#), and [Logs Tab > Maintenance](#).

Logs Tab > Status Records

Date & Time	Device max (A)	Device (A)	Voltage (V)	Power max (kW)	Power (kW)	Energy (kWh)	Temp. (°C)	Hum. (%RH)
08/11/2015 17:58:21	0.00	0.00	105.7	0.000	0.000	0.3	N/A	N/A
08/11/2015 16:58:21	0.00	0.00	105.5	0.000	0.000	0.3	N/A	N/A
08/11/2015 15:58:22	0.00	0.00	106.2	0.000	0.000	0.3	N/A	N/A
08/11/2015 14:58:22	0.00	0.00	106.8	0.000	0.000	0.3	N/A	N/A
08/11/2015 13:58:22	0.00	0.00	106.2	0.000	0.000	0.3	N/A	N/A
08/11/2015 12:58:22	0.00	0.00	105.9	0.000	0.000	0.3	N/A	N/A
08/11/2015 11:58:22	0.00	0.00	106.1	0.000	0.000	0.3	N/A	N/A
08/11/2015 10:58:22	0.00	0.00	106.2	0.000	0.000	0.3	N/A	N/A
08/11/2015 09:58:22	0.00	0.00	106.0	0.000	0.000	0.3	N/A	N/A
08/11/2015 08:58:23	0.00	0.00	106.7	0.000	0.000	0.3	N/A	N/A
08/11/2015 07:58:23	0.00	0.00	106.5	0.000	0.000	0.3	N/A	N/A
08/11/2015 06:58:23	0.00	0.00	105.6	0.000	0.000	0.3	N/A	N/A
08/11/2015 05:58:23	0.00	0.00	106.8	0.000	0.000	0.3	N/A	N/A
08/11/2015 04:58:23	0.00	0.00	107.3	0.000	0.000	0.3	N/A	N/A
08/11/2015 03:58:23	0.00	0.00	107.2	0.000	0.000	0.3	N/A	N/A

Item	Definition
Device Max (A)	The maximum load current of the connected device(s) or bank during a specific time interval, measured in Amps. This interval can be set in Logs Tab > Maintenance .
Device (A)	Load current of the connected device(s) or bank, measured in Amps.
Voltage (V)	Voltage of the utility power.
Power max (kW)	Maximum load power of the connected device(s) during a specific time interval, measured in kW. The interval can be set in Logs Tab > Maintenance .
Power (kW)	Load power of the connected device(s), measured in kW.
Energy (kWh)	Total energy consumed by the connected device(s) during a specific time interval, measured in kWh. This interval can be set in Logs Tab > Maintenance .

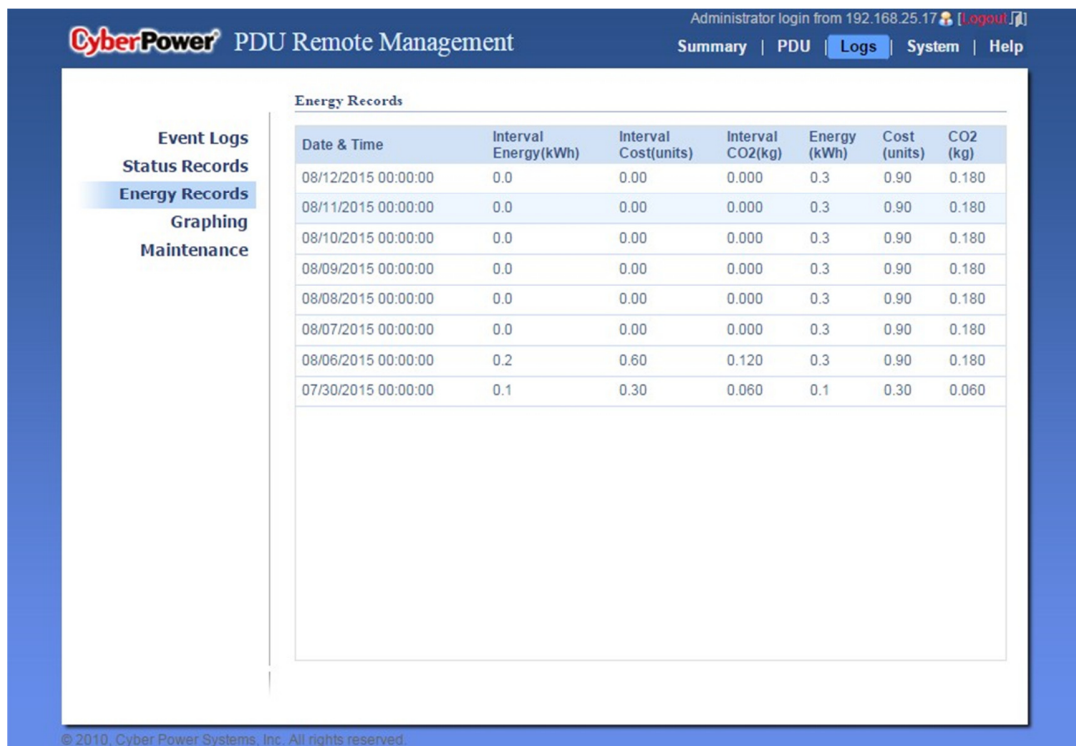
Item	Definition
Temp. (°C/°F)	The temperature detected by the Environment Sensor, measured in °C or °F.
Hum. (%RH)	The humidity detected by the Environment Sensor, measured as a percentage of relative humidity.

Logs Tab > Graphing

Item	Definition
Graph Period	The time period is used to create a retroactive graph of the status records. A large time period will require more time to render the graph.
Graph Data	The data is used to create a graph of the status records. Up to five data points can be selected. A large number of data selected will require more time to render the graph.
Graph Node	Select the Display All Nodes in Detail option to display the selected data points along the graph. When the cursor is moved to an individual data point, information about that point will be shown. If this option is not selected, the graph will show only the line (without the points), so less time is needed to render.

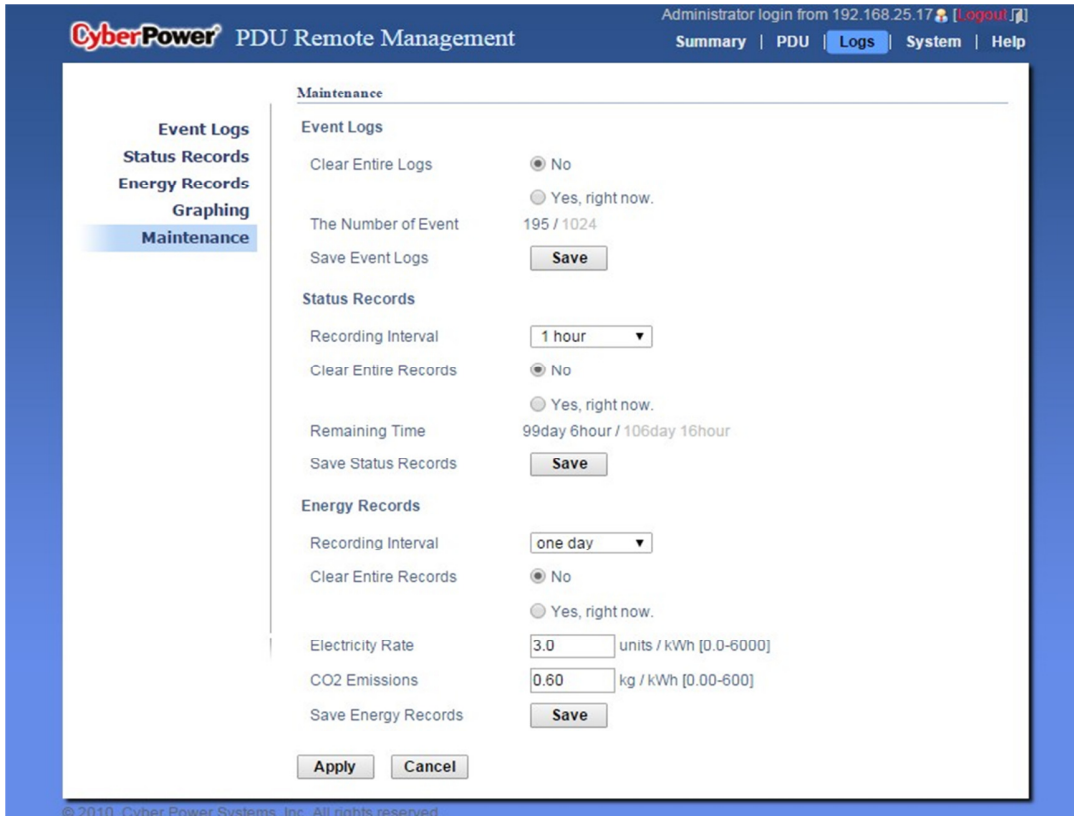
Item	Definition
Launch Graph in New Window	A detailed view of the graph opens in a new browser window.

Logs Tab > Energy Records



Item	Definition
Interval Energy (kWh)	Energy consumed by connected device(s) during a specific time interval, measured in kWh. This interval can be set in Logs Tab > Maintenance .
Interval Cost (units)	Cost of the energy consumed by the connected device(s) during a specific time interval, equal to <i>Electricity Rate</i> multiplied by <i>Interval Energy</i> . This interval can be set in Logs Tab > Maintenance .
Interval CO2 (kg)	Equivalent CO2 emission of the connected device(s) during a specific time interval, equal to <i>CO2 Emissions</i> multiplied by <i>Interval Energy</i> . This interval can be set in Logs Tab > Maintenance .
Energy (kWh)	Accumulated <i>Interval Energy</i> since the last reset.
Cost (units)	Accumulated <i>Interval Cost</i> since the last reset.
CO2 (kg)	Accumulated <i>Interval CO2</i> since the last reset.

Logs Tab > Maintenance



CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout] [i]

Summary | PDU | **Logs** | System | Help

Maintenance

Event Logs

Clear Entire Logs ☒ No ☐ Yes, right now.

The Number of Event 195 / 1024

Save Event Logs **Save**

Status Records

Recording Interval 1 hour ▼

Clear Entire Records ☒ No ☐ Yes, right now.

Remaining Time 99day 6hour / 106day 16hour

Save Status Records **Save**

Energy Records

Recording Interval one day ▼

Clear Entire Records ☒ No ☐ Yes, right now.

Electricity Rate 3.0 units / kWh [0.0-6000]

CO2 Emissions 0.60 kg / kWh [0.00-600]

Save Energy Records **Save**

Apply **Cancel**

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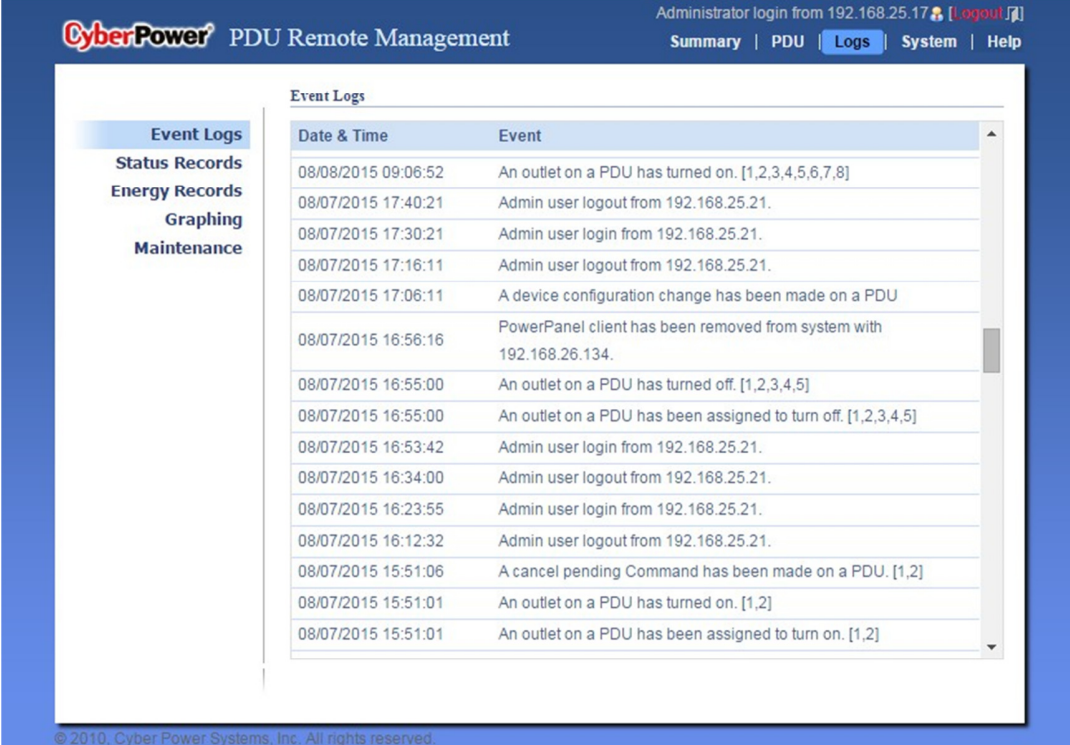
Item	Definition
Event Logs	
Clear Entire Logs	Clear the existing event logs.
The Number of Event	The number of the existing event logs and the maximum number of the event logs that can be recorded.
Save Event Logs	Save the existing event logs as a text file.
Status Records	
Recording Interval	The frequency to record the status data. A smaller interval will provide more recordings, but the recordings are overwritten in a shorter period of time. A larger interval will provide fewer recordings, but the recordings are overwritten in a longer period of time.
Clear Entire Records	Clear the existing status records.
Remaining Time	The time that records have been kept. A smaller recording interval leads to less remaining time while a larger recording interval leads to more remaining time.

Item	Definition
Save Status Records	Save the status records as a text file.
Energy Records	
Recording Interval	The frequency to record the energy data.
Clear Entire Records	Clear the existing energy records.
Electricity Rate	The cost (units) of energy per unit of energy consumed (kWh). Unit is a monetary value.
CO2 Emissions	The equivalent CO2 emission (kg) per unit of energy consumed (kWh).
Save Energy Records	Save the existing energy records as a text file.

2.3 Event Logging

Users can view all the events, including log in/out records and configuration changes. The timestamp is recorded in a 24-hour format. Users can clear the existing event logs in [Logs Tab > Maintenance](#). See [Logs Tab > Event Logs](#).

Logs Tab > Event Logs



The screenshot shows the CyberPower PDU Remote Management web interface. The top navigation bar includes the CyberPower logo, the title 'PDU Remote Management', and a user status bar indicating 'Administrator login from 192.168.25.17' with a 'Logout' link. The main navigation menu on the left includes 'Event Logs' (selected), 'Status Records', 'Energy Records', 'Graphing', and 'Maintenance'. The top right navigation bar includes 'Summary', 'PDU', 'Logs' (selected), 'System', and 'Help'.

The 'Event Logs' section displays a table with the following data:

Date & Time	Event
08/08/2015 09:06:52	An outlet on a PDU has turned on. [1,2,3,4,5,6,7,8]
08/07/2015 17:40:21	Admin user logout from 192.168.25.21.
08/07/2015 17:30:21	Admin user login from 192.168.25.21.
08/07/2015 17:16:11	Admin user logout from 192.168.25.21.
08/07/2015 17:06:11	A device configuration change has been made on a PDU
08/07/2015 16:56:16	PowerPanel client has been removed from system with 192.168.26.134.
08/07/2015 16:55:00	An outlet on a PDU has turned off. [1,2,3,4,5]
08/07/2015 16:55:00	An outlet on a PDU has been assigned to turn off. [1,2,3,4,5]
08/07/2015 16:53:42	Admin user login from 192.168.25.21.
08/07/2015 16:34:00	Admin user logout from 192.168.25.21.
08/07/2015 16:23:55	Admin user login from 192.168.25.21.
08/07/2015 16:12:32	Admin user logout from 192.168.25.21.
08/07/2015 15:51:06	A cancel pending Command has been made on a PDU. [1,2]
08/07/2015 15:51:01	An outlet on a PDU has turned on. [1,2]
08/07/2015 15:51:01	An outlet on a PDU has been assigned to turn on. [1,2]

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2.4 Power Protection

The configurable load threshold can be set to prevent an overload condition. Coldstart and system configurations are also offered for different user needs. See [PDU Tab > Device Manager](#).

PDU Tab > Device Manager

CyberPower PDU Remote Management Administrator login from 192.168.25.21 [Logout]

Summary | **PDU** | Logs | System | Help

Device Manager

Status

- Device Manager**
- Outlet Manager
- Wake on Lan
- EnergyWise
- PowerPanel® List

Load Configuration

Overload Threshold A

Near Overload Threshold A

Low Load Threshold A

Outlet Restriction

ColdStart Configuration

ColdStart State ☐ Previous State ☒ All On

ColdStart Delay ☒ Immediate ☐ Wait Second(s) ☐ Never

System Configuration

Idle Time

Local Outlet Control ☒ Enable

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Item	Definition
Load Configuration	
Overload Threshold	Set the value for the total current placed on the PDU that will signal an overload warning. Must be higher than <i>Near Overload Threshold</i> and lower than the <i>PDU Rating</i> in the Summary Tab .
Near Overload Threshold	Set the value for the total current placed on the PDU that will signal a near overload warning. Must be higher than <i>Low Load Threshold</i> and lower than <i>Overload Threshold</i> .
Low Load Threshold	Set the value for the total current placed on the PDU that will signal a low load warning. Must be lower than <i>Near Overload Threshold</i> .

Item	Definition
Outlet Restriction**	<p>When current load exceeds the corresponding threshold, no outlets will be allowed to turn on.</p> <p>*None: Users can turn on an outlet even if the device is in Near Overload or Overload state.</p> <p>*On Near Overload: Users cannot turn on an outlet when the device is in Near Overload or Overload state.</p> <p>*On Overload: Users cannot turn on an outlet when the device is in Overload state.</p>
ColdStart Configuration	
ColdStart State	<p>*Previous State: Outlets will return to the same state (on or off) they were in prior to the PDU turning off. The <i>ColdStart Delay</i> setting will apply when the PDU resumes power.</p> <p>*All On: All outlets will turn on when power is restored to the PDU and adhere to the configured <i>ColdStart Delay</i> setting.</p>
ColdStart Delay	<p>*Immediate: Outlets will be turned on immediately when power is restored to the PDU.</p> <p>*Wait: Outlets will be turned on according to each outlet's <i>Power On Delay</i> (as shown in PDU Tab > Outlet Manager > Configuration) when power is restored to the PDU.</p> <p>Valid values are within the range of 1 to 300 seconds.</p> <p>*Never: The outlet(s) will not turn on when power is restored to the PDU.</p>
System Configuration	
Idle Time	The PDU LCD screen will turn off automatically after it remains idle for the selected period of time.
Local Outlet Control	Enable or disable local outlet control function that turns on/off the outlet via the PDU LCD screen.

**For some models, the Outlet Restriction only shows in the [Bank Manager Window](#).

2.5 Event Action Notification

Users decide the event actions for which they receive notifications. When a certain event happens, an automatic notification will be sent to users so that they can make timely decisions to prevent potential problems. See [System Tab > Notification](#).

System Tab > Notification > Event Action

The screenshot shows the CyberPower PDU Remote Management web interface. The top navigation bar includes 'Summary', 'PDU', 'Logs', 'System' (selected), and 'Help'. The sidebar on the left contains links for 'General', 'Network Service', 'Notification' (selected), 'Event Action', 'SMTP Server', 'E-mail Recipients', 'Trap Receivers', 'SMS Service', 'SMS Recipients', 'Reset/Reboot', and 'About'.

The main content area is titled 'Event Action' and is divided into two columns: 'Device Events' and 'System Events'. Under 'Device Events', there are links for 'PDU Status', 'Power Status', 'Configuration', and 'Communication'. Under 'System Events', there are links for 'Outlet Control', 'Outlet Status', 'Environment Sensor', 'Security', 'System Information', and 'PowerPanel'.

Below these columns is a table with the following structure:

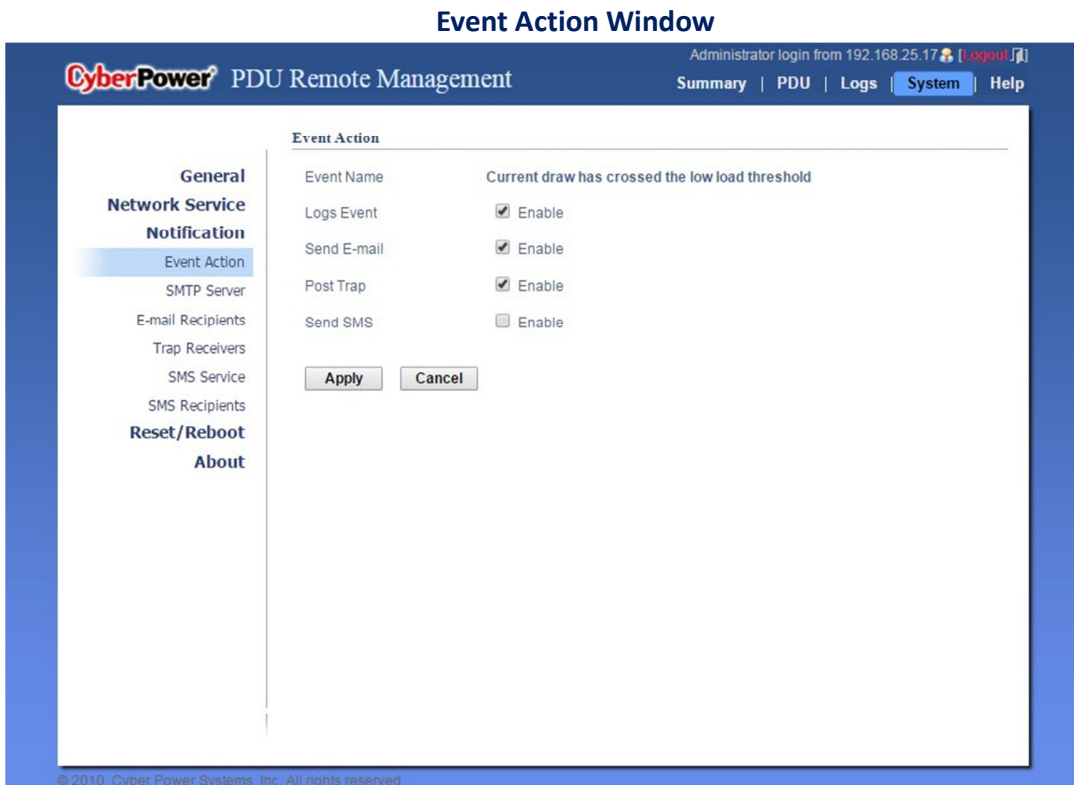
Event	Log	E-mail	Trap	SMS
Current draw has crossed the low load threshold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The low load condition on a PDU has been cleared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Current draw has cross the near overload threshold	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The near overload condition on a PDU has been cleared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Current draw has crossed the overload condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The overload condition on a PDU has been cleared	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A red rectangle highlights the 'Event' column of the table.

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Click the **Event** field to open the Event Action Window.

Event Action Window



Administrator login from 192.168.25.17 [Logout] [?]

Summary | PDU | Logs | **System** | Help

General

Network Service

Notification

Event Action

SMTP Server

E-mail Recipients

Trap Receivers

SMS Service

SMS Recipients

Reset/Reboot

About

Event Action

Event Name: Current draw has crossed the low load threshold

Logs Event: ☒ Enable

Send E-mail: ☒ Enable

Post Trap: ☒ Enable

Send SMS: ☐ Enable

Apply Cancel

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The Event Action Window enables users to modify the notification method.

Item	Definition
Logs Event	Record the device event in the <i>Event Logs</i> in Logs Tab > Maintenance .
Send E-mail	Send an email to a specific user. An available SMTP server is necessary.
Post Trap	Send a SNMP trap to a specific IP address.
Send SMS	Send a short message to a specific mobile phone number. An available Short Message Service (SMS) provider is needed.

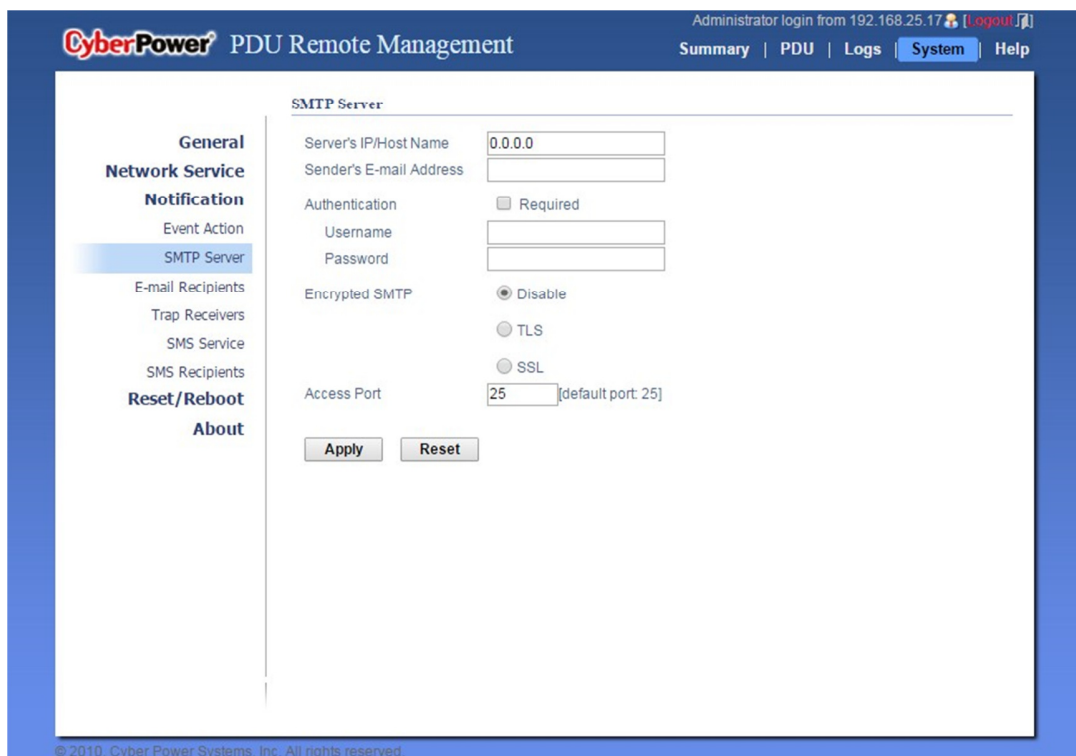
2.5.1 Event Action Recipient Settings

The following provides notification receiver configurations.

2.5.1.1 E-mail Notification

Set the proper SMTP server settings so that users can receive an email when a specific event occurs. See **System Tab > Notifications > SMTP Server**.

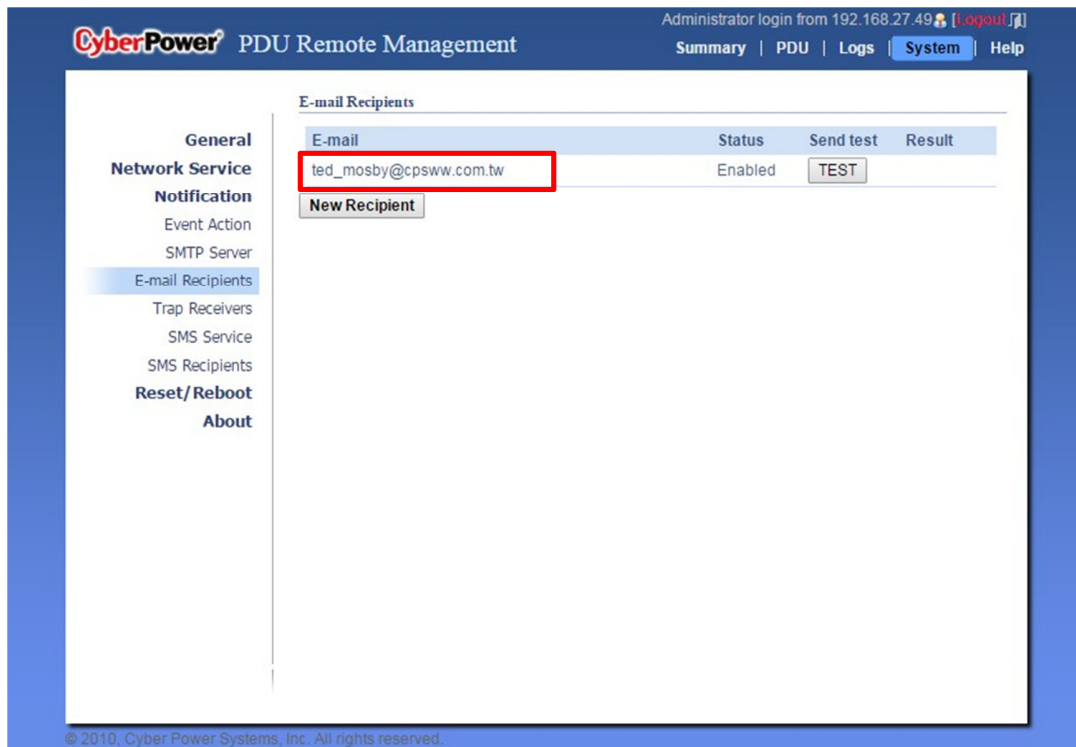
System Tab > Notification > SMTP Server



Item	Definition
Server's IP/Host Name	The IP or Host Name of SMTP server used to notify users by E-mail.
Sender's E-mail Address	The From field shown in the e-mail message.
Authentication	Select this option if the SMTP server requires Authentication.
Username	Username used for Authentication.
Password	Password used for Authentication.
Encrypted SMTP	Enable/Disable TLS or SSL to encrypt the SMTP connection.
Access Port	The port number that PDU uses to communicate with SMTP server.

Users can set up to five e-mail recipients in designated email address format. See **System > Notifications > E-mail Recipients**.

System > Notifications > E-mail Recipients



Item	Definition
E-mail	Click the e-mail address of the recipient to open the Configure E-mail Recipient Window . Users can modify the e-mail address, change its status, and delete an existing recipient.
TEST	Click this button to check if the SMTP setting and the email recipients are set correctly.
New Recipient	Click this button to open the Add New E-mail Recipient Window . Users can add a new recipient.

Configure E-mail Recipient Window

The screenshot shows the 'Configure E-mail Recipient' window. The left sidebar contains a menu with the following items: General, Network Service, Notification, Event Action, SMTP Server, E-mail Recipients (highlighted), Trap Receivers, SMS Service, SMS Recipients, Reset/Reboot, and About. The main content area is titled 'Configure E-mail Recipient' and contains the following fields and buttons:

- Active:** A checkbox labeled 'Enable' which is checked.
- E-mail:** A text input field containing the email address 'ted_mosby@cpsww.com.tw'.
- Buttons:** Three buttons are located at the bottom: 'Apply', 'Cancel', and 'Delete'.

At the top of the window, the header reads 'CyberPower PDU Remote Management'. On the right, it says 'Administrator login from 192.168.27.49' with a 'Logout' link. Below this are navigation links: 'Summary', 'PDU', 'Logs', 'System' (highlighted), and 'Help'. At the bottom left, the copyright notice reads '© 2010, Cyber Power Systems, Inc. All rights reserved.'

Add New E-mail Recipient Wind

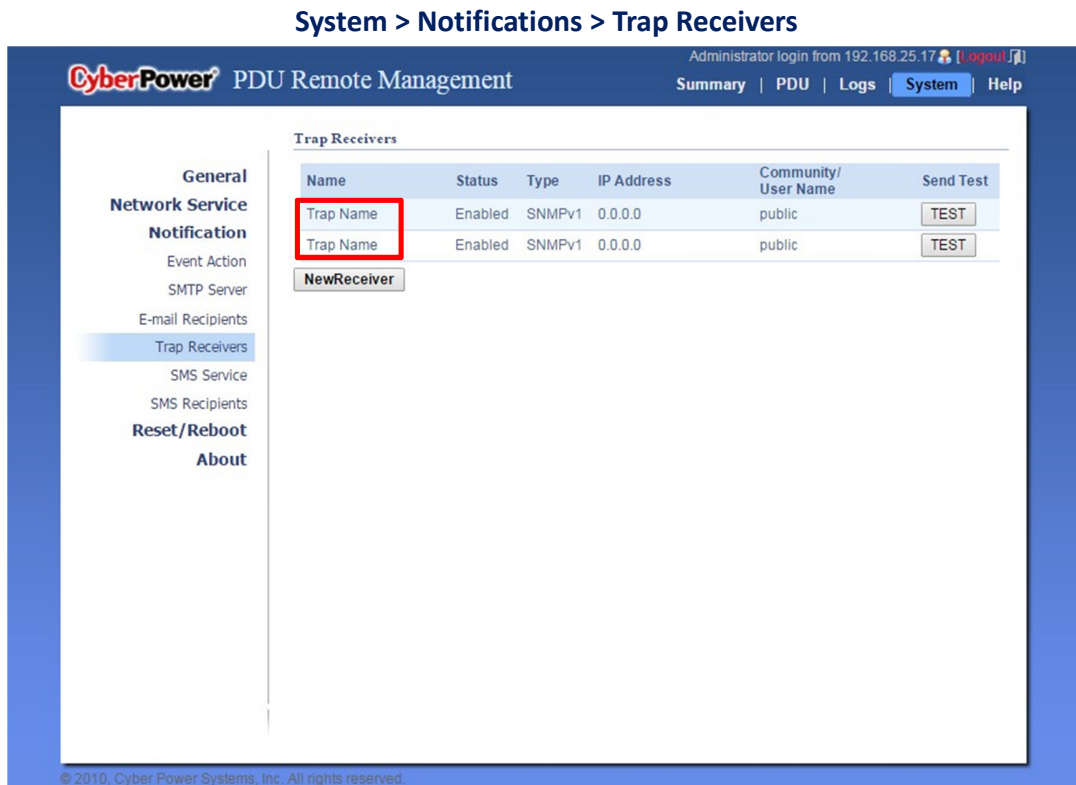
The screenshot shows the 'Add New E-mail Recipient' window. The left sidebar contains a menu with the following items: General, Network Service, Notification, Event Action, SMTP Server, E-mail Recipients (highlighted), Trap Receivers, SMS Service, SMS Recipients, Reset/Reboot, and About. The main content area is titled 'Add New E-mail Recipient' and contains the following fields and buttons:

- Active:** A checkbox labeled 'Enable' which is checked.
- E-mail:** An empty text input field.
- Buttons:** Two buttons are located at the bottom: 'Apply' and 'Cancel'.

At the top of the window, the header reads 'CyberPower PDU Remote Management'. On the right, it says 'Administrator login from 192.168.25.17' with a 'Logout' link. Below this are navigation links: 'Summary', 'PDU', 'Logs', 'System' (highlighted), and 'Help'. At the bottom left, the copyright notice reads '© 2010, Cyber Power Systems, Inc. All rights reserved.'

2.5.1.2 SNMP Trap Notification

Set up to 10 SNMP trap receivers to be notified when an event occurs. See **System > Notifications > Trap Receivers**.



Item	Definition
Name	Click on the trap name to open the Configure Trap Receiver Window . Users can modify or delete an existing receiver.
TEST	Click this button to verify if the trap can be sent.
New Receiver	Click this button to open the Add New Trap Receiver Window . Users can add a new recipient.

Configure Trap Receiver Window

The screenshot shows the 'Configure Trap Receiver' window. The left sidebar contains a menu with categories: General, Network Service, Notification, Event Action, SMTP Server, E-mail Recipients, Trap Receivers (highlighted), SMS Service, SMS Recipients, Reset/Reboot, and About. The main content area is titled 'Configure Trap Receiver' and contains the following fields and controls:

- Active:** A checkbox labeled 'Enable' which is checked.
- Name:** A text input field containing 'Trap Name'.
- IP Address:** A text input field containing '0.0.0.0'.
- SNMPv1:** A radio button that is selected.
- Community:** A text input field containing 'public'.
- SNMPv3:** A radio button that is unselected.
- User Name:** A dropdown menu showing 'cyber snmpv3 user1'.
- Buttons:** 'Apply', 'Cancel', and 'Delete' buttons at the bottom.

At the top right of the window, it says 'Administrator login from 192.168.25.17' with a 'Logout' link. Below this are navigation links: 'Summary', 'PDU', 'Logs', 'System' (highlighted), and 'Help'. The footer of the window states '© 2010, Cyber Power Systems, Inc. All rights reserved.'

Add New Trap Receiver Window

The screenshot shows the 'Add New Trap Receiver' window. The left sidebar is identical to the previous window, with 'Trap Receivers' highlighted. The main content area is titled 'Add New Trap Receiver' and contains the following fields and controls:

- Active:** A checkbox labeled 'Enable' which is checked.
- Name:** A text input field containing 'Trap Name'.
- IP Address:** A text input field containing '0.0.0.0'.
- SNMPv1:** A radio button that is selected.
- Community:** A text input field containing 'public'.
- SNMPv3:** A radio button that is unselected.
- User Name:** A dropdown menu showing 'cyber snmpv3 user1'.
- Buttons:** 'Apply' and 'Cancel' buttons at the bottom.

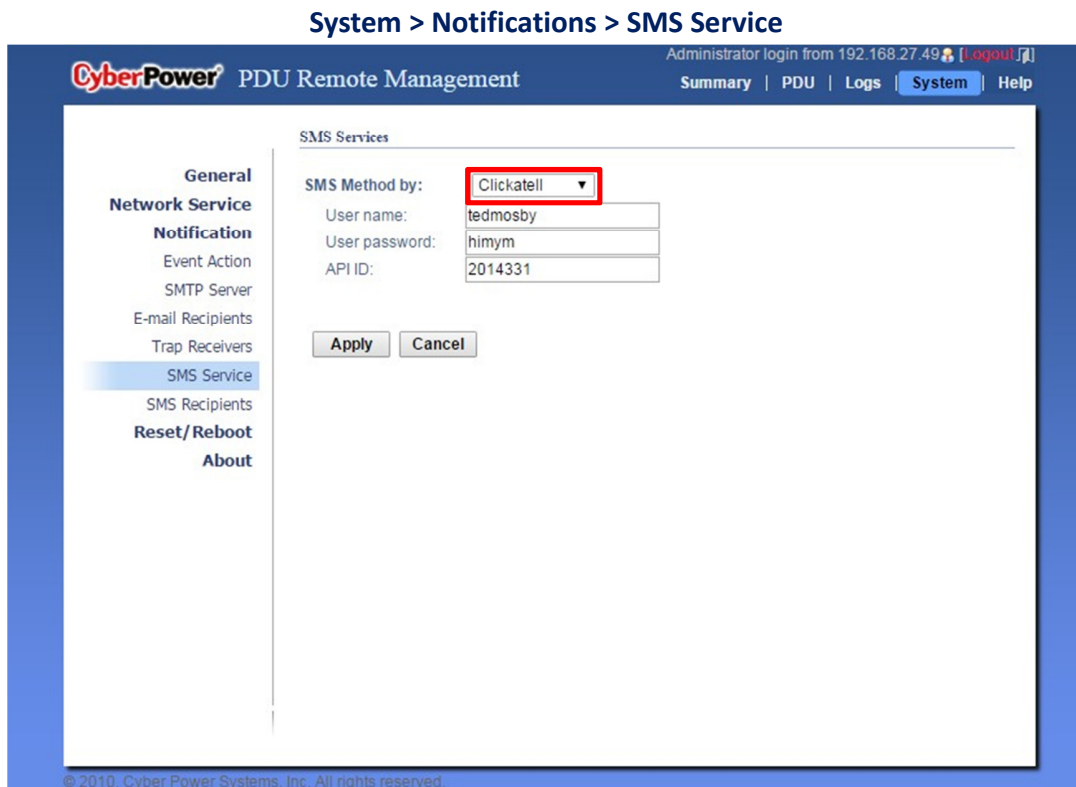
The top right of the window shows the same login information and navigation links as the previous window. The footer states '© 2010, Cyber Power Systems, Inc. All rights reserved.'

Item	Definition
Name	The name of trap receiver.
IP Address	The IP address of the trap receiver.
SNMPv1	If choosing the SNMPv1 option as the trap type for a trap receiver, select the corresponding community. See System Tab > Network Service > SNMPv1 Service .
SNMPv3	If choosing the SNMPv3 option as the trap type for a trap receiver, select the corresponding user name. See System Tab > Network Service > SNMPv3 Service .

2.5.1.2 SMS Notification

Short Message Service (SMS) is used by mobile communication systems to send a short message to a specific mobile phone number. Standardized communication protocols allow the exchange of short text messages between mobile devices. The system provides four methods for users to choose how they want to send a message. See [System > Notifications > SMS Service](#).

System > Notifications > SMS Service



CyberPower PDU Remote Management Administrator login from 192.168.27.49 [Logout]

Summary | PDU | Logs | **System** | Help

SMS Services

General

Network Service

Notification

Event Action

SMTP Server

E-mail Recipients

Trap Receivers

SMS Service

SMS Recipients

Reset/Reboot

About

SMS Method by: **Clickatell**

User name: tedmosby

User password: himym

API ID: 2014331

Apply Cancel

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Clickatell method:

Clickatell is one of the supported SMS service providers. Go to the Clickatell website to sign up and get an API ID.

Item	Definition
User name	The account username created on Clickatell website.
User password	The user password created on Clickatell website.
API ID	The API ID acquired on Clickatell website.

System > Notifications > SMS Service

CyberPower PDU Remote Management Administrator login from 192.168.27.49 [Logout]

Summary | PDU | Logs | **System** | Help

SMS Services

General
Network Service
Notification
 Event Action
 SMTP Server
 E-mail Recipients
 Trap Receivers
SMS Service
 SMS Recipients
Reset/Reboot
About

SMS Method by: **Http GET**

Get URL:
 http://api.clickatell.com/http/sendmsg?
 user=tedmosby&password=himym&api_id=2014331&to=E_PHONE
 E_NUMBER&text=E_MESSAGE

Apply Cancel

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HTTP GET method:

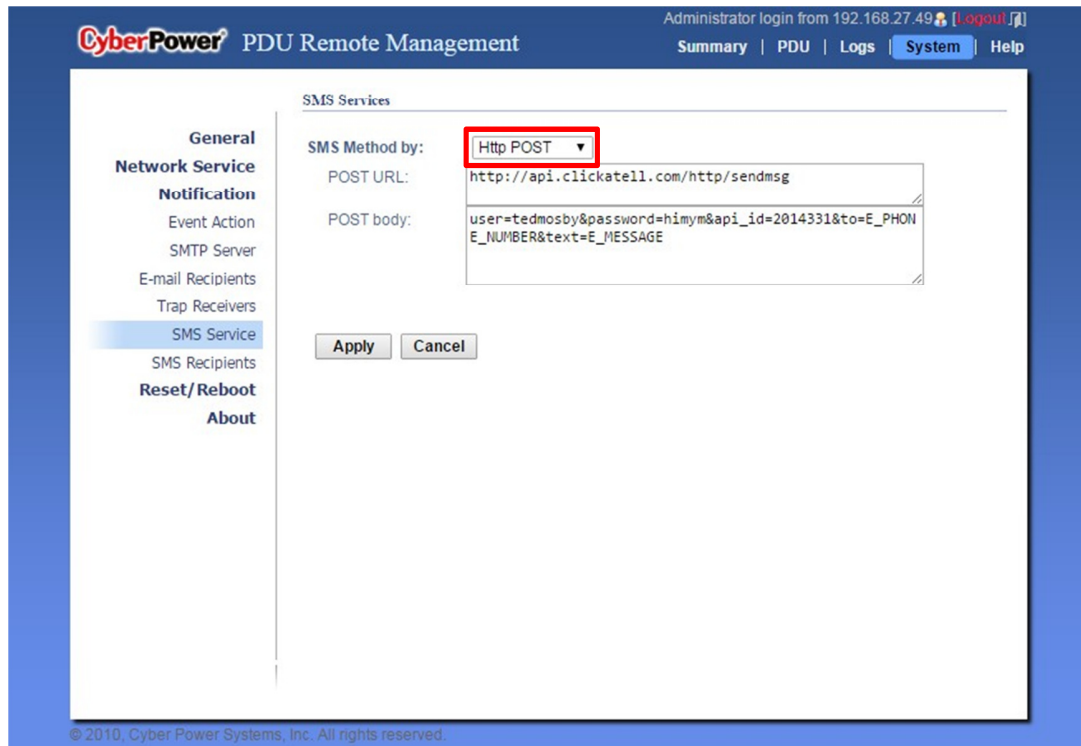
Use the example where Clickatell is the SMS provider.

The basic form of URL using the HTTP GET method is:

http://api.clickatell.com/http/sendmsg?user=tedmosby&password=himym&api_id=2014331&to=E_PHONE
 E_NUMBER&text=E_PHONE_MESSAGE

Query String in the URL	Definition
user=tedmosby	Replace "tedmosby" with the user name created at the Clickatell website.
password=himym	Replace "himym" with the password created at the Clickatell website.
api_id=2014331	Replace "2014331" with the API ID acquired at the Clickatell website.
to=E_PHONE_NUMBER	Do not replace this information. It refers to the receiver phone number entered in System Tab > Notifications > SMS Recipients .
text=E_MESSAGE	Do not replace this information. It refers to the event action sent by the SMS service provider. For configurations, see System Tab > Notification .

System > Notifications > SMS Service



CyberPower PDU Remote Management Administrator login from 192.168.27.49 [Logout]

Summary | PDU | Logs | **System** | Help

SMS Services

SMS Method by: **Http POST**

POST URL: http://api.clickatell.com/http/sendmsg

POST body: user=tedmosby&password=himym&api_id=2014331&to=E_PHONE_NUMBER&text=E_MESSAGE

Apply Cancel

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HTTP POST method:

Use the example where Clickatell is the SMS provider.

The basic form of URL is: http://api.clickatell.com/http/sendmsg

The basic form of body is:

user=tedmosby&password=himym&api_id=2014331&to=E_PHONE_NUMBER&text=E_MESSAGE

Query String in Body	Definition
user=tedmosby	Replace "tedmosby" with the user name created at the Clickatell website.
password=himym	Replace "himym" with the password created at the Clickatell website.
api_id=2014331	Replace "2014331" with the API ID acquired at the Clickatell website.
to=E_PHONE_NUMBER	Do not replace this information. It refers to the receiver phone number entered in System Tab > Notifications > SMS Recipients .
text=E_MESSAGE	Do not replace this information. It refers to the event action sent by SMS service provider. For configurations, see System Tab > Notification .

System > Notifications > SMS Service

CyberPower PDU Remote Management

Administrator login from 192.168.27.49 [Logout]

Summary | PDU | Logs | **System** | Help

SMS Services

SMS Method by: **SMTP MAIL**

Recipient: ted_mosby@cpsww.com.tw

Subject: PDU Event

Content: E_MESSAGE and E_PHONE_NUMBER

Apply Cancel

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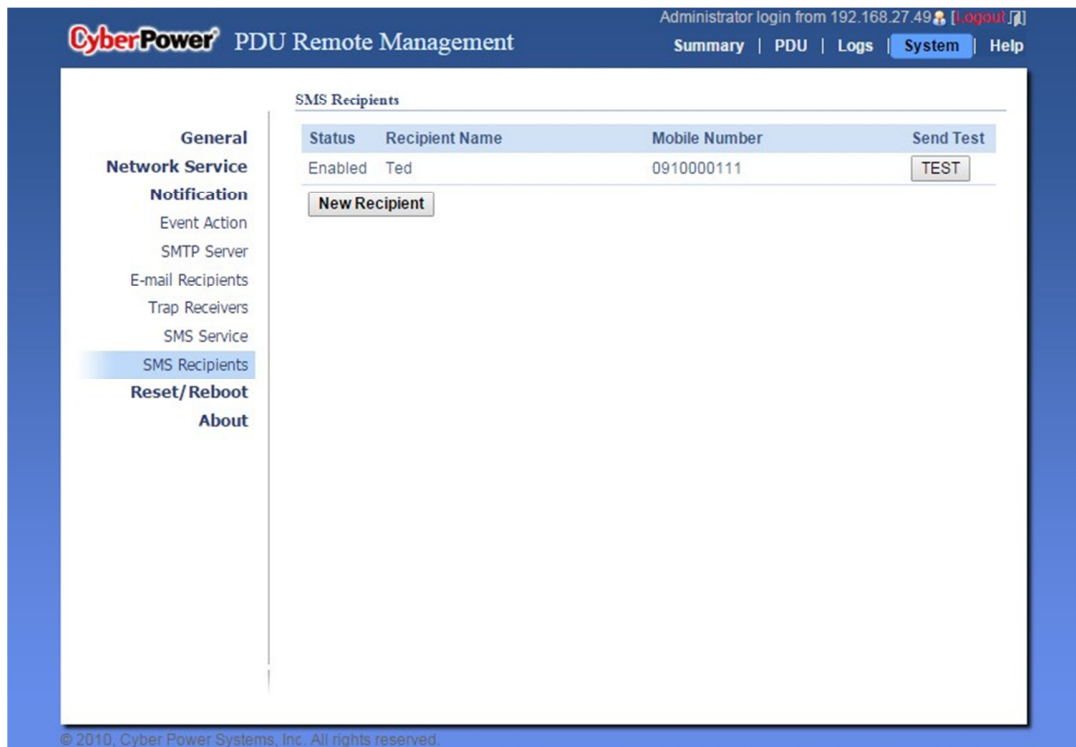
SMTP Mail method:

Users set the SMTP server in [System Tab > Notifications > SMTP Server](#) first, and then enter the following information.

Item	Definition
Recipient	Enter the e-mail of the recipient.
Subject	The Subject field shown in the e-mail message, entered by user.
Content	
E_ MESSAGE	Do not replace this information. It refers to the event action sent by SMS service provider. For configurations, see System Tab > Notification .
E_PHONE_NUMBER	Do not replace this information. It refers to the receiver phone number entered in System Tab > Notifications > SMS Recipient .

Users can set up to 10 mobile phone numbers as SMS recipients who will receive a short message notification when a specific event occurs. See **System Tab > Notifications > SMS Recipients**.

System Tab > Notifications > SMS Recipients



Item	Definition
Recipient Name/ Mobile Phone	Click the name or mobile number of the recipient to open the Configure SMS Receiver Window . Users can modify or delete an existing receiver.
TEST	Click this button to check whether the test message is correctly sent.
New Recipient	Click this button to open the Add New SMS Receiver Window . Users can add a new recipient.

Configure SMS Receiver Window

The screenshot shows the 'Configure SMS Receiver' window. On the left is a navigation menu with the following items: General, Network Service, Notification, Event Action, SMTP Server, E-mail Recipients, Trap Receivers, SMS Service, SMS Recipients (highlighted), Reset/Reboot, and About. The main content area is titled 'Configure SMS Recipient'. It contains the following fields: 'Active' with a checked 'Enable' checkbox, 'SMS Recipient' with a text box containing 'Ted', and 'Mobile Number' with a text box containing '0910000111'. Below these fields are three buttons: 'Apply', 'Cancel', and 'Delete'. At the top right of the interface, it says 'Administrator login from 192.168.27.49' with a 'Logout' link. Below this are links for 'Summary', 'PDU', 'Logs', 'System' (highlighted), and 'Help'. The CyberPower logo and 'PDU Remote Management' text are at the top left. A copyright notice '© 2010, Cyber Power Systems, Inc. All rights reserved.' is at the bottom.

Add New SMS Receiver Window

The screenshot shows the 'Add New SMS Receiver' window. The navigation menu on the left is identical to the previous window, with 'SMS Recipients' highlighted. The main content area is titled 'Add New SMS Recipient'. It contains the following fields: 'Active' with a checked 'Enable' checkbox, 'SMS Recipient' with an empty text box, and 'Mobile Number' with an empty text box. Below these fields are two buttons: 'Apply' and 'Cancel'. The top right of the interface shows 'Administrator login from 192.168.25.17' with a 'Logout' link, and links for 'Summary', 'PDU', 'Logs', 'System' (highlighted), and 'Help'. The CyberPower logo and 'PDU Remote Management' text are at the top left. A copyright notice '© 2010, Cyber Power Systems, Inc. All rights reserved.' is at the bottom.

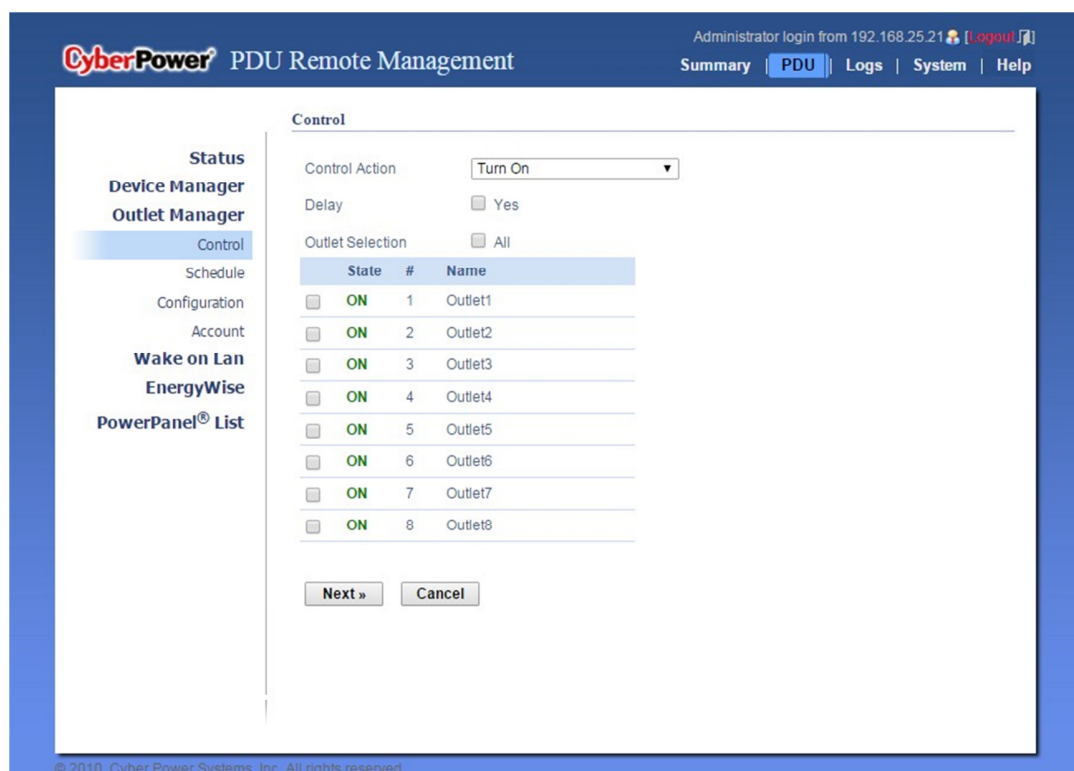
3. Outlet Management

The following provides the outlet configurations to meet different application conditions.

3.1 Remote Outlet On/Off/Reboot

Users can turn on, turn off, or reboot outlets. See **PDU Tab > Outlet Manager > Control**. (For Switched PDU models only.)

PDU Tab > Outlet Manager > Control



Item	Definition
Control Action	
Turn On	Selected outlets will be immediately turned on.
Turn On + Delay	Selected outlets will be turned on according to each outlet's <i>Power On Delay</i> in PDU Tab > Outlet Manager > Configuration .
Turn Off	Selected outlets will be immediately turned off.
Turn Off + Delay	Selected outlets will be turned off according to each outlet's <i>Power Off Delay</i> in PDU Tab > Outlet Manager > Configuration . This action could signal the PC to shut down, if PowerPanel Business Edition Client software is installed on it.

Item	Definition
Reboot	Selected outlets will be immediately turned off and then be turned on again according to each outlet's <i>Reboot Duration</i> in PDU Tab > Outlet Manager > Configuration .
Reboot + Delay	Selected outlets will be turned off in sequence according to each outlet's <i>Power Off Delay</i> . Then they will be synchronized with the longest <i>Power Off Delay</i> and the longest <i>Reboot Duration</i> of the selected outlets. They will be turned on in sequence according to each outlet's <i>Power On Delay</i> in PDU Tab > Outlet Manager > Configuration .
Cancel Pending Command	Any pending commands of the selected outlet(s) will be cancelled. Any outlet in a pending command state will be notated with an (*) asterisk.
Outlet Selection	Outlets selected for action.

3.2 Scheduled Outlet On/Off/Reboot

Outlets can be set to automatically turn on, turn off, or reboot at scheduled times. See **PDU Tab > Outlet Manager > Schedule**. (For Switched PDU models only.)

PDU Tab > Outlet Manager > Schedule

Select the **One Time**, **Per Day** or **Per Week** option, and then click the **Next** button to open the **Add New Action Schedule Window**.

Item	Definition
Frequency	
One Time	Scheduled action takes place once at the configured date and time.
Per Day	Scheduled action takes place daily at the configured time.
Per Week	Scheduled action takes place once a week for the configured day and time.

Add New Action Schedule Window

CyberPower PDU Remote Management

Administrator login from 192.168.25.21 [Logout]

Summary | **PDU** | Logs | System | Help

Add New Action Schedule - One Time

☒ Enable
 Name:
 Control Action:
 Delay: ☐ Yes
 Action Time: / at :
 Outlet Selection: ☐ All

#	Name
<input type="checkbox"/> 1	Outlet1
<input type="checkbox"/> 2	Outlet2
<input type="checkbox"/> 3	Outlet3
<input type="checkbox"/> 4	Outlet4
<input type="checkbox"/> 5	Outlet5
<input type="checkbox"/> 6	Outlet6
<input type="checkbox"/> 7	Outlet7
<input type="checkbox"/> 8	Outlet8

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Up to 10 scheduled settings are allowed.

Item	Definition
Enable	Check this box to activate the scheduled shutdown function.
Name	The name entered by the user to identify the specific scheduled event.
Control Action	The action will be performed when the scheduled event takes place.
Action Time	The time at which the scheduled event takes place.
Outlet Selection	Outlets selected for the scheduled event.

3.3 Sequencing Power On/Off

Enable users to turn on, turn off, or reboot the outlets in sequence. When powering on the connected devices, the sequential power-on method is recommended to avoid high inrush current. (For Switched PDU models only.) See **PDU Tab > Outlet Manager > Configuration**.

PDU Tab > Outlet Manager > Configuration

The screenshot shows the CyberPower PDU Remote Management web interface. The top navigation bar includes the CyberPower logo, the title 'PDU Remote Management', and user information: 'Administrator login from 192.168.25.17 [Logout]'. The main navigation tabs are 'Summary', 'PDU', 'Logs', 'System', and 'Help'. The left sidebar contains a tree view with the following items: Status, Device Manager, Outlet Manager (selected), Control, Schedule, Configuration (highlighted), Account, Wake on Lan, EnergyWise, and PowerPanel® List. The main content area is titled 'Configuration' and contains a table with the following data:

Outlet Name	On Delay	Off Delay	Reboot Duration
1. Outlet1	3 sec	3 sec	5 sec
2. Outlet2	3 sec	3 sec	5 sec
3. Outlet3	3 sec	3 sec	5 sec
4. Outlet4	3 sec	3 sec	5 sec
5. Outlet5	3 sec	3 sec	5 sec
6. Outlet6	3 sec	3 sec	5 sec
7. Outlet7	3 sec	3 sec	5 sec
8. Outlet8	3 sec	3 sec	5 sec

Below the table is a button labeled 'Multi >>'.

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Click the **Outlet Name** field to open the **Each Outlet Configuration Window** and configure the delay duration setting. Or click **Multi >>** to open the **Multiple Outlet Configuration Window** and configure the mutual time setting for the selected multiple outlets.

Each Outlet Configuration Window

CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout](#)

[Summary](#) | [PDU](#) | [Logs](#) | [System](#) | [Help](#)

Configuration

Name:

Power On Delay: ☐ Immediate ☒ Delay Second(s) [1-7200] ☐ Never

Power Off Delay: ☐ Immediate ☒ Delay Second(s) [1-7200] ☐ Never

Reboot Duration: Second(s) [5-60]

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Multiple Outlet Configuration Window

CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout](#)

[Summary](#) | [PDU](#) | [Logs](#) | [System](#) | [Help](#)

Configuration

Name:

Power On Delay: ☐ Immediate ☐ Delay Second(s) [1-7200] ☐ Never

Power Off Delay: ☐ Immediate ☐ Delay Second(s) [1-7200] ☐ Never

Reboot Duration: Second(s) [5-60]

Apply to Outlets: ☐ All

#	Name	
<input type="checkbox"/>	1	Outlet1
<input type="checkbox"/>	2	Outlet2
<input type="checkbox"/>	3	Outlet3
<input type="checkbox"/>	4	Outlet4
<input type="checkbox"/>	5	Outlet5
<input type="checkbox"/>	6	Outlet6
<input type="checkbox"/>	7	Outlet7
<input type="checkbox"/>	8	Outlet8

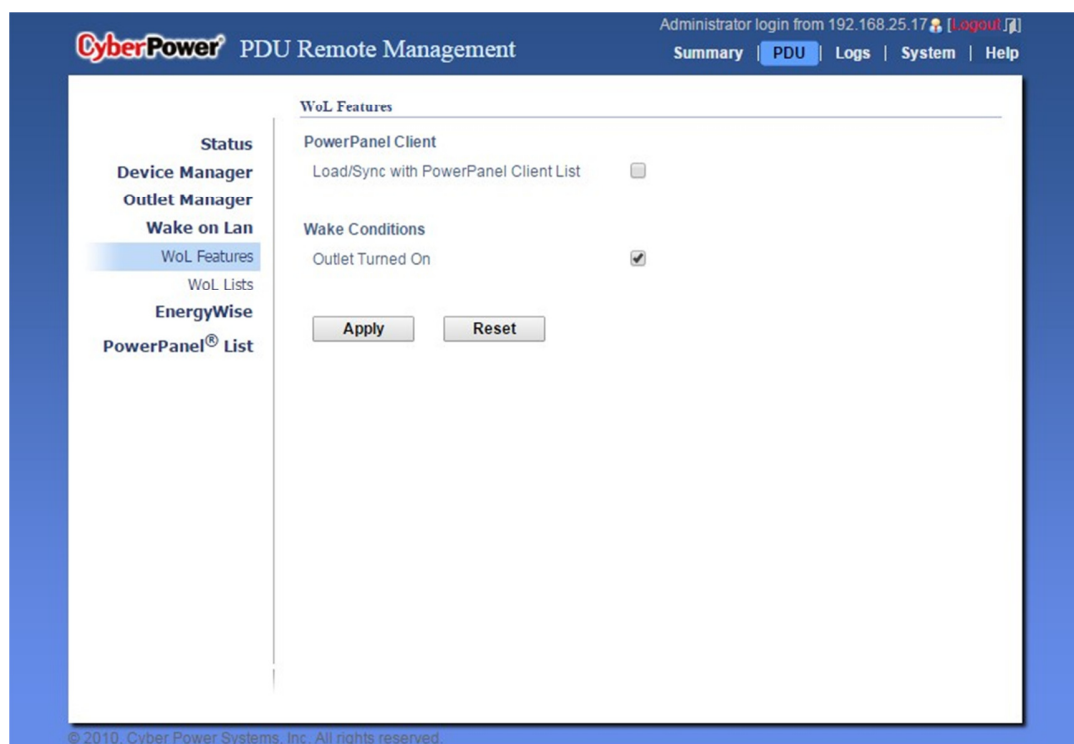
© 2010, Cyber Power Systems, Inc. All rights reserved.

Item	Definition
Name	The name entered by the user to identify the selected outlet or multiple outlet configuration.
Power On Delay	*Immediate: Turn on the outlet immediately. *Delay: Delay time before turning on the outlet. Valid values are within the range of 1 to 7,200 seconds. *Never: Do not turn on the outlet.
Power Off Delay	Delay time before turning off the outlet. Valid values are within the range of 1 to 7,200 seconds.
Reboot Duration	Duration time the outlet will remain off during a Reboot action. Valid values are within the range of 5 to 60 seconds.
Apply to Outlets	Outlets selected for the scheduled event.

3.4 Wake on Lan (WoL)

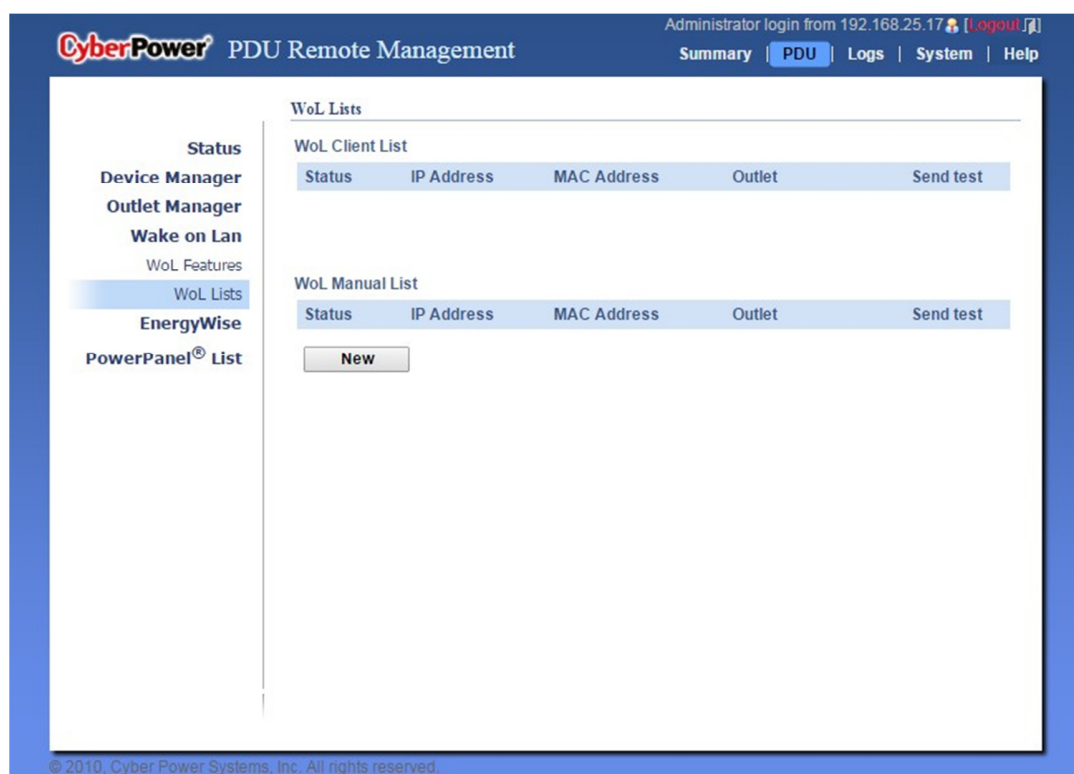
When turning on an outlet, the connected computer can be sent a Wake on LAN packet via the network. Make sure the computer supports this function and is configured as "Enable" in its BIOS settings. See **PDU Tab > Wake on Lan > WoL Features** and **PDU Tab > Wake on Lan > WoL Lists**. (For Switched PDU models only.)

PDU Tab > Wake on Lan > WoL Features



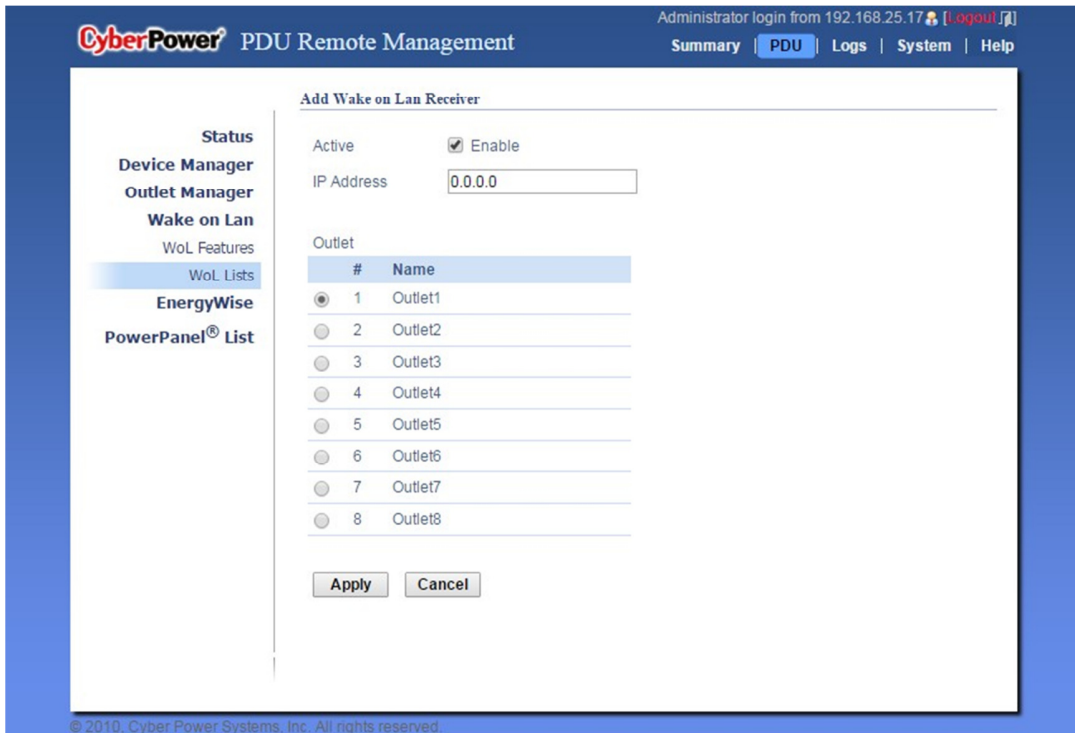
Item	Definition
PowerPanel Client	Synchronize with PowerPanel Client List. To achieve synchronization, make sure PDU has established communication with PowerPanel Business software. See System > General > Security .
Wake Conditions	Enable or disable the Wake on Lan function.

PDU Tab > Wake on Lan > WoL Lists



Item	Definition
WoL Client List	If the PowerPanel Client option in PDU Tab > Wake on Lan > WoL Features is selected, the PowerPanel® List will be automatically added to the WoL Client list.
WoL Manual List	Click New to open the Add Wake on Lan Receiver Window . Users can add another WoL receiver.

Add Wake on Lan Receiver Window



CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout] [?]
Summary | PDU | Logs | System | Help

Add Wake on Lan Receiver

Active ☒ Enable

IP Address

Outlet

#	Name	Status
1	Outlet1	<input checked="" type="radio"/>
2	Outlet2	<input type="radio"/>
3	Outlet3	<input type="radio"/>
4	Outlet4	<input type="radio"/>
5	Outlet5	<input type="radio"/>
6	Outlet6	<input type="radio"/>
7	Outlet7	<input type="radio"/>
8	Outlet8	<input type="radio"/>

Apply Cancel

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Item	Definition
Active	Enable/Disable the Wake on Lan function.
IP Address	The IP address of the computer. This IP must be in the same subnet with the PDU. Up to 50 IP addresses can be added.
Outlet	Select the outlet that provides power to the computer.

3.5 Graceful Computer Shutdown

After the connected computer is installed with PowerPanel Business Edition Client or Center and establishes communication with the PDU, its IP address will be automatically displayed in the PowerPanel List shown below. This computer can perform a graceful shutdown before the outlet powering the computer turns off, thus avoiding data loss. To achieve communication between the computer and PDU, see [System > General > Security](#).

Up to 50 computers having PPBE Client or Center installed can be listed. A Client or Center computer will be removed when it has been disconnected from the PDU for one hour. See [PDU Tab > PowerPanel® List](#). (For Switched PDU models only.)

PDU Tab > PowerPanel® List

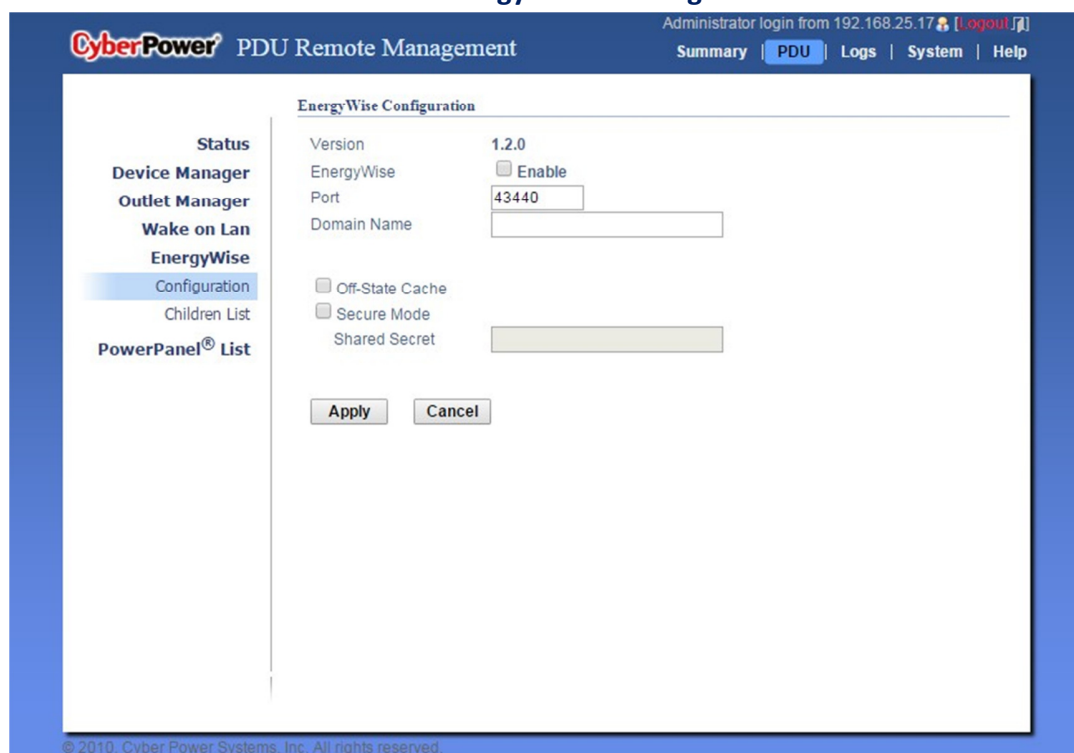
The screenshot displays the CyberPower PDU Remote Management web interface. The top navigation bar includes the CyberPower logo, the title 'PDU Remote Management', and a user login status 'Administrator login from 192.168.25.17' with a 'Logout' link. Below the navigation bar are tabs for 'Summary', 'PDU' (which is selected), 'Logs', 'System', and 'Help'. On the left side, there is a sidebar menu with options: 'Status', 'Device Manager', 'Outlet Manager', 'Wake on Lan', 'EnergyWise', and 'PowerPanel® List' (which is highlighted). The main content area is titled 'PowerPanel® List' and contains a table with the following headers: 'IP Address', 'Type', 'Outlet', 'Name', 'Location', and 'Contact'. The table is currently empty. At the bottom of the interface, there is a copyright notice: '© 2010, Cyber Power Systems, Inc. All rights reserved.'

Click the IP address of a client to access configuration settings.

3.6 Cisco EnergyWise

Users can manage and control all Cisco EnergyWise entities and configure settings. See **PDU Tab > EnergyWise > Configuration** and **PDU Tab > EnergyWise > Children List**.

PDU Tab > EnergyWise > Configuration



Item	Definition
Version	The version of EnergyWise.
EnergyWise	Enable/Disable EnergyWise support.
Port	The port number is used to communicate with EnergyWise. This number must be the same as that of a Cisco switch that the PDU connects to.
Domain Name	The EnergyWise domain name. This must be the same as that of a Cisco switch that the PDU connect to.
Off-State Cache	Enable/Disable endpoint to cache EnergyWise list in the Cisco switch after the PDU has rebooted.
Secure Mode	Enable EnergyWise use of a shared secret.
Shared Secret	The secret for the EnergyWise domain.

PDU Tab > EnergyWise > Children List

CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout]

Summary | **PDU** | Logs | System | Help

EnergyWise Children List

Parent

#	Name	Role	Keywords	importance
1	PDU_Base	base,role	endpoint,child,base	1

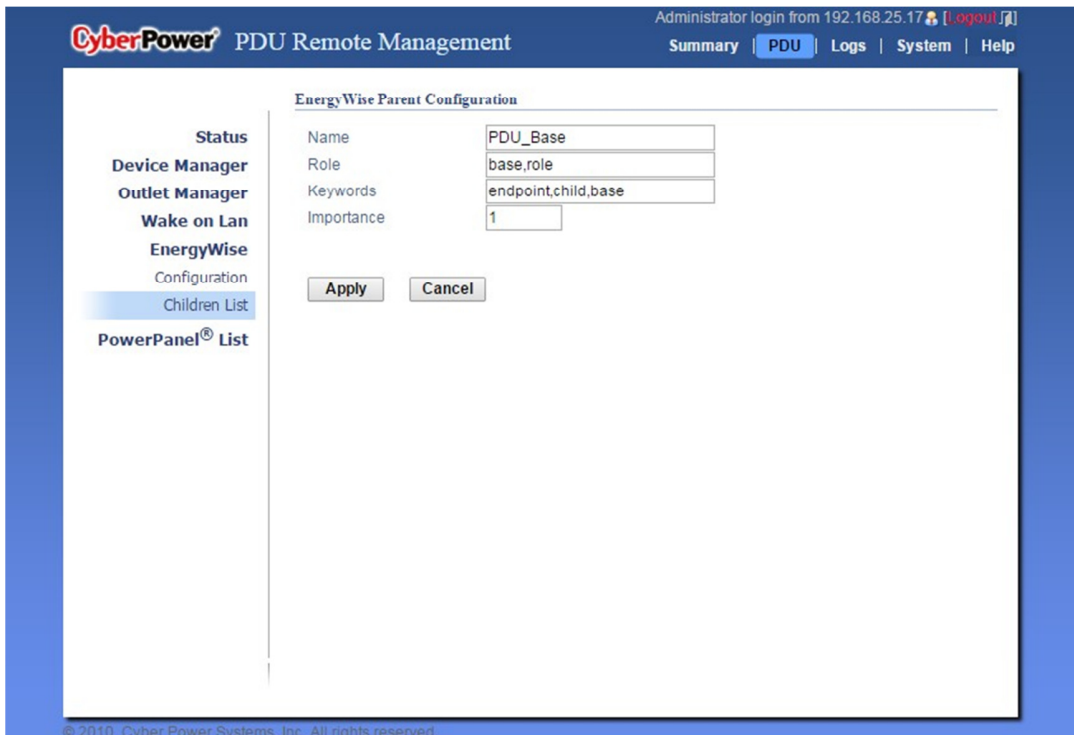
Children

#	Name	Role	Keywords	importance
1	Outlet1	outlet,role	endpoint,child,outlet	1
2	Outlet2	outlet,role	endpoint,child,outlet	1
3	Outlet3	outlet,role	endpoint,child,outlet	1
4	Outlet4	outlet,role	endpoint,child,outlet	1
5	Outlet5	outlet,role	endpoint,child,outlet	1
6	Outlet6	outlet,role	endpoint,child,outlet	1
7	Outlet7	outlet,role	endpoint,child,outlet	1
8	Outlet8	outlet,role	endpoint,child,outlet	1
9	Bank1	bank,role	endpoint,child,bank	1

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Click the **Name** field in parent and/or children list to open the EnergyWise Parent Configuration Window and EnergyWise Child Configuration Window.

EnergyWise Parent Configuration Window



The screenshot shows the 'EnergyWise Parent Configuration' window in the CyberPower PDU Remote Management interface. The left sidebar contains a navigation menu with the following items: Status, Device Manager, Outlet Manager, Wake on Lan, EnergyWise (highlighted), Configuration, Children List, and PowerPanel® List. The main content area is titled 'EnergyWise Parent Configuration' and contains a form with the following fields: Name (PDU_Base), Role (base,role), Keywords (endpoint,child,base), and Importance (1). Below the form are 'Apply' and 'Cancel' buttons. The top right of the interface shows the user is an Administrator logged in from 192.168.25.17, with a 'Logout' link. Navigation tabs at the top include Summary, PDU (selected), Logs, System, and Help. A copyright notice at the bottom reads '© 2010, Cyber Power Systems, Inc. All rights reserved.'

CyberPower PDU Remote Management

Administrator login from 192.168.25.17 [Logout]

Summary | PDU | Logs | System | Help

EnergyWise Parent Configuration

Name: PDU_Base

Role: base,role

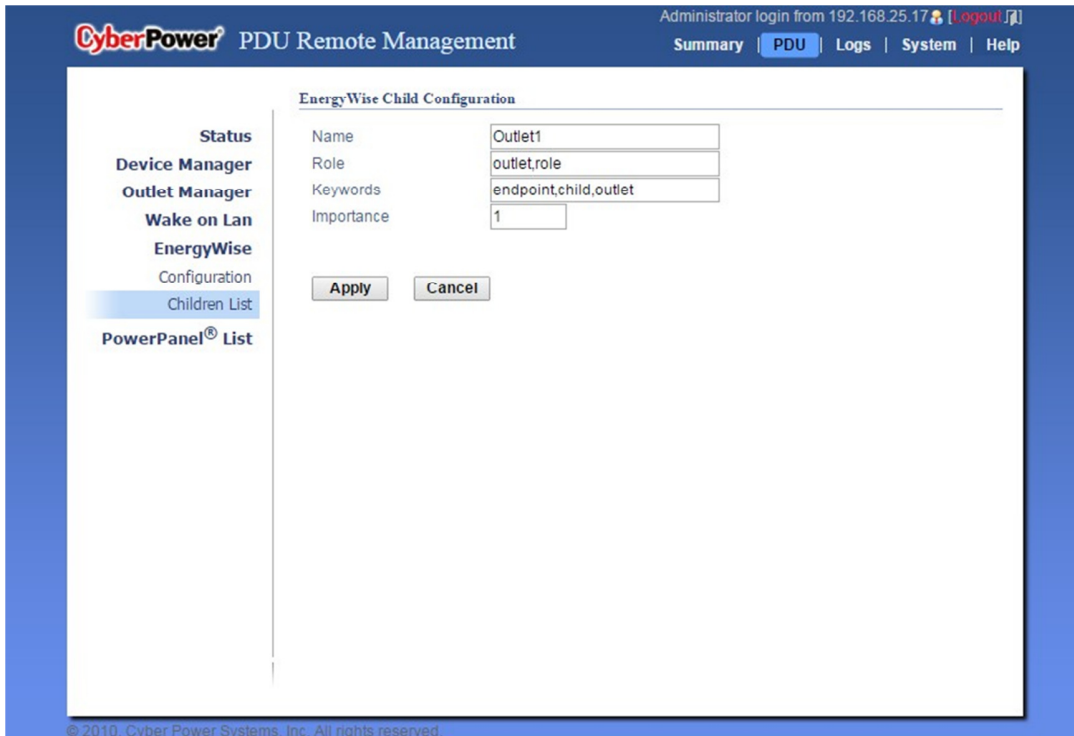
Keywords: endpoint,child,base

Importance: 1

Apply Cancel

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EnergyWise Child Configuration Window



The screenshot shows the 'EnergyWise Child Configuration' window in the CyberPower PDU Remote Management interface. The left sidebar is identical to the previous window, with 'EnergyWise' highlighted. The main content area is titled 'EnergyWise Child Configuration' and contains a form with the following fields: Name (Outlet1), Role (outlet,role), Keywords (endpoint,child,outlet), and Importance (1). Below the form are 'Apply' and 'Cancel' buttons. The top right of the interface shows the user is an Administrator logged in from 192.168.25.17, with a 'Logout' link. Navigation tabs at the top include Summary, PDU (selected), Logs, System, and Help. A copyright notice at the bottom reads '© 2010, Cyber Power Systems, Inc. All rights reserved.'

CyberPower PDU Remote Management

Administrator login from 192.168.25.17 [Logout]

Summary | PDU | Logs | System | Help

EnergyWise Child Configuration

Name: Outlet1

Role: outlet,role

Keywords: endpoint,child,outlet

Importance: 1

Apply Cancel

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Item	Definition
Name	The name entered by the user to identify an EnergyWise entity.
Role	This parameter is a string entered by the user to describe the function of the entity. Maximum length is 31 characters.
Keywords	This parameter is a string entered by the user to describe the entity. Maximum length is 31 characters.
Importance	This parameter, entered by the user, shows the value of an entity importance and must be between 1 and 100.

4. Security

Account configurations protect against unauthorized entry.

4.1 User Account

Configure the login account. Only one user at a time may log in to the web interface. See [System Tab > General > User Account](#).

System Tab > General > User Account

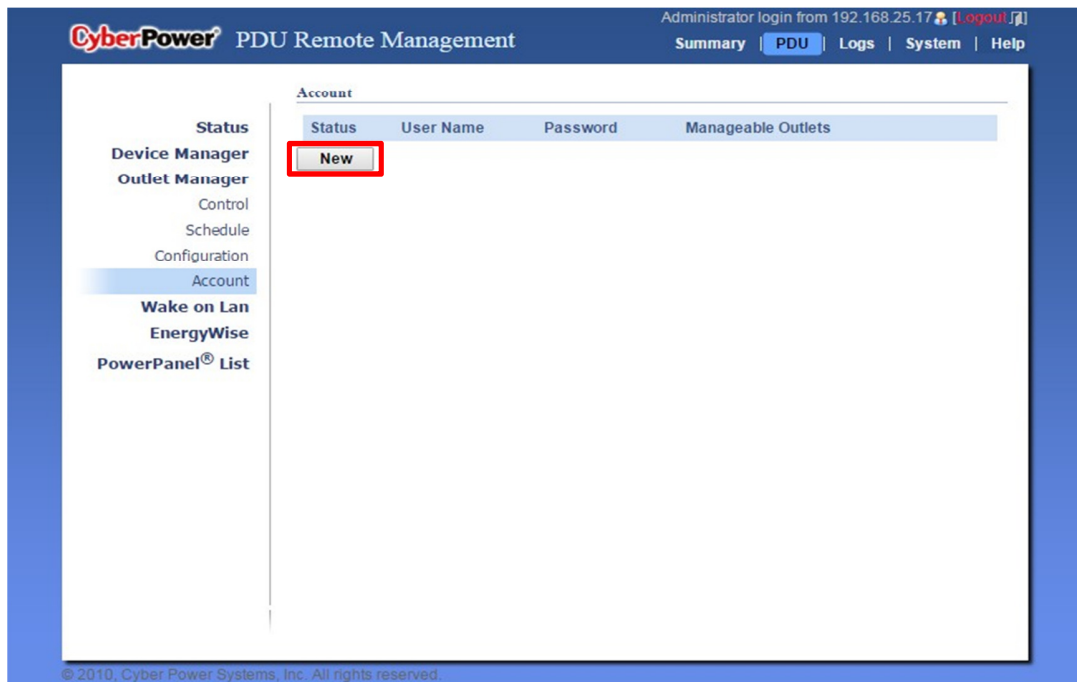
Item	Definition
Administrator	The administrator can access all functions, including Enable/Disable the Viewer account.
User Name	Enter the new user name.
Current Password	Enter the current password for authentication.
New Password	Enter the new password.
Confirm Password	Enter the new password again to confirm it.
Admin Manager IP (optional)	Set the Admin IP which is allowed access. If you want access from any IP address, you can set one of them as 0.0.0.0 or 255.255.255.255.

Item	Definition
Viewer	The viewer can view the settings but cannot control or change any settings.
Viewer Manager IP(optional)	Set the Viewer IP which is allowed access. If you want access from any IP address, you can set one of them as 0.0.0.0 or 255.255.255.255.

4.2 Outlet Account

With the given account and password, users are only allowed to control assigned outlets. See **PDU Tab > Outlet Manager > Account**. (For Switched PDU models only.)

PDU Tab > Outlet Manager > Account



Click **New** to open the Add Account Window.

Add Account Window

CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout]

Summary | **PDU** | Logs | System | Help

Add Account

Active ☒ Enable

User Name

Password

Outlet Selection ☐ All

#	Name
<input type="checkbox"/> 1	Outlet1
<input type="checkbox"/> 2	Outlet2
<input type="checkbox"/> 3	Outlet3
<input type="checkbox"/> 4	Outlet4
<input type="checkbox"/> 5	Outlet5
<input type="checkbox"/> 6	Outlet6
<input type="checkbox"/> 7	Outlet7
<input type="checkbox"/> 8	Outlet8

Apply Cancel

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Item	Definition
Active	Enable or disable the user account.
User Name	Set a name for the user account.
Password	Set the user password.
Outlets Selection	Outlets that the user can access.

4.3 Timeout Setting

Configure the idle login sessions and authentication phrase. See **System > General > Security**.

System > General > Security

The screenshot displays the 'Security' configuration page within the CyberPower PDU Remote Management interface. The left sidebar contains a menu with options: General, User Account, Date & Time, Identification, Security (highlighted), Network Service, Notification, Reset/Reboot, and About. The main content area is titled 'Security' and includes two sections: 'Login Session' with a 'Timeout' dropdown set to '10' and the unit 'minute(s)', and 'Authentication' with a 'Secret Phrase' text field containing 'powerpanel.encryption.key'. At the bottom of the main area are 'Apply' and 'Cancel' buttons. The top of the interface shows the 'CyberPower PDU Remote Management' header, a user login status 'Administrator login from 192.168.25.17', and navigation links for 'Summary', 'PDU', 'Logs', 'System' (active), and 'Help'. A copyright notice '© 2010, Cyber Power Systems, Inc. All rights reserved.' is visible at the bottom left.

Item	Definition
Login Session	
Timeout	The minutes that the system waits before automatically logging off.
Authentication	
Secret Phrase	The authentication phrase is used to communicate with PowerPanel Business Edition software. This phrase should be the same as Secret Phase field on PowerPanel Business Edition software interface.

5. Network Service

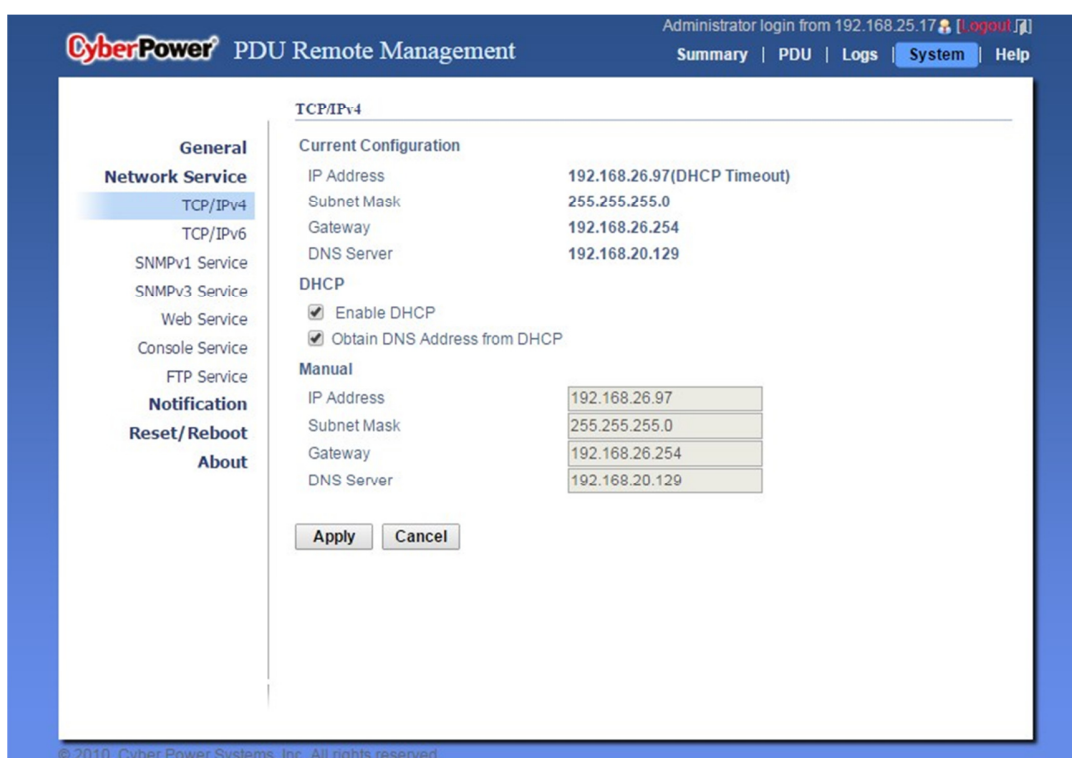
The following provides the network configurations.

5.1 TCP/IPv4 Setting

Display the current TCP/IPv4 settings and allow users to select the option to obtain TCP/IP settings by DHCP.

See **System > Network Service > TCP/IPv4**.

System > Network Service > TCP/IPv4



Item	Definition
Current Configuration	Display the current TCP/IP settings: IP Address, Subnet Mask, Gateway, and DNS server.
DHCP	<p>*Enable DHCP: Select this option to get IP address, Subnet Mask, and Gateway from DHCP.</p> <p>*Obtain DNS Address from DHCP: Select this option to get DNS by DHCP if DHCP is enabled.</p>
Manual	Enter the TCP/IP settings manually and click Apply .

5.2 TCP/IPv6 Setting

Display the current TCP/IPv6 settings and allow users to assign the IPv6 address either by router control or manually. See **System > Network Service > TCP/IPv6**.

System > Network Service > TCP/IPv6

The screenshot shows the CyberPower PDU Remote Management web interface. The breadcrumb navigation at the top reads "System > Network Service > TCP/IPv6". The page title is "CyberPower PDU Remote Management". The user is logged in as "Administrator" from IP "192.168.25.17". The sidebar menu includes "General", "Network Service" (selected), "TCP/IPv4", "TCP/IPv6" (selected), "SNMPv1 Service", "SNMPv3 Service", "Web Service", "Console Service", "FTP Service", "Notification", "Reset/Reboot", and "About". The main content area is titled "TCP/IPv6" and contains the following sections:

- IPv6 Interfaces:** A table with columns "Type" and "IPv6 Address".
- IPv6 Gateway:** Displays "N/A".
- IPv6 Configuration:** Includes checkboxes for "Allow Access" (checked), "Address Mode" (set to "Router Control"), and "Manual" (unchecked).
- Manual IPv6 Address:** A section with a "System IP Address" input field.

At the bottom of the configuration section are "Apply" and "Reset" buttons. The footer indicates "© 2010, Cyber Power Systems, Inc. All rights reserved."

Item	Definition
IPv6 Interface	Displays the current IPv6 address.
IPv6 Gateway	Displays the current IPv6 gateway.
IPv6 Configuration	
Allow Access	Enable/Disable IPv6 service.
Address Mode: Router Control	The IPv6 address is assigned through the method (Stateless Address Auto configuration, Stateless DHCPv6, or Stateful DHCPv6) determined by the router's configuration.
Address Mode: Manual	The IPv6 address is assigned manually.
Manual IPv6 Address	Enter the IPv6 address manually and click Apply when the Address Mode: Manual option is selected.

5.3 SNMPv1 Service Setting

Allow users to perform SNMPv1 configurations. See **System Tab > Network Service > SNMPv1 Service**.

System Tab > Network Service > SNMPv1 Service

CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout]

Summary | PDU | Logs | **System** | Help

SNMPv1

SNMPv1 Service

Allow Access ☒

Apply Reset

SNMPv1 Access Control

Community	IP	Access Type
public	0.0.0.0	Read Only
private	0.0.0.0	Read/Write
public2	0.0.0.0	Forbidden
public3	0.0.0.0	Forbidden

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Item	Definition
SNMPv1 Service	
Allow Access	Enable or disable the SNMPv1 service.

Click the **Community** field to open the **SNMPv1 Window**. Users can configure the SNMPv1 settings.

SNMPv1 Window

CyberPower PDU Remote Management

Administrator login from 192.168.25.17 [Logout] [?]

[Summary](#) |
 [PDU](#) |
 [Logs](#) |
 [System](#) |
 [Help](#)

General

Network Service

TCP/IPv4

TCP/IPv6

SNMPv1 Service

SNMPv3 Service

Web Service

Console Service

FTP Service

Notification

Reset/Reboot

About

SNMPv1

Community Name

Access IP

Access Type

Read Only ▼

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Item	Definition
Community Name	The name is used to access the SNMP community from a Network Management System (NMS). Its maximum length is 15 characters.
Access IP (IPv6 Support)	<p>The IP address or IP address mask can be accessed by the NMS. A specific IP address only allows access by the NMS with the specified IP Address. The “255” is regarded as the subnet mask and the rules are as follows:</p> <p>*192.168.20.255: Access only by an NMS on the 192.168.20.0 segment.</p> <p>*192.255.255.255: Access only by an NMS on the 192.0.0.0 segment.</p> <p>*0.0.0.0 (the default setting) or 255.255.255.255: Access by any NMS on any segments.</p>
Access Type	<p>The allowable action for the NMS through the community and IP address.</p> <p>*Read Only: <i>GET</i> at anytime but cannot <i>SET</i>.</p> <p>*Write/Read: <i>GET</i> at anytime. <i>SET</i> at anytime unless someone logs in the Web interface.</p> <p>*Forbidden: No <i>GET</i> or <i>SET</i>.</p>

5.4 SNMPv3 Service Setting

Users can perform SNMPv3 configurations. Authentication type or privacy type are provided to strengthen security. See **System Tab > Network Service > SNMPv3 Service**.

System Tab > Network Service > SNMPv3 Service

Administrator login from 192.168.25.17 [Logout]

CyberPower PDU Remote Management Summary | PDU | Logs | System | Help

SNMPv3

SNMPv3 Service

Allow Access ☐

Apply Reset

SNMPv3 Access Control

User Name	Status	IP	Authentication	Privacy
cyber snmpv3 user1	Disabled	0.0.0.0	None	None
cyber snmpv3 user2	Disabled	0.0.0.0	None	None
cyber snmpv3 user3	Disabled	0.0.0.0	None	None
cyber snmpv3 user4	Disabled	0.0.0.0	None	None

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Item	Definition
SNMPv3 Service	
Allow Access	Enable or disable the SNMPv3 service.

Click the **User Name** field to open the **SNMPv3 Window**. Users can configure SNMPv3 settings.

SNMPv3 Window

CyberPower PDU Remote Management Administrator login from 192.168.25.17 [Logout]

Summary | PDU | Logs | **System** | Help

SNMPv3

General
Network Service
 TCP/IPv4
 TCP/IPv6
 SNMPv1 Service
SNMPv3 Service
 Web Service
 Console Service
 FTP Service
 Notification
 Reset/Reboot
 About

Access Status ☐ Enable
 User Name
 Authentication Password
 Privacy Password
 Access IP
 Authentication Type
 Privacy Type
 Apply Reset

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Item	Definition
Access Status	Enable or disable the SNMPv3 service.
User Name	The name that identifies the SNMPv3 user. It must be 1 to 31 characters long.
Authentication Password	The password used to generate the key for authentication. It must be 16 to 31 characters long.
Privacy Password	The password used to generate the key for encryption. It must be 16 to 31 characters long.
Access IP (IPv6 Support)	The IP address or IP address mask that can be accessed by the NMS. A specific IP address only allows access by the NMS with the specified IP Address. The "255" is regarded as the subnet mask and the rules are as follows: * 192.168.20.255 : Access only by an NMS on the 192.168.20.0 segment. * 192.255.255.255 : Access only by an NMS on the 192.0.0.0 segment. * 0.0.0.0 (the default setting) or 255.255.255.255 : Access by any NMS on any segments.
Authentication Type	The hash type for authentication.
Privacy Type	The privacy type for encrypting and decrypting data.

5.5 Web Service

Select the **Enable HTTP** option to access the HTTP/HTTPS Service and configure HTTP/HTTPS port settings.

See **System Tab > Network Service > Web Service**.

System Tab > Network Service > Web Service

The screenshot displays the 'Web Service' configuration interface within the CyberPower PDU Remote Management system. The interface is divided into a left sidebar with a menu and a main content area. The menu includes options like 'General', 'Network Service', 'TCP/IPv4', 'TCP/IPv6', 'SNMPv1 Service', 'SNMPv3 Service', 'Web Service' (which is currently selected), 'Console Service', 'FTP Service', 'Notification', 'Reset/Reboot', and 'About'. The main content area is titled 'Web Service' and contains three sections: 'Access', 'Http Settings', and 'Https Settings'. In the 'Access' section, there are three radio buttons: 'Enable HTTP' (which is selected), 'Enable HTTPS', and 'Disable'. The 'Http Settings' section includes a text input for 'Http Port' with the value '80' and a range indicator '[80 or 5000-65535]'. The 'Https Settings' section includes a text input for 'Https Port' with the value '443' and a range indicator '[443 or 5000-65535]'. Below these settings are two links: 'Valid Certificate' and 'Upload Certificate'. At the bottom of the configuration area are two buttons: 'Apply' and 'Cancel'. The top of the page features a navigation bar with links for 'Summary', 'PDU', 'Logs', 'System', and 'Help'. The footer of the page indicates the copyright year as 2010 for Cyber Power Systems, Inc.

Item	Definition
Access	
Allow Access	<p>Enable or disable HTTP/HTTPS service.</p> <p>HTTPS supports the following encryption algorithms:</p> <ul style="list-style-type: none"> ● AES (256/128 bits) ● Camellia (256/128 bits) ● 3DES (168 bits) ● DES (168 bits) ● RC4 SHA (128) ● RC4 MD5 (128)
Http Settings	
HTTP Port	<p>The TCP/IP port of the Hypertext Transfer Protocol (HTTP); 80 is the default value.</p> <p>Users can also change the port setting to any unused port from 5000 to 65535 to</p>

Item	Definition
	enhance security.
Https Settings	
Https Port	The TCP/IP port of the Hypertext Transfer Protocol Secure (HTTPS); 443 is the default value. Users can also change the port setting to any unused port from 5000 to 65535 to enhance security.
Certificate Status	* Valid Certificate: Display the detailed certificate information. * Upload Certificate: Upload the certificate and replace the current one. The certificate must be uploaded in standard PEM (Privacy Enhanced Mail) format.

Click the **Valid Certificate** link, and the **Installed Certificate Window** will appear.

Installed Certificate Window

The screenshot displays the 'Installed Certificate' window within the CyberPower PDU Remote Management interface. The window is titled 'Installed Certificate' and contains the following information:

- Issue to:**
 - Common Name(CN): Power Distribution Unit
 - Organization(O): CyberPower Systems, Inc.
 - Organization Unit(OU): PDU
 - Locality(L): Unknown
 - Country: Unknown
 - Serial Number: 11:1C:76:14
- Issue by:**
 - Common Name(CN): Power Distribution Unit
 - Organization(O): CyberPower Systems, Inc.
 - Organization Unit(OU): PDU
- Validity:**
 - Issued from: 05/28/2013
 - Expires on: 05/26/2023
- Fingerprints:**
 - SHA1 Fingerprint: 44 C0 C5 CF 64 41 A0 A5 98 DF 0A B9 B1 BA 2F 3E FD 2B 84 CF
 - MD5 Fingerprint: DD 84 A4 A3 38 3C BE 3E D9 09 FF 73 6D 53 3E 5C

At the bottom of the window, there is a '« Back' button. The left sidebar shows a navigation menu with options: General, Network Service, TCP/IPv4, TCP/IPv6, SNMPv1 Service, SNMPv3 Service, Web Service (highlighted), Console Service, FTP Service, Notification, Reset/Reboot, and About. The top bar includes the CyberPower logo, 'PDU Remote Management', and user login information: 'Administrator login from 192.168.25.17 [Logout]'. Navigation links for Summary, PDU, Logs, System, and Help are also present.

Click the **Upload Certificate** link, and the Change Certificate Window will appear.

Change Certificate Window

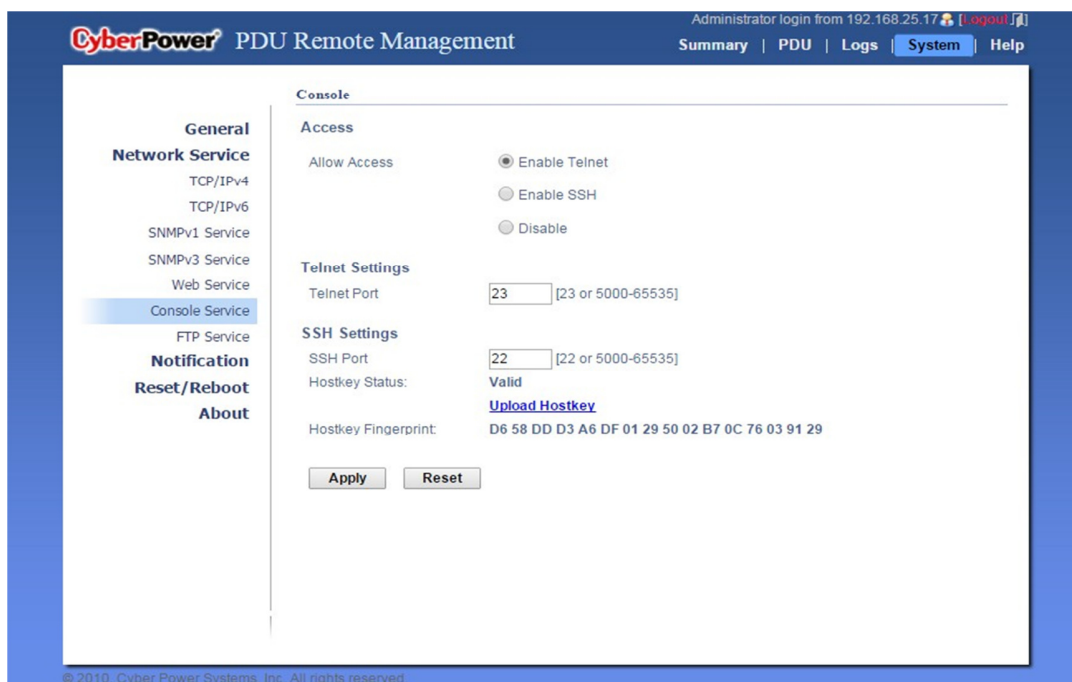
The screenshot shows the 'Change Certificate' window within the CyberPower PDU Remote Management interface. The window has a dark blue header with the CyberPower logo and 'PDU Remote Management' text. On the right side of the header, it says 'Administrator login from 192.168.25.17' with a user icon and a 'Logout' link. Below this are navigation links: 'Summary', 'PDU', 'Logs', 'System' (which is highlighted), and 'Help'. On the left side of the window is a sidebar menu with the following items: 'General', 'Network Service' (which is expanded), 'TCP/IPv4', 'TCP/IPv6', 'SNMPv1 Service', 'SNMPv3 Service', 'Web Service' (which is highlighted), 'Console Service', 'FTP Service', 'Notification', 'Reset/Reboot', and 'About'. The main content area of the window is titled 'Change Certificate' and contains the following elements: 'Upload and Replace', 'Upload Certificate' (with a yellow tooltip), a 'Select File' button, a 'Submit' button, and a 'Back' button with a left-pointing arrow. At the bottom of the window, there is a copyright notice: '© 2010, Cyber Power Systems, Inc. All rights reserved.'

5.6 Console Service

Select the **Enable** options to allow access using Telnet/SSH service and configure Telnet/SSH port settings.

See **System Tab > Network Service > Console Service**.

System Tab > Network Service > Console Service



Item	Definition
Access	
Allow Access	Enable access using Telnet or SSH version 2, which transmits user names, passwords, and data in an encrypted format.
Telnet Settings	
Telnet Port	The TCP/IP port that Telnet uses to communicate; 23 is the default value. Users can change the port setting to any unused port from 5000 to 65535 to enhance security. Note: Telnet clients require users to enter a space and the port number after the PDU IP address on the command line to access the control console.
SSH Settings	
SSH Port	The TCP/IP port that SSH uses to communicate; 22 is the default value. Users can change port setting to any unused port from 5000 to 65535 to enhance security.
Hostkey Status	Display the status of hostkey fingerprint to show whether it is valid or invalid.

Item	Definition
Hostkey Fingerprint	The hostkey fingerprint uploaded by users will be displayed in this field.

5.7 FTP Service

Allow users to enable/disable the FTP server service and configure the TCP/IP port of the FTP server. The FTP server is used for upgrading Firmware. **See System Tab > Network Service > FTP Service.**

System Tab > Network Service > FTP Service

The screenshot displays the 'FTP Service' configuration page within the CyberPower PDU Remote Management interface. The left sidebar shows the 'Network Service' category selected, with 'FTP Service' highlighted. The main panel, titled 'FTP', contains the following configuration options:

- Allow Access:** A checkbox labeled 'Enable' is checked.
- Access Port:** A text input field contains the value '21', with a hint '[21 or 5000-65535]' displayed to its right.

'Apply' and 'Cancel' buttons are located below the configuration fields. The footer of the interface indicates the copyright year as 2010.

Item	Definition
Allow Access	Enable FTP server access.
Access Port	The TCP/IP port of the FTP server; 21 is the default value.

6. PDU Information

Display the system information of the PDU. See **System > About**.

System > About

The screenshot shows the 'CyberPower PDU Remote Management' web interface. At the top, it says 'Administrator login from 192.168.25.17' with a 'Logout' link. The navigation bar includes 'Summary', 'PDU', 'Logs', 'System' (selected), and 'Help'. On the left, a sidebar lists 'General', 'Network Service', 'Notification', 'Reset/Reboot', and 'About' (selected). The main content area is titled 'About' and contains two sections: 'Information' and 'Save/Restore Configuration'. The 'Information' section lists: Model Name (PDU15SW8FNET), Hardware Version (1.1), Firmware Version (2.1.6), Firmware Update Date (08/05/2015), and MAC Address (00-0C-15-40-2C-A7). The 'Save/Restore Configuration' section has 'Save Configuration' with a 'Save' button, 'Restore Configuration' with a 'Select File' button, and a 'Submit' button.

Item	Definition
Information	
Model Name	Model name of the PDU.
Hardware Version	The hardware version of the PDU.
Firmware Version	The version number of the current firmware installed on the PDU.
Firmware Updated Date	The date the firmware was last updated.
MAC Address	MAC address of the PDU. Note: The MAC address is shown on the label on the back of the PDU .
Save/Restore Settings	
Save Configuration	Click Save to save the configuration file to local computer. The text file will have a default format of YYYY_MM_DD_HHMM.txt.
Restore Configuration	To restore a configuration that has been saved earlier. Click Select File to import an existing file and then click Submit .