

Pharos Control User Guide

REV1.0.1

1910011630

Conte	nts	I
Chapte	er 1 Quick Start Guide	1
1.1	Introduction	1
1.2	Installation	1
1.3	Before Login	8
Chapte	er 2 Pharos Control Interface	9
2.1	Pharos Control Server	9
2.2	Pharos Control Client	11
2.	2.1 Login	11
2.	2.2 Client Interface Overview	12
2.	2.3 Navigation	13
Chapte	er 3 Device	14
3.1	Device Classification	15
3.2	Device List	17
3.3	Device Details	27
Chapte	er 4 Firmware	38
4.1	Firmware Classification	
4.2	Firmware List	40
4.3	Firmware Details	41
Chapte	er 5 Task	43
5.1	Task Classification	43
5.2	Task List	44
5.3	Task Details	49
Chapte	er 6 Trigger	50
6.1	Trigger Rule and Event Classification	50
6.2	Trigger Rule/Event List	51
6.3	Trigger Rule/Event Details	54
Chapte	er 7 Account	56
7.1	Account Classification	
7.2	Account List	58
7.3	Account Details	61

Contents

Chapte	er 8	Log	63
8.1	Log	Classification	64
8.2	Log	List	65
8.3	Log	Details	66
Chapte	er 9	Mail setting	67
Chapte	er 10	My Settings	70
Chapte Chapte	er 10 er 11	My Settings Application Example	70 71
Chapte Chapte 11.1	er 10 er 11 Ema	My Settings Application Example	70 71 .71
Chapte Chapte 11.1 11.2	er 10 er 11 Ema Auto	My Settings Application Example il Notification	70 71 .71 .73

Chapter 1 Quick Start Guide

1.1 Introduction

Pharos Control is a client-server based network management system application that allows for the centralized management and maintenance over the entire network formed by TP-LINK Pharos devices. It provides the following main features:

- Discover Pharos devices in the same subnet with the server or the devices in specified IP range.
- Connect devices and monitor their status: The Pharos Control server will monitor the status updates of those devices under management.
- Firmware upgrade: Devices under management can be upgraded from the Pharos Control.
 Multiple devices can be upgraded synchronously as a batch.
- Task Schedule: Automatically execute device discovery, reboot and firmware update tasks. These tasks can be performed once or periodically.
- Device configuration backup and restore: Backup or restore multiple device configurations remotely.
- Device statistics/graphs: Display the attributes of the device in the device details list and the graph view. Attributes in the graph can be customized and plotted for a period of time.
- Device grouping: Provide a device tree for navigation and device selection. The built-in auto grouping is categorized as managed and unmanaged. Users can also customize device groups in the manual grouping branch.
- Log, error and debug history: Record the system's working, error and debugging history.
- C/S architecture: Allow multiple users to access one single server. Users can be assigned different access levels (administrator, manager and guest).

1.2 Installation

Pharos Control server is an application typically hosted on a machine within the private network, together with the managed devices. Users can login the server through the Pharos Control client from anywhere on the network or over the Internet.

The server is meant to run continuously, to monitor and collect statistics about the managed devices. It is possible to run the server and client on the same machine, and launch the server on-demand, but this is not recommended.

System requirements for the server primarily depend on the number of the managed devices and the frequency of statistic updates from those devices. A single core machine with 512M dedicated RAM may be able to serve around 50 devices while a few thousand managed devices may require a better performing multi-core machine with 2-3GB dedicated memory. The server and client installers are provided for windows XP/Vista/7/8 and Server.

Server and Client Location: Ensure the managed devices are in the same subnet with the server on which the Pharos Control server is installed. The client machine can be either in the subnet with the server or in the Internet. Just make sure there is network connectivity between the client machine and the server.



Figure 1-1 Server-Client Location

Installation procedure:

If an earlier version of the application is present on your computer, please uninstall it and install the latest version.

Step 1. Go to <u>http://www.tp-link.com/resources/software/PharosControl_v1.1.4.zip</u> (or any support pages of Pharos series products) to download the software.



Step 2. Unzip the file and double click the PharosCtrol.exe file

Please wait for the InstallShield Wizard preparing the setup shown as the following screen.



Figure 1-2 Preparing to Install

Step 3. Then the following screen will appear. Please close all the antivirus software for the installation and click **OK** to continue.



Figure 1-3 Close all the Antivirus Software

Step 4. Then the following screen will appear. Click **Next** to continue. If you want to stop the installation, click **Cancel**.



Figure 1-4 Welcome to the InstallShield Wizard

Step 5. Choose the destination location for the installation files and click Next to continue.

Pharos Control - InstallShield Vizard
Choose Destination Location Select folder where setup will install files.
Setup will install Pharos Control in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
C Destination Folder
C:\Program Files\Pharos Control\ Browse
InstallShield
< <u>B</u> ack <u>Next</u> Cancel

Figure 1-5 Choose Destination Location

By default, the installation files are saved on the Program Files folder of system disk. Click the **Browse** button to modify the destination location as needed.

Step 6. Take server's installation as an example here. Select **Pharos Control Server** and click **Next**.

Pharos Control - InstallShield Vizaro	i 🔀
Select Features Select the features setup will install.	
Select the features you want to install, and deselect the fe	eatures you do not want to install.
Pharos Control Client	Description This is the Pharos Control Server
152.41 MB of space required on the C drive 30221.41 MB of space available on the C drive InstallShield	
	:k <u>N</u> ext≻ Cancel

Figure 1-6 Install the Software

Step 7. The following screen shows the default settings of the server. You can customize the server port number, the username and password here. Click **Next** to continue.

Pharos Contr	ol - InstallShield Vizard	×
Server Settings Change the para	ameters of the server.	
You can change	e the server port , the login username and password, or leave it as default.	
Server Port:	9321	
Username:	admin	
Password:	admin	
InstallShield		
	< <u>B</u> ack <u>N</u> ext > Cancel	



Step 8. Till now, the Wizard is ready to begin the installation. Click **Next** to start the installation on the following screen.

Pharos Control - InstallShield Vizard	
Start Copying Files Review settings before copying files.	1
Setup has enough information to start copying the program files. If you want to review or change any settings, click Back. If you are satisfied with the settings, click Next to begin copying files.	
Current Settings:	
Pharos Control Server	<
InstallShield <u>Back Next</u> Canc	el

Figure 1-8 Start Installation

Step 9. The InstallShield Wizard is installing the software, shown as the following screen. Please wait.

Pharos Control - InstallShield Vizard	
Setup Status	N.
Pharos Control is configuring your new software installation.	
C:\Program Files\Pharos Control\jre\bin\client\jvm.dll 	
InstallShield	
	Cancel

Figure 1-9 Setup Status

Step 10. On the following screen, click **Finish** to complete the installation and launch the Pharos Control Server.



Figure 1-10 Complete Installation

1.3 Before Login

Ensure the server is reachable from the client before login. If the server is behind an NAT gateway, please refer to the gateway's reference guide to open the corresponding port as configured in Figure 1-7 if you want to access the Pharos Control Server from the Internet.

Return to Contents

Chapter 2 Pharos Control Interface

2.1 Pharos Control Server

Double click _____ at the bottom right corner of the taskbar to open the Pharos Control Server Monitor Window:

Pharos Control Server	Lonitor	
Sever status : Running	Server port :	9321
Sessions information (1)		
Username	Role	Client Address
admin	Administrator	192.168.0.100:55181
Restart server	ॡ Restore database	View logs
Stop server	Backup database	🐳 Setting
Start server	🕐 Reset database	E Exit

Figure 2-1 Server Monitor

The upper half of the window displays the running status of the server. The lower half contains corresponding operation buttons.

Server status: Displays the server's status.

Server port: Displays the server's listening port number.

Sessions Information: The user information connecting to the server, including Username, Role

and Client Address. Right click an entry and choose Stop session to disconnect the specified client.



Restore database

: Restore the database with a previous backup.





Figure 2-2 Server Settings

Status board	Open the Server Monitor Window.		
🔆 Setting	Configure the Server's port and whether it will run automatically at boot.		
	* Setting		
	Server port : 9321 (1025 - 65535) Run automatically at boot : 🗹		
	OK Cancel		
💈 Restart server	Restart the server.		
Start server	Start the server.		
🧧 Stop server	Shut down the server.		
🕐 Reset database	Reset the server to factory settings, which will lose the user's current configuration.		
Backup database	Backup the database.		
Restore database	Restore the database with a previous backup.		
Exit	Shut down the server and close this window.		

Pharos Control User Guide

2.2 Pharos Control Client

2.2.1 Login

Open the Pharos Control Client and enter the Server's IP address, port (by default 9321), Username and Password (by default both are admin).

C Pharos Control		
TP-LINK® The Reliable Choice		
PHAROS C	ONTROL	
Server:		
Username:		
Password:		
	Remember password	
	Login	

Figure 2-3 Login the Client

2.2.2 Client Interface Overview

The Client's typical interface is shown as Figure 2-4. Section A is entry category. Section B is entries under the selected category and the corresponding buttons. Section C is the detailed information of the selected entry. The red box marked at the top of this window is the notification message box.

		🗘 Mail setting 💄 admin 🕞 Logout
	Device Firmware Task	Trigger Account Log
5 A 	Discover 📃 🖺 🗙 🕅 🖬 🔿 🛈 🕅	<u>م</u>
all devices	Davie name Statue Mode SSII Doub AD SSII Diadelase MAP addase Diadest Varian	SND Ty rela
 Autogrouping Managed Managed Managed Managed Section A 	Section B	
General Discover Reboot Upgrade Ping		<u> </u>
Device details	01 C	
Attribute Value		
Device name		
Status	1.0	
Mode	0.9	
SSID	0.8	
RootAP SSID		
IP address	u./	
MAC address	0.6	
Product		
version	20.3	
SNR	0.4	
TX Tale		
Ty total		
Division	0.2	
CPUIdad	0.1	
CPUtrenuency		
Memory usage	V 0.0 ¹	
Non particular and the second		

Figure 2-4 Typical Interface

2.2.3 Navigation

Use the top level navigation tabs to access different functions.

Device	Firmware	Task	Trigger	Account	Log

Figure 2-5 Navigation Tabs

Device page displays Pharos devices managed by Pharos Control.

Firmware page allows managing firmware files saved in the Pharos Control Server.

Task page allows viewing and editing scheduling tasks.

Trigger page allows managing triggering rules and events.

Account page allows viewing and managing all the users' accounts.

Log page contains log information about Pharos Control System and managed devices.

There are three setting buttons at the top right corner of the window:

🌣 Mail setting 💄 admin 🕒 Logout

Figure 2-6 Settings

For Mail setting and admin, please refer to Chapter 9 and Chapter 10.

Logout: Click to logout the Client.

Return to Contents

Chapter 3 Device

Device Tab is used to view and classify the Pharos devices for ease of navigation, including **Device Classification**, **Device List** and **Device Details**.





3.1 Device Classification

Device Classification is in Section A of the Device Tab.



Figure 3-2 Device Classification

Devices can be categorized into several groups in Section A. "All devices" and "Auto grouping" are dynamic groups, in which devices are automatically added and removed. Under the "Auto grouping", Managed and Unmanaged are built-in groups. User can also create a new group and define its corresponding search criteria. This group will automatically contain devices based on the preset criteria. "Manual grouping" is a static group, and users can customize new categories under this group and add devices in **Device List** section to these categories.

Entry Introduction:

- > All Devices: Lists all the Pharos devices.
- Auto Grouping: Devices in Auto Grouping are selected according to certain criteria automatically. The Managed and Unmanaged groups are built-in and undeletable.
- Managed: Displays Pharos devices under management.
- Unmanaged: Displays Pharos devices that are discovered but unmanaged by Pharos Control.



Under the Auto grouping, click is to customize a new group and configure the grouping conditions, as shown in Figure 3-3. Several conditions can be combined with AND-OR logic.

A	dd fo	olde	er						
Na	me:								
FE	xpres	ssic	n						
			Device name	~	contains	¥		+ -	
I.					_				
	AND	~	Memory usage	~	contains	~	_	+	
	and OR								
					ок	Ca	incel		

Figure 3-3 Customized Group

> Manual Grouping: Devices in this static group are added or removed by the users manually.

Operations:

	Maximize the current window.
3	Add a new group.
×	Delete the selected group.
2	Edit the name of the selected group.



The Managed and Unmanaged folder under Autogrouping cannot be edited or deleted.

3.2 Device List

 Discover
 Image: Comparison of the status in the status

Device List is in Section B of the Device Tab.

Figure 3-4 Device List

Device List displays the device information of the selected group.

Entry Introduction:

Device name:	Name of the device.			
Status:	Status of the device, including Managed, Unmanaged or Error. Managed indicates the device is reachable and under management. Unmanaged indicates the device either cannot reach Pharos Control or is down. It's also the device's initial status in Pharos Control. If you try to manage a device which is unreachable or is down, its status will change to Error.			
	Figure 3-5 shows details of the status transition.			
Mode:	The device's operation mode, including Access Point, Client, Repeater, Bridge, AP Router and AP Client Router.			
SSID:	The device's SSID.			
Root AP SSID:	Displays the SSID of the device's root AP when it is in the following mode: Client, Repeater, Bridge and AP Client Router.			
IP Address:	The device's IP address.			
MAC Address:	The device's MAC address.			

Product:	The device's model and version.
Version:	The device's software version.
SNR:	Signal Noise Ratio.
Tx Rate:	Displays the data rate at which the device transmits wireless packets.
Rx Rate:	Displays the data rate at which the device receives wireless packets.
Tx Total:	The total wireless packets that the device has transmitted.
Rx Total:	The total wireless packets that the device has received.
CPU Usage:	The device's CPU usage.
CPU Frequency:	The device's CPU frequency.
Memory Usage:	The device's memory usage.
Memory Size:	The device's memory size.
Client Number:	Displays the number of clients that connect to the device wirelessly.
CCQ:	Client Connection Quality.
Description:	The description of the device.

You can sort the entries on a specific column by simply clicking the column name.



The following figure shows the device's status transition in Pharos Control.

Figure 3-5 Status Transition

Operations:

Discover	Search the devices. The discovering process and results are displayed in the Device Details window. Ensure the Discovery function is
	enabled on the Management Tab->Miscellaneous page of the Pharos
	series products, so that they can be discovered by Pharos Control.
	Discover
	Discovery mode
	• Auto(same subnet as the server)
	O Custom IP-Range Scan
	Example: 192.168.0.0/24
	The netmask length should be equal or greater than 24
	OK Cancel
	Auto: Search the devices in the same subnet as the server.
	Custom IP-Range Scan: Search the devices in specified IP range.
	The netmask length should be equal or greater than 21, and the
	maximum number of the devices that can be searched is 2047.

	Maximize the current window.			
些	Add a new device mo	del manually.		
	Add device			
	IP address:			
	Description:		•	
	Set managing	option		
	Username:			
	Password:			
	Port:	22		
	C	OK Cancel		
	Enter the related infor	mation of the device to be add	ed and click OK to	
	save.			
	IP Address: Enter the	device's IP address.		
	Description: Enter the	device's description (optional).		
	Username: Enter the u	user's name.		
	Password: Enter the p	assword.		
	Port: Enter the SSH p	ort.		
×	Delete the selected de	evice.		

	Click to edit the inform	mation of the selected device	
	Edit device		
	IP address:	192.168.0.254	
	Description:	CPE510 DK Cancel	~ ~
	Edit the related inform IP Address: Edit the Description: Edit the	nation of the selected device device's IP address. device's description (optional	and click OK to save.
>	Select all the devices	s in the Device List window.	

0	Upgrade the software of the device being managed.
	Click this button and the Upgrade confirmation window will pop up.
	Please note that only the device being managed will show up in this
	window. For information about how to manage the device, please refer
	to <u>Start manage</u> .
	Do you really want to upgrade the device(s) below?
	Device name IP address Firmware
	OK Cancel
	In this window, select the target device and the corresponding firmware file, and click OK to upgrade the device. The firmware files should be uploaded to the server in advance. For details, please refer to <u>Firmware</u>
	Device name: The device's name.
	IP Address: The device's IP address.
	Firmware: Select the corresponding firmware file which is saved in the
	server from the pull-down list.

С С	Reboot the selected devices. Click this button and the Reboot confirmation window will pop up.
	Reboot confirmation
	Do you really want to reboot the devices below?
	Device name IP address ✓ tp-link - 192.168.0.254 192.168.0.254
	OK Cancel Select one or multiple devices in this window and click OK to reboot
	them.
	Device Name: The device's name.
	IP Address: The device's IP address.

8	Click this hutten to add ashedulad tools
\odot	
	Name:
	Scheduled
	O Cycle
	From: 2016-02-01 0 ≑ 0 ≑
	lo: 2016-02-01 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
	Task
	Devices IP
	✓ New Device 192.168.0.254
	OK Cancel
	Add the scheduled tasks in this window and click OK to save.
	Name: Enter the scheduled task's name.
	Scheduled: Configure the scheduled execution time.
	Once: This scheduled task will be executed once.
	Date: Specify the task's execution time.
	Cycle: This scheduled task will be executed periodically.
	From: The start time of the execution period.
	Io: The end time of the execution period.
	month week or day
	Date&Time: The exact time at which the task is executed during
	the period.
	Task: Specify the scheduled action, including Discovery, Reboot,
	Firmware upgrade and Manage. If Reboot is selected, the target
	devices should be specified in the lists below. If Firmware upgrade is
	selected, both the target devices and their corresponding firmware files
	should be specified. If Manage is selected, the server will try to
	reconnect the target devices.
	Device everyon Cale at the device everyon



Click the menu button (or right click any device entry below) to display all the operations available. Operations without corresponding buttons are introduced below:

Start managing
Stop managing
Edit managing option
Reboot
Upgrade
Ping
Open web UI
Add
Delete
Edit
Add schedule
Add to group
Remove from group

Start Managing: Select the unmanaged device in the list below to manage it. Its username, password and SSH port number should be configured in advance in <u>Edit Managing Option</u>. Ensure the Remote Management function is enabled on the **Management Tab->SSH Server** page of the Pharos series products, so that they can be managed by Pharos Control.

Stop Managing: Click to stop the management of the selected device being managed now.

Edit Managing Option: Configure the login information of the selected device.

Edit manag	ging option				
Username:	admin				
Password:	•••••				
Port:	22				
Manage	Save Cancel				
Enter the login information of the device and Click OK to save.					
Username: Enter the device's login username.					
Password: Enter the device's login password.					

Port: Specify SSH port of the Ping: Click this to ping the sele	e device to be managed. ected device.
Ping confirmation	
Count: 4 🛨	Timeout 1 S
Device name	IP address
✓ New Device	192.168.0.254
OK	Cancel
Configure the parameters relat	ted to the ping operation, and click OK to
save.	
Count: The amount of times	to send ping request during the test.
I imeout: Specify the timeou	t time of the ping test.
IP Address: The IP address	target device.
Open Web UI: Open the We	b interface of the selected device. It is
opened in the default browser	by default.

Login TERMS OF USE This TP-LINK wireless device must be installed by a certific Ethernet cable and earth grounding must be used in compl abide by local rules and regulations in terms of legal freque Frequency Selection (DFS) requirements. The End User ac accordance with these rules and regulations. For further inf	Username: Password: ed professional, Properly installed shielded liance with this product's warranty. Installers must ency channels, output power, and Dynamic ccepts responsibility for maintaining the product in formation, please visit www.tp-link.com. Login Clear
Add to Group: Add the selected de Start managing Stop managing Edit managing option Reboot Upgrade Ping Open web UI Add Delete Edit Add schedule	evice to the user-defined group.
Add to group	tplink1
Remove from group Remove from group: Remove the user-defined group.	selected device from the
Enter a key word to search all the a partial text match will be highligh	columns in the device list below, and hted.
Discover	Kot AP SSID IP address MAC address Prot NNA 192180.254 E0-06-5AABB-CF CPE2101

3.3 Device Details

Device Details is in Section C of the **Device Tab**.

Device Details contains 5 sub tabs: **General**, **Discover**, **Reboot**, **Upgrade** and **Ping**. Every sub tab divides into two windows.

General Tab:

The left window of Section C displays the detailed information of the selected device.

Device details		
Attribute	Value	
Device name	CPE210 - 192.168.0.254	
Status	Managed	
Mode	AP Router	
MAC address	E0-05-C5-AA-BB-CF	
IP address	192.168.0.254	
SSID	TP-LINK_Outdoor_AABBCF	
Root AP SSID	N/A	
Product	CPE210:1.0	
SNR	N/A	
Tx rate	0.00Kb/s	
Rx rate	0.00Kb/s	
Tx total	223.00B	-
Rv total	0.008	The second se

Figure 3-6 Device Details

Attribute: This column displays the name of the device's attribute, including device name, status, mode, MAC address, IP address, SSID, root AP SSID, Product, SNR, Tx rate, Rx rate, Tx total, Rx total, CPU load, CPU frequency, memory usage, memory size, client number, Transmit CCQ, version and description.

Value: The corresponding value of each attribute.

The right window of Section C displays graph for attributes, including memory size, memory usage, CCQ and so on, of the currently selected device. The attributes displayed is customizable and will refresh every one second when the device is online.



Users can choose one or more attributes to form a set, which is displayed below dynamically.

Figure 3-7 Attributes in Graph

Cli	ck this button to confi Add set Manage set ck Add set to add a r Add set	gure the attribute set.	
	Name: Attribute Tx rate Rx rate CPU load Memory usage Client number Tx total Rx total SNR Transmit CCQ	Description The sending rate of device. The receiving rate of device. The CPU load of device. The free memory of device. The free memory of device. The current clients' number of device. The wlan sending rate of device. The wlan receiving rate of device. The SNR of device. The transmit CCQ of device.	
	Select the attributes to Name: Enter the name Attribute: The name o Description: The desc Tx Rate: Displays the Rx Rate: Displays the CPU load: The device Memory Usage: The o Client Number: Displa Tx total: The total wire	OK Cancel OK Cancel D be displayed, and click OK to save. The of the new attribute set. If the attribute. If the attribu	vireless packets. rireless packets. the device wirelessly. tted.

Click Manage set to configure the existed attribute sets.	SNR: Signal Nois Transmit CCQ: 0	lse Ratio. Client Connection Quality.
Attribute set: Delete Attribute tolink=1 tplink-2 CPU load Memory usage Client number Tx total Rx total SNR Transmit CCQ In this window you can edit each set's attributes or delete the set, and click OK to (Please note that you cannot delete or edit a set's attribute when the set is displayed.) Delete: Click this button to delete the selected set. Attribute: Check the boxes to choose the attributes contained in the selected set.	Click Manage set f	to configure the existed attribute sets.
Attribute set: Delete Attribute Ty rate Tx rate CPU load Memory usage Client number Tx total Rx total SNR Transmit CCQ OK Cancel OK In this window you can edit each set's attributes or delete the set, and click OK to (Please note that you cannot delete or edit a set's attribute when the set is displayed.) Delete: Click this button to delete the selected set. Attribute: Check the boxes to choose the attributes contained in the selected set.		
OK Cancel In this window you can edit each set's attributes or delete the set, and click OK to (Please note that you cannot delete or edit a set's attribute when the set is displayed.) Delete: Click this button to delete the selected set. Attribute: Check the boxes to choose the attributes contained in the selected set.	Attribute set: tplink-1 tplink-2	Delete Attribute Tx rate Rx rate CPU load Memory usage Client number Tx total Rx total SNR Transmit CCQ
In this window you can edit each set's attributes or delete the set, and click OK to (Please note that you cannot delete or edit a set's attribute when the set is displayed.) Delete: Click this button to delete the selected set. Attribute: Check the boxes to choose the attributes contained in the selected set.		OK Cancel
Autobice. Oncervate boxes to choose the autobices contained in the selected set.	In this window you (Please note that displayed.) Delete: Click this Attribute: Check	a can edit each set's attributes or delete the set, and click OK to say you cannot delete or edit a set's attribute when the set is bei s button to delete the selected set.
Select the set to display the changes of its attributes in real-time. (refreshing	Select the set to	display the changes of its attributes in real-time. (refreshing eve



Discover Tab:

The left window of Section C displays the discovery operation list.



Figure 3-8 Discovery List

Entry introduction:

Queue Total:	The total number of the discovery operations in the list below.
Completed:	The total number of the completed discovery operations in the list below.
Failed:	The total number of the failed discovery operations in the list below.
Name:	Displays the name of the discovery operation distinguished by the time it was carried on.
Status:	Displays the result of the discovery operation.

Operations:

Ē	Clear all the discovery operation lists in this tab.
×	Delete the selected discovery operation entry.
	Stop the currently running discovery operation.

The right window of Section C displays the progress bar of the selected discovery operation and its result.

Discovery [2014-06-06 15::	28:23]		Status: Complet	ted	
Progress:		100)%		
New		Online		Offline	
Device name	IP addres: 🛆	Device name	IP addre: 🛆	Device name	IP addre 🛆
		CPE210 - 192.168.0.254	192.168.0.254	abvc	192.168.0.25

Figure 3-9 Discovery Status

Entry introduction:

Discovery:	The time when the discovery operation begins.
Status:	The status of the discovery operation.
Progress:	The progress of the discovery operation.
New:	This table lists the newly discovered devices in this operation which are not in the list of <u>3.2 Device List</u> .
Online:	This table lists the discovered devices in this operation which are in the list of 3.2 Device List and are online now.
Offline:	This table lists the discovered devices in this operation which are in the list of <u>3.2 Device List</u> and are offline now.

Entries in the list:

Device Name:	The name of the device.
IP Address:	The IP address of the device.

Reboot Tab:

The left window of Section C displays the reboot operation list.



Figure 3-10 Reboot List

Entry introduction:

Queue Total:	The total number of the reboot operations in the list below.
Completed:	The total number of the completed reboot operations in the list below.
Failed:	The total number of the failed reboot operations in the list below.
Name:	Displays the name of the reboot operation distinguished by the time it was carried on.
Status:	Displays the result of the reboot operation.

Operations:

Ŵ	Clear all the reboot operation lists in this tab.
×	Delete the selected reboot operation entry.
The right window of Section C displays the progress bar of the selected reboot operation and its result.

Reboot [2013-07-19 14:10:58]	Status: Completed		
Device name	Progress	Status	
tp-link - 192.168.0.254	100%	Completed	
			∇
			\geq

Figure 3-11 Reboot Status

Entry introduction:

Reboot:	The time when the reboot operation begins.
Status:	The status of the reboot operation.
Device Name:	The name of the device.
Progress:	The progress of the reboot operation.

Upgrade Tab:

The left window of Section C displays the upgrade operation list.



Figure 3-12 Upgrade List

Entry introduction:

total number of the upgrade operations in the list below.

Completed:	The total number of the completed upgrade operations in the list below.
Failed:	The total number of the failed upgrade operations in the list below.
Name:	Displays the name of the upgrade operation distinguished by the time it was carried on.
Status:	Displays the result of the upgrade operation.

Operations:

Ē	Clear all the upgrade operation lists in this tab.	
×	Delete the selected upgrade operation entry.	

The right window of Section C displays the progress bar of the selected upgrade operation and its result.

Upgrade [2014-06-09 10:52:12]	Status: Completed	
Device name	Progress	Status
CPE210 - 192.168.0.254	100%	Completed

Figure 3-13 Upgrade Status

Entry introduction:

Upgrade:	The time when the upgrade operation begins.
Status:	The status of the upgrade operation.
Device Name:	The name of the selected device.
Progress:	The progress of the upgrade operation.
Status:	The result of the upgrade operation.

Ping Tab:

The left window of Section C displays the ping operation list.



Figure 3-14 Ping List

Entry introduction:

Queue Total:	The total number of the ping operations in the list below.
Completed:	The total number of the completed ping operations in the list below.
Failed:	The total number of the failed ping operations in the list below.
Name:	Displays the name of the ping operation distinguished by the time it was carried on.
Status:	Displays the result of the ping operation.

Ŵ	Clear all the ping operation lists in this tab.	
×	Delete the selected ping operation entry.	

The right window of Section C displays the information of the selected ping operation and its result.

Ping [2014-06-09 11:3	4:01]	Status: Completed
Device name CPE210 - 192.168.0.254	IP address 192.168.0.254	<pre>ping192.168.0.254 process started Pinging 192.168.0.254 with 32 bytes of data: Reply from 192.168.0.254: bytes=32 time<1ms TTL=64 Reply from 192.168.0.254: bytes=32 time<1ms TTL=64 Reply from 192.168.0.254: bytes=32 time<1ms TTL=64 Ping statistics for 192.168.0.254: Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in mili-seconds: Minimum = 0ms, Maximum = 0ms, Average = 0ms ping 192.168.0.254 process completed </pre>

Figure 3-15 Ping Status

Entry Introduction:

Ping:	The total number of the ping operations in the list below.
Status:	Displays the status of the ping operation.
Device name:	The name of the device.
IP Address:	The IP address of the device.

The window in the right displays the detailed ping operation result.

Chapter 4 Firmware

Firmware Tab is used for managing the firmware files in the server, including **Firmware Classification**, **Firmware List** and **Firmware Details**.

				三 B X	$\odot \ominus \equiv$	Q
n 🥁 Firmwares	File name TL-WA8520N-up-ver1-0-0-P10-[20130427-rel44235] b	n 100	Software version	Hardware version	Upload date 2014-04-23 18-48	Uplos
Section A	Section B ≺					
Attribute File name Status Software version Hardware version Uploader Upload date Build date Build date Support list	on C					

Figure 4-1 Firmware Tab

4.1 Firmware Classification

Firmware Classification is in Section A of the Firmware Tab.



Figure 4-2 Firmware Classification

Firmware files can be categorized in Section A. Users can customize groups to save firmware files uploaded into the server. All the groups are under the root Firmwares by default.

Entry Introduction:

Firmwares:	List all the firmware files saved in the server.
CPE-210:	The manually added firmware group.

	Maximize the current window.
	Add a new firmware group.
×	Delete the selected firmware group.
	Manage the selected group.
	In this window users can edit the group name and remove the firmware files from this group. Click OK to save the configurations. If not chosen, the firmware file will be deleted from this group.
	Name: The group's name.
	File Name: The firmware file's name.
	Machine Type: The firmware file's applicable product models.
	Version: The firmware file's version.

4.2 Firmware List

Firmware List is in Section B of the Firmware Tab.

File name	Software version	Hardware version	Upload date	Uploa	
pharos_un-up-ver1-0-0-P15-[20140324-rel56987].bit	.0.0	1.0	2014-05-30 10:55	admin	
4					

Figure 4-3 Firmware List

Firmware List displays the firmware files' information of the selected group.

Entry Introduction:

File Name:	Name of the firmware file.
Software Version	Software version of the firmware file.
Hardware Version:	Hardware version of the firmware file.
Upload Date:	The uploaded date of the firmware file.
Uploader:	The uploader of the firmware file.

You can sort the entries on a specific column by simply clicking the column name.

s a s s	Maximize the current window.
	Click to add a new firmware file manually.
	File Path: Browse Upload Cancel
×	Delete the selected firmware file from server.

\odot	Activate the selected firmware file. The firmware file is activated by default when it's uploaded.
O	Deactivate the selected firmware file to remove it from the applicable list when users upgrade the devices.
	Click the menu button (or right click any device entry below) to display all the operations in this window. Operations without corresponding buttons are introduced below: Add Delete Activate Deactivate Add to group Add to group Add the selected firmware file to the firmware group you have manually created.
Q	Enter a key word to search all the columns in the firmware file list below, and a partial text match will be highlighted.

4.3 Firmware Details

Firmware Details is in Section C of the **Firmware Tab**. This window displays the detailed information of the selected firmware file.

Attribute	
File name	pharos_un-up-ver1-0-0-P15-[20140324-rel56987].bin
Status	
Software version	
Hardware version	
Uploader	
Upload date	
Build date	
Support list	
4	

Figure 4-4 Firmware Details

Attribute: The name of the firmware file's attribute.

Value: The value of the corresponding attribute.

File name:	The name of the firmware file.
Status:	The firmware file's status, including activated and deactivated. The deactivated firmware file cannot be used to upgrade devices.
Software Version:	The software version of the firmware file.

Hardware Version:	The hardware version of the firmware file.
Uploader:	The uploader of the firmware file.
Upload Date:	The upload date.
Build Date:	The firmware file's build date and version.
Support List:	The product models that this firmware file supports.

Chapter 5 Task

Task Tab is used for editing the scheduled tasks and viewing their running status. This tab includes **Task Classification**, **Task List** and **Task Details**.



Figure 5-1 Task Tab

5.1 Task Classification

Task Classification is in Section A of the Task Tab.



Figure 5-2 Task Classification

Tasks are categorized into four groups: Scheduled, Running, Completed and Failed.

These four categories cannot be edited or deleted. Click the corresponding folder to view its tasks.

Entry Introduction:

- Scheduled: The scheduled tasks which are not executed yet.
- Running: The running tasks.
- > Completed: The completed tasks.
- ➢ Failed: The failed tasks.

Operations:

5.2 Task List

Task List is in Section B of the Task Tab.

	Name	A	Action	Create Time	Start Time	Finish Time	Scheduler
reboot_1				2016-03-09 10:23			admin
ব							
2							

Figure 5-3 Task List

This section is used to manage the scheduled tasks. Different devices have different operation buttons and entries.

Scheduled:



Figure 5-4 Scheduled Task List

Entry Introduction:

Name:	The name of the scheduled task.
Action:	The action to be executed, including Discovery, Reboot and Firmware upgrade.
Create Time:	The time when this task was created.
Start Time:	The time when this task starts.
End Time:	The time when this task ends.
Scheduler:	The creator of the task.

You can sort the entries on a specific column by simply clicking the column name.

	Maximize the current window.
\mathbf{i}	Click this button to add scheduled tasks.
×	Delete the selected task.
2	Click to edit the information of the selected task entry.
\odot	Activate the selected task. The scheduled task is activated by default when it is created.
Θ	Deactivate the selected task to make it inactive.
	Run the selected task immediately.
	Click the menu button (or right click any task entry below) to display all the operations in this window.
Q	Enter a key word to search all the columns in the task list below, and a partial text match will be highlighted.

> Running

		je ≔ I		Q
Task name 🛛 🔺	Action	Status	Start Time	
Scheduled - Reboot [2014-06-10 14:58:03]	Reboot	Running	2014-06-10 14:58	

Figure 5-5 Running Task List

Entry Introduction:

Task Name:	The name of the running task.
Action:	The executing action, including Discovery, Reboot and Firmware upgrade.
Status:	The current status of the task.
Start Time:	The start time of the task.

	Maximize the current window.
(Click this button to add scheduled tasks.
Q	Enter a key word to search all the columns in the task list below, and a partial text match will be highlighted.

> Completed

			1	ð× ᡯ ← → ¥ ≔ ■	Q
No.	Task name	Action	Status	Start time	Fir 🛆
14	Scheduled - Reboot [2014-06-10 14:58:03]	Reboot	Completed	2014-06-10 14:58	2014-06-10 14:59
13	Scheduled - Reboot [2014-06-10 14:56:34]	Reboot	Completed	2014-06-10 14:56	2014-06-10 14:57
12	Scheduled - Reboot [2014-06-10 14:53:55]	Reboot	Completed	2014-06-10 14:53	2014-06-10 14:55
11	Ping [2014-06-09 11:40:26]	Ping	Completed	2014-06-09 11:40	2014-06-09 11:40
10	Ping [2014-06-09 11:34:01]	Ping	Completed	2014-06-09 11:34	2014-06-09 11:34
9	Upgrade (2014-06-09 10:52:12)	Upgrade	Completed	2014-06-09 10:52	2014-06-09 10:54
8	Reboot [2014-06-06 17:05:47]	Reboot	Completed	2014-06-06 17:05	2014-06-06 17:06
7	Discovery [2014-06-06 15:30:29]	Discovery	Completed	2014-06-06 15:30	2014-06-06 15:31
6	Discovery [2014-06-06 15:28:23]	Discovery	Completed	2014-06-06 15:28	2014-06-06 15:29
5	Discovery [2014-05-29 15:47:07]	Discovery	Completed	2014-05-29 15:47	2014-05-29 15:47
4	Discovery [2014-05-29 14:35:56]	Discovery	Completed	2014-05-29 14:35	2014-05-29 14:36
3	Discovery [2014-05-29 14:33:38]	Discovery	Completed	2014-05-29 14:33	2014-05-29 14:34
2	Discovery [2014-05-29 14:32:24]	Discovery	Completed	2014-05-29 14:32	2014-05-29 14:32
1	Discovery [2014-05-27 15:43:06]	Discovery	Completed	2014-05-27 15:43	2014-05-27 15:43
4					



Entry Introduction:

No. :	The sequence number.
Task Name:	The name of the task and its start time.
Action:	The action of the task, including Discovery, Reboot and Firmware upgrade.
Status:	The status of the task.
Start Time:	The time when this task starts.
Finish Time:	The time when this task ends.

к я 2 л	Maximize the current window.
\mathbf{i}	Click this button to add scheduled tasks.
×	Delete the selected task record. (multiple)
不	Displays the 50 tasks recently completed.
←	The previous page.

\rightarrow	The next page.
Ŧ	Displays the 50 tasks firstly completed.
	Click the menu button (or right click any task entry below) to display all the operations in this window.
Q	Enter a key word to search all the columns in the task list below, and a partial text match will be highlighted.

> Failed

Entry Introduction:

No. :	The sequence number.
Task Name:	The name of the task and its start time.
Action:	The action of the task, including Discovery, Reboot and Firmware upgrade.
Status:	The status of the task.
Start Time:	The time when this task starts.
Finish Time:	The time when this task ends.

	Maximize the current window.
©	Click this button to add scheduled tasks.
×	Delete the selected task record. (multiple)
←	Displays the 50 tasks recently failed.
Ť	The previous page.
\rightarrow	The next page.
Ŧ	Displays the 50 tasks firstly failed.

	Click the menu button (or right click any task entry below) to display all the operations in this window.
Q	Enter a key word to search all the columns in the task list below, and a partial text match will be highlighted.

5.3 Task Details

Task Details is in Section C of the **Task Tab**. Different kinds of task corresponds to different details window. The scheduled task will be taken as an example in the following:



Figure 5-7 Task Details

Attribute: The name of the task's attribute.

Value: The value of the corresponding attribute.

Schedule name:	The scheduled task's name.
Action:	The action to be executed.
Device:	The device to execute the task.
Status:	The status of the scheduled task.
Create Time:	The create time of the scheduled task.
Start Time:	The start time of the task.
End Time:	The end time of the task.
Scheduled by:	The creator of the scheduled task.
Repeat:	The scheduled task's execution time/period.

Chapter 6 Trigger

Trigger Tab is used to configure and manage the trigger rules and trigger events saved in the server. This tab includes **Trigger Rules and Trigger Events Classification**, **Trigger Rules/Events List** and **Trigger Rules/Events Details**.

к. а к. м.			🗐 🖁 🗙 🖺 🗐	۹ ⊖ ♦
ringger rules ■ Tingger events ■ Unchecked Unchecked	Name	From state	To state	Action
Section A	Section B			
Sect	ion C			

Figure 6-1 Trigger Tab

6.1 Trigger Rule and Event Classification

Trigger Rule and Event Classification is in Section A of the Trigger Tab.



Figure 6-2 Trigger Rule and Event Classification

Trigger rules are displayed under the Trigger rules folder. Trigger rules define actions that are triggered by device status changes.

Trigger events are divided into two folders: Checked and Unchecked. The unread trigger events are saved in the Unchecked folder, and the read trigger events are saved in the Checked folder.

Operation:

ľ	a.	я
	с.	- 24

Maximize the current window.

6.2 Trigger Rule/Event List

Trigger Rules/Events List is in Section B of the **Trigger Tab**. Trigger rules and events have different operation buttons and lists.

> Trigger Rules:

				三 & ×		Q
	Name		From State	To State	Action	
аа		Mana	ged	Unmanaged	E-Mail Notification	
alarm		Mana	ged	Connection error	Manage device	



Entry Introduction:

Name:	The name of the trigger rule.
From State:	The former state of the device.
To State:	The state that the device transits to.
Action:	Action to take on device status changes.

111 111 111 111 111 111 111 1	Add new trigger rules.
	Add trigger
	Name: Device group: All devices v Condition: From Unmanaged v To Managed v
	Type: E-Mail Notification V
	Action setting To: Subject:
	OK Cancel
	Name: Enter the name of the trigger rule. Assign meaningful names to rules that will easily identify them.
	Device Group: Limit the trigger rule to a specified device group defined in <u>3.1 Device Classification</u> .
	Condition: Specify the status changes. The status includes Unmanaged, Managed and Error.
	includes E-Mail Notification and Manage device. If E-mail
	specified trigger occurs; If Manage device is selected, the server will try to reconnect to the device when the specified trigger occurs.
	Action setting: Configure the recipient address and subject of the email if E-mail Notification is selected.
×	Delete the selected trigger rule.
	Edit the selected trigger rule.
\odot	Activate the selected trigger rule. The trigger rule is activated by default when it is created.
Θ	Deactivate the selected task to make it inactive.

	Run the selected trigger rule immediately.
	Click the menu button (or right click any rule entry below) to display all the operations in this window.
Q	Enter a key word to search all the columns in the rule list below, and a partial text match will be highlighted.

> Trigger Events:

				$\Xi \times \equiv$	Q
	Trigger name 🛛 🔺	Device name	Time	Туре	Actic 🛆
alarm		CPE210 - 192.168.0.254	2014-06-11 10:02	From Managed to Error	E-mail

Figure 6-4 Trigger Event List

Trigger events divide into two types depending on whether the notification email has been read:

Checked

Entry Introduction:

Trigger name:	The name of the trigger
Device name:	The device on which the event happened.
Time:	The time when the trigger event happened.
Туре:	The transition of the device status.
Action:	The action that was taken after the event triggered.

	Maximize the current window.
×	Delete the selected trigger event.
	Click the menu button (or right click any trigger event below) to display all the operations in this window.



Enter a key word to search all the columns in the rule list below, and a partial text match will be highlighted.

Unchecked

Entry Introduction:

Trigger Name:	The name of the trigger.
Device name:	The device on which the event happened.
Time:	The time when the trigger event happened.
Туре:	The device's status transition type.
Action:	The action that was taken after the event triggered.

Operations:

	Maximize the current window.
×	Delete the selected trigger event.
\odot	Set the selected unchecked event as checked.
	Click the menu button (or right click any trigger event below) to display all the operations in this window.
ď	Enter a key word to search all the columns in the rule list below, and a partial text match will be highlighted.

6.3 Trigger Rule/Event Details

Trigger Rules/Events Details is in Section C of the **Trigger Tab**. This window displays the detailed information of the selected trigger rule/trigger event.

> Trigger Rules:

Attribute	Value	
Name		
Status	Activated	
Group		
From state	Unmanaged	
To state	Managed	
Action	E-mail	
Receiver	test@gmail.com	
Subject		
4		



Attribute: The name of the trigger rule's attribute.

Value: The attribute's corresponding value.

Name:	The name of the trigger rule.
Status:	The trigger rule's status, including activated and deactivated.
From State:	The previous state of the device.
To State:	The state that the device changes to.
Action:	Action to take on device status changes. (only supports email notification)
Receiver:	The recipient of the notification email on the trigger event.
Subject:	The subject of the notification email.

> Trigger Events:



Figure 6-6 Trigger Event Details

Attribute: The name of the trigger event's attribute.

Value: The attribute's corresponding value.

Trigger Name:	The name of the trigger event.
Device Name:	The device on which the event happened.
Time:	The time when the trigger event happened.
Туре:	The device's status transition type.
Action:	The action that was taken after the event triggered.
Status:	The status of the trigger event, checked or unchecked.

Chapter 7 Account

Account Tab is used to create or edit user accounts for this system. You can assign different privileges to different user accounts by assigning them to different account groups (Administrator, Manager or Guest). This tab includes Account Classification, Account List and Account Details.

				🗐 🖁 🗙 🕲 🖂	Q
Accounts Administrator Guest	Name , admin	Role Login Administrator true	i E-mail admin@pharos-control.com	Telephone This is administra	Notes
Section A	Section B				
Attribute Name Sect Login E-mail Telephone Notes	Critical Control Contr		Value		

Figure 7-1 Account Tab

7.1 Account Classification



Account Classification is in Section A of the Account Tab.

Figure 7-2 Account Classification

User Accounts are categorized into three groups: Administrator, Manager and Guest. These three categories cannot be edited or deleted. Click the folder to view its corresponding accounts.

Entry Introduction:

- Administrator: This user group has all privileges including accessing the Admin section, uploading/downloading firmware files and editing scheduled tasks.
- Manager: This user group has limited privileges, including connecting devices to the system, uploading firmware files, accessing all function pages and viewing the system log. However, they cannot access the Admin, Firmware and Task sections.
- Guest: This user group has very limited privileges and can only view the Device Tab and Log Tab. They cannot connect devices to this system, upgrade device firmware, or access the function tabs of the system. They have no privileges to access the Admin, Firmware or Task sections.

Different user accounts and their privileges:

Account Privilege	Administrator	Manager	Guest
Downloading firmware files and editing scheduled tasks	\checkmark	х	х
Connecting devices to the system	\checkmark	х	х
Upgrading device firmware	\checkmark		Х
Uploading firmware files	\checkmark	\checkmark	Х
Accessing all functions of the Device page and viewing the System Log	\checkmark	\checkmark	x

Table 7-1 Accounts and Privileges

Operation:

	Maximize the current window.
--	------------------------------

7.2 Account List

Account List is in Section B of the Account Tab.



Figure 7-3 Account List

This section is used to add and edit the user account information. The related operation buttons are displayed above and the users are listed below.

Entry Introduction:

Name:	The name of the user account.
Role:	The role of the user.
Login:	Whether the user logs in.
E-mail:	The email address of the user.
Telephone:	The telephone number of the user.
Notes:	Notes about this account.

You can sort the entries on a specific column by simply clicking the column name.

Maximi	ze the current window.
--------	------------------------

B	Add a new user ac	count.
	Add user	
	Role: View statu Change co Change co User Name: Password: Confirm: E-mail: Telephone: Notes:	Manager
	Role: Specify the illustrations bellow view the status of devices, but it cann User Name: Enter the Password: Enter the Confirm: Re-enter the E-mail: Enter the us Telephone: Optional	user's role. It is Manager by default. The shows that the manager has the privileges to all devices and change configurations of all not change the configurations of the server. the user name. The user's password. the password for confirmation. user's email address. tal. Enter the user's telephone number. nter notes for this use account.
×	Delete the selected	d user account.

	Edit the selected user account information.	
	Account settin	g
	Role: View statu Change co Change co	Administrator v as of all devices. configurations of all devices. configurations of the server.
	User Name: Password:	admin Change
	E-mail:	admin@example.com
	Telephone: Notes:	This is administrator
		OK Cancel
	Note: The user's currently logged in	role and user name cannot be edited if it is
:=	Click the menu but display all the oper	tton (or right click any account entry below) to rations in this window.
Q	Enter a key word below, and a partia	to search all the columns in the account list al text match will be highlighted.

7.3 Account Details

Account Details is in section C of the Account Tab. This section displays the detailed information of the selected user account.

Attribute		Value
Name		
Role		
Login		
E-mail	admin@pharos-control.com	
Telephone		
Notes	This is administrator account.	

Figure 7-4 Account Details

Attribute: The name of the user account's attribute.

Value: The value of the corresponding attribute.

Name:	The name of the user account.
Role:	The role of the user.
Login:	Whether the user logs in.
E-mail:	The email address of the user.
Telephone:	The telephone number of the user.
Notes:	Notes about this user account.

Chapter 8 Log

Log Tab is used for viewing the log information saved in the server. The log information is categorized into three groups: Log, Event, Error and Debug. The Log Tab includes three sections: Log Classification, Log List and Log details.



Figure 8-1 Log Tab

8.1 Log Classification

Log Classification is in Section A of the Log Tab.



Figure 8-2 Log Classification

All the logs are categorized into three types: Log, Error and Debug.

Log: The informational system service messages.

Event: The records of adding, connecting or disconnecting devices.

Error: Some errors or warning messages.

Debug: The debugging information.

8.2 Log List

Log List is in Section B of the Log Tab.

	🗐 🗙 👼 🖬 🕞		Q
Time	Message	Туре 🔺	Device n 🔺
2014-06-12 15:21	Task completed, which task name = Ping [2014-06-12 15:21:35], task type = PING	Log	
2014-06-12 15:21	Ping device, which device name = CPE210 - 192.168.0.254, device ipaddress = 192.168	Log	CPE210 - 192.168.0
2014-06-12 15:21	Task started, which task name = Ping [2014-06-12 15:21:35], task type = PING	Log	
2014-06-12 15:20	Discovery task is completed, which name is Discovery [2014-06-12 15:19:35]	Log	
2014-06-12 15:19	Discovery task started, which name = Discovery [2014-06-12 15:19:35]	Log	
2014-06-12 15:18	Discovery task is completed, which name is Discovery [2014-06-12 15:18:11]	Log	
2014-06-12 15:18	Discovery process, find new device, which device name = CPE210 - 192.168.0.254	Log	CPE210 - 192.168.0
2014-06-12 15:18	Discovery task started, which name = Discovery [2014-06-12 15:18:11]	Log	
-2014 06 12 16 12	Lloor admin login	Log	•

Figure 8-3 Log List

This section is used to view and export the log entries under the selected group.

Entry Introduction:

Time:	The log's generating time.
Message:	Detailed information of this log.
Туре:	The type of this log.
Device Name:	The device name. If the log is system-level, this column will be blank.
MAC:	The MAC address of the device. If the log is system-level, this column will be blank.
IP:	The IP address of the device. If the log is system-level, this column will be blank.

You can sort the entries on a specific column by simply clicking the column name.

	Maximize the current window.
×	Delete the selected log entry.
Ŵ	Clear all the log entries under the selected log folder.
	Select all the log entries in this section.

	Export all the log entries in this section to your computer as an Excel file.	
	Click the menu button (or right click any device entry below) to display all the operations in this window. Operations without corresponding buttons are introduced below:	
Q	Enter a key word to search all the columns in the firmware file list below, and a partial text match will be highlighted.	

8.3 Log Details

Log Details is in Section C of the **Log Tab**. This window displays the detailed information of the selected log entry.

Attribute	
Time	2014-06-12 15:21
Type	
Device name	
MAC address	
IP address	
Message	Ping device, which device name = CPE210 - 192.168.0.254, device ipaddress = 192.168.0.254

Figure 8-4 Log Details

Attribute: The name of the firmware file's attribute.

Value: The value of the corresponding attribute.

Time:	The log's generating time.
Message:	Detailed information of this log.
Туре:	The type of this log.
Device Name:	The device name. If the log is system-level, this column will be blank.
MAC:	The MAC address of the device. If the log is system-level, this column will be blank.
IP:	The MAC address of the device. If the log is system-level, this column will be blank.

Chapter 9 Mail setting

Click Mail setting

at the top right corner to configure the mail settings.

Mail setting	
 Default 	
Mail server address:	smtp.example.com
Mail server port:	25
SSL	Enable
Mail account:	user@example.com
Mail password:	•••••
Note: when using Gma for less secure apps	ail in default way, turn on access
O GMail (OAuth2)	
Account:	Get code
Code:	Validate
ОК	Cancel

Figure 9-1 Mail Setting

There are two different mail settings: Default and GMail. Please choose one based on you personal needs.

1. In Default settings, please set the parameters as shown below:

Mail server address:	Specify the SMTP server to be used by the system.
Mail server port:	Specify the email server port.

SSL	Enable/Disable SSL function.
Mail account:	Specify the SMTP account.
Mail password:	Specify the SMTP password.

Moreover, if you want to use Gmail in default way, please enable SSL function, and click "**Note: when using Gmail in default way, turn on access for less secure apps**". The web browser will jump to **Less secure apps** page, please turn on **Access for less secure apps** for your Gmail account as shown below:

÷	Less secure apps	
	Some apps and devices use less secur You can turn off access for these apps despite the risks. Learn more	re sign-in technology, which makes your account more vulnerable. , which we recommend, or turn on access if you want to use them
	Access for less secure apps	 Turn off Turn on

- 2. In Gmail settings, please follow the steps as shown below:
 - 1) Enter your Gmail account and click Get code, the web browser will jump to Gmail login page, please log into your Gmail.

examp	le@gmail.	com	
	Ne	xt	
			Need help?

Sign in with your Google Account

2) After you log in, it will jump to the authorization page, please click <Allow>.

- PharOS Control would like to:

	View and manage your mail	(i)
	By clicking Allow, you allow this app and Google to use your information in accordance with their respective terms of service and privacy policies. You can change this and other Account Permissions at any time.	ĩn
	Deny	Allow
3)	Please copy the code in the code page, then switch to PharOS Contr	rol and paste it in the
	code bar. Click Validate to validate the parameter.	
	Google	
	Please copy this code, switch to your application and paste 4/kjKQraHx8AK-wtYOe7li_FR6BQ62XDNx3upNTsj	it there:
4)	Click OK to finsh mail settings.	

Account	Specify the Gmail account.
Code	Specify the Gmail code.
Chapter 10 My Settings

This window is used to view and edit the logging user's information.

You can edit the logging user's password, email, telephone and notes on this page. Among them, email, telephone and notes are optional.

My setting		
Role:	Administrator	~
🧹 View statu	is of all devices	
🧹 Change cor	nfigurations of all devices	
🧹 Change cor	nfigurations of the server	
User Name:	admin	
Password:	Change	
E-mail:	admin@pharos-control.com	
Telephone:		
Notes:	This is administrator account.	
	OK Cancel	

Figure 10-1 My Settings

Return to Contents

Chapter 11 Application Example

11.1 Email Notification

The Pharos Control can monitor and record the specified device group's status changes, such as managed, unmanaged and error.

Example: send an email notification when a specified device group's status goes wrong.

Configuration Procedure:

Step 1. Open the Mail setting page to configure the SMTP server. Enter the mail server's address and port, and specify the email account and password on the following page.

Mail setting	
Default	
Oelauit	
Mail server address:	smtp.tp-link.com
Mail server port:	25
SSL	✓ Enable
Mail account:	Tom@tp-link.com
Mail password:	•••••
Note: when using Gma for less secure apps	il in default way, turn on access
O GMail (OAuth2)	
Account:	Get code
Code:	Validate
ОК	Cancel

Figure 11-1 Configure the Mail Server

- Step 2. Open the Trigger->Add trigger window.
- Step 3. Specify the trigger's name and device group.
- Step 4. Set the conditions as from Managed to Unmanaged.
- Step 5. Specify the recipient and the subject of the notification email in the Action setting box.

Add trigger						
Name:	Umanr	aged				
Device group:	All dev	vices	~			
Condition:	From	Managed	~	То	Unmanaged	~
Туре:	E-Mai	Notification	~			
Action setting						
To:	Jack@	tp-link.com				
Subject:	Unmar	naged Report				
		ОК	Car	ncel		

Figure 11-2 Add an Error Trigger Rule

The notification email will display the unmanaged device's information:



Figure 11-3 Notification Email

11.2 Auto-upgrade

The Pharos Control can execute discovery, reboot and upgrade actions on specified device(s) at a certain point in time.

Example: Specify a time to upgrade the device.

Configuration Procedure:

Step 1. Upload the firmware file to the server on the page Firmware->Add firmware.

Add firmw	vare		
File Path:			Browse
	Upload	Cancel	

Figure 11-4 Upload the Specified Firmware File

Step 2. Open Device->Add schedule window.

Add schedule
Name: Upgrade
Scheduled
0.055
Date: 2016-03-09
Cycle
From: 2016-03-09 0 💠 0 💠
To: 2016-03-09 0 0 0
Period: Month V Date: 1 V Time: 0 💠:0 🜩
Task
Task: Firmware upgrade 🗸 Device group: All devices 🗸
Devices IP Firmware
OK Cancel

Figure 11-5 Schedule a Firmware Upgrade Task

Step 3. Enter the scheduled task's name and specify the scheduled period as once and specify the exact date.

Step 4. In the Task box, select the scheduled task as Firmware upgrade and select the target Device and Firmware in the list below.

11.3 Auto-reboot

The Pharos Control can execute discovery, reboot and upgrade actions on specified device(s) at a certain point in time.

Example: Specify a time to reboot the device.

Configuration Procedure:

Step 1. Open Device->Add schedule window.

Add schedule	
Name: Reboot	
Scheduled	
Once	
Date: 2016-03-0	9 🙀 0 🚖 : 0 🚔
 Cycle 	
From: 2016-03-0	9 4 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
To: 2016-03-0	9 0 0 0
Period: Month	✓ Date: 1 ✓ Time: 0 ÷:0 ÷
Task Task: Reboot	✓ Device group: All devices ✓
Devices	IP
	OK Cancel



Step 2. Enter the scheduled task's name and specify the scheduled period as once and specify the exact date.

Step 3. In the Task box, select the scheduled task as Reboot and select the target Device and click **OK** to apply.

Return to Contents