# **Dray** Tek

# VigorConnect

The Management Software Connects Your Vigor Devices

**USER'S GUIDE** 

# VigorConnect

# The Management Software Connects Your Vigor Devices User's Guide

Version: 1.0

Firmware Version: V1.1.2

Date: August 14, 2019

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#### **Safety Instructions and Approval**

#### Safety Instructions

- Read the installation guide thoroughly before you set up the modem.
- The modem is a complicated electronic unit that may be repaired only be authorized and qualified personnel. Do not try to open or repair the modem yourself.
- Do not place the modem in a damp or humid place, e.g. a bathroom.
- The modem should be used in a sheltered area, within a temperature range of +5 to +40 Celsius.
- Do not expose the modem to direct sunlight or other heat sources. The housing and electronic components may be damaged by direct sunlight or heat sources.
- Do not deploy the cable for LAN connection outdoor to prevent electronic shock hazards.
- Keep the package out of reach of children.
- When you want to dispose of the modem, please follow local regulations on conservation of the environment.

#### Warranty

We warrant to the original end user (purchaser) that the modem will be free from any defects in workmanship or materials for a period of one (1) year from the date of purchase from the dealer. Please keep your purchase receipt in a safe place as it serves as proof of date of purchase. During the warranty period, and upon proof of purchase, should the product have indications of failure due to faulty workmanship and/or materials, we will, at our discretion, repair or replace the defective products or components, without charge for either parts or labor, to whatever extent we deem necessary tore-store the product to proper operating condition. Any replacement will consist of a new or re-manufactured functionally equivalent product of equal value, and will be offered solely at our discretion. This warranty will not apply if the product is modified, misused, tampered with, damaged by an act of God, or subjected to abnormal working conditions. The warranty does not cover the bundled or licensed software of other vendors. Defects which do not significantly affect the usability of the product will not be covered by the warranty. We reserve the right to revise the manual and online documentation and to make changes from time to time in the contents hereof without obligation to notify any person of such revision or changes.

#### Be a Registered Owner

Web registration is preferred. You can register your Vigor modem via http://www.draytek.com.

#### Firmware & Tools Updates

Due to the continuous evolution of DrayTek technology, all modems will be regularly upgraded. Please consult the DrayTek web site for more information on newest firmware, tools and documents.

http://www.draytek.com

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# **Part I Introduction**



#### I-1 Introduction

This is a generic International version of the user guide. Specification, compatibility and features vary by region. For specific user guides suitable for your region or product, please contact local distributor.

VigorConnect, a central AP management software, is able to manage VigorAPs connected to Switch/Router. With VigorConnect, an administrator can modify the wireless settings, perform firmware upgrade, backup / restore settings related to VigorAP via a PC easily without accessing into the web page of VigorAPs one by one.

VigorConnect can manage VigorAP up to 100 devices.

#### System Requirements for VigorConnect Server

OS: Windows 7 and later

CPU: 1.2GHz Quad Core 64 bits CPU

Memory: 2GB memory (DDR4)

HDD: 1GB storage

Browser: Firefox, Chrome, Opera, Safari, IE, Edge

#### **System Requirements for VigorConnect Client**

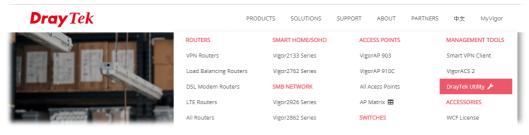
OS: Windows 7 and later

Browser: Firefox, Chrome, Opera, Safari, IE, Edge

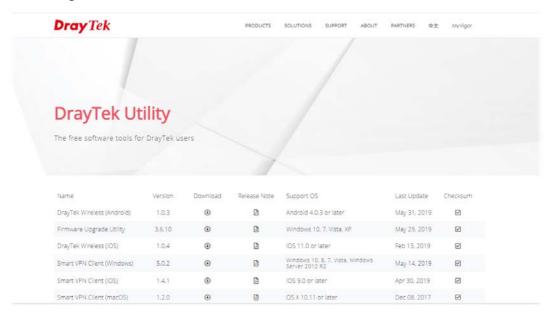
# **I-2 Installation**

Follow the steps below.

- 1. Visit www.draytek.com.
- 2. Open Products>>Management Tools>>DrayTek Utility.



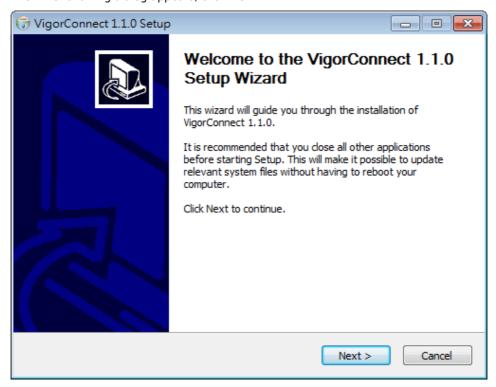
3. Locate VigorConnect.



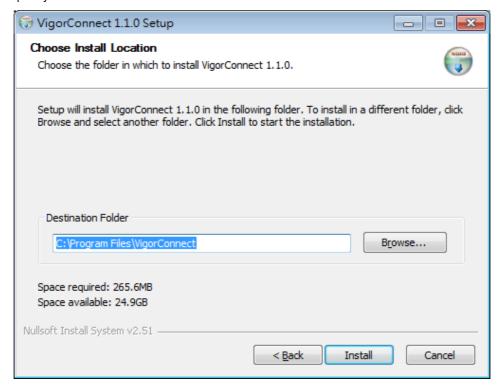
- 4. Download **VigorConnect** onto your computer.
- 5. Run the installer. Specify the language you want.



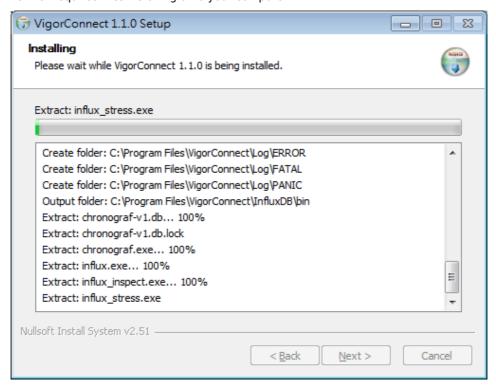
6. When the following dialog appears, click **Next**.



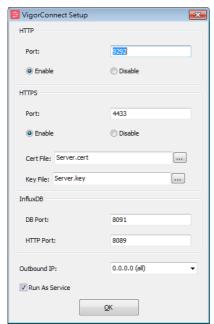
7. Specify the destination folder and click **Install**.



8. Wait for required files installing onto your computer.



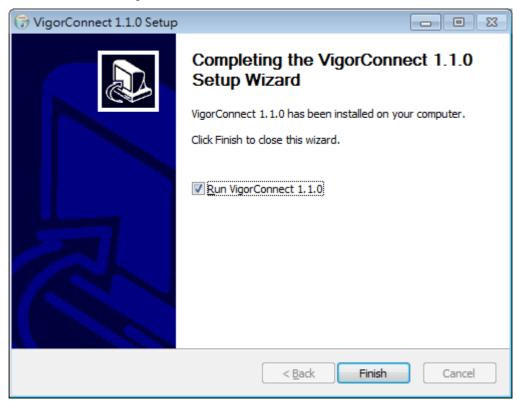
9. Then, the setup dialog with default values will appear. Click **OK.** 



10. When the following dialog appears, simply click **OK**.



11. Check the box of Run VigorConnect and click **Finish**.



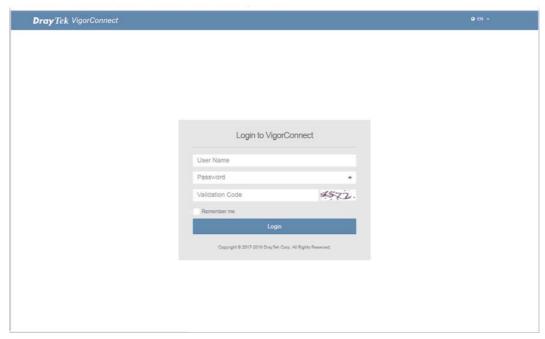
# I-3 Accessing to Web User Interface

All functions and settings of this access point must be configured via web user interface. Please start your web browser (e.g., Firefox).

Double click the VigorConnect icon on the desktop or open Programs >> VigorConnect>>
VigorConnect.



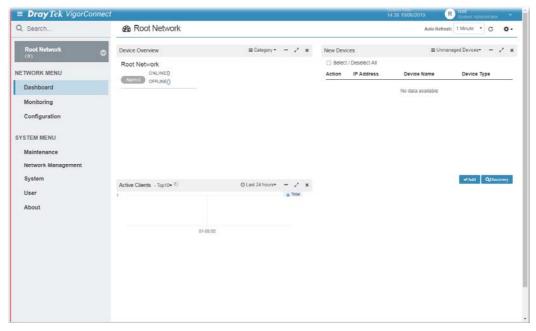
2. Please enter "root/admin123" as the Username/Password and enter validation code. Then, click **Login**.



3. For the first time to access into VigorConnect, Vigor system will ask you to change the login password. If you want to use the default password, simply click **Cancel** to access into the main screen.



4. Now, the **Main Screen** will appear.



5. The web page can be logged out by clicking **Log Out** on the top right of the web page. Or, logout the web user interface according to the chosen condition. The default setting is **Auto Logout**, which means the web configuration system will logout after 5 minutes without any operation. Change the setting of auto logout if you want.

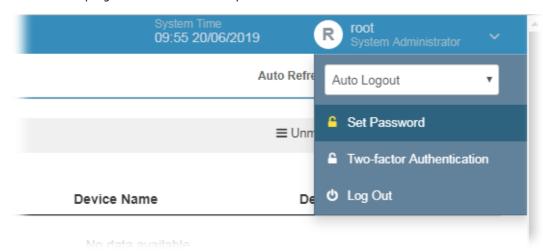
#### i Note:

If you fail to access the web configuration, please go to the section "Trouble Shooting" for detecting and solving your problem.

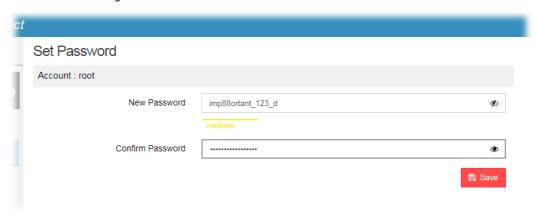
For using the device properly, it is necessary for you to change the password of web configuration for security and adjust primary basic settings.

# I-4 Changing Password

- 1. Please change the password for enhancing the security.
- 2. Click the top-right corner to list the drop down menu. Choose **Set Password.**



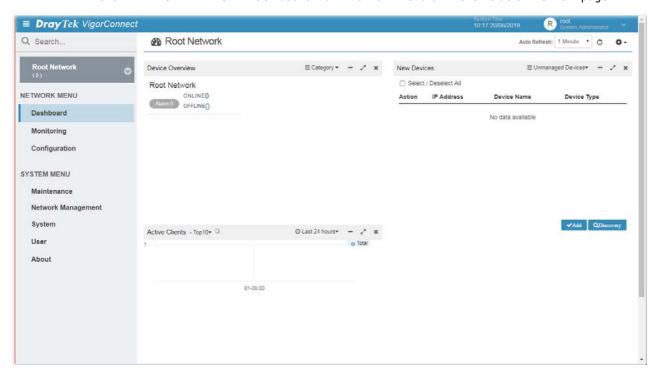
3. A Set Password page is shown as follows. Enter a new password and re-enter the password to confirm the setting.



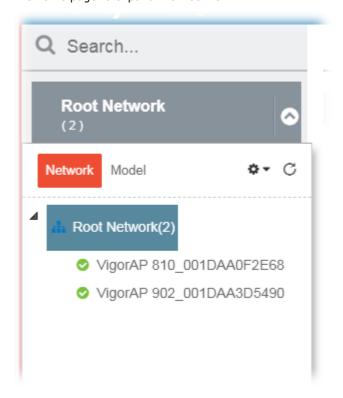
- 4. Click Save.
- 5. Now, the password has been changed. Next time, use the new password to access the Web User Interface of VigorConnect.

# I-5 Dashboard

Dashboard shows the statistics of unread events, access points, rogue APs, traffic and wireless clients. Click **NETWORK MENU>>Dashboard** from the main menu on the left side of the main page.

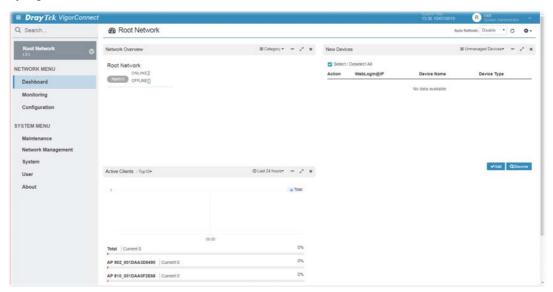


The information displayed on dashboard will be changed based on the network, group or device selected. To switch the dashboard among network, group and device, simply click **Root Network** on the home page to expand the tree view.

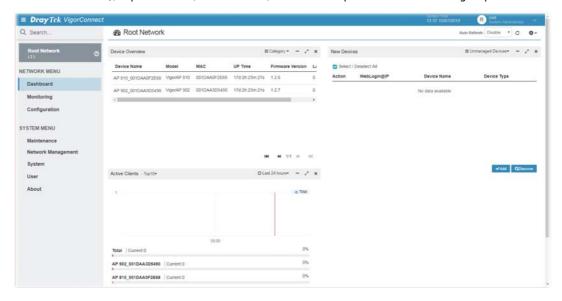


#### I-5-1 Dashboard for Network (Root Network)

The dashboard displays brief and quick overview information for the devices (Access Point) managed by VigorConnect.



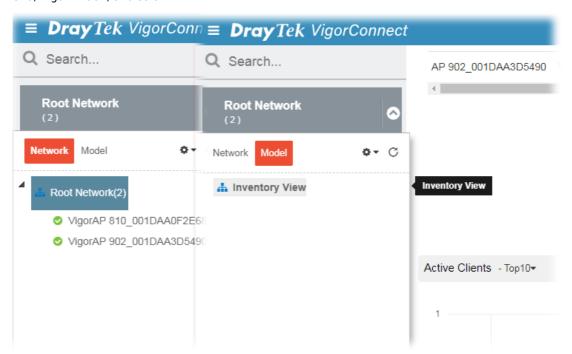
This page offers information about device overview (including device name, model, MAC, Up Time, Firmware Version), top 10 clients, new devices, and traffic top 10 for the selected group.



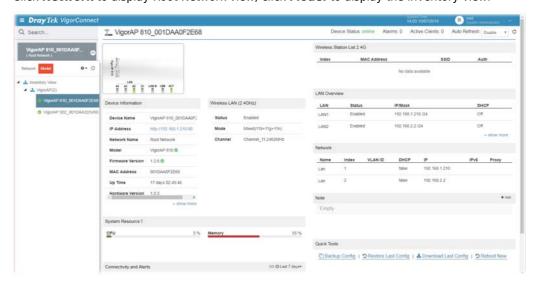
#### I-5-2 Dashboard for Device (Inventory View)

Root Network shows a tree view for all of the managed devices (Access Point) grouped under different networks.

Inventory view allows the devices to be divided and categorized with the model series, such as VigorAP 810, VigorAP 902, and so on.

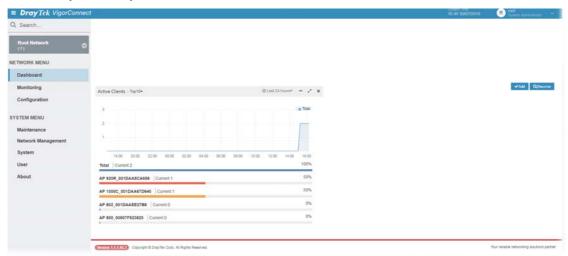


Click **Network** to display Root Network view; click **Model** to display the Inventory view.



# I-5-3 Top 10 for Clients

This area displays the top 10 clients or top 10 clients accessing into VigorConnect during the last 24 hours, 7 days or 30 days.



# I-5-4 Icons Used in VigorConnect

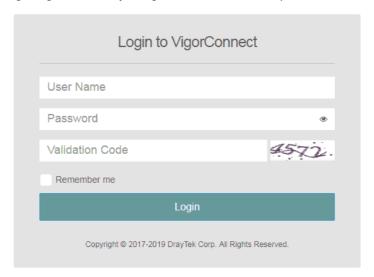
Item	Description	
+	Add a new device.	
- / ~	Hide the page / Display the page in fullscreen.	
×	Delete the selected widget.	
	Switch these two icons by click the mouse cursor on it.  - means "Enable".  - means "Disable".	
	- Illeans Disable .	

### I-6 Two-factor Authentication

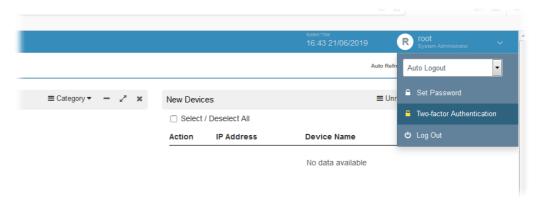
Usually, the system administrator can access into VigorConnect by using user account and password. If network security is highly concerned, two-factor authentication will be strongly recommended.

For using two-factor authentication for accessing VigorConnect;

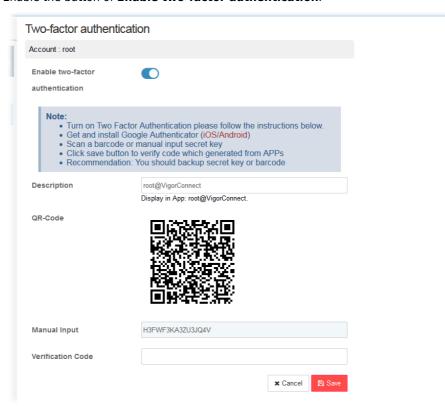
- 1. Get and install **Google Authenticator** (iOS/Android) first.
- 2. Login VigorConnect by using the user account and password.



3. Open Root>>Two-factor Authentication.



4. Enable the button of **Enable two-factor authentication**.



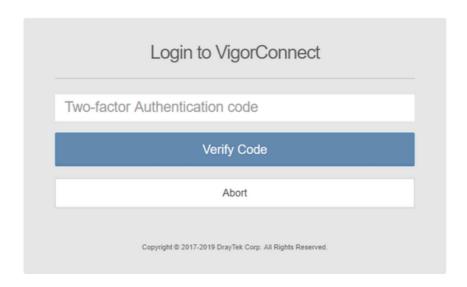
5. Use your cell phone to scan the QR-Code shown on the page or enter the secret key displayed on the box of **Manual Input**.



A key will be created randomly on the cell phone. Enter that key on the box of Verification Code and click the **Save** button.



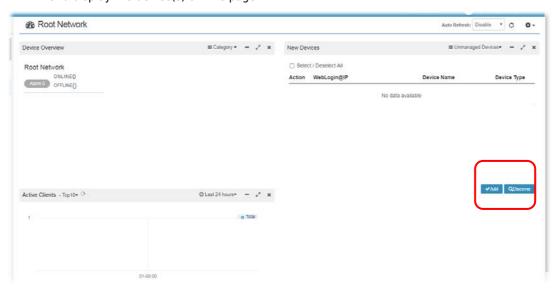
- 7. Logout VigorConnect.
- 8. Re-login VigorConnect. The first login web page requires you to enter the original user account and password. After clicking the Login button, the **second** login web page appears. Please enter the authentication code (created randomly) obtained from the APP (Google Authenticator) on your cell phone and click the Verify Code button.



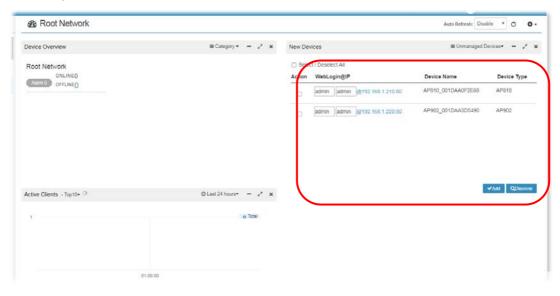
### I-7 Discover LAN AP Devices

AP devices on LAN can be managed by VigorConnect.

1. On the dashboard, click **Discover** under the field of New Devices. Vigor system will search nearby AP and display the device(s) on this page.



2. Later, scanned AP devices will be shown under the field of New Devices.

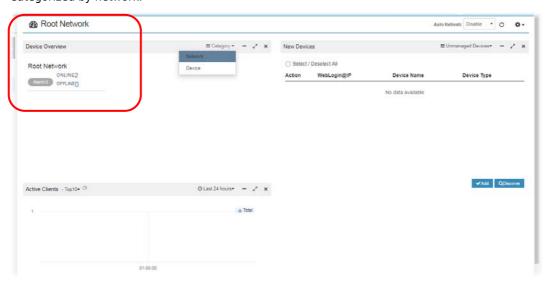


3. Check the one(s) which will be managed by VigorConnect and click **Add**.

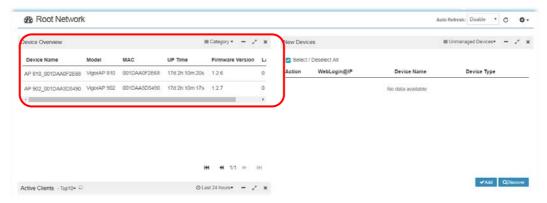




4. Then, the selected devices will be shown under **Device Overview**. Categorized by network:



#### Categorized by Device:



## Note:

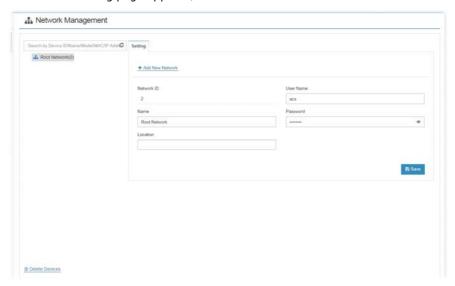
To prevent management conflict occurred between Vigor device and VigorConnect, when VigorAP is installed behind a Vigor router, remember to disable the AP Management function on router end.

#### **Applications**

#### A-1 How to Create a New Network?

VigorConnect allows the administrator to build several networks (and sub-network) for different devices under the *root network*.

- 1. From the SYSTEM MENU, click Network Management.
- 2. When the following page appears, click the link of **+Add New Network**.



3. A pop-up window appears. Type the required information.



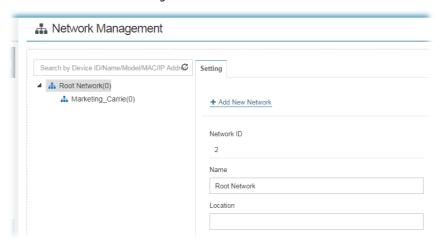
**Name** - Type a new name of the network.

**Location** - Define the location of such network.

**User Name** - Type a user name for such network.

**Password** - Type a password for such network.

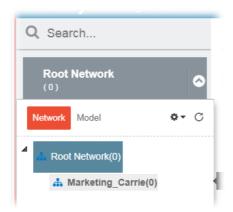
4. Click **Add** to save the settings. The new created network will be seen under the Root Network.



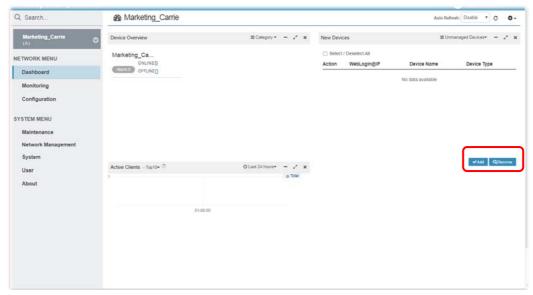
#### A-2 How to Assign a New Added AP to a Network?

New added device can be grouped under Network. If no assignment, the new device will be grouped under Root Network in default.

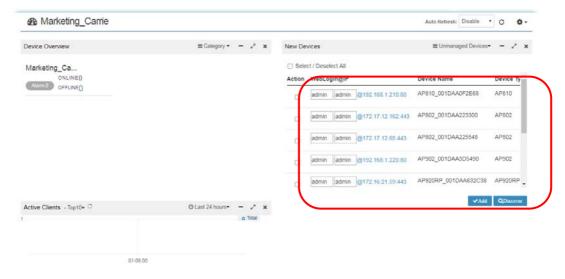
1. Open the dashboard of the network (e.g., Marketing Carrie) created in A-1.



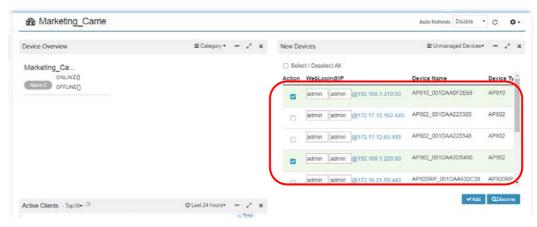
2. On the dashboard, click **Discover** under the field of New Devices. Vigor system will search nearby AP and display the device(s) on this page.



3. Later, scanned AP devices will be shown under the field of New Devices.



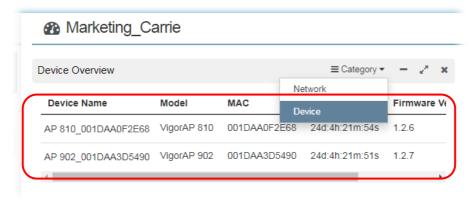
4. Check the one(s) which will be managed under the specified network (e.g., Marketing\_Carrie) and click **Add**.



5. Then, the selected devices will be shown under **Device Overview**.
Categorized by Network:



#### Categorized by Device:



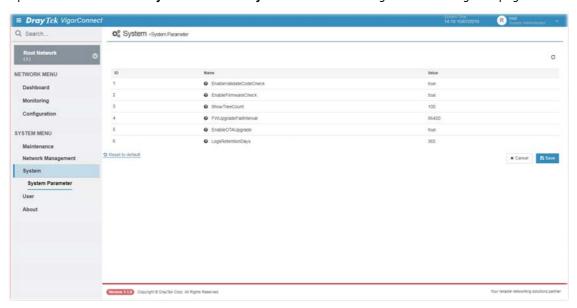
# Part II SYSTEM MENU, System and User Settings Management



# II-1 System

## II-1-1 System Parameter

Open SYSTEM MENU>>System and click System Parameter to get the following web page:

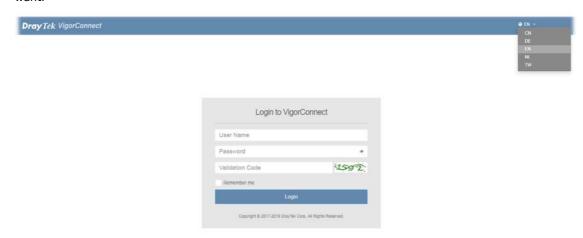


Available settings are explained as follows:

ID No.	Description	
	Reset to default	
	Click the link to reset all of the system parameters with factory default values.	
1	EnableValidateCodeCheck	
	True - Enable the function of validating code check on the login page.	
	False – Disable the function. It is the default value.	
2	EnableFirmwareCheck	
	True - VigorConnect will compare current firmware of the device with the file version detected from DrayTek website. Therefore, while viewing the Firmware Version on the dashboard of the selected device, a pop-up window with current firmware version detected will appear if both firmware versions are different.	
3	ShowTreeCount	
	Set how many devices will be shown on the home device tree. Default value is 100.	
4	FWUpgradeFailInterval	
	If the firmware upgrade failed, the next firmware upgrade will execute after the time interval configured here. Default value is 86400 seconds.	
5	EnableOTAUpgrade	
	If enabled (choosing true), the system will check for the new update once at 3:00 a.m. every day and download the file if it is available.	
6	LogsRetentionDays	
	VigorConnect will store the log for a while (the number of days defined here).	

# II-1-2 Language

VigorConnect can be displayed and operated with different language texts. Choose the language system from the top-right of the login page. Later, VigorConnect will be shown with the language you want.



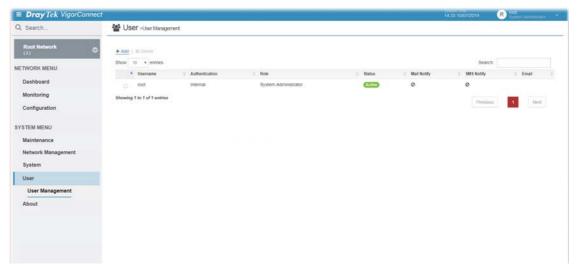
#### II-2-1 User Management

VigorConnect allows a user to manage AP devices through VigorConnect server. However, the user has to type specific name and password defined in this page. Different users must use different names and passwords for accessing VigorConnect.

This chapter will guide you to define users. It can be set with different roles (at present, only System Administrator is allowed); each role has different administration authority.

The user management function allows a user to set name, password, and e-mail address as identification in VigorConnect system.

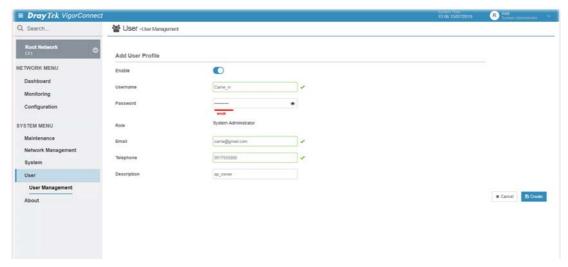
To add, delete a user or check information for a user, open **SYSTEM MENU>>User** and choose **User Management.** This page displays basic information including username, authentication, role, status (active, inactive), mail notify (yes or no), SMS notify (yes or no), email address for the user.



Available settings are explained as follows:

Item	Description
+Add	Click it to add a user.
Delete	Click it to remove the selected user.

The following setting page appears when **+Add** is clicked.



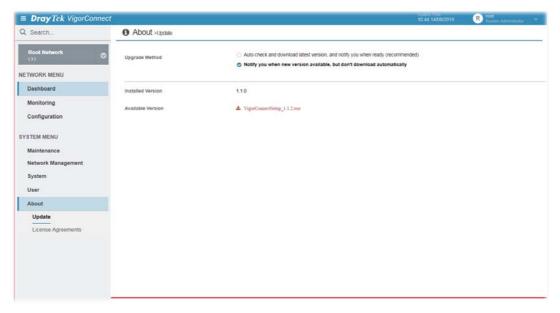
Available settings are listed as follows:

Item	Description
Enable	Click it to enable the user profile.
Username	Enter a name for the new user.
Password	Type the password for the user.
Role	Choose the role for the selected <b>user</b> . Different role represents different authority that the user group will have. The great the authority is, the more functions the user can have.
	<b>System Administrator</b> - Have the highest authority.
Email	Type the email for communication between the user and VigorConnect server.
Telephone	Type the telephone number for receiving the SMS notification.
Description	Type a brief description for the user.
Cancel	Discard current settings.
Create	Click it to create a new user profile and exit the page.

# II-3 About

## II-3-1 Update

This page offers information for the newest version of VigorConnect.

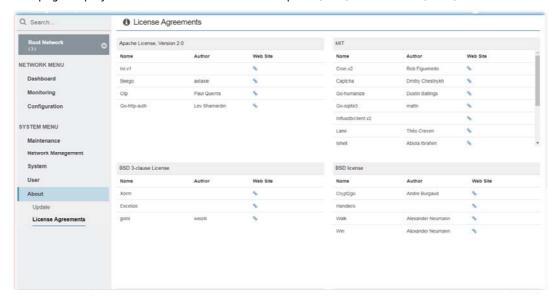


#### Available settings are listed as follows:

Item	Description
Upgrade Method	<b>Auto check</b> - After clicking it, you will be notified when the latest version is available.
	<b>Notify you</b> - After clicking it, the system will display the newest version available for you to download and upgrade for VigorConnect.
Installed Version	Display the current software version installed.
Available Version	Display the newest and available software version allowed to be download for the update.
	Click the download link to download the newest version. Later, update VigorConnect with the newest version.

# II-3-2 License Agreements

This page displays license information related to Apache, MIT, BSD 3-clause, BSD, ISC and zlib.



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# Part III SYSTEM MENU, General Settings for Managing Device



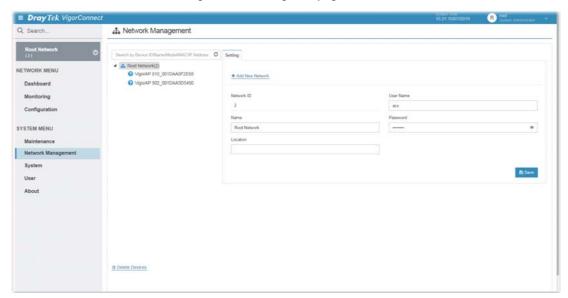
# III-1 Network Management

Network Management allows you to modify the information for Networks and Devices. It can

- Add new network (s) for new client which will be managed by VigorConnect.
- Delete existed network if the client will not be managed by VigorConnect.
- Modify the name and location of the network for management.

# III-1-1 Settings for Network

To add, change or delete a network, please open **SYSTEM MENU** >> **Network Management.** Click **Root Network** or sub-network to get the following web page.



Item	Description	
Search by Device ID/Name/Model/MAC / IP Address	Enter the ID, name, model or MAC address of the device you want to locate.	
+Add New Network	Click it to add a new network.	
Network ID	Display a number which is given by VigorConnect randomly for the selected network.	
Name	Display the name of the parent network. You can modify it if required.	
Location	Type the location (e.g., HsinChu, New York) for such network.	
User Name	Display the name of the selected network. Change it if required.	
Password	Display the password of the selected network. Change it if required.	
Save	Click it to save the change.	

The following setting page appears when **+Add New Network** is clicked.



Available settings are listed as follows:

Item	Description	
Parent Network	Display the name of the root network. New created network will be the sub-network of the parent network.	
	In default, Root Network is the parent network for any new created network.	
Name	Enter a name for the new network.	
Location	Type the location for the new network. Later, you can locate such network on the web page of <b>SYSTEM MENU</b> >> <b>Network Management</b> >> <b>Map.</b>	
User Name	Type a login name (e.g., carrie) for the new network which will be used for communication between Vigor device and VigorACS.	
Password	Type a password (e.g., admin123) for such new network. If you are going to group several devices under such network, please open <b>System</b> Maintenance>>TR-069 in the web configuration page of CPE. Then, type the user name and password defined in this page (e.g., in this case, they are <i>carrie</i> and <i>admin123</i> ) in the corresponding fields.	
Cancel	Discard current settings.	
+Add	Click it to create a new network profile and exit the page.	

#### III-1-2 Settings for Device

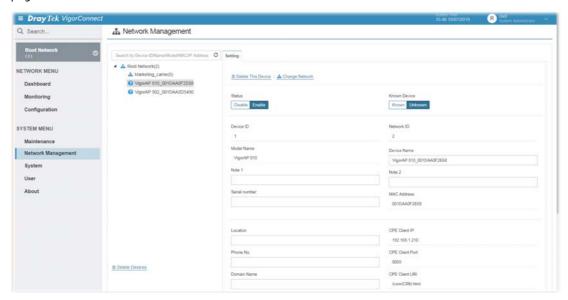
To add, change or delete a network, please open **SYSTEM MENU** >> **Network Management.** Click **Root Network** or sub-network to get the following web page.

The administrator can create several sub networks for different devices. Also, the administrator can change the network for the devices.

Open SYSTEM MENU >> Network Management. This web page allows to:

- Modify the name of the device for easy identification and management by VigorConnect.
- Modify the user name/password of certain device (non-DrayTek CPE) to be managed by VigorConnect
- Enable or disable the management of the device for VigorConnect.
- Select certain protocol (e.g., TR-069) for the device for management.

Choose and click any one of the CPE displayed on  $\bf Root\ Network$  tree view to get the following web page.

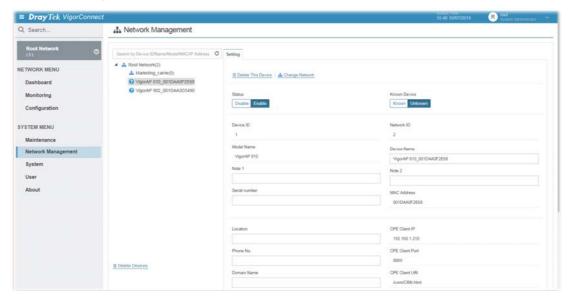


Item	Description	
Delete This Device	Click it to remove the selected device from current group.	
Change Network	Click it to change the network / group for the selected device.	
Status	Move the mouse cursor on the network you want and click <b>Apply. Disable</b> – The selected device will be hidden on the tree view. <b>Enable</b> – The selected device can be displayed on the tree view.	
Known Device	Known - The selected device is known(♣) to VigorConnect.  Unknown - If the selected device is new added device, it will be identified as Unknown (♠).	
Device ID / Network ID	<b>Device ID</b> - Display the number of that device which is given by VigorConnect randomly. <b>Network ID</b> - Display the ID number of the network that selected device is grouped under.	
Model Name / Device Name	Model Name - Display the model name of the selected device. Model name cannot be changed.  Device Name - Display the name of the device for identification. It can be changed if required.	
Note 1 / Note 2	Note 1 – Display brief description for the selected device.  Note 2 – Display brief description for the network.	
Serial number / MAC Address	Serial number - Type a number for identification of the device.  MAC Address - Display the MAC address of the device.	

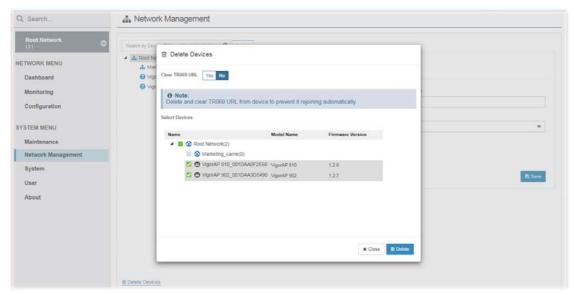
Location	Display the position of the device.	
Phone No.	It is optional and is used to offer additional information for reference. If required, type a phone number for such device.	
Domain Name	Type a domain name for a device. Later, simply click the domain name to access into the CPE.	
<b>Management Protocol</b>	Choose HTTPS or HTTP.	
Management Port	Type a port number which will be used for accessing into web user interface of the device.	
IP / Port / URI	Display the IP address, port number and URI.	
User Name / Password	Display the username and password that VigorConnect can use to access into such device.	

#### III-1-3 Delete Devices

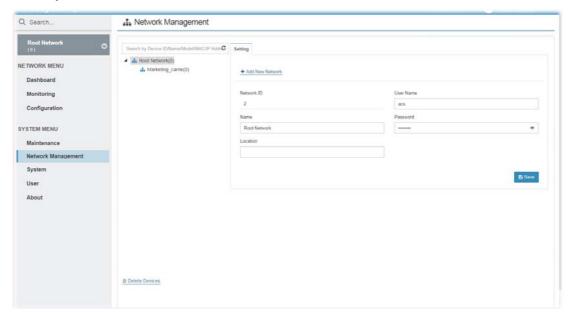
To delete devices under certain network (e.g., root network), please open **SYSTEM MENU** >> **Network Management.** 



Click **Delete Devices**. A pop-up dialog will appear as follows.



Select the device (e.g., VigorAP 810) to be removed from a network by checking the box in the front of the entry. Then click Delete.



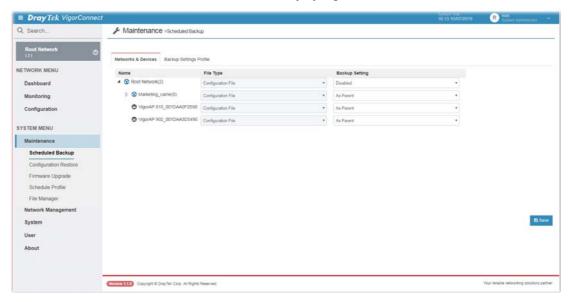
# III-2 Maintenance

Options in Maintenance are configured and applied onto numerous TR-069 devices instead of configuring settings for each device one by one.

# III-2-1 Scheduled Backup

#### III-2-1-1 Network & Devices

Such page is used to specify a backup profile for the device / network. Later, the configuration backup for the device/network will be executed automatically by VigorConnect.



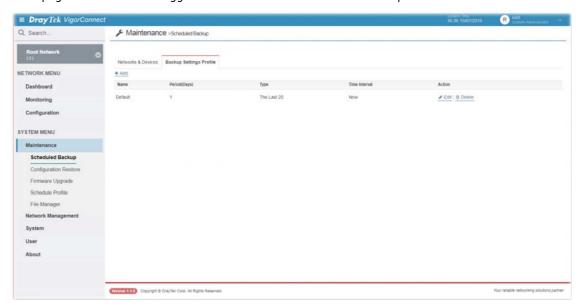
Available settings are explained as follows:

Item	Description	
User Group	Specify a user group for applying the backup settings profile.  Each user group can be configured with different backup settings profiles.	
File Type	Display the file type used for the device.	
Backup Setting	Choose a profile defined in <b>Backup Settings Profile</b> for applying onto the selected device.	
Save	Save the current settings.	

Click **Save** to save these settings.

#### III-2-1-2 Backup Settings Profile

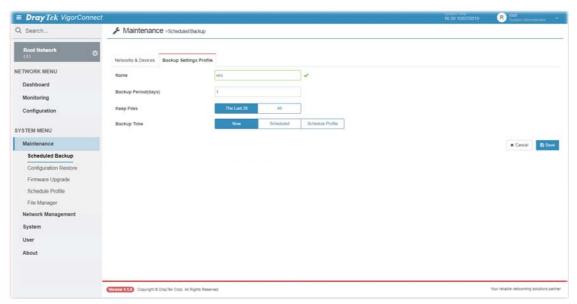
Such page determines the trigger time and method for firmware backup.



Available settings are explained as follows:

Item	Description	
+Add	Click it to create a new profile.	
Edit	Click it to modify, change the selected profile.	
Delete	Click it to delete the selected profile.	

The following setting page appears when **+Add** is clicked.



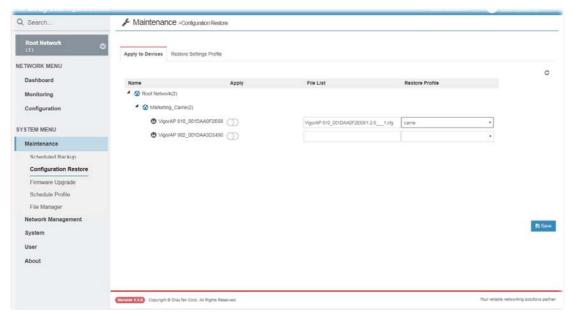
Item	Description	
Name	Enter a name of the backup profile.	
Backup Period(days)	The number typed here means the interval for the backup executed by VigorConnect. The unit is "day". If you type 1, that means the backup will be executed one time by one day.	

Keep Files	Choose to keep all of the files (router's configuration files) or the last 20 files.	
Backup Time	Set a time interval for executing the backup work for networks and devices.  Now Scheduled Schedule Profile	
Start Time / End Time	It is available when <b>Scheduled</b> is selected as the <b>Backup Time</b> . Click <b>Select time</b> to display a clock. Set the hour and minutes by clicking the number on the clock.   OO: OO  13 22 11 12 1 14 2 10 21 9 3 15 8 4 16 19 18 17 Schedule Profile  End Time  Select time	
Specify Start Date	It is available when <b>Scheduled</b> is selected as the <b>Backup Time</b> .  Click it to enable the time setting. <b>Date</b> - Click it to pop up a calendar to choose a date as the starting date.	
Schedule Profile	It is available when <b>Scheduled Profile</b> is selected as the <b>Backup Time</b> .  Choose a trigger profile from the drop down list. In which, VigorConnect offers default schedule profile.	

# III-2-2 Configuration Restore

#### III-2-2-1 Apply to Devices

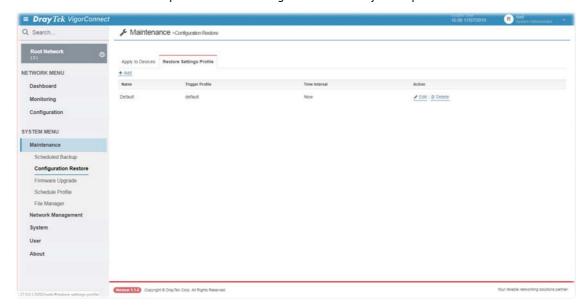
The user can apply the configuration file (for system restoration) to the VigorAP managed by VigorConnect immediately or within a scheduled time.



Item	Description	Description	
Name	Display the name of the network, group and managed device(s).	Display the name of the network, group and managed device(s).	
Apply	Click the toggle to activate the configuration restoration for the sele AP device by using the <b>Restore Profile</b> .	Click the toggle to activate the configuration restoration for the selected AP device by using the <b>Restore Profile</b> .	
File List	Click it to open the following page. Choose a configuration file relat the selected AP device and click <b>Close</b> .	ed t	
	Select a config file		
	Filename * Property   Size Last Modified   File Path	-0	
	Directory 0 Byte 07/24/2019 13:46:31 /RootGroupMarketing_Carrie  WageAP \$10,001DAA092E68 Directory 0 Byte 07/24/2019 13:46:43 /RootGroupMarketing_Carrie	-	
	To restore a CFG file from a different model, please make sure the firmware to both devices is up to date. To apply ACL CFG file from a different model, please make sure the stremware version is 1.2.5 or newer. With old firmware, your AP might be reset to factory settings, so the selected AP with old firmware will be ignored automatically.  **Close**  **Temporary and the properties of the proper		
Restore Profile	Choose a schedule profile (defined in <b>Restore Settings Profile</b> ) from the drop down list for applying onto the device.		
_			
C	Save the current settings.		
Save	Save the current settings.		

#### III-2-2-2 Restore Settings Profile

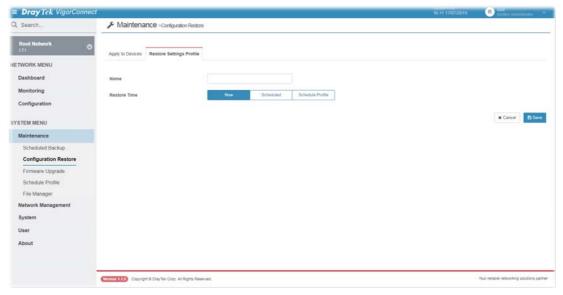
The user can define several profiles for executing the restoration job at specified date and time.



Available settings are explained as follows:

Item	Description	
+Add	Click it to create a new profile.	
Name	Display the name of the restoration profile.	
Trigger Profile	Display the schedule profile used by the restoration profile.	
Time Interval	Display the type (e.g., Now, Scheduled or Schedule Profile) of time interval.	
Action	<b>Edit</b> - Click it to modify the content of the restore setting profile. <b>Delete</b> - Click it to remove the setting profile.	

The following setting page appears when **+Add** is clicked.

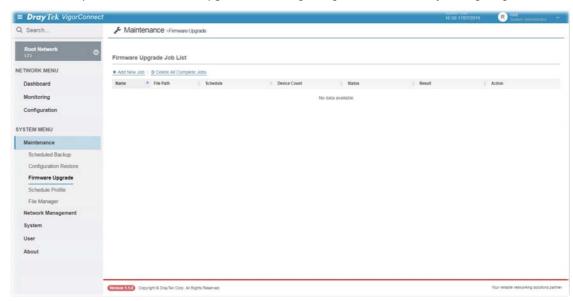


Item	Description
Name	Enter a name of the restore profile.

Restore Time  Start Time / End Time	Set a time interval for executing the redevices.  Now Scheduled Schedule Profile  It is available when Scheduled is select Click Select time to display a clock. So clicking the number on the clock.	cted as the <b>Restore Time.</b>
	00:00	
	23 00 13 22 11 12 1 14 21 9 3 15 20 7 6 5 16 19 18 17  Start Time Select time	Schedule Profile  End Time Select time
Specify Start Date	It is available when <b>Scheduled</b> is selected as the <b>Restore Time.</b> Click it to pop up a calendar to choose a date as the starting date Click it to enable the date setting. <b>Date</b> - Click it to pop up a calendar to choose a date as the starting date.	
Trigger Profile	It is available when <b>Schedule Profile</b> is selected as the <b>Restore Time</b> . Choose a profile from the drop-down list (profiles defined in <b>Maintenance&gt;&gt;Schedule Profile</b> ) to perform the configuration restoration. In general, VigorConnect offers a default schedule profile.	
Save	Save the current settings.	

# III-2-3 Firmware Upgrade

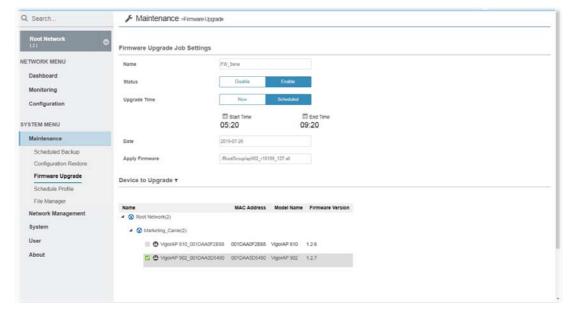
The user can perform the firmware upgrade for managed VigorAP devices easily through VigorConnect.



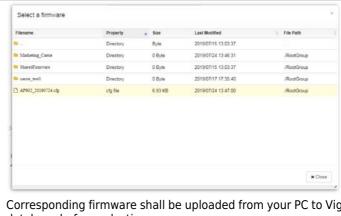
Available settings are explained as follows:

Item	Description			
+Add New Job	Click it to create a new profile.			
Delete All Complete Jobs	Click it to remove all jobs.			
Name	Display the name of the firmware upgrade job profile.			
File Path	Display the file path of the firmware on VigorConnect database.			
Schedule	Display the name of the selected schedule profile or the period of time for executing upgrade job.			
Device Count	Display the execution times of the firmware upgrade job.			
Status	Display the status of the firmware upgrade job.			
Result	Display the result of the firmware upgrade job.			
Action	<b>Edit</b> - Click it to modify the content of the firmware upgrade profile. <b>Delete</b> - Click it to remove the profile.			

The following setting page appears when **+Add New Job** is clicked.



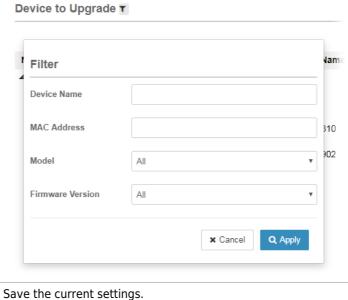
Item	Description				
Name	Enter the name of the firmware upgrade profile.				
Status	<ul> <li>Disable - Disable the function of firmware upgrade.</li> <li>Enable - Enable the function of firmware upgrade.</li> </ul>				
Upgrade Time	Set a time interval for executing the upgrade work for networks and devices.				
	<ul><li>Now</li><li>Scheduled</li></ul>				
Start Time / End Time	It is available when <b>Scheduled</b> is select Click <b>Select time</b> to display a clock. So clicking the number on the clock.	• •			
	23 00 13 12 1 14 2 1 14 2 19 3 15 8 4 16 19 18 17 18 Select time  Date - Click it to pop up a calendar to compare the compare to the compare the compare to the compare the compare to the compare the	Schedule Profile  End Time Select time hoose a date as the starting d			
Apply Firmware	<b>Date</b> - Click it to pop up a calendar to choose a date as the starting date Click it to open the following page. Choose the firmware you want and click <b>Close</b> .				



Corresponding firmware shall be uploaded from your PC to VigorConnect database before selecting.

#### **Device to Upgrade**

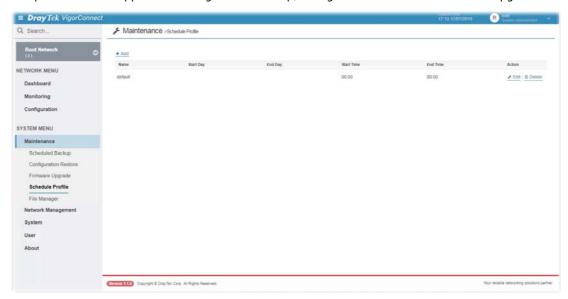
Click the filter icon on the right side of **Device to Upgrade** to open the following page. Only the device matched with the conditions will be upgraded with new firmware version.



Save

#### III-2-4 Schedule Profile

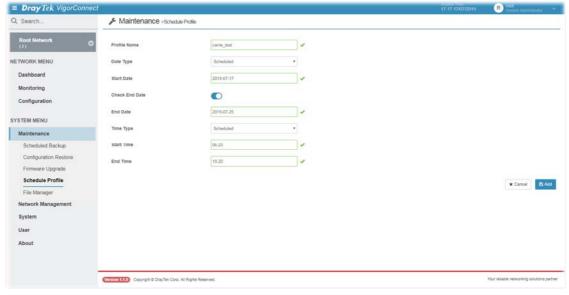
The profiles can be applied for configuration backup, configuration restore and firmware upgrade.



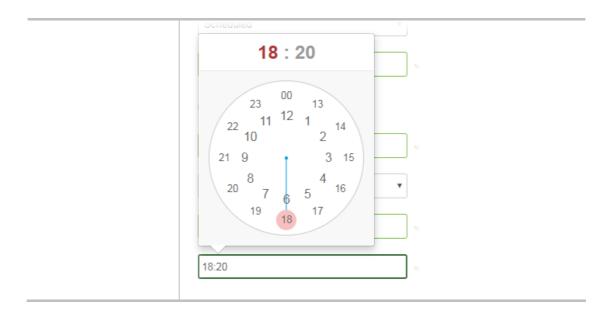
Available settings are explained as follows:

Item	Description		
+Add	Click it to create a new profile.		
Name	Display the name of the schedule profile.		
Start Day	Display the starting date of the schedule profile.		
End Day	Display the ending date of the schedule profile.		
Start Time	Display the starting time of the schedule profile.		
End Time	Display the ending time of the schedule profile.		
Action	Edit - Click it to modify the content of the profile.  Delete - Click it to remove the schedule profile.		

The following setting page appears when **+Add** is clicked.

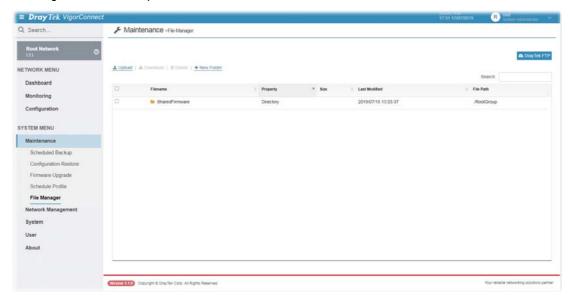


Item	Description			
Profile Name	Enter the name of the schedule profile.			
Date Type	Set a date type for executing certain job for networks and devices.  Now Scheduled			
Start Date	It is available when <b>Scheduled</b> is selected as the <b>Date Type.</b> Click the entry box to display a calendar. Specify the date you want by clicking on it.  2019-07-17  Su Mo Tu We Th Fr Sa  1 2 3 4 5 6  7 8 9 10 11 12 13  14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31			
Check End Date	It is available when <b>Scheduled</b> is selected as the <b>Date Type.</b> Click the toggle to enable / disable the end date setting.			
End Date	It is available when <b>Check End Date</b> is enabled.  Click the entry box to display a calendar. Specify the date you want by clicking on it.  2019-07-17  Su Mo Tu We Th Fr Sa  1 2 3 4 5 6  7 8 9 10 11 12 13  14 15 16 17 18 19 20  21 22 23 24 25 26 27  28 29 30 31			
Time Type	Set a time type for executing certain job for networks and devices.  Now Scheduled			
Start Time / End Time	It is available when <b>Scheduled</b> is selected as the <b>Time Type.</b> Click the entry box to display a clock. Set the hour and minutes by clicking the number on the clock.			

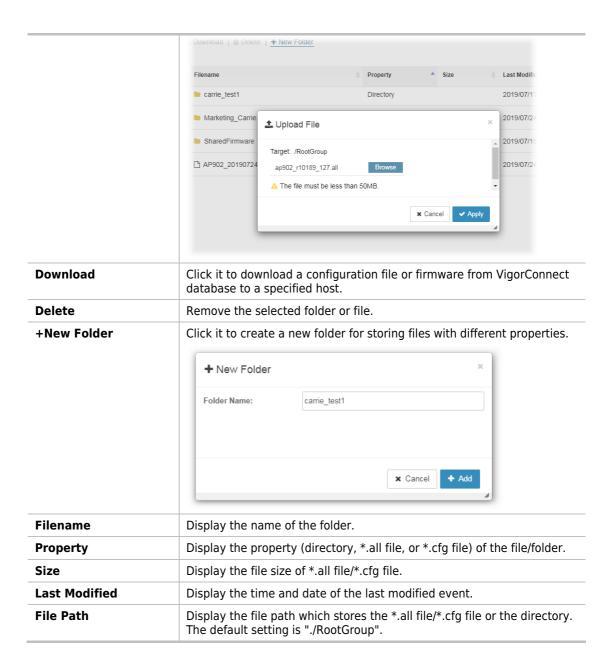


#### III-2-5 File Manager

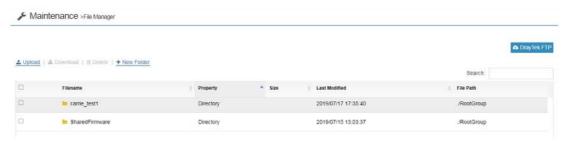
VigorConnect database is a place which can store the configuration file, firmware and so on. This page allows the user to upload file(s) stored on other places to VigorConnect database, or download the file from VigorConnect to a specified host.



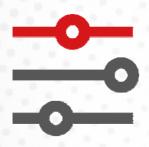
Item	Description			
DrayTek FTP	Click it to open the DrayTek FTP cloud.			
Search	Enter a string for searching and displaying on the page.			
Upload	Click it to upload a configuration file or firmware from the host to VigorConnect database.			



Below shows an example of new filename added on the table.

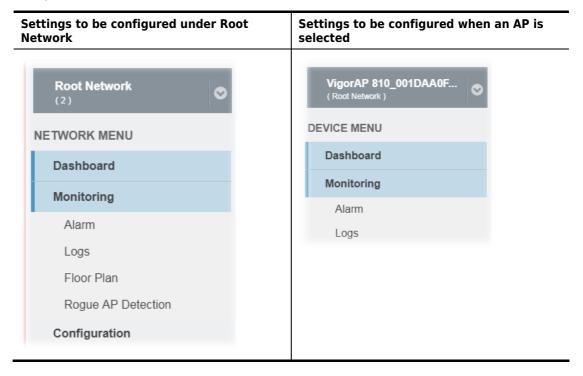


# Part IV NETWORK MENU for Root Network



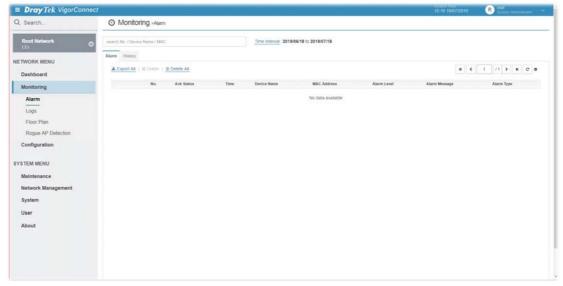
# IV-1 Monitoring for Network

Monitoring menu offers Alarm, Logs, Floor Plan and Rogue AP Detection for monitoring the normal and abnormal actions for managed device. Monitoring settings will vary for NETWORK MENU and DEVICE MENU.



#### IV-1-1 Alarm

Alarm message will be recorded on VigorConnect when there is a trouble happened to the device.

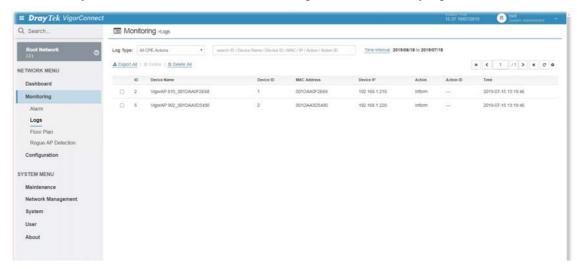


Item	Description
Search No. / Device	Enter the index number, device name or MAC address of the device to

Name / MAC	display alarm message of that device.			
Time Interval	Click the link to open a time setting box. Choose one of the time interval settings and click <b>Search</b> . The alarm records within the period will be listed on this page.  Time Interval: 2019/06/18 to 2019/07/18			
	Time Last 30 Days ▼			
	★ Cancel Q Search			
Alarm / History	Alarm - Display the alarm records recently.  History - Display all the alarm records that have been solved and cleared.			
Export All	Click this button to save alarm log as a XLS file.			
Delete	Clear the alarm record which has been solved by VigorConnect.			
Delete All	Clear all of the alarm records which have been solved by VigorConnect.			
No.	Display the index number of the alarm. It is offered by VigorConnect automatically.			
Ack Status	Display the status of the records with the type specified here (Not Ack or Acked).			
Time	Display the time of alarm occurred for the device.			
<b>Device Name</b>	Display the name of the device.			
MAC Address	Display the MAC address of the monitored device.			
Clear Time	Display the time of alarm removed.			
Alarm Level	Display the alarm message with the severity (e.g., Critical) specified.			
Alai III Level	Display a brief explanation for the alarm sent by VigorConnect automatically.			
Alarm Message				

# IV-1-2 Logs

Log provides administrator records for action executed, device name, MAC address, Device IP, CommandKey, and Current Time for CPE device managed and monitored by VigorConnect.

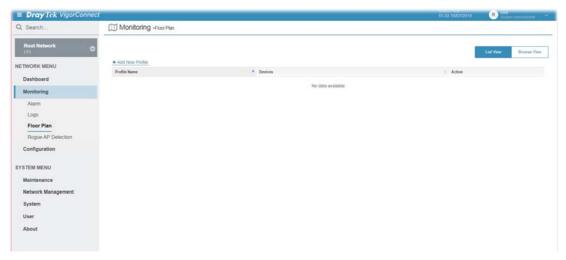


Item	Description			
Log Type	Choose one of the conditions to display related log on this page.  All CPE Actions  All CPE Actions  Device Reboot Reboot By CPE Set Parameter File Transfer CPE Notify Device Register Device Operate			
Search ID / Device Name / Device ID / MAC / IP / Action / Action ID	Enter the condition for VigorConnect to search and display relational information.			
Time Interval				
	Click the link to open a time setting box. Choose one of the time interval settings and click <b>Search</b> . The logs records within the period will be listed on this page.  Time Interval: 2019/06/18 to 2019/07/18			
	interval settings and click <b>Search</b> . The logs records within the period will be listed on this page.			
Export All	interval settings and click <b>Search</b> . The logs records within the period will be listed on this page.  Time Interval: 2019/06/18 to 2019/07/18  Time Last 30 Days			
Export All Delete	interval settings and click <b>Search</b> . The logs records within the period will be listed on this page.  Time Interval: 2019/06/18 to 2019/07/18  Time Last 30 Days  Cancel Q Search			

#### IV-1-3 Floor Plan

This function is helpful to determine the best location for VigorAP in a room. A floor plan of a room is required to be uploaded first. By dragging and dropping available VigorAP icon from the list to the floor plan, the placement with the best wireless coverage will be clearly indicated through simulated signal strength.

#### IV-1-3-1 List View

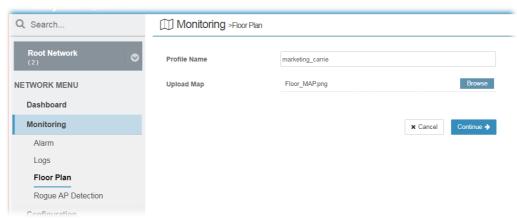


Available settings are explained as follows:

Item	Description	
+Add New Profile	Create a new profile.	
List View / Browse View	Display the profile with different views.	

To create a new profile:

- 1. Click Add New Profile.
- 2. From the following page, enter profile name (e.g., marketing\_carrie) and click Browse to upload a map (e.g., Floor\_MAP.png). Click **Continue**.



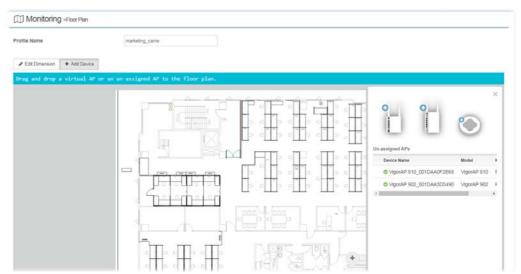
3. A floor map will be displayed on the screen.



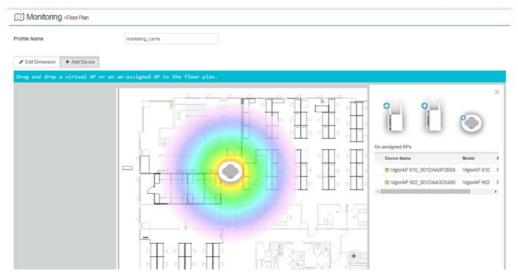
**Edit Dimension** - Draw a line and enter the distance of length / width of the map.

**Add Device** - Click it to display available VigorAP to apply it on to the map.

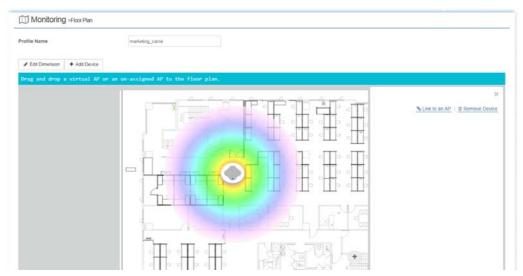
4. Click **+Add Device**. Available VigorAP icons and name list will be displayed on the right side of this page.



5. Select the AP you want (e.g., VigorAP910C icon, in this case) from right side of this page. Drag and drop the icon on the map. Later, an icon with effective signal range will be seen on the screen.



6. Slightly click the AP icon on the map. Two links of **Link to an AP** and **Remove Device** will be shown on the right side.



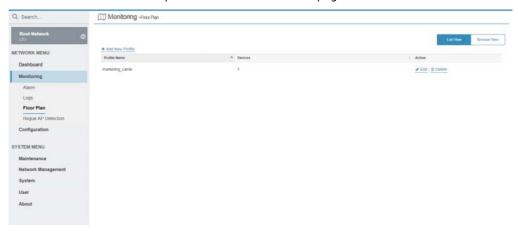
**Remove Device** - If you do not satisfy the location of AP icon, click this link to remove the AP icon from the map.

**Link to an AP** – If you satisfy the location of AP icon, click this link to select VigorAP. All of un-assigned AP names will be shown on the list. Choose the one you want and click Apply. Then such map has been connected with the specified AP.

7. Click **Link to an AP** to select the AP you want. Then, the name of the VigorAP will be displayed below the icon on the map.

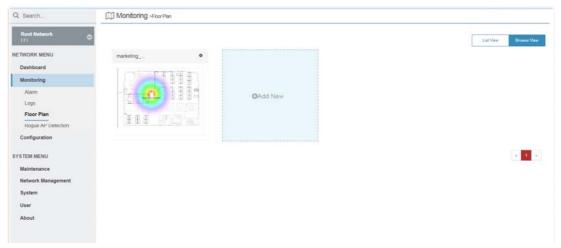


8. Click **Save**. The new created profile will be shown on the page.



#### IV-1-3-2 Browse View

This page displays all of the floor plan profiles with the map used.



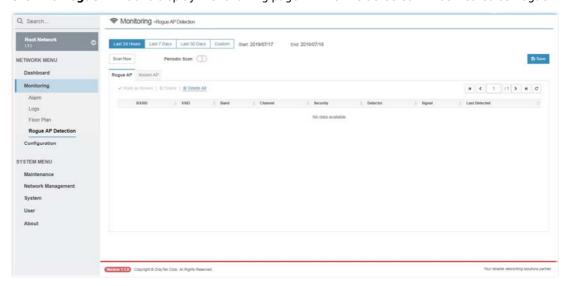
You can click **Add New** on this page to create a new profile. To modify the existed profile, click the icon on the right-top to display a drop down menu. Then click **Edit Map & Plan** to perform the modification, or click **Delete Map Profile** to remove the selected floor plan profile.



# IV-1-4 Rogue AP Detection

Information detected by VigorAP can be displayed in this page. In which, the APs will be classified with rogue AP and known AP in different colors.

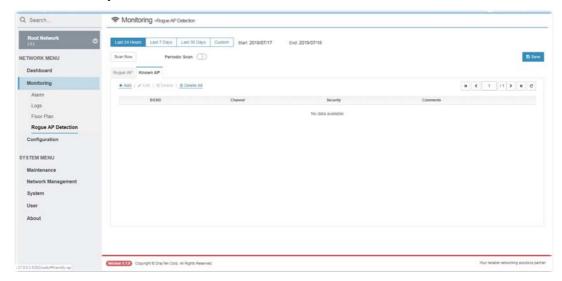
Click the **Rogue AP** tab to display the following page. All the APs detected will be treated as Rogue AP.



Item	Description  Display the access point(s) detected within 24 hours, 7 days, 30 days or user defined days.			
Last 24 Hours / Last 7 Days / Last 30 Days / Custom				
Scan Now	Perform device detection immediately.			
Periodic Scan	After enabling this feature, access points will be detected periodically based on the setting configured here.  Daily -VigorConnect will detect access point on certain time every day.  Start Time - Specify a time point as starting time for device detection.  Weekly - VigorConnect will detect access point on certain time every week.			
	<ul> <li>On - Choose the day to perform device detection.</li> <li>Start Time - Specify a time point as starting time for device detection.</li> </ul>			
Mark as Known	Vigor access points can be detected and be shown in the table under Roque AP. However, some of them might be known to you and			

	should not be listed here. To solve this problem, simply click the access point and then click <b>Mark as Known</b> . The selected access point will be transferred and listed under Known AP.
Delete	Remove the selected access point from the list.
<b>Delete All</b> Remove all of the access points from the list.	

Click **Known AP** to display the following page. All the access points listed under this page will be treated as friendly AP.

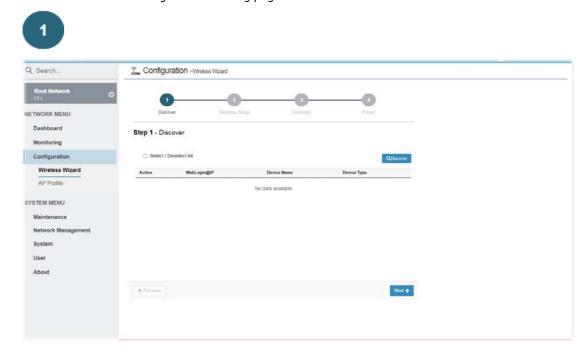


Item	Description			
+Add	Click it to create a new entry for entering information for access point.			
Edit	Change the settings for a selected access point.  Select one of the access points. The Edit link will be available for clicking, then.  After clicking it, channel, security and comments will be allowed to be modified with different values			
	Rogue AP Known AP  + Add   ≠ Edt   ⊕ Delete   ⊕ Delete			H ( 1 /1 > H
	BSSID	Channel	Security	Comments
	□ 00:1D:AA.9C:F7:42	1	Arry	friendly
Delete	Remove the selecte	d access r	Any WEP WEP WEAPEK WEADEK WEADES WEFERE 1 WEFERE 1 WEFERE 1 WEADER 1 WEFERE 1 WEADER	
Delete All		•		
BSSID	Remove all of the access points from the list.  Display the MAC address of the detected access point.			
Channel	Display the MAC address of the detected access point.  Display the channel used by the access point.  Check the box of the selected access point and click <b>Edit</b> .			
Security	Display the security mode used by the access point.  It can be changed.			
Comments	Display a brief explanation for the access point. It can be changed.			
Save	Save the settings.			

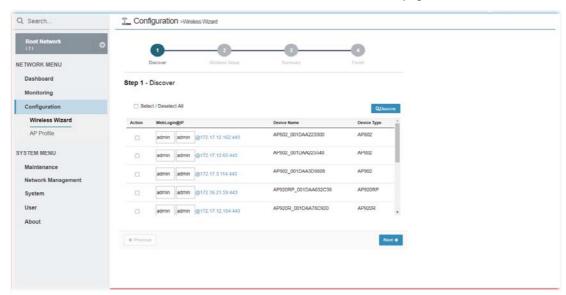
# IV-2 Configuration for Network

#### IV-2-1 Wireless Wizard

There is an easy way to configure settings for wireless AP. Click **NETWORK MENU** >> **Configuration** >> **Wireless Wizard** to get the following page.

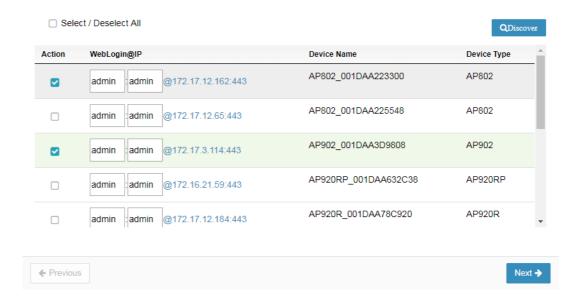


Click **Discover**. Later, the detected AP devices will be listed on the web page.

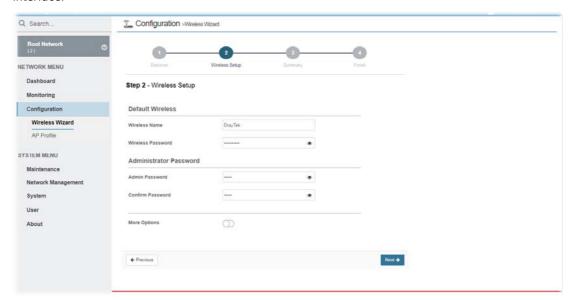


Select the devices you want by clicking the box under  $\boldsymbol{Action}.$  Then, click  $\boldsymbol{Next}.$ 

Step 1 - Discover



On the following web page, set the username / password for the user to access into web user interface.

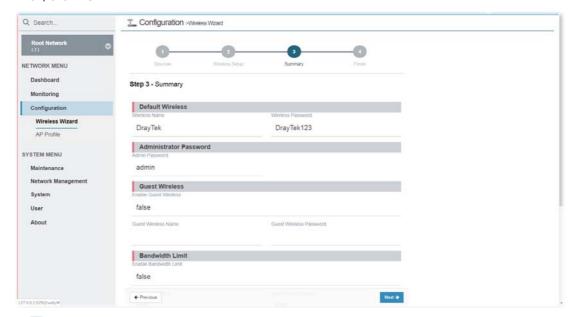


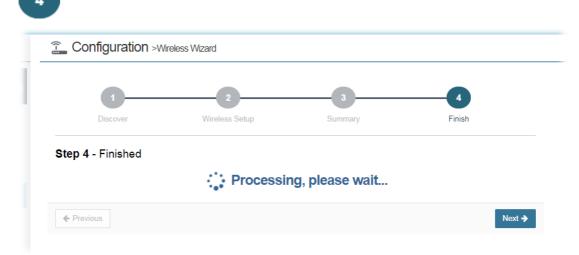
Item	Description
Default Wireless	<b>Wireless Name</b> - Enter a name for a wireless client to connect via the selected AP device.
	<b>Wireless Password</b> - Enter a password for a wireless client to connect via the selected AP device.
Administrator Password	<b>Admin Password</b> - Enter a password to replace the original password of the selected AP device.
	Confirm Password - Enter a password again for confirmation.
More Options	If enabled, you shall configure advanced settings.
Guest Wireless	<b>Enable Guest Wireless</b> - If enabled, you can set the second group of wireless name and password for the wireless client connecting via

	the selected AP device.
	<ul> <li>Guest Wireless Name - Enter a name for a wireless client to connect via the selected AP device.</li> </ul>
	<ul> <li>Guest Wireless Password - Enter a password for a wireless client to connect via the selected AP device.</li> </ul>
Bandwidth Limit	Enable Bandwidth Limit - Click it to enable the bandwidth limit.
	<ul><li>Upload Limit (bps) - Set the upload limit.</li></ul>
	Download Limit (bps) - Set the download limit.

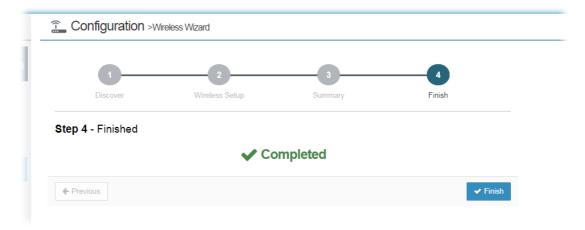
After finishing the above configuration, click **Next**.

In this step, a summary will be shown on the screen. Check if the configuration is correct or not. Then, click **Next**.





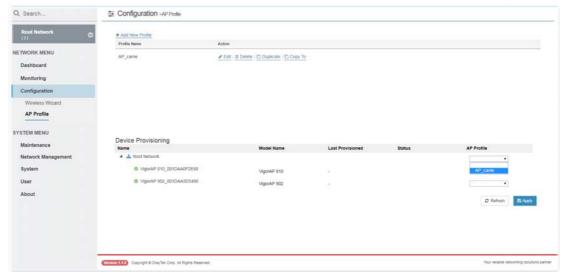
Click Finish.



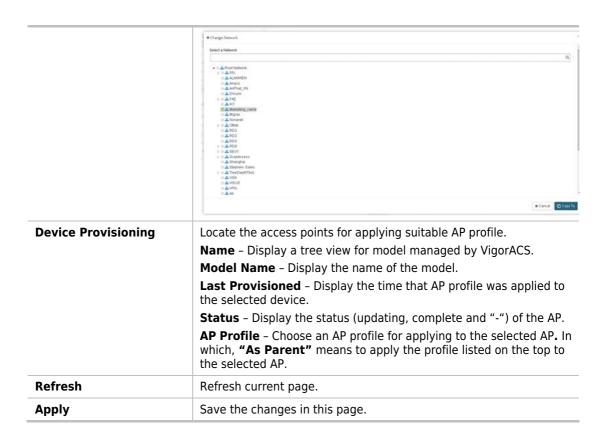
#### IV-2-2 AP Profile

AP profile is used to apply to a selected access point. It is very convenient for the administrator to configure the setting for access point without opening the web user interface of the access point.

The functions listed in the AP profile in VigorConnect contain settings for all of models of VigorConnect. When an AP profile is created, it can be used to apply onto any access point managed by VigorConnect. If the access point does not have the functions defined in the AP profile, after being applied, only the functions that the selected access point support will be overwritten by the selected AP profile.



Item	Description
+Add New Profile	Create a new AP profile with basic settings.
Profile Name	Display the name of AP profile.
Action	Edit - Configure detailed settings for the selected AP profile.  Delete -Delete the selected AP profile.  Duplicate - Click it to duplicate a new profile (e.g., aaa(1)) based on the selected profile (e.g., aaa).
	<b>Copy To</b> - Click it to open the following page. Then select a network (e.g., Marketing_carrie in this case) from the tree view of Root Network. After clicking the Copy To button, the configuration of selected AP profile will be applied to the selected network (e.g., Marketing_carrie).

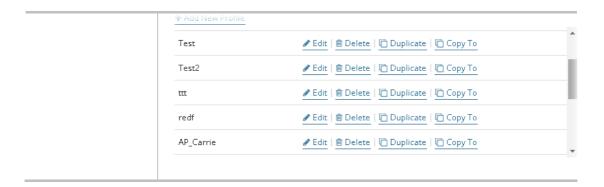


#### IV-2-2-1 Add a New AP Profile

The following setting page appears when **+Add New Profile** is clicked.

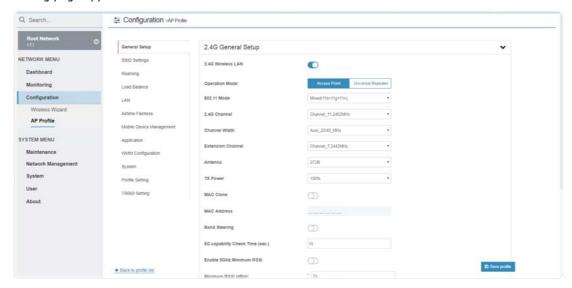


Item	Description
<b>Profile Name</b>	Type a name of the profile.
AP Login Username	Type a username for login the access point.
AP Login Password	Type a password for login the access point.
Back to profile list	Return to previous page, AP profile list.
Save	Save the settings and display the new profile on the AP profile list.



#### IV-2-2-2 Edit the AP Profile

To configure detailed settings for each AP profile, click the **Edit** button for the selected profile. The setting page appears as follows:



Available settings are explained as follows:

Item	Description
Area A - Menu Item	At present, the available menu items contain,
	General Setup
	<ul> <li>SSID Settings</li> </ul>
	<ul><li>Roaming</li></ul>
	Load Balance
	• LAN
	Airtime Fairness
	Mobile Device Management
	<ul> <li>Application</li> </ul>
	WMM Configuration
	System
	Profile Setting
Area B - Settings	Such area will vary according to the item selected in Area A - Menu Item.

If required, refer to User's Guide of VigorAP for the detailed information of settings definition.

#### **Applications**

#### A.1 How to apply an AP profile to AP device(s)?

- 1. Choose a group containing with access points (e.g., "ap" in this case) from Root Network.
- 2. The dashboard of "ap" group appears as follows.
- 3. Open NETWORK MENU>>Configuration>>AP Profile.
  - In the **Device Provisioning**, all of the access points (e.g., AP 800/ AP810/ AP900 / AP902) grouped under "ap" are displayed under the field of Name.
- 4. Select the AP (e.g., AP 810 in this case) required to apply new AP profile; and use the drop down list of AP Profile to specify a profile (e.g., test in this case).
  - You can click **+Add New Profile** to create a new AP profile if there is no AP profile to be chosen or the existed AP profile is not suitable for the AP model.
- 5. Click **Save**. The settings in web user interface of the selected VigorAP will be overwritten with the settings configured in AP profile immediately.

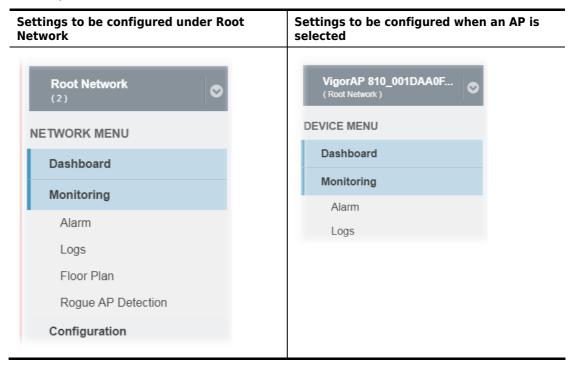
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# Part V DEVICE MENU for Specified AP



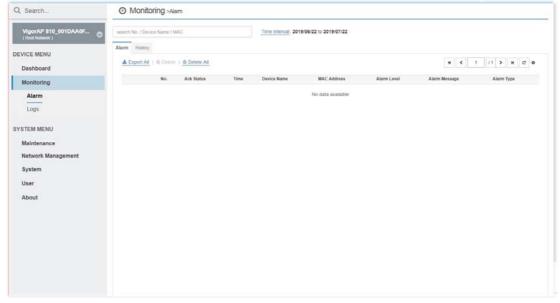
# V-1 Monitoring for CPE

Monitoring menu offers Alarm, Logs and Diagnostics for monitoring the normal and abnormal actions for the specified AP.



# V-1-1 Alarm

Alarm message will be recorded on VigorConnect server when there is a trouble happened to the device (AP). Only the users within the same user group will be notified with the alarm message.

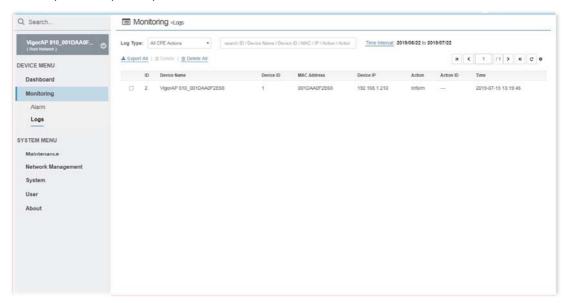


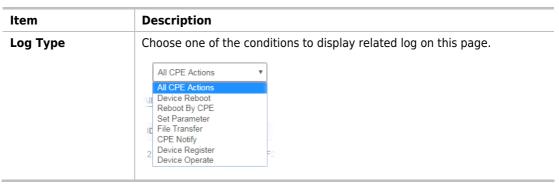
Item	Description
Alarm / History	Alarm - Display the alarm records recently.

	<b>History</b> - Display all the alarm records that have been solved and cleared.
Export All	Click this button to save alarm log as a XLS file.
Delete	Clear the alarm record which has been solved by VigorConnect.
Delete All	Clear all of the alarm records which have been solved by VigorConnect.
No.	Display the index number of the alarm. It is offered by VigorConnect automatically.
Ack Status	Display the status of the records with the type specified here (Not Ack or Acked).
Time	Display the time that the alert occurred.
Device Name	Display the name of the device encountering the trouble.
MAC Address	Display the MAC address of the device.
Alarm Level	Display the alarm message with the severity specified.
Alarm Message	Display a brief explanation for the alarm sent by VigorConnect automatically.
Alarm Type	Display the alarm message with the type specified.
Alarm Status	Display the status of the records with the type specified here (Alarm or Rearm).

# V-1-2 Logs

Log provides administrator records for action executed, device name, MAC address, Device ID, MAC Address, Device IP, Action, Action ID and Time for the selected device.





search Device Name / IP / MAC	Enter the condition for VigorConnect to search and display relational information.
Time Interval	Specify the time interval to display information within that time period.  Time Interval: 2019/06/22 to 2019/07/22  Time Last 30 Days  Cancel Q Search
Export All	Click this button to save alarm log as a XLS file.
Delete	Clear the alarm record which has been solved by VigorACS.
Delete All	Clear all of the alarm records which have been solved by VigorACS.

# Part VI Troubleshooting



# VI-1 Contacting DrayTek

If the modem still cannot work correctly after trying many efforts, please contact your dealer for further help right away. For any questions, please feel free to send e-mail to support@draytek.com.

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