

DrayTek

VigorACS SI


Centralized Management System



Your reliable networking solutions partner

User's Guide

V2.5



VigorACS SI

Centralization Management System

User's Guide

Version: 2.5

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Please read the license screen in the installation wizard. You must accept the terms of the license in order to install VigorACS SI.

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Part I Introduction

Chapter 1 Features

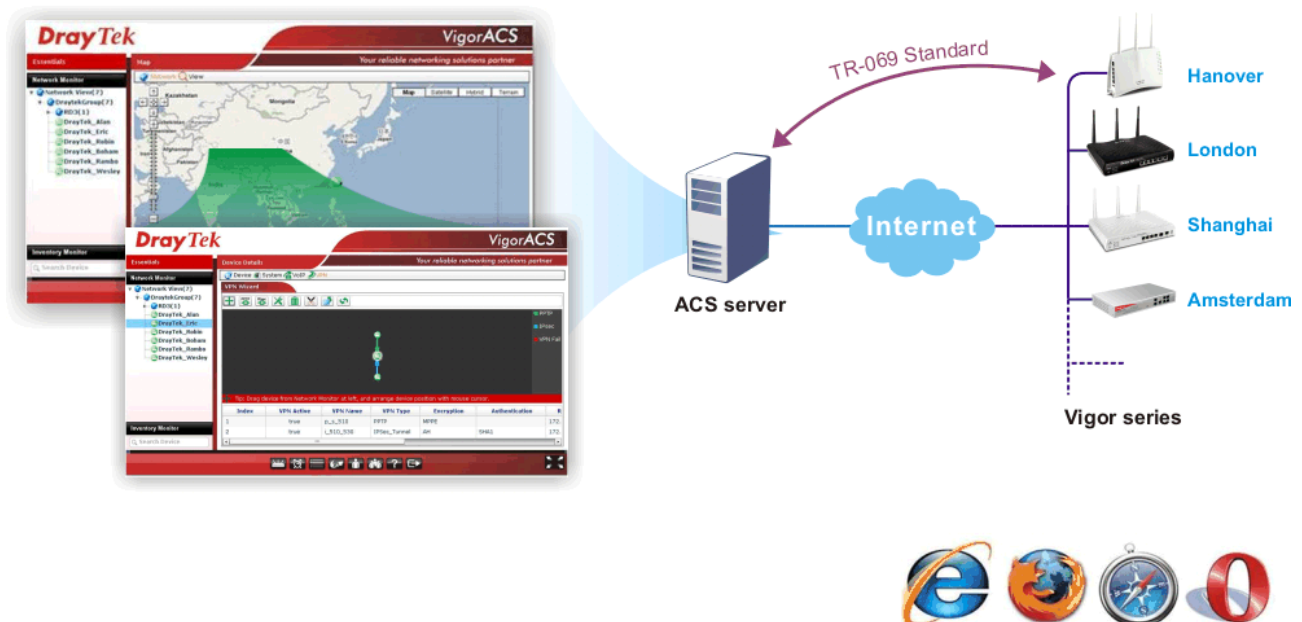
VigorACS is a software which provides centralized device management for TR-069 based CPEs such as broadband gateway, XDSL router, VoIP gateway and wireless AP. VigorACS has device status, monitor status of devices, or perform scheduling tasks such as firmware upgrade, configuration backup/restore and parameter profile for mass deployment of CPE devices. It is easy to use through intuitive Web-based GUI with security management. VigorACS can be installed on different kinds of platform e.g., Windows, Linux and so on.

1.1 Main Features and Benefit

- Manage all kinds of devices complied with TR-069 specification.
- VigorACS server can be installed in Windows and Linux.
- Intuitive Web-based GUI can be executed on all browsers like IE, Firefox, Mozilla and so on.
- Support scheduling firmware upgrade, configuration backup/restore and parameter profile deployment.
- Support auto-discovery to survey all TR-069 devices.
- Provide device inform management.
- Support security management

1.2 System Architecture

The following figure shows an overview for the application between VigorACS and CPE devices. With TR-069 protocol, VigorACS SI can communicate and manage devices with ease.



1.3 Web Service

Web service is a software system identified by a URI, whose public interfaces and bindings are defined and described using XML. Its definition can be discovered by other software systems. These systems may then interact with the Web service in a manner prescribed by its definition, using XML based messages conveyed by internet protocols.

The basis for Web Services contains: XML, WSDL (Web Services Description Language) , SOAP (Simple Object Access Protocol), UDDI(Universal Description, Discovery and Integration). The procedure for the structure of bottom layer: transform Web Service information into XML file format, use WSDL statement to describe the objects for service. The remote end can get required information through such description. It carries out transformation job to search or register from UDDI by means of SOAM communication bottom layer.

- For the designers of Java program: you can write java program to control VigorACS. Also, VigorACS will offer some API for you to write and call it. For example, you can get all the connected CPE devices controlled VigorACS through web service.

Corresponding files are placed in - ***WebServices_TR069API.zip***

The documentation for web services api is placed in - ***WebServices_TR069API/doc/***

Sample program is placed in -

WebServices_TR069API/example/src/tw/com/draytek/acs/test/TestMain.java

For the designers with other program language: you can define WSDL to control VigorACS through SOAP(Simple Object Access Protocol)

Chapter 2 Installation

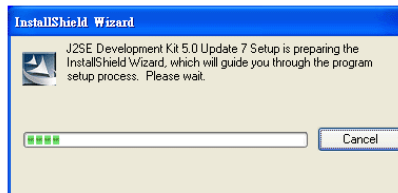
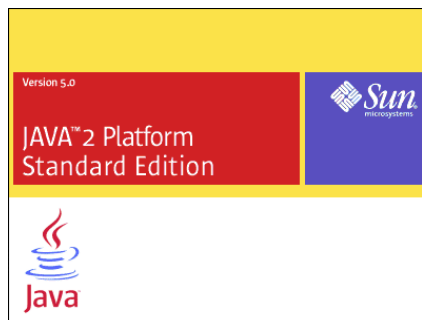
Please follow the procedure listed below to install VigorACS completely. The installation for different platforms might be different.

2.1 Platform for Windows 2000, XP or Vista

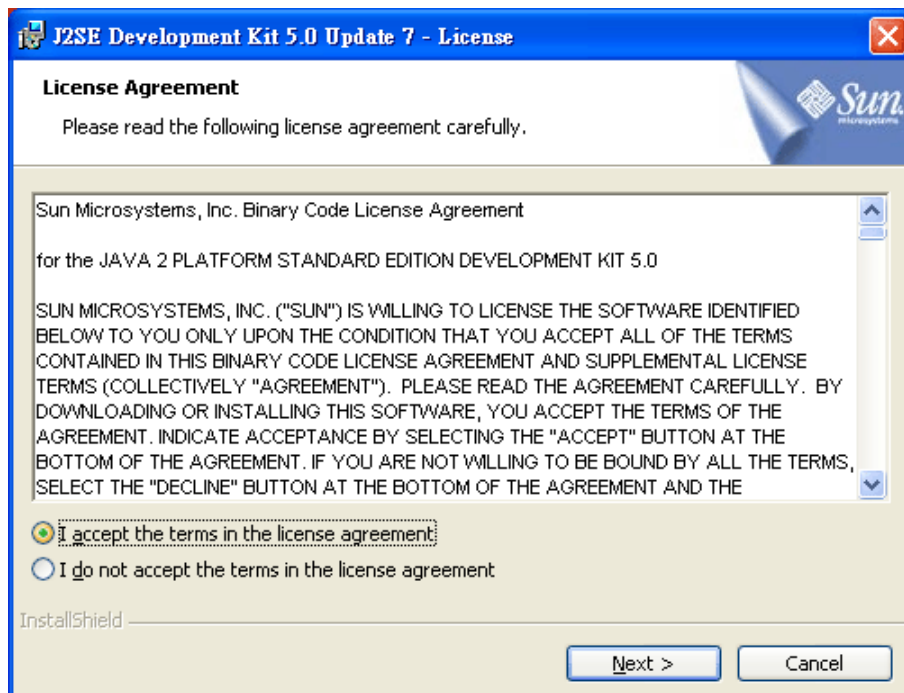
There are three programs needed to be installed for operating VigorACS.

2.1.1 Installation for Java

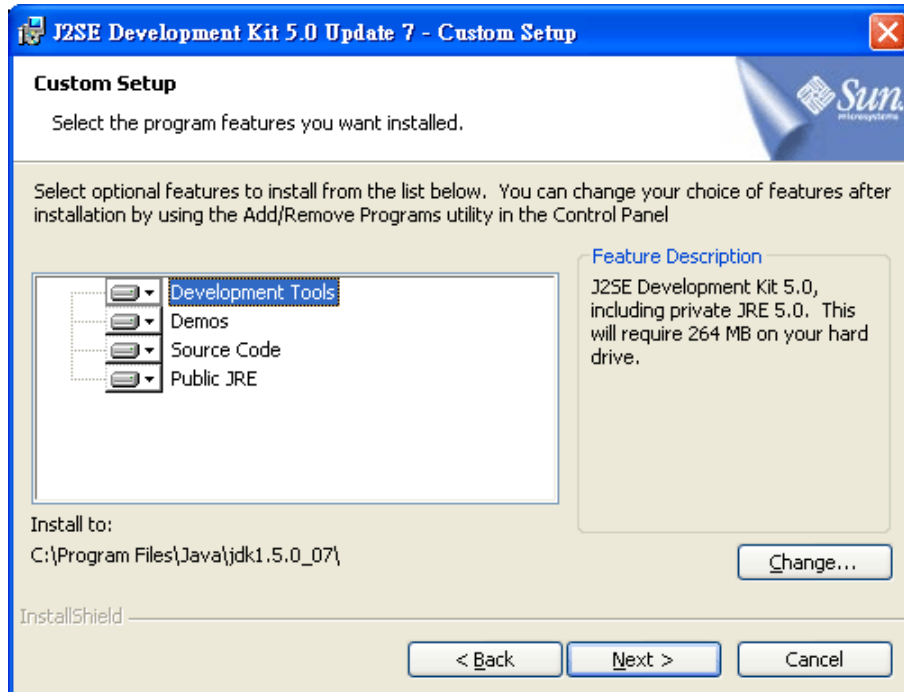
1. Locate ACS\Software\jdk-1_5_0_07-windows-i586-p.exe from CD and double click on it to execute the installation.



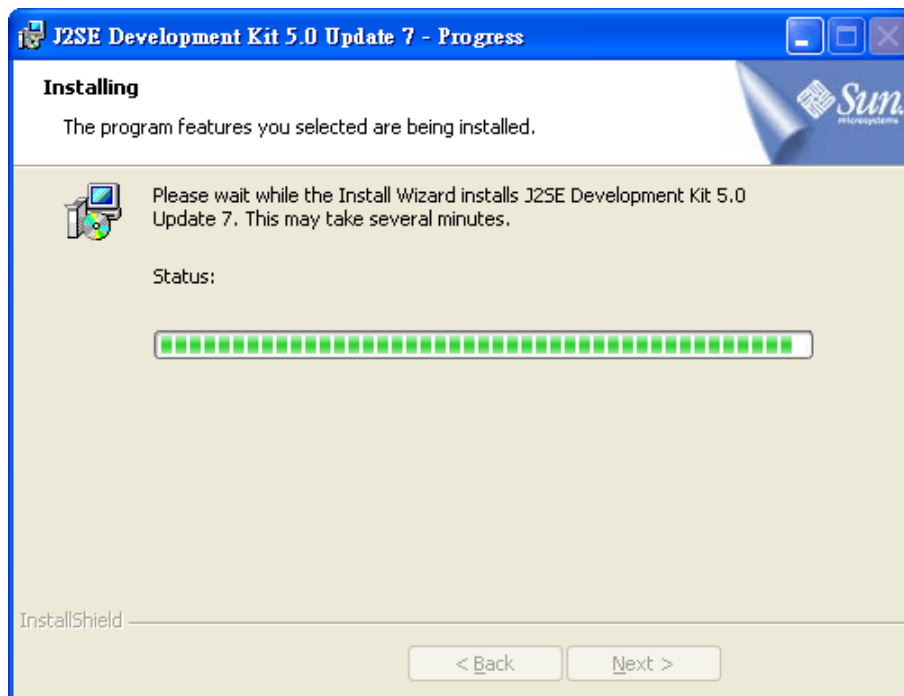
2. A license agreement dialog box will appear. Choose **“I accept the ...”** and click **Next**.



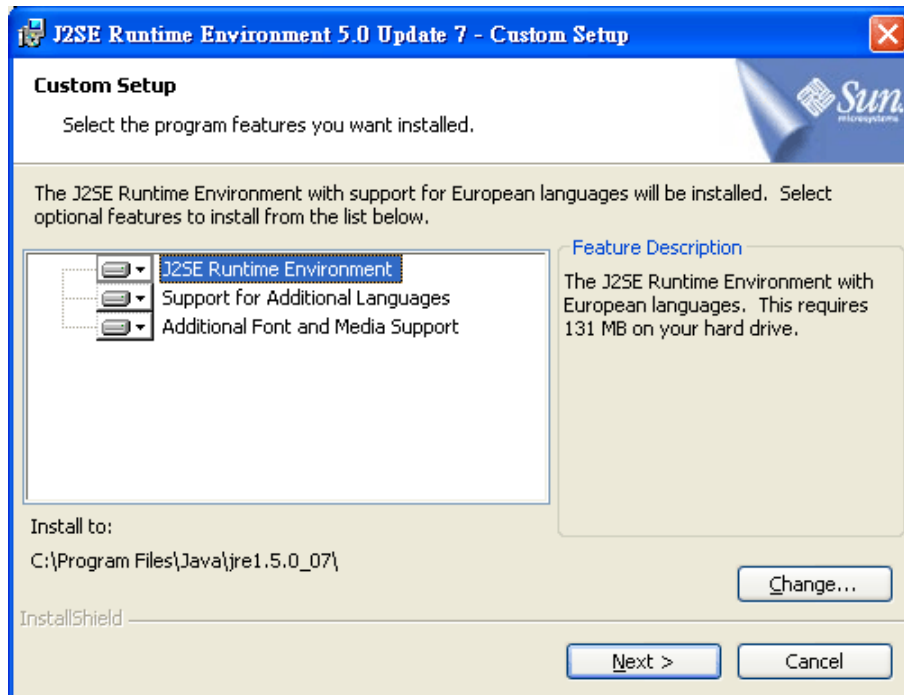
3. In this dialog box, optional features will be listed for you to choose for installation. Choose the one you need and click **Next**.



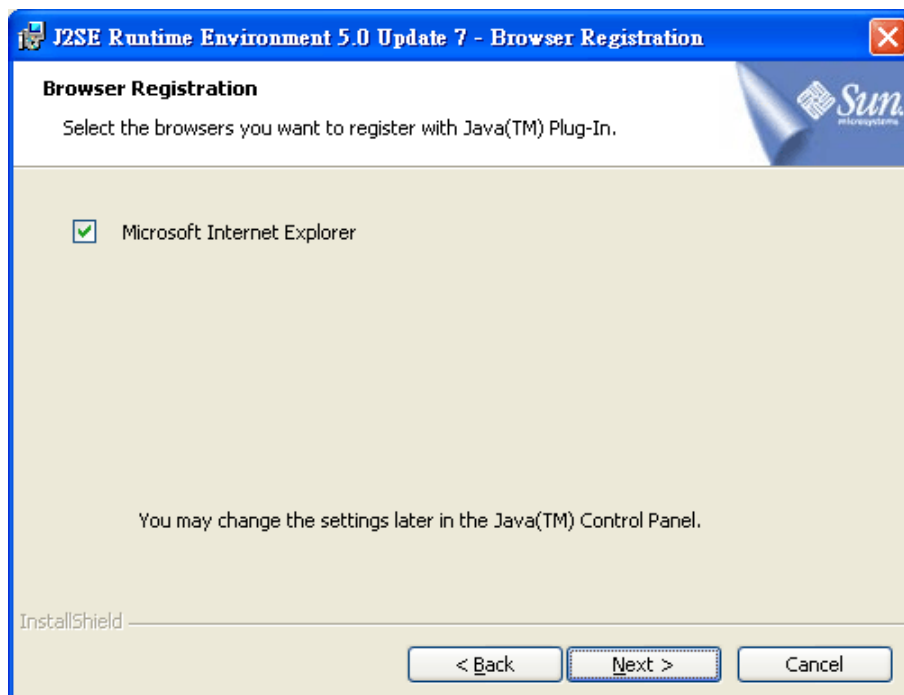
4. Wait for a while to install the selected feature.



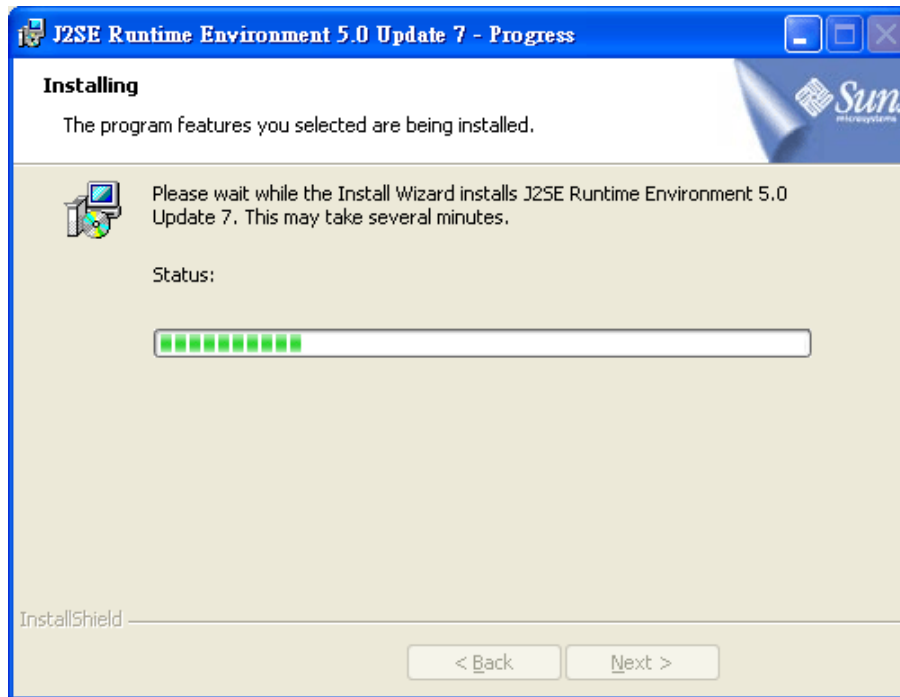
5. When this dialog box appears, please click **Next**.



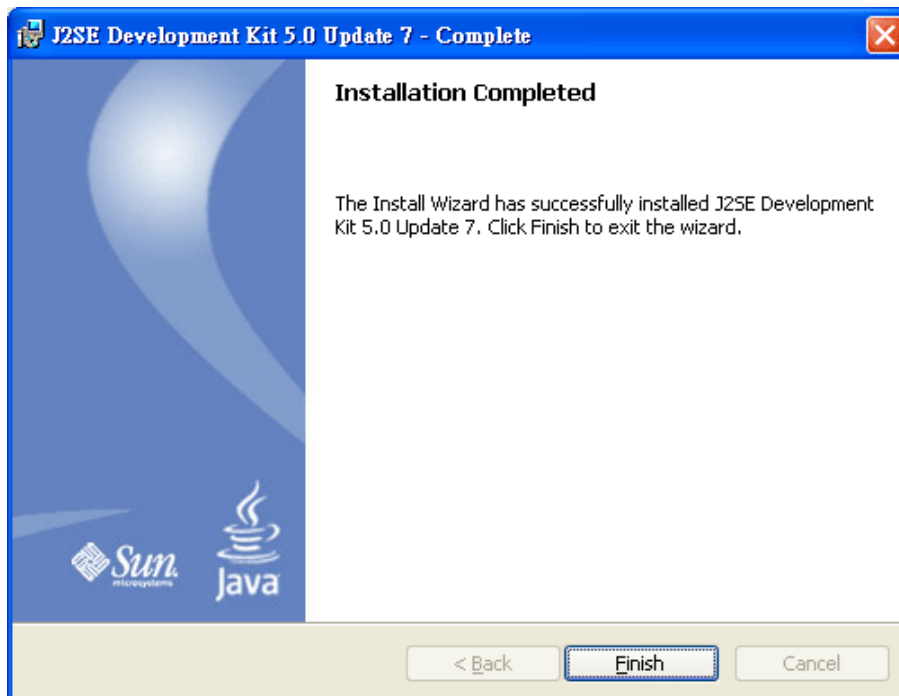
6. You have to choose the browser for configuring VigorACS later, and then click **Next**.



7. Wait for a while to install the required features.



8. Now the installation is completed. Click **Finish** to exit the installing program.



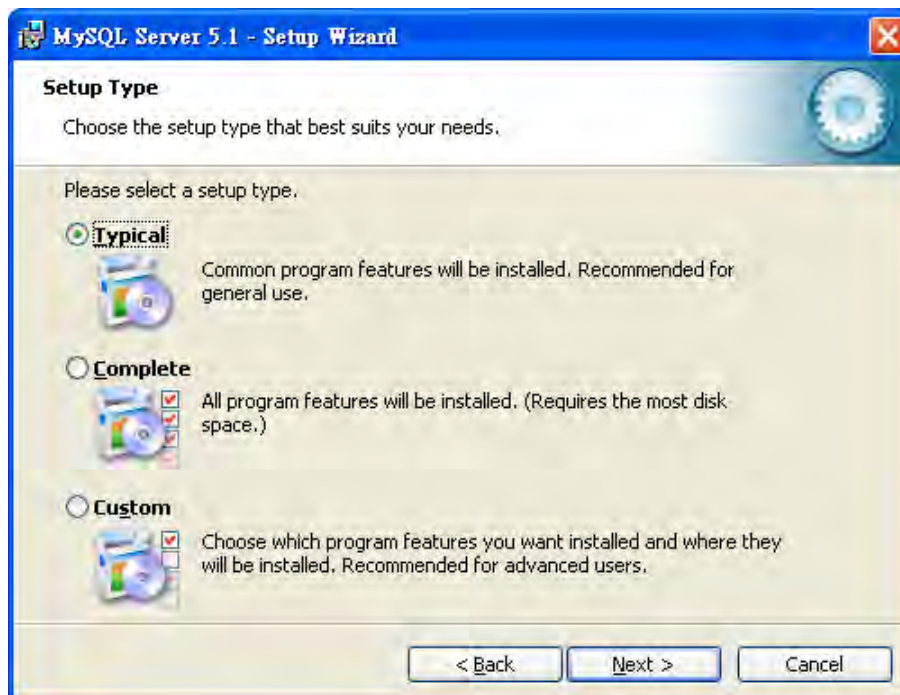
2.1.2 Installation for MySQL

Follow the steps below to install MySQL.

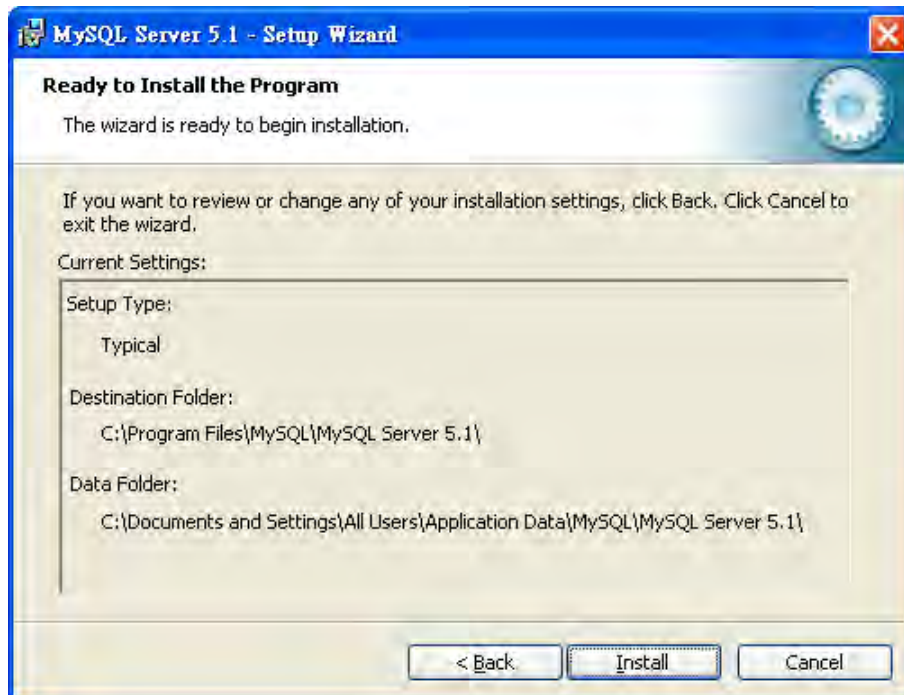
1. Locate ACS\Software\mysql-5.1.41-win32\Setup.exe from CD and double click on it to execute the installation.
2. When the welcome screen appears, please click **Next** for next step.



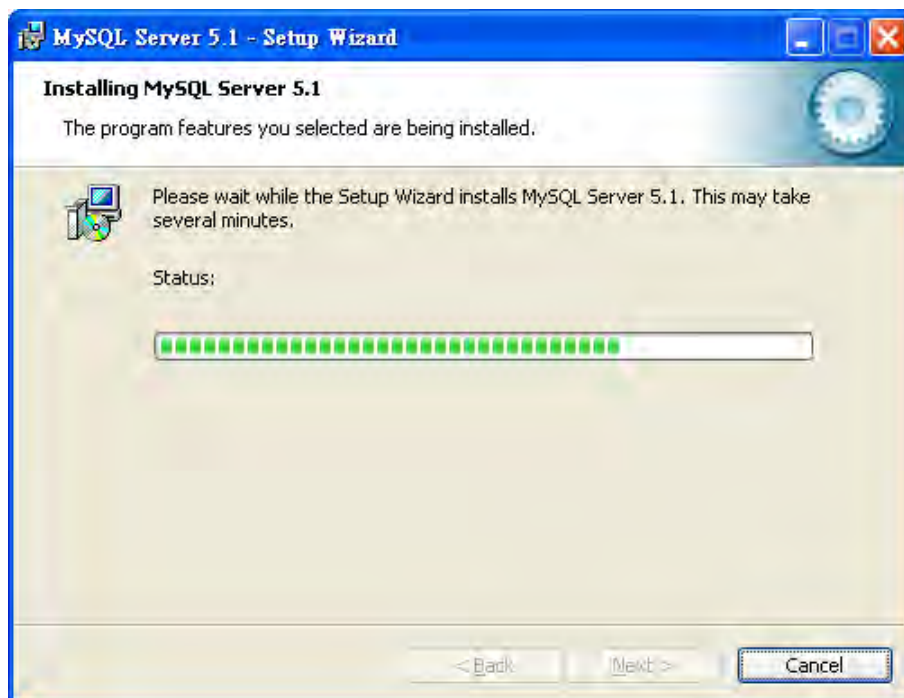
3. On this dialog box, choose the type of setup you want and click **Next**.



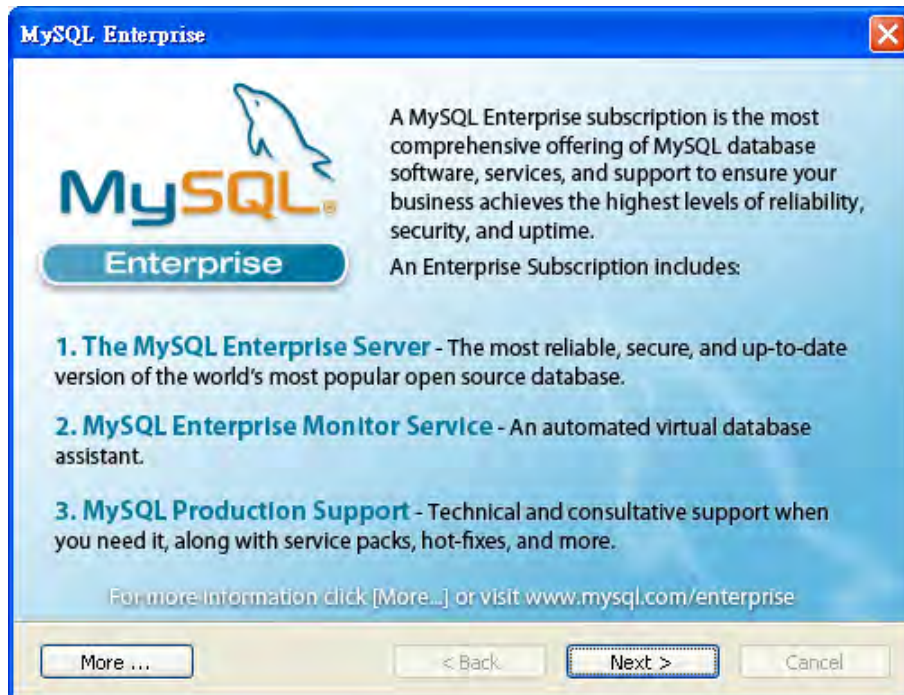
4. On this dialog box, click **Install**.



5. The installation program starts to install required files for MySQL to your computer. Wait for several seconds.



6. When the following screen appear, please click **Next**.



7. Click **Next** again.



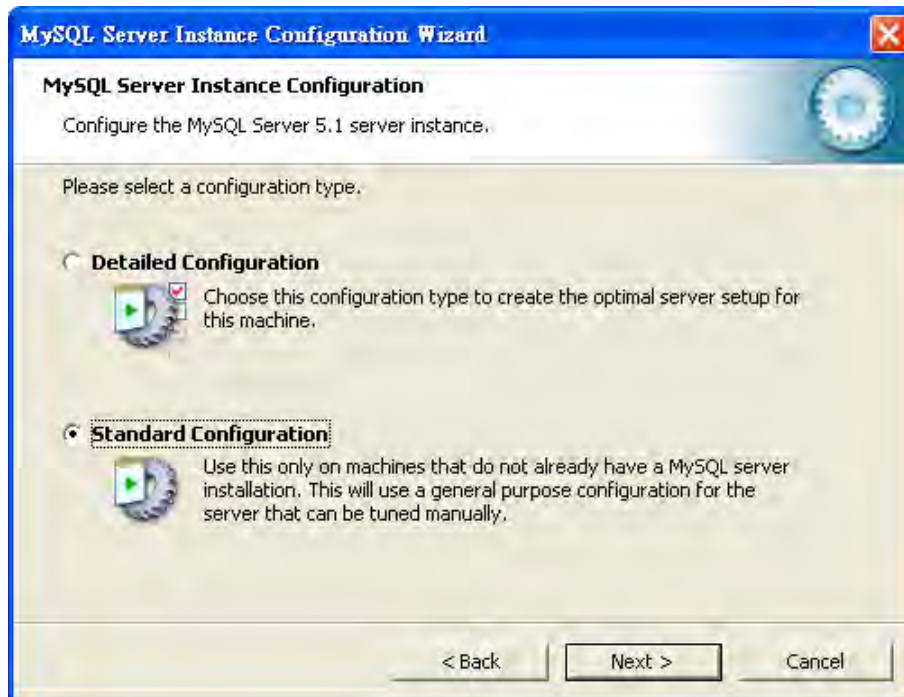
8. When the program finishes the installation, the following dialog box will appear. Please click **Finish** to exit the program.



9. When the following page appears, click **Next**.



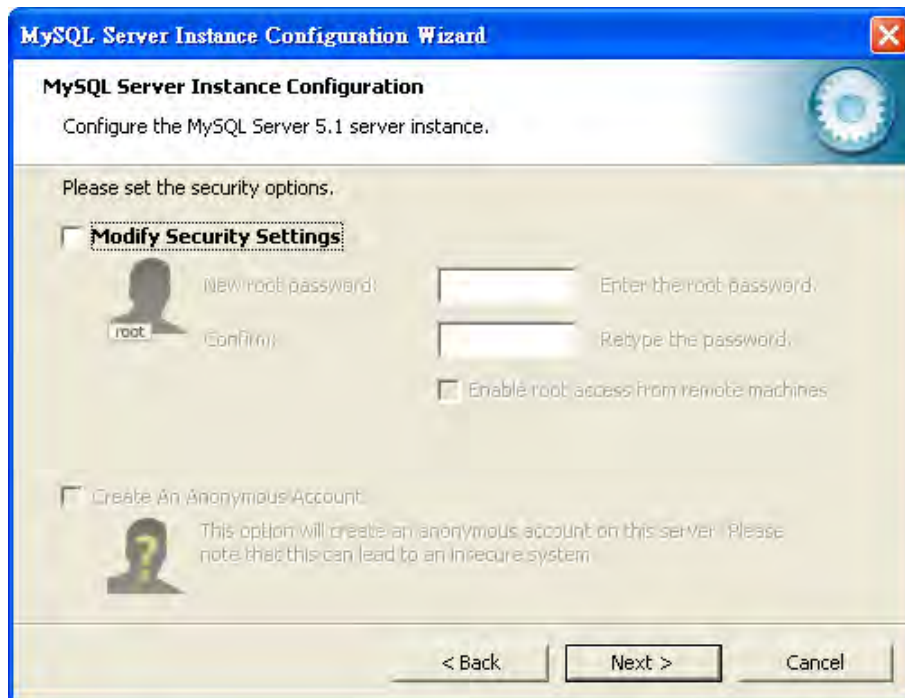
10. Choose **Standard Configuration** and click **Next**.



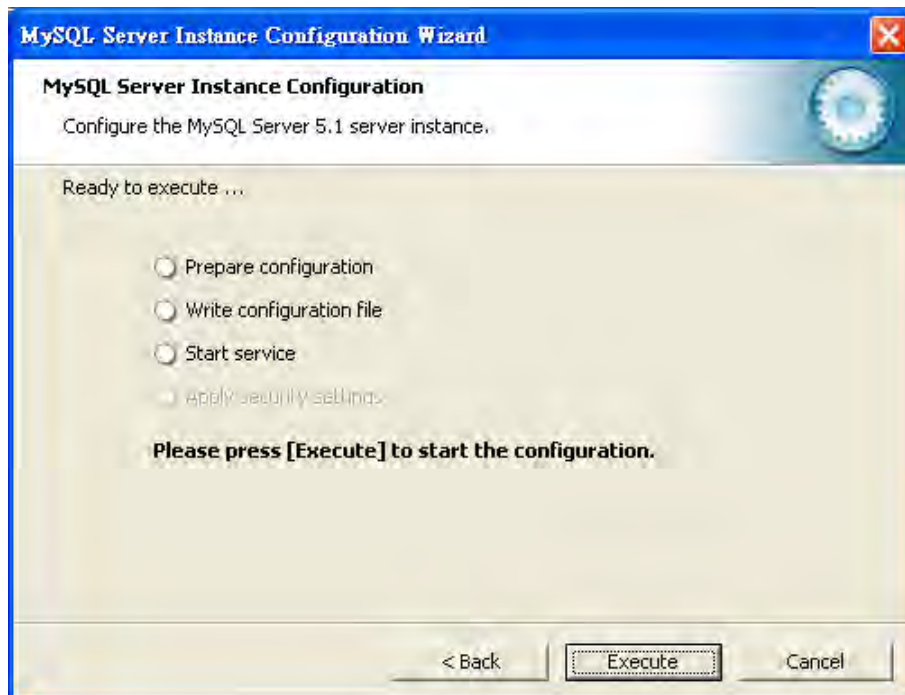
11. In this page, simply click **Next**.



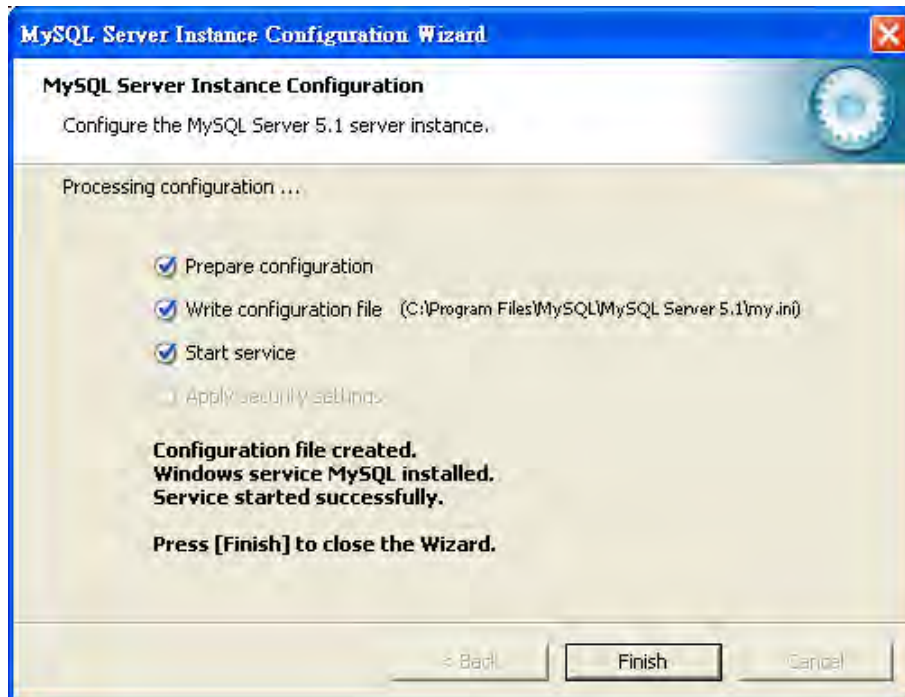
12. If you want to configure password for MySQL server, please check **Modify Security Settings** and type the password. It depends on your request. Otherwise, simply click **Next**.



13. Then, click **Execute**.



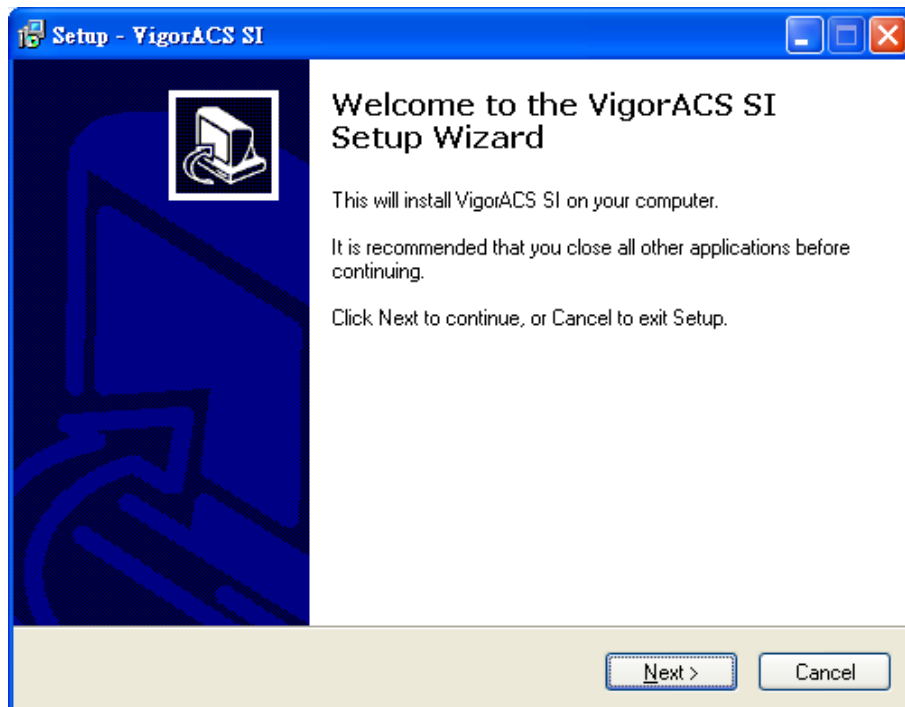
14. After finishing the configuration, please click Finish to exit the wizard.



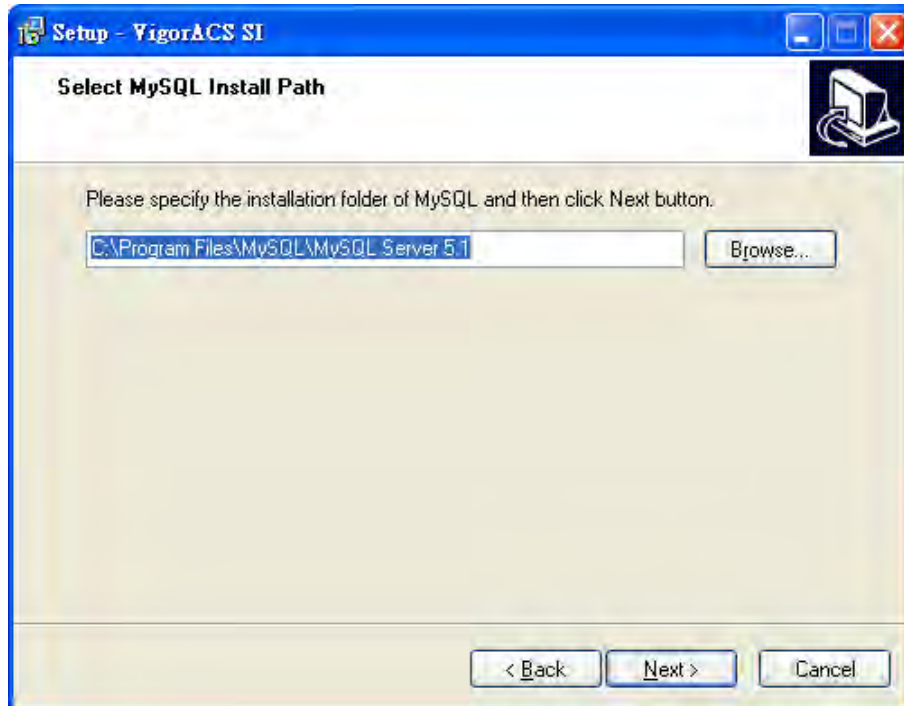
2.1.3 Installation for VigorACS SI

It is time to install VigorACS main program. Follow the steps below.

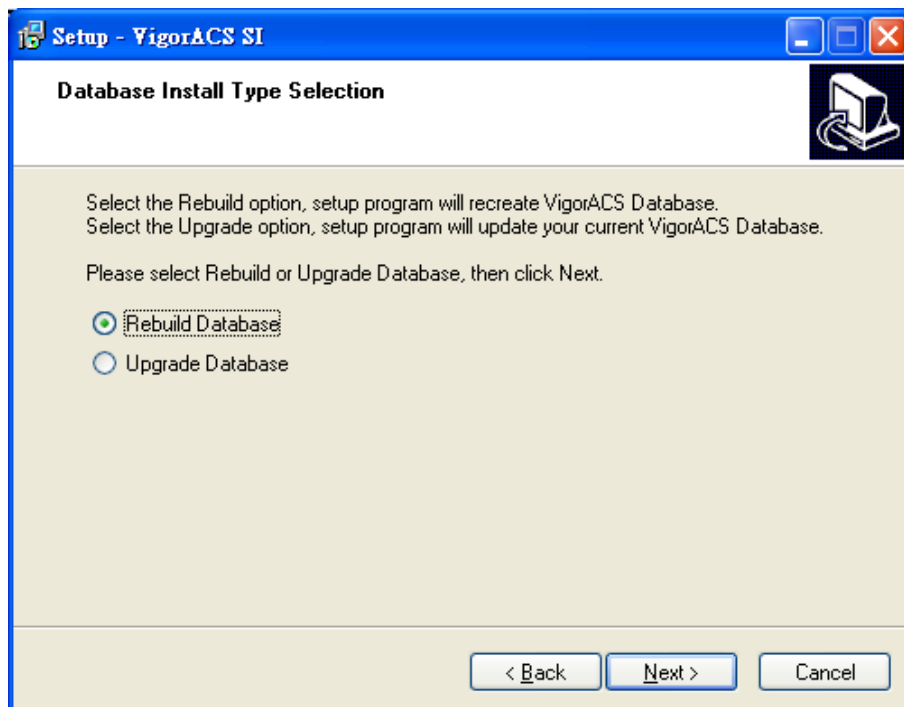
1. Locate ACS\ACS\setup.exe from CD and double click on it to execute the installation.



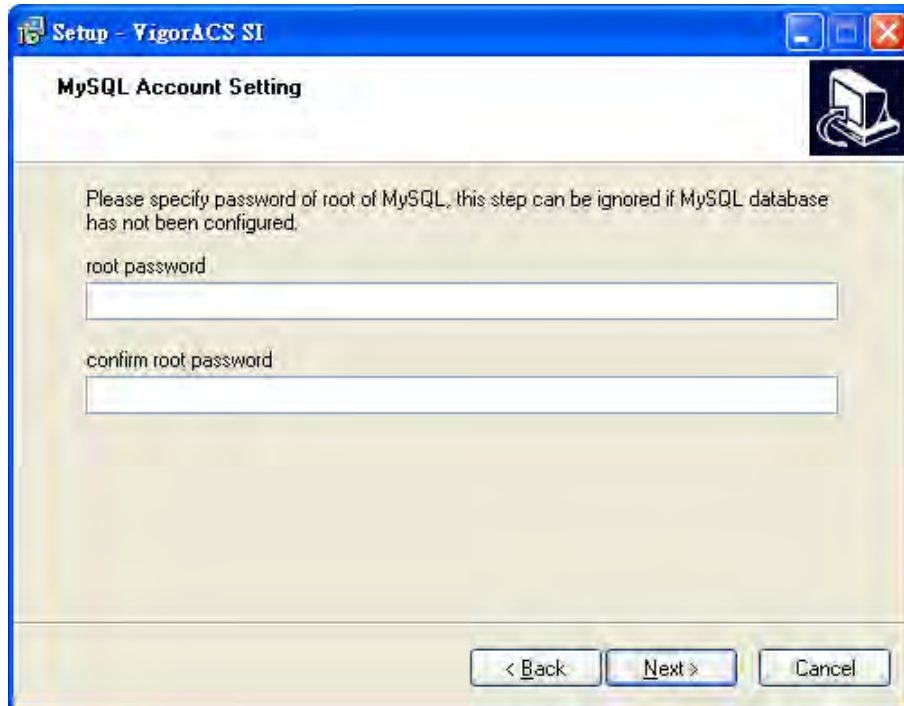
2. Select the directory that MySQL being installed (done in 2.1.2) and click **Next**



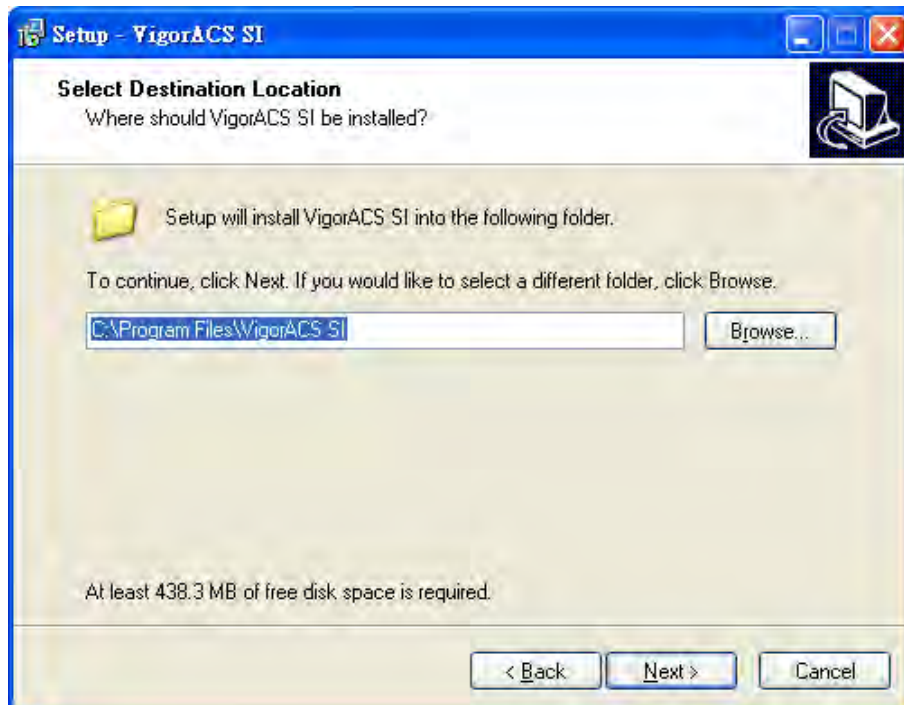
3. In this dialog box, choose **Rebuild Database** (for rebuilding the VigorACS database) or **Upgrade Database** (for upgrading the database) and click **Next**. For the first time using, please choose **Rebuild Database**.



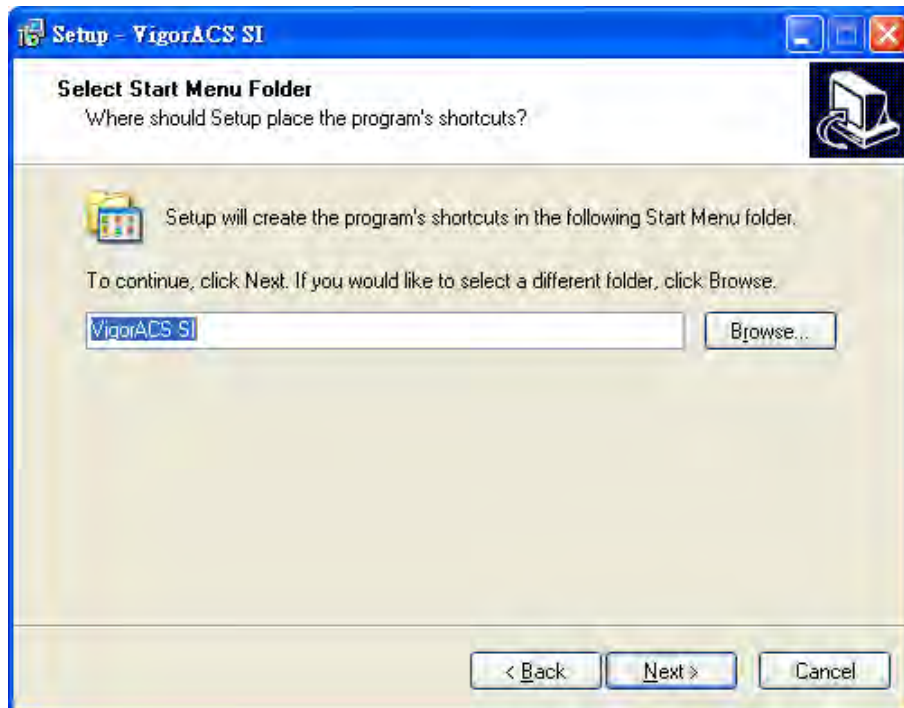
4. Click **Next**. If you have configured MySQL previously and specified password for it, you have to type the password in this page and then click **Next**.



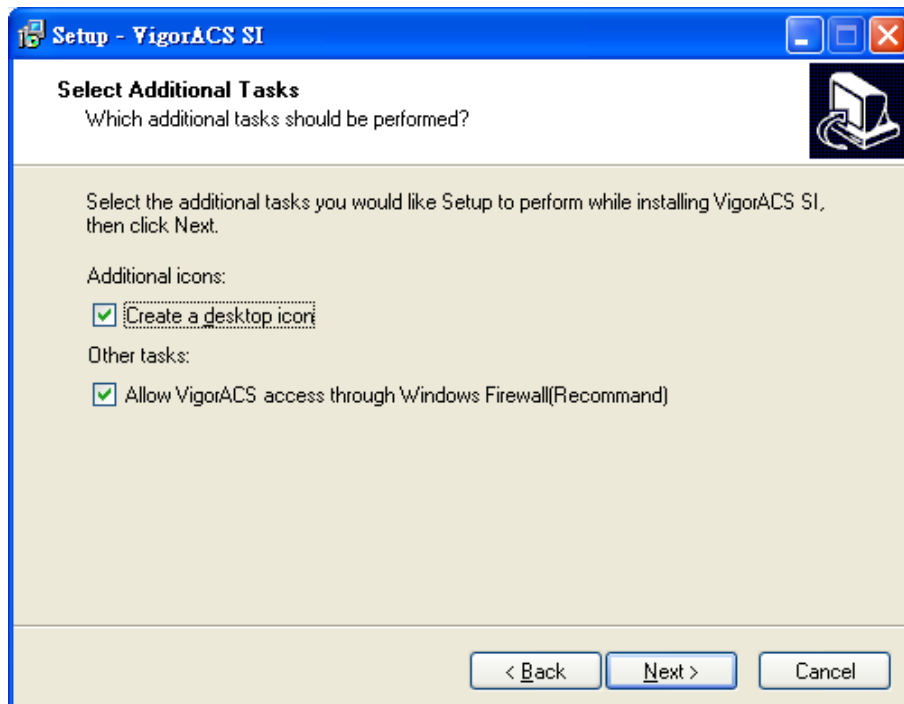
5. Determine the destination folder and click **Next**. The default directory used by this program is *c:\Program Files\VigorACS SI*. You can modify it if you want and please make sure the length of directory is not over 100 characters, otherwise you might encounter problem of VigorACS SI in installation.



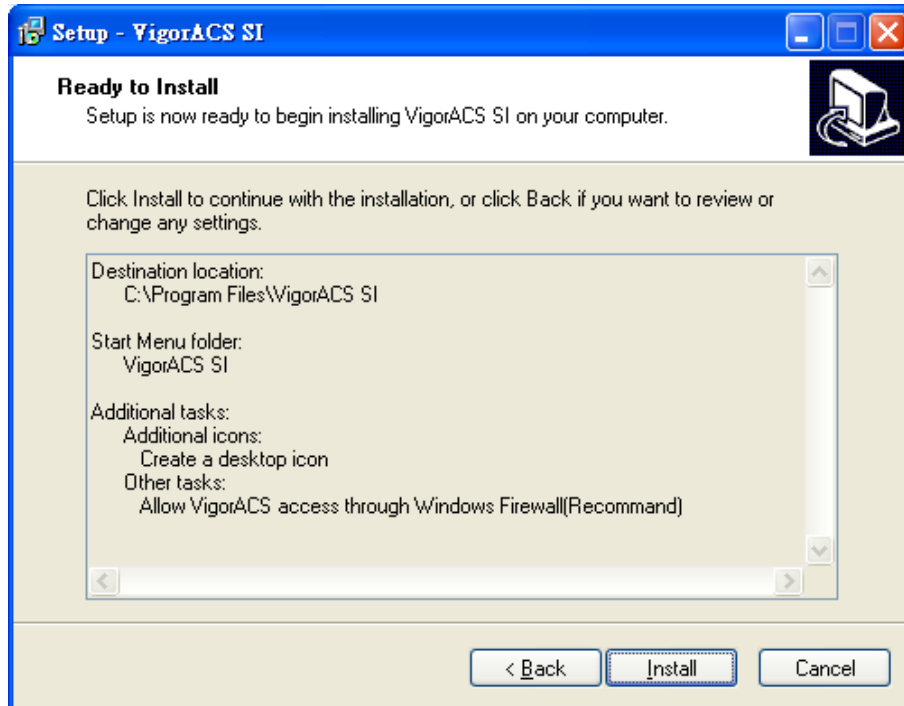
6. Determine the program name of VigorACS SI for you to start up. Then click **Next**.



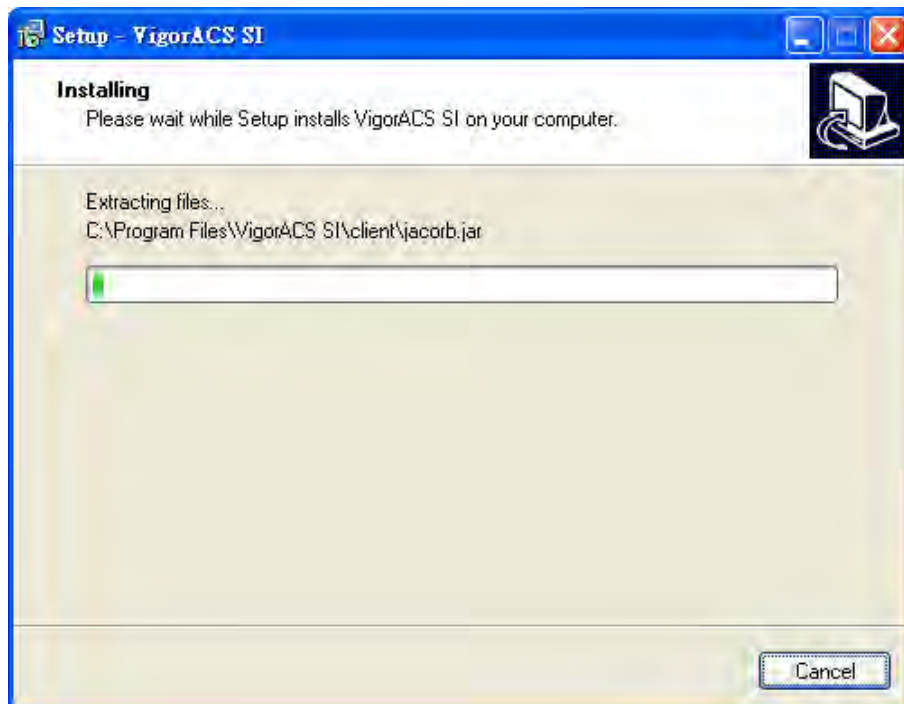
7. In this dialog, check the box of “**Create a desktop icon**” for your necessity. Click **Next**.



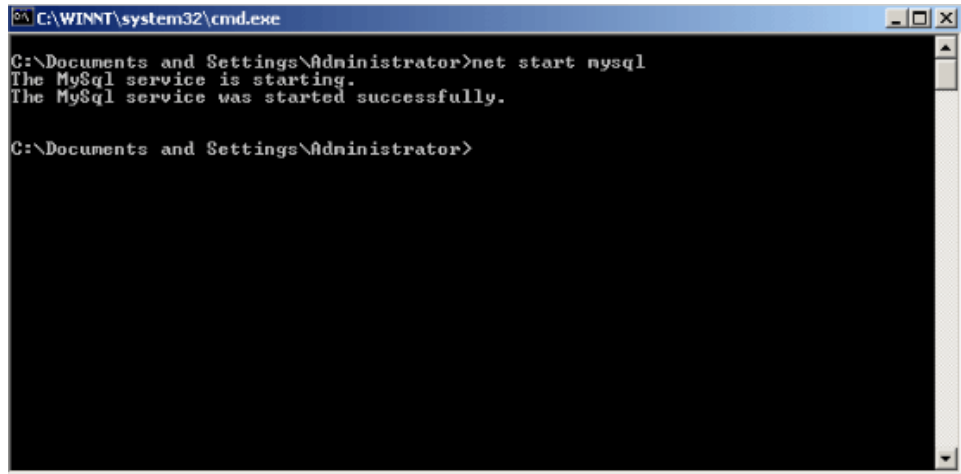
8. Now, the program is ready to install necessary features and files to your computer. Please click **Install** to start.



9. Please wait for a while to complete the installation.

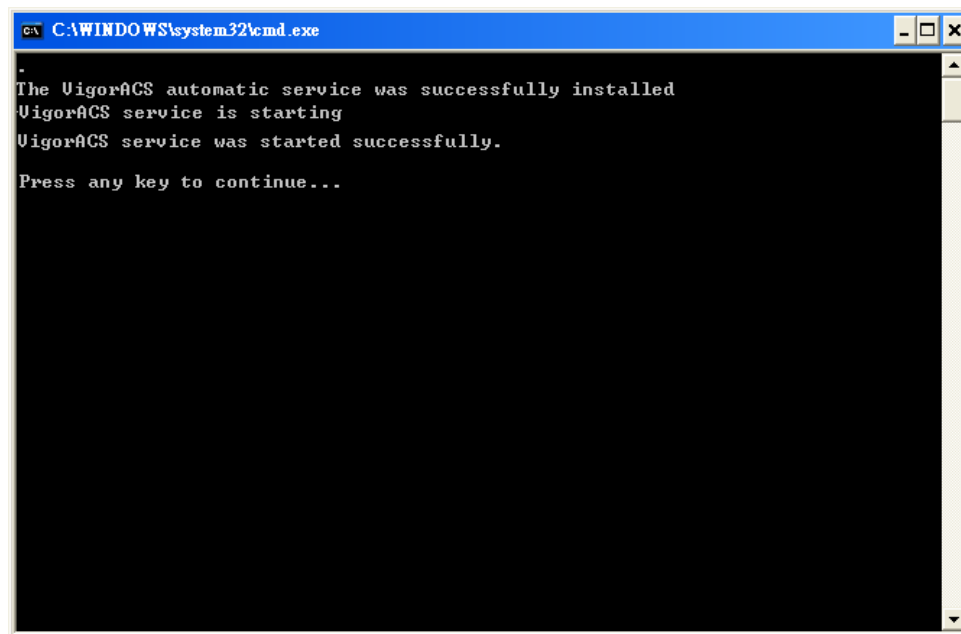


10. While installing, the following screen will appear to show that MySQL has been activated. Please wait for next dialog appearing.



```
C:\WINNT\system32\cmd.exe
C:\Documents and Settings\Administrator>net start mysql
The MySQL service is starting.
The MySQL service was started successfully.

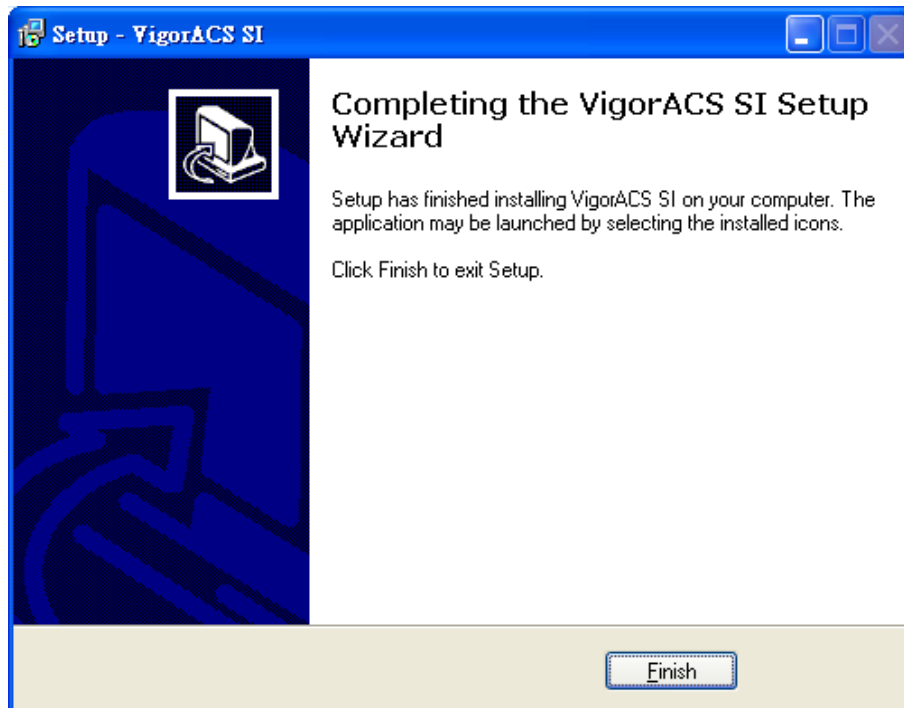
C:\Documents and Settings\Administrator>
```



```
C:\WINDOWS\system32\cmd.exe
-
The VigorACS automatic service was successfully installed
VigorACS service is starting
VigorACS service was started successfully.

Press any key to continue...
```

- Now the program has completed the installation of VigorACS SI. Click **Finish** to exit it.



2.2 Platform for Linux

Follow the steps listed below.

- Login Linux with root or the root privilege.
- Locate **VigorACS_Unix_Like_xxxxxx_xxxxx.tar.bz2** from CD and copy it to your hard disk.
- Decompress the setup packages

```
bzip2 -cd VigorACS_Unix_Like_xxxxxx_xxxxx.tar.bz2 |tar xvf -
```

```
drwxr-x--- 17 root    root      4096
drwxr-xr-x  2 root    root      8192
drwxr-xr-x  3 root    root      4096
drwxrwxrwt 18 root    root      4096
drwxr-xr-x 16 root    root      4096
drwxr-xr-x 28 root    root      4096
-rw-r--r--  1 root    root     185348096
root@localhost /# rm vigoracs
rm: remove regular file 'vigoracs' ? y
root@localhost /# ls
bin boot dev etc home initrd lib lost+found misc mnt opt proc root sbin tftpbroot tmp usr var
root@localhost /# cd home/
root@localhost home/# cd robin/
root@localhost robin/# ls
vigoracs
root@localhost robin/# cd vigoracs/
root@localhost vigoracs/# ls
0.0.1.3 0.0.1.3.1
root@localhost vigoracs/# cd 0.0.1.3.1/
root@localhost 0.0.1.3.1/# ls
VigorACS_Unix_Like_Draytek_Pro_0.0.1.3.tar VigorACS_Unix_Like_Draytek_Pro_0.0.1.3.tar.gz
root@localhost 0.0.1.3.1/# ls
VigorACS_Unix_Like_Draytek_Pro_0.0.1.3.tar VigorACS_Unix_Like_Draytek_Pro_0.0.1.3.tar.gz
root@localhost 0.0.1.3.1/# ls
VigorACS_Unix_Like_Draytek_Pro_0.0.1.3.tar VigorACS_Unix_Like_Draytek_Pro_0.0.1.3.tar.gz
root@localhost 0.0.1.3.1/# gzip -cd VigorACS_Unix_Like_Draytek_Pro_0.0.1.3.tar.gz_|tar xvf -
```

- Change the permissions mode of **install.sh** and **uninstall.sh**.

```
chmod 755 ./install.sh
```

```
chmod 755 ./uninstall.sh
```

```

linux/my.cnf
linux/mysql-standard-4.0.24-pc-linux-gnu-i686.tar.gz
solaris_8/coreutils-4.5.4-sol8-sparc-local.gz
solaris_8/jdk-1_5_0_07-solaris-sparc.tar.Z
solaris_8/jdk-1_5_0_07-solaris-sparcv9.tar.Z
solaris_8/libgcc-3.3-sol8-sparc-local.gz
solaris_8/libiconv-1.8-sol8-sparc-local.gz
solaris_8/my.cnf
solaris_8/mysql-4.0.21-sol8-sparc-local.gz
solaris_8/ncurses-5.4-sol8-sparc-local.gz
solaris_8/unzip-5.50-sol8-sparc-local.gz
solaris_9/coreutils-4.5.4-sol9-sparc-local.gz
solaris_9/jdk-1_5_0_07-solaris-sparc.tar.Z
solaris_9/jdk-1_5_0_07-solaris-sparcv9.tar.Z
solaris_9/libgcc-3.3-sol9-sparc-local.gz
solaris_9/libiconv-1.8-sol9-sparc-local.gz
solaris_9/my.cnf
solaris_9/mysql-4.0.21-sol9-sparc-local.gz
solaris_9/ncurses-5.4-sol9-sparc-local.gz
solaris_9/unzip-5.50-sol9-sparc-local.gz
uninstall.sh
vigoracs
vigoracsmysql
[root@localhost 0.0.1.3.11# chmod 755 ./install.sh
[root@localhost 0.0.1.3.11# chmod 755 ./uninstall.sh
[root@localhost 0.0.1.3.11#

```

- Execute the installation by entering the following.

```
./install.sh
```

```

solaris_8/libiconv-1.8-sol8-sparc-local.gz
solaris_8/my.cnf
solaris_8/mysql-4.0.21-sol8-sparc-local.gz
solaris_8/ncurses-5.4-sol8-sparc-local.gz
solaris_8/unzip-5.50-sol8-sparc-local.gz
solaris_9/coreutils-4.5.4-sol9-sparc-local.gz
solaris_9/jdk-1_5_0_07-solaris-sparc.tar.Z
solaris_9/jdk-1_5_0_07-solaris-sparcv9.tar.Z
solaris_9/libgcc-3.3-sol9-sparc-local.gz
solaris_9/libiconv-1.8-sol9-sparc-local.gz
solaris_9/my.cnf
solaris_9/mysql-4.0.21-sol9-sparc-local.gz
solaris_9/ncurses-5.4-sol9-sparc-local.gz
solaris_9/unzip-5.50-sol9-sparc-local.gz
uninstall.sh
vigoracs
vigoracsmysql
[root@localhost 0.0.1.3.11# chmod 755 ./install.sh
[root@localhost 0.0.1.3.11# chmod 755 ./uninstall.sh
[root@localhost 0.0.1.3.11# ./install.sh

entering /home/robin/vigoracs/0.0.1.3.1/linux.....

Please create /usr/local/vigoracs
Create it now? (y/n)
y_

```

- Click **y** to create *vigoracs* folder for storing necessary files.
- Next, please select the item number which you want to execute. Be aware that VigorACS supports Linux OS. The program will detect the system you have in your computer.
 - Install mysql
 - Install java
 - Install VigorACS (It will build one mysql database: tr069)
 - Upgrade VigorACS (It will upgrade tr069 database)
 - Exit

input select num :
- If your computer has installed MySQL and java previously, ignore the installation of them. Otherwise, install all the required items (MySQL, Java and VigorACS) for your system. Item number 4 is used to upgrade VigorACS, so it is not necessary for you to execute for the first time of installation.

Select the item of Exit to finish the installation.

2.3 Registering VigorACS

The normal procedure of starting up the VigorACS:

- Start MySQL Database
- Initiate VigorACS
- Register VigorACS

Different platform has different way of initiation. Please follow the steps listed below for each platform.

2.3.1 For Windows 2000, XP and Vista

1. Start MySQL Database

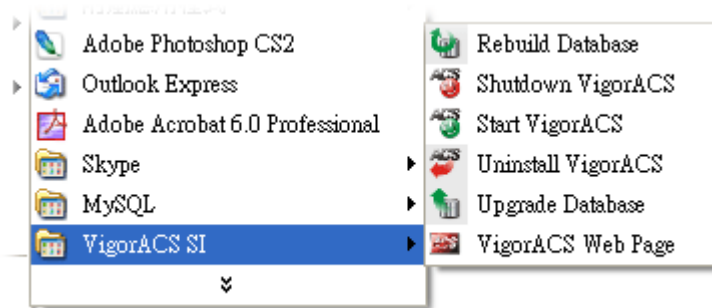
After installing VigorACS, installing program will register MySQL to Windows Service. MySQL will startup automatically after installing VigorACS or rebooting system. Normally, you don't need to worry about this step on Windows. But, if you find any problem on VigorACS, you should check MySQL first.

Please open **Start >Setup >Control Panel >Administrative Tools >Service** to check if the MySQL Service has been initiated or not. If not, please double click it to enable.

2. Initiate VigorACS

After installing VigorACS, it will startup automatically. Normally, you don't need to worry about this step on Windows. But, if you find any problem on VigorACS, you could shut down VigorACS and start VigorACS again.

Please open **Start >Setup >Control Panel >Administrative Tools >Service** to check if the VigorACS Service has been initiated or not. If not, please double click it to enable.



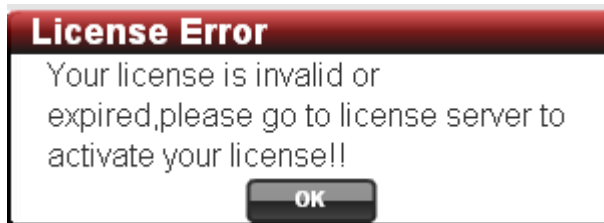
3. Register VigorACS

1. Click **Programs> VigorACS SI> VigorACS Web Page** to access into VigorACS. The login page of VigorACS will be shown as the following:

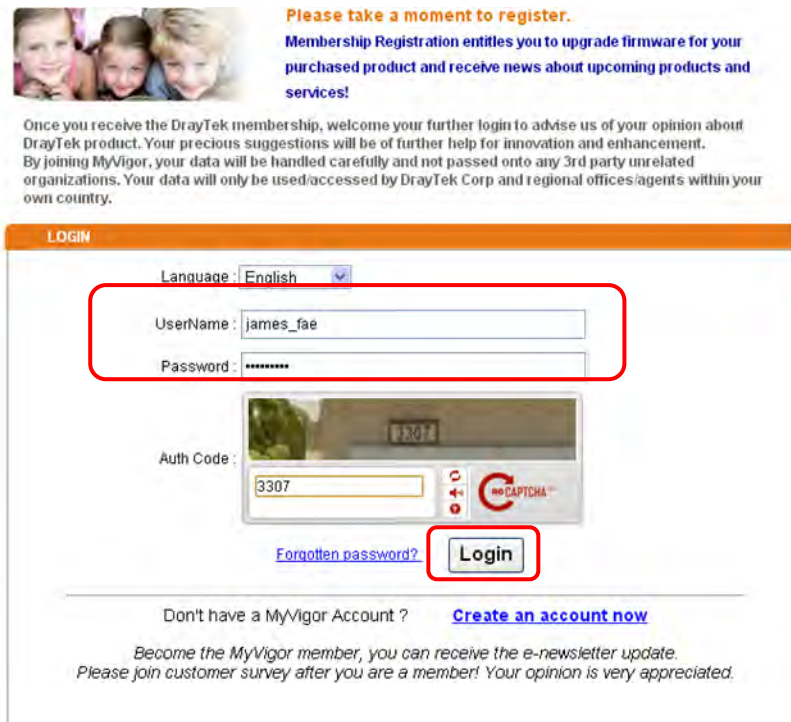


The image shows the VigorACS login interface. At the top, there is a red header with the DrayTek logo on the left and the VigorACS logo on the right. Below the header, the word "Login" is displayed in a black box. The main area contains three input fields: "User Name" with the value "root", "Password" with a masked value "*****", and "Validated Code" with a value "7xxS". To the right of the "Validated Code" field is a red box containing the text "7 x x S". Below the input fields, there is a language dropdown menu set to "EN" and a "Login" button.

2. Please type “root” as user name and “admin123” as password. Then click **Login**. A License Error dialog appears as follows:



3. Click **OK**. A login page for MyVigor web site will pop up automatically.



The image shows the MyVigor login page. At the top left, there is a small photo of three children. To the right of the photo, there is a red heading "Please take a moment to register." followed by blue text: "Membership Registration entitles you to upgrade firmware for your purchased product and receive news about upcoming products and services!". Below this, there is a paragraph of text: "Once you receive the DrayTek membership, welcome your further login to advise us of your opinion about DrayTek product. Your precious suggestions will be of further help for innovation and enhancement. By joining MyVigor, your data will be handled carefully and not passed onto any 3rd party unrelated organizations. Your data will only be used/accessed by DrayTek Corp and regional offices/agents within your own country." Below the text, there is a "LOGIN" section with a language dropdown set to "English". The "UserName" field contains "james_fae" and the "Password" field is masked with "*****". Below these fields is a "Auth Code" field containing "3307" and a "NO CAPTCHA" logo. At the bottom of the login section, there is a "Forgotten password?" link and a "Login" button. Below the login section, there is a link "Don't have a MyVigor Account ?" and a "Create an account now" link. At the very bottom, there is a footer text: "Become the MyVigor member, you can receive the e-newsletter update. Please join customer survey after you are a member! Your opinion is very appreciated."

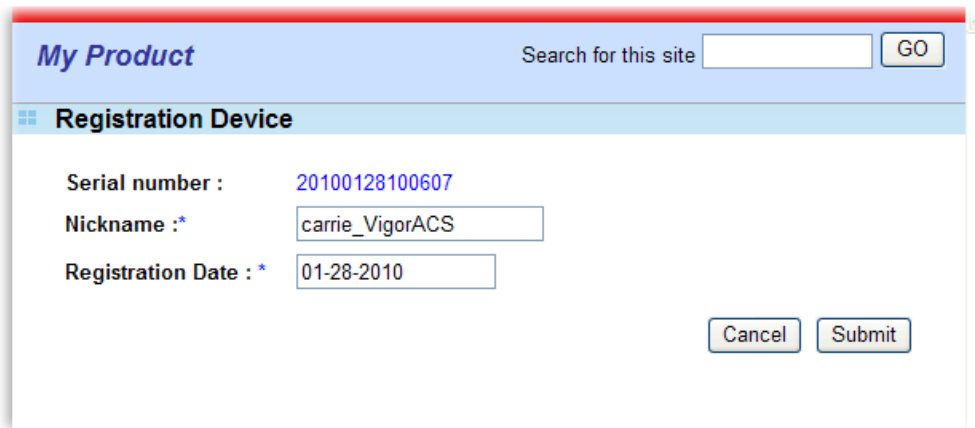
4. Type your account (user name) and password in this page. Enter the authentication code with the characters displayed on the screen. Then, click **Login**.

Note: If you do not have any account, simply click **Create an account now** to create a new one for using the service provided by MyVigor web site. Refer to Appendix C Creating an Account for MyVigor.

5. MyVigor will verify and authenticate if the user account you typed is allowed to access into the web site. If yes, the following screen will appear.



6. Click **Add** to get the following page.



7. Type a name for identification in the field of **Nickname** and click **Submit**. You can see the following screen. Click **OK**.

Your device has been successfully added to the database.



8. In this page, click the serial number link (in this case, it is 1141236).

My Information

Welcome, **carrie_yfn**
Last Login Time : 2010-01-13 15:03:46
Last Login From : 61.216.234.12
Current Login Time : 2010-01-28 10:19:52
Current Login From : 61.216.234.204

RowNo : PageNo :

Your Device List

| Serial Number / Host ID | Device Name | Model | Note |
|-------------------------|-------------|----------|------|
| 1141236 | carrie_yfn | VigorACS | - |

9. You will get a device information page as shown below:

My Product

Device Information
Nickname : [carrie_VigorACS](#)
Host ID : [DT-ACS](#)
Model : [VigorACS](#)

Device's Service

Expired License

| Service | Provider | Action | Status | Start Date | Expired Date | Nodes |
|---------|----------|--------------------------------------|-------------------------------------|------------|--------------|-------|
| ACS | DT-ACS | <input type="button" value="Trial"/> | ● <input type="button" value="On"/> | - | - | - |

RowNo : PageNo :

| | | | | | | | |
|--|---|--------------------------------------|--|--------------------------------------|--------------------------------------|---|---------------------------------|
| <ul style="list-style-type: none"> ● Means such service is in use. ● Means such service is not in use. ● Means such service has not been activated yet. ● Means such service is in use and will be invalid soon (less than one month). | <table border="1" style="width: 100%; border-collapse: collapse; margin: 0;"> <tr> <td style="padding: 2px 5px;"><input type="button" value="Trial"/></td> <td style="padding: 2px 5px;">Allows you to have the free trial for service.</td> </tr> <tr> <td style="padding: 2px 5px;"><input type="button" value="Renew"/></td> <td style="padding: 2px 5px;">Allows you to renew service license.</td> </tr> <tr> <td style="padding: 2px 5px;"><input type="button" value="Activate"/></td> <td style="padding: 2px 5px;">Allows you to activate service.</td> </tr> </table> | <input type="button" value="Trial"/> | Allows you to have the free trial for service. | <input type="button" value="Renew"/> | Allows you to renew service license. | <input type="button" value="Activate"/> | Allows you to activate service. |
| <input type="button" value="Trial"/> | Allows you to have the free trial for service. | | | | | | |
| <input type="button" value="Renew"/> | Allows you to renew service license. | | | | | | |
| <input type="button" value="Activate"/> | Allows you to activate service. | | | | | | |

10. If you are the new user of VigorACS SI, you can get a free charge of 30-day service of VigorACS SI. Simply click the **Trial** button to open the following screen.

Confirm Message Cancel

User Name : carrie_yfn
Serial : 20100128100607
Model : VigorACS

| License Number | Service Provider | Status | Nodes |
|---|------------------|--------|-------|
| DrayTek VigorACS SI Series End-User License Agreement | | | |
| <p>IMPORTANT:</p> <p>DrayTek IS WILLING TO LICENSE THE ENCLOSED SOFTWARE TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS LICENSE AGREEMENT. PLEASE READ THE TERMS CAREFULLY BEFORE COMPLETING THE INSTALLATION PROCESS AS INSTALLING THE SOFTWARE WILL INDICATE YOUR ASSENT TO THEM. IF YOU DO NOT AGREE TO THESE TERMS, THEN DrayTek IS UNWILLING TO LICENSE THE</p> | | | |
| <input checked="" type="checkbox"/> I have read and accept the above Agreement. (Please check this box). | | | |

Next

11. Check the box of “**I have read and accept the above....**” and click **Next**.

Apply For A License Number Cancel

Service Name: **ACS**

STEP 2

Activation Date (MM-DD-YYYY): Register

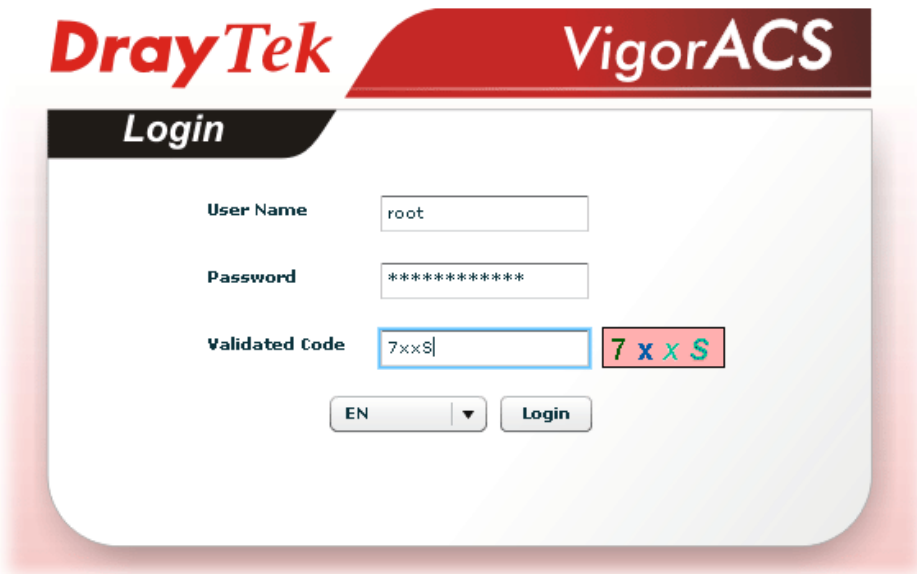
12. Click **Register**. When the VigorACS License Information page appears, the service is ready for you to use.

VigorACS License Information

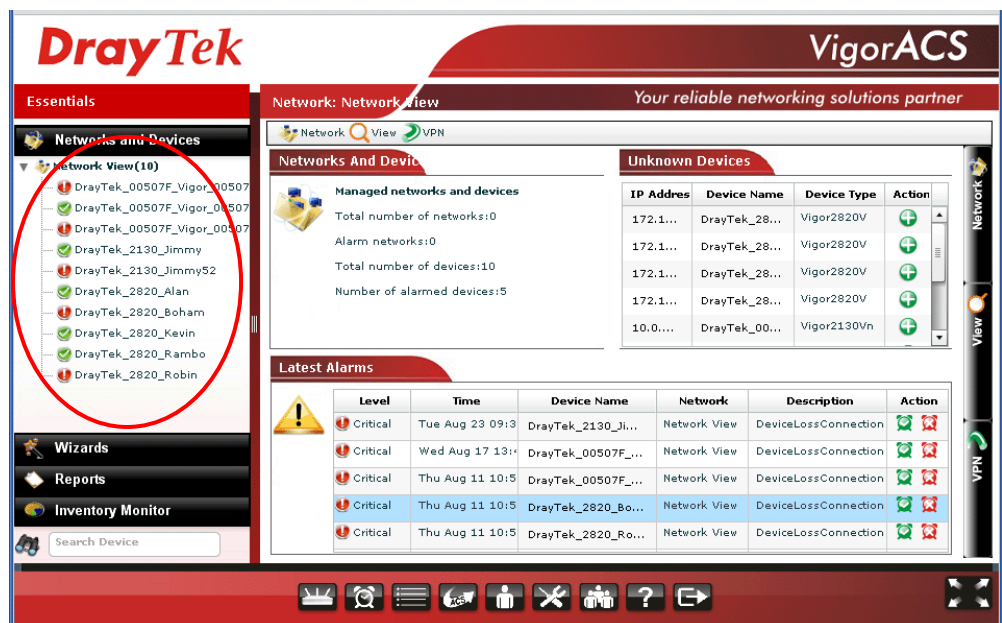
| | |
|------------------|---------------------------|
| Operation | 1000 : Service activation |
| License id | 00001b10 |
| Start date | 2010-01-28 |
| Expire date | 2010-02-11 |
| Max node | 20 |
| Is trial license | Yes |

Login to ACS

- Click **Login to ACS** to use VigorACS SI service. The login page will appear as follows.



- Type the default settings of User Name (root) and Password (admin123) and type the validated code. Then, click **Login**. The main screen of VigorACS will be shown as follows.



Above shows the view of CPEs added to the database and controlled by VigorACS.

2.3.2 For Linux

Start/Shutdown MySQL Database

Execute `"/usr/local/vigoracs/VigorACS/bin/vigoracs.sh"` instruction. The following menu will appear.

1. start mysql
2. shutdown mysql
3. start VigorACS
4. shutdown VigorACS
5. edit bind ip of VigorACS Server(please keying IP or server name)
6. set the MAX and MIN memory value of running java (It will valid after restarting VigorACS)
7. view the MAX and MIN memory value of running java
8. exit

input select num:

```
Start to create snmpdb db ...
VigorACS MySQL:
MySQL:
Create snmpdb db successfully...
Create snmpdb db table...
Create snmpdb table successfully...
VigorACS and snmpdb install Successfully

1. Install mysql
2. Install java
3. Install VigorACS < It will build one mysql database : snmpdb >
4. Upgrade VigorACS < It will upgrade snmpdb database >
5. Exit
input select num :
5
root@localhost 0.0.1.3.1# /usr/local/vigoracs/VigorACS/bin/vigoracs.sh
1. start mysql
2. shutdown mysql
3. start VigorACS
4. shutdown VigorACS
5. edit bind ip of VigorACS Server(please keyin ip or servername)
6. set the MAX and MIN memory vaule of running java <It will valid after restarting VigorACS >
7. view the MAX and MIN memory vaule of running java
8. exit
input select num :
```

Type item number **1** to start MySQL database if necessary. Usually MySQL daemon will start automatically after installing VigorACS server.

Note: You can type `"ps -ef|grep mysql"` to view the content of MySQL. If you want to shutdown MySQL database, simply type the menu item 2 to close MySQL.

Start/Shutdown VigorACS

For the first time of starting the VigorACS on Linux system, the startup program will need you to input Server IP. Select item number **3** for starting VigorACS. And type the required IP address used for initiating.

```

# http://developer.java.sun.com/developer/bugParade/bugs/4465334.html
done
fi
"vigoracsserver.sh"
[root@localhost bin]# ls
changeip.bat          jboss_init_redhat.sh  probe.sh      set_memory.sh      StartVigorACS.bat  vigoracs.sh
changeip.bat.bak     jboss_init_suse.sh   run.bat       shutdown.bat       twiddle.bat        VigorACS.url
classpath.sh         memory.txt           run.conf     shutdown.jar       twiddle.jar        wstools.bat
hs_err_pid508.log    noip.bat            run.jar      shutdown.sh        twiddle.sh         wstools.sh
jboss_init_hpux.sh  probe.bat           run.sh       ShutdownVigorACS.bat  vigoracsserver.sh
[root@localhost bin]# chmod 755 vigoracs.sh
[root@localhost bin]# chmod 755 vigoracsserver.sh
[root@localhost bin]# ./vigoracs.sh
1. start mysql
2. shutdown mysql
3. start VigorACS
4. shutdown VigorACS
5. edit bind ip of VigorACS Server(please keyin ip or servername)
6. set the MAX and MIN memory vaule of running java (It will valid after restarting VigorACS )
7. view the MAX and MIN memory vaule of running java
8. exit
input select num :
3
Which ip address do you want to bind for VigorACS service ( x.x.x.x or Enter for bind localhost.localdomain server)?
172.17.3.132

```

The system will start VigorACS with the specified IP address.

Edit VigorACS IP

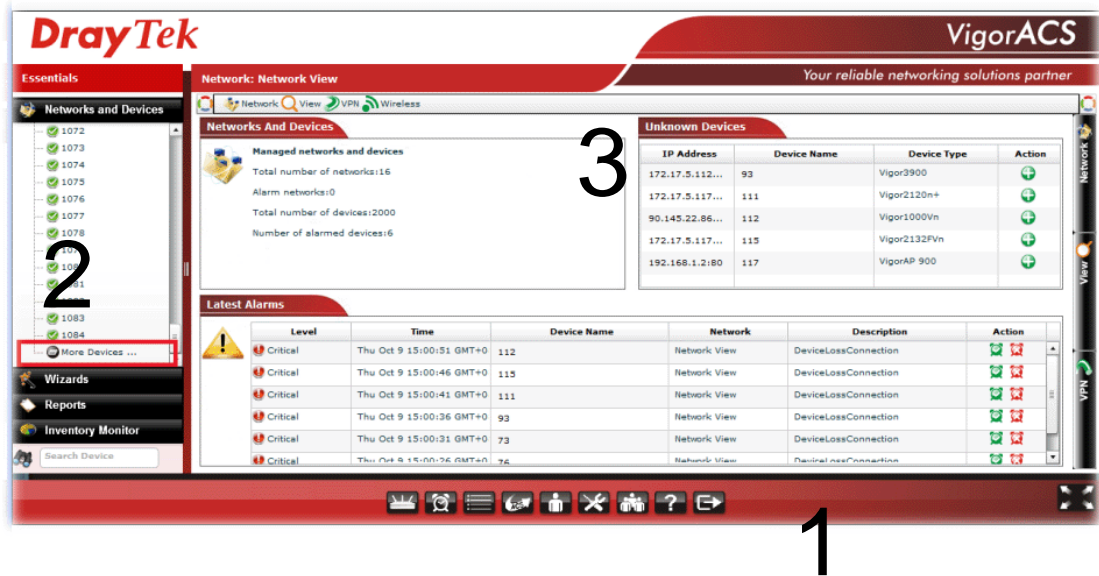
Once you input the IP address, VigorACS will keep it on *startway.txt*. However, if you want to change the server bind IP for some reason, please follow the steps below:

1. Execute "/usr/local/vigoracs/VigorACS/bin/vigoracs.sh" instruction.
2. Stop VigorACS by selecting item number 2 to shutdown VigorACS. Such action can make sure the new changed IP setting being effective.
3. Then select item number 5 to edit *startway.txt* by using *vi* editor.
4. When you finished the change of bind IP, please select item number 3 to start VigorACS again.

Chapter 3 Getting Start

3.1 Brief Introduction of Main Screen

The main screen of VigorACS SI is shown as below and it can be divided into several parts:



Part 1

Such area displays different **operation modes**. Each mode will bring out different parameters for configuration or different information for reviewing. Simply move your mouse on each one of them to open the corresponding web page.



Device Management



Alarm



Log



Provision



Admin



System



User



Help



Logout

Part 2

Such area displays device(s) managed by VigorACS SI. All

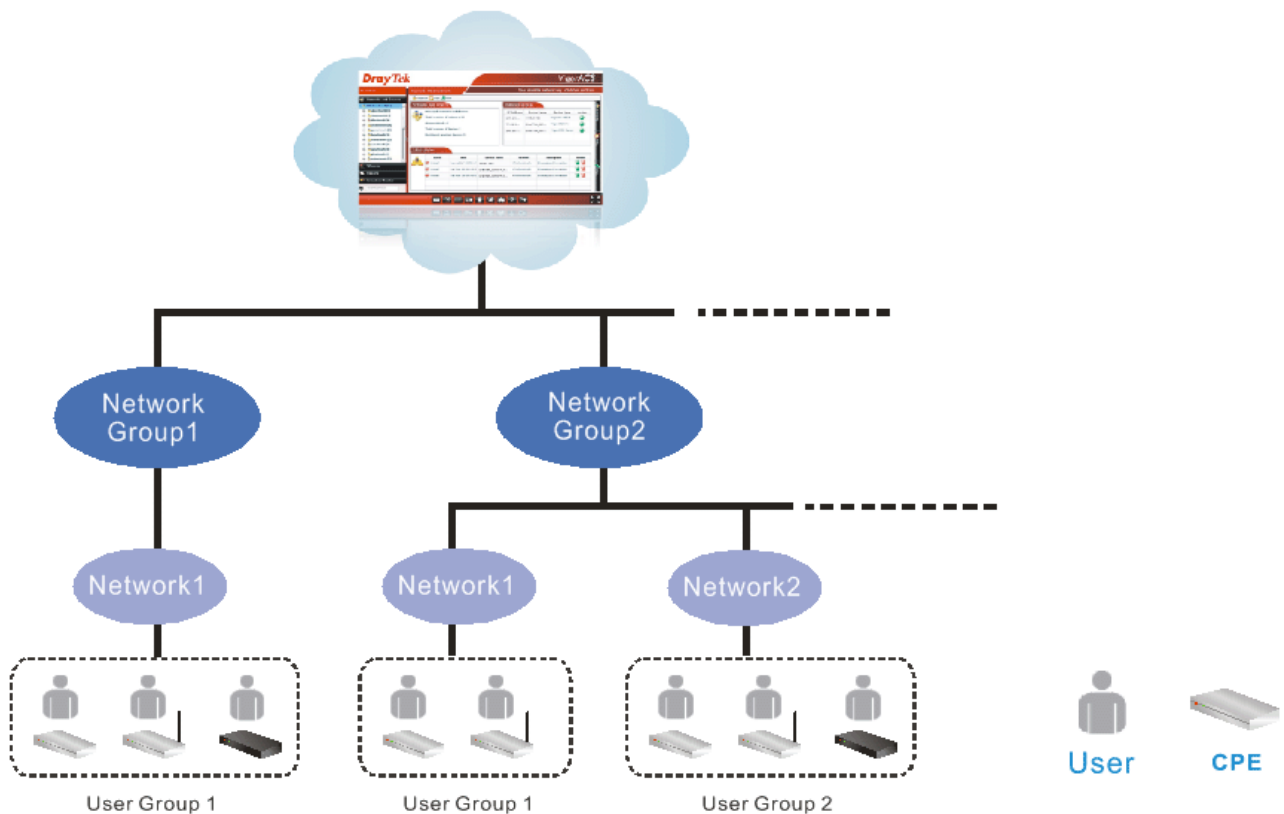
| | |
|---------------|---|
| | of the devices will be queued automatically. More Devices – If the number of CPE managed by VigorACS SI is over 100, such icon will appear. By clicking it, the next 100 CPEs will be shown in queue. |
| Part 3 | Such area displays the detailed information according to the device selected from part 2. |

3.2 Operation Procedure

Follow the instruction listed below to operate VigorACS:

- Create networks and add devices (CPE).
For more details, go to *Chapter 4 Admin Operation*.
- Create users,
For more details, go to *Chapter 5 User Operation*.
Each CPE device can be assigned to one user group only.
- Create user groups,
For more details, go to *Chapter 5 User Operation*.
Assign users under different user groups.
RootGroup is the group defined in factory.
- Edit and modify the settings for the TR-069 devices, refer to *Chapter 6 Device Management*.

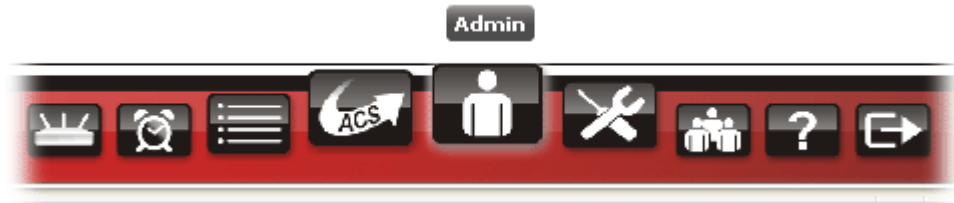
Below shows a brief illustration to describe the relationships among CPE, user group, network and network group.



3.3 Creating a New Network and Device

VigorACS allows the administrator to build several networks (and sub-network) for different CPE devices under the *root level*, Main network.

1. Click the **Admin** tab to access into administration operation mode.



2. Click the **Device Management** button.



3. Click **Network View** under **Networks And Devices** field to make the **Add** button being available on the right side.



4. Click  to open the following screen to add a new network.

Add Network

Parent Network: Main network

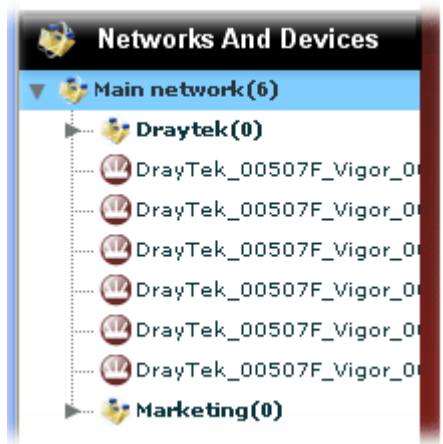
Name:

Location:

User Name:

Password:

5. Fill in the name, location, user name and password. Click **OK** to save the settings and exit the dialog. The new network has been created and displayed under **Networks And Devices**.




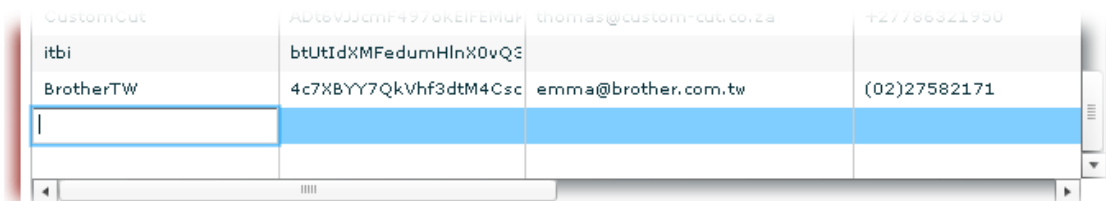
3.4 Creating a User and User Group

Follow the steps below to create a user.

1. Click the **User** tab to access into administration operation mode.

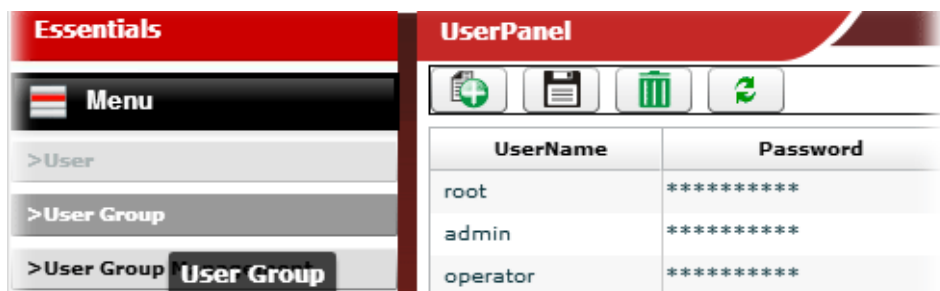


2. To insert a user, simply click .
3. A new line with input boxes will appear for the user to type personal information for being identified by VigorACS.



Follow the steps below to create a user group.

1. Click **User Group** item under **Menu**.



- To insert a user group, simply click .
- A new line with an input box will appear for the user to type personal information for identified by VigorACS.

| # | Group | <input type="checkbox"/> | <input type="checkbox"/> | - |
|---|----------------------|-------------------------------------|-------------------------------------|----|
| 5 | Group_V | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 |
| 6 | Group_Test | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 |
| 7 | carrie | <input checked="" type="checkbox"/> | <input type="checkbox"/> | -1 |
| 8 | Tim_Group | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 |
| 0 | <input type="text"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 |

3.5 Logout VigorACS

Simply click **Logout** icon to logout.



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Part II Web Configuration

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Chapter 4 Admin Operation

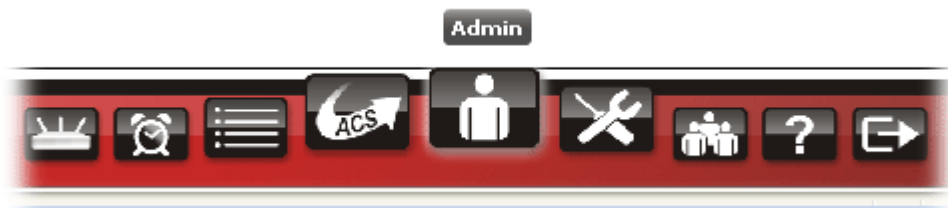
Admin page allows you to modify the information for Networks and Devices.

For network, it can

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

For device, it can


- Modify the name of the device (CPE) for easy identification and management by VigorACS.
- Modify the location of the device (CPE) easily. It can be identified precisely while using GoogleMap to search it.
- Modify the user name/password of certain device (non-DrayTek CPE) to be managed by VigorACS.
- Enable or disable the management of the device (CPE) for VigorACS.
- Select certain protocol (e.g., TR-069) for the device (CPE) for management.

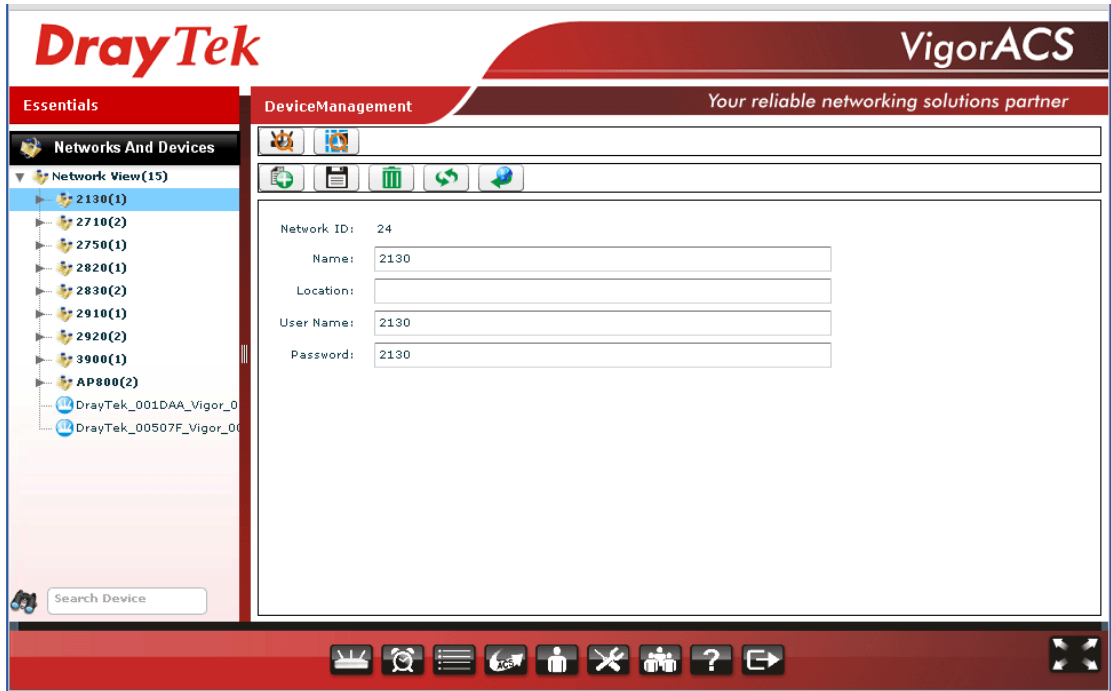


It can be divided into two parts, Device Management and Topology Management.




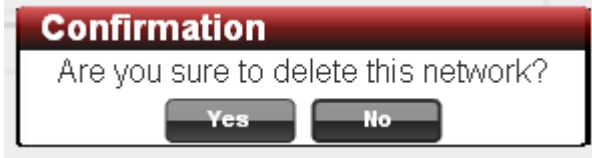




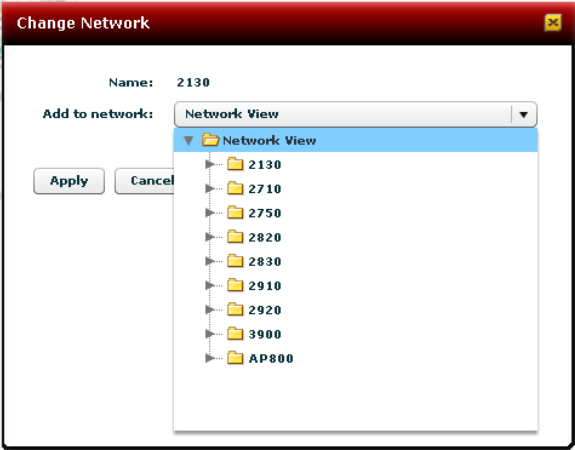
4.1 Device Management

To edit, change or delete devices under different network or add, change or delete a network, please click  **Device Management** for advanced operation. Then, choose any one of the CPE displayed on **Networks And Devices** tree view to make the options for **Device Management** being available.




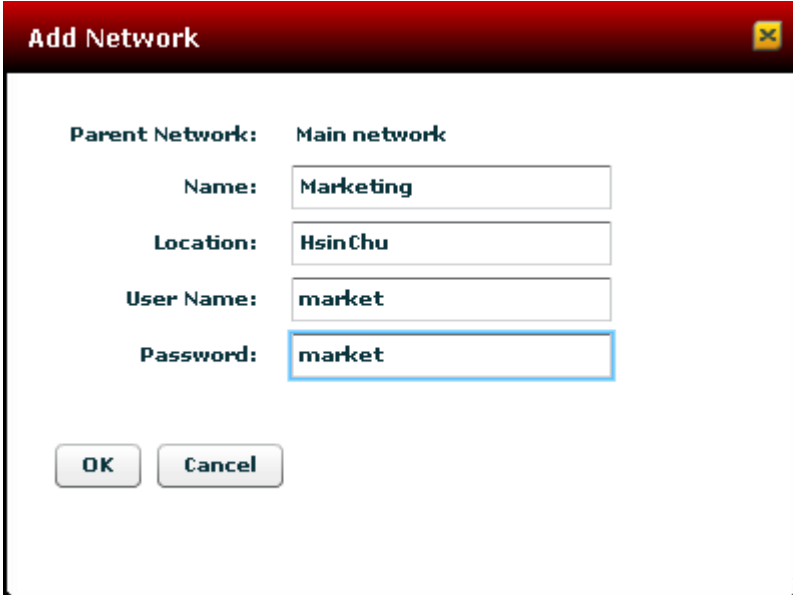
Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Add New Network | Click this button to add a new network. |
|  Save Network | Click this button to save the change. |
|  Remove Network | Click this button to delete selected network.  |
|  Refresh Record | Click this button to refresh current page. |
|  Change Network | After clicking this button, a dialog box will appear for you to specify the selected CPE to be placed in another network. |

| Items | Description |
|------------------|--|
| |  |
| Name | You can modify the name of the parent network. |
| Location | Type the address 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. |

4.2 Creating a New Network to Manage Devices (CPEs)

VigorACS allows the administrator to build several networks (and sub-network) for different CPE devices under the *root level*, Main network. Click  to open the following screen to add a new network.



Available settings for such feature will be shown as follows:

| Items | Description |
|------------------|--|
| Name | Type name for the new network. |
| Location | Type a brief description for the new network. |
| User Name | Type a name (e.g., market) for the new network. |
| Password | Type a password (e.g., market) for such new network. If you are going to group several CPE devices under such network, please open System Maintenance>>TR-069 in the web configuration page of CPE. Next, type the same user name and password (in this case, both are <i>market</i>) in the corresponding fields. System Maintenance >> TR-069 Setting |

ACS and CPE Settings

ACS Server On:

ACS Server

URL:

Username:

Password:

CPE Client

Enable Disable

URL:

Port:

Username:

Password:

Periodic Inform Settings

Disable Enable

Interval Time: second(s)



Deleting a Network

To delete a network, click to select the network link displayed under **Network View** and click



Remove Network

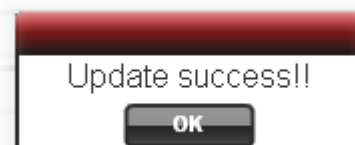
VigorACS will ask you to confirm such action. You can click **OK** to execute the action, otherwise, click **No** to cancel this action.

If there is still one device grouped under a sub-network, such network cannot be deleted by this function unless that device is removed.

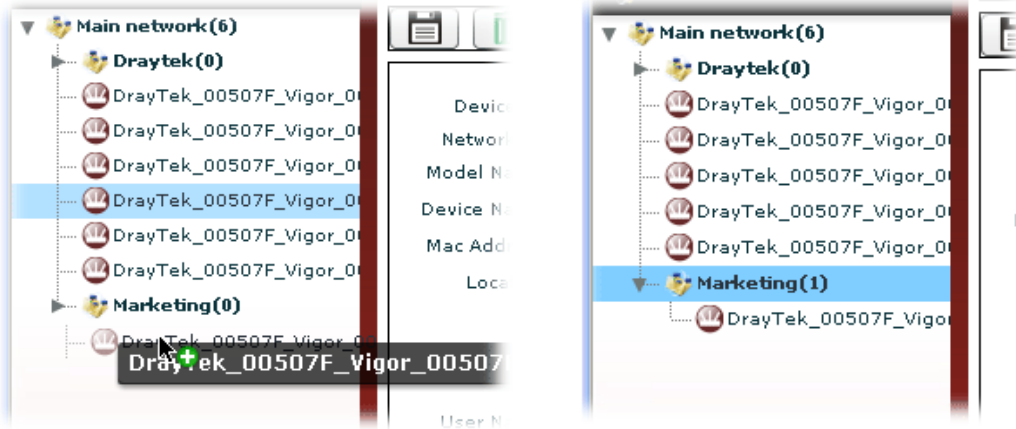
4.3 Changing the Network for Devices (CPEs)

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

To change the network, simply click that network and drag it to the directory you want. VigorACS will ask you to confirm such action. You can click **Yes** to execute the action (Update success), otherwise, click **No** to cancel this action.



For example, you want to move **DrayTek_00507_Vigor_XXXXX** onto **Marketing**. You can drag and hold it to that group directly. When the mouse cursor changes into “+”, please release your mouse cursor. VigorACS will ask you to confirm such action. If you click **Yes**, it will be moved to the new location.

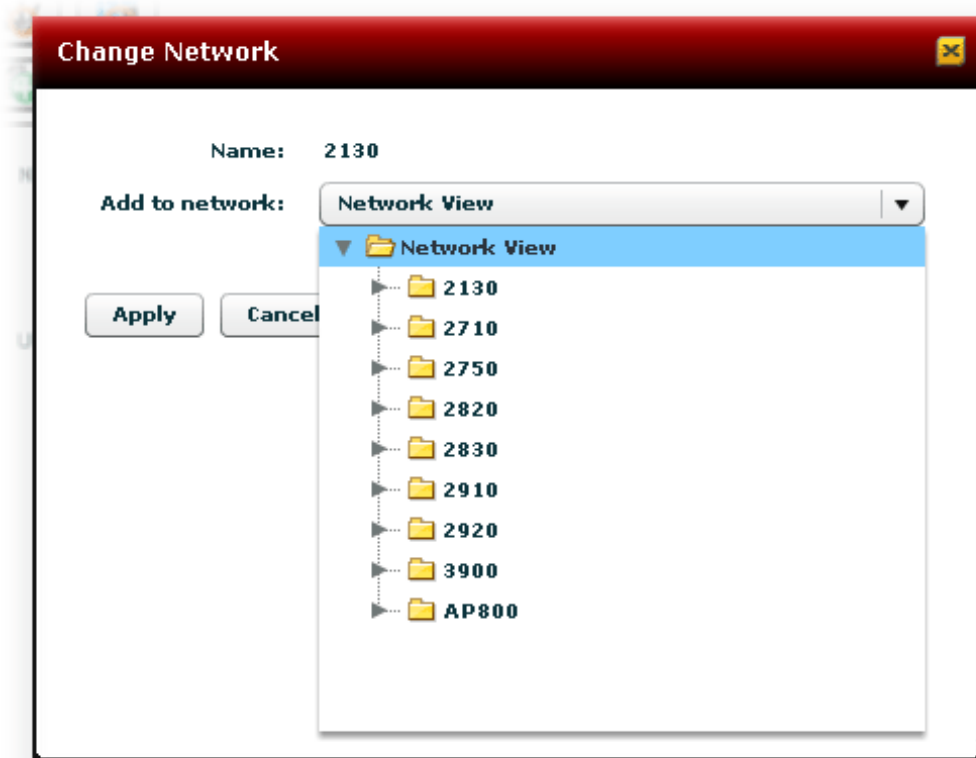


Or,

Open the tree view of **Networks And Devices** and select the CPE you want. Click the button of



Change Network to specify which network will have such selected CPE.

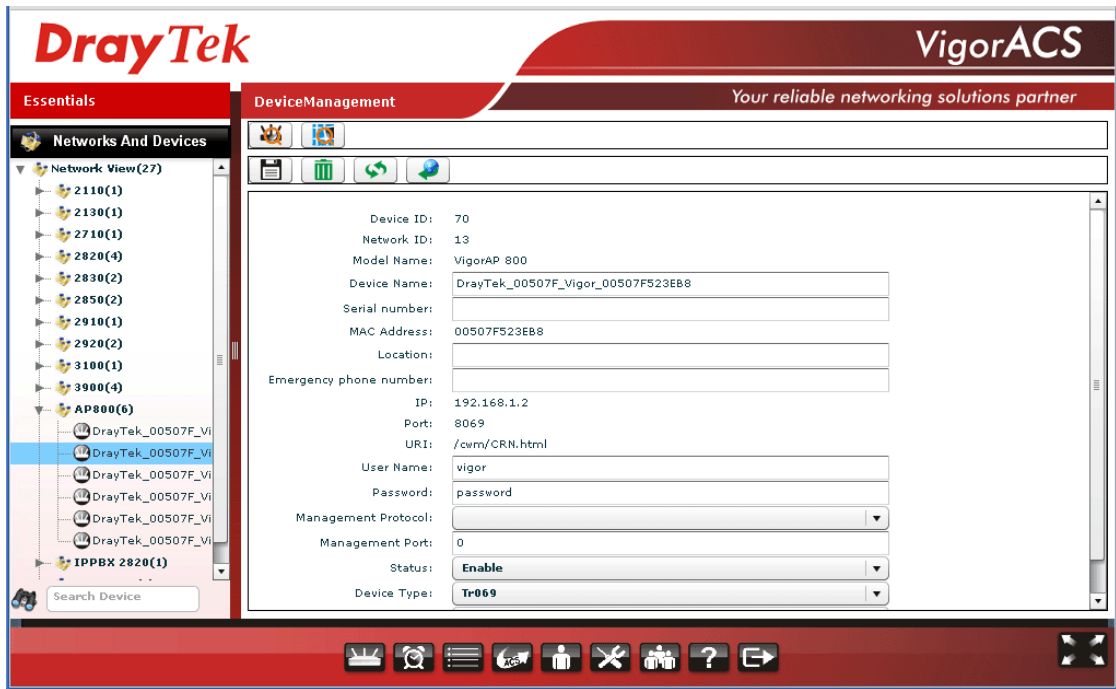


Click **Apply** after you make your choice. Later, a dialog will appear to inform you the CPE changing has been done.



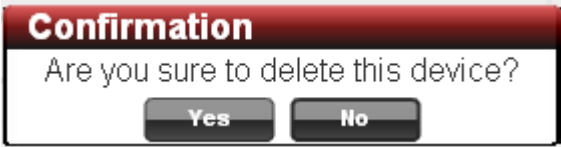


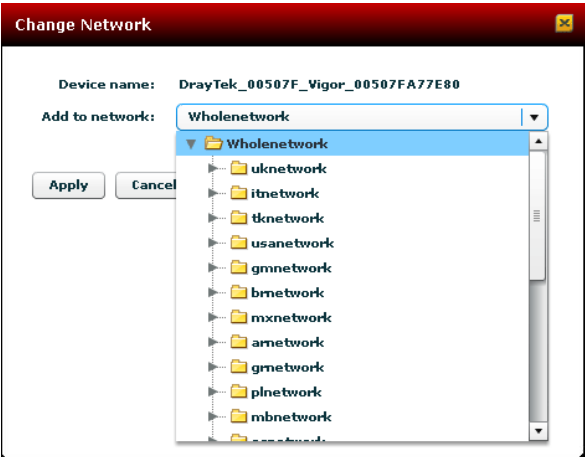


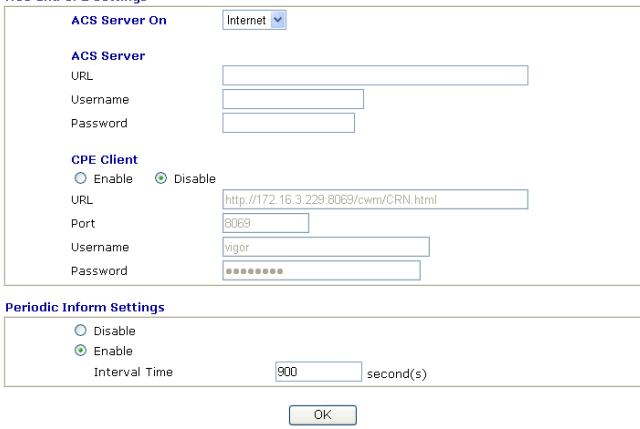
4.4 Modifying General Information of Selected CPE



Administrator can modify certain settings (e.g., device name, address for the selected device, and etc.) for the **selected CPE** (device) respectively. Note that different CPE will bring about different configuration pages.




Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Save Device | Click this button to save the change. |
|  Remove Device | Click this button to delete selected device.  |
|  Refresh Record | Click this button to refresh current page. |
|  Change Network | Click this button to change the device into other network.  |

| | |
|-------------------------------|---|
| | Choose the network that you want from the drop down list of Add to network . Then, click Apply . The device will be grouped under the network you specified. |
| Device ID | Display the identification number for the device. |
| Network ID | Display the sequence number for the device under such network. |
| Model Name | Display the model name of the device. |
| Device Name | Display the name that you specify for such device. If required, you can change the name. |
| Serial number | Define a serial number of the selected device for identification. |
| MAC Address | Display the MAC address for the device. |
| Location | Type the address for the selected device. It will be helpful to be searched while using Topology Management. |
| Emergency phone number | Type an emergency phone number for contact if required. |
| IP | Display the WAN IP address of the selected device. |
| Port | Display the port number of the selected device. |
| URI | Display the URI for the selected device. |
| User Name | Such name is set in default for the CPE. Do not change it. You also can find such information from System Maintenance >> TR-069 in the web configuration page of CPE. |
| Password | Such password is set in default for the CPE. Do not change it. You also can find such information from System Maintenance >> TR-069 in the web configuration page of CPE. System Maintenance >> TR-069 Setting  |
| Management Protocol | The administrator can specify which protocol (http or https) will be used for accessing into the web page of the CPE controlled by VigorACS. Refer to the following figure. |




| | |
|-------------------------------|--|
| |  <p>“http” displayed on Web URL and Proxy URL is the management protocol typed in this field.</p> |
| <p>Management Port</p> | <p>Type the port number according to the port number set by the selected CPE. Refer to the following figure.</p>  <p>“80” displayed on Web URL and Proxy URL is the management port chosen in this field.</p> |
| <p>Status</p> | <p>Choose Enable to show the status of the selected device; choose Disable to hide the status of the selected device.</p> |
| <p>Device Type</p> | <p>In general, VigorACS can manage and control the CPEs which follow TR-069 standard. Do not change it.</p> |
| <p>Known Device</p> | <p>This setting can let the selected CPE not displayed on the Unknown Devices from the Home page of VigorACS SI.</p> |

4.5 Topology Management

To display the **location** of the selected CPE with a bird's eye view, choose the CPE first from the tree view of **Networks And Devices** and click  **Topology Management** for advanced operation.



Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  | You can type the address (description) manually and click Zoom icon to search the device in the map. |
|  Search | Click this button to search CPE. |
|  Save | Click this button to save the change. |

Chapter 5 User Operation

Users who want to control CPE through VigorACS server can access VigorACS with private name and password. The user management function allows a user to set name, password, e-mail address as identification in VigorACS system.

Each time, when the user wants to access into VigorACS, he/she can type the name and password that configured in this page. Other people also can set different name and password for accessing VigorACS. However, the password will be displayed with codes for prevent peeping by other users. Therefore, you have to remember your password.



You have to:





- Define User (refer to 5.1)
- Define User Group (refer to 5.2)
- Assign User (s) to certain User Group (refer to 5.3)
- Use Role Management to specify certain authority to User Group(s) for displaying different functions (refer to 5.4)

5.1 User


To add/edit/delete a user, choose **User** item from **Menu**. The following web page will be shown on the screen.

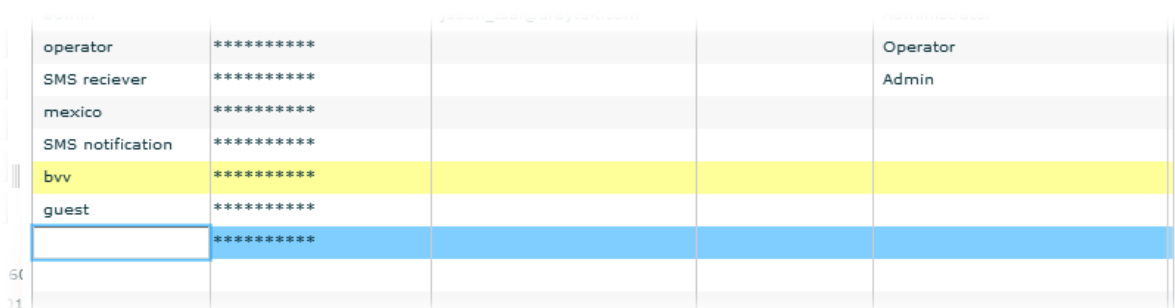
| UserName | Password | Email | Telephone | Description |
|------------------|----------|------------------------|-----------|----------------------|
| root | ***** | jliu@draytek.com | | System Administrator |
| admin | ***** | jason_tsai@draytek.com | | Administrator |
| operator | ***** | | | Operator |
| SMS reciever | ***** | | | Admin |
| mexico | ***** | | | |
| SMS notification | ***** | | | |
| bvv | ***** | | | |
| guest | ***** | | | |

Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Add user | Click this button to add a new record. |
|  Save user setting | Click this button to save the record. |
|  Delete user | Click this button to delete the selected record. |
|  Refresh | Click this button to refresh current page. |
| UserName | Display the name that users created. |
| Password | Display the password that users typed. It will be displayed with random codes. If you forget the password, simply click the item and click Update for changing the password manually. |
| Email | Display email address for certain user for receiving the mail notification. |
| Telephone | Display the telephone number for certain user for receiving the SMS notification. |
| Description | Display the authority of the user. There are three levels – administrator, operator, and system administrator. |
| Status | Display current status of the user. “Active” means the user is on the network. |
| MailNotify | When this function is enabled, an e-mail will be sent to the one listed here as a notification when the device gets alarms. |
| SMS Notify | When this function is enabled, an SMS will be sent to the one listed here as a notification when the device gets alarms. |

5.1.1 Add a User

To insert a user, simply click . A new line with input boxes will appear for the user to type personal information for being identified by VigorACS.



| Username | Password | Authority | Status |
|------------------|----------|-----------|--------|
| operator | ***** | Operator | |
| SMS reciever | ***** | Admin | |
| mexico | ***** | | |
| SMS notification | ***** | | |
| bvv | ***** | | |
| guest | ***** | | |
| | ***** | | |

Available settings for such feature will be shown as follows:


| Items | Description |
|------------------|-------------------------------------|
| User Name | Type a name for the new added user. |
| Password | Type the password for the user. |

| Items | Description |
|--------------------|---|
| Email | Type the e-mail for communication between the user and VigorACS server. |
| Telephone | Type the telephone number for receiving the SMS notification. |
| Description | Type a brief description for the user. |
| Status | Choose Active to let the user can access into VigorACS at any time. Choose Inactive to prevent the user accessing into VigorACS. |
| MailNotify | Check the box to enable the function. When it is enabled, an e-mail will be sent to the user as a notification when the connected device gets alarms. |
| SMS Notify | Check the box to enable the function. When it is enabled, an SMS will be sent to the one listed here as a notification when the device gets alarms. |

5.1.2 Edit a User

To edit a user (if it is useless or unsatisfied) setting, please select the one that you want to edit and modify each box directly.

5.1.3 Delete a User

To delete a user (if it is useless or unsatisfied) setting, please select the one that you want to delete and click .

5.2 User Group


This page allows you to add a new user group with common authority which will be shared by the users under the same group. **RootGroup** is defined in factory and owns the highest authority. You can define new user group(s) to fit your requirement.

| GroupID | GroupName | EnableGlobalMailServer | EnableGlobalSNMPServer | Nodes | EnableExpireDate | ExpireDate | UsedNodes |
|---------|--------------|-------------------------------------|-------------------------------------|-------|--------------------------|------------|-----------|
| 1 | RootGroup | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | <input type="checkbox"/> | | 108 |
| 2 | 北區Group | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | <input type="checkbox"/> | | 0 |
| 3 | MexicoGroup | <input type="checkbox"/> | <input type="checkbox"/> | -1 | <input type="checkbox"/> | | 0 |
| 4 | test4Group | <input checked="" type="checkbox"/> | <input type="checkbox"/> | -1 | <input type="checkbox"/> | | 0 |
| 5 | jasonGroup | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | <input type="checkbox"/> | | 17 |
| 6 | 123 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | <input type="checkbox"/> | | 0 |
| 7 | Simet | <input checked="" type="checkbox"/> | <input type="checkbox"/> | -1 | <input type="checkbox"/> | | 0 |
| 8 | DrayTekFAE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | -1 | <input type="checkbox"/> | | 6 |
| 9 | AGNSolutions | <input checked="" type="checkbox"/> | <input type="checkbox"/> | -1 | <input type="checkbox"/> | | 5 |

Available settings for such feature will be shown as follows:


| Items | Description |
|---|---|
| Add user group | Click this button to add a new group. |
| Save user group setting | Click this button to save the record. When you add, edit or delete a user group, click this button to save the changes. |
| Delete user group | Click this button to delete the selected group. |
| Delete user group with wholesale | Click this button to remove the selected user group with wholesale. |
| Refresh | Click this button to refresh current page. |
| GroupID | Display the index number for the user group. |
| GroupName | Display the name of user group. |
| EnableGlobalMailServer | Display the status of Global Mail Server. It is enabled if the box is checked. |
| EnableGlobalSNMPServer | Display the status of Global SNMP Server. It is enabled if the box is checked. |
| Nodes | Display the number of device (CPE) for such group can have. Value “-1” means there is no limit of the number. |
| EnableExpireDate | Display if Expire Date is enabled or not. |
| ExpireDate | Display the date of the Expire Date. |
| UsedNodes | Display the number of used Nodes. |

5.2.1 Add a User Group

To insert a user group, simply click . A new line with an input box will appear for the user to type personal information for identified by VigorACS.

| GroupID | GroupName | EnableGlobalMailServer | EnableGlobalSNMPServer | Nodes | EnableExpireDate | ExpireDate | UsedNodes |
|---------|----------------------|-------------------------------------|-------------------------------------|-------|------------------|------------|-----------|
| 5 | Group_V | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | | | |
| 6 | Group_Test | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | | | |
| 7 | carrie | <input checked="" type="checkbox"/> | <input type="checkbox"/> | -1 | | | |
| 8 | Tim_Group | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | | | |
| 0 | <input type="text"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | -1 | | | |


Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------------|--|
| GroupID | Display the index number for the user group. |
| GroupName | Type the name (e.g., Marketing) that can represent the user group. When you finish the typing, click  to save it. |
| EnableGlobalMailServer | Check it to display the status of Global Mail Server. It is enabled if the box is checked. |
| EnableGlobalSNMPServer | Check it to display the status of Global SNMP Server. It is enabled if the box is checked. |
| Nodes | Double click it to type a new number of device (CPE) for such group can have. Value “-1” means there is no limit of the number. |
| EnableExpireDate | Check it to display the Expire Date. |
| ExpireDate | Use the drop down calendar to specify the date you want. |
| UsedNodes | Display the number of used Nodes. |

5.2.2 Edit a User Group

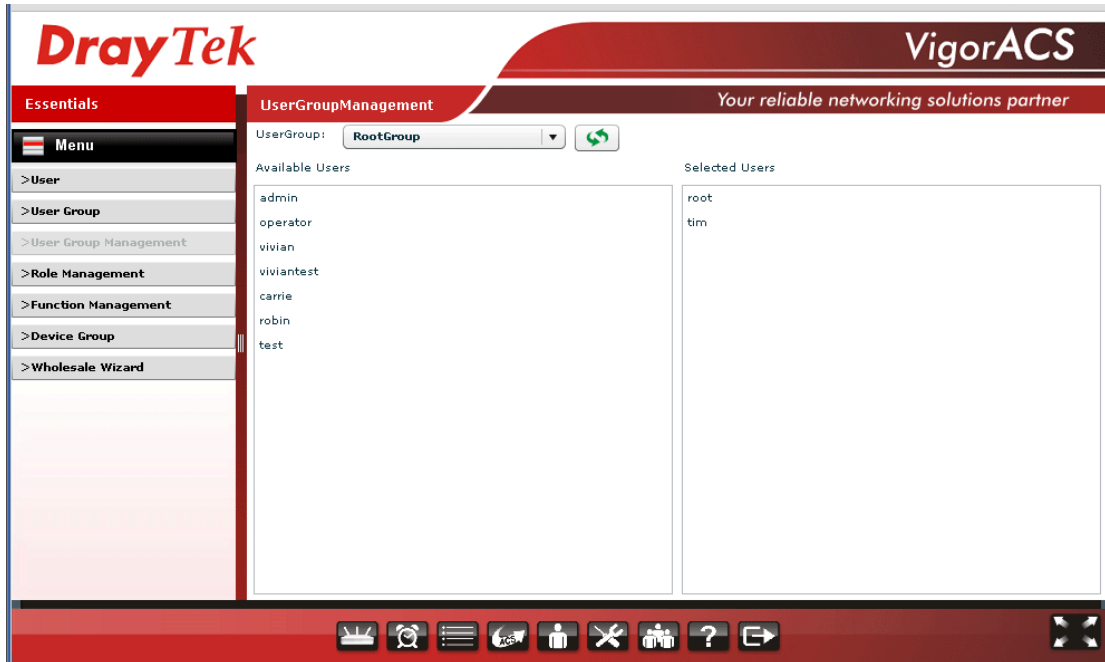
To edit a user group (if it is useless or unsatisfied) setting, please select the one that you want to edit and modify each box directly.

5.2.3 Delete a User Group



To delete a user group (if it is useless or unsatisfied) setting, please select the one that you want to delete and click .

5.3 User Group Management

This page allows you to specify users who want to access VigorACS into different user groups.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
| UserGroup | <p>Choose one of the user groups from the drop down list. RootGroup is the default one.</p>  <p>Except RootGroup and AdminGroup, all the other user groups can be defined in the section 10.2 User Group. If you want to add a new group, please refer to section 10.2 User Group for detailed information.</p> |
|  Refresh | Click this button to refresh current page. |
| Available Users | <p>This box displays all the selectable users in VigorACS.</p> <p>root – It has the highest authority. The one with such authority has such level can do all of the jobs in VigorACS without limitation.</p> <p>admin – It has the higher authority.</p> |
| Selected Users | <p>This box displays the users selected by this group.</p> <p>Click one of the users in Available Users and drag to Selected Users, that one will be categorized under such user</p> |

| Items | Description |
|-------|---|
| | group. As to adding new users in VigorACS, please refer to section 10.1.1 Add a User for detailed information. |




5.4 Role Management

This page can specify the authority for a user / user group.

Basically, each group will be assigned with a Role in default by VigorACS. You can modify the role whenever you want.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Save user setting | Click this button to save the settings. |
|  Refresh | Click this button to refresh current page. |
| Users | This field displays all the users in VigorACS. |
| Role | Choose the role for the selected user . Different role represents different authority that the user group will have. The great the authority is, the more functions the user /user group can have.  |



| Items | Description |
|-------|---|
| | <p>View Only Operator – Have the lowest authority.</p> <p>Group Administrator –Have the middle authority high than “Administrator”.</p> <p>Administrator – Have the middle authority.</p> <p>Operator – Have the low authority higher than View Only Operator.</p> <p>System Administrator – Have the highest authority.</p> |

5.5 Function Management

In addition to specifying the authority for the user, the administrator also can determine what functions the user can have.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Save user setting | Click this button to save the settings. |
|  Refresh | Click this button to refresh current page. |
| Role | <p>View Only Operator – Have the lowest authority. You can view the information but not edit it. However, there is no time out for viewing the information with such role.</p> <p>Group Administrator –Have the middle authority high than “Administrator”.</p> <p>Administrator – Have the middle authority.</p> <p>Operator – Have the low authority higher than View Only Operator.</p> <p>System Administrator – Have the highest authority.</p> |

| Items | Description |
|---------------------|--|
| Show Unknown Device | Unknown device can be seen / hidden if it is checked / unchecked for different role. |



5.6 Device Group

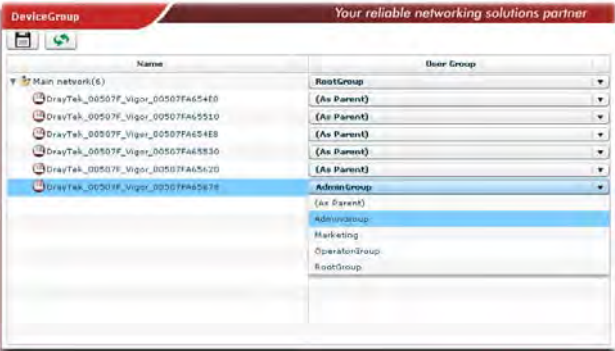
VigorACs allows administrator to manage users who want to access into VigorACS. In addition, it also allows the administrator (user) to manage networks and devices.

Though the VigorACS server allows the administrator to create several user groups in the database, yet each CPE device can be assigned to one user group only. Therefore, if the CPE has been specified in certain user group, it will not be accessed by other users in different user group.

| Name | User Group |
|------------------|-------------|
| Network View(20) | RootGroup |
| ▶ 2110(1) | (As Parent) |
| ▶ 2130(1) | (As Parent) |
| ▶ 2710(1) | (As Parent) |
| ▶ 2820(3) | (As Parent) |
| ▶ 2830(2) | (As Parent) |
| ▶ 2850(1) | (As Parent) |
| ▶ 2910(1) | (As Parent) |
| ▶ 2920(2) | (As Parent) |
| ▶ 3100(1) | (As Parent) |
| ▶ 3900(1) | (As Parent) |
| ▶ AP800(4) | Tim_Group |
| ▶ IPPBX 2820(1) | (As Parent) |
| ▶ viviantest(1) | Group_Test |

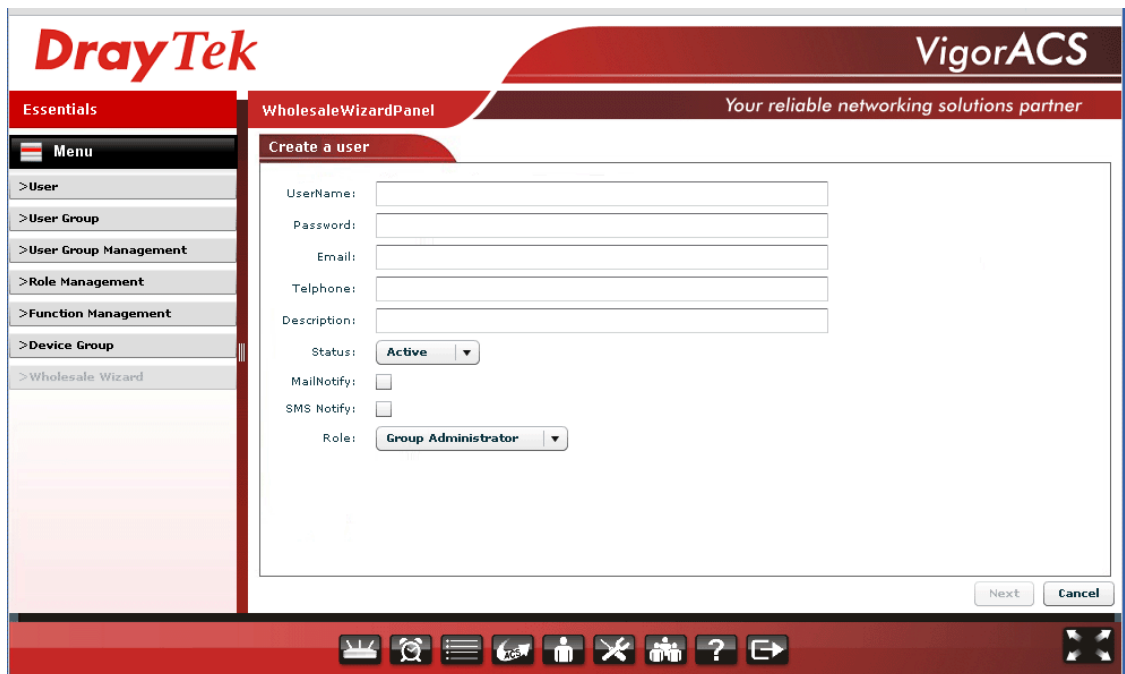
Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Save | Click this button to save the record. |
|  Refresh | Click this button to refresh current page. |
| Name | Display the devices controlled by VigorACS. |
| User Group | As Parent – Choose the same setting as the previous layer. |

| Items | Description |
|-------|--|
| |  |

5.7 Wholesale Wizard

This section can guide the administrator to create user, user group and network via a wizard.



Please follow the steps listed below to create:

1. Choose **Wholesale Wizard**. The following screen for creating a user will appear.

Create a user

UserName:

Password:

Email:

Telephone:

Description:

Status:

MailNotify:

SMS Notify:

Role:

- System Administrator
- Group Administrator**
- Administrator
- Operator
- View Only Operator

Available settings for such feature will be shown as follows:

| Items | Description |
|--------------------|--|
| UserName | Type a new name. |
| Password | Type a new password. |
| Email | Type email address of such user for receiving the mail notification. |
| Telephone | Type the telephone number of such user for receiving the SMS notification. |
| Description | Give a brief introduction of such user. |
| Status | Choose “Active” to make such user being seen on the network. |
| MailNotify | When this function is enabled, an e-mail will be sent to the user as a notification when the device gets alarms. |
| SMS Notify | When this function is enabled, an SMS will be sent to the user as a notification when the device gets alarms. |
| Role | Assign a Role for such user. |
| Next | Go to next configuration page. |
| Cancel | Exit the setting page without saving any configuration. |

- When you finished typing the above settings, click **Next** to create a new group or specify an existing user group for such user.

Create a user group

Existing group

UserGroup:

New group

GroupName:

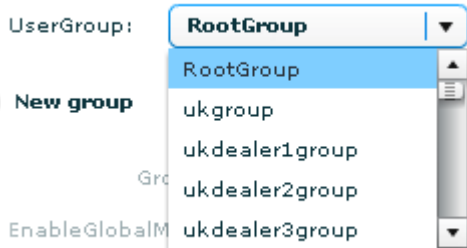
EnableGlobalMailServer:

Nodes:

EnableExpireDate:

ExpireDate:

Available settings for such feature will be shown as follows:

| Items | Description |
|-----------------------|---|
| Existing group | <p>Click the radio button. The existing user groups will be available for you to choose.</p>  |
| New group | <p>Click the radio button to create a new group for such user.</p> <p>GroupName - Type the name (e.g., Marketing) that can represent the user group.</p> <p>EnableGlobalMailServer – Check the box to enable the global mail server.</p> <p>Nodes - Type the number of Nodes for such group. The default number is “-1”.</p> <p>EnableExpireDate - Check the box to enable the expire date setting.</p> <p>ExpireDate - Use to pop-up calendar to specify the expire date.</p> |
| Previous | Back to previous configuration page. |
| Next | Go to next configuration page. |
| Cancel | Exit the setting page without saving any configuration. |

- When you finished typing the above settings, click **Next** to create or specify an existing network for such user.

Create a network

Existing network

Network: Network View

New network

Parent Network: Network View

NetworkName: carrie_network

Location: marketing

User Name: carrie

Password: 04160416

Previous Next Cancel

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------|--|
| Existing network | <p>Click the radio button. The existing network will be available for you to choose.</p> |
| New Network | <p>Click the radio button to create a new network for such user.</p> <p>Parent Network – Choose one of the existing networks as the Parent Network.</p> <p>NetworkName – Type a name for the new network.</p> <p>Location - Type a brief description for the new network.</p> <p>User Name - Type a name (e.g., market) for the new network.</p> <p>Password - Type a password (e.g., market) for such new network.</p> |
| Previous | Back to previous configuration page. |
| Next | Go to next configuration page. |
| Cancel | Exit the setting page without saving any configuration. |

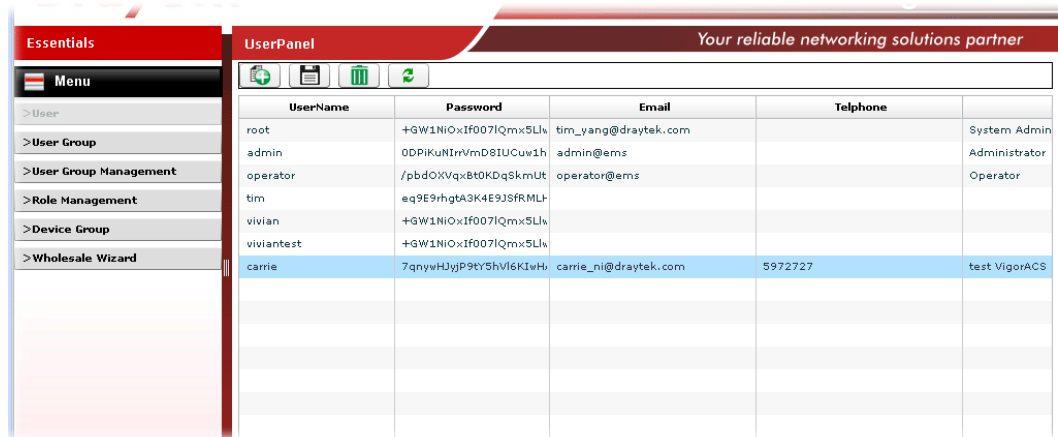
- When you finished typing the above settings, click **Next** to review the settings. A summary for the new user and network will be displayed as the following figure.



- Click **Finish** to save the settings.



- Open **User**. The new added user profile will be shown on the **UserPanel**.

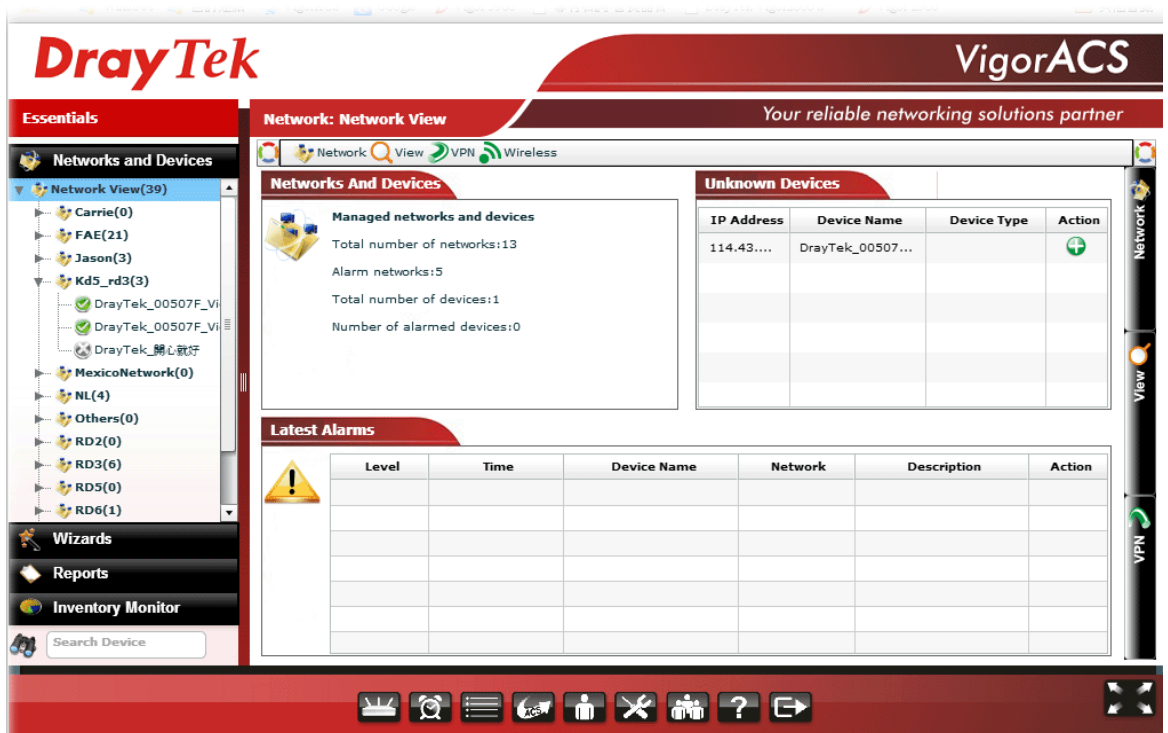


Chapter 6 Device Management

The home page for VigorACS is Device Management. Basically, a summary screen with Network and Devices, Unknown Devices and Latest Alarms will be brought out for your reference whenever such mode (Device) is selected.




The welcome screen for VigorACS can be divided into two boxes, one is Essentials (the left side) and the other is main screen (the right side). **Essentials** contains four groups (containing drop down items), **Networks and Devices**, **Wizards**, **Reports**, and **Inventory Monitor**. Main screen will be changed based on the group selected in Essentials.

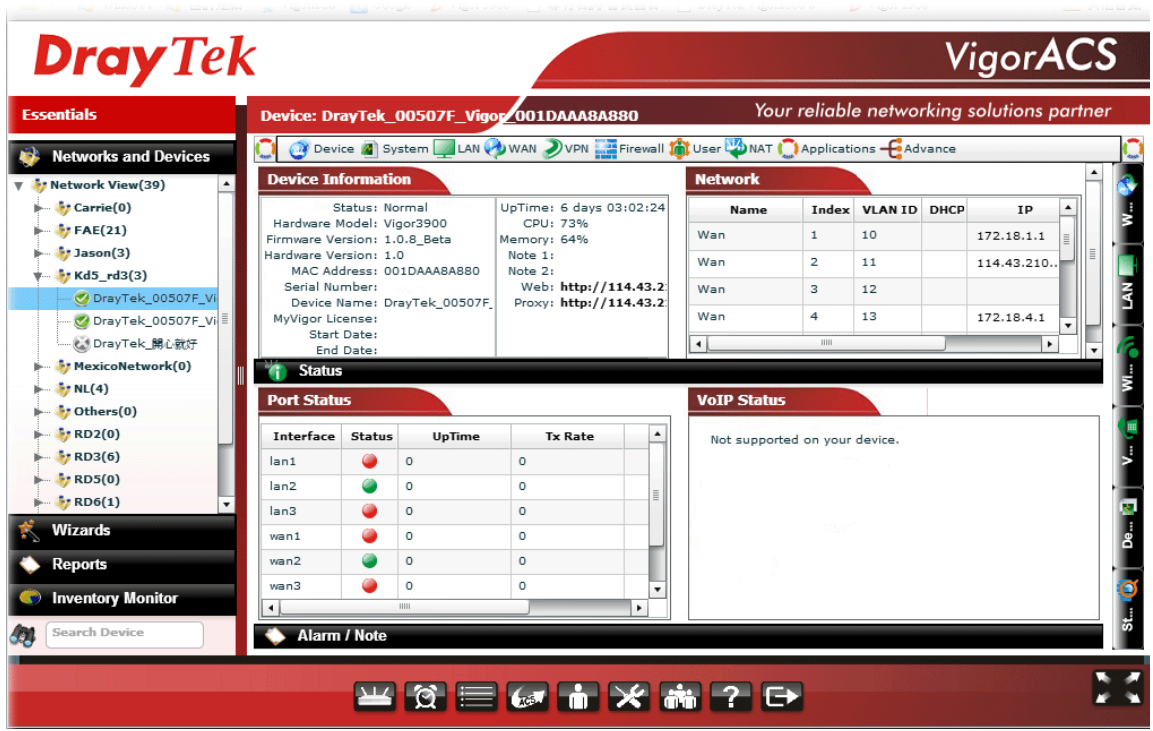


There are four menu items offered for users/administrator to adjust corresponding settings. Move your mouse cursor on any one of them, the drop down menu items will be shown automatically.



Available parameters for NAT DMZ Host settings include:

| Items | Description |
|------------------------------------|--|
| <p>Networks and Devices</p> | <p>This field displays network and devices controlled by VigorACS. To get the detailed information for each device/network, just click one of device/network. Device Details will be shown on the right side. Refer to the following figure.</p>  |



Device Information

| | |
|------------------------------|--|
| Status: Normal | UpTime: 6 days 03:02:24 |
| Hardware Model: Vigor3900 | CPU: 73% |
| Firmware Version: 1.0.8_Beta | Memory: 64% |
| Hardware Version: 1.0 | Note 1: |
| MAC Address: 001DAAA8A880 | Note 2: |
| Serial Number: | Web: http://114.43.2 |
| Device Name: DrayTek_00507F | Proxy: http://114.43.2 |
| MyVigor License: | |
| Start Date: | |
| End Date: | |

Network

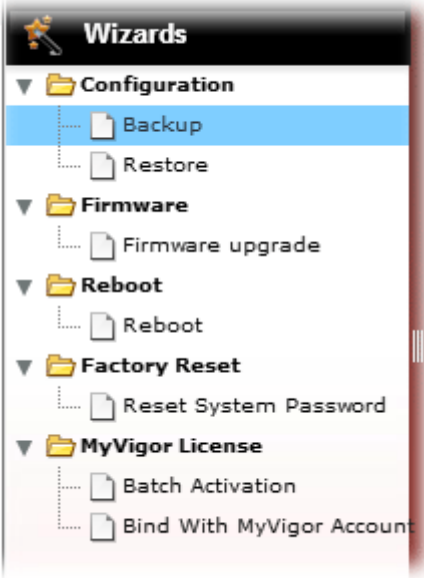
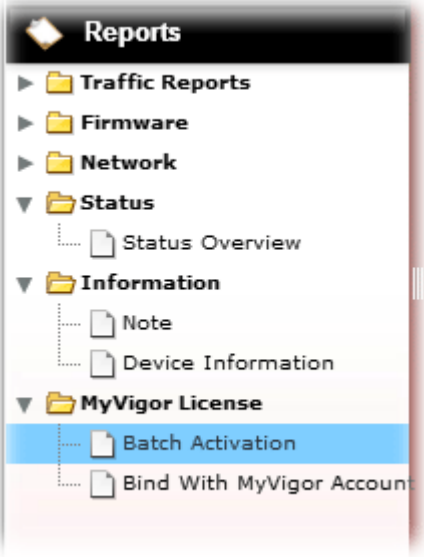
| Name | Index | VLAN ID | DHCP | IP |
|------|-------|---------|------|--------------|
| Wan | 1 | 10 | | 172.18.1.1 |
| Wan | 2 | 11 | | 114.43.210.. |
| Wan | 3 | 12 | | |
| Wan | 4 | 13 | | 172.18.4.1 |

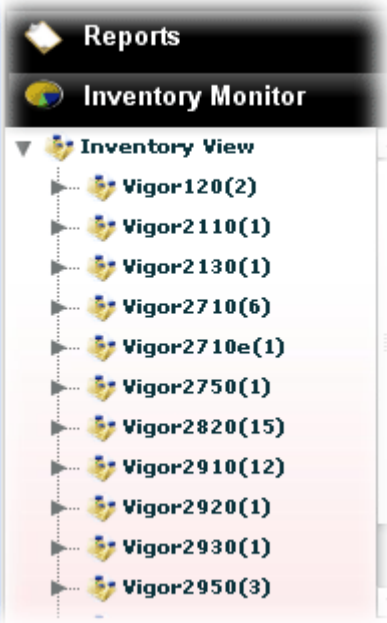
Port Status

| Interface | Status | UpTime | Tx Rate |
|-----------|--------|--------|---------|
| lan1 | ● | 0 | 0 |
| lan2 | ● | 0 | 0 |
| lan3 | ● | 0 | 0 |
| wan1 | ● | 0 | 0 |
| wan2 | ● | 0 | 0 |
| wan3 | ● | 0 | 0 |

VoIP Status

Not supported on your device.

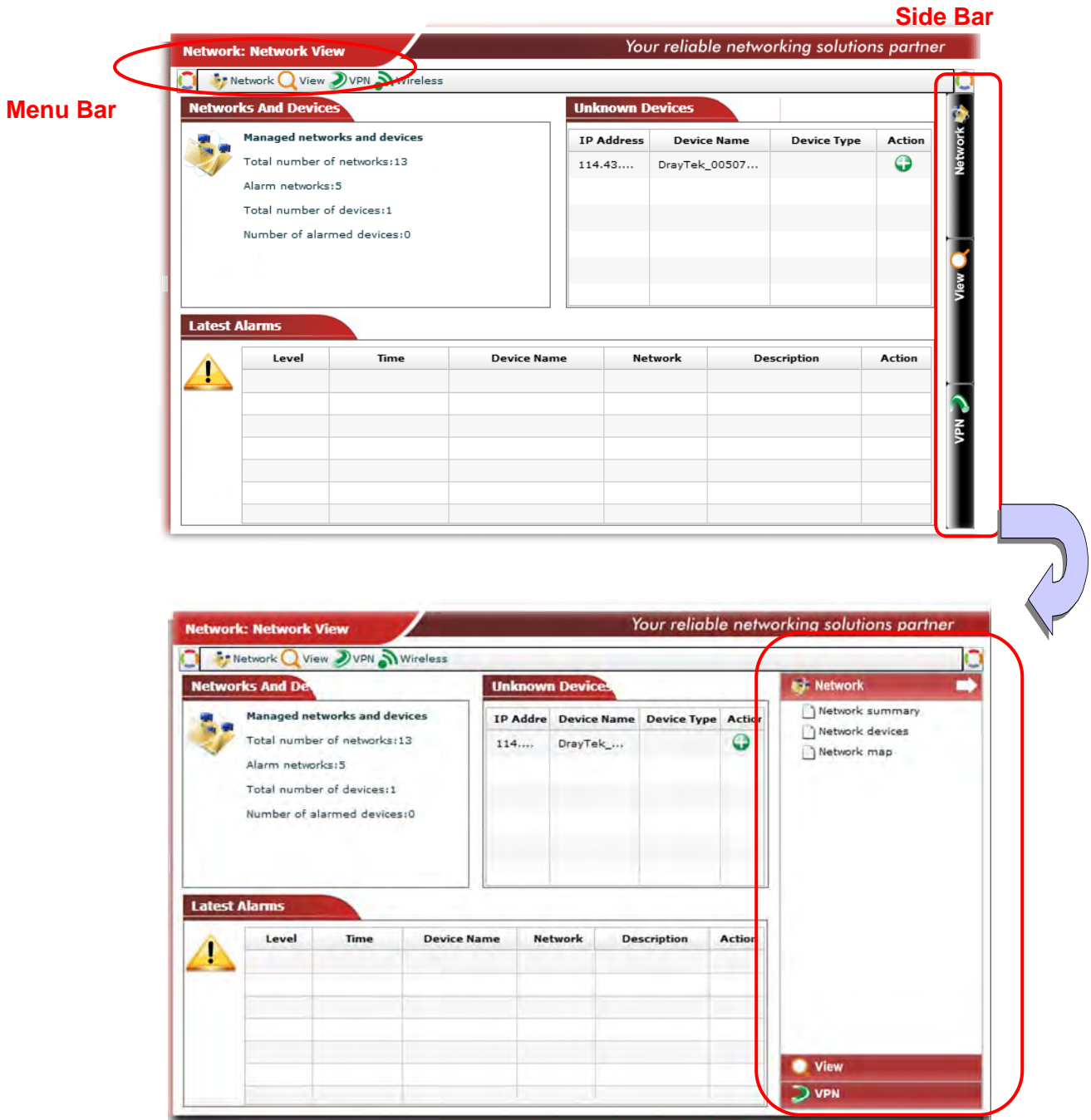
| Items | Description |
|-----------------------|--|
| <p>Wizards</p> | <p>Backup, restore, firmware upgrade, reboot, factory reset and WCF batch operation for CPEs can be done via Wizards.</p>  <p>Note: Refer to Section 6.3 and Chapter 12 for detailed information about wizards operations.</p> |
| <p>Reports</p> | <p>Such groups allow the user to check traffic statistic, graph, firmware, IP, Status, Device, MyVigor License information for all the CPE controlled by VigorACS.</p>  <p>Note: Refer to Section 6.3 for detailed information for printing reports with PDF files.</p> |

| Items | Description |
|--------------------------|---|
| Inventory Monitor | <p>Click Inventory Monitor to display the devices (CPEs) under different model series.</p>  <p>The screenshot shows a navigation menu with 'Reports' and 'Inventory Monitor'. Under 'Inventory Monitor', there is an 'Inventory View' section containing a list of device models with their counts:</p> <ul style="list-style-type: none"> Vigor120(2) Vigor2110(1) Vigor2130(1) Vigor2710(6) Vigor2710e(1) Vigor2750(1) Vigor2820(15) Vigor2910(12) Vigor2920(1) Vigor2930(1) Vigor2950(3) |

6.1 Networks

This page displays the information and current status for network(s) and device(s).

A convenient design offered by VigorACS is that you can select the menu items from menu bar or side bar according to your usage habit.



| Items | Description |
|-----------------|---|
| Menu Bar | Available menu items for the network contain Network, View, VPN (e.g., VPN wizard) and Wireless (e.g., wireless wizard). Available menu items for selected device will be changed based on the model of the selected device. |

| | |
|----------------------------|--|
| Side Bar | <p>Only the common used menu items for the network will be displayed. That is, not all the available parameters settings can be seen in this area.</p> <p>The Side Bar can be unfolded whenever you click on any one of the menu items.</p> |
| Network And Devices | <p>This area will display the total number of networks/devices managed by VigorACS.</p> |
| Unknown Devices | <p>This area will display the devices detected by VigorACS which has not grouped under any network to be managed by VigorACS.</p> <p>If you click the “+” button, a pop-up window (as shown below) will appear for you to specify which network the device can be added to.</p> <div> </div> <p>After finished the settings, click Apply. The device will be added to the specified network and will be removed from unknown devices area.</p> |
| Latest Alarms | <p>This area will display the record of the device/network with latest alarm message.</p> |

Below shows an example to open a menu item from menu bar or side bar:

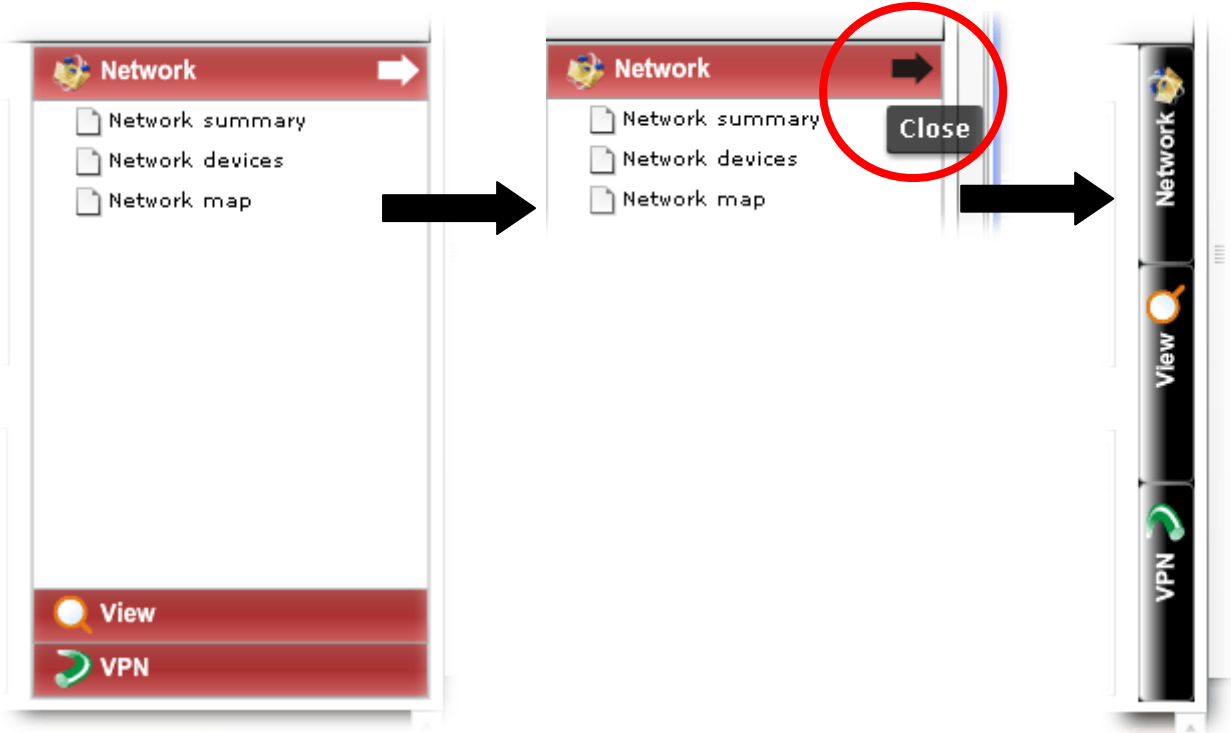
- Click the **Network** menu item from the Menu bar and choose **Network summary**.



- Click the **Network** icon on the Side Bar, a drop down menu items or expanded menu items will be shown as follows.



Click the Close arrow on the unfolded side bar to fold the Side Bar again.



6.1.1 Network Summary



Network Summary provides summary for the whole management and shows the Networks information, devices information, latest alarms information and unknown devices information.

Managed networks and devices

- Total number of networks:19
- Alarm networks:16
- Total number of devices:3
- Number of alarmed devices:2

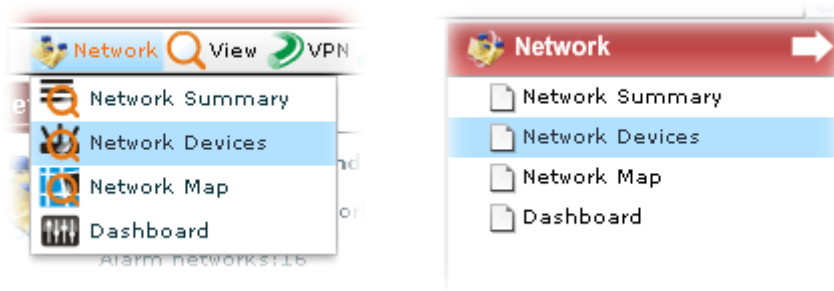
Unknown Devices

| IP Address | Device Name | Device Type | Action |
|------------|---------------|-------------|--------|
| 5.11.1... | DrayTek_00... | Vigor2760 | + |
| 220.1... | DrayTek_00... | VigorAP 800 | + |
| 111.2... | DrayTek_00... | Vigor2760Vn | + |

Latest Alarms

| Level | Time | Device Name | Network | Description | Action |
|----------|-----------------|-------------------|--------------|---------------------|-----------|
| Critical | Mon Jul 27 11:3 | DrayTek_00507F... | Network View | DeviceLossConnectio | View Stop |
| Critical | Mon Jul 27 11:3 | DrayTek_001DA... | Network View | DeviceLossConnectio | View Stop |

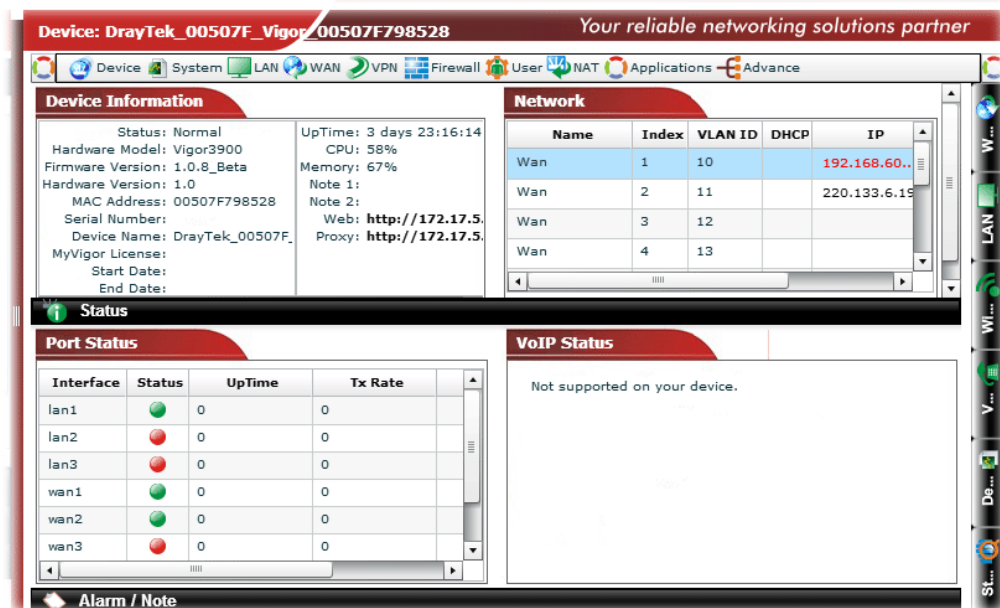
6.1.2 Network devices



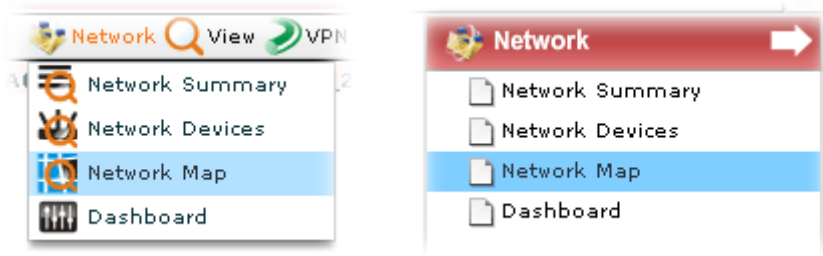
A list of managed and controlled CPEs under the selected network will be displayed with icons in this page. On the left side of the page, the tree view shows all the created groups. On the right side, the CPEs **under selected group** will be displayed.



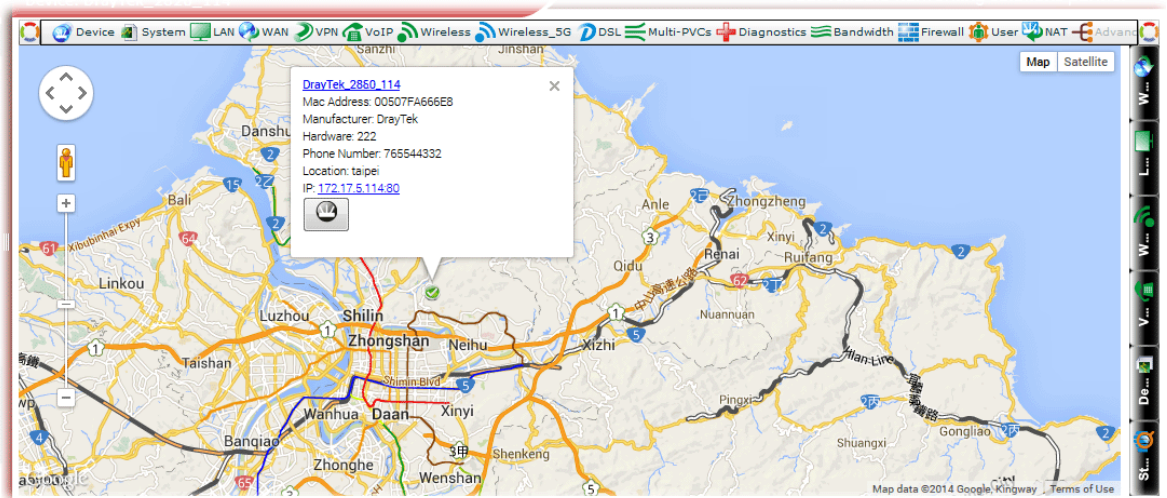
To have the detailed information for each CPE, simply move your mouse to the device (represented as an icon) you want and click on it. A **Device Details** page for the selected CPE will be displayed immediately for your reference.



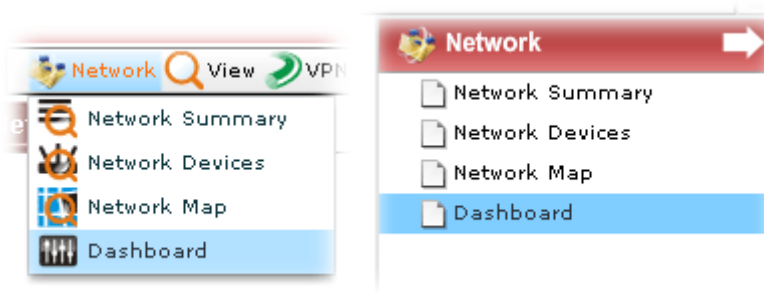
6.1.3 Network map



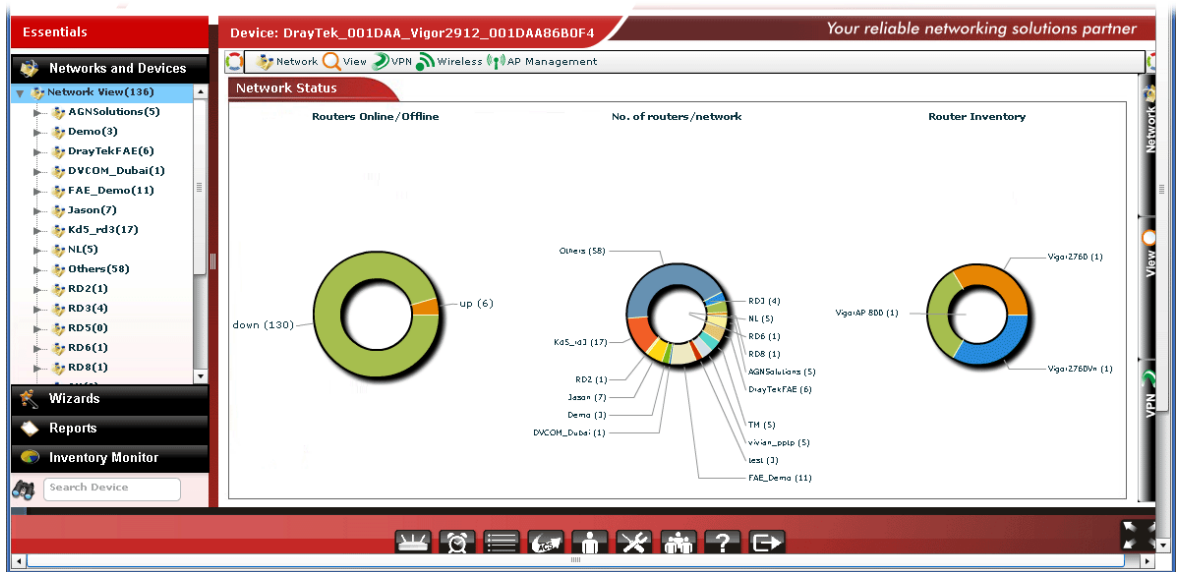
Such mode allows you to view the devices with a bird view. Network map can assist you to find out the location of the devices conveniently and easily.



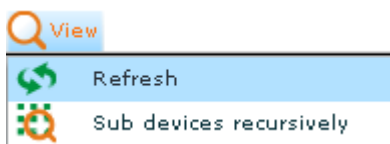
6.1.4 Dashboard



This page can display the network status, online/offline, number of routers/network groups and router inventory for the whole network or for the selected network group by using ring diagrams with different colors.

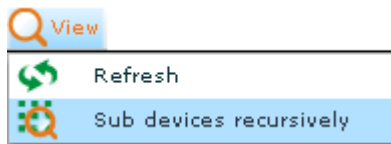


6.1.5 Refresh



This function can refresh current network information displayed on the screen.

6.1.6 Sub devices recursively



This function can display the network information for all of the networks and devices if it is enabled.

Network
View
VPN

Networks And Devices

Managed networks and devices

Total number of networks:2

Alarm networks:1

Total number of devices:3

Number of alarmed devices:3

Unknown Devices

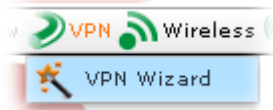
| IP Address | Device Name | Device Type | Action |
|------------|-------------|-------------|--------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Latest Alarms

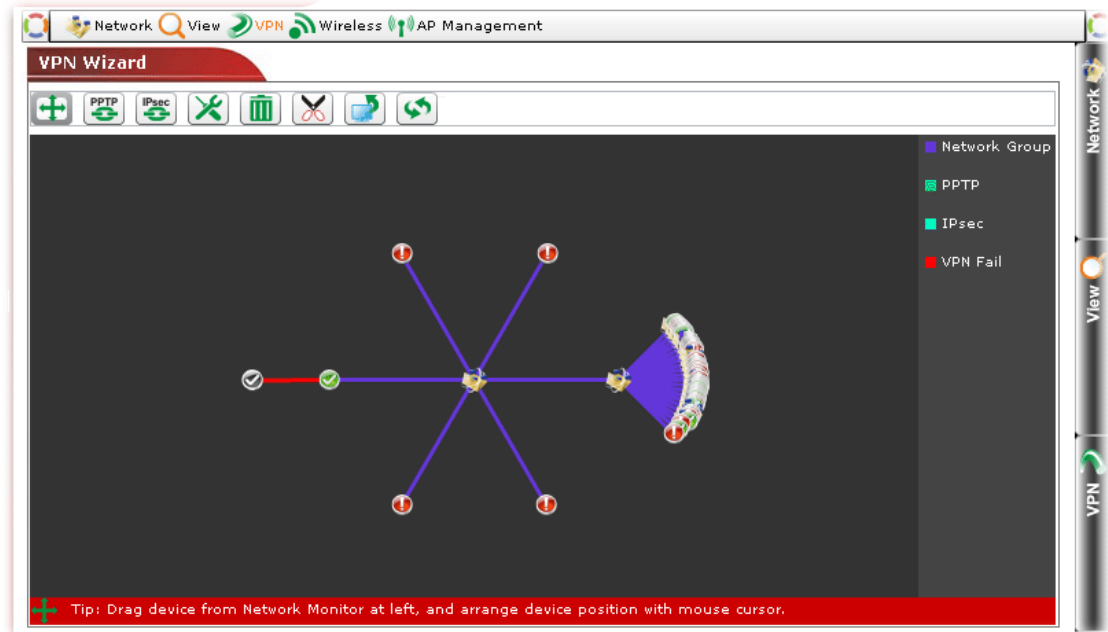
| Level | Time | Device Name | Network | Description | Action | |
|-------|----------|--------------|----------------|-------------|-----------------|--|
| ! | Critical | Thu Nov 3 19 | Vigor2820IP... | harry | DeviceLossConne | |
| ! | Critical | Thu Nov 3 19 | VigorAP800 | harry | DeviceLossConne | |
| ! | Critical | Thu Nov 3 19 | Vigor2920V | harry | DeviceLossConne | |

6.1.7 VPN





VigorACS offers an easy method to configure VPN settings for building VPN connection between two CPEs.




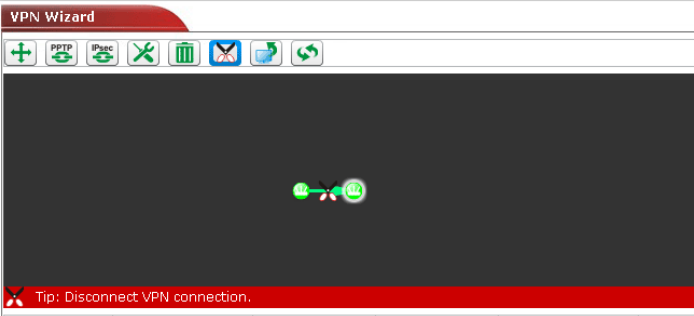





Click **VPN Wizard** from **VPN** menu to open the following page.



Available settings for such feature will be shown as follows:

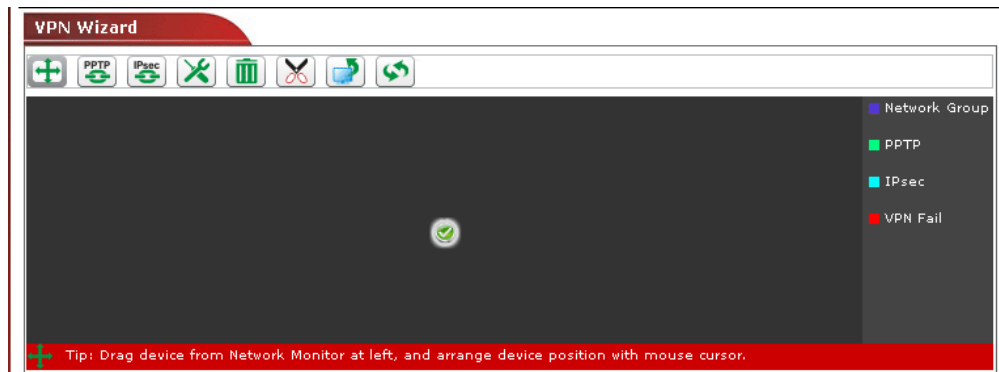
| Items | Description |
|---|---|
|  Add device... | Click this button to add a device for building VPN connection. If you do not click this button first, you can not drag any device from Network View . |
|  PPTP | To build a quick VPN connection with PPTP , simply click this button first and then drag the device from Network View to the black area. |
|  IPsec | To build a quick VPN connection with IPSec , simply click this button first and then drag the device from Network View to the black area. |
|  Advance Connection | To build a VPN connection with detailed configuration, click Advance Connection tool. For detailed information, please refer to the section of Building an Advanced VPN Connection later. |

| | |
|--|---|
| |  |
|  Remove the device.... | <p>Click this button to remove the selected device without VPN connection.</p> |
|  Disconnect | <p>To disconnect a VPN connection, Click this button and move the mouse cursor to the VPN connection that you want to disconnect. Notice that the mouse cursor will be transformed into a scissor.</p>  <p>If you press Enter, a confirmation dialog will appear. You can click Yes and the VPN connection will be cut off immediately.</p>  |
|  Change LAN IP Setting | <p>If there is LAN IP segment conflict in VPN connection, please select that device and click this button to change LAN IP setting.</p> |
|  Refresh VPN Wizard | <p>Click this button to reconnect both devices.</p> |

How to Build a Simple VPN Connection

Please follow the steps to build a simple VPN connection.

1. Open **VPN>>WPN wizard**. You will get the following page. Selected CPE will be displayed in the middle of the screen. There is no VPN connection existed.



2. Open the **Networks and Devices** and expand the group folder as the following:

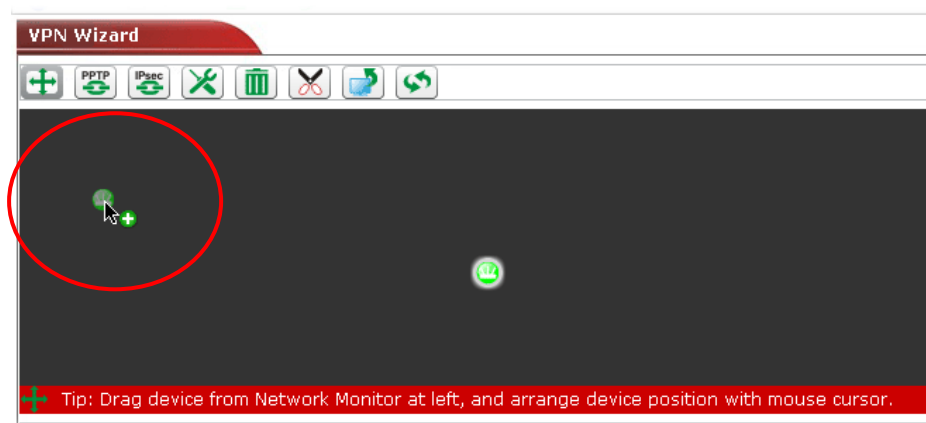


3. Click the **Add device** button.

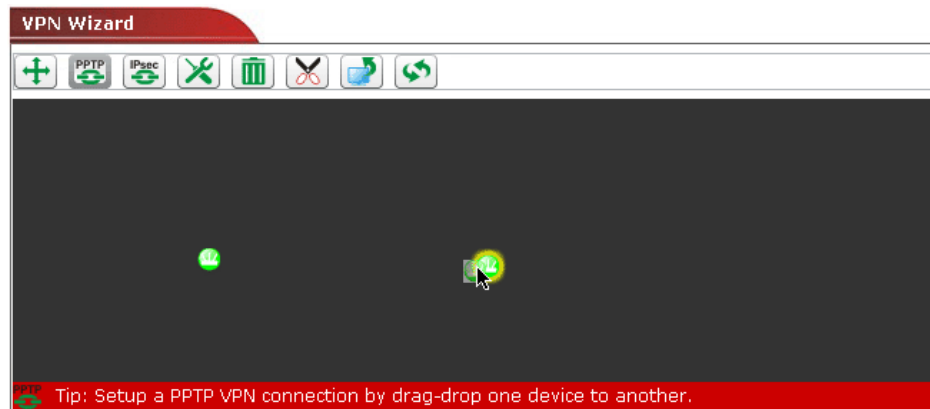


Add device for VPN connection and topology arrangement

4. Choose one device from the **Networks and Devices** that you want to build a VPN connection with the current selected device. **Drag** it from the **Networks and Devices** to the page of **Device Details**.



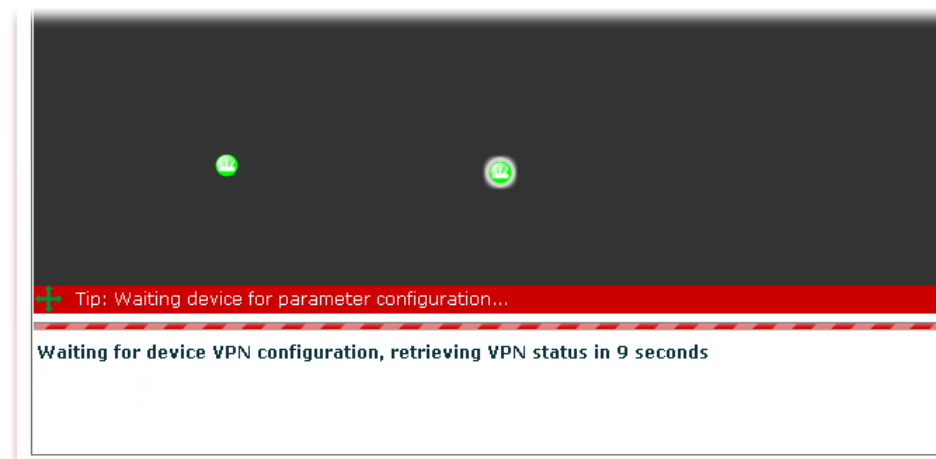
5. If you want to build VPN connection through PPTP or IPSec, click the PPTP or IPSec icon first. Then, drag one of the devices to the other.



6. A confirmation dialog will appear. Click **Yes**.



7. Now, the system will configure parameters automatically between these two devices. Please wait patiently.



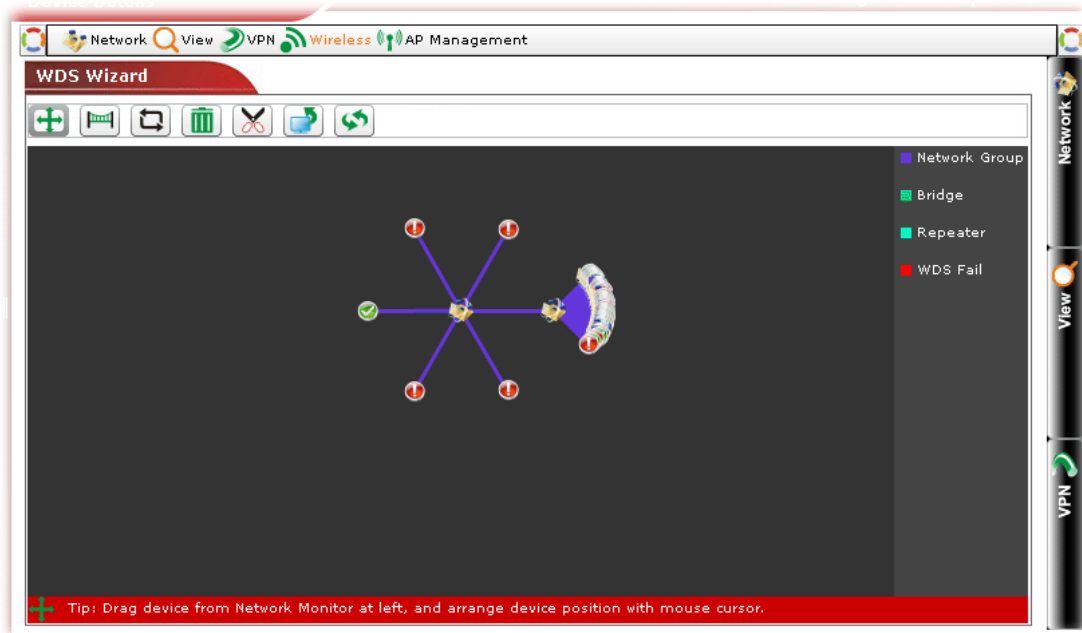
8. When the VPN connection has been done, an arrow will appear and indicate the direction between these two devices. VPN connection information also will be displayed below the black area.
9. Different colors for arrows represent different protocols used in VPN connections. Green means PPTP mode; blue means IPSec mode; and red means the VPN connection is failed.

6.1.8 Wireless






WDS Wizard offers a quick and simple way to build WDS network between Vigor routers and network.

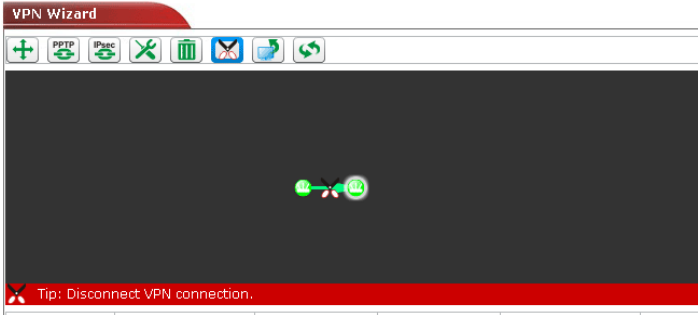




Click **WDS Wizard** from **Wireless** menu to open the following page.

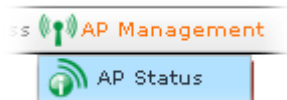


Available parameters for this function include:

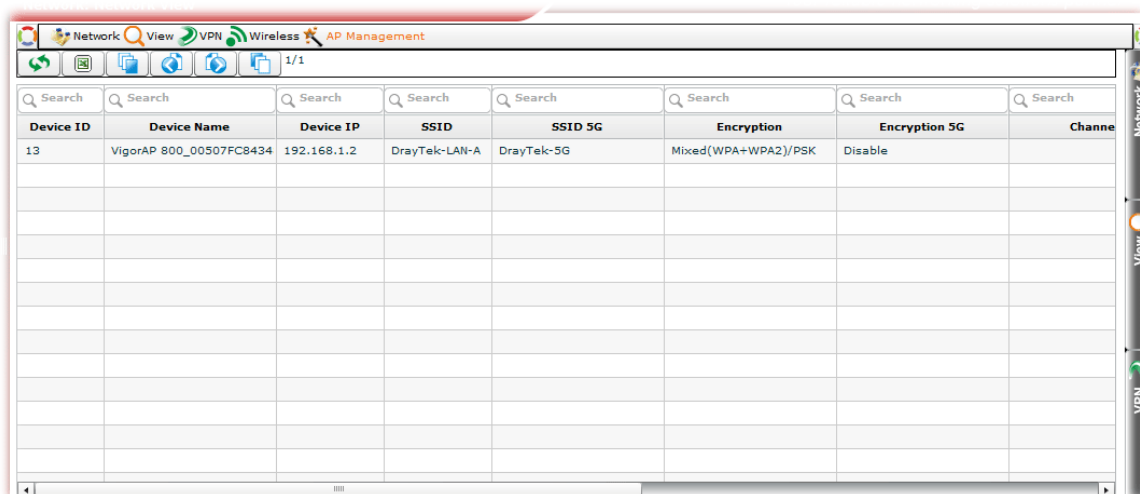
| Items | Description |
|--|---|
|  Add device... | Click this button to add a device for building WDS connection. If you do not click this button first, you can not drag any device from Network View . |
|  Bridge | To build a quick WDS connection in Bridge mode, simply click this button first and then drag the device from Network View to the black area. |
|  Repeater | To build a quick WDS connection in Repeater mode,, simply click this button first and then drag the device from Network View to the black area. |
|  Remove the device.... | Click this button to remove the selected device without WDS connection. |
|  Disconnect | To disconnect a WDS connection, click this button and move the mouse cursor to the WDS connection that you want to disconnect. Notice that the mouse cursor will be transformed into a scissor. |

| | |
|---|--|
| |  <p>If you press Enter, a confirmation dialog will appear. You can click Yes and the WDS connection will be cut off immediately.</p> |
|  <p>Change LAN IP Setting</p> | <p>If there is LAN IP segment conflict in WDS connection, please select that device and click this button to change LAN IP setting.</p> |
|  <p>Refresh</p> | <p>Click this button to refresh this page.</p> |

6.1.9 AP Management









At present, only **AP Status** is available. Click it to check the status of VigorAP managed under current selected network.



| Device ID | Device Name | Device IP | SSID | SSID 5G | Encryption | Encryption 5G | Channel |
|-----------|-------------------------|-------------|---------------|------------|---------------------|---------------|---------|
| 13 | VigorAP 800_00507FC8434 | 192.168.1.2 | DrayTek-LAN-A | DrayTek-5G | Mixed(WPA+WPA2)/PSK | Disable | |

Available parameters for this function include:

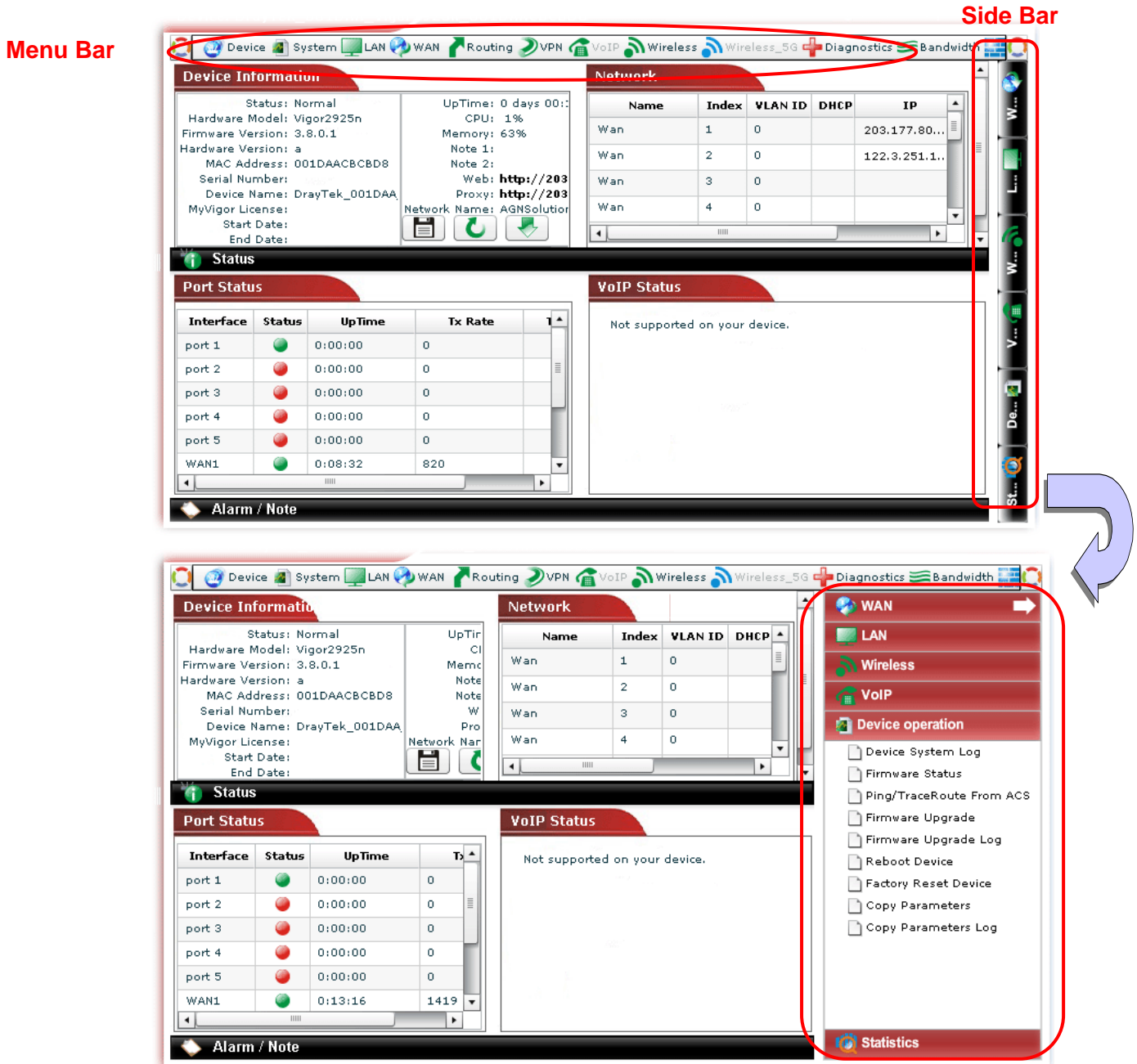
| Items | Description |
|---|--|
|  <p>Refresh</p> | <p>Click this button to refresh this page.</p> |
|  <p>Export to CSV</p> | <p>Click this button to save related information of AP status as a CSV file.</p> |

| | |
|---|---|
|  First | <p>When there is more than one page for related information of AP status, click this button to display the first page.</p> |
|  Previous | <p>When there is more than one page for related information of AP status, click this button to display the previous page.</p> |
|  Next | <p>When there is more than one page for related information of AP status, click this button to display the next page.</p> |
|  Last | <p>When there is more than one page for related information of AP status, click this button to display the last page.</p> |




6.2 Devices

Most of the Vigor CPEs controlled and managed by VigorACS can be viewed and modified through VigorACS. Click one of the CPEs from the tree view under **Essentials>>Networks and Devices**.

Note: The menu items displayed on menu bar /side bar will be different according to the Vigor router selected. Here, in this section, Vigor2925n is selected as an example for introducing device management.



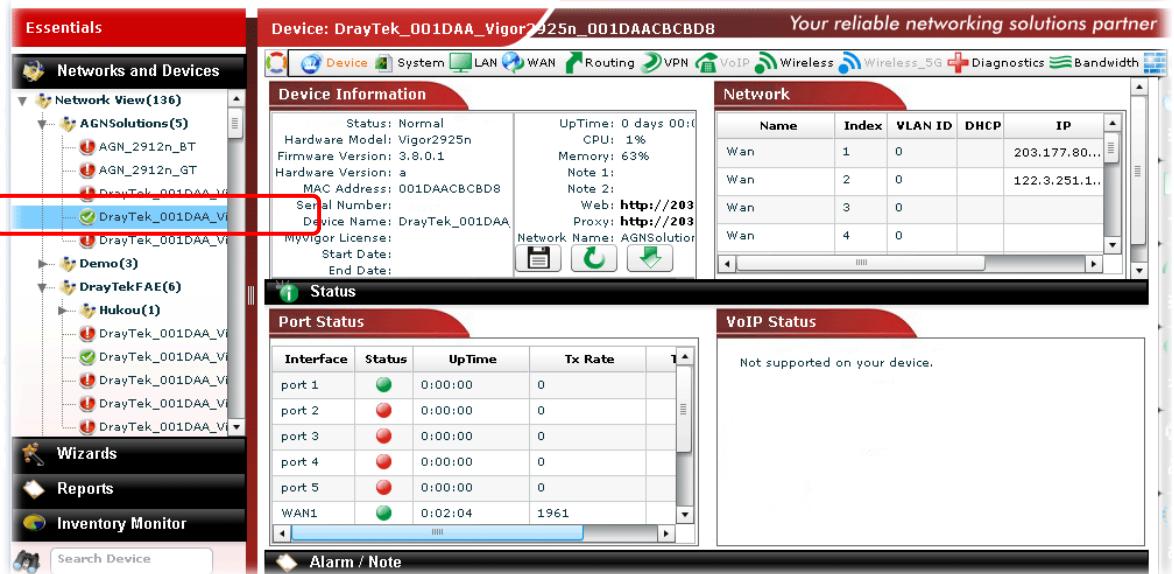
| Items | Description |
|----------|--|
| Menu Bar | Display all the available menu items for the device, such as Device, System, LAN, WAN, VPN, Wireless, DSL, Multi-PVC, VoIP, NAT, and etc. Different model of CPE will bring out different menu items. |

| Side Bar | <p>Only the common used menu items for the selected CPE will be displayed. That is, not all the available parameters settings can be seen in this area.</p> <p>The Side Bar can be unfolded whenever you click on any one of the menu items.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------|---|-------------|------------|---------|--------|---|---|-----|--|---|---|-----|--------|---|---|-------------|----------|---|---|-------------|--------|---|---|----------|--|---|---|-----|--|
| Device Information | <p>This area display general information for the selected CPE.</p> <p> - Click it to backup current configuration for the selected CPE as a file.</p> <p> - Click it to perform the restoration of the latest configuration file for the selected CPE.</p> <p> - Click it to download the latest configuration file for the selected CPE.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Port Status | <p>This area will display current status (online/offline, up time and transmission rate) for LAN, WAN, and WLAN of the selected CPE.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Network | <p>This area will display current network configuration, such as VLAN ID setting, DHCP server enabled/disabled, IPv4 address, IPv6 address, proxy enabled/disabled for LAN, WAN and VLAN of the selected CPE.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VoIP Status | <p>If the selected CPE does not support VoIP, you will get a message of “Not supported on your device”.</p> <p>However, if the selected CPE does support VoIP, you will get VoIP Status as the following figure.</p> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center; background-color: #800000; color: white; margin: 0;">VoIP Status</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">SIP Account</th> <th style="text-align: center;">Registered</th> <th style="text-align: left;">Account</th> <th style="text-align: left;">Ring P</th> </tr> </thead> <tbody> <tr> <td>1</td> <td style="text-align: center;">●</td> <td>100</td> <td></td> </tr> <tr> <td>2</td> <td style="text-align: center;">●</td> <td>200</td> <td>Phone2</td> </tr> <tr> <td>3</td> <td style="text-align: center;">●</td> <td>draytek5555</td> <td>Phone1,P</td> </tr> <tr> <td>4</td> <td style="text-align: center;">●</td> <td>draytek5556</td> <td>Phone2</td> </tr> <tr> <td>5</td> <td style="text-align: center;">●</td> <td>fanny123</td> <td></td> </tr> <tr> <td>6</td> <td style="text-align: center;">●</td> <td>---</td> <td></td> </tr> </tbody> </table> </div> | SIP Account | Registered | Account | Ring P | 1 | ● | 100 | | 2 | ● | 200 | Phone2 | 3 | ● | draytek5555 | Phone1,P | 4 | ● | draytek5556 | Phone2 | 5 | ● | fanny123 | | 6 | ● | --- | |
| SIP Account | Registered | Account | Ring P | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | ● | 100 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | ● | 200 | Phone2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | ● | draytek5555 | Phone1,P | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | ● | draytek5556 | Phone2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | ● | fanny123 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | ● | --- | | | | | | | | | | | | | | | | | | | | | | | | | | | |

6.2.1 Device Summary

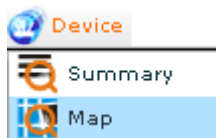


Click one of the CPEs from the tree view under **Essentials>>Networks and Devices**. Then Open **Device>>Summary**. Device details for the selected CPE will be shown with the summary information of system, alarm, network and note. The following example shows the summary of Vigor2860n.

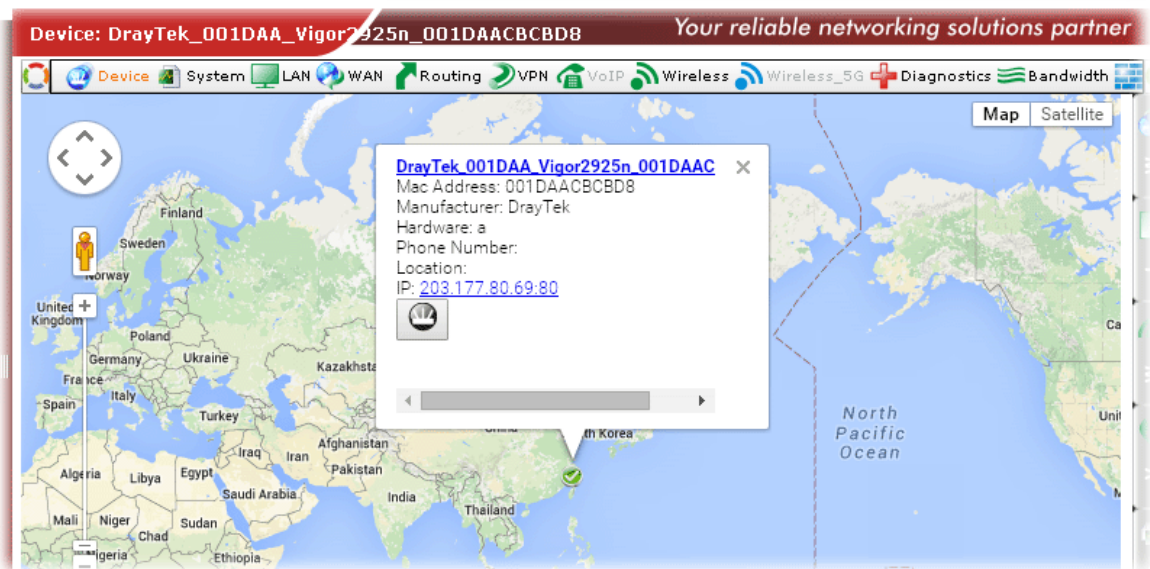


You can **switch into** other page to check additional information, e.g., location of CPE, list of managed CPEs, Web URL to connect CPE and so on. Just move your mouse to **Device** menu and select one of the items from the drop down list.

6.2.2 Device Map



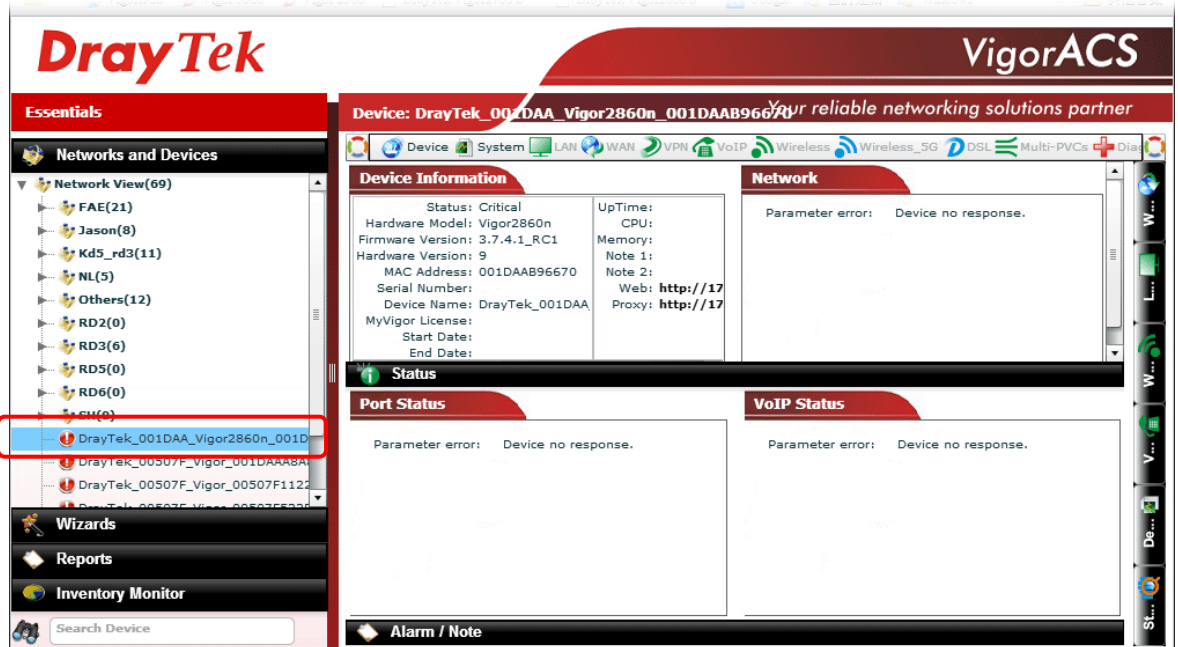
Click this item to display the location of current selected CPE (e.g., Vigor2925n) with a map.



6.2.3 System Management for Selected CPE

VigorACS allows you to view device system log, firmware status, statistics, ping/trace route, reboot the device or factory reset the device by using **System** menu items.

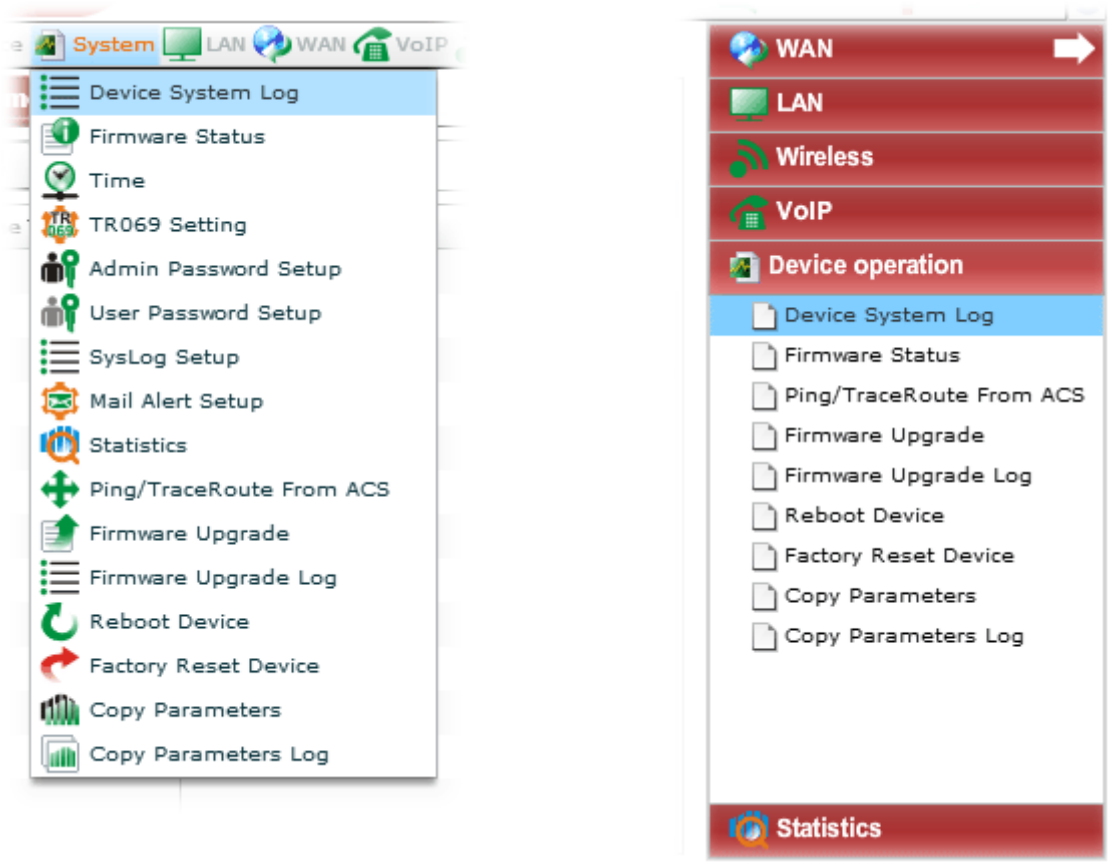
Click one of the CPEs from the tree view under **Essentials>>Networks and Devices** to display general information for the selected CPE.



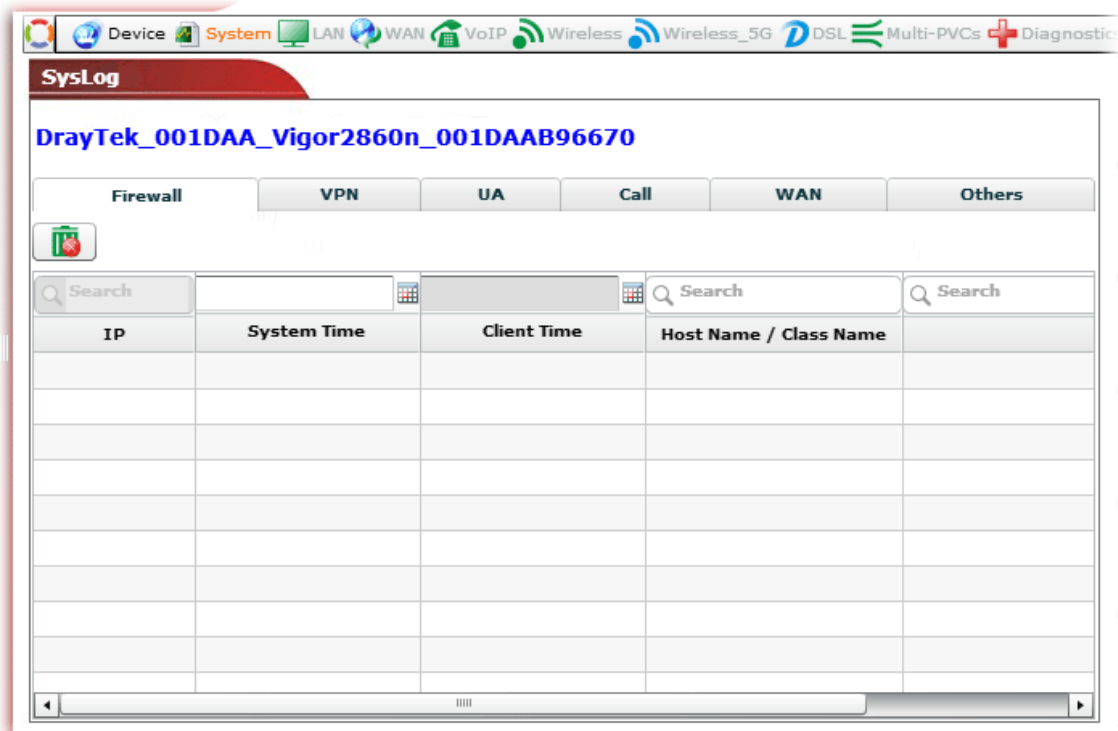
Next, open the **System** menu by using the drop down menu or clicking the **System** button on side bar.

Checking Device SysLog for the Selected CPE

The administrator can check syslog for selected CPE. Simply choose **System>>Device System Log**.



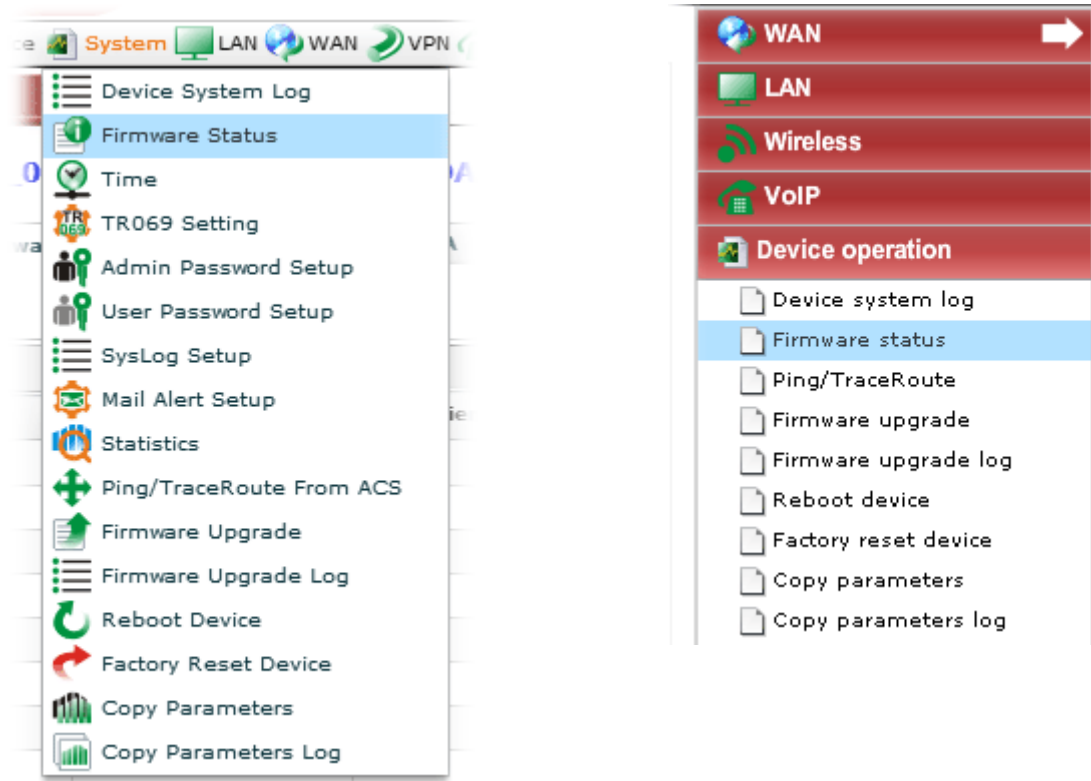
Related page will be shown as follows:



If you want to check syslog for **all devices** which are controlled by VigorACS, please refer to Chapter 6 Log View for more detailed information.

Checking the Firmware Status for the Selected CPE

To get the information of firmware version for the selected CPE, please open **System>>Firmware status**.




A screen of firmware status for the selected CPE will be shown as follows.



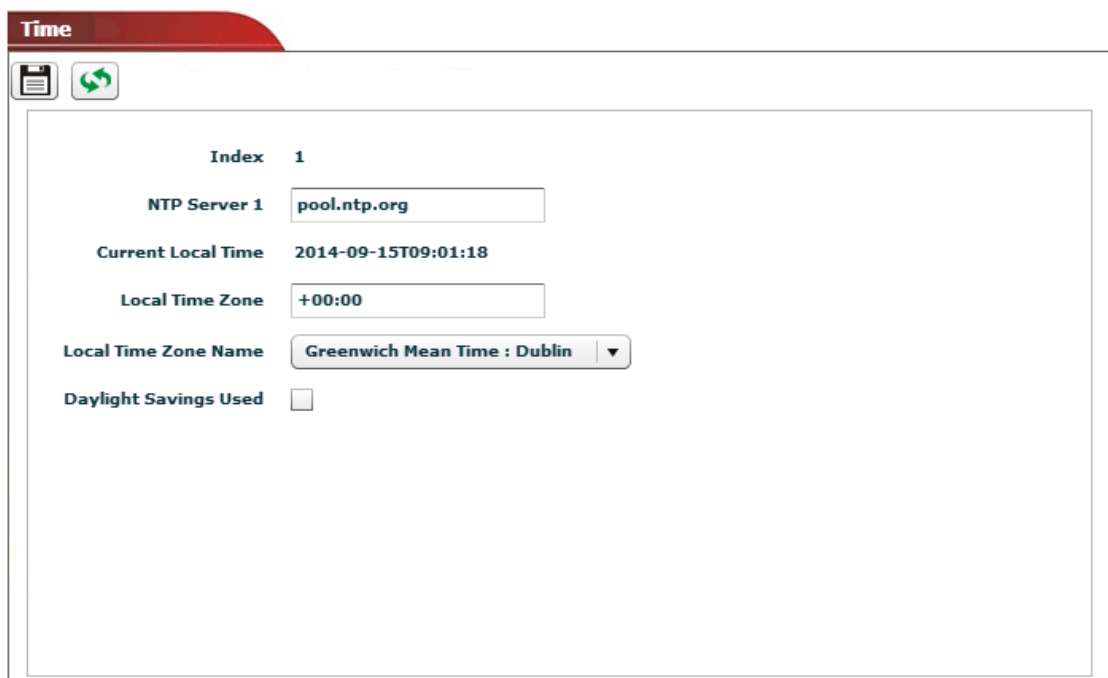
Available parameters for this function include:

| Items | Description |
|-------------------------------|--|
| Index | Display the index number of the CPE in current network group. |
| Modem Firmware Version | Display the firmware version for the hardware that the CPE used currently. |

| Items | Description |
|--|---|
| Software Version | Display the software version that the CPE used currently. |
| Manufacturer OUI | Display the characters of OUI. OUI means “organizationally unique identifier” of the device manufacturer. |
| Model Name | Display the model name of the selected CPE. |
|  Save parameter settings | Click this button to save the parameters settings. |

Specifying the Time Setting for the Selected CPE

To get the information of time setting or modify the time setting for the selected CPE, please open **System>>Time**.

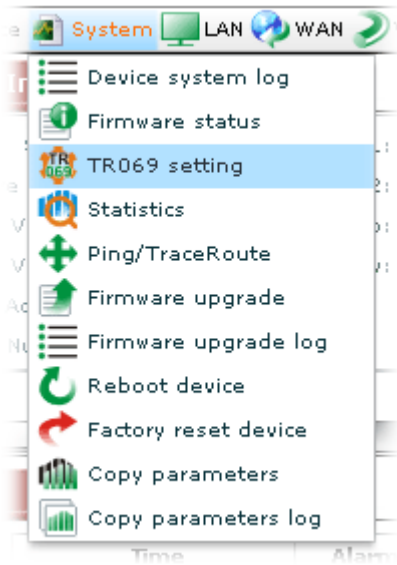


Available parameters for this function include:

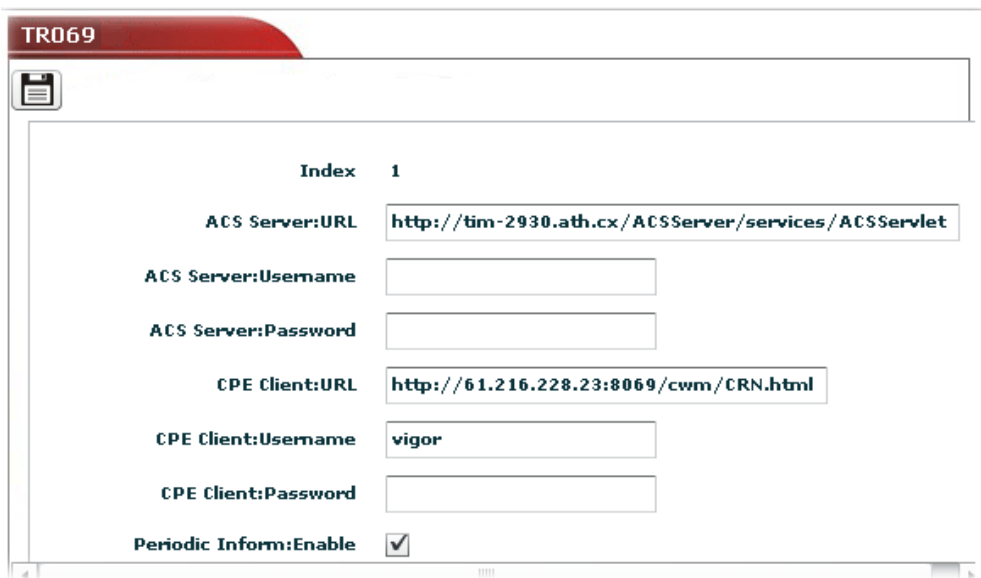
| Items | Description |
|-------------------------------|--|
| Index | Display the index number of the CPE in current network group. |
| NTP Server 1 | Type the web site of the time server. |
| Current Local Time | Display current time. |
| Local Time Zone | Type the time zone where the router is located. |
| Local Time Zone Name | Select the time zone name where the router is located. |
| Daylight Savings Used. | Check the box to enable the daylight saving. Such feature is available for certain area. |

Checking the TR-069 Settings for the Selected CPE

The administrator can view TR-069 settings for the selected CPE.




A screen of TR-069 status for the selected CPE will be shown as follows.



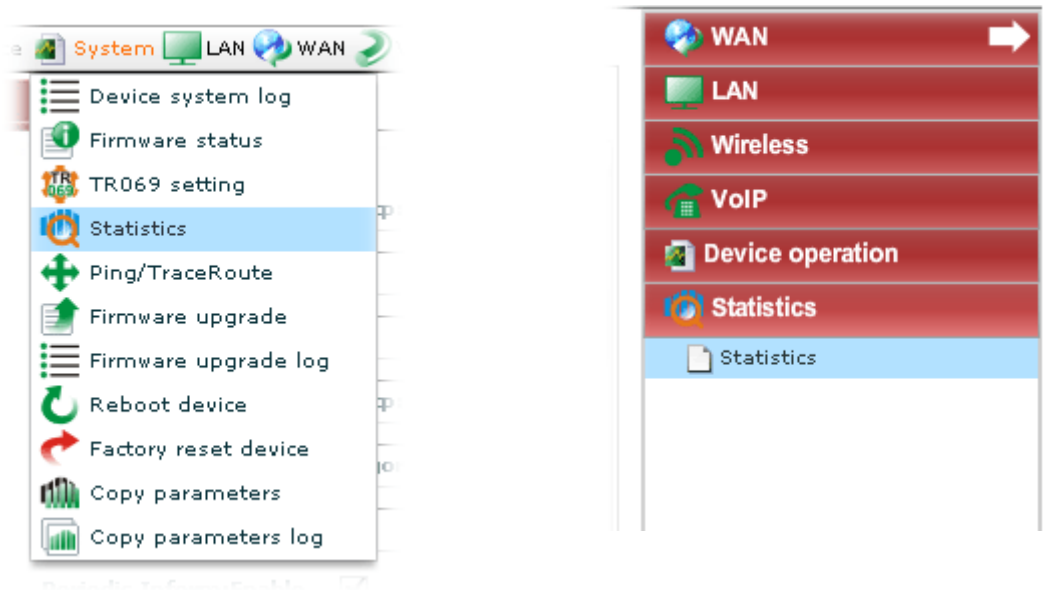
Available parameters for this function include:

| Items | Description |
|--|---|
| Index | Display the index number of the CPE in current network group. |
| ACS Server: URL/ Username/ Password | The original URL /username/password of VigorACS SI will be displayed in these fields. You can modify the username and password if required. |
| CPE Client: URL/ Username/ Password | The original URL /username/password of the managed CPE will be displayed in these fields. It is not necessary to change it. |
| Periodic Inform: Enable | The default setting is Enable (checked). Uncheck the box to close the mechanism of notification. |

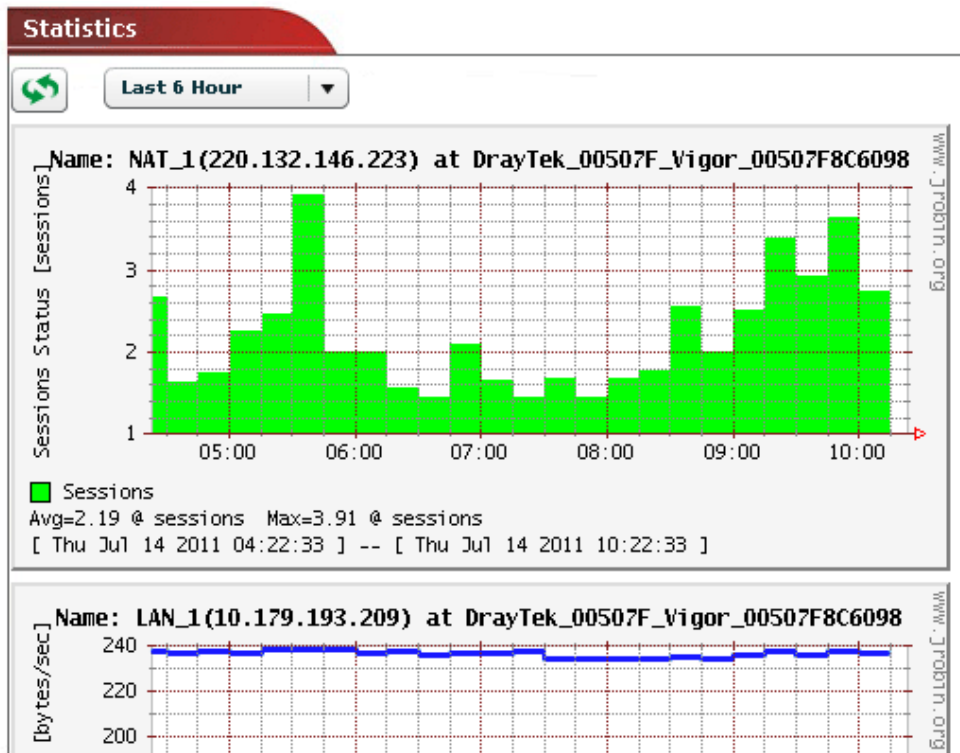
| Items | Description |
|--|---|
| Periodic Inform: Interval Time | Please set interval time or schedule time for the router to send notification to CPE is Periodic Inform is enabled. |
|  Save parameter settings | Click this button to save the parameters settings. |

Checking the Statistics for the Selected CPE

The administrator can view specified date of statistics for CPE(s).

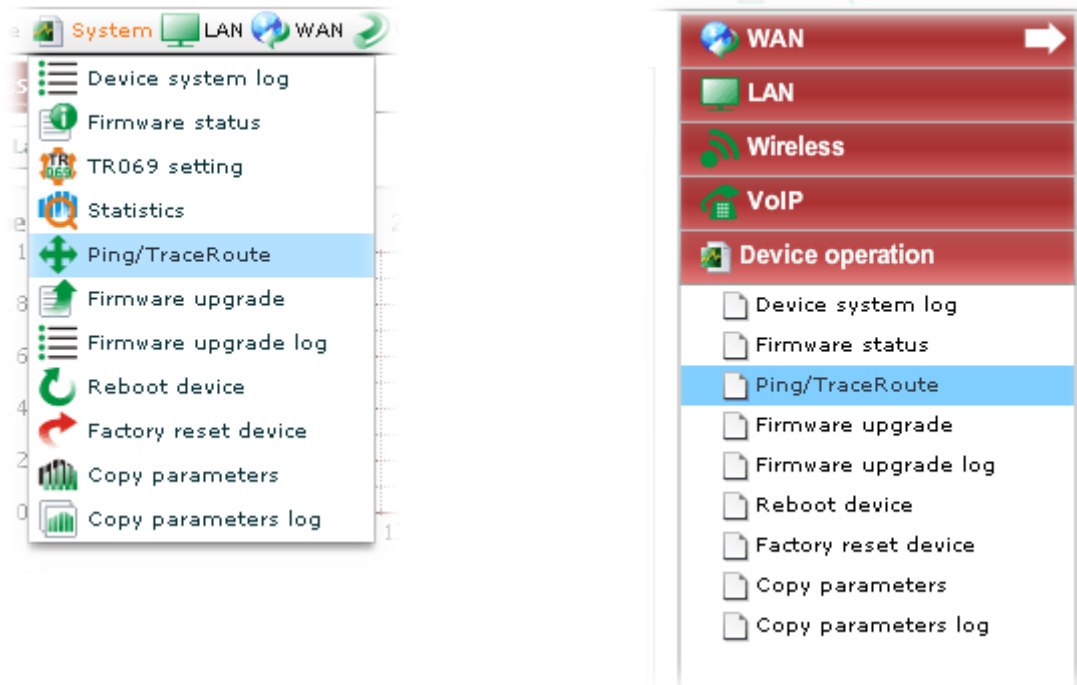


Please open **System>>Statistics**. Such page will display graphics for LAN statistics, WAN Statistics and VPN statistics of the selected CPE.

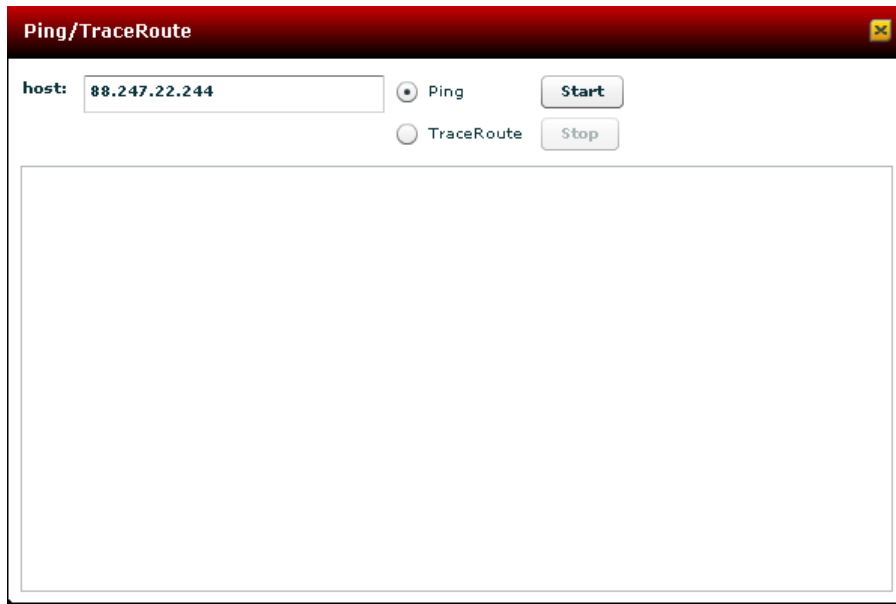


Pinging or Tracing the Route for the Selected CPE

To trace the route of a host or ping a specific host for the purpose of diagnosis, please open **System>>Ping/TraceRoute**.



This page allows you to specify a host for tracing route or ping.



Available parameters for this function include

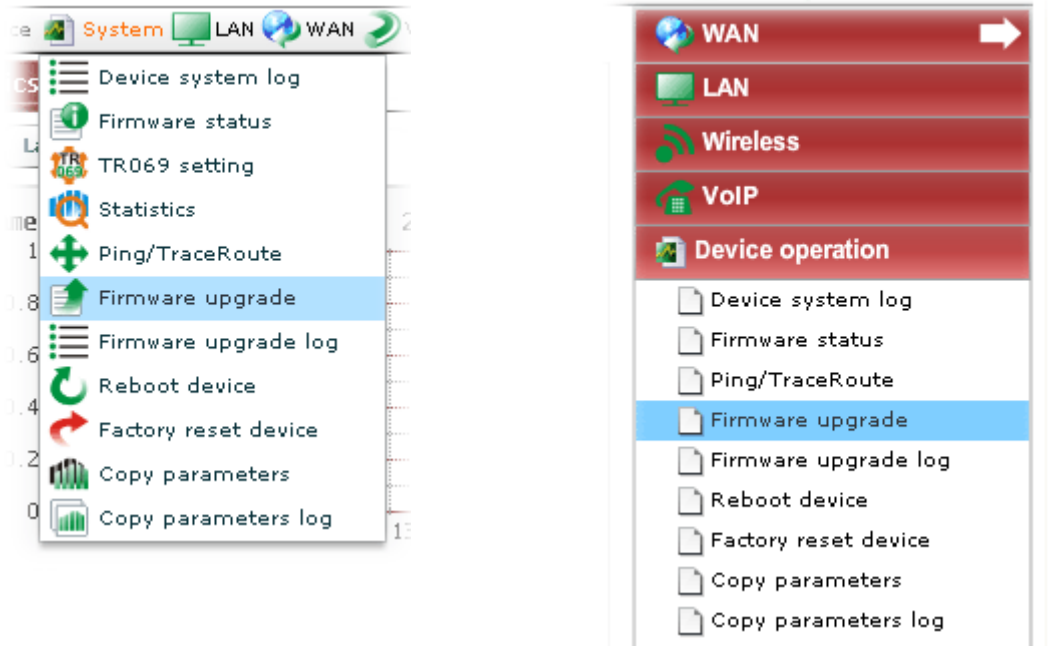
| Items | Description |
|------------------|---|
| host | Type in the IP address of the Host/IP that you want to ping or trace. |
| Ping /TraceRoute | <p>Start - Click this button to start the ping work. The result will be displayed on the screen.</p> <p>Stop – Click this button to stop the work of pining or tracing.</p> |

Upgrading the Firmware for the Selected CPE

Firmware Upgrade web pages allow you to do firmware upgrade for specified CPE device.

Note: If you want to upgrade the firmware for multiple devices at one time, please go to section **4.2.3** Firmware Upgrade for more detailed information.





Please open **System>>Firmware upgrade**.




A screen of firmware used by current selected CPE will be shown as follows.

| File | Size | Path |
|---------------------------|--------|-------------------------|
| v2130001.all | 7.0 MB | ./RootGroup/SharedFirmw |
| v2830_a9_336.rst | 5.6 MB | ./RootGroup/SharedFirmw |
| v2830_a9_336.all | 5.6 MB | ./RootGroup/SharedFirmw |
| v2820_v03351_211011_A.all | 5.4 MB | ./RootGroup/SharedFirmw |
| | | |
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Available parameters for this function include:

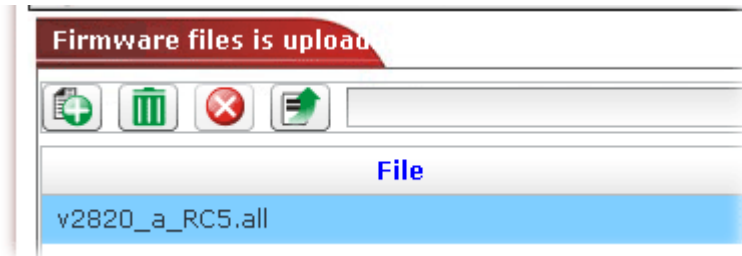
| Items | Description |
|--|--|
|  Add file(s) | Click this button to add the newly firmware driver to VigorACS server. You have to download from DrayTek website first and then click this button for uploading. |
|  Remove files (s) | Click this button to remove the selected firmware file. |
|  Cancel upload | Click this button to terminate uploading procedure. |
|  Upgrade firmware with | Click this button to upgrade the firmware of selected |


| Items | Description |
|---------------|--|
| selected file | CPE. A confirmation dialog box will appear. Click Yes to continue the upgrading process, or click No to cancel this job.  Note: If you do not add any new file to VigorACS server, the confirmation dialog box will not appear. |
| File | Display current firmware on VigorACS. |
| Size | Display the file size for the firmware. |
| Path | Display the location of the firmware. |

Performing the Firmware Update

To do the firmware upgrade, please:

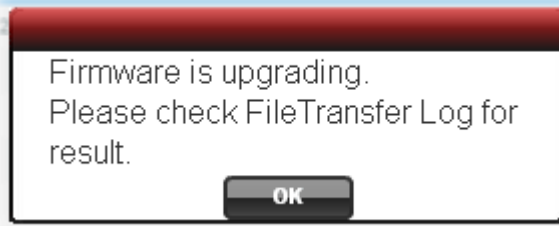
1. Upload the required firmware from vendor for the CPE that you want to upgrade to VigorACS server by clicking **Add** .
2. Choose suitable firmware for the CPE that you want to upgrade. You must specify which firmware to be applied in the CPE device requiring for firmware upgrade. The uploaded firmware will be displayed in the screen as shown below:



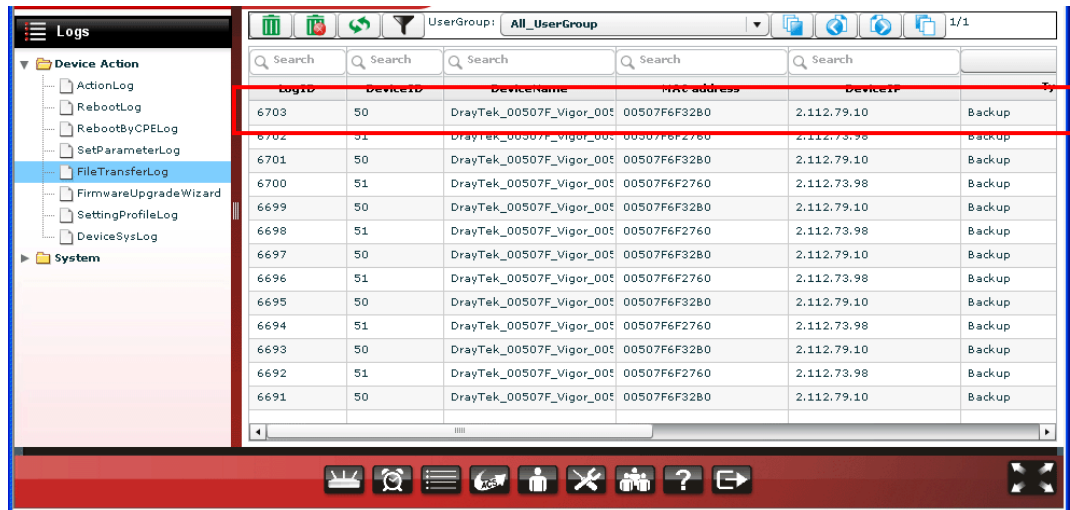
3. When the uploading process is finished, please choose the file and click  to upgrade the firmware with the selected file to the current selected CPE.



4. When the upgrading is completed, the new driver will be shown on the screen.

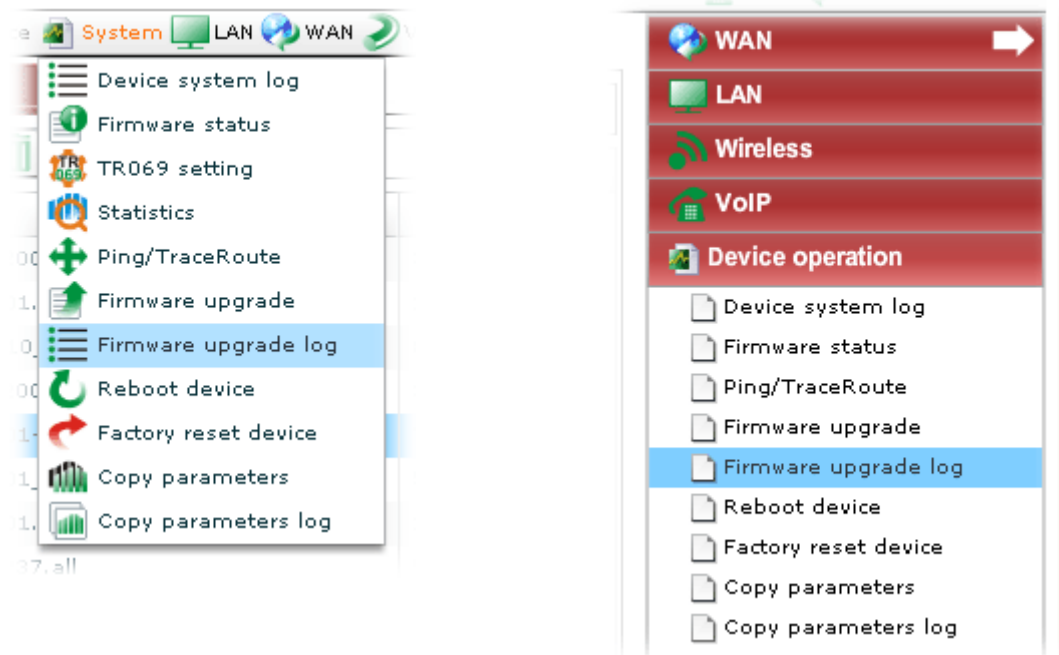


5. Click **OK**. Open click the **Log** icon. Under **Device Action**, choose **FileTransferLog**. The new result will be added on the top.



Checking the Firmware Update Log








Please open **System>>Firmware upgrade log** to check the firmware update history.



A screen of firmware upgrade log current selected CPE will be shown as follows.

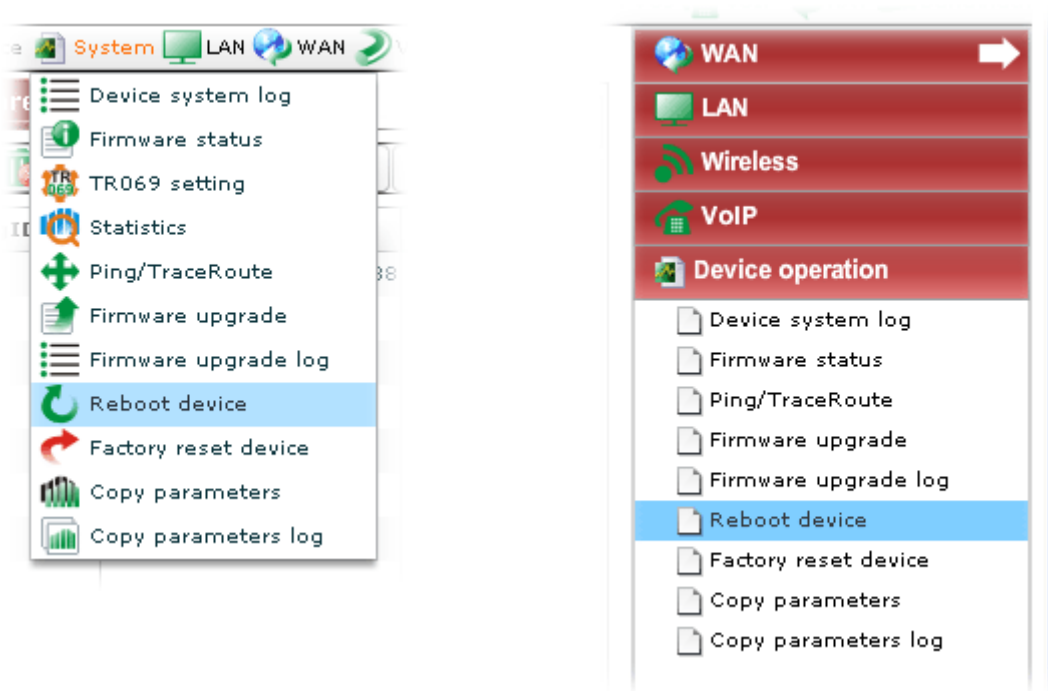
| Firmware upgrade log | | | |
|----------------------|-----------------------|---------|-----------------------------------|
| LogID | CommandKey | Status | Time |
| 5 | ManuFirmUpgr_12952253 | Success | Mon Jan 17 08:48:31 GMT+0800 2011 |
| | | | |
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Available parameters for this function include:

| Items | Description |
|---|---|
|  Delete | Click this button to delete a selected record. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  First | When there is more than one page for the firmware upgrade records in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the firmware upgrade records in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the firmware upgrade records in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the firmware upgrade records in this user group, click this button to display the last page. |
| LogID | Display the arrangement number for each firmware upgrade record. |
| CommandKey | Display the key that VigorACS sends to CPE while performing download/upload job. |
| Status | Display if the firmware upgrade is successful or not. |
| Time | Display the time that firmware upgrade is performed. |

Rebooting the Selected CPE

When you finish configuration, please open **System>>Reboot device** to make the new settings enabled.

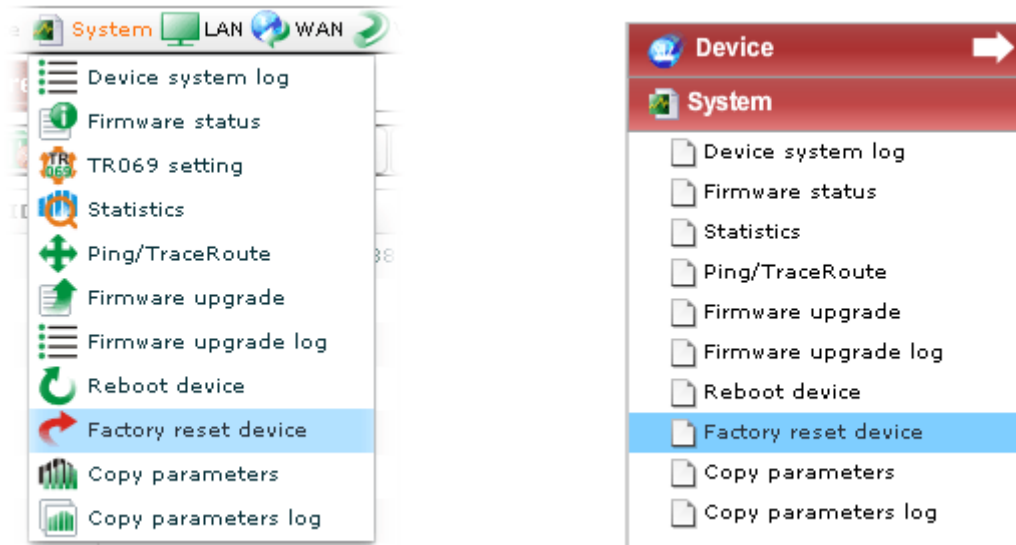


In the confirmation dialog box, click **Yes** to reboot the selected CPE or click **No** to cancel the reboot process.

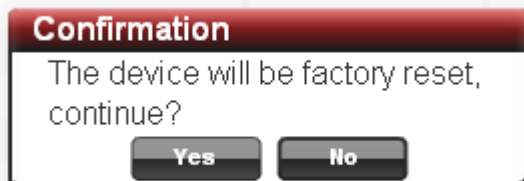


Returning to Factory Default Settings for Selected CPE

If, any time, you want to return to the factory default settings for the selected CPE, choose the device and click **System>>Factory reset device**.

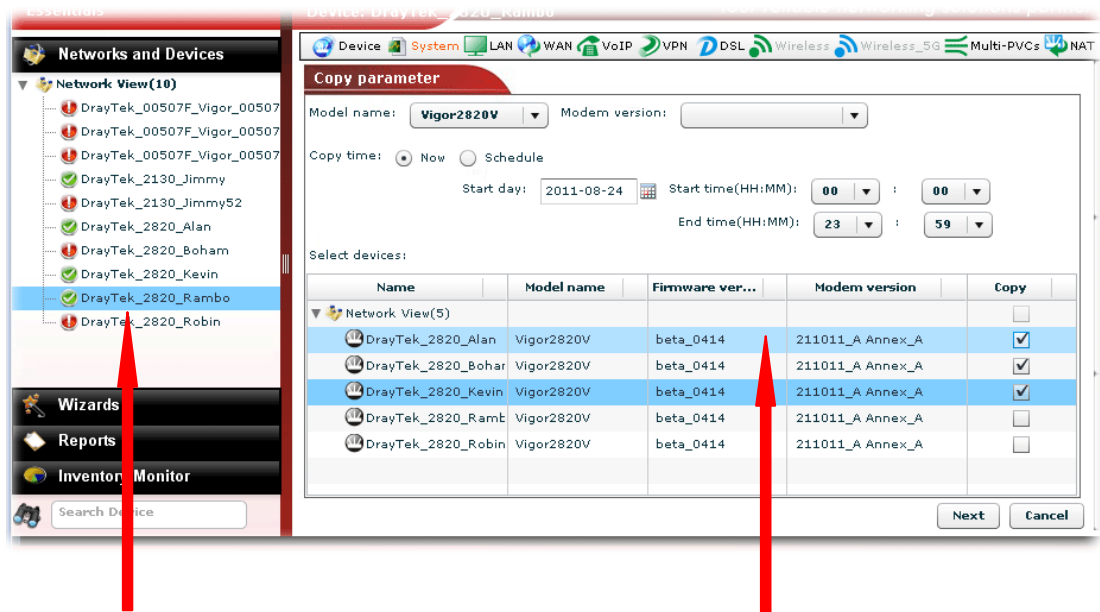


In the confirmation dialog box, click **Yes** to reset the selected CPE or click **No** to cancel the reset process.



Copying Parameters for Selected CPE

Such function allows you to copy parameters from the selected CPE to the devices specified in the of **Copy Parameter** page.

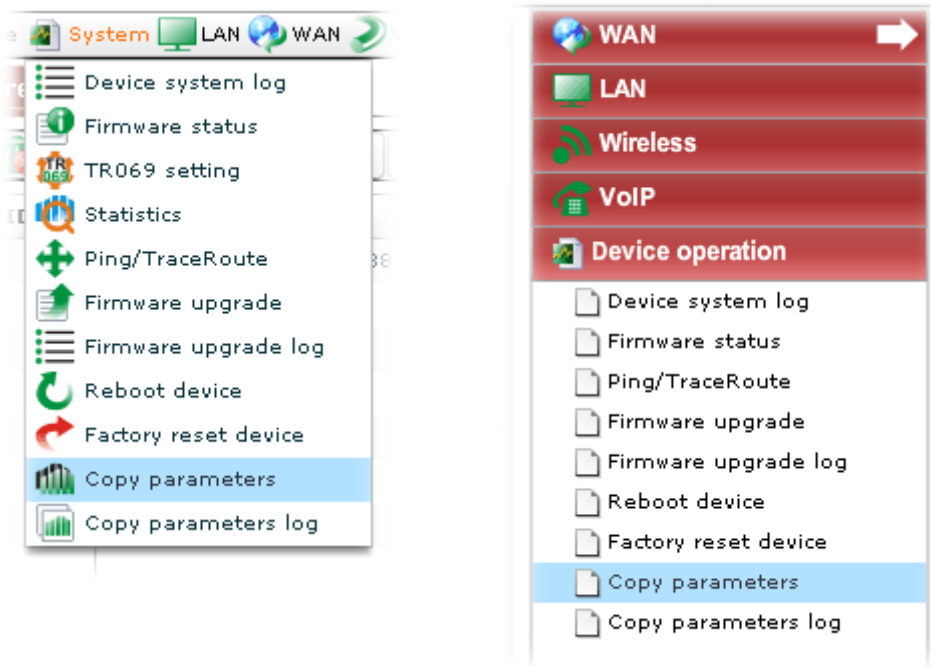


Selected CPE

Devices chosen for applying the parameters coming from the selected CPE

Follow the steps below to perform the operation of **Copy Parameter**.

1. Choose a device from **Networks and Devices**. Next, open **System>> Copying Parameters**.



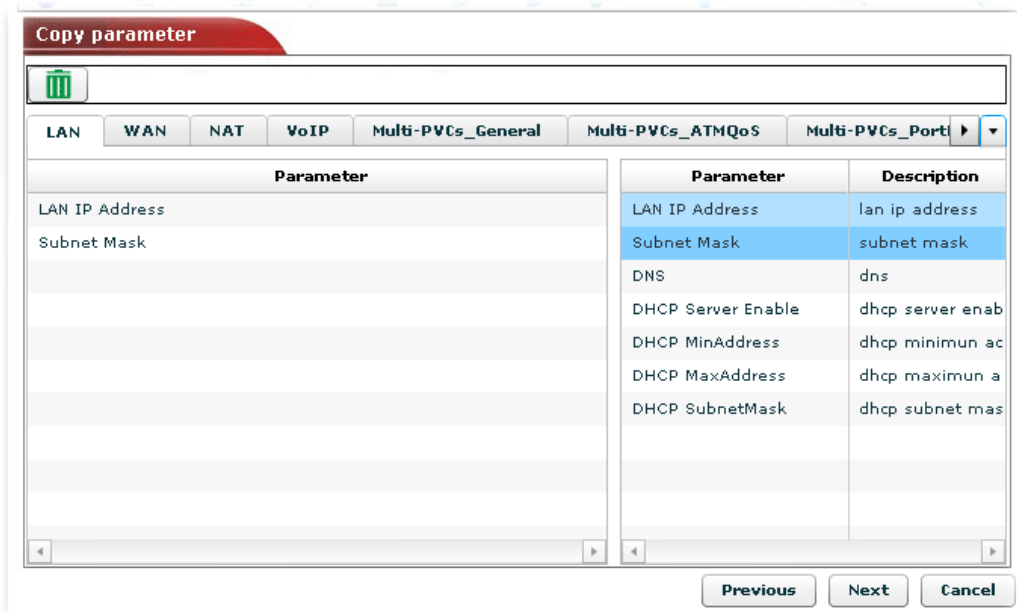
2. The following page will be shown. Set the corresponding settings and select devices from the tree view.

Available parameters for this function include:

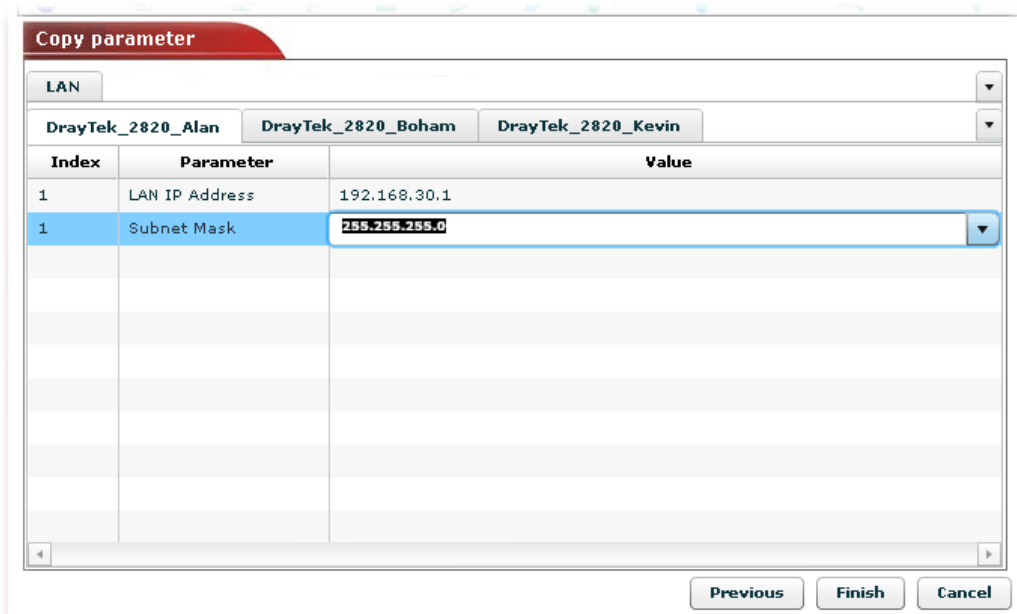
| Items | Description |
|-----------------------|---|
| Profile | Use the drop down list to choose a existing profile. Delete Profile – If the selected profile is not the one you want, click this button to remove the profile from VigorACS server. Save Profile – If you want to create a new profile for the job, check this box first. The, type a new name in the field of Name . |
| Model name | Use the drop down list to choose the model to perform the job. |
| Modem version | Some model might need to choose modem version. If yes, use the drop down list to select the one you need. |
| Copy time | Now – To perform the job immediately. Schedule – To specify a certain time to perform the job, choose this one and specify start day, start time and end time respectively. VigorACS will perform the job for the selected CPE (s) according to the schedule set here. Start day – Use the drop down calendar to specify the day you want to start the operation. Start time - Use the drop down menu to specify the hour and minutes you want to start the operation. End time - Use the drop down menu to specify the hour and minutes you want to finish the operation. |
| Select devices | Choose the device (CPE) that you want to do copying parameters. |

| Items | Description |
|-------|---|
| Next | Click it to access into next web page. If you do not choose any CPE, such button will not be available. |

- After specified the CPE to be applied with the parameters from the selected CPE, click **Next** to access into the following page. In this case, three devices are selected.



- From the above page, choose the parameters that you want to copy. In this case, **LAN IP Address** and **Subnet Mask** are selected. Click **Next**. The parameters with values will be displayed on the screen.



- Values will be displayed automatically. Such values are from the selected CPE under **Networks and Devices**. Note that the selected devices will be displayed with tabs respectively.

You can click every tab for every device for checking or modifying the parameters and values. If you want to modify any value, simply move and click your mouse on the value field.

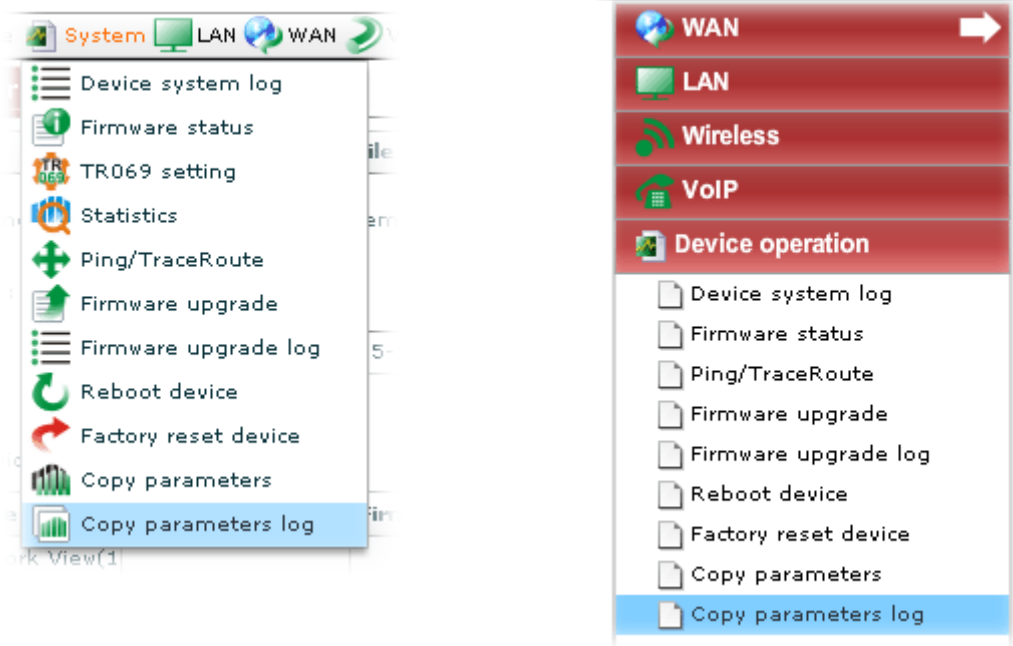
6. If you are satisfied with the settings, click **Finish**. Later, the following dialog will appear.



Checking the Copying Parameters Log

Only the operation that failed to copy parameters will be displayed in this page.




Please open **System>> Copying Parameters log** to check the log.



A screen of copy parameters log will be shown as follows:

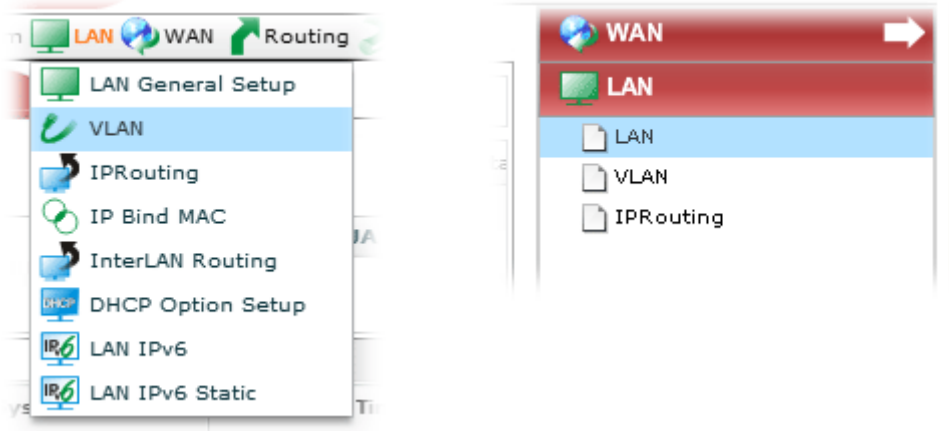
| Copy parameters log | | | |
|---------------------|------------|------------|----------|
| Time Type | Start Day | Start Time | End Time |
| Now | 2011-08-24 | 00:00 | 23:59 |
| Now | 2011-08-24 | 00:00 | 23:59 |
| | | | |
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Available parameters for this function include:

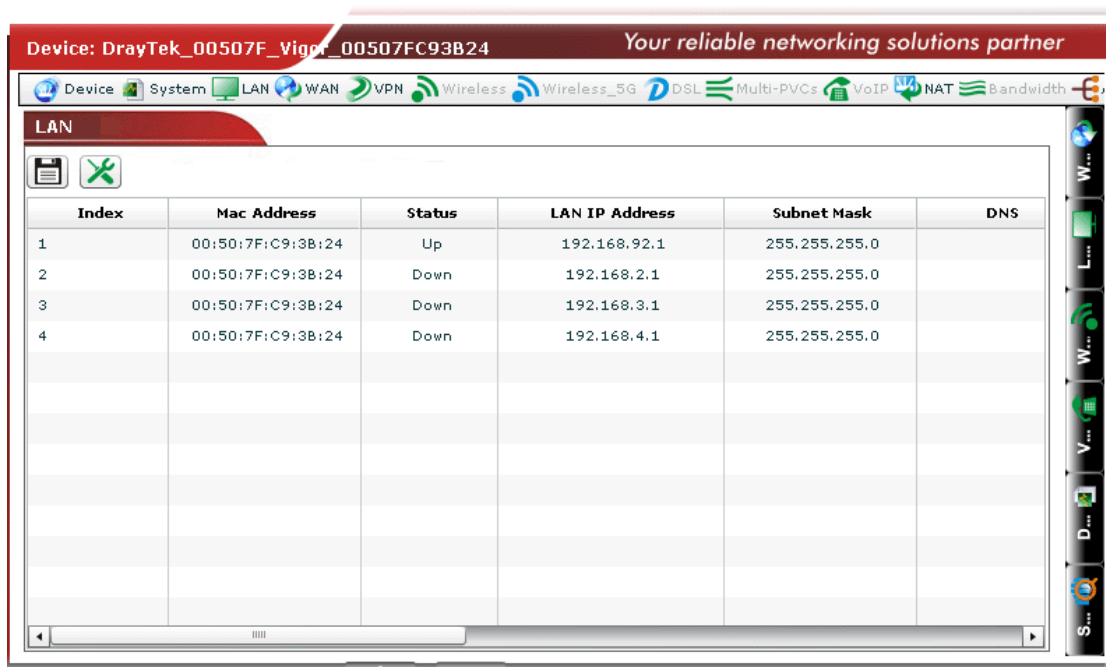
| Items | Description |
|--|---|
|  Detail | Such button will bring up another dialog and display detailed information for the selected CPE. |
|  Refresh | Click this button to refresh this page. |
|  Delete | Click this button to delete a selected record. |
| Time Type | Display the copy time specified on the Copy Parameters page. |
| Start Day | Display the start day specified on the Copy Parameters page. |
| Start Time | Display the start time specified on the Copy Parameters page. |
| End Time | Display the end time specified on the Copy Parameters page. |
| Status | No setting will be displayed in this field. It means no action done to the selected CPE yet. |
| Retry Number | Display the times of the copy parameters performed. |
| Time | Display the time that copy parameters are performed. |
| Username | Display the username that access into VigorACS for performing the copy parameters. |

6.2.4 LAN Settings for the Selected CPE

The administrator can check and edit LAN settings for the selected **CPE/group** if it is necessary to modify. Simply open **LAN>>LAN**.



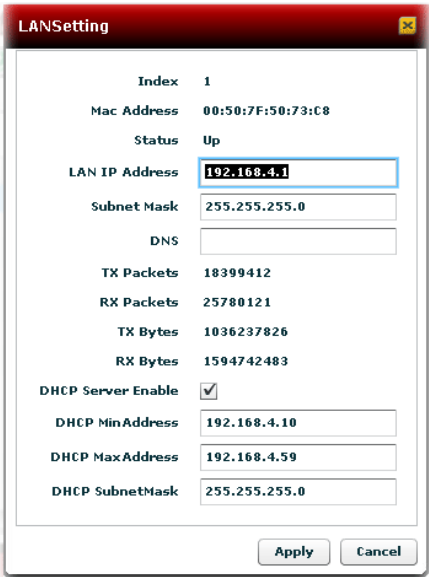


The following screen will appear with all of the LAN settings for the selected CPE/group.



Available parameters for this function include:

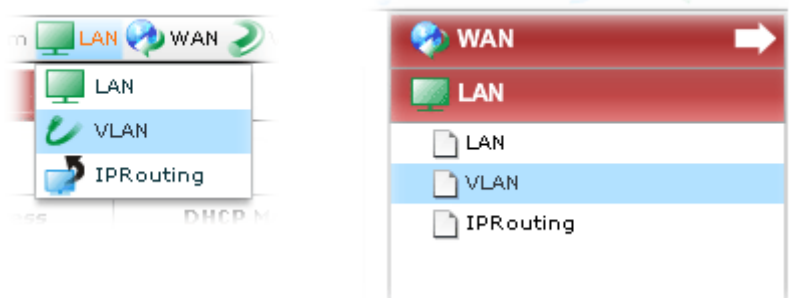
| Items | Description |
|-----------------------|--|
| Index | Display the index number of the CPE in current network group. |
| Mac Address | Display the MAC address of the CPE. |
| Status | Display current connection status for the selected CPE. “Up” means the CPE is controlled by VigorACS and runs well. “Down” means there is no data transmission/receiving on CPE. |
| LAN IP Address | Display the IP address of the CPE. Such value can be edited if required. |

| Items | Description |
|--|---|
| Subnet Mask | Display the subnet mask of the selected CPE. Such value can be edited if required. |
| DNS | Display the IP address of DNS server. Such value can be edited if required. |
| TX/RX Packets | Display the packets of data transmission/receiving. |
| TX/RX Bytes | Display the size of data transmission/receiving. |
| DHCP Server Enable | If the DHCP server is enabled, the word of “true” will be shown here. Otherwise, the word of “false” will appear. Such value can be edited if required. |
| DHCP MinAddress | Display the starting IP address for the range of DHCP server. Such value can be edited if required. |
| DHCP MaxAddress | Display the ending IP address for the range of DHCP server. Such value can be edited if required. |
| DHCP SubnetMask | Display the subnet mask for the DHCP server. Such value can be edited if required. |
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click this button to open a window for editing the parameters settings of the selected CPE. |
| |  |

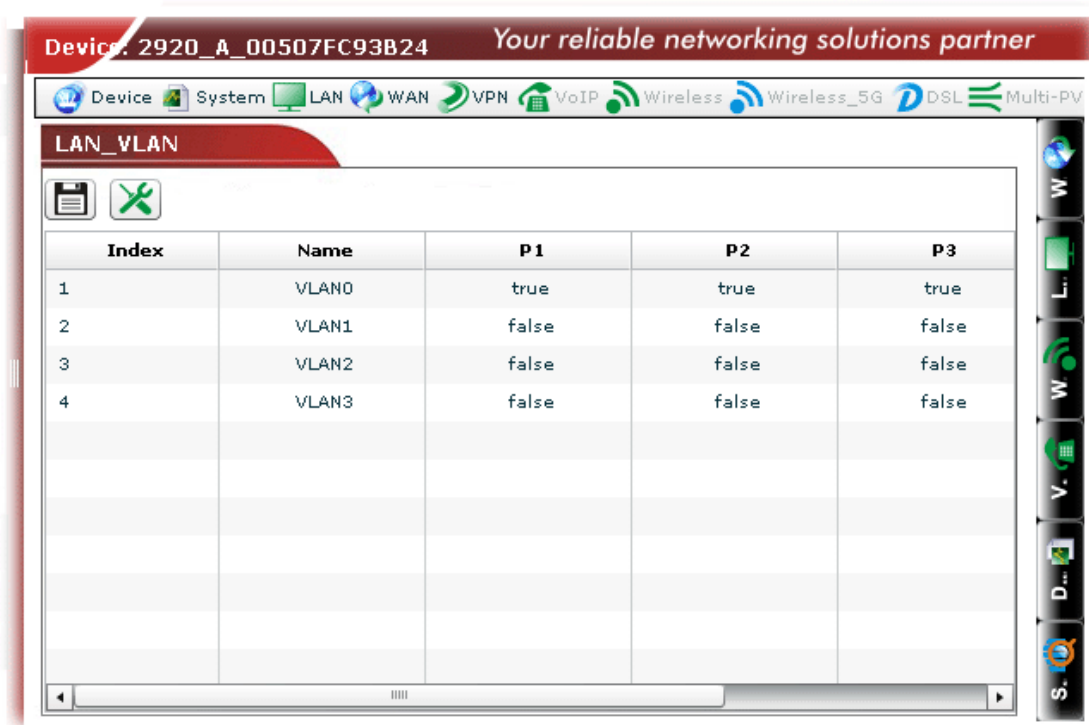
Checking and Editing VLAN Settings for the Selected CPE

WAN settings relate to access Internet for CPEs. If you want to change VLAN settings for specified CPE(s), please choose the device. And, open **LAN >>VLAN**.


Note: Only the CPE supporting VLAN feature can be modified by VigorACS. Otherwise, the system will display “Lack of required parameters”.


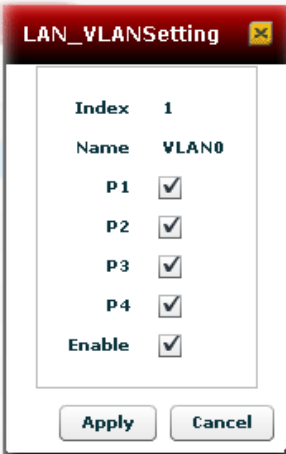


The following screen will appear with all of the VLAN settings for the selected CPE/group.



Available parameters for this function include:

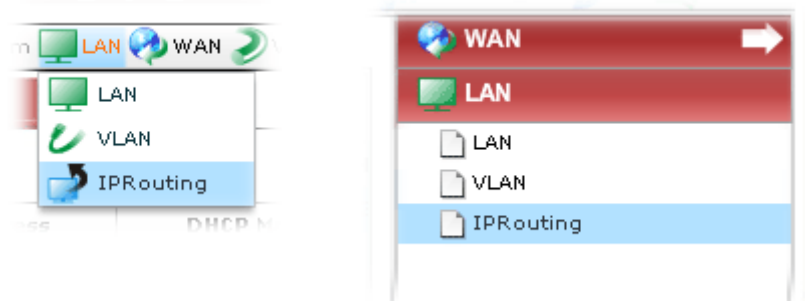
| Items | Description |
|---|--|
| Index | Display the index number of the CPE in current network group. |
| Name | Display the name of the VLAN group. |
| P1 – P3 | If the LAN port is selected for such VLAN, the corresponding field will display “true”. Otherwise, “false” will be display to indicate such port is not selected for the VLAN group. |
|  Save parameter setting | Click this button to save the parameters settings. |

| Items | Description |
|---|--|
|  Edit | <p>Click this button to open a window for editing the parameters settings of the selected VLAN group.</p>  |

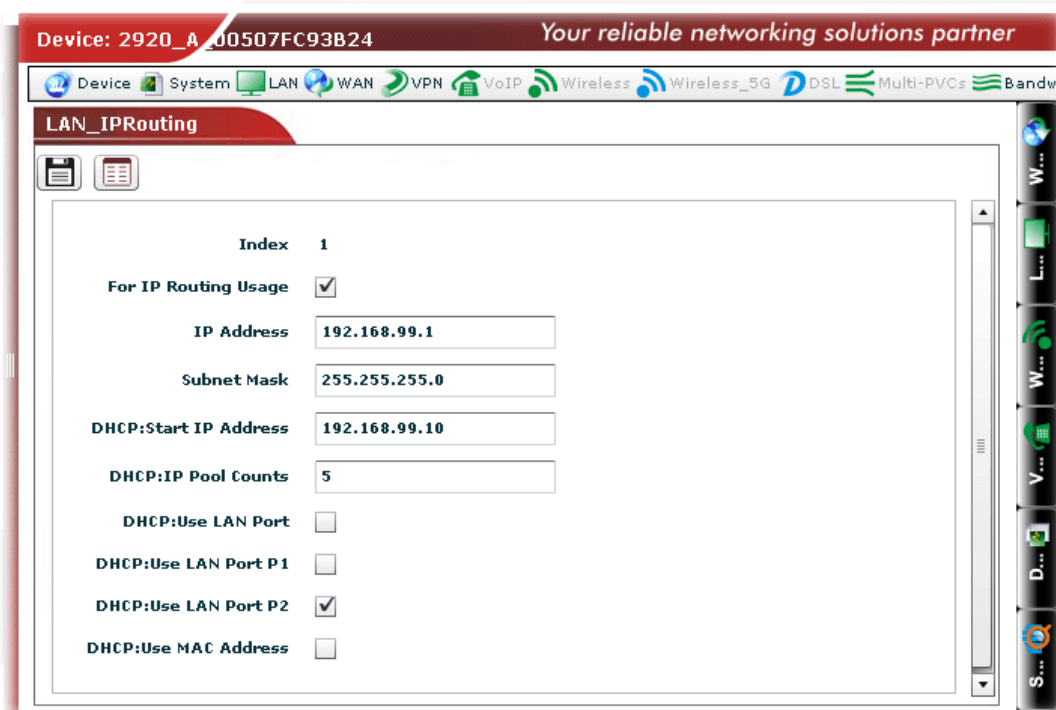
Checking and Editing IP Routing Settings for the Selected CPE

If you want to change IP route settings for specified CPE(s), please choose the device. And, open **LAN >>IPRouting**.



Note: Only the CPE supporting IP routing feature can be modified by VigorACS. Otherwise, the system will display “Lack of required parameters”.



The following screen will appear with all of the VLAN settings for the selected CPE/group.



Available parameters for this function include:

| Items | Description |
|---|---|
| Index | Display the index number of the CPE in current network group. |
| For IP Routing Usage | Check the box to enable such function. |
| IP Address | The original setting will be shown here. If you want to change it, simply re-type the IP address. |
| Subnet Mask | The original setting will be shown here. If you want to change it, simply re-type the subnet mask. |
| DHCP:Start IP Address | Such field defines the starting IP address of DHCP server. If you want to change it, simply re-type the IP address. |
| DHCP:IP Pool Counts | The original count number will be shown here. If you want to change the total number for IP assignment, simply re-type the value in this field. |
| DHCP:Use LAN Port/ DHCP:Use LAN Port P1/ DHCP :Use LAN Port P2 | Check (or uncheck) the box to change the port usage status. |
| DHCP :Use MAC Address | Check (or uncheck) the box to use the MAC address for IP routing. |
|  Save parameter setting | Click this button to save the parameters settings. |
|  Detail | Such button will bring up another dialog and display detailed information for the selected CPE. |

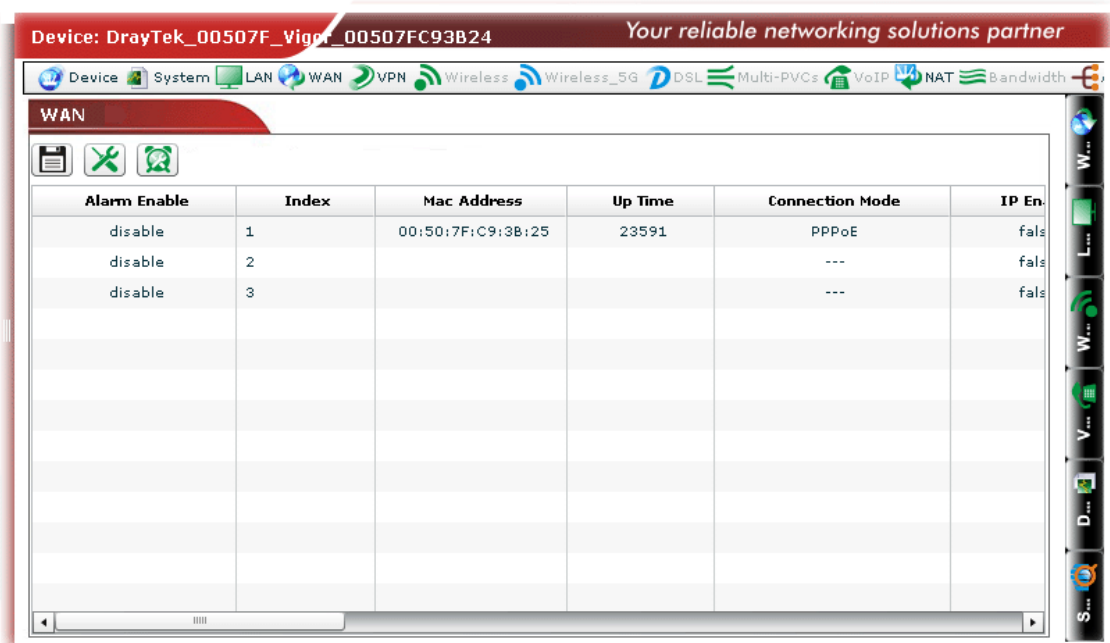
| Items | Description |
|-------|--|
| |  |

6.2.5 WAN Settings for the Selected CPE

WAN settings relate to access Internet for CPEs. If you want to change WAN settings for specified CPE(s), please choose the device. And, open **WAN >>WAN**.





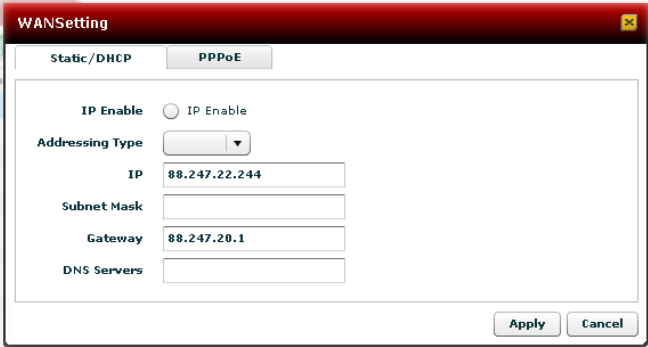


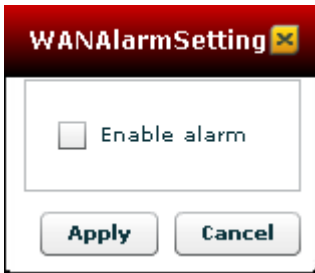
The following screen will appear with all of the WAN settings for the selected CPE/group.



Available parameters for this function include:

| Items | Description |
|---------------------|---|
| Alarm Enable | Display the activation status for alarm mechanism. |
| Index | Display the index number of the CPE in current network group. |
| Mac Address | Display the MAC address of the CPE. |

| Items | Description |
|--|--|
| Up Time | Display the up time for the connection of the CPE. |
| Connection Mode | Display the connection mode that such CPE used to access Internet. |
| IP Enable | Choose True or False to enable/disable IP address on Ethernet port. |
| Addressing Type | Display the connection type that the CPE used. Available types for such CPE can be seen from the drop down list. You can change the connection type if required. |
| IP | Display the WAN IP address of the CPE. Such value can be edited if required. |
| Subnet Mask | Display the subnet mask for the CPE. |
| Gateway | Display the gateway of the CPE. Such value can be edited if required. |
| DNS Servers | Display the DNS server used for the CPE. |
| PPP Enable | Choose True or False to enable/disable PPP connection. |
| PPP User Name | Display the user name of PPPoE connection. |
| PPP Password | Display the password of PPPoE connection. |
| Modem Type | Display the modem type (e.g., DSL, Broadband, etc..) of the CPE. |
| Link Status | Display current connection status for the selected CPE. "Up" means the CPE is controlled by VigorACS and runs well. "Down" means there is no data transmission/receiving on CPE. |
| Tx/Rx Bytes | Display the size of data transmission/receiving. |
| Tx/Rx Packets | Display the packets of data transmission/receiving. |
|  Save parameter settings | Click this button to save the parameters settings. |

| Items | Description |
|--|---|
|  Edit | <p>Click this button to open a window for editing the parameters settings of the selected CPE.</p>   |
|  Alarm | <p>Click this button to enable/disable the Alarm mechanism for such WAN.</p>  |

Checking WAN Status for the Selected CPE

WAN settings relate to access Internet for CPEs. For checking the status, open **WAN >> WAN Status**.



The following screen will appear with all of the WAN settings for the selected CPE/group.

Device: 2910_00507F_Vigor_00507F267257 Your reliable networking solutions partner

Device System LAN WAN VPN VoIP Wireless Wireless_5G DSL Multi-PVCs Bandwidth Firewall

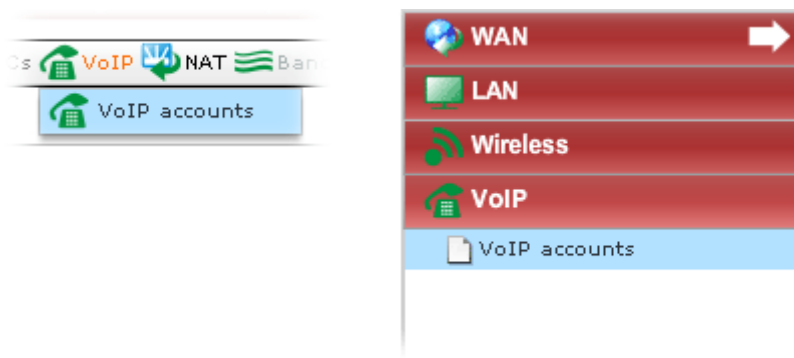
WAN_Status

| Index | Enable | Line | Name | Mode | Up Time | Signal |
|-------|--------|----------|------|-------------|---------|--------|
| 1 | Yes | Ethernet | | DHCP Client | 0:01:01 | |
| 2 | No | Ethernet | | --- | 0:00:00 | - |
| | | | | | | |
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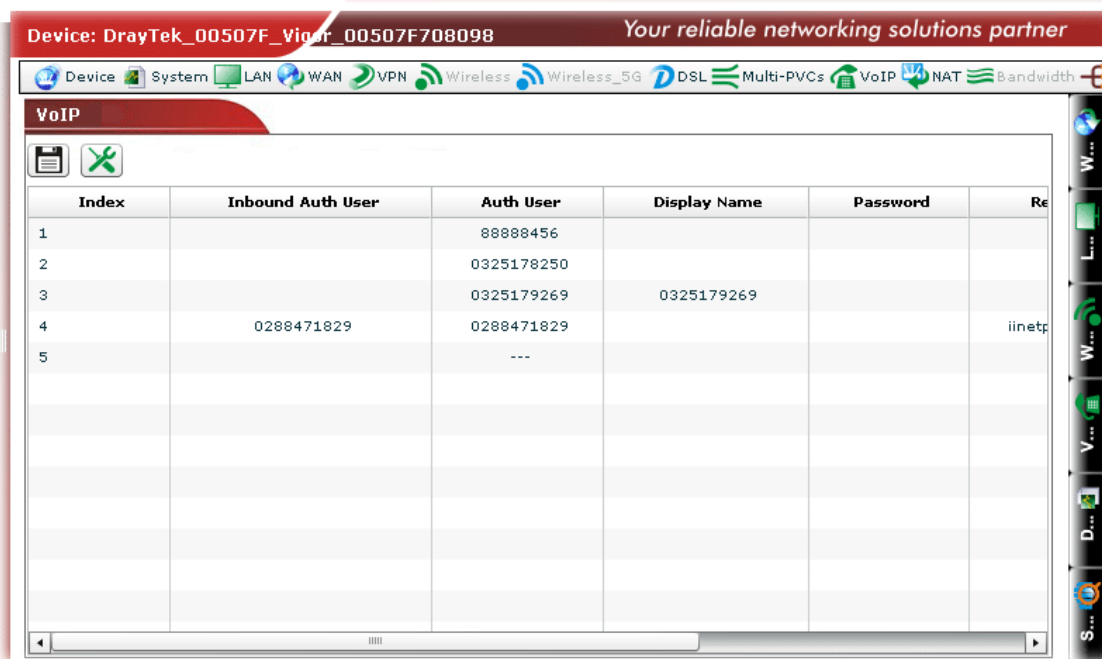
6.2.6 VoIP Settings for the Selected CPE

This page allows you to set VoIP configuration which maps with SIP accounts of the selected device.


Note: If the selected CPE doesn't support VoIP function, such menu will be invalid.





Click **VoIP>>VoIP accounts** to open the following screen.



Available settings for such feature will be shown as follows:

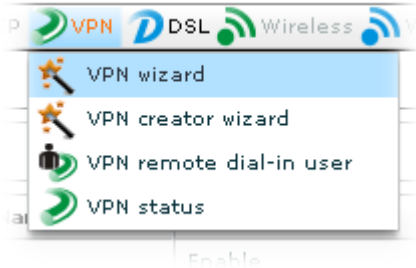
| Items | Description |
|---|--|
| Index | Display the index number of the CPE in current network group. |
| Inbound Auth User | Display the authentication ID which is specified by the web configuration page of the selected device. |
| Auth User | Display the account name/account number which is specified by the web configuration page of the selected device. |
| Display Name | Display the display name which is specified by the web configuration page of the selected device. |
| Password | Display the password which is specified by the web configuration page of the selected device. |
| Registrar Server | Display the IP address or domain name of the registrar server for such account. |
| Proxy Server | Display the IP address or domain name of the proxy server. |
| Register Via | Display the registration interface for such account. |
| Ring Port | Display the ring port for such VoIP account. |
|  Save parameter setting | Click this button to save the parameters settings. |

| Items | Description |
|---|---|
|  Edit | <p>Click this button to open a window for editing the parameters settings of the selected account</p>  <p>Inbound Auth User - Type the authentication ID which is specified by the web configuration page of the selected device.</p> <p>Auth User - Type the account name/account number which is specified by the web configuration page of the selected device.</p> <p>Display Name - Type the display name which is specified by the web configuration page of the selected device.</p> <p>Password –Type the password which is specified by the web configuration page of the selected device.</p> <p>Registrar Server –Type the IP address or domain name of the registrar server for such account.</p> <p>Proxy Server –Type the IP address or domain name of the proxy server.</p> <p>Register Via –Use the drop down list to choose the registration interface (including None, Auto, WAN1, WAN2, LAN_VPN, PVC) for such account.</p> <p>Ring Port - Choose the ring port (including Phone1, Phone2, Phone1, Phone2) for such VoIP account.</p> <p>Apply – Click it to save the settings.</p> <p>Cancel – Click it to exit the screen without saving any settings.</p> |

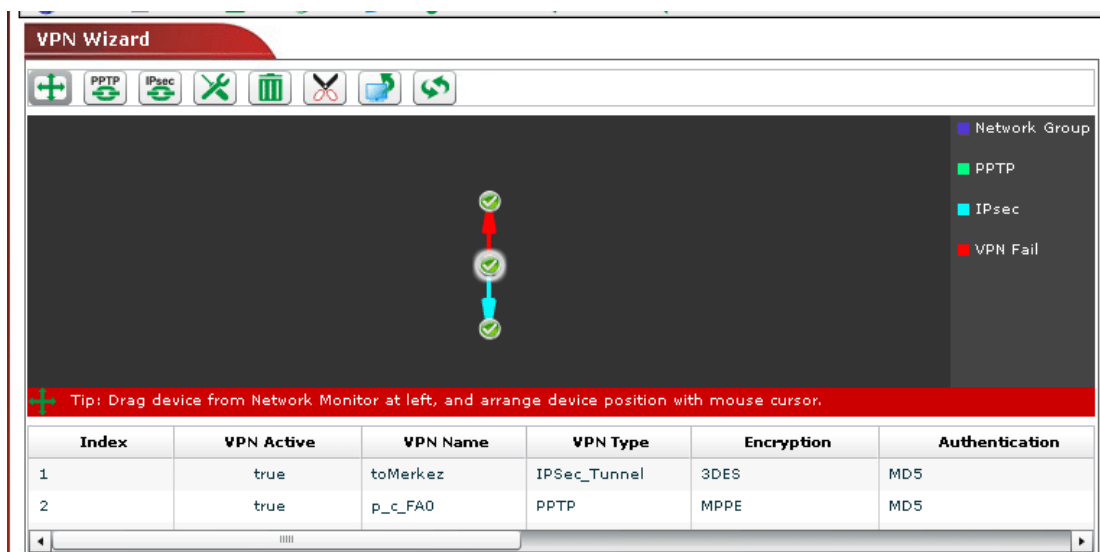
6.2.7 VPN Settings for the Selected CPE

VPN Wizard - Creating VPN Connection between Two CPEs





VigorACS offers an easy method to configure VPN settings for building VPN connection between two CPEs.




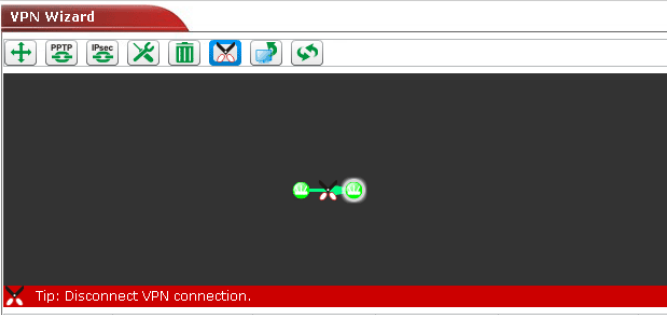





Open **VPN>>VPN wizard**, the following screen will appear.



Available settings for such feature will be shown as follows:

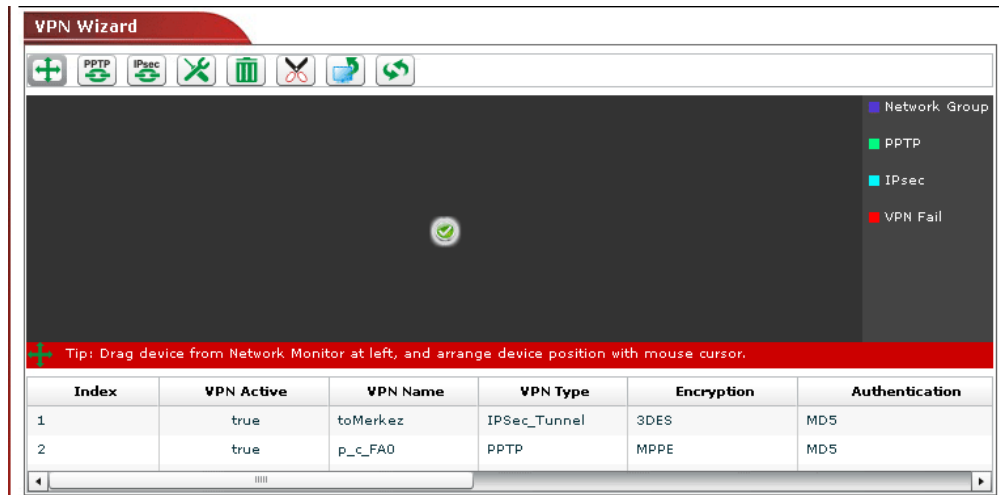
| Items | Description |
|---|---|
|  Add device... | Click this button to add a device for building VPN connection. If you do not click this button first, you can not drag any device from Network View . |
|  PPTP | To build a quick VPN connection with PPTP , simply click this button first and then drag the device from Network View to the black area. |
|  IPsec | To build a quick VPN connection with IPSec , simply click this button first and then drag the device from Network View to the black area. |
|  Advance Connection | To build a VPN connection with detailed configuration, click Advance Connection tool. For detailed information, please refer to the section of Building an Advanced VPN Connection later. |

| Items | Description |
|--|---|
| |  |
|  Remove the device.... | <p>Click this button to remove the selected device without VPN connection.</p> |
|  Disconnect | <p>To disconnect a VPN connection, Click this button and move the mouse cursor to the VPN connection that you want to disconnect. Notice that the mouse cursor will be transformed into a scissor.</p>  <p>If you press Enter, a confirmation dialog will appear. You can click Yes and the VPN connection will be cut off immediately.</p>  |
|  Change LAN IP Setting | <p>If there is LAN IP segment conflict in VPN connection, please select that device and click this button to change LAN IP setting.</p> |
|  Refresh VPN Wizard | <p>Click this button to reconnect both devices.</p> |

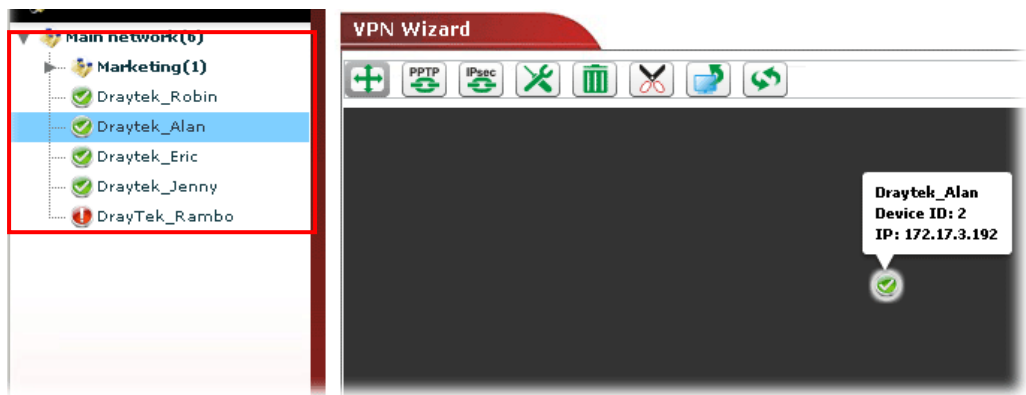
- **Building a Simple VPN Connection**

Please follow the steps to build a simple VPN connection.

10. Open **VPN>>WPN wizard**. You will get the following page. Selected CPE will be displayed in the middle of the screen. There is no VPN connection existed.



11. Open the **Networks and Devices** and expand the group folder as the following:

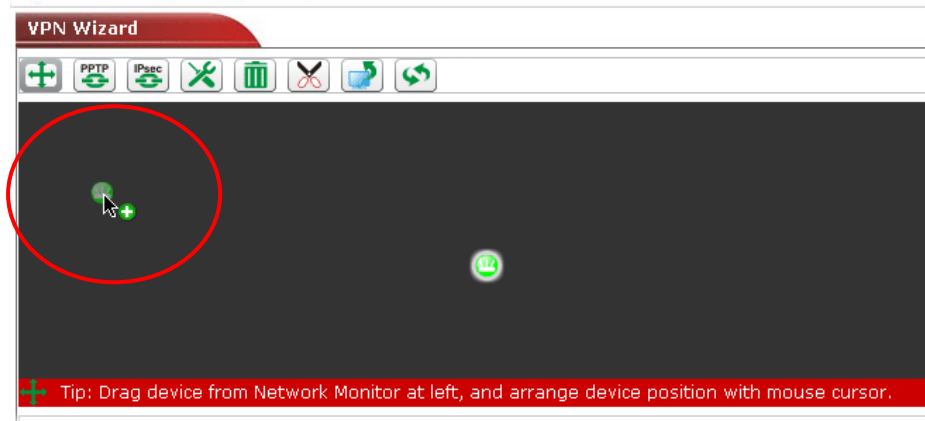


12. Click the **Add device** button.



Add device for VPN connection and topology arrangement

- Choose one device from the **Networks and Devices** that you want to build a VPN connection with the current selected device. **Drag** it from the **Networks and Devices** to the page of **Device Details**.



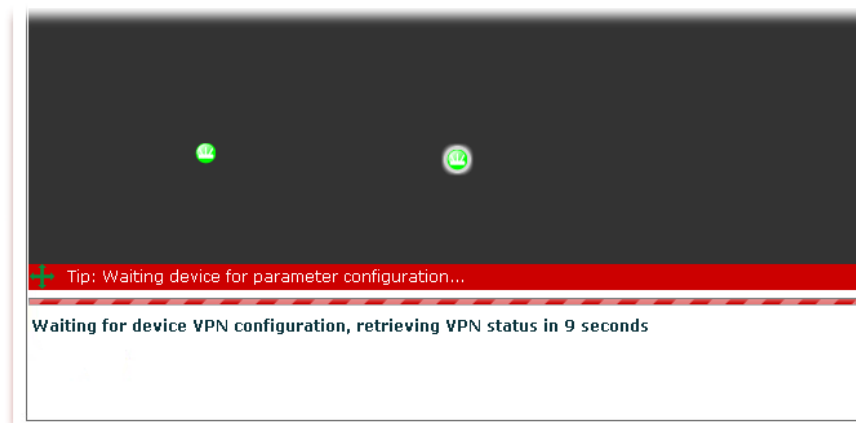
- If you want to build VPN connection through PPTP or IPSec, click the PPTP or IPSec icon first. Then, drag one of the devices to the other.



- A confirmation dialog will appear. Click **Yes**.



- Now, the system will configure parameters automatically between these two devices. Please wait patiently.

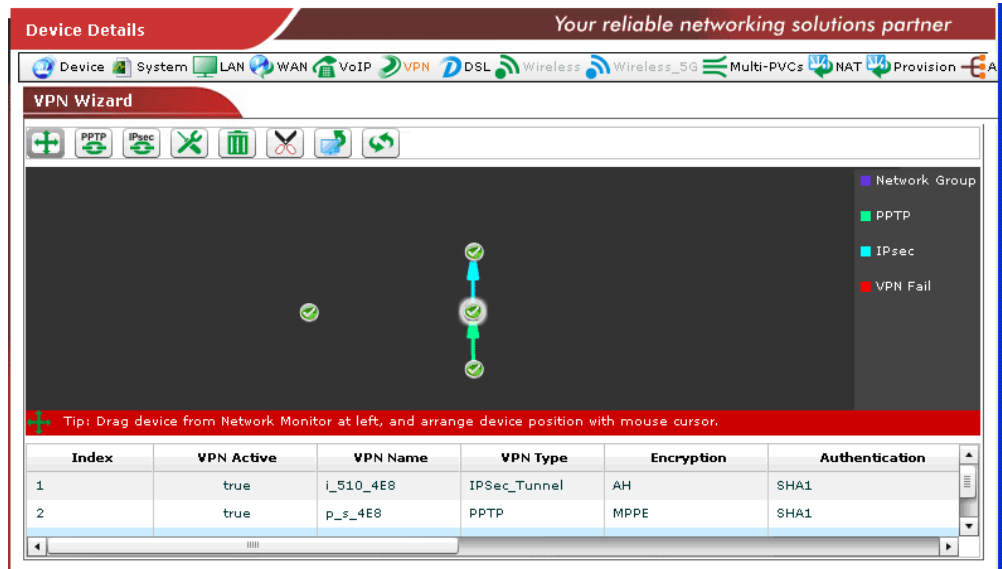


17. When the VPN connection has been done, an arrow will appear and indicate the direction between these two devices. VPN connection information also will be displayed below the black area.
18. Different colors for arrows represent different protocols used in VPN connections. Green means PPTP mode; blue means IPsec mode; and red means the VPN connection is failed.

- **Building an Advanced VPN Connection**

Please follow the steps to build an advanced VPN connection.

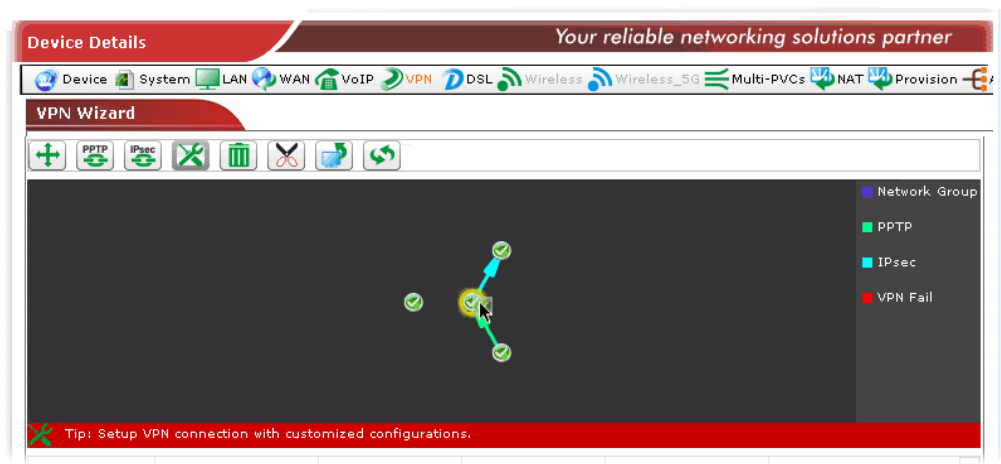
1. Open **VPN>>WPN wizard**. You will get the following page. Selected CPE will be displayed in the middle of the screen. No other device connects to it.



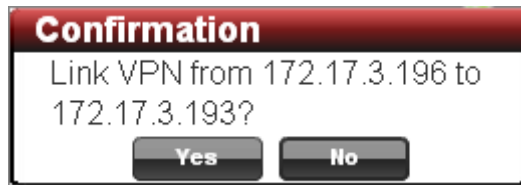
2. Click the **Advance connection** button.



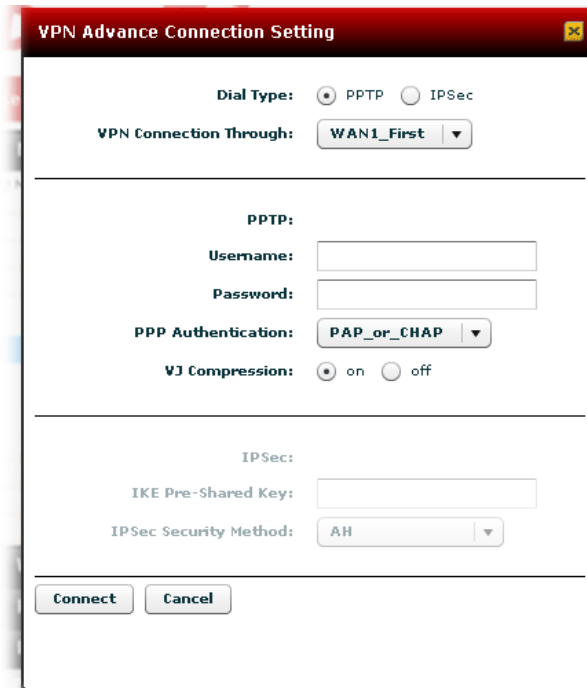
3. To build an advanced VPN connection through PPTP or IPsec, drag the selected CPE s to the one you want to build.



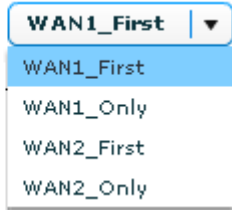
- A confirmation dialog will appear. Click **Yes**.

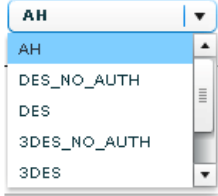


- A dialog appears as follows. Please set the corresponding parameters and settings manually and click **Connect**.



Available settings for such feature will be shown as follows:

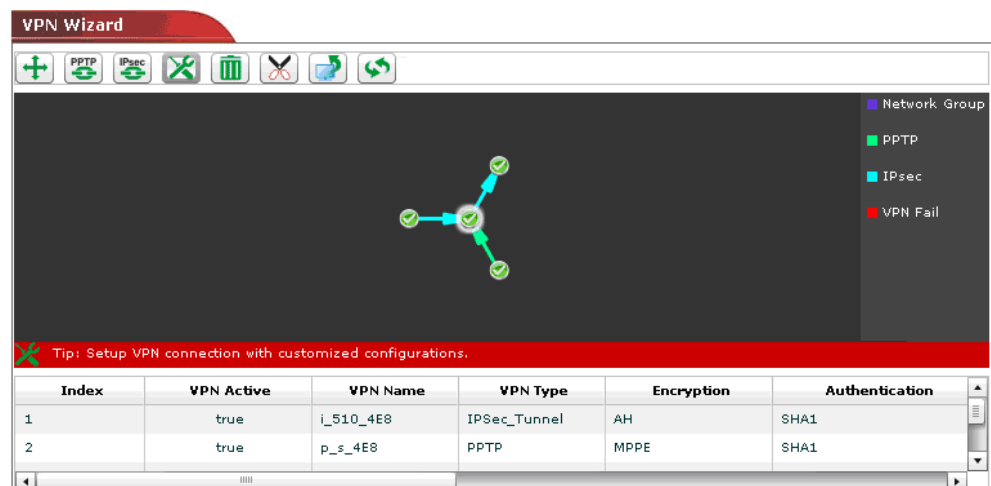
| Items | Description |
|-------------------------------|--|
| Dial Type | Choose PPTP or IPsec. Relational settings based on the type you choose will be displayed below |
| VPN Connection Through | Use the drop down list to choose one way for VPN connection. VPN Connection Through:  |
| PPTP | When you click PPTP as Dial Type, you have to fill the username and password, choose PPP Authentication and specify if VJ compression should be on or off for such connection. |

| Items | Description |
|-------|--|
| IPSec | <p>When you click IPSec as Dial Type, you have to type IKE Pre-Shared Key, and choose IPSec Security Method for such connection.</p> <p>IPSec Security Method: </p> |

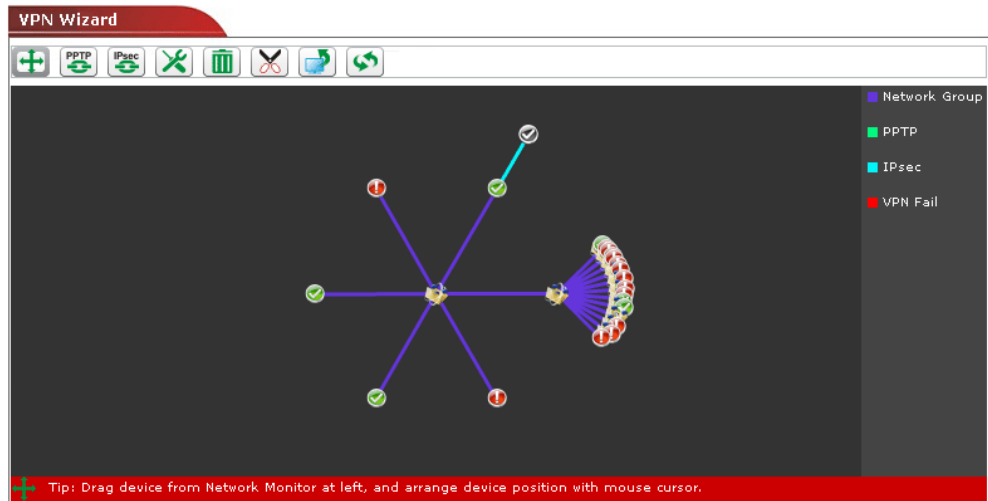
- Now, the system will configure parameters automatically between these two devices. Please wait patiently.




- When the VPN connection has been done, an arrow will appear and indicate the direction between these two devices. VPN connection information also will be displayed below the black area.



Note: Different colors for arrows represent different protocols used in VPN connections. Purple means Network Group; Green means PPTP mode; blue means IPSec mode; and red means the VPN connection is failed.



- **Changing LAN IP Setting**

If there is LAN IP segment conflict in VPN connection, you can change the LAN IP setting for the device and avoid the conflict. Choose the device on the screen and click  **Change LAN IP Setting**. The following dialog will appear.

LAN IP Setting: Draytek_Robin

Device ID: 1

Device IP: 172.17.3.191

LAN IP:

Subnet mask:

DHCP server enable:

Start IP:

End IP:

Gateway:

Force DNS manual setting:

Primary IP:

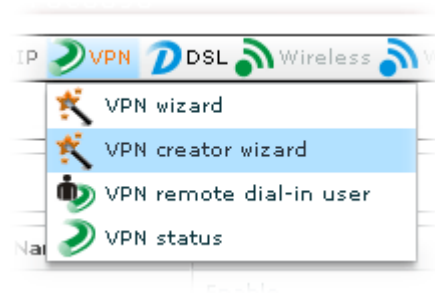
Available settings for such feature will be shown as follows:

| Items | Description |
|------------------|---|
| Device ID | Display the identification number of the selected device (CPE). |
| Device IP | Display the WAN IP address of the selected device (CPE). |

| Items | Description |
|---------------------------------|--|
| LAN IP | Display the LAN IP address of the selected device. You can change it with another IP address to avoid the conflict. |
| Subnet mask | Display the subnet mask of the selected device. You can change it if required. |
| DHCP server enable | DHCP server has been activated. If you uncheck this box, you have to specify static IP address for the selected device. |
| Start IP | Type the starting IP address for the range that DHCP server can utilize. |
| End IP | Type the ending IP address for the range that DHCP server can utilize. |
| Gateway | Type the gateway address of the selected device. |
| Force DNS manual setting | Check this box to force Vigor router using DNS servers in this page instead of DNS servers given by the Internet access server (PPPoE, PPTP, L2TP or DHCP server). |
| Primary IP (DNS) | Specify a DNS server IP address here for the ISP should provide you with usually more than one DNS Server. If your ISP does not provide it, the router will automatically apply default DNS Server IP address: 194.109.6.66 to this field. |
| Change LAN IP | When you finish the modification, click this button to save the configuration and exit this dialog. |

VPN Creator Wizard - Creating LAN to LAN VPN Connection




To create a LAN to LAN connection for the selected CPE, choose **VPN creator wizard**. You can create up to 32 profiles for such CPE.

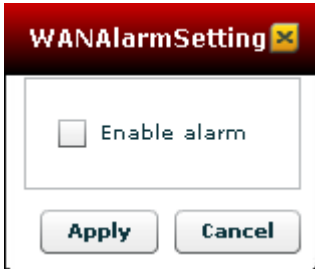


Open **VPN>>VPN creator wizard**, the following screen will appear.





Available settings for such feature will be shown as follows:

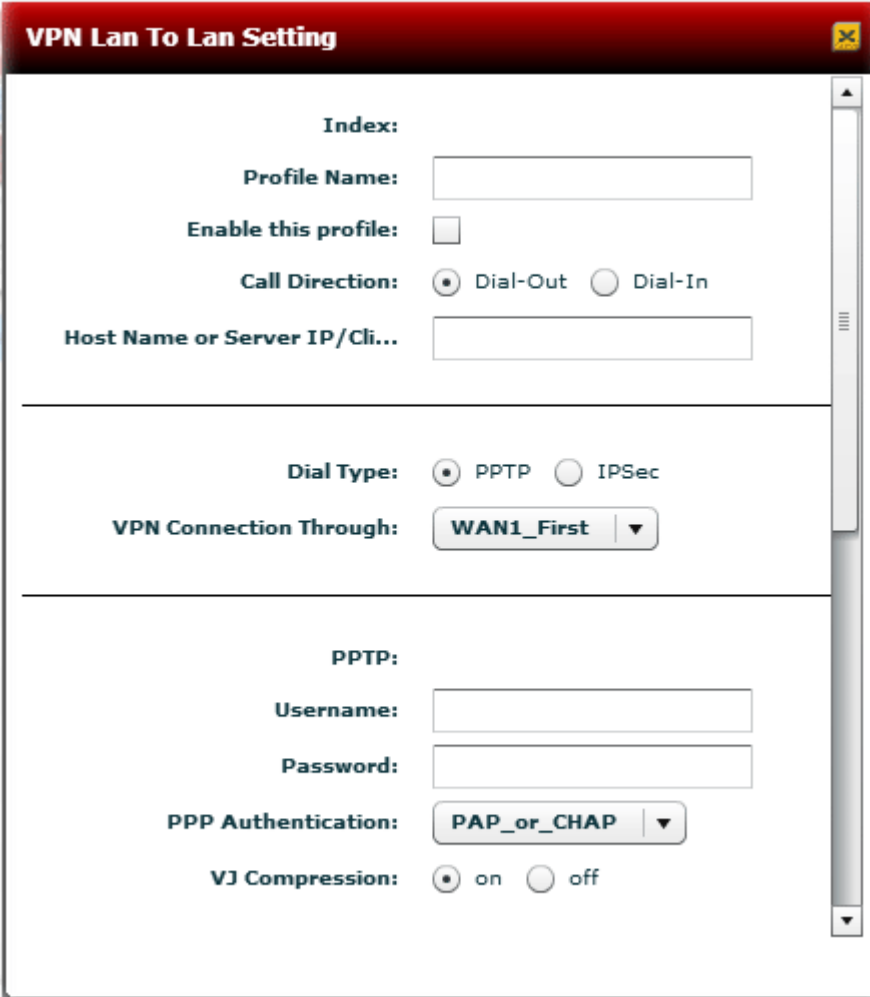
| Items | Description |
|--|--|
| Alarm Enable | Display the activation status for alarm mechanism. |
| Index | VigorACS SI allows you to create up to 32 index numbers (profiles). |
| Name | Display the name of the LAN-to-LAN profile. |
| Status | Display if such profile is enabled or disabled for such CPE. |
|  Detail | Click this button to edit the selected VPN profile or click it to add a new VPN profile. |
|  Refresh | Click this button to refresh current page. |
|  Alarm | Click this button to enable/disable the Alarm mechanism for such WAN. |

| Items | Description |
|-------|--|
| |  <p>The dialog box titled 'WANAlarmSetting' contains a checkbox labeled 'Enable alarm' which is currently unchecked. Below the checkbox are two buttons: 'Apply' and 'Cancel'.</p> |

- **Adding/Editing a new LAN-to-LAN VPN Profile**

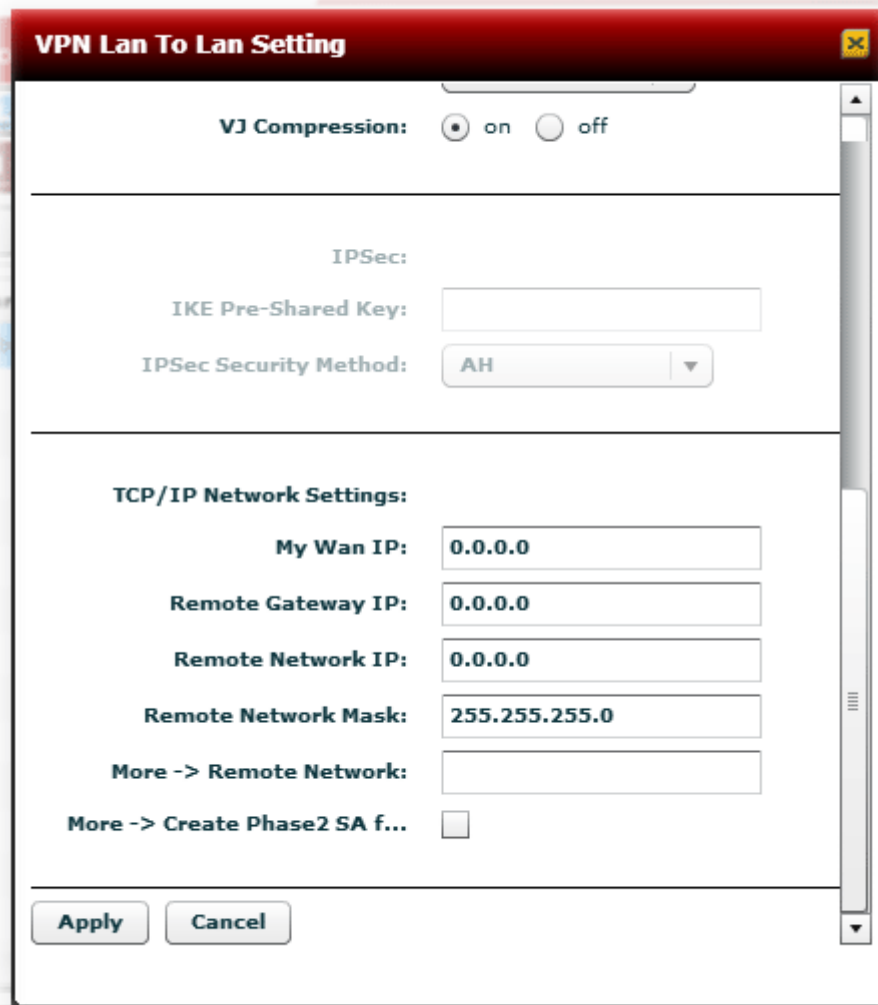
To add a new LAN-to-LAN VPN profile, simply choose the one with the name (???) and click the **Detail** button .

To modify a VPN profile, choose one of the profile names from the list and click the **Detail** button . The following dialog will appear. You can modify the LAN to LAN settings to fit your necessity.



The 'VPN Lan To Lan Setting' dialog box is divided into three sections:

- Index:**
 - Profile Name:** [Text input field]
 - Enable this profile:**
 - Call Direction:** Dial-Out Dial-In
 - Host Name or Server IP/Cli...** [Text input field]
- Dial Type:** PPTP IPSec
- VPN Connection Through:** [Dropdown menu showing 'WAN1_First']
- PPTP:**
 - Username:** [Text input field]
 - Password:** [Text input field]
 - PPP Authentication:** [Dropdown menu showing 'PAP_or_CHAP']
 - VJ Compression:** on off



Available settings for such feature will be shown as follows:

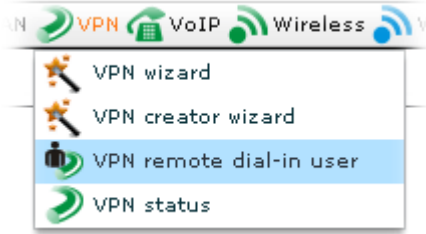
| Items | Description |
|--|--|
| Profile Name | Display the profile name. Modify it if it is required. |
| Enable this profile | Check the box to enable such profile. |
| Call Direction | Specify which direction that such profile will use Dial-In or Dial-Out. |
| Host Name or Server IP /Client IP | Type the IP address for the server / client or the host name. |
| Dial Type | Click the radio button to specify the dial type. |
| VPN Connection Through | Use the drop down list to choose one way for VPN connection. VPN Connection Through: <div style="border: 1px solid black; padding: 2px; margin-top: 5px;"> WAN1_First ▾ WAN1_First WAN1_Only WAN2_First WAN2_Only </div> |

| Items | Description |
|--------------------------------|--|
| PPTP | When you click PPTP as Dial Type, you have to fill the username and password, choose PPP Authentication and specify if VJ compression should be on or off for such connection. |
| IPSec | When you click IPSec as Dial Type, you have to type IKE Pre-Shared Key, and choose IPSec Security Method for such connection. |
| TCP IP Network Settings | <p>My WAN IP – Specify the WAN IP address for the selected CPE.</p> <p>Remote Gateway IP – Specify the IP address for the remote client.</p> <p>Remote Network IP – Specify the IP address for the remote server.</p> <p>Remote Network Mask – Specify the network mask for the remote server.</p> <p>More->Remote Network – Specify additional IP address and subnet mask for the remote server.</p> <p>More - >Create Phase2 SA Function – Check the box to enable the Phase2 SA function.</p> |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Click **Apply** to save the configuration and exit such window.

Creating Remote Dial-in User Profile for VPN Connection



The administrator can manage remote access by maintaining a table of remote user profile, so that users can be authenticated to dial-in via VPN connection. The administrator may set parameters including specified connection peer ID, connection type (VPN connection - including PPTP, IPSec Tunnel, and L2TP by itself or over IPSec) and corresponding security methods, etc.



Open **VPN>>VPN remote dial-in user**, the following screen will appear.




Available settings for such feature will be shown as follows:

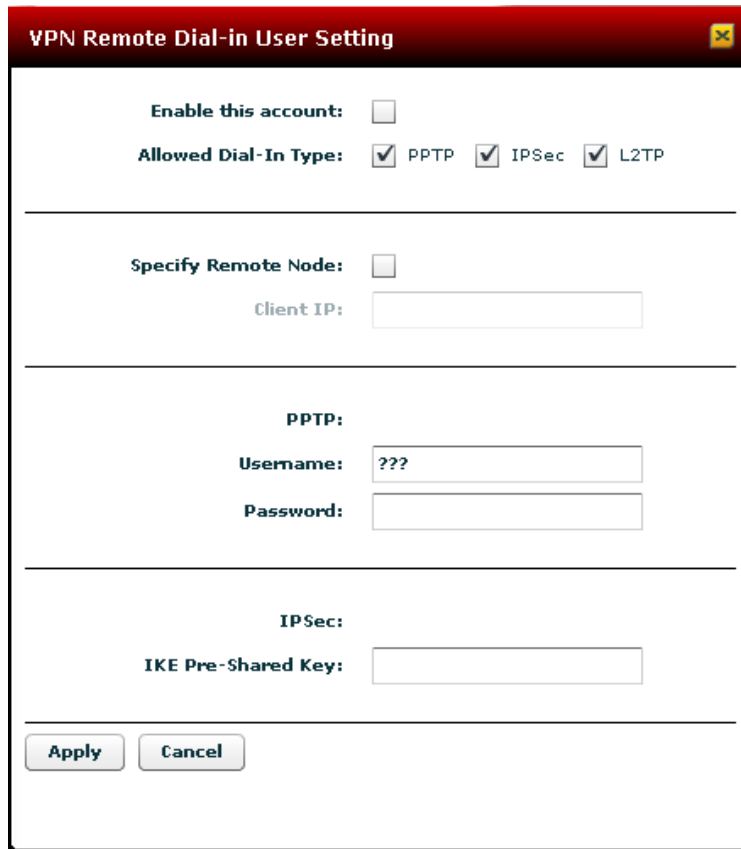
| Items | Description |
|--|--|
|  Detail | Click this button to edit the selected profile or click it to add a new profile. |
|  Refresh | Click this button to refresh current page. |
| Index | VigorACS SI allows you to create up to 32 index numbers (profiles). |
| User | Display the name of the remote dial-in profile. |
| Status | Display if such profile is enabled or disabled for such CPE. |

- **Adding/Editing a new Remote Dial-in User Profile**

To add a new remote dial-in profile, simply choose the one with the name (???) and click the

Detail button .

To modify a selected profile, choose one of the profile names from the list and click the **Detail** button . The following dialog will appear. You can modify the settings to fit your necessity.



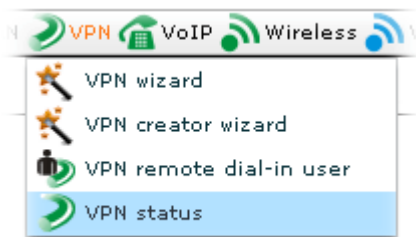
Available settings for such feature will be shown as follows:

| Items | Description |
|----------------------------|---|
| Enable this account | Click it to enable such account. |
| Allow Dial-in Type | Allow the remote dial-in user to make a PPTP/IPSec/L2TP VPN connection through the Internet. You should set the User Name and Password of remote dial-in user below. |
| Specify Remote Node | You can specify the IP address of the remote dial-in user if you check this box. If you want to build a VPN that all the IP address can connect through the router. Do not check the box. |
| Client IP | Type the IP address of the remote client that is allowed to pass through VPN connection. |
| PPTP | Username – This field is applicable when you select PPTP policy above. Password – This field is applicable when you select PPTP policy above. |
| IPSec | IKE Pre-Shared Key - Type in the required characters (1-63) as the pre-shared key if IPSec is selected as Allow Dial-in Type . |

| Items | Description |
|---------------|--|
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Checking VPN Connection Status

VPN Status displays VPN name, remote IP address, virtual network address, VPN type, VPN Active, encryption, authentication, transmission packets, transmission bytes, receiving packets, receiving rate, and connection time for the selected CPE.



Open **VPN>>VPN status**, the following screen will appear.

VPN Status

| Add | Index | VPN Name | RemoteIP | VirtualNetwork | VPN Type |
|-----|-------|----------|---------------|----------------|--------------|
| | 1 | toMerkez | 78.186.22.249 | 192.168.0.0/24 | IPSec_Tunnel |
| | 2 | p_c_FA0 | 88.247.22.34 | 192.168.2.0/24 | PPTP |

VPN Monitor

| Profile Name | Remote IP |
|--------------|-----------|
| | |
| | |

Available settings for such feature will be shown as follows:

| Items | Description |
|-----------------------|--|
| Add to monitor | Make the selected VPN tunnel to be monitored and display in the field of VPN Monitor. Choose any one of the CPEs (or profiles) and click Add to monitor button to make the selected one to be monitored by VigorACS. |
| Index | Display the number of the VPN tunnel. |
| VPN Name | Display the VPN profile name that created by using VPN Wizard or VPN creator wizard . |
| Remote IP | Display the IP address that the VPN tunnel connected. |

| Items | Description |
|------------------------|--|
| Virtual Network | Display the private IP address with subnet mask. |
| VPN Type | Display the connection type used by such VPN tunnel. |
| VPN Active | Display the status of such VPN tunnel. “ true ” means the VPN tunnel has be connected; “ false ” means the VPN tunnel has be disconnected. |
| Encryption | Display the method for encryption used by such VPN tunnel. |
| Authentication | Display the mode for authentication used by such VPN tunnel. |
| Tx Packets | Display the packet size of the transmitted data. |
| Tx Bytes | Display the size of the transmitted data. |
| Rx Packets | Display the packet size of the received data. |
| Rx Rate | Display the receiving rate for data receiving. |
| Up Time | Display the connection time for such VPN tunnel. |

Monitoring VPN Tunnel

In the **VPN Status** page, basic information for each VPN tunnel will be shown on the screen. However, if you want to check the total traffic of VPN tunnel, you have to do the job of VPN Monitor.

VPN Status

| Add | Index | VPN Name | RemoteIP | VirtualNetwork | VPN Type | V |
|-----|-------|-----------|--------------|-----------------|--------------|------|
| | 1 | i_4EB_510 | 172.17.5.192 | 192.168.20.0/24 | IPSec_Tunnel | true |
| | 2 | i_4EB_4E0 | 172.17.5.191 | 192.168.10.0/24 | IPSec_Tunnel | true |
| | 3 | i_4EB_620 | 172.17.5.195 | 192.168.50.0/24 | IPSec_Tunnel | true |

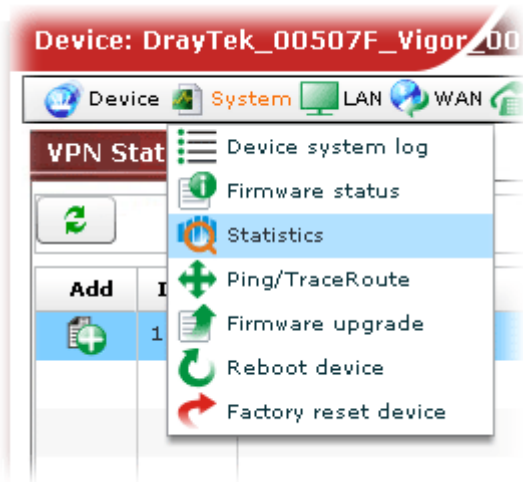
VPN Monitor

| Profile Name | Remote IP |
|--------------|--------------|
| i_4EB_4E0 | 172.17.5.191 |
| i_4EB_510 | 172.17.5.192 |
| i_4EB_620 | 172.17.5.195 |

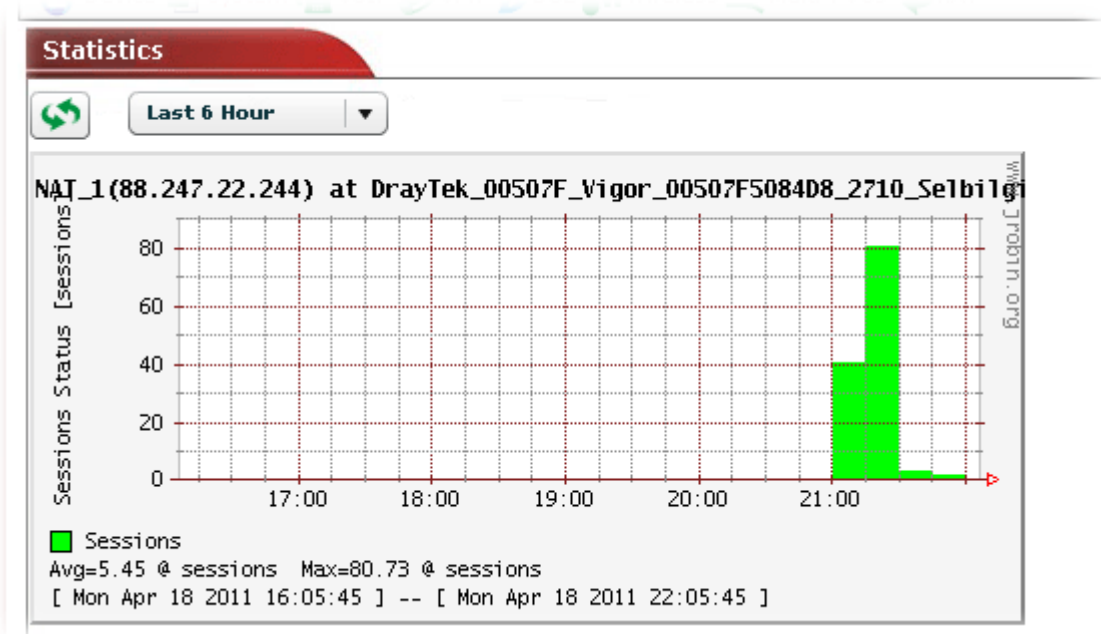
Available settings for such feature will be shown as follows:

| Items | Description |
|---------------------|---|
| Name | Display the name of the profile. |
| Profile Name | Display the name listed in VPN Name field. |
| Remote IP | Display the IP address that the VPN tunnel connected. |

Choose the VPN tunnel(s) (in this case, p_c_FA0 and toMerkez are selected) that you want to monitor and click the **Add to monitor** icon. Next, open **System >> Statistics**.



The statistics for the above three profiles will be displayed on the screen as shown below.



6.2.8 DSL Settings for the Selected CPE

This page display DSL settings for the selected CPE. You can modify the settings if required.

Note: If the selected CPE is not a DSL router, such menu will be invalid.



Open **DSL>>DSL**, the following screen will appear.

DSL

Save parameter settings

Index 1

ADSL Status Up

ADSL Operation Mode Multimode

Download Speed 7488

Upload Speed 800

SNR Margin 13

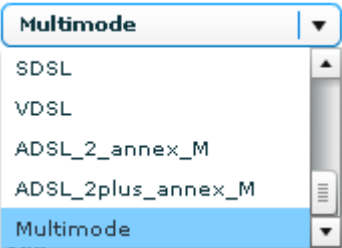
Loop Attenuation 190

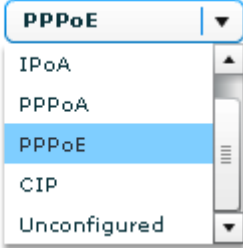
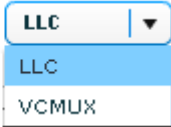
Protocol PPPoE

PVC:VPI/VCI PVC:8/35

User Name ergpancar@ttnet

Available settings for such feature will be shown as follows:

| Items | Description |
|----------------------------|--|
| Save parameter settings | Click this button to save the parameters settings. |
| Index | Display the index number of the CPE in current network group. |
| ADSL Status | Display current connection status for the selected CPE. “Up” means the CPE is controlled by VigorACS and runs well. “Down” means there is no data transmission/receiving on CPE. |
| ADSL Operation Mode | Specify the type of DSL module used on the interface associated with connection.  |
| Download Speed | Display the download speed of the selected CPE. |
| Upload Speed | Display the upload speed of the selected CPE. |
| SNR Margin | Display the quality of SNR (signal to noise ratio). The higher the SNR Margin is, the better the connection speed is. |
| Loop Attenuation | Display the loss of signal over distance. Many factors will influence the value of loop attenuation. The lower the value is, the better the connection speed is. |

| Items | Description |
|---------------------------|---|
| Protocol | <p>Select an IP mode for the WAN interface of the selected CPE.</p>  |
| PVC:VPI/VCI | <p>VPI stands for Virtual Path Identifier. It is an 8-bit header inside each ATM cell that indicates where the cell should be routed. The ATM, is a method of sending data in small packets of fixed sizes. It is used for transferring data to client computers.</p> <p>VCI stands for Virtual Channel Identifier. It is a 16-bit field inside ATM cell's header that indicates the cell's next destination as it travels through the network. A virtual channel is a logical connection between two end devices on the network.</p> |
| User Name | Type a user name for the selected Protocol such as PPPoE, PPPoA and so on. |
| Password | Type a password for the selected Protocol such as PPPoE, PPPoA and so on. |
| CRC Errors | Display the CRC (Cycle Redundancy Check) error of your hardware. |
| ATU CRC Errors | Display the ATU CRC (Cycle Redundancy Check) error of your hardware. |
| Encapsulating Type | <p>Drop down the list to choose the type provided by ISP.</p>  <p>Available types will be changed according to the model (CPE) you select.</p> |

6.2.9 Wireless Settings for the Selected CPE

This page displays wireless settings for the selected CPE. You can modify the settings if required.

Note: If the selected CPE does not support wireless function, such menu will be invalid.



General Setting for Wireless Connection

This page allows you to enable the wireless LAN connection for the selected CPE; specify different wireless mode; change wireless channel and invoke the Long Preamble function for the selected CPE.

Open **Wireless>>General**, the following screen will appear.

Wireless_General

Index 1

Wireless LAN Enable

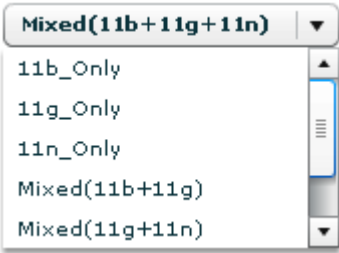
Mode Mixed(11b+11g+11n) ▼

Channel Channel_6,2437MHz ▼

Long Preamble

Available settings for such feature will be shown as follows:

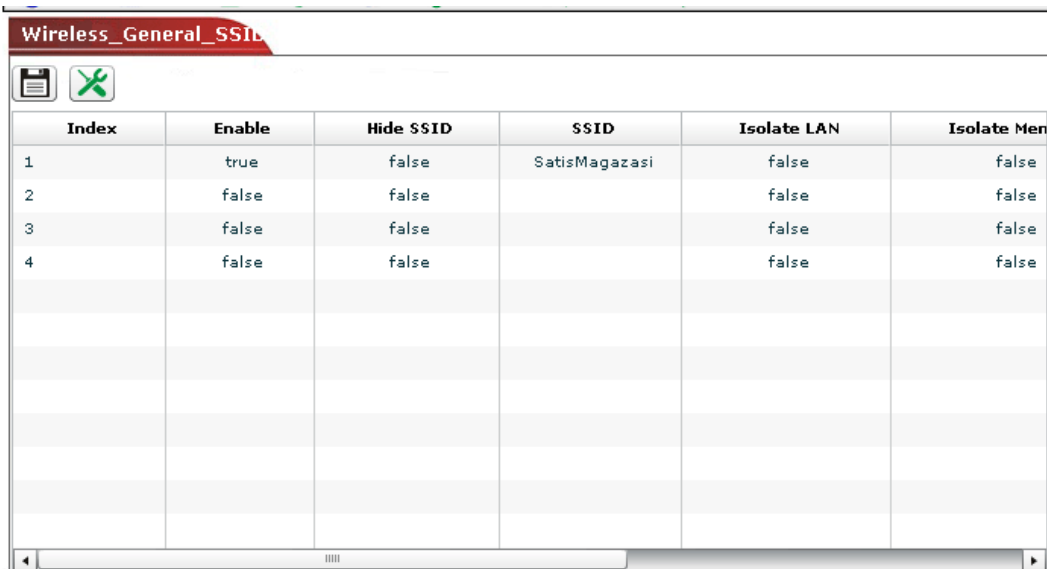
| Items | Description |
|----------------------------|---|
| Index | Display the index number of the CPE in current network group. |
| Wireless LAN Enable | Click it to enable the wireless LAN function for such CPE. |
| Mode | Choose the wireless mode for such CPE. |

| Items | Description |
|----------------------|---|
| |  |
| Channel | Means the channel of frequency of the wireless LAN. The default channel is 6. You may switch channel if the selected channel is under serious interference. If you have no idea of choosing the frequency, please select Auto to let system determine for you. |
| Long Preamble | This option is to define the length of the sync field in an 802.11 packet. Most modern wireless network uses short preamble with 56 bit sync field instead of long preamble with 128 bit sync field. However, some original 11b wireless network devices only support long preamble. Check it to use Long Preamble if needed to communicate with this kind of devices. |

General SSID Setting for Wireless Connection



This page allows you to configure SSID for the selected CPE.

Open **Wireless>>General SSID**, the following screen will appear.




| Index | Enable | Hide SSID | SSID | Isolate LAN | Isolate Men |
|-------|--------|-----------|---------------|-------------|-------------|
| 1 | true | false | SatisMagazasi | false | false |
| 2 | false | false | | false | false |
| 3 | false | false | | false | false |
| 4 | false | false | | false | false |

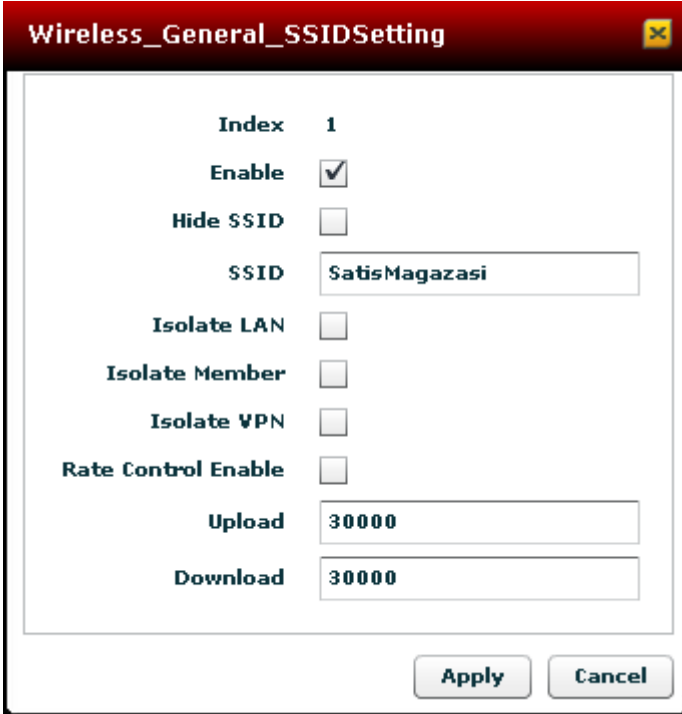
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |

| Items | Description |
|----------------------------|--|
| Index | Display the index number of the profile in current network group. |
| Enable | Display if such profile is enabled (true) or not (false). |
| Hide SSID | Display if the SSID of such profile is hidden (true) or not (false). |
| SSID | Display the SSID of the wireless profile. |
| Isolate LAN | Display if such function is enabled (true) or not (false). |
| Isolate Member | Display if such function is enabled (true) or not (false). |
| Isolate VPN | Display if such function is enabled (true) or not (false). |
| Rate Control Enable | Display if such function is enabled (true) or not (false). |
| Upload | Display the transmitting rate for data upload. |
| Download | Display the transmitting rate for data download. |

Editing the SSID Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.



The screenshot shows a dialog box titled "Wireless_General_SSIDSetting". It contains the following settings:

- Index:** 1
- Enable:**
- Hide SSID:**
- SSID:** SatisMagazasi
- Isolate LAN:**
- Isolate Member:**
- Isolate VPN:**
- Rate Control Enable:**
- Upload:** 30000
- Download:** 30000

Buttons at the bottom: **Apply** and **Cancel**.

Available settings for such feature will be shown as follows:

| Items | Description |
|----------------------------|--|
| Index | Display the index number of the CPE in current network group. |
| Wireless LAN Enable | Click it to enable this setting. |
| Hide SSID | Check it to hide the SSID of such wireless profile. |
| SSID | Means the identification of the wireless LAN. SSID can be any text numbers or various special characters. The default SSID is "Draytek. We suggest you to change it. |
| Isolate LAN | Check this box to make the wireless clients (stations) with the same SSID cannot access wired PCs on LAN. |
| Isolate Member | Check this box to make the wireless clients (stations) with the same SSID not accessing for each other. |
| Isolate VPN | Check this box to make the wireless clients (stations) with the same SSID not accessing for other VPN. |
| Rate Control Enable | It controls the data transmission rate through wireless connection. Check the box to enable such function. |



| Items | Description |
|-----------------|---|
| Upload | Type the transmitting rate for data upload. Default value is 30,000 kbps. |
| Download | Type the transmitting rate for data download. Default value is 30,000 kbps. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Security Setting for Wireless Connection

Display the security settings that Vigor router supports. The administrator can modify and save the changes for the Vigor router remotely by using VigorACS. **However, not all of the Vigor routers' wireless security settings can be handled by VigorACS.** Here, we take VigorAP 800 as an example for explanation.


| Index | Mode | WPA Algorithms | Pass Phrase | Key Renewal Interva |
|-------|-----------------|----------------|-------------|---------------------|
| 1 | Mixed(WPA+WPA2) | TKIP | | 3600 |
| 2 | Mixed(WPA+WPA2) | TKIP | | 3600 |
| 3 | Disable | | | |
| 4 | Disable | | | |

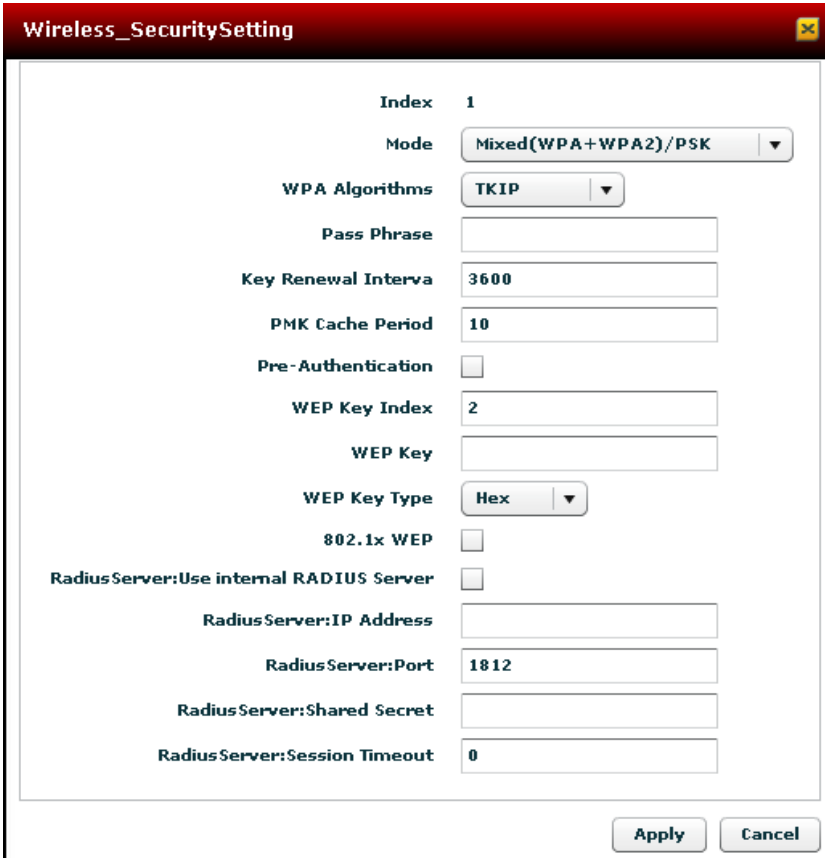
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Mode | Display the mode used by such router. |
| WPA Algorithm | Display the algorithm used by WPA. |
| Pass Phrase | Display the Pass Phrase used by such router. |
| Key Renewal Interva | Display the renewal security time for authentication to the network. |
| PMK Cache Period | Display the expire time of WPA2 PMK (Pairwise master key) cache. |
| Pre-Authentication | Display if IEEE 802.1X Pre-Authentication is enabled |

| Items | Description |
|--|---|
| | (true) or not (false). |
| WEP Key Index | Display the number of WEP Key is used. |
| WEP Key | Display the content of the WEP Key. |
| WEP Key Type | Display the type of the WEP Key. |
| 802.1x WEP | Display if WEP Encryption is enabled (true) or not (false). |
| RadiusServer:Use internal RADIUS Server | Display if RADIUS Server is enabled (true) or not (false). |
| RadiusServer:IP Address | Display the IP address of external RADIUS server. |
| RadiusServer:Port | Display the UDP port number that the external RADIUS server is using. |
| RadiusServer:Shared Secret | Display the shared secret that the external RADIUS server and client share. |
| RadiusServer:Session Timeout | Display maximum time of service provided before re-authentication. |

Editing the Security Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.



Wireless_SecuritySetting

Index: 1

Mode: Mixed(WPA+WPA2)/PSK

WPA Algorithms: TKIP

Pass Phrase:

Key Renewal Interval: 3600

PMK Cache Period: 10

Pre-Authentication:

WEP Key Index: 2

WEP Key:

WEP Key Type: Hex

802.1x WEP:

RadiusServer:Use internal RADIUS Server:

RadiusServer:IP Address:

RadiusServer:Port: 1812

RadiusServer:Shared Secret:

RadiusServer:Session Timeout: 0

Apply Cancel

Available settings for such feature will be shown as follows:

| Items | Description |
|-----------------------------|---|
| Index | Display the index number of the profile in current network group. |
| Mode | <p>There are several modes provided for you to choose.</p> <p>Disable - The encryption mechanism is turned off.</p> <p>WEP - Accepts only WEP clients and the encryption key should be entered in WEP Key.</p> <p>WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK - Accepts only WPA clients and the encryption key should be entered in PSK. The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication.</p> <p>WEP/802.1x - The built-in RADIUS client feature enables VigorAP 800 to assist the remote dial-in user or a wireless station and the RADIUS server in performing mutual authentication. It enables centralized remote access authentication for network management.</p> <p>The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication. Select WPA, WPA2 or Auto as WPA mode.</p> <p>WPA/802.1x - The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication.</p> <p>WPA2/802.1x - The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication.</p> |
| WPA Algorithm | Select TKIP, AES or TKIP/AES as the algorithm for WPA. Such feature is available for WPA2/802.1x, WPA/802.1x, WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK mode. |
| Pass Phrase | Either 8~63 ASCII characters, such as 012345678. (or 64 Hexadecimal digits leading by 0x, such as "0x321253abcde..."). Such feature is available for WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK mode. |
| Key Renewal Interval | WPA uses shared key for authentication to the network. However, normal network operations use a different encryption key that is randomly generated. This randomly generated key that is periodically replaced. Enter the renewal security time (seconds) in the column. Smaller interval leads to greater security but lower performance. Default is 3600 seconds. Set 0 to disable re-key. Such feature is available for WPA2/802.1, WPA/802.1x, WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK |

| Items | Description |
|--|---|
| | mode. |
| PMK Cache Period | Set the expire time of WPA2 PMK (Pairwise master key) cache. PMK Cache manages the list from the BSSIDs in the associated SSID with which it has pre-authenticated. Such feature is available for WPA2/802.1 mode. |
| Pre-Authentication | Enables a station to authenticate to multiple APs for roaming securer and faster. With the pre-authentication procedure defined in IEEE 802.11i specification, the pre-four-way-handshake can reduce handoff delay perceivable by a mobile node. It makes roaming faster and more secure. (Only valid in WPA2) Check the box to enable IEEE 802.1X Pre-Authentication. |
| WEP Key Index | Four WEP Keys can be configured for such router. This field is used to indicate which one will be applied. Available numbers are 1 ~ 4. |
| WEP Key | The format of WEP Key is restricted to 5 ASCII characters or 10 hexadecimal values in 64-bit encryption level, or restricted to 13 ASCII characters or 26 hexadecimal values in 128-bit encryption level. The allowed content is the ASCII characters from 33(!) to 126(~) except '#' and ','. Such feature is available for WEP mode. |
| WEP Key Type | Choose the type (ASCII or HEX) of the WEP Key. |
| 802.1x WEP | Check the box to enable the WEP Encryption. |
| RadiusServer:Use internal RADIUS Server | There is a RADIUS server built in VigorAP 800 which is used to authenticate the wireless client connecting to the access point. Check this box to use the internal RADIUS server for wireless security. Besides, if you want to use the external RADIUS server for authentication, do not check this box. |
| RadiusServer:IP Address | Enter the IP address of external RADIUS server. |
| RadiusServer:Port | The UDP port number that the external RADIUS server is using. The default value is 1812, based on RFC 2138. |
| RadiusServer:Shared Secret | The external RADIUS server and client share a secret that is used to authenticate the messages sent between them. Both sides must be configured to use the same shared secret. |
| RadiusServer:Session Timeout | Set the maximum time of service provided before re-authentication. Set to zero to perform another authentication immediately after the first authentication has successfully completed. (The unit is second.) |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Access Control Setting for Wireless Connection

Display the Access Control settings that Vigor router supports.

| Index | Policy |
|-------|---------|
| 1 | Disable |
| 2 | Disable |
| 3 | Disable |
| 4 | Disable |

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------|---|
| Save parameter settings | Click this button to save the parameters settings. |
| Edit | Click it to edit the settings of the selected profile. |
| Detail | Click it to edit the advanced settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Policy | Display the selected policy for the wireless control. |

Editing the Access Control Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.

Wireless_AccessControlSetting

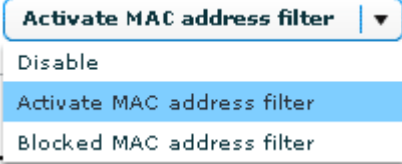

Index 1

Policy

Apply Cancel

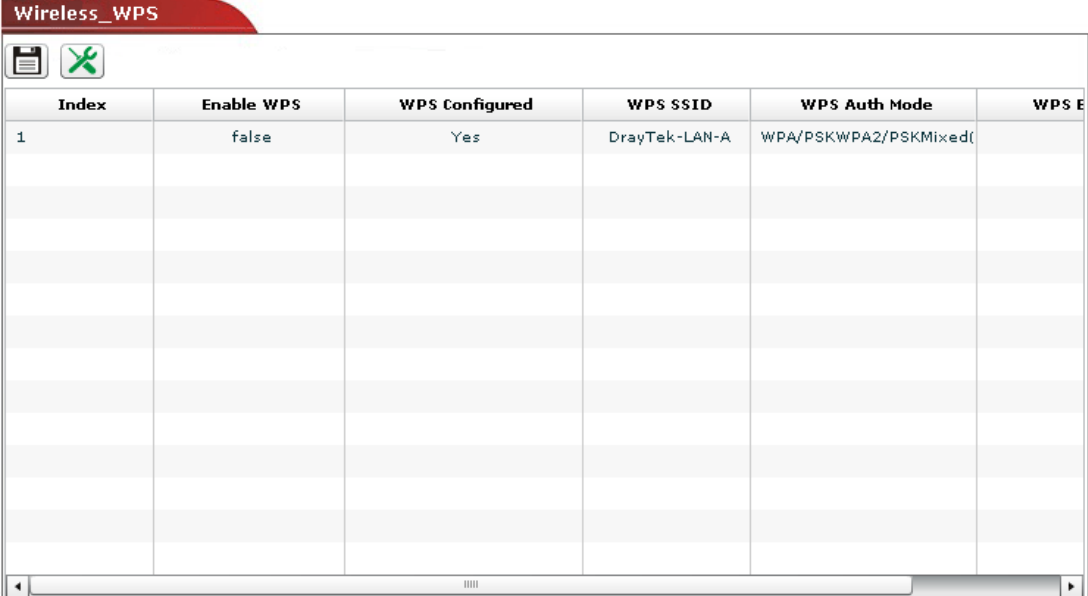
Available settings for such feature will be shown as follows:

| Items | Description |
|--------------|---|
| Index | Display the index number of the profile in current network group. |

| Items | Description |
|--------|---|
| Policy | <p>Determine the policy for the wireless control.</p>  <p>Later, click  to configure advanced settings for the policy.</p> |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |



WPS Setting for Wireless Connection

Display the WPS settings that Vigor router supports.




| Index | Enable WPS | WPS Configured | WPS SSID | WPS Auth Mode | WPS E |
|-------|------------|----------------|---------------|----------------------|-------|
| 1 | false | Yes | DrayTek-LAN-A | WPA/PSKWPA2/PSKMixed | |


Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Enable WPS | Display if the WPS profile is enabled (true) or disabled (false). |
| WPS Configured | Display related system information for WPS. If the wireless security (encryption) function of Vigor router is properly configured, you can see 'Yes' message |

| Items | Description |
|-------------------------|--|
| | here. |
| WPS SSID | Display the SSID that such WPS specified. |
| WPS Auth Mode | Display the authentication modes such router supports. |
| WPS Encrypt Type | Display encryption mode (None, WEP, TKIP, AES, etc.) of Vigor router. |
| AP PIN | Display the number which is used for remote client entering the registrar's PIN code in remote station to make a network connection. |

Editing the WPS Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.



Wireless_WPSSetting

Index 1

Enable WPS

WPS Configured Yes

WPS SSID DrayTek-LAN-A

WPS Auth Mode WPA/PSKWPA2/PSKMixed(WPA+WPA2)/PSK

WPS Encryp Type TKIP

AP PIN 72674727

Apply Cancel

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------|--|
| Index | Display the index number of the profile in current network group. |
| Enable WPS | Check this box to enable WPS setting. |
| WPS Configured | Display related system information for WPS. If the wireless security (encryption) function of Vigor router is properly configured, you can see 'Yes' message here. |
| WPS SSID | Display the SSID that such WPS specified. |
| WPS Auth Mode | Display the authentication modes such router supports. |
| WPS Encrypt Type | Display encryption mode (None, WEP, TKIP, AES, etc.) of Vigor router. |
| AP PIN | Display the number which is used for remote client entering the registrar's PIN code in remote station to make a network connection. |

| Items | Description |
|---------------|--|
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

AP Discovery Setting for Wireless Connection

Display the AP Discovery settings that Vigor router supports.

| Index | SSID | BSSID | RSSI | Channel | Encryption | Auth |
|-------|-------------------|----------------|------|---------|------------|-------|
| 1 | P874 | 50:67:f0:1a:0 | 100% | 1 | | NONE |
| 2 | Default_SSID | 00:12:34:54:3 | 86 % | 1 | | NONE |
| 3 | DrayTek_kyeh_282C | 00:50:7f:6f:83 | 10 % | 1 | AES | |
| 4 | 0024A57217A8-1 | 00:24:a5:72:1 | 100% | 1 | | NONE |
| 5 | 0024A57217A8 | 00:24:a5:72:1 | 100% | 1 | | NONE |
| 6 | DrayTek | 00:50:7f:aa:1 | 100% | 1 | AES | |
| 7 | FAE-292222220 | 00:50:7f:c9:3b | 100% | 4 | AES | |
| 8 | mis_test | 00:12:0e:37:3 | 44 % | 6 | TKIP/AES | Mixed |
| 9 | DrayTek | 00:50:7f:a7:6 | 24 % | 6 | | NONE |
| 10 | DrayTek700-AAA | 00:1f:1f:c4:88 | 100% | 6 | AES | |
| 11 | Dennis_Test | 00:50:7f:c3:5f | 86 % | 6 | | NONE |
| 12 | default | 00:1d:7d:34:c | 55 % | 6 | | NONE |
| 13 | PQA-tang | 00:50:7f:ce:b6 | 70 % | 6 | TKIP | Mixed |
| 14 | DrayTek | 00:50:7f:a6:3 | 100% | 6 | | NONE |

Available settings for such feature will be shown as follows:

| Items | Description |
|-----------------------|--|
| Index | Display the index number of the profile in current network group. |
| SSID | Display the SSID of the AP scanned by Vigor router. |
| BSSID | Display the MAC address of the AP scanned by Vigor router. |
| RSSI | Display the signal strength of the access point. RSSI is the abbreviation of Receive Signal Strength Indication. |
| Channel | Display the wireless channel used for the AP that is scanned by Vigor router. |
| Encryption | Display the encryption mode for the scanned AP. |
| Authentication | Display the authentication type that the scanned AP applied. |

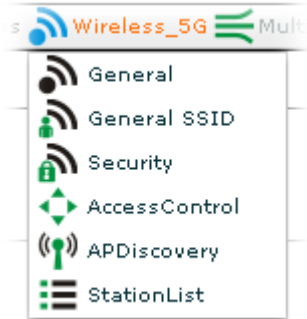
Station List for Wireless Connection

Display the stations connecting to Vigor router.

6.2.10 Wireless 5G Settings for the Selected CPE

At present, VigorAP 800 supports wireless 5G function. You can modify the settings for VigorAP800 via VigorACS SI.

Note: If the selected CPE does not support wireless 5G function, such menu will be invalid.



General Setting for Wireless Connection

This page display wireless settings for the selected CPE. You can modify the settings if required.

Wireless_General

Save parameter settings

Index 1

Enable Wireless LAN

Mode Mixed(11b+11g+11n) ▼

Enable 2 Subnet (Simulate 2 APs)

Channel Channel_11,2462MHz ▼

Rate ▼

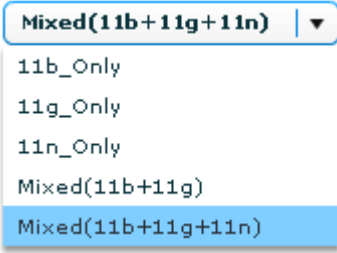
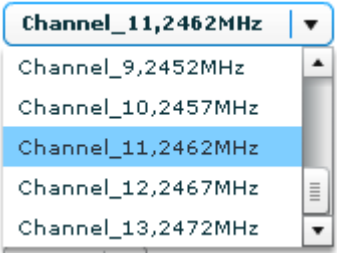
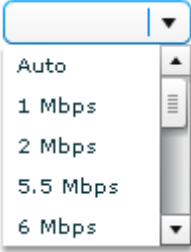
Tx Burst

WMM Capable

Antenna 2T2R ▼

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------|---|
| Save parameter settings | Click this button to save the parameters settings. |
| Index | Display the index number of the profile in current network group. |
| Mode | Choose the wireless mode for such CPE. |

| Items | Description |
|--|---|
| |  <p>Mixed(11b+11g+11n)</p> <ul style="list-style-type: none"> 11b_Only 11g_Only 11n_Only Mixed(11b+11g) Mixed(11b+11g+11n) |
| <p>Enable 2 Subnet (Simulate 2 APs)</p> | <p>Check the box to enable the function for two independent subnets. Once you enable this function, LAN-A and LAN-B would be independent. Next, you can connect one router in LAN-A, and another router in LAN-B. Such mechanism can make you feeling that you have two independent AP/subnet functions in one VigorAP 800.</p> <p>If you disable this function, LAN-A and LAN-B ports are in the same domain. You could only connect one router (no matter connecting to LAN-A or LAN-B) in this environment.</p> |
| <p>Channel</p> | <p>Means the channel of frequency of the wireless LAN. The default channel is 6. You may switch channel if the selected channel is under serious interference. If you have no idea of choosing the frequency, please select Auto to let system determine for you.</p>  <p>Channel_11,2462MHz</p> <ul style="list-style-type: none"> Channel_9,2452MHz Channel_10,2457MHz Channel_11,2462MHz Channel_12,2467MHz Channel_13,2472MHz |
| <p>Rate</p> | <p>If you choose 11g Only, 11b Only or 11n Only, such feature will be available for you to set data transmission rate.</p>  <p>Auto</p> <ul style="list-style-type: none"> 1 Mbps 2 Mbps 5.5 Mbps 6 Mbps |
| <p>Tx Burst</p> | <p>This feature can enhance the performance in data transmission about 40%* more.</p> |
| <p>WMM Capable</p> | <p>To apply WMM parameters for wireless data transmission, please click the Enable radio button.</p> |
| <p>Antenna</p> | <p>VigorAP 800 can be attached with two antennas to have good data transmission via wireless connection. However, if you have only one antenna attached, please</p> |

| Items | Description |
|-------|---|
| | choose 1T1R. <div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">2T2R ▾</div> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block; background-color: #e0f0ff;">2T2R</div> <div style="border: 1px solid #ccc; padding: 2px; display: inline-block; background-color: #fff;">1T1R</div> |

General SSID Setting for 5G Wireless Connection

This page allows you to configure SSID for the selected CPE.

Open **Wireless_5G**>>**General SSID**, the following screen will appear.


| Index | Hide SSID | SSID | Subnet | Isolate LAN | Isolate Member |
|-------|-----------|------------|--------|-------------|----------------|
| 1 | false | DrayTek-5G | LAN-A | false | false |
| 2 | false | | | false | false |
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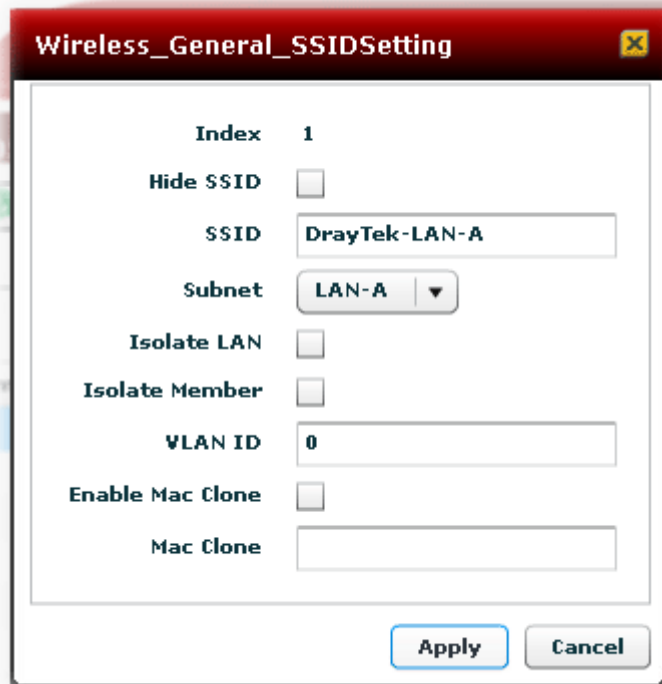
Available settings for such feature will be shown as follows:

| Items | Description |
|--------------------------------|--|
| Save parameter settings | Click this button to save the parameters settings. |
| Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Hide SSID | Display if the SSID of such profile is hidden (true) or not (false). |
| SSID | Display the SSID of the wireless profile. |
| Subnet | Display which subnet is used for the selected CPE. |
| Isolate LAN | Display if such function is enabled (true) or not (false). |
| Isolate Member | Display if such function is enabled (true) or not (false). |
| VLAN ID | Display the VLAN ID of the selected CPE. |

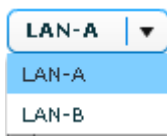
| Items | Description |
|------------------|--|
| Enable Mac Clone | Display if such function is enabled (true) or not (false). |
| Mac Clone | Display the MAC address of the selected CPE. |

Editing the SSID Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.



Available settings for such feature will be shown as follows:

| Items | Description |
|-------------|--|
| Index | Display the index number of the CPE in current network group. |
| Hide SSID | Check it to hide the SSID of such wireless profile. |
| SSID | Means the identification of the wireless LAN. SSID can be any text numbers or various special characters. The default SSID will be displayed in this field. We suggest you to change it. |
| Subnet | Choose LAN-A or LAN-B for each SSID. If you choose LAN-A, the wireless clients connecting to this SSID could only communicate with LAN-A.  |
| Isolate LAN | Check this box to make the wireless clients (stations) |



| Items | Description |
|-------------------------|---|
| | with the same SSID cannot access wired PCs on LAN. Note: If Isolate LAN is checked, do not type any value for VLAN ID. |
| Isolate Member | Check this box to make the wireless clients (stations) with the same SSID not accessing for each other. |
| VLAN ID | Type the value for such SSID. Packets transferred from such SSID to LAN will be tagged with the number. |
| Enable Mac Clone | Check this box to enable the function. |
| Mac Clone | Manually enter the MAC address of the device with SSID 1. The MAC address of other SSIDs will change based on this MAC address. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Security Setting for 5G Wireless Connection

Display the security settings that Vigor router supports. The administrator can modify and save the changes for the Vigor router remotely by using VigorACS. However, not all of the Vigor routers' wireless security settings can be handled by VigorACS.


| Wireless_5G_Security | | | | |
|----------------------|---------|----------------|-------------|---------------------|
| Index | Mode | WPA Algorithms | Pass Phrase | Key Renewal Interva |
| 1 | Disable | | | 3600 |
| 2 | Disable | | | 3600 |
| 3 | Disable | | | 3600 |
| | | | | |
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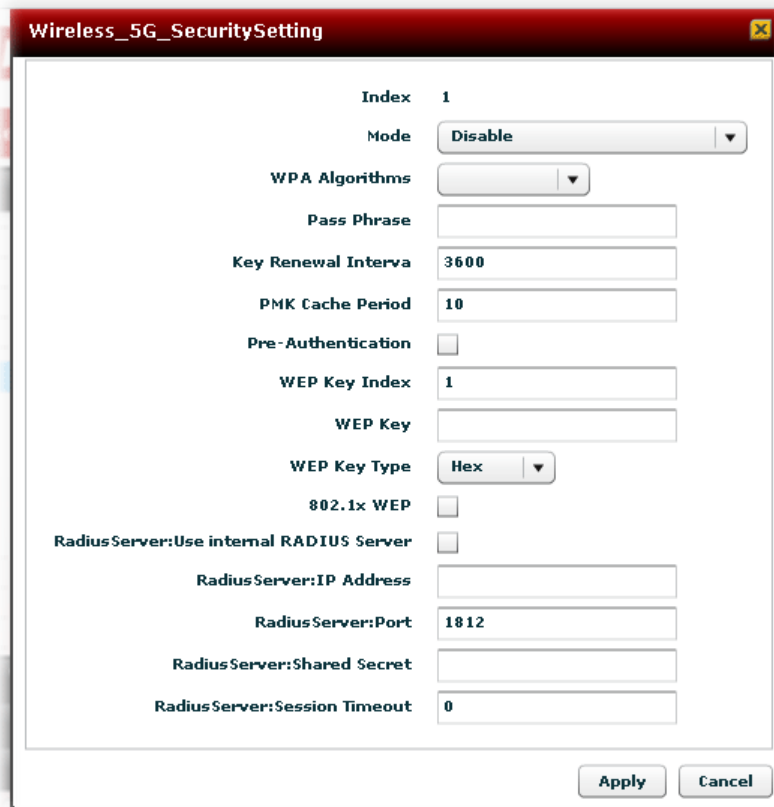
Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |

| Items | Description |
|---|---|
| Mode | Display the mode used by such router. |
| WPA Algorithms | Display the algorithm used by WPA. |
| Pass Phrase | Display the Pass Phrase used by such router. |
| Key Renewal Interval | Display the renewal security time for authentication to the network. |
| PMK Cache Period | Display the expire time of WPA2 PMK (Pairwise master key) cache. |
| Pre-Authentication | Display if IEEE 802.1X Pre-Authentication is enabled (true) or not (false). |
| WEP Key Index | Display the number of WEP Key is used. |
| WEP Key | Display the content of the WEP Key. |
| WEP Key Type | Display the type of the WEP Key. |
| 802.1x WEP | Display if WEP Encryption is enabled (true) or not (false). |
| RADIUS Server: User internal RADIUS Server | Display if RADIUS Server is enabled (true) or not (false). |
| RADIUS Server: IP Address | Display the IP address of external RADIUS server. |
| RADIUS Server: Port | Display the UDP port number that the external RADIUS server is using. |
| RADIUS Server: Shared Secret | Display the shared secret that the external RADIUS server and client share. |
| RADIUS Server: Session Timeout | Display maximum time of service provided before re-authentication. |

Editing the Security Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.



Available settings for such feature will be shown as follows:

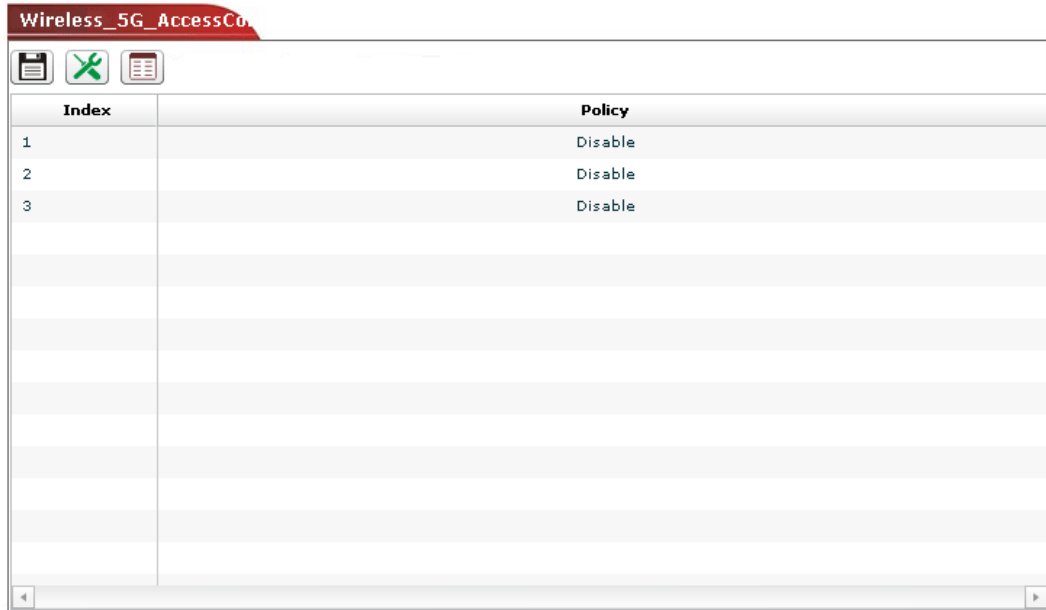
| Items | Description |
|--------------|--|
| Index | Display the index number of the profile in current network group. |
| Mode | <p>There are several modes provided for you to choose.</p> <p>Disable - The encryption mechanism is turned off.</p> <p>WEP - Accepts only WEP clients and the encryption key should be entered in WEP Key.</p> <p>WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK - Accepts only WPA clients and the encryption key should be entered in PSK. The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication.</p> <p>WEP/802.1x - The built-in RADIUS client feature enables VigorAP 800 to assist the remote dial-in user or a wireless station and the RADIUS server in performing mutual authentication. It enables centralized remote access authentication for network management.</p> <p>The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication. Select WPA, WPA2 or Auto as WPA mode.</p> |

| Items | Description |
|-----------------------------|---|
| | <p>WPA/802.1x - The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication.</p> <p>WPA2/802.1x - The WPA encrypts each frame transmitted from the radio using the key, which either PSK (Pre-Shared Key) entered manually in this field below or automatically negotiated via 802.1x authentication.</p> |
| WPA Algorithm | Select TKIP, AES or TKIP/AES as the algorithm for WPA. Such feature is available for WPA2/802.1x, WPA/802.1x, WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK mode. |
| Pass Phrase | Either 8~63 ASCII characters, such as 012345678. (or 64 Hexadecimal digits leading by 0x, such as "0x321253abcde..."). Such feature is available for WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK mode. |
| Key Renewal Interval | WPA uses shared key for authentication to the network. However, normal network operations use a different encryption key that is randomly generated. This randomly generated key that is periodically replaced. Enter the renewal security time (seconds) in the column. Smaller interval leads to greater security but lower performance. Default is 3600 seconds. Set 0 to disable re-key. Such feature is available for WPA2/802.1, WPA/802.1x, WPA/PSK or WPA2/PSK or Mixed (WPA+WPA2)/PSK mode. |
| PMK Cache Period | Set the expire time of WPA2 PMK (Pairwise master key) cache. PMK Cache manages the list from the BSSIDs in the associated SSID with which it has pre-authenticated. Such feature is available for WPA2/802.1 mode. |
| Pre-Authentication | Enables a station to authenticate to multiple APs for roaming securer and faster. With the pre-authentication procedure defined in IEEE 802.11i specification, the pre-four-way-handshake can reduce handoff delay perceivable by a mobile node. It makes roaming faster and more secure. (Only valid in WPA2) Check the box to enable IEEE 802.1X Pre-Authentication. |
| WEP Key Index | Four WEP Keys can be configured for such router. This field is used to indicate which one will be applied. Available numbers are 1 ~ 4. |
| WEP Key | The format of WEP Key is restricted to 5 ASCII characters or 10 hexadecimal values in 64-bit encryption level, or restricted to 13 ASCII characters or 26 hexadecimal values in 128-bit encryption level. |

| Items | Description |
|--|--|
| | The allowed content is the ASCII characters from 33(!) to 126(~) except '#' and ','. Such feature is available for WEP mode. |
| WEP Key Type | Choose the type (ASCII or HEX) of the WEP Key. |
| 802.1x WEP | Check the box to enable the WEP Encryption. |
| RadiusServer:Use internal RADIUS Server | There is a RADIUS server built in VigorAP 800 which is used to authenticate the wireless client connecting to the access point. Check this box to use the internal RADIUS server for wireless security. Besides, if you want to use the external RADIUS server for authentication, do not check this box. |
| RadiusServer:IP Address | Enter the IP address of external RADIUS server. |
| RadiusServer:Port | The UDP port number that the external RADIUS server is using. The default value is 1812, based on RFC 2138. |
| RadiusServer:Shared Secret | The external RADIUS server and client share a secret that is used to authenticate the messages sent between them. Both sides must be configured to use the same shared secret. |
| RadiusServer:Session Timeout | Set the maximum time of service provided before re-authentication. Set to zero to perform another authentication immediately after the first authentication has successfully completed. (The unit is second.) |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |





Access Control Setting for 5G Wireless Connection

Display the Access Control settings that Vigor router supports.




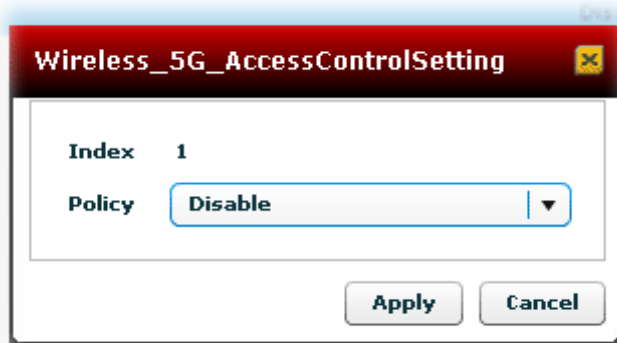
| Index | Policy |
|-------|---------|
| 1 | Disable |
| 2 | Disable |
| 3 | Disable |

Available settings for such feature will be shown as follows:

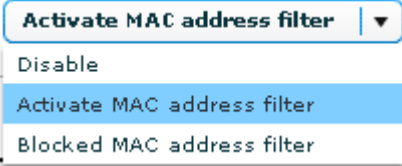

| Items | Description |
|--|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
|  Detail | Click it to edit the advanced settings of the selected profile.  |
| Index | Display the index number of the profile in current network group. |
| Policy | Display the selected policy for the wireless control. |

Editing the Access Control Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.



Available settings for such feature will be shown as follows:

| Items | Description |
|---------------|---|
| Index | Display the index number of the profile in current network group. |
| Policy | <p>Determine the policy for the wireless control.</p>  <p>Later, click  to configure advanced settings for the policy.</p> |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

AP Discovery Setting for 5G Wireless Connection

Display the AP Discovery settings that Vigor router supports.

| Index | SSID | BSSID | RSSI | Channel | Encryption | A |
|-------|------------|---------------|------|---------|------------|---|
| 1 | DrayTek-5G | 00:50:7f:5b:4 | 100% | 36 | | |

Available settings for such feature will be shown as follows:

| Items | Description |
|-----------------------|--|
| Index | Display the index number of the profile in current network group. |
| SSID | Display the SSID of the AP scanned by Vigor router. |
| BSSID | Display the MAC address of the AP scanned by Vigor router. |
| RSSI | Display the signal strength of the access point. RSSI is the abbreviation of Receive Signal Strength Indication. |
| Channel | Display the wireless channel used for the AP that is scanned by Vigor router. |
| Encryption | Display the encryption mode for the scanned AP. |
| Authentication | Display the authentication type that the scanned AP applied. |

Station List for 5G Wireless Connection

Display which stations connecting to Vigor router.

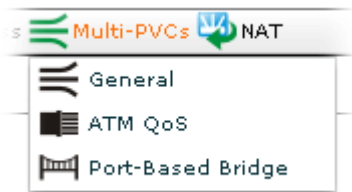
| Index | MAC Address | SSID | Auth | Encrypt |
|-------|-------------------|------------|------|---------|
| 1 | 00:1D:E0:10:6E:BB | DrayTek-5G | OPEN | NONE |
| | | | | |
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Available settings for such feature will be shown as follows:

| Items | Description |
|-------------|---|
| Index | Display the index number of the profile in current network group. |
| MAC Address | Display the MAC address of the client. |
| SSID | Display the SSID of the station. |
| Auth | Display the authentication type which the station uses for connecting the AP. |
| Encrypt | Display the encryption mode which the station uses for connecting the AP. |

6.2.11 Multi-PVCs for the Selected CPE

Note: If the selected CPE does not support Multi-PVCs function, such menu will be invalid.






General Settings for Multi-PVCs


Open **Multi-PVCs>>General**, the following screen will appear.

| Multi-PVCs_General | | | | | | |
|--------------------|--------|-----|-----|----------|----------|--|
| Index | Enable | VPI | VCI | QoS Type | Protocol | |
| 1 | true | 0 | 33 | UBR | PPPoE | |
| 2 | true | 0 | 88 | UBR | MPoA | |
| 3 | false | 1 | 43 | UBR | PPPoA | |
| 4 | false | 1 | 44 | UBR | PPPoA | |
| 5 | false | 1 | 45 | UBR | PPPoA | |
| 6 | false | 1 | 46 | UBR | PPPoA | |
| 7 | false | 1 | 47 | UBR | PPPoA | |
| 8 | false | 1 | 48 | UBR | PPPoA | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
|  Detail | This button is available for Index 3 to Index 5 only. A window with detailed information about the index will be shown on your screen. |
| Index | Display the index number of the profile in current network group. |
| Enable | Display if such profile is enabled (true) or not (false). |
| VPI | Display the VPI value for such profile. |
| VCI | Display the VCI value for such profile. |
| QoS Type | Display the QoS type for such profile. |
| Protocol | Display the protocol for such profile. |
| Encapsulation | Display the encapsulation type for such profile. |
| Wancount | Display if such PVC can be configured for WAN interface. When the value is greater than 0, it means WAN settings are available for such PVC. |

Editing the General Multi-PVCs Setting

To modify a selected profile, choose one of the profile names from the list and click the **Edit** button . The following dialog will appear. You can modify the settings to fit your necessity.

Available settings for such feature will be shown as follows:



| Items | Description |
|----------------------|--|
| Index | Display the index number of the profile in current network group. |
| Enable | Check this box to enable the profile. |
| VPI | VPI stands for Virtual Path Identifier . It is an 8-bit header inside each ATM cell that indicates where the cell should be routed. The ATM, is a method of sending data in small packets of fixed sizes. It is used for transferring data to client computers. Type in the value provided by your ISP. |
| VCI | VCI stands for Virtual Channel Identifier . It is a 16-bit field inside ATM cell's header that indicates the cell's next destination as it travels through the network. A virtual channel is a logical connection between two end devices on the network. Type in the value provided by your ISP. |
| QoS Type | Select a proper QoS type for the channel. |
| Protocol | Select a proper protocol for this channel. |
| Encapsulation | Choose a proper type for this channel. The types will be different according to the protocol setting that you choose. |
| WanCount | Display if such PVC can be configured for WAN interface. When the value is greater than 0, it means WAN settings are available for such PVC. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

ATM QoS for Multi-PVCs

This function can display the ATM QoS function settings for the selected CPE.

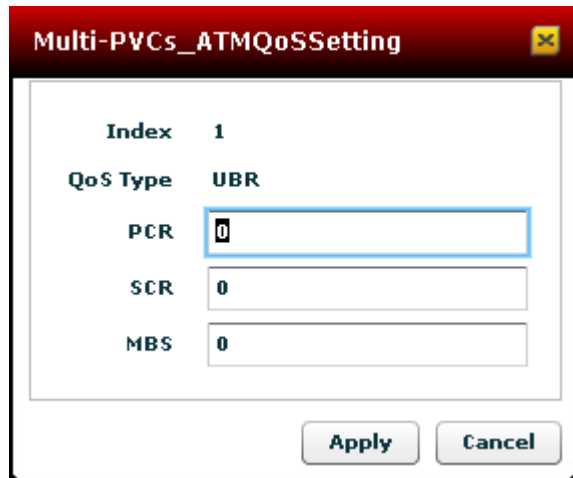
| Multi-PVCs_ATMQoS | | | | |
|-------------------|----------|-----|-----|-----|
| Index | QoS Type | PCR | SCR | MBS |
| 1 | UBR | 0 | 0 | 0 |
| 2 | UBR | 0 | 0 | 0 |
| 3 | UBR | 0 | 0 | 0 |
| 4 | UBR | 0 | 0 | 0 |
| 5 | UBR | 0 | 0 | 0 |
| 6 | UBR | 0 | 0 | 0 |
| 7 | UBR | 0 | 0 | 0 |
| 8 | UBR | 0 | 0 | 0 |

Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| QoS Type | Display the QoS type (e.g., UBR, CBR) for the channel. |
| PCR | Display the value of PCR. |
| SCR | Display the value of SCR. |
| MBS | Display the value of MBS. |

Editing the ATM QoS for Multi-PVCs Settings

To modify the profile, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



The screenshot shows a dialog box titled "Multi-PVCs_ATMQoSSetting". It contains the following fields and values:

| | |
|----------|-----|
| Index | 1 |
| QoS Type | UBR |
| PCR | 0 |
| SCR | 0 |
| MBS | 0 |

At the bottom of the dialog are two buttons: "Apply" and "Cancel".

Available settings for such feature will be shown as follows:



| Items | Description |
|-----------------|---|
| Index | Display the index number of the profile in current network group. |
| QoS Type | Display the type of QoS. |
| PCR | It represents Peak Cell Rate. The default setting is "0". |
| SCR | It represents Sustainable Cell Rate. The value of SCR must be smaller than PCR. |
| MBS | It represents Maximum Burst Size. The range of the value is 10 to 50. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Port-Based Bridge for Multi-PVCs

This function can display the Port-Based Bridge function settings for the selected CPE. There are eight channels that can be configured in this page.

| Multi-PVCs_PortBasedB | | | | | |
|-----------------------|--------|-------|-------|-------|--------------|
| Index | Enable | P2 | P3 | P4 | Service Type |
| 1 | false | false | false | false | Normal |
| 2 | false | false | false | false | Normal |
| 3 | false | false | false | false | Normal |
| 4 | false | false | false | false | Normal |
| 5 | false | false | false | false | Normal |
| 6 | false | false | false | false | Normal |
| 7 | false | false | false | false | Normal |
| 8 | false | false | false | false | Normal |
| | | | | | |
| | | | | | |
| | | | | | |

Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Enable | Display if such profile is enabled (true) or not (false). |
| P2/P3/P4 | Display which LAN port is enabled (true) or disabled (false). |
| Service Type | Display the service type used for the service of video stream (e.g., IPTV). |
| Add Tag Enable | Display if such function is enabled (true) or not (false). |
| Add Tag | Display the number of VLAN ID. |

Editing the Port-Based Bridge for Multi-PVCs Settings

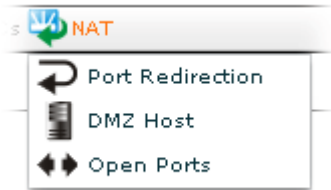
To modify the profile, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

Available settings for such feature will be shown as follows:

| Items | Description |
|-----------------------|---|
| Index | Display the index number of the profile in current network group. |
| Enable | Check this box to enable the profile. |
| P2/P3/P4 | Check this box to invoke such LAN port. It means the LAN port 2 to 4. Check the box to designate the LAN port for channel 3 to 8. |
| Service Type | Normally, service type is used for the service of video stream (e.g., IPTV). It can divide the packets from remote control and from video stream into different PVC. In general, the protocol used by remote control is IGMP. |
| Add Tag Enable | Check this box to enable the function of Add Tag. |
| Add Tag | To identify the usage of PVC, check this box to invoke this setting. And type the number for VLAN ID (number). |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

6.2.12 Configuring NAT Setting for the Selected CPE

Usually, the router serves as an NAT (Network Address Translation) router. NAT is a mechanism that one or more private IP addresses can be mapped into a single public one. Public IP address is usually assigned by your ISP, for which you may get charged. Private IP addresses are recognized only among internal hosts.



Port Redirection

Port Redirection is usually set up for server related service inside the local network (LAN), such as web servers, FTP servers, E-mail servers etc. Most of the case, you need a public IP address for each server and this public IP address/domain name are recognized by all users. Since the server is actually located inside the LAN, the network well protected by NAT of the router, and identified by its private IP address/port, the goal of Port Redirection function is to forward all access request with public IP address from external users to the mapping private IP address/port of the server.

Open **NAT>>Port Redirection**. The following screen will appear with all of the NAT settings for the selected CPE/group.

| Index | Port Redirection | Port Redirection Mode | Service Name | |
|-------|------------------|-----------------------|--------------|--|
| 1 | true | Single | kamera1 | |
| 2 | true | Single | kamera2 | |
| 3 | true | Single | kamera3 | |
| 4 | true | Single | kamera4 | |
| 5 | false | Single | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------|---|
| Save parameter settings | Click this button to save the parameters settings. |
| Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the CPE in current network group. |
| Port Redirection | Display if such profile is enabled (true) or |

| Items | Description |
|------------------------------|---|
| | not (false). |
| Port Redirection Mode | Display the port redirection mode of the CPE. |
| Service Name | Display the name of the service for identification. |
| Protocol | Display the protocol for NAT of the CPE. |
| WAN IP | Display the WAN IP alias for the device passing through. |
| Public Port Start | Display which port can be redirected to the specified Private IP and Port of the internal host. |
| Public Port End | Display the ending port used for such profile. |
| Private IP Start | Display the private IP address of the internal host providing the service. |
| Private IP End | Display the IP address as the end of Private IP. |
| Private Port | Display the private port number of the service offered by the internal host. |

Editing the Port Redirection Setting


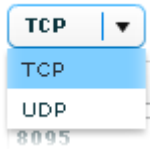
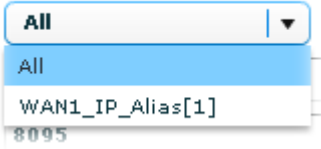
To modify the profile, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

The screenshot shows a dialog box titled "NATSetting" with a red header and a close button. The dialog contains the following settings:

- Index:** 1
- Port Redirection:**
- Port Redirection Mode:** Single (dropdown menu)
- Service Name:** kamera1 (text input)
- Protocol:** TCP (dropdown menu)
- WAN IP:** All (dropdown menu)
- Public Port Start:** 8095 (text input)
- Public Port End:** 8095 (text input)
- Private IP Start:** 192.168.4.96 (text input)
- Private IP End:** 96 (text input)
- Private Port:** 8095 (text input)

At the bottom of the dialog are two buttons: "Apply" and "Cancel".

Available settings for such feature will be shown as follows:

| Items | Description |
|------------------------------|---|
| Index | Display the index number of the CPE in current network group. |
| Port Redirection | Move and click your mouse on the field, a check box will appear. Check the box to set “true” mode (means enabled) or uncheck the box to set “false” mode (means disabled). |
| Port Redirection Mode | <p>Display the port redirection mode of the CPE. Available modes (true/false) for such CPE can be seen from the drop down list. You can change the mode if required.</p>  <p>If you select Range as Port Redirection Mode, please specify the value of Private IP Start and Private IP End.</p> |
| Service Name | Type a name for the service for identification. |
| Protocol | <p>Display the protocol for NAT of the CPE. Available settings for such CPE can be seen from the drop down list. You can change the protocol if required.</p>  |
| WAN IP | <p>Choose WAN IP alias for the device passing through.</p>  |
| Public Port Start | Specify which port can be redirected to the specified Private IP and Port of the internal host. |
| Public Port End | If you choose Range as the port redirection mode, please type the required number on this field. |
| Private IP Start | Specify the private IP address of the internal host providing the service. |
| Private IP End | If you choose Range as the port redirection mode, you need to specify Private IP End additionally. |
| Private Port | Specify the private port number of the service offered by the internal host. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |



DMZ Host

As mentioned above, **Port Redirection** can redirect incoming TCP/UDP or other traffic on particular ports to the specific private IP address/port of host in the LAN. However, other IP protocols, for example Protocols 50 (ESP) and 51 (AH), do not travel on a fixed port. Vigor router provides a facility **DMZ Host** that maps ALL unsolicited data on any protocol to a single host in the LAN. Regular web surfing and other such Internet activities from other clients will continue to work without inappropriate interruption. **DMZ Host** allows a defined internal user to be totally exposed to the Internet, which usually helps some special applications such as Netmeeting or Internet Games etc.

Open **NAT>>DMZ Host**. The following screen will appear with all of the NAT settings for the selected CPE/group.

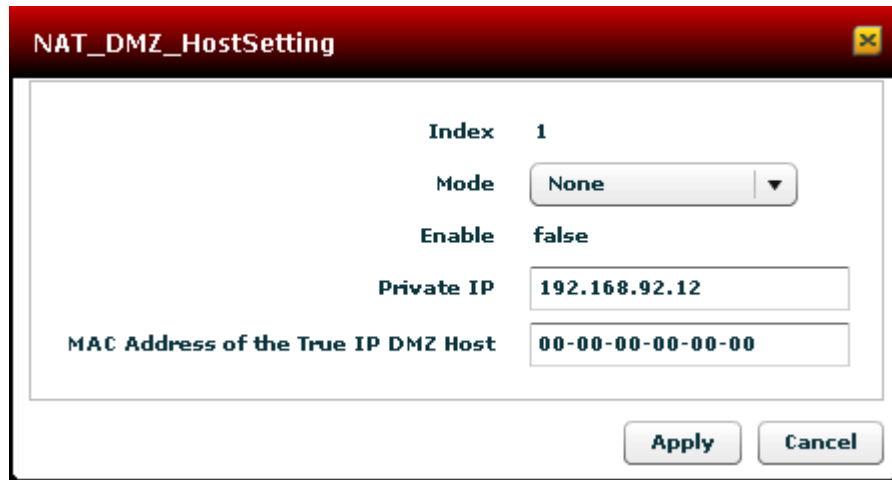
| NAT_DMZ_Host | | | | |
|--------------|------|--------|---------------|-------------------------------------|
| Index | Mode | Enable | Private IP | MAC Address of the True IP DMZ Host |
| 1 | None | false | 192.168.92.12 | 00-00-00-00-00-00 |
| 2 | | false | 0.0.0.0 | |
| 3 | | false | 0.0.0.0 | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the CPE in current network group. |
| Mode | Display which mode (Private IP or Active_True_IP) is specified for such profile. |
| Enable | If the DHCP server is enabled, the word of “true” will be shown here. Otherwise, the word of “false” will appear. Such value can be edited if required. |
| Private IP | Display private IP address of the CPE. |
| MAC Address of the True IP DMZ Host | Display the MAC address of the CPE. |

Editing the DMZ Host Setting

To modify the profile, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



NAT_DMZ_HostSetting

Index 1

Mode None

Enable false

Private IP 192.168.92.12

MAC Address of the True IP DMZ Host 00-00-00-00-00-00

Apply Cancel

Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
| Index | Display the index number of the CPE in current network group. |
| Mode | Choose None , Private IP or Active_True_IP for typing the related information on the fields listed below. |
| Private IP | Type the IP address of the DMZ host if you choose Private IP as the Mode. |
| MAC Address of the True IP DMZ Host | Type the MAC address for the DMZ host if you choose Active_True_IP as the Mode. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Open Ports

Open Ports allows you to open a range of ports for the traffic of special applications. Common application of Open Ports includes P2P application (e.g., BT, KaZaA, Gnutella, WinMX, eMule and others), Internet Camera etc. Ensure that you keep the application involved up-to-date to avoid falling victim to any security exploits.

Open **NAT>>Open Port**. The following screen will appear with all of the NAT settings for the selected CPE/group.

| Index | Enable Open Ports | Comment | WAN Interface | WAN IP |
|-------|-------------------|---------|---------------|------------------|
| 1 | false | | WAN1 | WAN1_IP_Alias[:] |
| 2 | true | ST7501 | WAN1 | WAN1_IP_Alias[:] |
| 3 | true | IP7152 | WAN1 | WAN1_IP_Alias[:] |
| 4 | true | IP7133 | WAN1 | WAN1_IP_Alias[:] |
| 5 | true | dahua | WAN1 | WAN1_IP_Alias[:] |
| 6 | false | idclock | WAN1 | WAN1_IP_Alias[:] |
| 7 | true | P27151 | WAN1 | WAN1_IP_Alias[:] |
| 8 | false | | WAN1 | WAN1_IP_Alias[:] |

Available settings for such feature will be shown as follows:

| Items | Description |
|--------------------------------|---|
| Save parameter settings | Click this button to save the parameters settings for the profile. |
| Edit | Click it to edit the settings of the selected profile. |
| Detail | Click it to display a window with detailed information for the selected open ports profile. |

| Index | Protocol | Start Port | End Port |
|-------|----------|------------|----------|
| 1 | | 0 | 0 |
| 2 | | 0 | 0 |
| 3 | | 0 | 0 |
| 4 | | 0 | 0 |
| 5 | | 0 | 0 |
| 6 | | 0 | 0 |
| 7 | | 0 | 0 |
| 8 | | 0 | 0 |
| 9 | | 0 | 0 |
| 10 | | 0 | 0 |

| | |
|--------------------------|---|
| Index | Display the index number of the profile in current network group. |
| Enable Open Ports | Display if such profile is enabled (true) or not (false). |
| Comment | Display the name for the defined network |

| Items | Description |
|-------------------------|--|
| | application/service |
| WAN Interface | Display the WAN interface for the entry. |
| WAN IP | Display the WAN IP Alias |
| Local IP Address | Display the private IP address of the local host offering the service. |

Editing the Open Ports Setting

To modify the profile, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

Available settings for such feature will be shown as follows:

| Items | Description |
|--------------------------|---|
| Index | Display the index number of the profile in current network group. |
| Enable Open Ports | Display if such profile is enabled (true) or not (false). |
| Comment | Make a name for the defined network application/service |
| WAN Interface | Choose the WAN interface for the entry. |
| WAN IP | Choose WAN IP address from the drop down list for the entry. |
| Local IP Address | Type the private IP address of the local host offering the service. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

6.2.13 Bandwidth Settings for the Selected CPE

As an administrator, you can configure the bandwidth ratio for QoS of the WAN interface for the selected CPE.





Configuring QoS WAN Setting for the Selected CPE

Open **Bandwidth**>>**QoS WAN**. The following screen will appear with all of the QoS WAN settings for the selected CPE/group.

| Index | Enable | Direction | Inbound Bandwidth | Outbound Bandwidth |
|-------|--------|-----------|-------------------|--------------------|
| 1 | false | OUT | 10000 | 10000 |
| 2 | false | OUT | 10000 | 10000 |
| 3 | false | OUT | 10000 | 10000 |

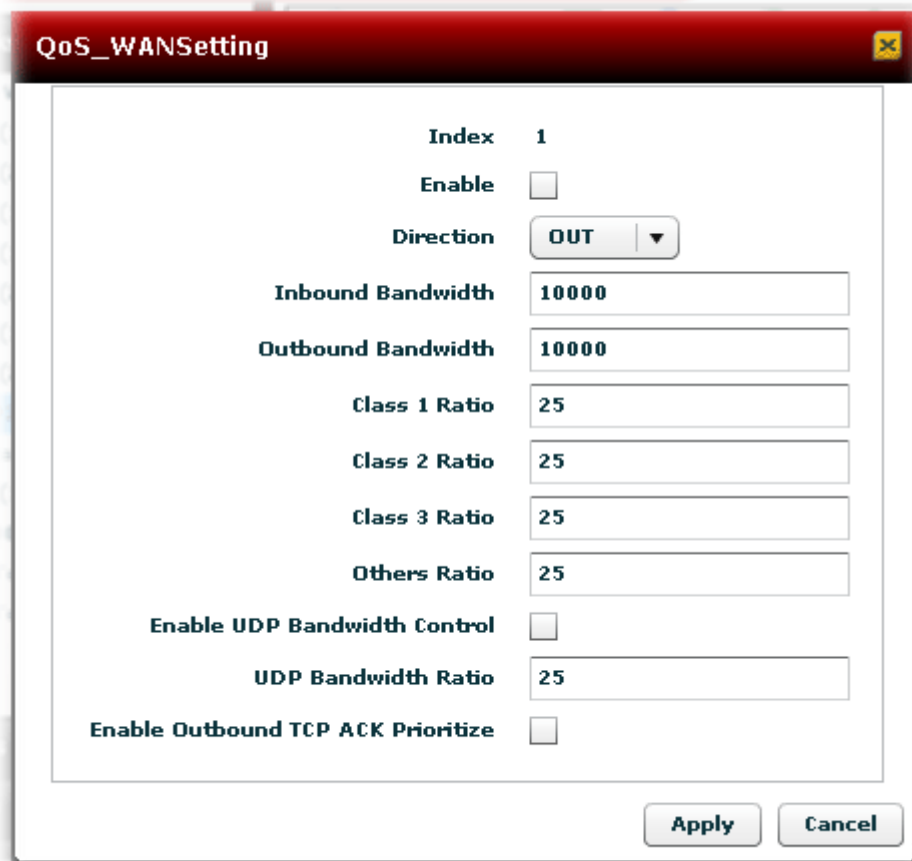
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
| Index | Display the index number of the profile in current network group. |
| Enable | Display if such profile is enabled (true) or not (false). |
| Direction | Display the direction (OUT/IN/Both) of such QoS setting. |
| Inbound Bandwidth | Display the connecting rate of data input for WAN. |
| Outbound Bandwidth | Display the connecting rate of data output for WAN |
| Class 1 Ratio/ Class 2 Ratio/ Class 3 Ratio | Display the ratio of bandwidth fo the class rules (up to three) that configured to meet your request. |
| Others Ratio | Display the ratio of bandwidth reserved for the packets which are not suitable for the user-defined class rules. |

| Items | Description |
|--|--|
| Enable UDP Bandwidth Control | Display if the function is enabled (true) or not (false). |
| UDP Bandwidth Ratio | Display the ratio of bandwidth configured for UDP. |
|  Save parameter settings | Click this button to save the parameters settings for the profile. |
|  Edit | Click it to edit the settings of the selected item. |

Editing the QoS WAN Setting

To modify the QoS WAN setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



The screenshot shows a dialog box titled "QoS_WANSetting" with the following configuration:

- Index:** 1
- Enable:**
- Direction:** OUT (dropdown menu)
- Inbound Bandwidth:** 10000
- Outbound Bandwidth:** 10000
- Class 1 Ratio:** 25
- Class 2 Ratio:** 25
- Class 3 Ratio:** 25
- Others Ratio:** 25
- Enable UDP Bandwidth Control:**
- UDP Bandwidth Ratio:** 25
- Enable Outbound TCP ACK Prioritize:**

Buttons at the bottom right: **Apply** and **Cancel**.

Available settings for such feature will be shown as follows:

| Items | Description |
|------------------|---|
| Index | Display the index number of the profile in current network group. |
| Enable | Check the box to enable QoS WAN setting. |
| Direction | Define which traffic the QoS Control settings will apply to. IN- apply to incoming traffic only. OUT- apply to outgoing traffic only. |

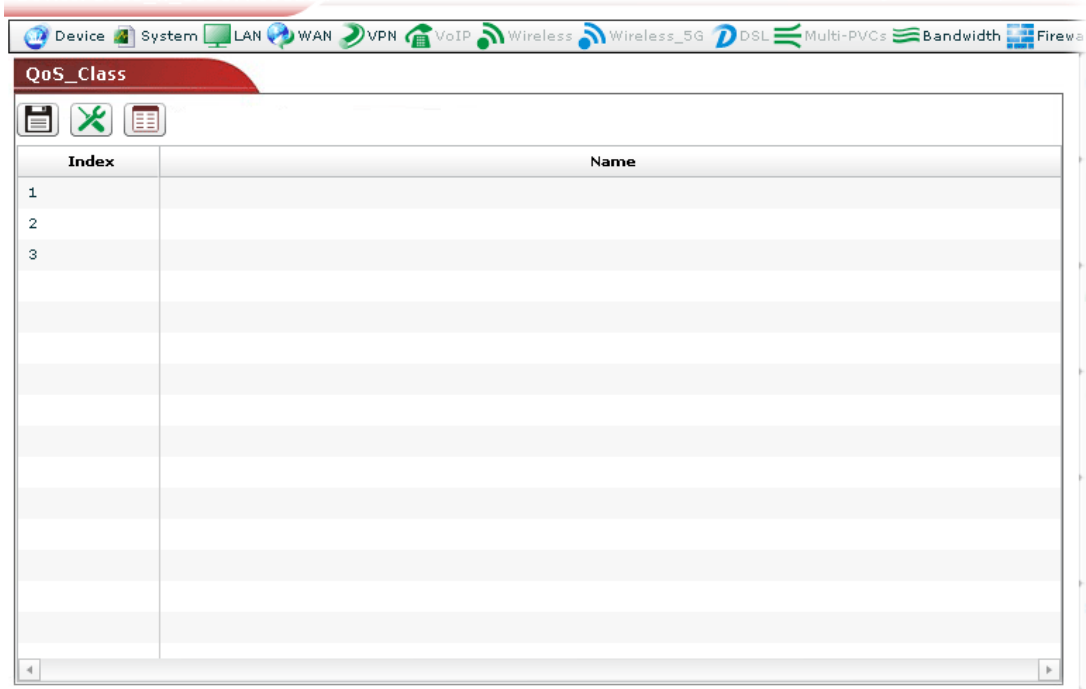
| Items | Description |
|--|---|
| | BOTH- apply to both incoming and outgoing traffic. |
| Inbound Bandwidth | Set the connecting rate of data input for WAN. For example, if your ADSL supports 1M of downstream and 256K upstream, please set 1000kbps for this box. The default value is 10000kbps. |
| Outbound Bandwidth | Set the connecting rate of data output for WAN. For example, if your ADSL supports 1M of downstream and 256K upstream, please set 256kbps for this box. The default value is 10000kbps. |
| Class 1 Ratio/ Class 2 Ratio/ Class 3 Ratio/ Others Ratio | It is reserved for the group index in the form of ratio of reserved bandwidth to upstream speed and reserved bandwidth to downstream speed . |
| Enable UDP Bandwidth Control | Check this and set the limited bandwidth ratio on the right field. |
| UDP Bandwidth Ratio | The ratio typed here is reserved for limited bandwidth of UDP application. |
| Enable Outbound TCP ACK Prioritize | Check this box to push ACK of upload faster to speed the network traffic. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring QoS Class Setting for the Selected CPE




The QoS class rules (Class 1 to Class 3) can be adjusted for your necessity.



Open **Bandwidth>>QoS WAN**. The following screen will appear with all of the QoS class rule settings for the selected CPE/group.

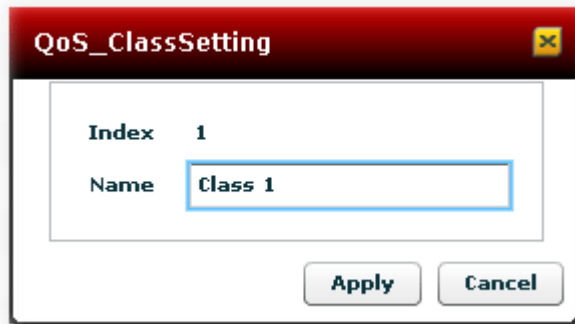


Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
| Index | Display the index number of the profile in current network group. |
| Name | Display the name of the QoS Class. |
|  Save parameter settings | Click this button to save the parameters settings for the profile. |
|  Edit | Click it to edit the settings of the selected item. |
|  Detail | Such button will bring up another dialog and display detailed information for the selected CPE. <div> </div> <p>Move the mouse button to the place below the setting items. Click it to modify the status or settings (local start IP, local end IP, local mask, etc.) for such CPE.</p> |

Editing the QoS Class Setting

To modify the QoS Class setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



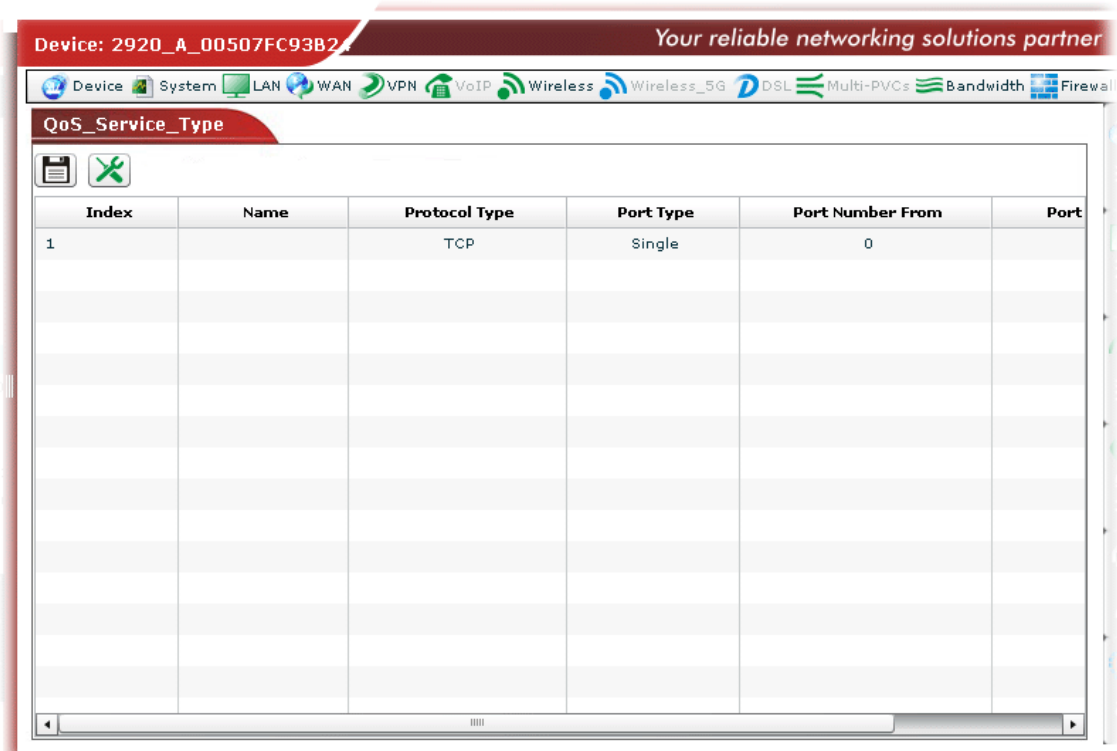
Available settings for such feature will be shown as follows:

| Items | Description |
|---------------|---|
| Index | Display the index number of the profile in current network group. |
| Name | Type a name for such class setting. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |



Configuring QoS Service Type Setting for the Selected CPE



Open **Bandwidth>>QoS WAN**. The following screen will appear with all of the QoS service

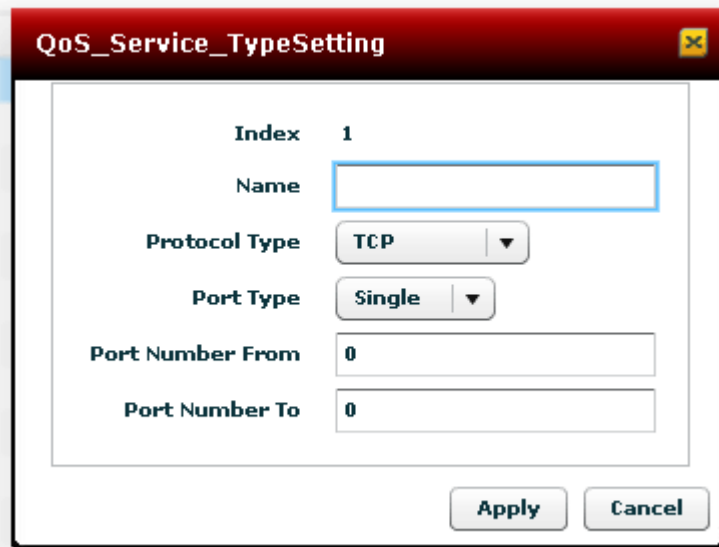


Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
| Index | Display the index number of the profile in current network group. |
| Name | Display the name of the QoS Class. |
| Protocol Type | Display the protocol selected for such service type. |
| Port Type | Display the port type (single or range) used for such service type. |
| Port Number From | Display the starting port number. |
| Port Number To | Display the ending port number. |
|  Save parameter settings | Click this button to save the parameters settings for the profile. |
|  Edit | Click it to edit the settings of the selected item. |

Editing the QoS Service Type Setting

To modify the QoS service type setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



The screenshot shows a dialog box titled "QoS_Service_TypeSetting". It contains the following fields and controls:

- Index:** 1
- Name:** An empty text input field.
- Protocol Type:** A dropdown menu currently set to "TCP".
- Port Type:** A dropdown menu currently set to "Single".
- Port Number From:** A text input field containing the value "0".
- Port Number To:** A text input field containing the value "0".
- Buttons:** "Apply" and "Cancel" buttons at the bottom right.

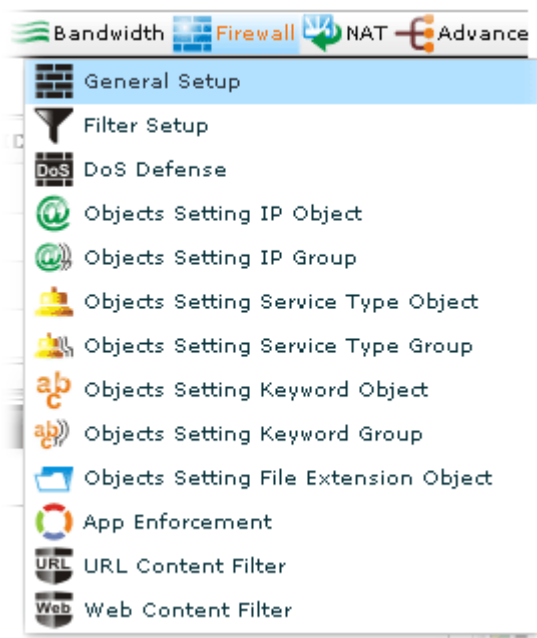
Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
| Index | Display the index number of the profile in current network group. |
| Name | Type a name for the QoS service type. |
| Protocol Type | Choose the type (TCP, UDP or TCP/UDP) for the new service |
| Port Type | Click Single or Range as the Type . If you select Range, you have to type in the starting port number and the end porting number on the boxes below. |
| Port Number From/ Port Number To | Type the same number for starting port and the ending port if you choose Single as the type. For Range, type the different values for these two boxes. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

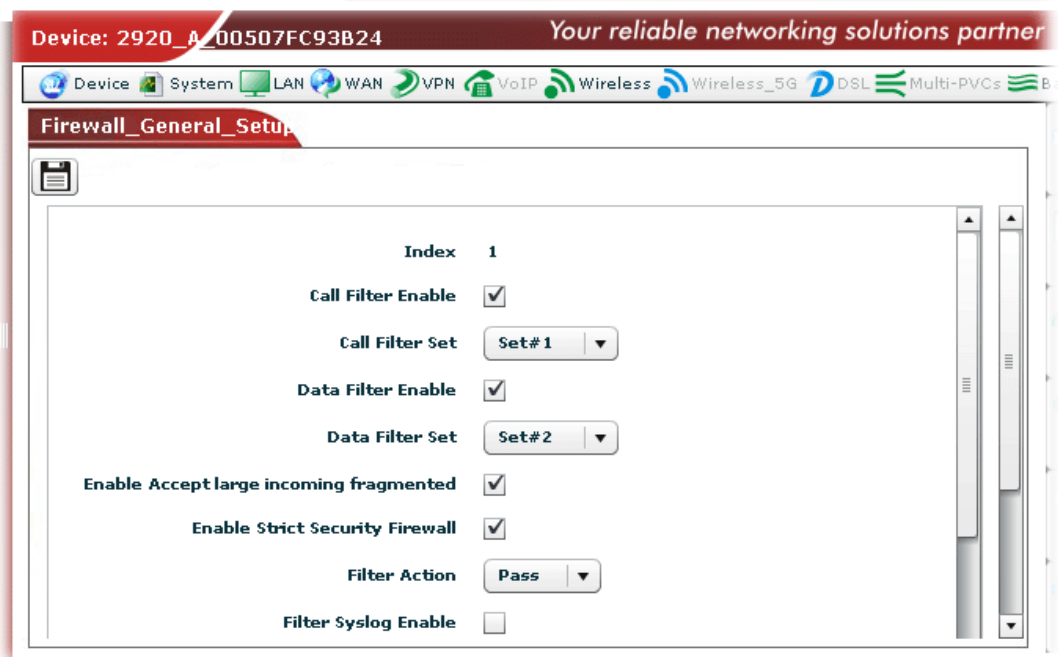
6.2.14 Firewall Settings for the Selected CPE

Configuring General Setup of Firewall for the Selected CPE

General Setup for firewall allows you to adjust settings of IP Filter and common options for the selected CPE.

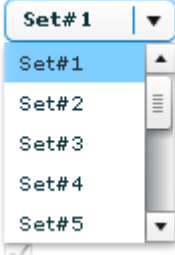
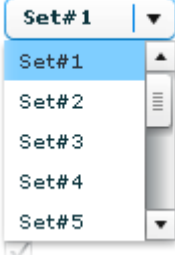



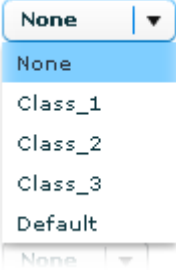
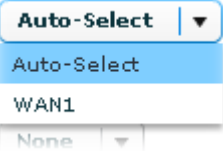
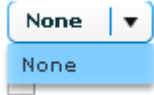
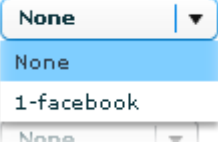
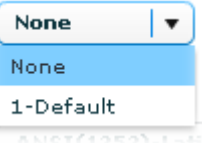
Open **Firewall>>General Setup**. The following screen will appear.

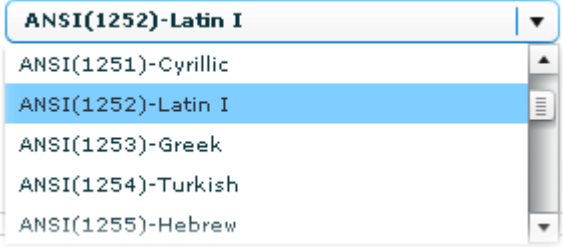


Available settings are shown as follows:

| Items | Description |
|---|--|
|  Save parameter settings | Click this button to save the parameters settings. |

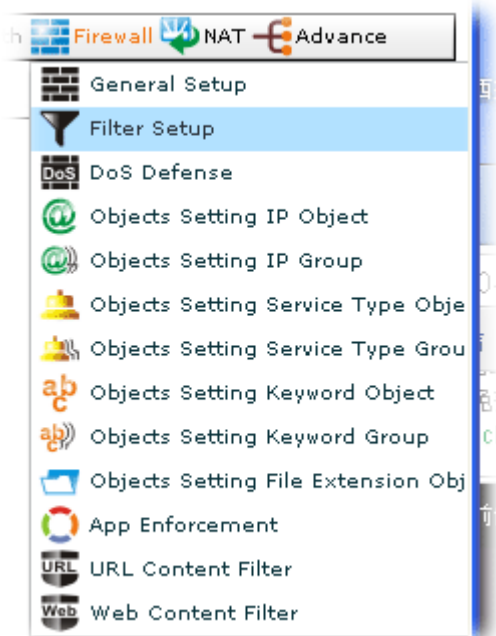
| Items | Description |
|--|---|
| Index | Display the index number of the profile in current network group. |
| Call Filter Enable | Check Enable to activate the Call Filter function. |
| Call Filter Set | Assign a start filter set for the Call Filter.  |
| Data Filter Enable | Check Enable to activate the Data Filter function. |
| Data Filter Set | Assign a start filter set for the Data Filter.  |
| Enable Accept large incoming fragmented | Some on-line games (for example: Half Life) will use lots of fragmented UDP packets to transfer game data. By checking this box, you can play these kinds of on-line games. If security concern is in higher priority, you cannot enable “ Accept large incoming fragmented ”. |
| Enable Strict Security Firewall | Check the box to enable such function. All the packets, while transmitting through Vigor router, will be filtered by firewall settings configured by Vigor router if such feature is enabled. |
| Filter Action | Select Pass or Block for the packets that do not match with the filter rules.  |
| Filter Syslog Enable | Check the box to make the data filter being sent to Syslog server. |
| Session Control | The number typed here is the total sessions of the packets that do not match the filter rule configured in this page. |

| Items | Description |
|--|---|
| Session Control Syslog Enable | Check the box to make the session control information being sent to Syslog server. |
| QoS | Choose one of the QoS rules to be applied as firewall rule. For detailed information of setting QoS, please refer to the related section later.  |
| QoS Syslog Enable | Check the box to make the QoS data being sent to Syslog server. |
| Load-Balance policy | Choose the WAN interface for applying Load-Balance Policy.  |
| Load-Balance policy Syslog Enable | Check the box to make the load-balance policy being sent to Syslog server. |
| APP Enforcement | Select an APP Enforcement profile for global IM/P2P application blocking.  |
| APP Enforcement Syslog Enable | Check the box to make the APP enforcement data being sent to Syslog server. |
| URL Content Filter |  |
| URL Content Filter Syslog Enable | Check the box to make the URL content filter data being sent to Syslog server. |
| Web Content Filter | Select one of the Web Content Filter profile setting.  |
| Web Content Filter Syslog | Check the box to make the web content filter data |

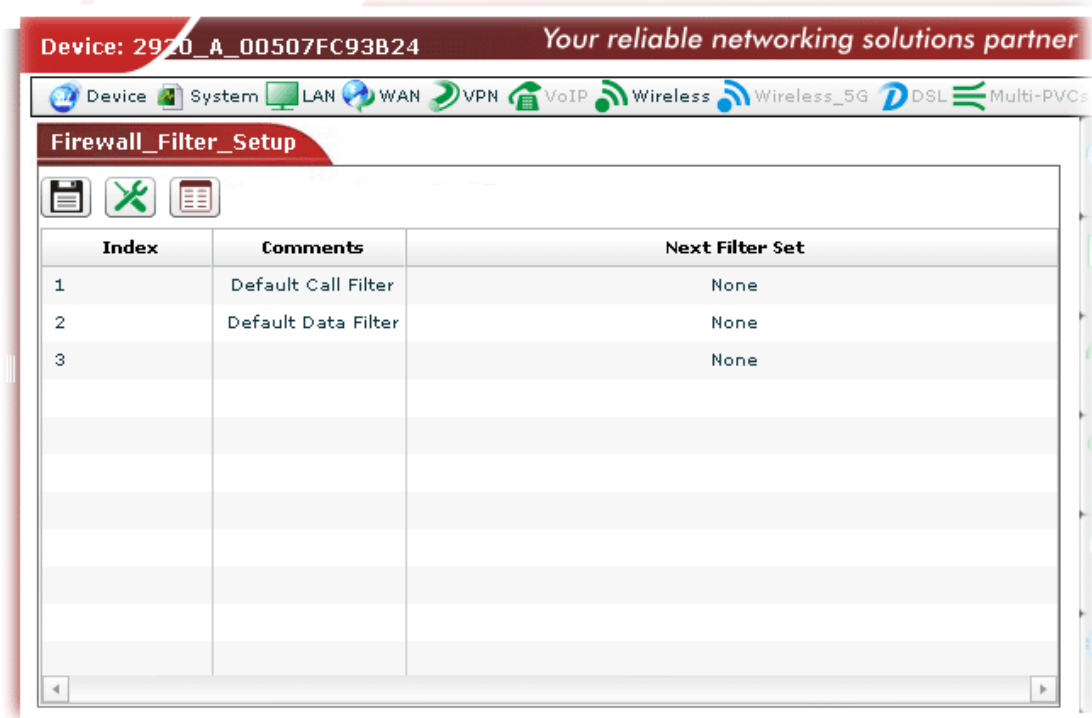
| Items | Description |
|------------------------|---|
| Enable | being sent to Syslog server. |
| Codepage | <p>It is used to compare the characters among different languages. Choose correct codepage can help the system obtaining correct ASCII after decoding data from URL and enhance the correctness of URL Content Filter.</p>  |
| Window size | It determines the size of TCP protocol (0~65535). The more the value is, the better the performance will be. However, if the network is not stable, small value will be proper. |
| Session timeout | Setting timeout for sessions can make the best utilization of network resources. |

Configuring Filter Setup of Firewall for the Selected CPE





Firewall filter can filter out specific packets that trigger the router to build an unwanted outgoing connection.



Open **Firewall>>Filter Setup**. The following screen will appear.

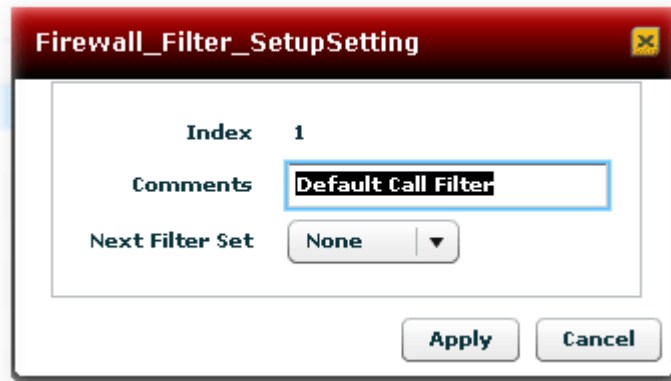


Available settings are shown as follows:

| Items | Description |
|--|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
|  Detail | Click it to edit the advanced settings of the selected profile.  |
| Index | Display the index number of the profile in current network group. |
| Comments | Display filter set comments/description. |
| Next Filter Set | Display the name of the next filter set. |

Editing the Filter Setup Setting

To modify the filter setup setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

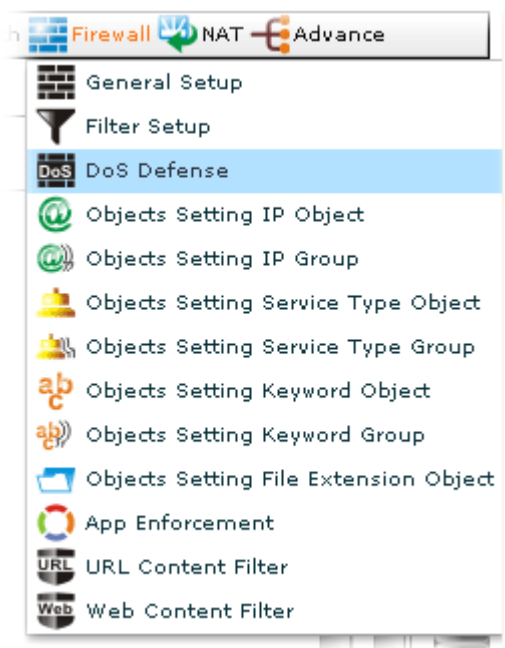


Available settings for such feature will be shown as follows:

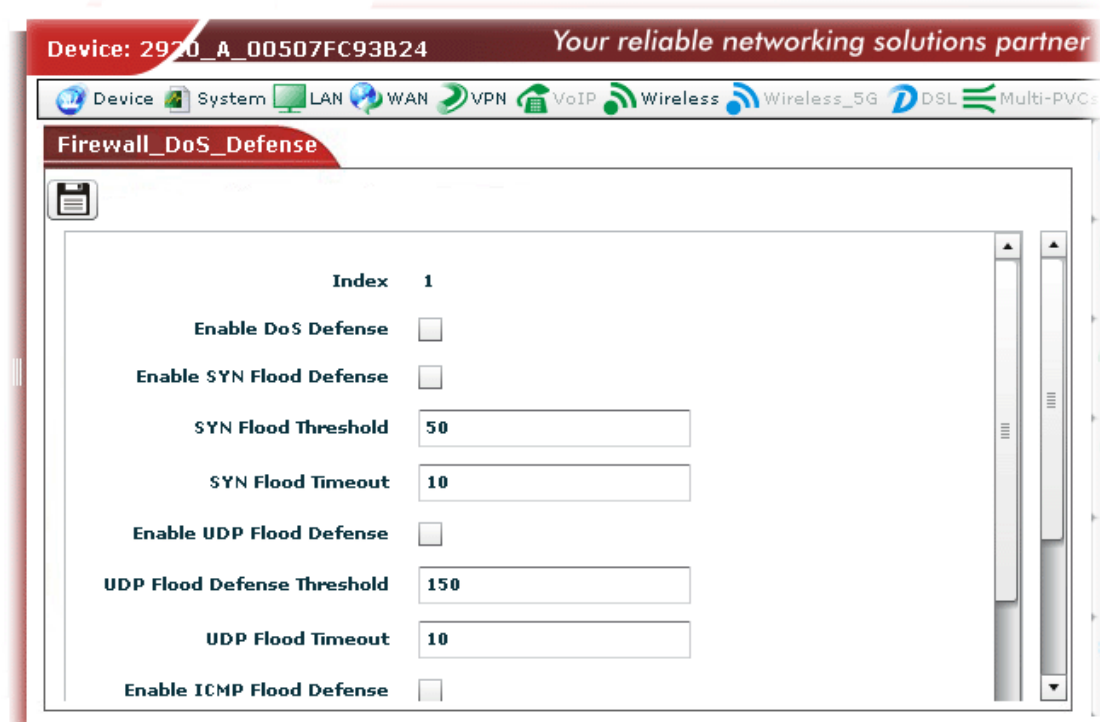
| Items | Description |
|------------------------|--|
| Index | Display the index number of the profile in current network group. |
| Comments | Enter filter set comments/description. Maximum length is 23-character long. |
| Next Filter Set | Set the link to the next filter set to be executed after the current filter run. Do not make a loop with many filter sets. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring DoS Defense of Firewall for the Selected CPE

As a sub-functionality of IP Filter/Firewall, there are 15 types of detect/ defense function in the DoS Defense setup.



Open **Firewall>>DoS Defense**. The following screen will appear.



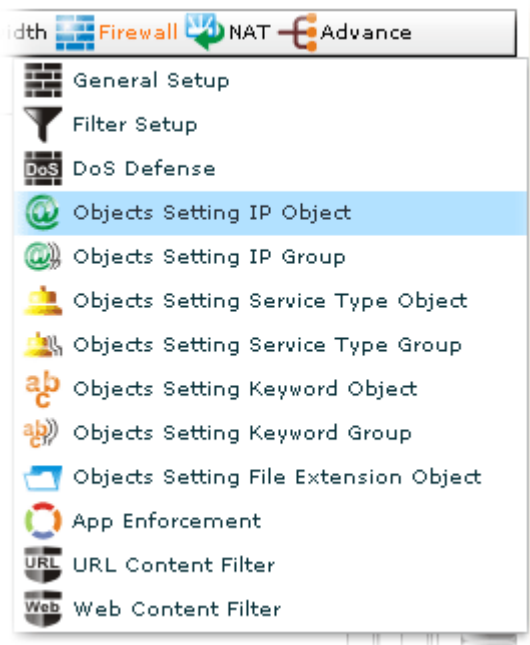
Available settings are shown as follows:

| Items | Description |
|--|--|
|  Save parameter | Click this button to save the parameters settings. |

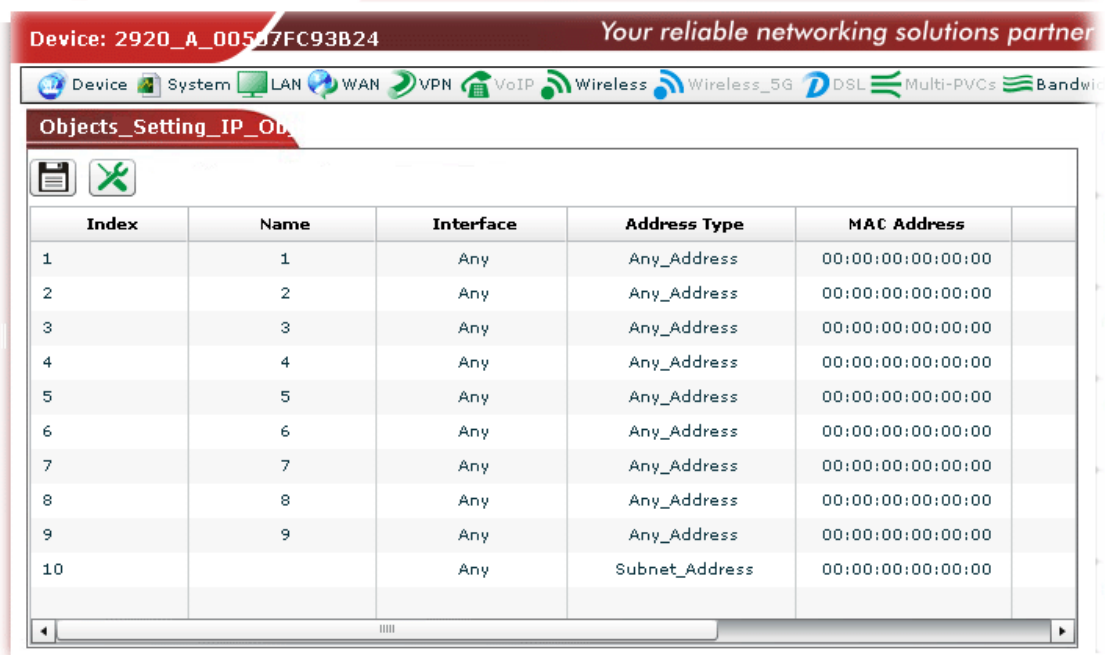
| Items | Description |
|---|---|
| settings | |
| Index | Display the index number of the profile in current network group. |
| Enable DoS Defense | Check the box to enable DoS Defense. |
| Enable SYN Flood Defense | Check the box to enable SYN Flood Defense. |
| SYN Flood Threshold / SYN Flood Timeout | The goal of the function is to prevent the TCP SYN packets' attempt to exhaust the limited-resource of Vigor router. By default, the threshold and timeout values are set to 50 packets per second and 10 seconds, respectively. |
| Enable UDP Flood Defense | Check the box to enable UDP Flood Defense. |
| UDP Flood Defense Threshold/ UDP Flood Timeout | Threshold of the UDP packets from the Internet has exceeded the defined value, the Vigor router will start to randomly discard the subsequent UDP packets for a period defined in Timeout. The default setting for threshold and timeout are 150 packets per second and 10 seconds, respectively. |
| Enable ICMP Flood Defense | Check the box to enable ICMP Flood Defense. |
| ICMP Flood Threshold/ ICMP Flood Timeout | Check the box to activate the ICMP flood defense function. The default setting for threshold and timeout are 50 packets per second and 10 seconds, respectively |
| Enable Port Scan Detection | Check the box to enable Port Scan Defense. |
| Port Scan Threshold | The Vigor router sets the threshold as 150 packets per second. |
| Block IP Options | Check the box to activate the Block IP options function. |
| Block TCP Flag Scan | Check the box to activate the Block TCP flag scan function. |
| Block Land | Check the box to enforce the Vigor router to defense the Land attacks. |
| Block Tear Drop | Check the box to activate the Block Tear Drop function. |
| Block Smurf | Check the box to activate the Block Smurf function. The Vigor router will ignore any broadcasting ICMP echo request. |
| Block Ping of Death | Check the box to activate the Block Ping of Death function. |
| Block Trace Route | Check the box to enforce the Vigor router not to forward any trace route packets. |
| Block ICMP fragment | Check the box to activate the Block ICMP fragment function. |
| Block SYN fragment | Check the box to activate the Block SYN fragment function. |
| Block Unknown Protocol | Check the box to activate the Block Unknown Protocol function. |
| Block Fraggle Attack | Check the box to activate the Block fraggle Attack function. |

Configuring IP Object Setting of Firewall for the Selected CPE



For IPs in a range and service ports in a limited range usually will be applied in configuring router's settings, therefore we can define them with *objects* and bind them with *groups* for using conveniently. Later, we can select that object/group that can apply it. For example, all the IPs in the same department can be defined with an IP object (a range of IP address).



Open **Firewall>>Objects Setting IP Object**. The following screen will appear.

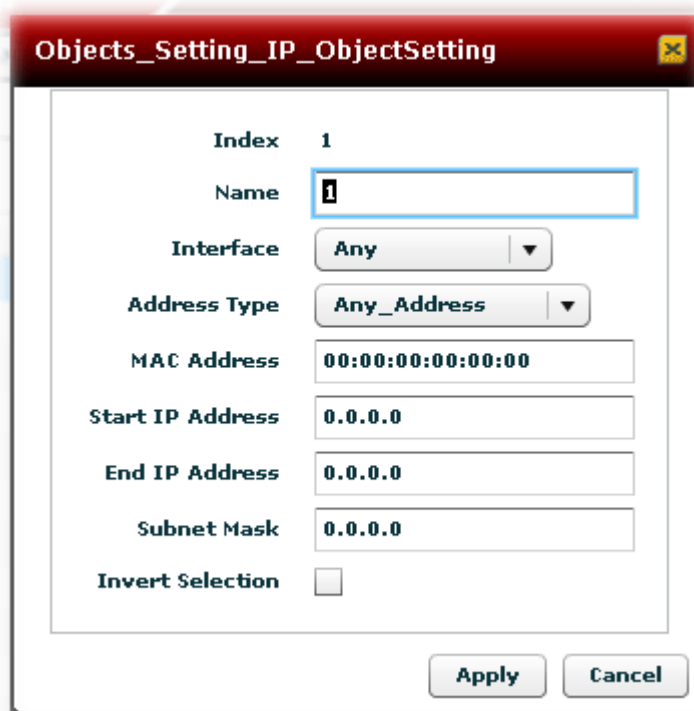


Available settings for such feature will be shown as follows:

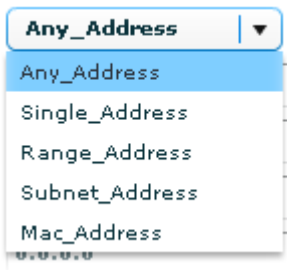
| Items | Description |
|--|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Name | Display the name of the selected profile. |
| Interface | Display the interface of the selected profile. |
| Address Type | Display the address type of the selected profile. |
| MAC Address | Display the MAC address of the selected profile. |
| Start IP Address | Display the start IP address of the selected profile. |
| End IP Address | Display the end IP address of the selected profile. |
| Subnet Mask | Display the subnet mask of the selected profile. |
| Invert Selection | Display if the function is enabled (true) or disabled (false). |

Editing the IP Object Setting

To modify the IP Object setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



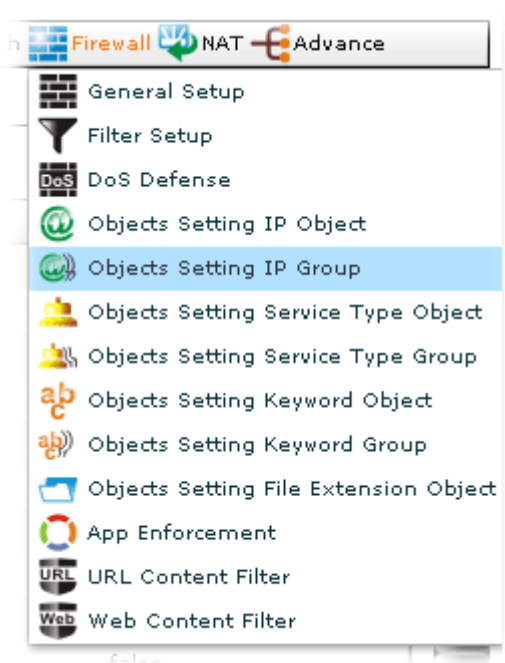
Available settings are shown as follows:

| Items | Description |
|---------------------|--|
| Index | Display the index number of the profile in current network group. |
| Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Interface | Choose an interface you want. |
| Address Type | <p>Determine the address type for the IP address.</p> <p>Select Single Address if this object contains one IP address only.</p> <p>Select Range Address if this object contains several IPs within a range.</p> <p>Select Subnet Address if this object contains one subnet for IP address.</p> <p>Select Any Address if this object contains any IP address.</p> <p>Select Mac Address if this object contains Mac address.</p>  |
| MAC Address | Type the MAC address of the network card which will be |

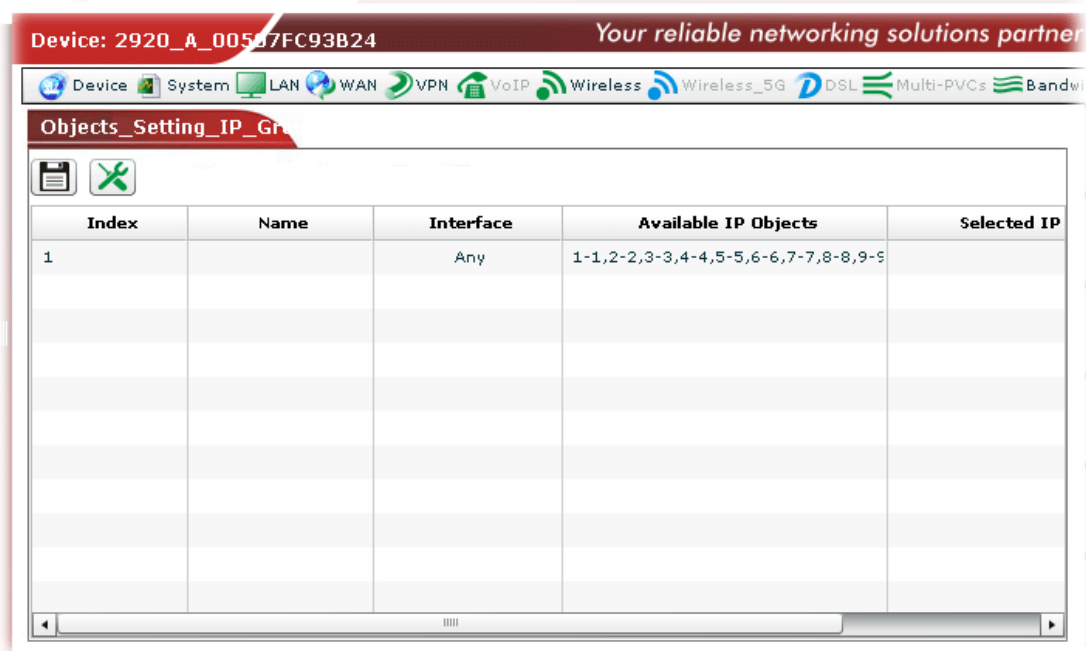
| Items | Description |
|-------------------------|---|
| | controlled. |
| Start IP Address | Type the start IP address for Single Address type. |
| End IP Address | Type the end IP address if the Range Address type is selected. |
| Subnet Mask | Type the subnet mask if the Subnet Address type is selected. |
| Invert Selection | If it is checked, all the IP addresses except the ones listed above will be applied later while it is chosen. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring IP Group Setting of Firewall for the Selected CPE



Several IP objects can be grouped under one IP group profile.



Open **Firewall>>Objects Setting IP Group**. The following screen will appear.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Name | Display the profile name of the IP group. |
| Interface | Display the interface for the IP group. |
| Available IP Objects | Display all the available IP objects in this field. |
| Selected IP Objects | Display the profile name of IP objects under the group. |

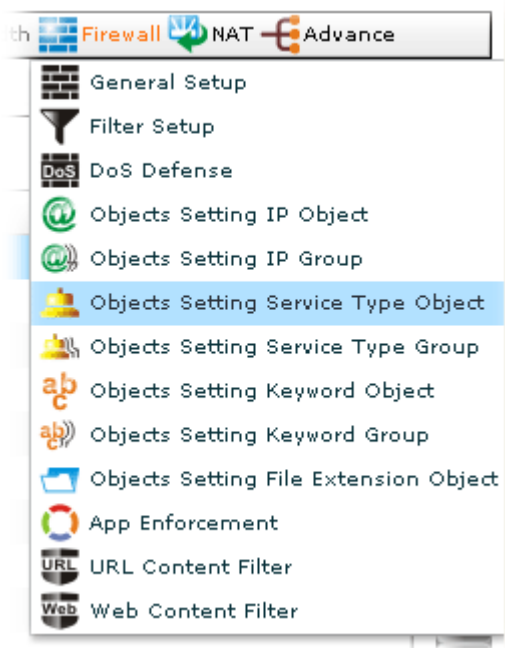
Editing the IP Group Setting

To modify the IP Group setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

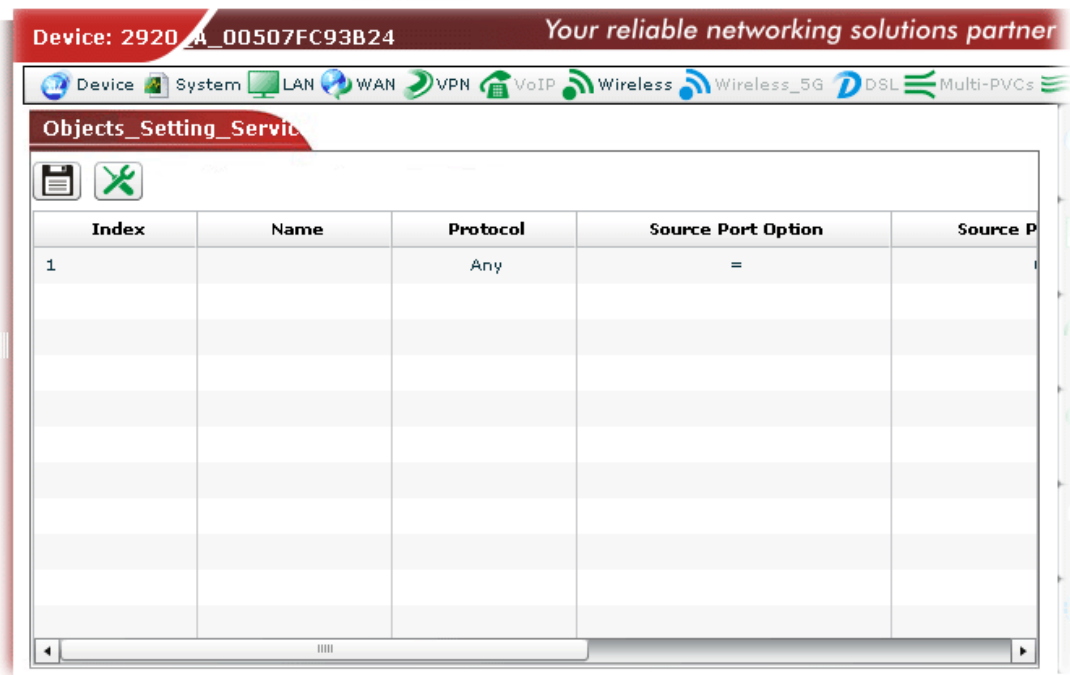
Available settings are shown as follows:

| Items | Description |
|-----------------------------|--|
| Index | Display the index number of the profile in current network group. |
| Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Interface | Choose WAN, LAN or Any to display all the available IP objects with the specified interface. |
| Available IP Objects | All the available IP objects with the specified interface will be shown in this box. |
| Selected IP Objects | Type the profile name of IP objects you want to group in this field. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |



Configuring Service Type Object Setting of Firewall for the Selected CPE

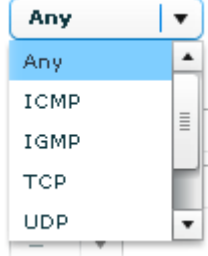


Open **Firewall>>Objects Setting Service Type Object**. The following screen will appear.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |

| Items | Description |
|---|--|
| Index | Display the index number of the profile in current network group. |
| Name | Display the name of this profile. |
| Protocol | Specify the protocol(s) which this profile will apply to.  |
| Source Port Option / Destination Port Option | <p>Source Port and the Destination Port column are available for TCP/UDP protocol. It can be ignored for other protocols. The filter rule will filter out any port number.</p> <p>(=) – when the first and last value are the same, it indicates one port; when the first and last values are different, it indicates a range for the port and available for this profile.</p> <p>(!=) – when the first and last value are the same, it indicates all the ports except the port defined here; when the first and last values are different, it indicates that all the ports except the range defined here are available for this service type.</p> <p>(>) – the port number greater than this value is available.</p> <p>(<) – the port number less than this value is available for this profile.</p> |
| Source Port From | Display the starting port number of the source. |
| Source Port To | Display the ending port number of the source. |
| Destination Port From | Display the starting port number of the destination. |
| Destination Port To | Display the ending port number of the destination. |

Editing the Service Type Object

To modify the service type object setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

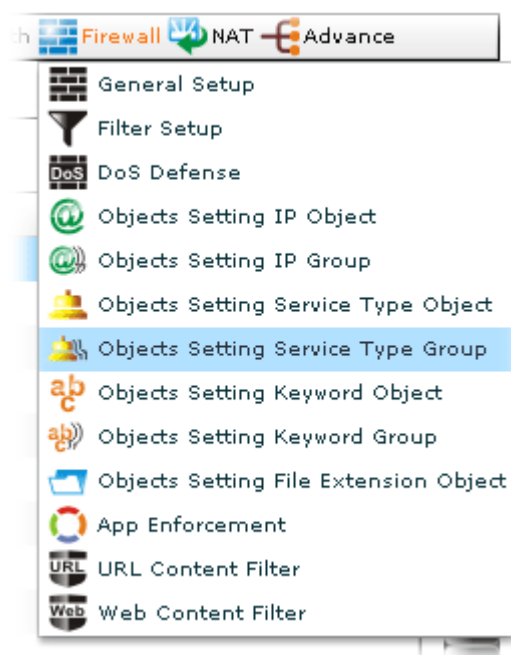
Available settings are shown as follows:

| Items | Description |
|---|--|
| Index | Display the index number of the profile in current network group. |
| Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Protocol | Specify the protocol(s) which this profile will apply to. |
| Source Port Option / Destination Port Option | <p>Source Port and the Destination Port column are available for TCP/UDP protocol. It can be ignored for other protocols. The filter rule will filter out any port number.</p> <p>(=) – when the first and last value are the same, it indicates one port; when the first and last values are different, it indicates a range for the port and available for this profile.</p> <p>(!=) – when the first and last value are the same, it indicates all the ports except the port defined here; when the first and last values are different, it indicates that all the ports except the range defined here are available for this service type.</p> <p>(>) – the port number greater than this value is available.</p> <p>(<) – the port number less than this value is available for this profile.</p> |
| Source Port From | Type a number as starting port. |
| Source Port To | Type a number as ending port. |
| Destination Port From | Type a number as starting port. |

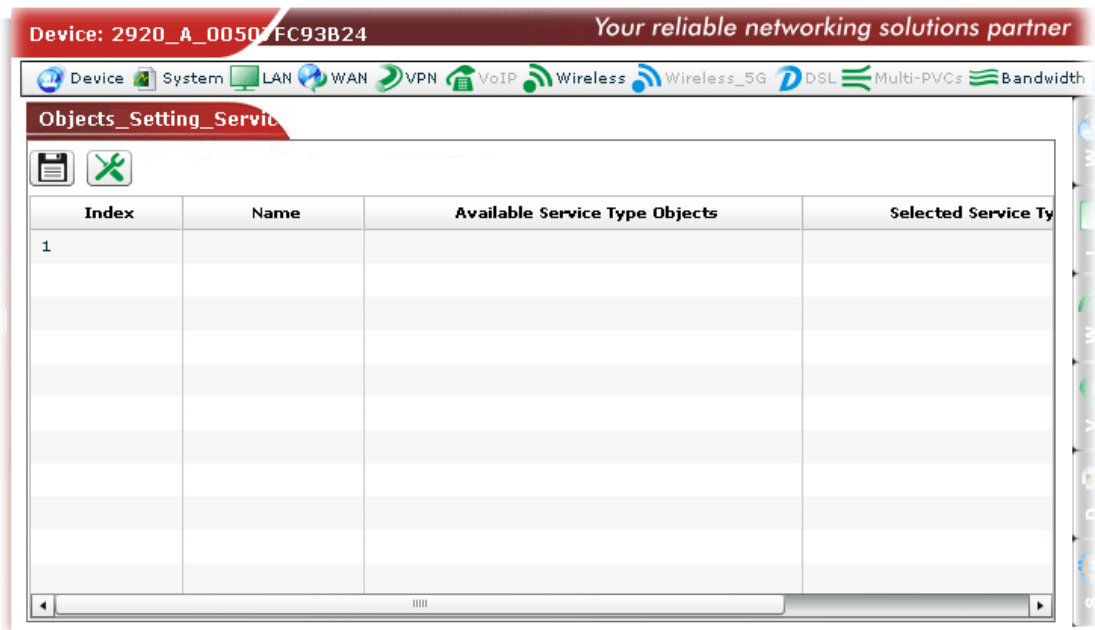
| Items | Description |
|----------------------------|--|
| Destination Port To | Type a number as ending port. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring Service Type Group Setting of Firewall for the Selected CPE


Several service type objects can be grouped under one IP group profile.




Open **Firewall>>Objects Setting Service Type Group**. The following screen will appear.



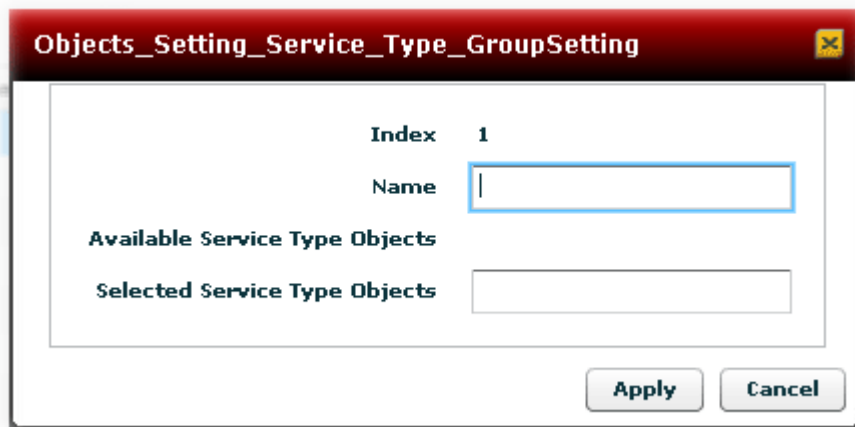
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |

| Items | Description |
|---|---|
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Name | Display the name of this profile. |
| Available Service Type Objects | Display all the available service type objects in this field. |
| Selected Service Type Objects | Display the profile name of service type objects under the group. |

Editing the Service Type Group Object

To modify the service type group setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

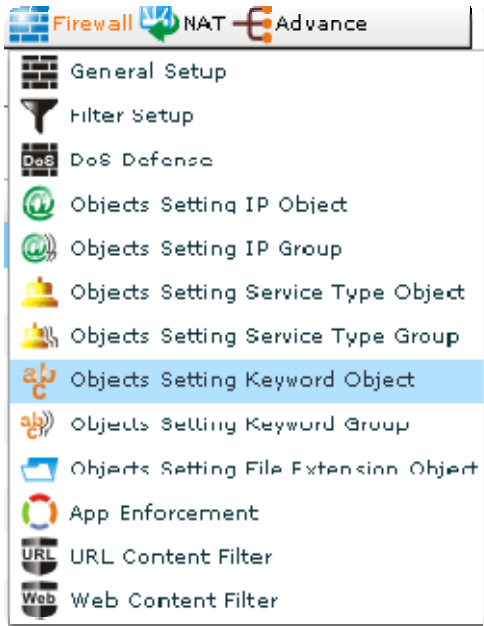


Available settings are shown as follows:

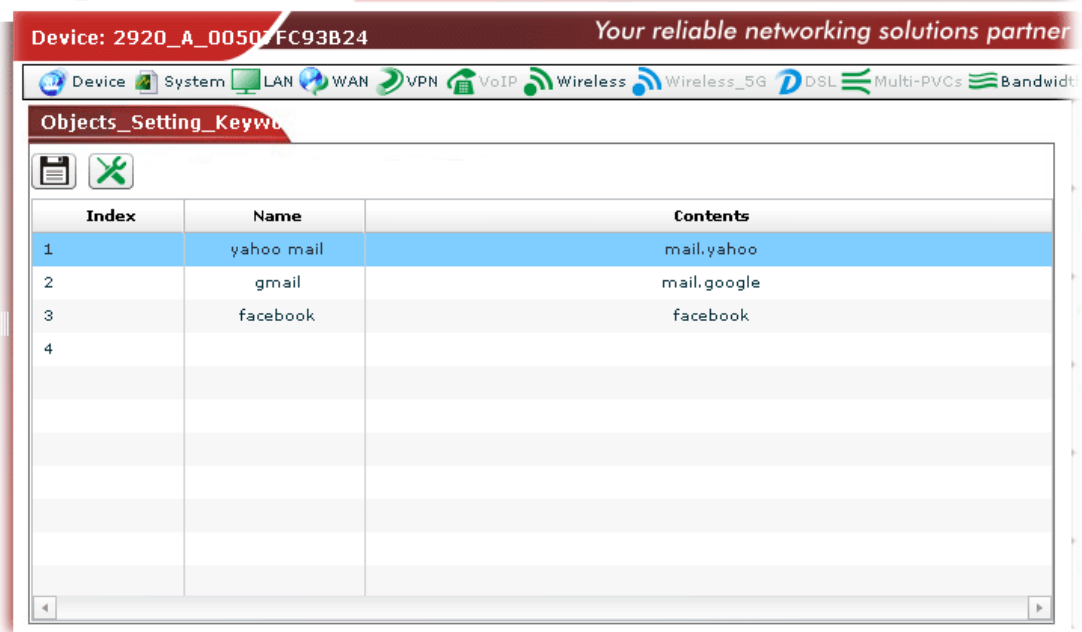
| Items | Description |
|---------------------------------------|--|
| Index | Display the index number of the profile in current network group. |
| Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Available Service Type Objects | All the available service type objects with the specified interface will be shown in this box. |
| Selected Service Type Objects | Type the profile name of service type objects you want to group in this field. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring Keyword Object Setting of Firewall for the Selected CPE



You can set 200 keyword object profiles for choosing as black /white list used for **URL Content Filter Profile**.



Open **Firewall>>Objects Setting Keyword Object**. The following screen will appear.



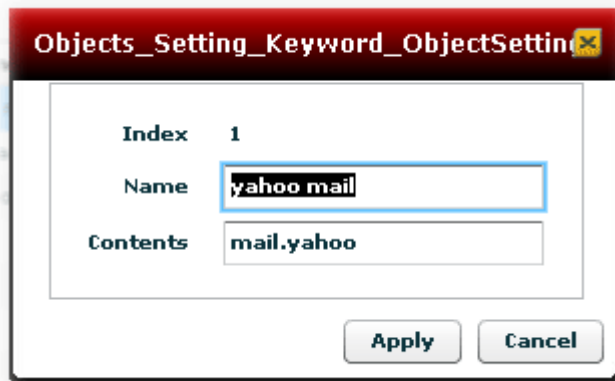
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |

| Items | Description |
|-----------------|---|
| Index | Display the index number of the profile in current network group. |
| Name | Display the name of the profile. |
| Contents | Display the content of the keyword profile. |

Editing the Keyword Object

To modify the keyword object setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

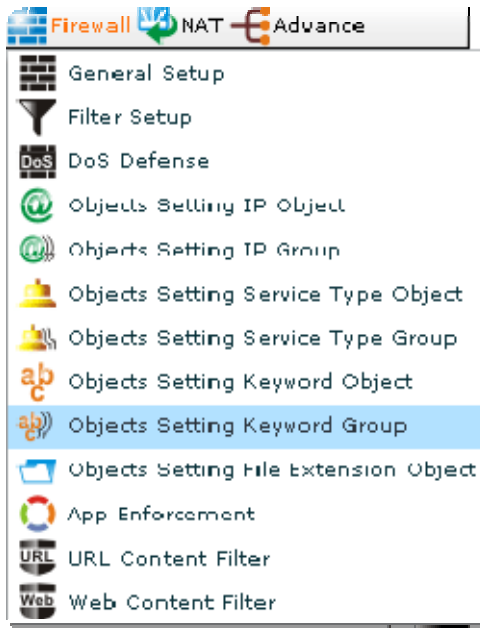


Available settings are shown as follows:

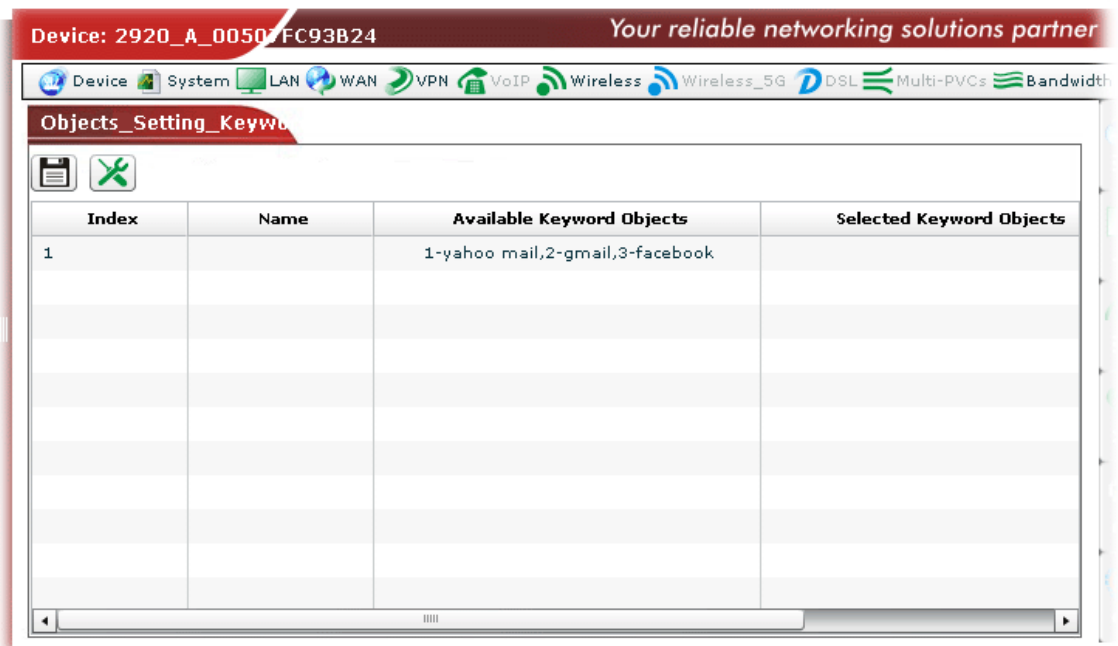
| Items | Description |
|----------------|--|
| Index | Display the index number of the profile in current network group. |
| Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Content | Type the content for such profile. For example, type <i>gambling</i> as Contents. When you browse the webpage, the page with gambling information will be watched out and be passed/blocked based on the configuration on Firewall settings. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring Keyword Group Setting of Firewall for the Selected CPE



Several keyword group objects can be grouped under one IP group profile.



Open **Firewall>>Objects Setting Keyword Group**. The following screen will appear.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |

| Items | Description |
|----------------------------------|---|
| Index | Display the index number of the profile in current network group. |
| Name | Display the name of this profile. |
| Available Keyword Objects | Display all the available service type objects in this field. |
| Selected Keyword Objects | Display the profile name of service type objects under the group. |

Editing the Keyword Group

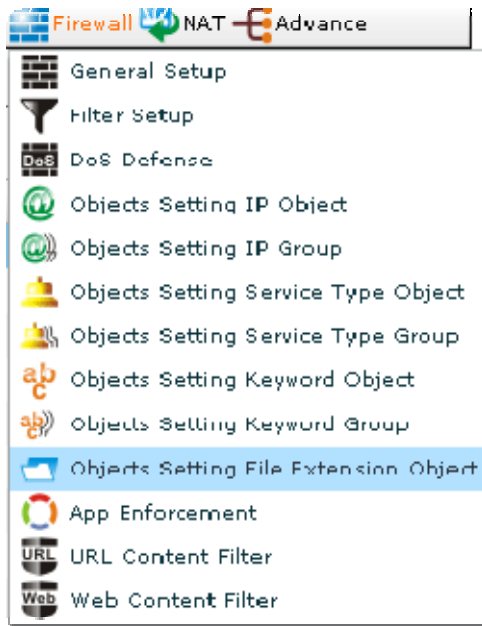
To modify the keyword group setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

Available settings are shown as follows:

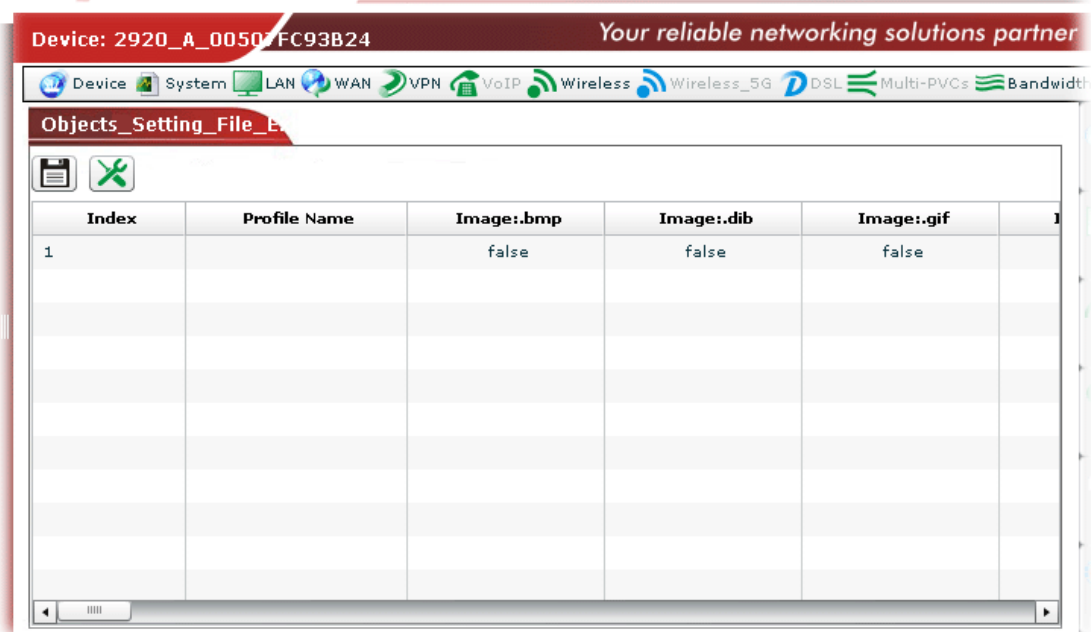
| Items | Description |
|----------------------------------|---|
| Index | Display the index number of the profile in current network group. |
| Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Available Keyword Objects | All the available Keyword objects with the specified interface will be shown in this box. |
| Selected Keyword Objects | Type the name of Keyword objects you want to group in this field. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring File Extension Setting of Firewall for the Selected CPE



All the files with the extension names specified in these profiles will be processed according to the chosen action.



Open **Firewall>>Objects Setting File Extension Object**. The following screen will appear.



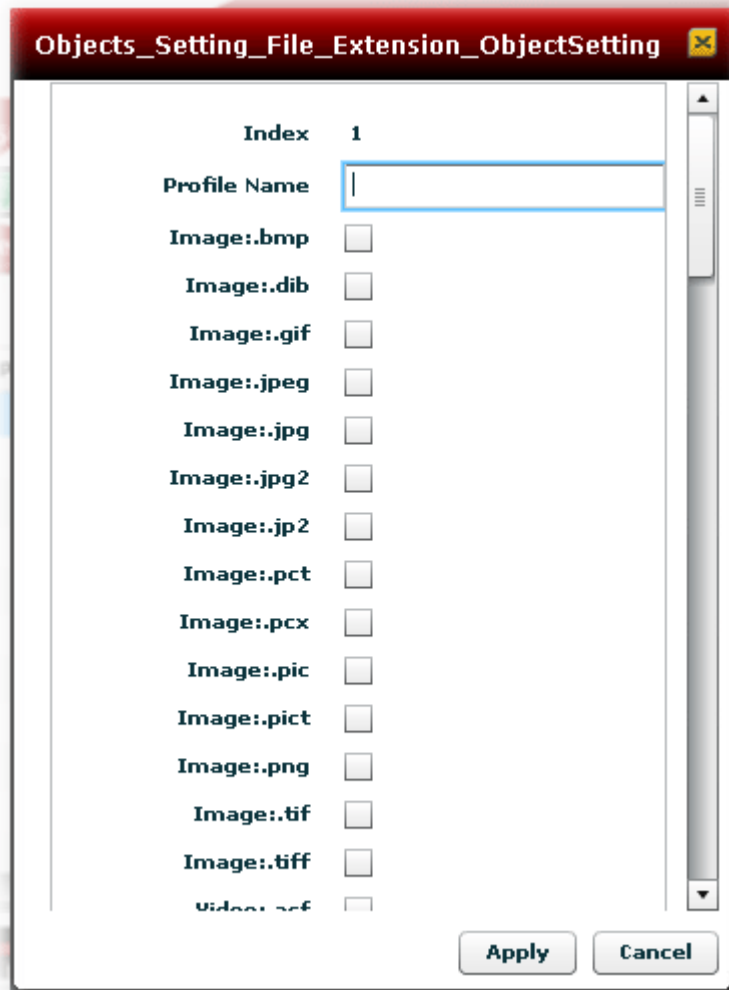
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |

| Items | Description |
|---|---|
| Index | Display the index number of the profile in current network group. |
| Profile Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Image:.bmp ~ Image:.tiff, Video:.asf ~ Video:.3g2, Audio:.aac ~ Audio:.wma, Java:.class ~ Java:.jtk, ActiveX:.alx ~ ActiveX:.vrm, Compression:.ace ~ Compression:.zip, Execution:.bas ~ Execution:.scr | Display if such file extension is selected (true) or not selected (false) for such profile. |

Editing the File Extension Object Setting

To modify the file extension object setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

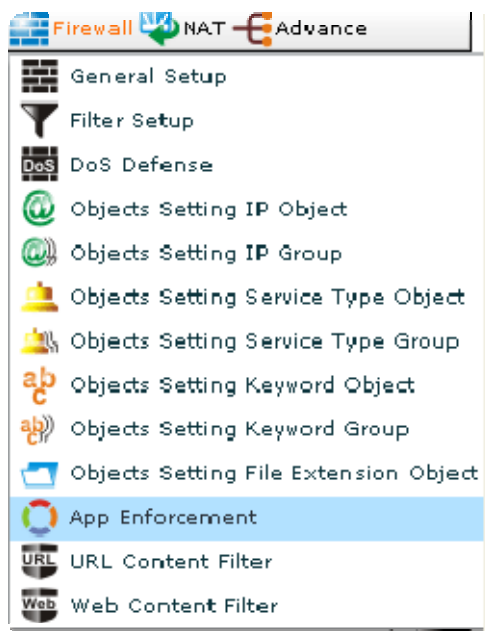


Available settings are shown as follows:

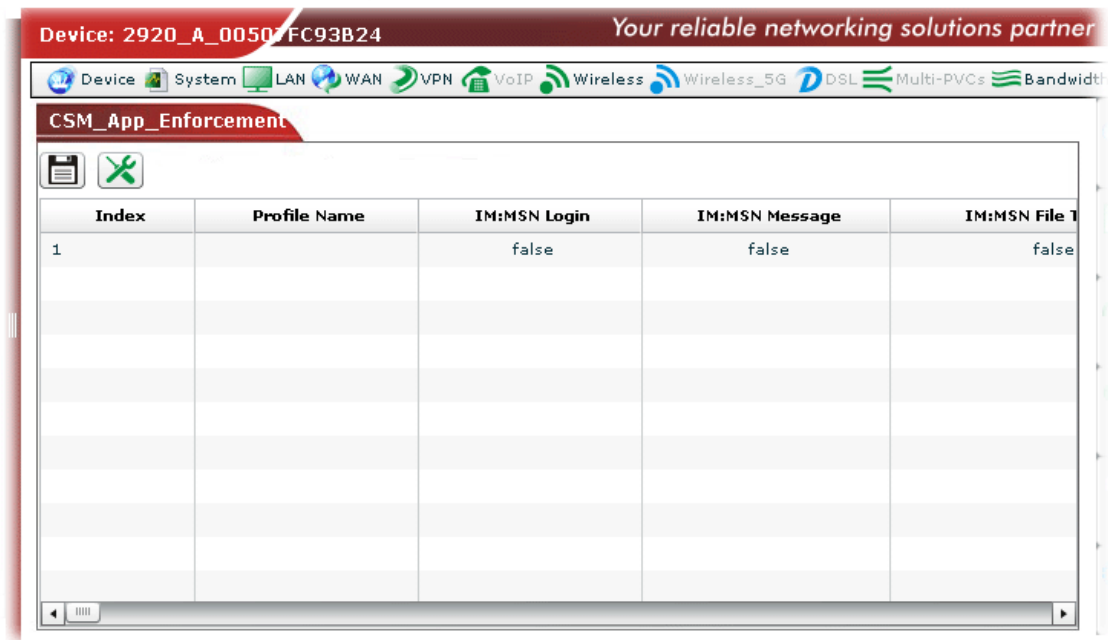
| Items | Description |
|--|--|
| Index | Display the index number of the profile in current network group. |
| Profile Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Image:.bmp ~ Image.tiff, Execution:.bas ~ Execution:.scr, ... | Check the box of each file extension to make it to be included under the file extension profile. The file extensions specified in this profile will be ignored and not be scanned by Vigor router. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring APP Enforcement Setting of Firewall for the Selected CPE



You can define/edit policy profiles for IM (Instant Messenger)/P2P (Peer to Peer)/Protocol/Misc application.



Open **Firewall>>APP Enforcement**. The following screen will appear.

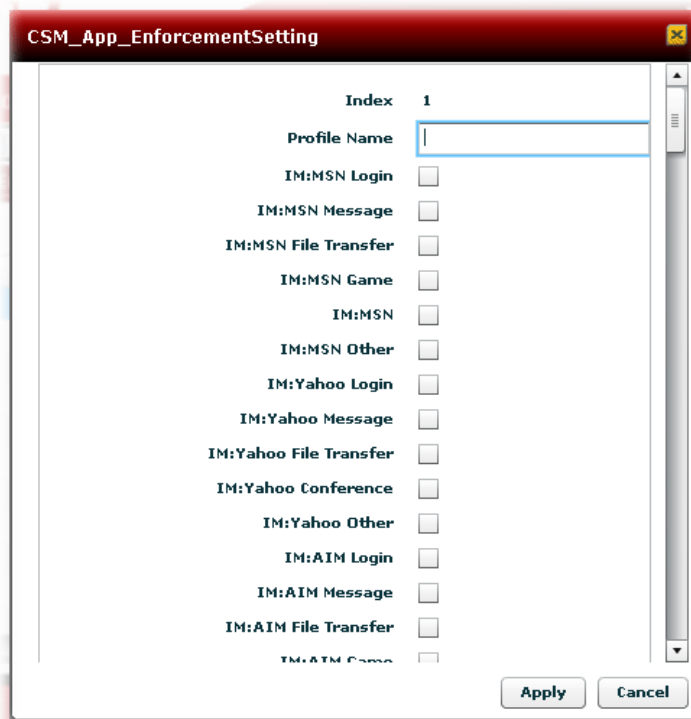


Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Profile Name | Display the name of the profile. |
| IM:MSN Login ~ IM:WebIM, P2P:SoulSeek ~ P2P:Kuwo, Protocol:DNS ~ Protocol:Informix, Misc:Tunneling:Socks4/5 ~ Misc:Web HD:OfficeLive | Display if such application is selected (true) or not selected (false) for such profile. |

Editing the APP Enforcement Setting

To modify the APP enforcement setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.

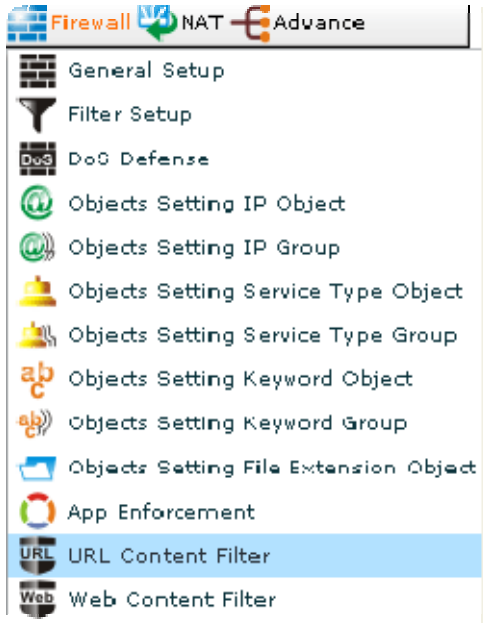


Available settings are shown as follows:

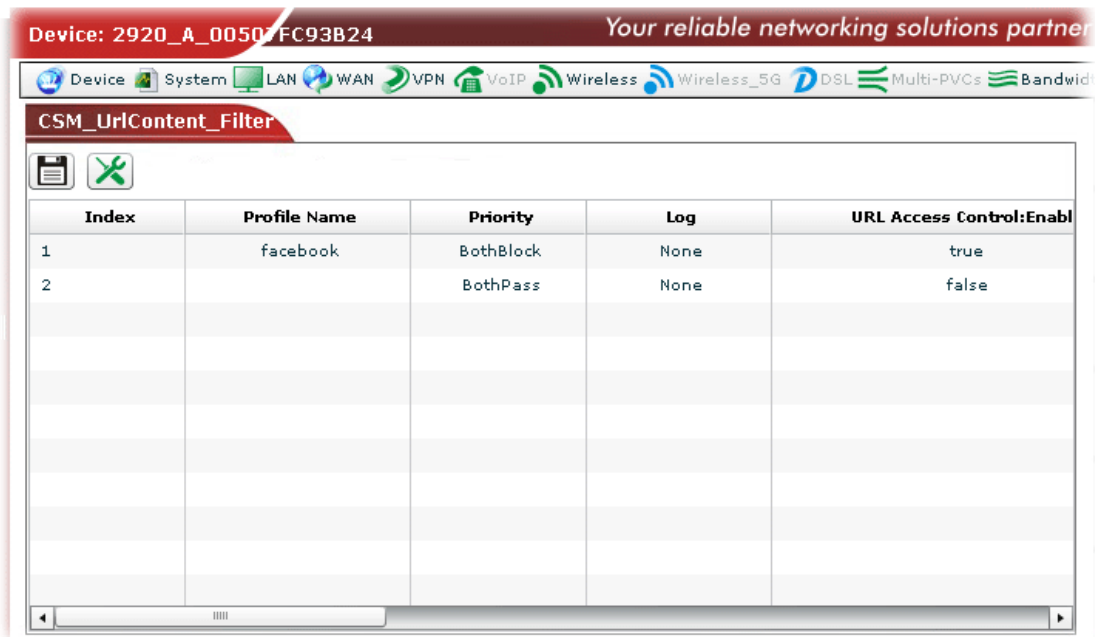
| Items | Description |
|--|--|
| Index | Display the index number of the profile in current network group. |
| Profile Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| IM:MSN Login ~ IM:WebIM, 5 ~ Misc:Web HD:OfficeLive,..... | Check the box of each APP to make it to be included under the profile. The APP specified in this profile will be ignored and not be scanned by Vigor router. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring URL Content Filter Setting of Firewall for the Selected CPE



URL Content Filter not only can limit illegal traffic from/to the inappropriate web sites but also can prohibit other web feature where malicious code may conceal.



Open **Firewall>>URL Content Filter**. The following screen will appear.



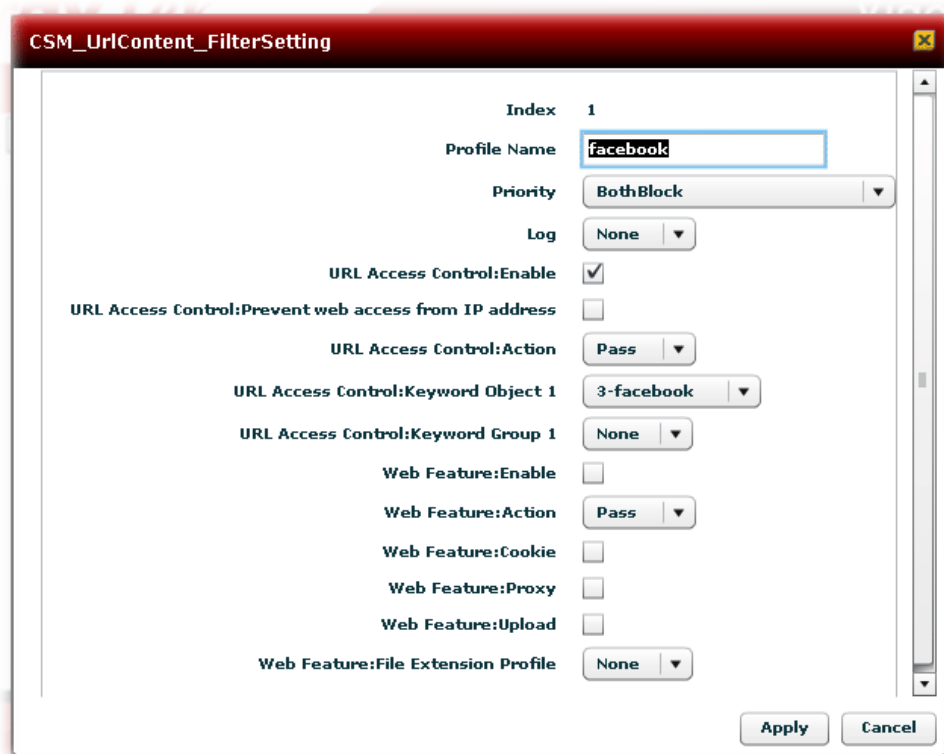
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save parameter settings | Click this button to save the parameters settings. |
|  Edit | Click it to edit the settings of the selected profile. |

| Items | Description |
|--|---|
| Index | Display the index number of the profile in current network group. |
| Profile Name | Display the name of the profile. |
| Priority | Display the action that the CPE will apply. |
| Log | Display the log with the action recorded for this profile. |
| URL Access Control:Enable | Display if such function is enabled (true) or disabled (false). |
| URL Access Control:Prevent web access from IP address | Display if such function is enabled (true) or disabled (false). |
| URL Access Control:Action | Display the action (Pass or Block) of such feature adopted by this profile. |
| URL Access Control:Keyword Object1 | Display the object profile selected for URL Access Control by this profile. |
| URL Access Control:Keyword Group1 | Display the object group profile selected for URL Access Control by this profile. |
| Web Feature: Enable | Display if such function is enabled (true) or disabled (false). |
| Web Feature:Action | Display the action (Pass or Block) of such feature adopted by this profile. |
| Web Feature:Cookie | Display if such function is enabled (true) or disabled (false). |
| Web Feature:Proxy | Display if such function is enabled (true) or disabled (false). |
| Web Feature:Upload | Display if such function is enabled (true) or disabled (false). |
| Web Feature:File Extension Profile | Display the profile adopted by this profile. |



Editing the URL Content Filter Setting

To modify the URL content filter setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



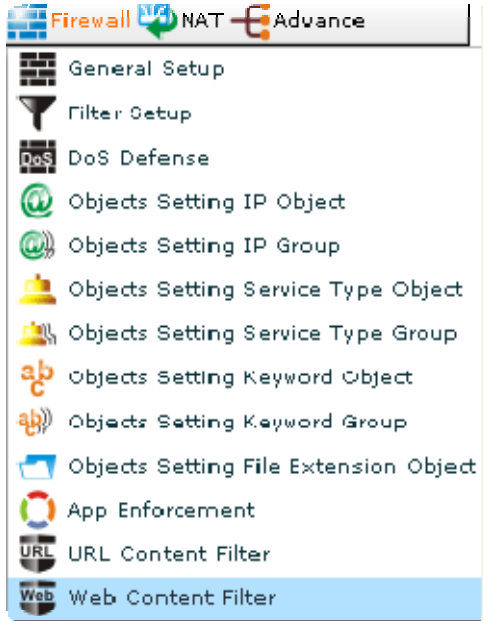
Available settings are shown as follows:

| Items | Description |
|--|--|
| Index | Display the index number of the profile in current network group. |
| Profile Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Priority | It determines the action that this router will apply. Use the drop down list to choose the one you want. |
| Log | None – There is no log file will be recorded for this profile. Pass – Only the log about Pass will be recorded in Syslog. Block – Only the log about Block will be recorded in Syslog. All – All the actions (Pass and Block) will be recorded in Syslog. |
| URL Access Control:Enable | Check the box to activate URL Access Control. |
| URL Access Control:Prevent web access from IP address | Check the box to activate the function of Prevent web access from IP address for URL Access Control. |
| URL Access Control:Action | Pass - Allow accessing into the corresponding webpage. Block - Restrict accessing into the corresponding webpage. If the web pages do not match with the specified feature set here, it will be processed with reverse action. |

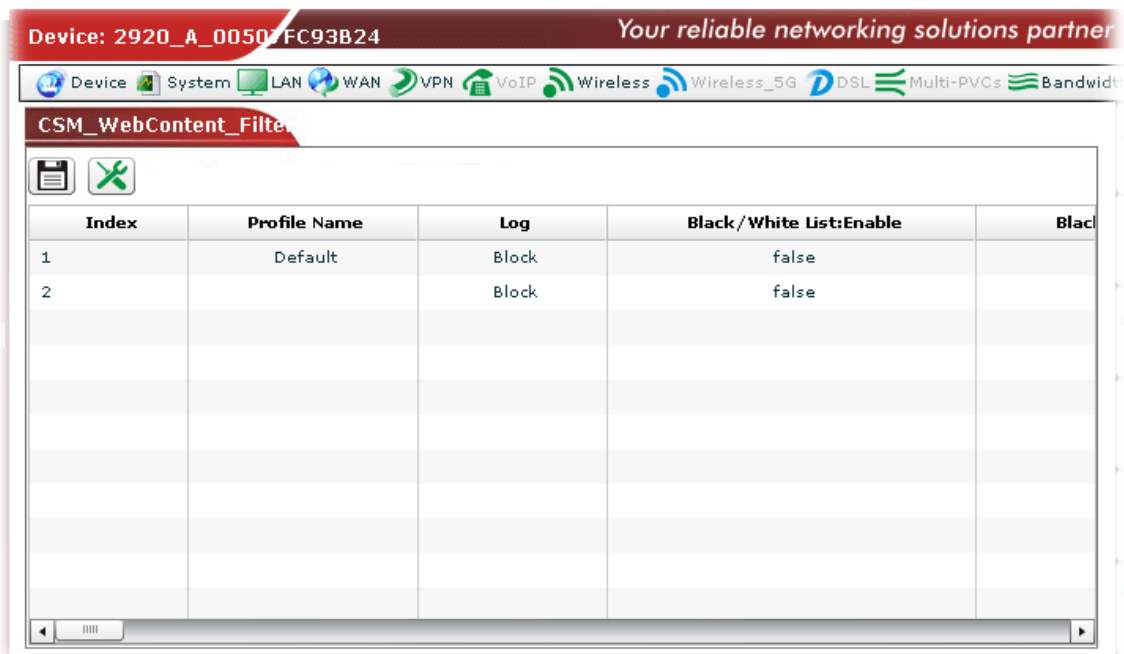
| Items | Description |
|---|--|
| |  |
| URL Access Control:Keyword Object1 | Use the drop down list to choose the profile you want. |
| URL Access Control:Keyword Group1 | Use the drop down list to choose the profile you want. |
| Web Feature: Enable | Check the box to activate Web Feature. |
| Web Feature:Action | <p> Pass - Allow accessing into the corresponding webpage. Block - Restrict accessing into the corresponding webpage. If the web pages do not match with the specified feature set here, it will be processed with reverse action. </p>  |
| Web Feature:Cookie | Check the box to filter out the cookie transmission from inside to outside world to protect the local user's privacy. |
| Web Feature:Proxy | Check the box to reject any proxy transmission. To control efficiently the limited-bandwidth usage, it will be of great value to provide the blocking mechanism that filters out the multimedia files downloading from web pages. |
| Web Feature:Upload | Check the box to upload data with the limitation of Web Feature. |
| Web Feature:File Extension Profile | Use the drop down list to choose the profile you want. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

Configuring Web Content Filter Setting of Firewall for the Selected CPE

With Web filtering service of the Vigor router, you can protect your business from common primary threats, such as productivity, legal liability, network and security threats. For parents, you can protect your children from viewing adult websites or chat rooms.




Open **Firewall>>Web Content Filter**. The following screen will appear.



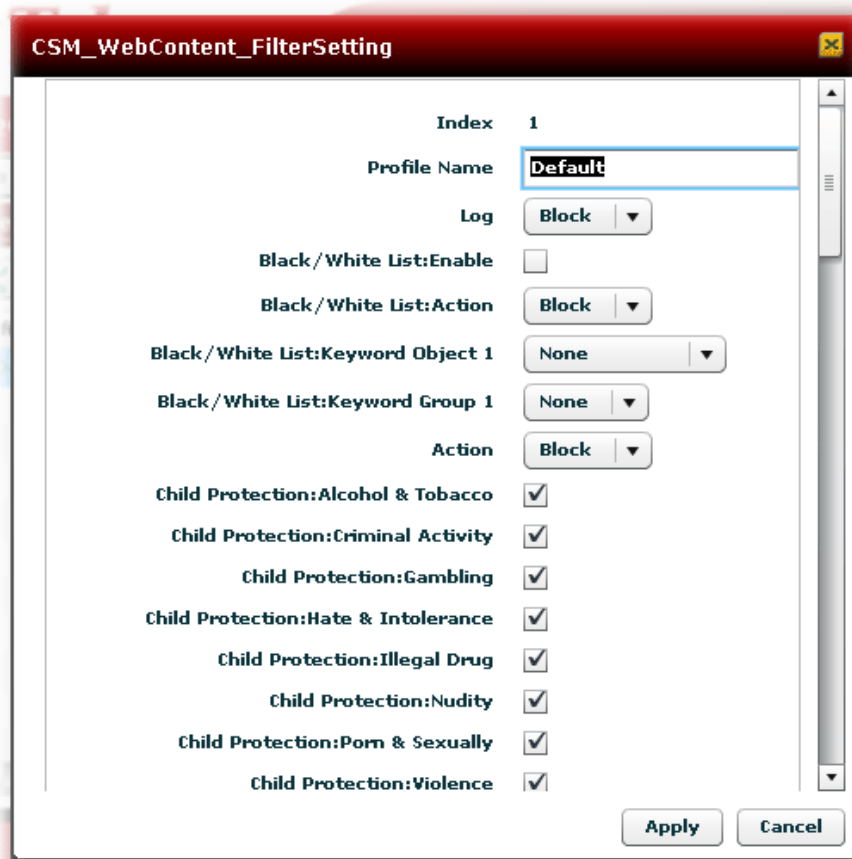
Available settings for such feature will be shown as follows:

| Items | Description |
|--------------------------------|--|
| Save parameter settings | Click this button to save the parameters settings. |


| Items | Description |
|--|--|
|  Edit | Click it to edit the settings of the selected profile. |
| Index | Display the index number of the profile in current network group. |
| Profile Name | Display the name of the profile. |
| Log | Display the log with the action recorded for this profile. |
| Black/White List:Enable | Display if such function is enabled (true) or disabled (false). |
| Black/White List:Action | Display the action (Pass or Block) of such feature adopted by this profile. |
| Black/White List:Keyword Object 1 | Display the keyword object profile selected for this profile. |
| Black/White List:Keyword Group 1 | Display the keyword object group profile selected for this profile. |
| Action | Display the action (Pass or Block) of such feature adopted by this profile. |
| Child Protection:Alcohol & Tobacco ~ Child Protection:Child Abuse Images, Other, | Display if such application is selected (true) or not selected (false) for such profile. |


Editing the Web Content Filter Setting

To modify the Web content filter setting, simply choose the one you want to modify from the list and click the **Edit** button. The following screen will appear.



Available settings are shown as follows:

| Items | Description |
|--------------------------------|--|
| Index | Display the index number of the profile in current network group. |
| Profile Name | Retype a name for this profile for modification. Maximum 15 characters are allowed. |
| Log | <p>None – There is no log file will be recorded for this profile.</p> <p>Pass – Only the log about Pass will be recorded in Syslog.</p> <p>Block – Only the log about Block will be recorded in Syslog.</p> <p>All – All the actions (Pass and Block) will be recorded in Syslog.</p> |
| Black/White List:Enable | Check the box to activate Black/White List filtering. |
| Black/White List:Action | <p>Pass - Allow accessing into the corresponding webpage.</p> <p>Block - Restrict accessing into the corresponding webpage. If the web pages do not match with the specified feature set here, it will be processed with reverse action.</p>  |

| Items | Description |
|---|--|
| Black/White List:Keyword Object 1 | Use the drop down list to choose the profile you want. |
| Black/White List:Keyword Group 1 | Use the drop down list to choose the profile you want. |
| Action | <p>Pass - Allow accessing into the corresponding webpage. Block - Restrict accessing into the corresponding webpage. If the web pages do not match with the specified feature set here, it will be processed with reverse action.</p>  |
| Child Protection:Alcohol & Tobacco ~ Child Protection:Child Abuse Images, Other,.... | Check the box of each web content category to make it to be included under the profile. The web content category specified in this profile will be ignored and not be scanned by Vigor router. |
| Apply | Click it to save the settings and exit the screen. |
| Cancel | Click it to exit the screen without saving any change. |

6.3 Wizards

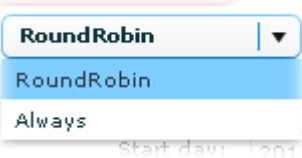
Such page offers several wizards for you to implement the backup, restore, firmware upgrade, system reboot, factory reset for CPE and batch activation of WCF license.

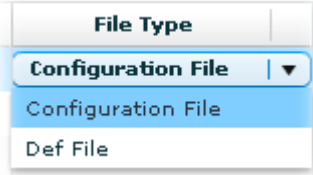
6.3.1 Backup Configuration

It allows you to do backup operation for specified CPEs (devices) immediately or within a specified period.

Open **Wizards>>Configuration>>Backup** to display the following page.

Available settings for such feature will be shown as follows:

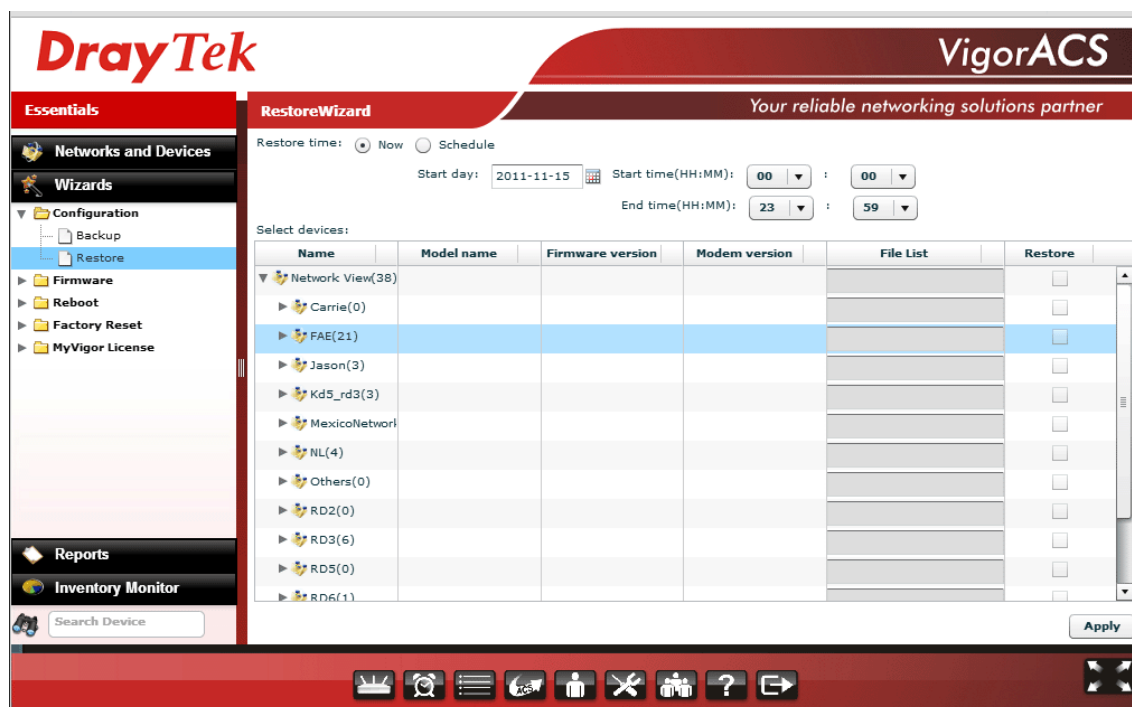
| Items | Description |
|---------------------|---|
| Backup Type | <p>Use the drop down list to choose the backup type for such action.</p> <p>RoundRobin – Choose this type to execute the backup (with global settings). The backup files will be recorded with the filename from <i>1.cfg</i> to <i>20.cfg</i>. Only 20 filenames will be kept in the same directory.</p> <p>Always – Choose this type to execute the backup (with global settings) according to the schedule. The backup files will be recorded with the filename one by one (e.g, 1.cfg, 2.cfg,..., 1000cfg,..., 10000cfg,...no limit in file number). All of the backup files will be kept in the same directory.</p>  |
| Period(days) | Determine the frequency for the configuration backup performed by VigorACS. The default value is 1 day. |
| Backup time | <p>Now – To perform the firmware backup immediately, choose this one and click Apply.</p> <p>Schedule – To specify a certain time to perform firmware</p> |

| | |
|--------------------------------|---|
| | <p>backup, choose this one and specify start day, start time and end time respectively. After finishing the configuration, click Apply. VigorACS will perform firmware backup operation for the selected CPE (s) according to the schedule set here.</p> <ul style="list-style-type: none"> ● Start day – Use the drop down calendar to specify the day you want to start the firmware backup. ● Start time - Use the drop down menu to specify the hour and minutes you want to start firmware backup. ● End time - Use the drop down menu to specify the hour and minutes you want to finish the firmware backup. |
| <p>Selected devices</p> | <p>Choose the device that you want to do firmware backup via VigorACS. Specify the File type (Configuration File or Def File) and check the box of Backup. Then click Apply.</p>  <p>If the Backup box the firmware backup is not checked, the backup procedure will not be performed after clicking Apply.</p> <p>Note: Def File means “the default setting file”.</p> |
| <p>Apply</p> | <p>Execute the action of firmware backup.</p> |

6.3.2 Restore configuration

Such page allows you to do firmware restoration for specified CPEs (devices) immediately or within a specified period.

Open **Wizards>>Configuration>>Restore** to display the following page.



Available settings for such feature will be shown as follows:

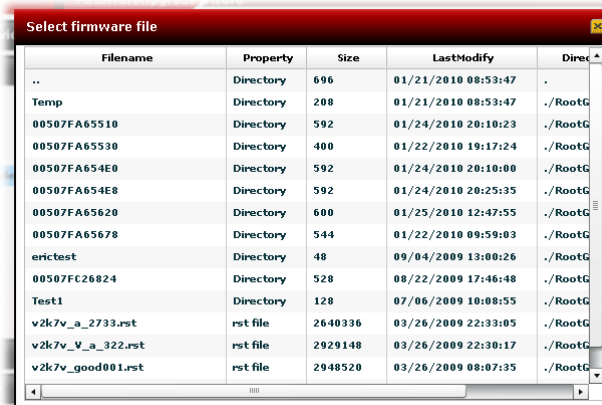
| Items | Description |
|------------------|--|
| Restore time | <p>Now – To perform the firmware restoration immediately, choose this one and click Apply.</p> <p>Schedule – To specify a certain time to perform firmware restoration, choose this one and specify start day, start time and end time respectively. After finishing the configuration, click Apply. VigorACS will perform firmware restoration operation for the selected CPE (s) according to the schedule set here.</p> <ul style="list-style-type: none"> ● Start day – Use the drop down calendar to specify the day you want to start the firmware restore. ● Start time - Use the drop down menu to specify the hour and minutes you want to start firmware restore. ● End time - Use the drop down menu to specify the hour and minutes you want to finish the firmware restore. |
| Selected devices | Choose the device that you want to do firmware restore. Please check the box of Restore , otherwise, the firmware restoration will not be performed after clicking Apply . |
| Apply | Execute the action of firmware restoration. |

6.3.3 Firmware Upgrade for Selected CPE

Firmware upgrade wizard allows you to upgrade firmware for CPEs in specified time or immediately. Open **Wizards>>Firmware>>Firmware Upgrade** to display the following page.

Available settings for such feature will be shown as follows:

| Items | Description |
|------------------------|---|
| Model name | Choose the model name. The related devices will be available for you to choose under Select devices. |
| Modem version | Display the type (Annex A or Annex B) of the router with type version such as <i>211011_A Hardware: Annex</i> . |
| Job name | Type the reason to upgrade the firmware. For example, you can type “firewall for protection”. It is just for reference and will not affect the function of firmware upgrade wizard. |
| Upgrade version | Type the firmware version number for the CPE after finished the firmware upgrade by wizard. |
| File | Specify a firmware to be used for upgrading the selected CPE(s). Click the blank area to display the following dialog. |



Double click the item until the *rst* file is selected.

Upgrade time

Now – To perform the firmware upgrade immediately, choose this one and click **Apply**.

Schedule – To specify a certain time to perform firmware upgrade, choose this one and specify start day, start time and end time respectively. After finishing the configuration, click **Apply**. VigorACS will perform firmware upgrade operation for the selected CPE (s) according to the schedule set here.

- **Start day** – Use the drop down calendar to specify the day you want to start the firmware upgrade.
- **Start time** - Use the drop down menu to specify the hour and minutes you want to start firmware upgrade.
- **End time** - Use the drop down menu to specify the hour and minutes you want to finish the firmware upgrade.

Selected devices

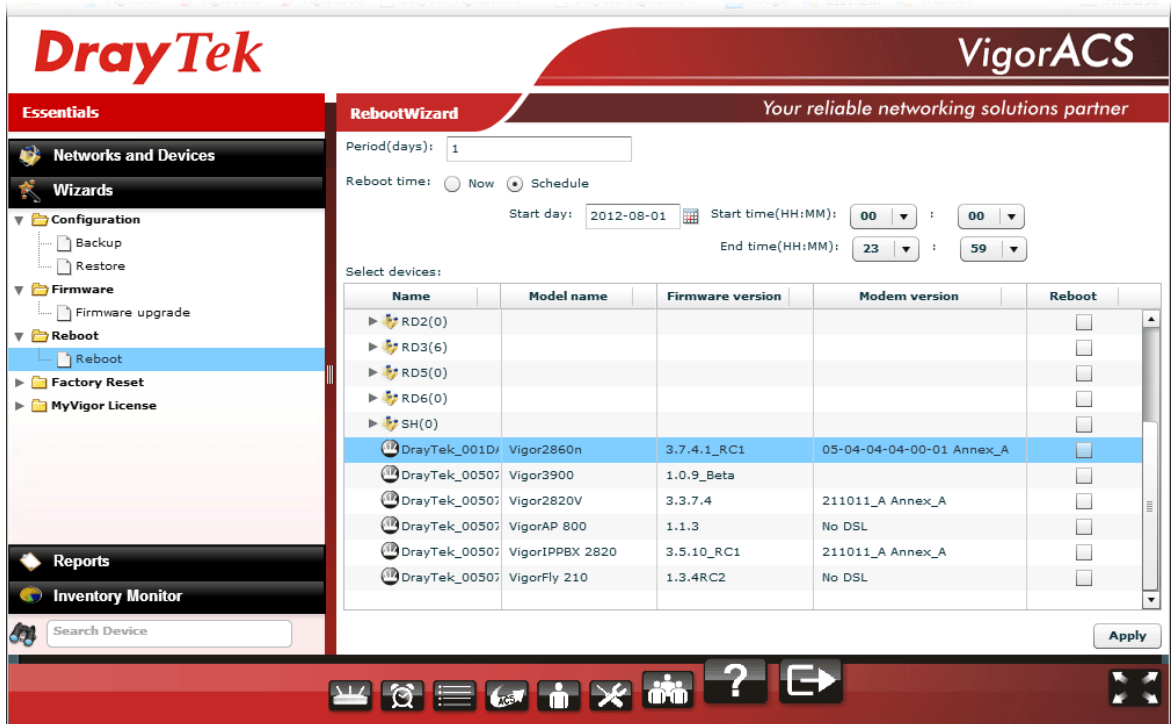
Choose the device that you want to do firmware backup. Please check the box of **Upgrade**, otherwise, the firmware upgrade will not be performed after clicking **Apply**.

Apply

Execute the action of firmware upgrade.

6.3.4 Reboot for Selected CPE(s)

You can define the time schedule for rebooting the selected CPE(s) automatically by VigorACS SI. Open **Wizards>>Reboot>>Reboot** to display the following page.



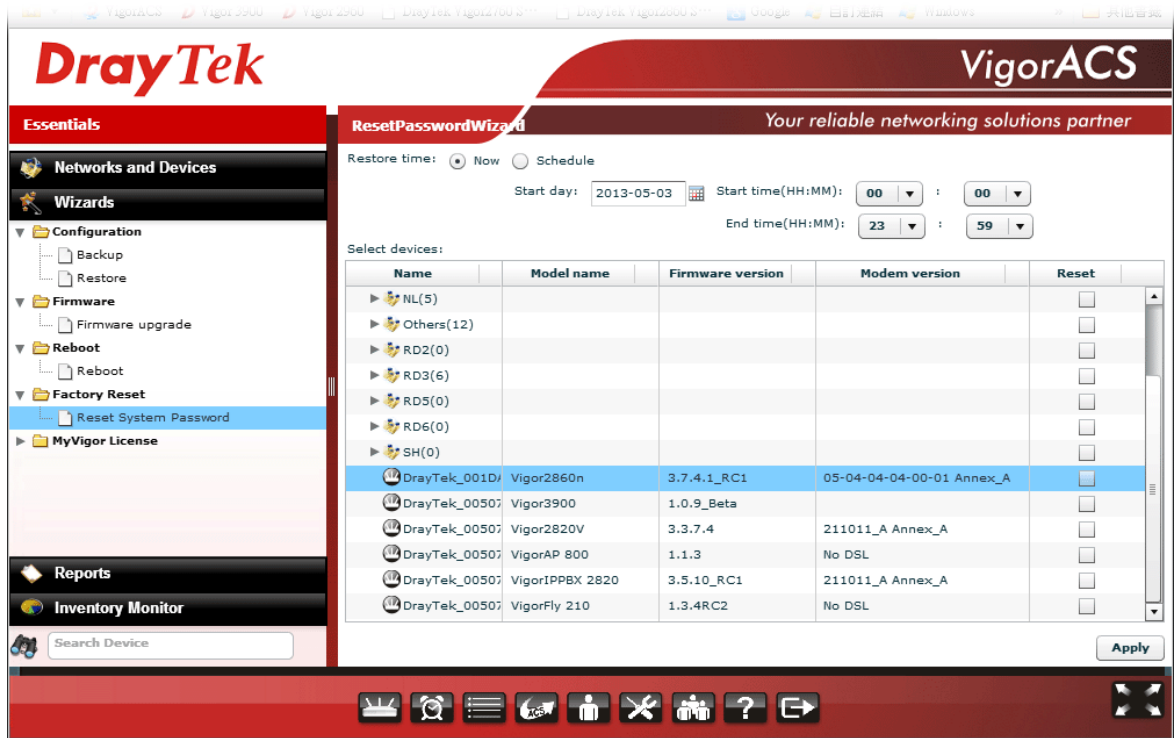
Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------|---|
| Period | Determine the frequency for the system reboot performed by VigorACS. The default value is 1 day. |
| Reboot time | <p>Now – To perform the job immediately.</p> <p>Schedule – To specify a certain time to perform the job, choose this one and specify start day, start time and end time respectively. VigorACS will perform the job for the selected CPE (s) according to the schedule set here.</p> <ul style="list-style-type: none"> ● Start day – Use the drop down calendar to specify the day you want to start the operation. ● Start time - Use the drop down menu to specify the hour and minutes you want to start the operation. ● End time - Use the drop down menu to specify the hour and minutes you want to finish the operation. |
| Select device(s) | Choose the device that you want to do system reboot. Please check the box of Reboot , otherwise, the system reboot will not be performed after clicking Apply . |

| Items | | Description | | | |
|---------------|------------|---|---------------------------|-------------------------------------|--|
| Devices: | | | | | |
| Name | Model name | Firmware version | Modem version | Reboot | |
| RD2(0) | | | | <input type="checkbox"/> | |
| RD3(6) | | | | <input type="checkbox"/> | |
| RD5(0) | | | | <input type="checkbox"/> | |
| RD6(0) | | | | <input type="checkbox"/> | |
| SH(0) | | | | <input type="checkbox"/> | |
| DrayTek_001D/ | Vigor2860n | 3.7.4.1_RC1 | 05-04-04-04-00-01 Annex_A | <input checked="" type="checkbox"/> | |
| DrayTek_0050/ | Vigor3900 | 1.0.9 Beta | | <input type="checkbox"/> | |
| Apply | | Execute the action of firmware upgrade. | | | |

6.3.5 Factory Reset for Selected CPE(s)

This page is used to reset the default factory password for the administrator of CPE.



Available settings for such feature will be shown as follows:

| Items | Description |
|------------------|---|
| Restore time | <p>Now – To perform the job immediately.</p> <p>Schedule – To specify a certain time to perform the job, choose this one and specify start day, start time and end time respectively. VigorACS will perform the job for the selected CPE (s) according to the schedule set here.</p> <ul style="list-style-type: none"> ● Start day – Use the drop down calendar to specify the day you want to start the operation. ● Start time - Use the drop down menu to specify the hour and minutes you want to start the operation. ● End time - Use the drop down menu to specify the hour and minutes you want to finish the operation. |
| Select device(s) | <p>Choose the device that you want to do factory reset.</p> <p>Please check the box of Reset, otherwise, the factory reset will not be performed after clicking Apply.</p> |
| Apply | <p>Execute the action of resetting to factory settings.</p> |

6.3.6 Batch Activation of MyVigor License for Selected CPE(s)

1. You can activate multiple WCF license(s) for multiple Vigor router(s) at one time. Open **Wizards>>MyVigor License >>Batch Activation** to display the following page.

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------------|---|
| UserGroup | Choose the user group for the CPEs required to perform license activation. |
| UserName | Type the user name which can be used for accessing into MyVigor portal website. |
| Password | Type the password which can be used for accessing into MyVigor portal website. |
| Specify Mail | When the license key is expired, the system will send a notification mail to the e-mail address specified here. |
| Select device(s) | Choose the device that you want to do license activation. Please check the box of Activation , otherwise, the license activation will not be performed after clicking Apply . |
| License Key | Type the code of the license key in such field. |
| Activate | Check the box to perform the license activation later. |
| Next | Click it to open next web page. |

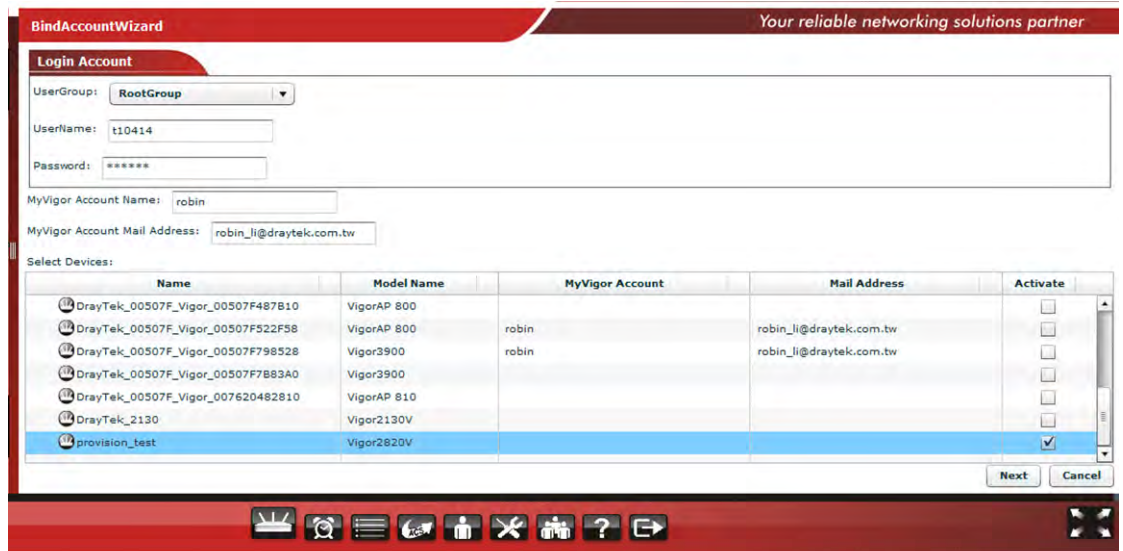
- After specify the required information, click **Next** to get he following page.



- On the above page, simply check all the information is correct or not. If not, click **Previous** to change the settings.
- If there is no problem, click **Finish**. Now, the system will perform the license activation automatically for lots of CPEs.

6.3.7 Bind with MyVigor Account for Selected CPE(s)

- You can activate the WCF license for Vigor routers at one time. Open **Wizards>>MyVigor License >>Bind With MyVigor Account** to display the following page.

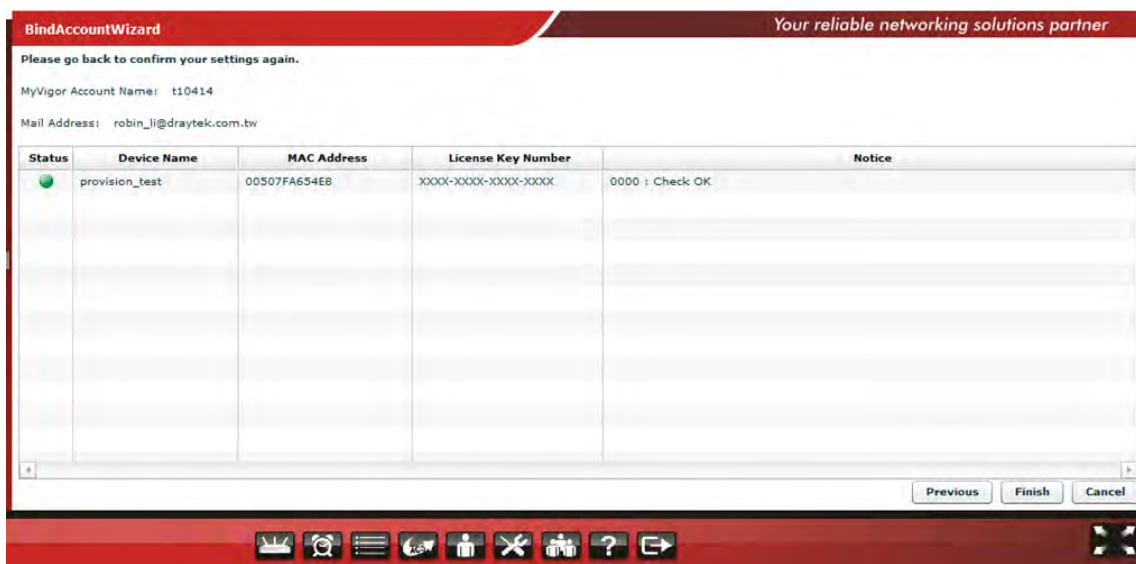


Available settings for such feature will be shown as follows:

| Items | Description |
|------------------|---|
| UserGroup | Choose the user group for the CPEs required to perform license activation. |
| UserName | Type the user name which can be used for accessing into MyVigor portal website. |

| Items | Description |
|-------------------------------------|---|
| Password | Type the user name which can be used for accessing into MyVigor portal website. |
| MyVigor Account Name | Type the account name of MyVigor that CPE will be bound to. Afterwards, such CPE can be managed by MyVigor with such account. |
| MyVigor Account Mail Address | Type the e-mail address for the account of MyVigor that CPE will be bound to. Afterwards, such CPE can be managed by MyVigor with such account. |
| Select device(s) | Choose the device that you want to do license activation. Please check the box of Activation , otherwise, the license activation will not be performed after clicking Apply . |
| Activate | Check the box to perform the license activation later. |
| Next | Click it to open next web page. |

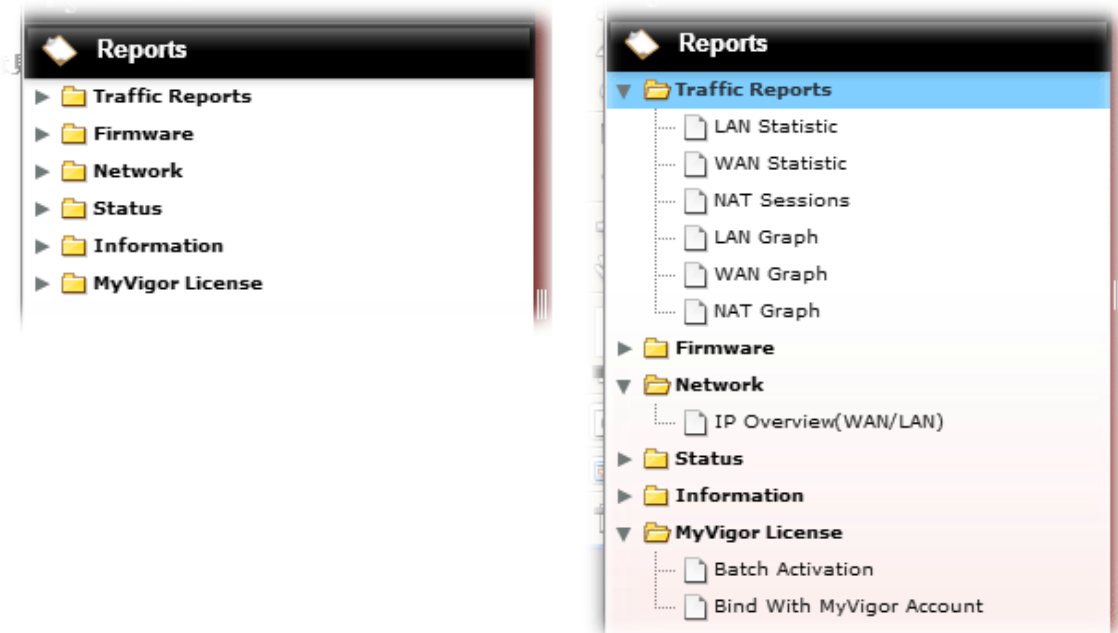
- After specify the required information, click **Next** to get the following page.



- On the above page, simply check all the information is correct or not. If not, click **Previous** to change the settings.
- If there is no problem, click **Finish**. Now, the system will perform the license activation automatically for lots of CPEs.

6.4 Reports

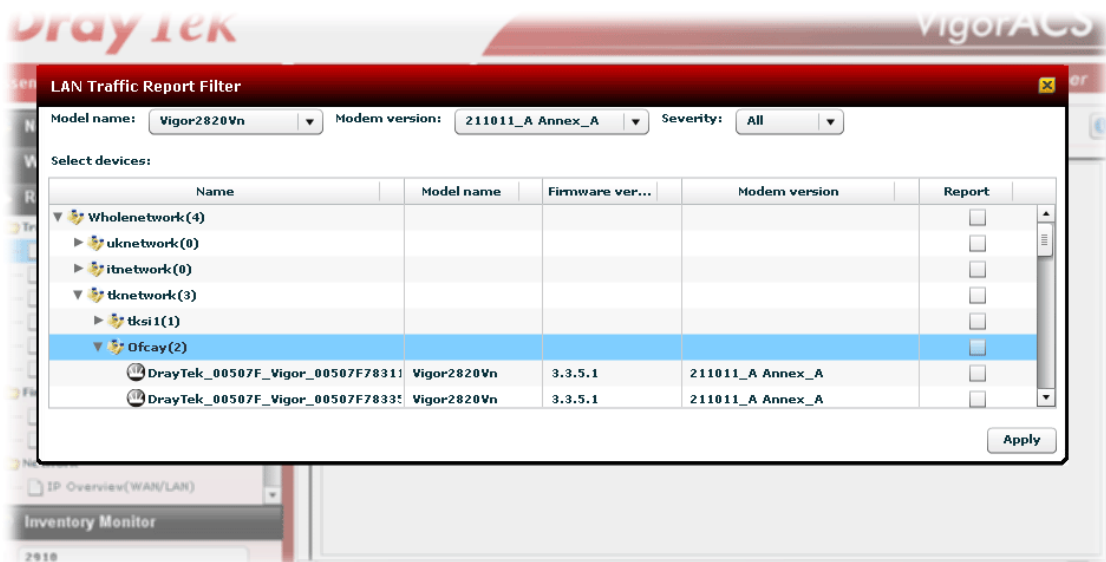
VigorACS allows you to print reports with PDF files. There are several types of reports that you can check and print out. Each type contains several items.



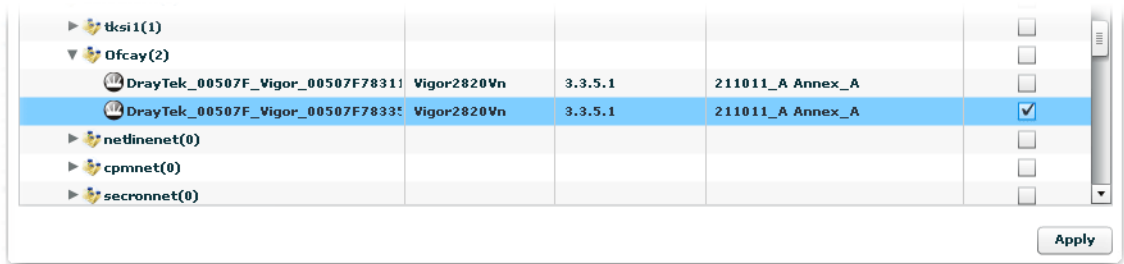
6.4.1 LAN/WAN Statistic

Choose **Traffic Reports**>> **LAN/WAN Statistic** from **Reports**.

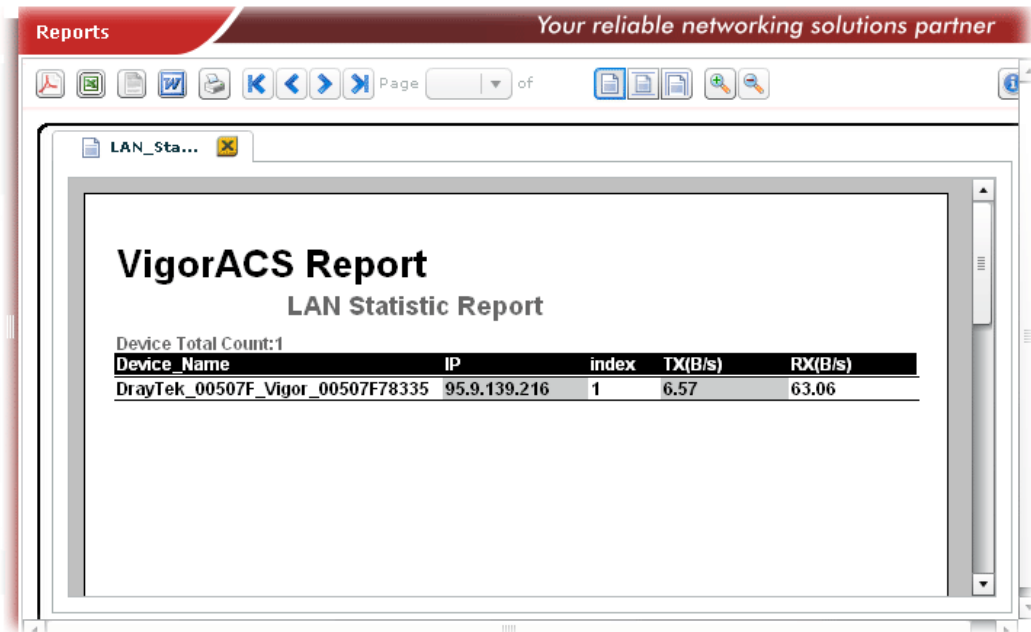
Move your mouse to the items you want to print out and click on it. A dialog box will appear. Take **LAN Statistics** as an example.



All the CPEs on the same network group will be displayed. Please choose the one(s) you want to print out and check the **Report** box.



Next, please **Apply**. **VigorACS Report** containing all the records of LAN/WAN configuration for the selected CPE will be shown as the following.

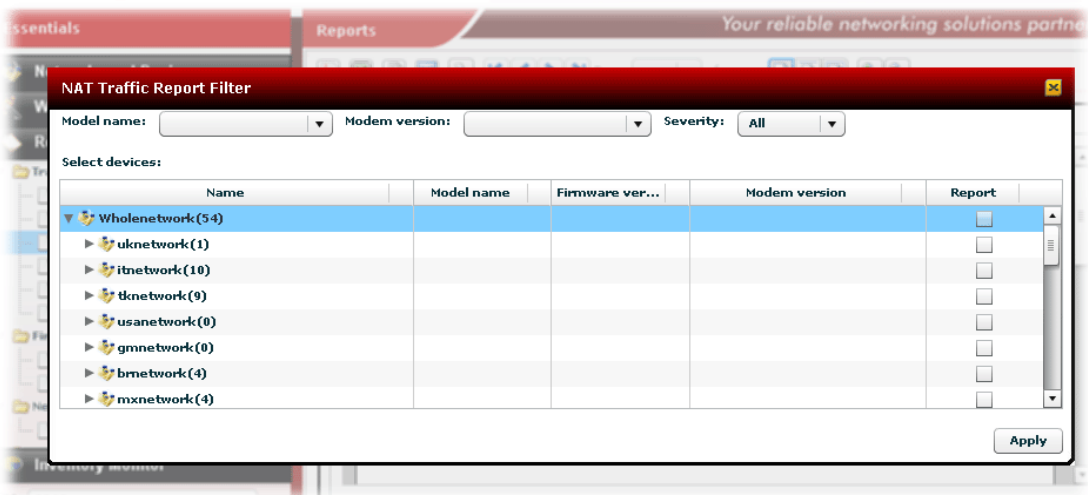


Now, you can print such report as a PDF file or print it out via specified printer.

6.4.2 NAT Sessions

Choose **Traffic Reports**>> **NAT Sessions** from **Reports**.

Move your mouse to the items you want to print out and click on it. A dialog box will appear.



All the CPEs on the same network group will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

Select devices:

| Name | Model name | Firmware ver... | Modem version | Report |
|--------------------------------------|---------------|-----------------|------------------|-------------------------------------|
| ▶ acronisnet(0) | | | | <input type="checkbox"/> |
| ▶ armianet(0) | | | | <input type="checkbox"/> |
| ▶ DrayTek_00507F_Vigor_00507FCA4894_ | VigorPro 5510 | 3.3.5 | No DSL | <input checked="" type="checkbox"/> |
| ▶ DrayTek_00507F_Vigor_00507F5084D8_ | Vigor2710Vn | 3.3.6 | 211011_A Annex_A | <input checked="" type="checkbox"/> |
| ▶ DrayTek_00507F_Vigor_00507F507FA0_ | Vigor2710Vn | 3.3.6 | 211011_A Annex_A | <input checked="" type="checkbox"/> |
| ▶ usanetwork(0) | | | | <input type="checkbox"/> |
| ▶ gmnetwork(0) | | | | <input type="checkbox"/> |
| ▶ bnetwork(4) | | | | <input type="checkbox"/> |

Apply

Next, please **Apply**. **VigorACS Report** containing all the records of NAT session for the selected CPE will be shown as the following.

Reports Your reliable networking solutions partner

Page 1 of 1

LAN_Sta... NAT_Ses...

VigorACS Report

NAT Sessions Report

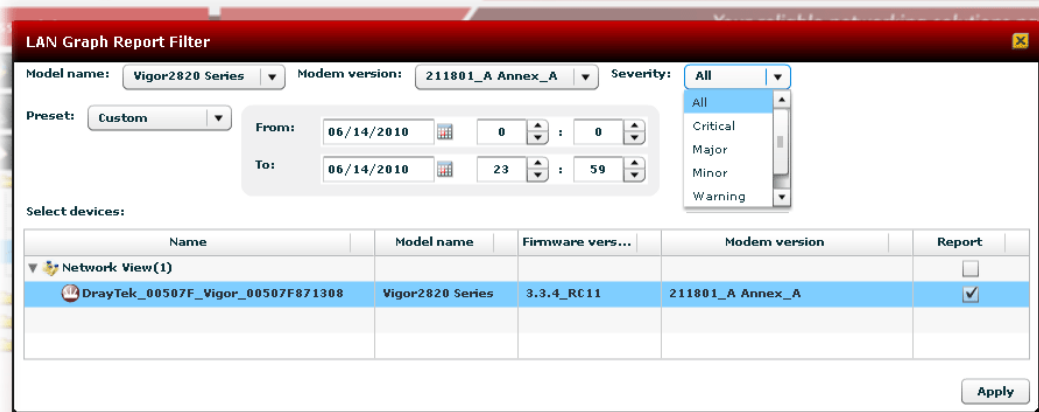
Device Total Count:3

| Device Name | IP | index | sessions |
|----------------------------------|---------------|-------|----------|
| DrayTek_00507F_Vigor_00507FCA489 | 78.186.22.249 | 1 | 3 |
| DrayTek_00507F_Vigor_00507F507FA | 88.247.22.34 | 1 | 0 |
| DrayTek_00507F_Vigor_00507F5084D | 88.247.22.244 | 1 | 0 |

6.4.3 LAN/WAN/NAT Graph

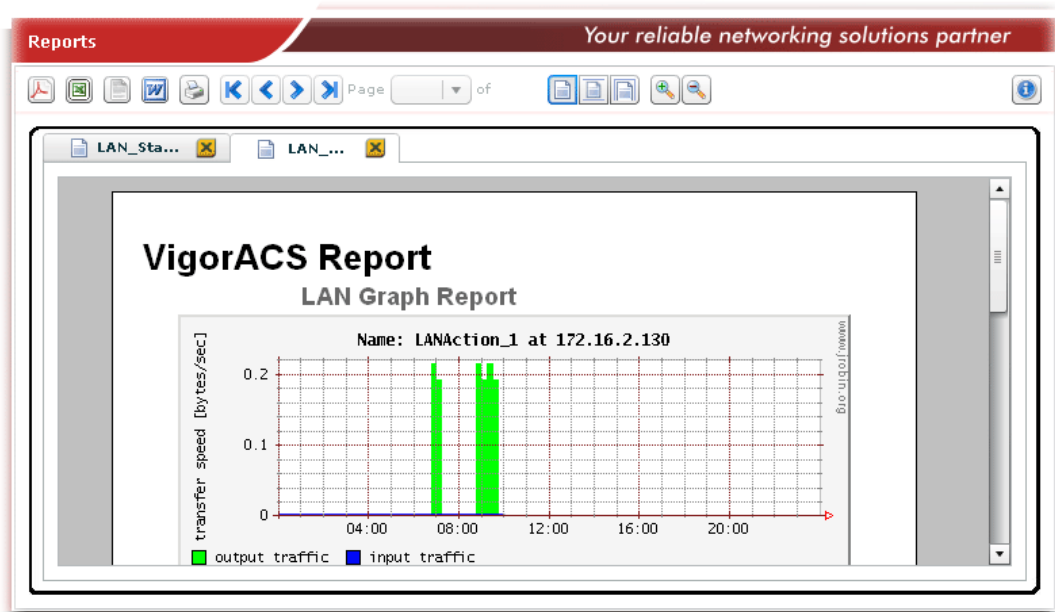
Move your mouse to the items you want to print out and click on it. A dialog box will appear. Take **LAN Graphic** as an example.

Choose **Traffic Reports**>> **LAN/WAN/NAT Graph** from **Reports**.



All the CPEs on the same network group will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

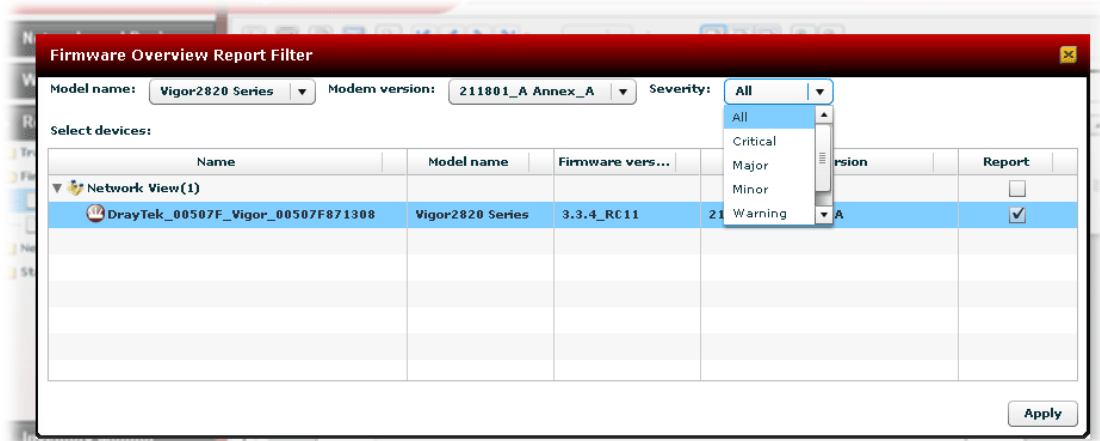
Next, please **Apply**. **VigorACS Report** containing all the LAN/WAN/NAT Graph for the selected CPE will be shown as the following.



Now, you can print such report as a PDF file or print it out via specified printer.

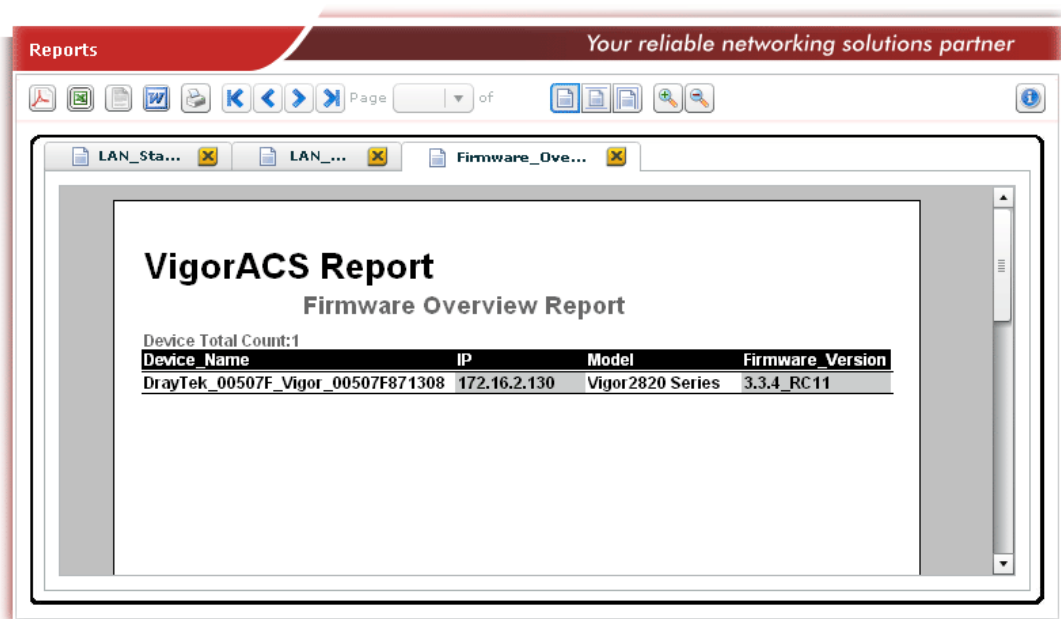
6.4.4 Firmware Overview

Choose **Firmware>>Firmware Overview** from **Reports**. A dialog box will appear.



All the CPEs on the same network group will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

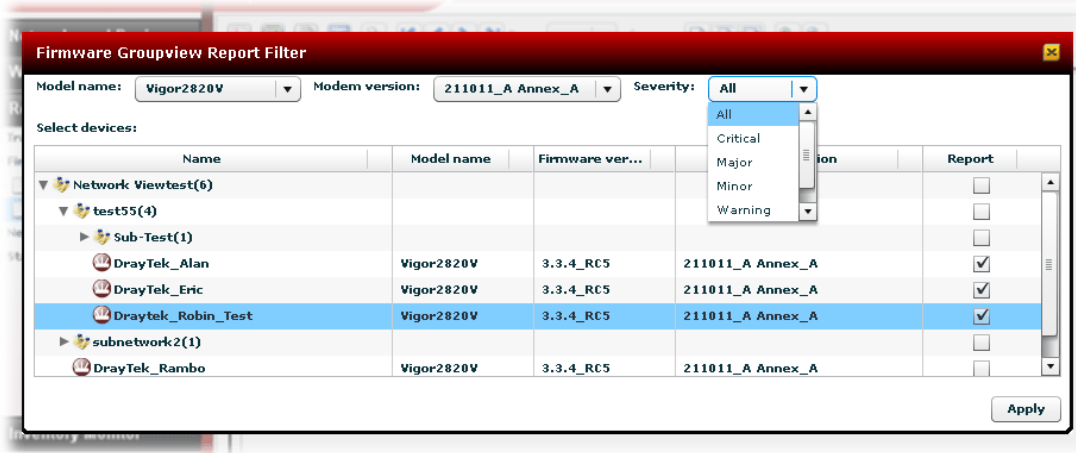
Next, please **Apply**. **VigorACS Report** containing all the records of firmware version ordered with device names for different CPEs will be shown as the following.



Now, you can print such report as a PDF file or print it out via specified printer.

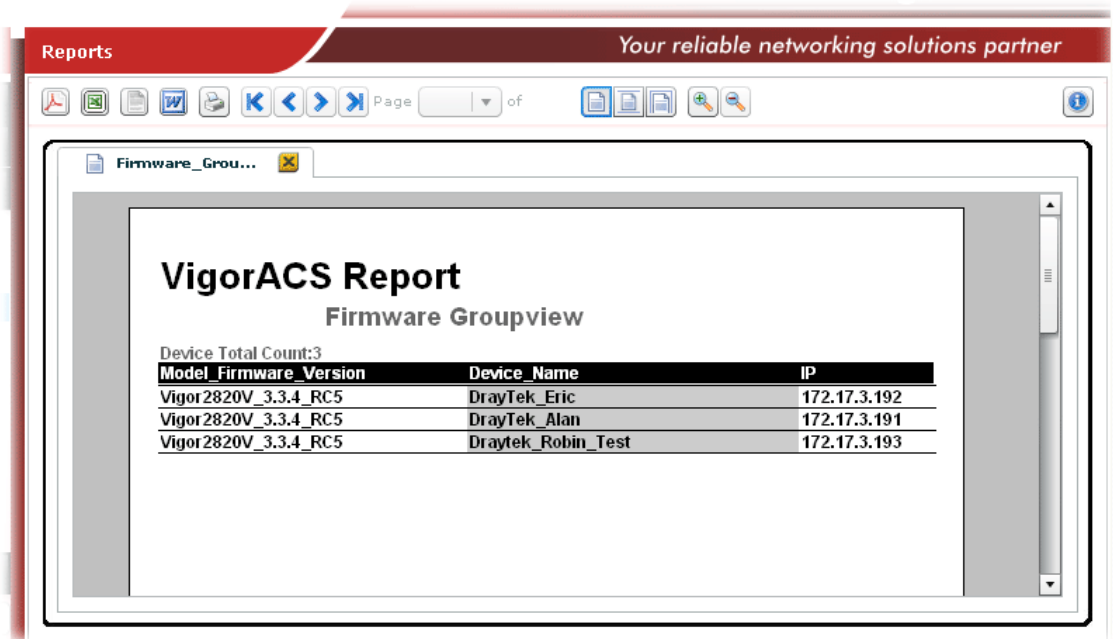
6.4.5 Firmware Groupview

Choose **Firmware >> Firmware Groupview** from **Reports**. A dialog box will appear.



All the CPEs on the same network group will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

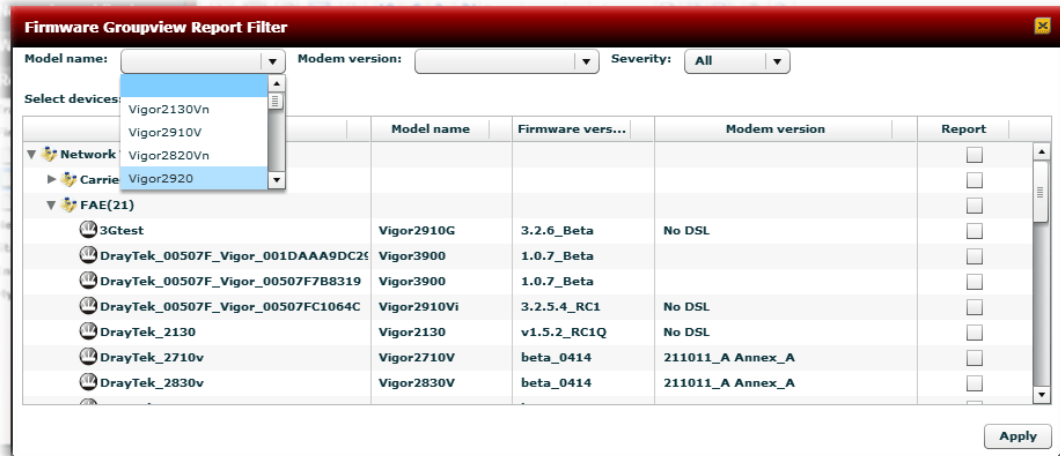
Next, please **Apply**. **VigorACS Report** containing the records of firmware information ordered with model and firmware version for different CPEs will be shown as the following.



Now, you can print such report as a PDF file or print it out via specified printer.

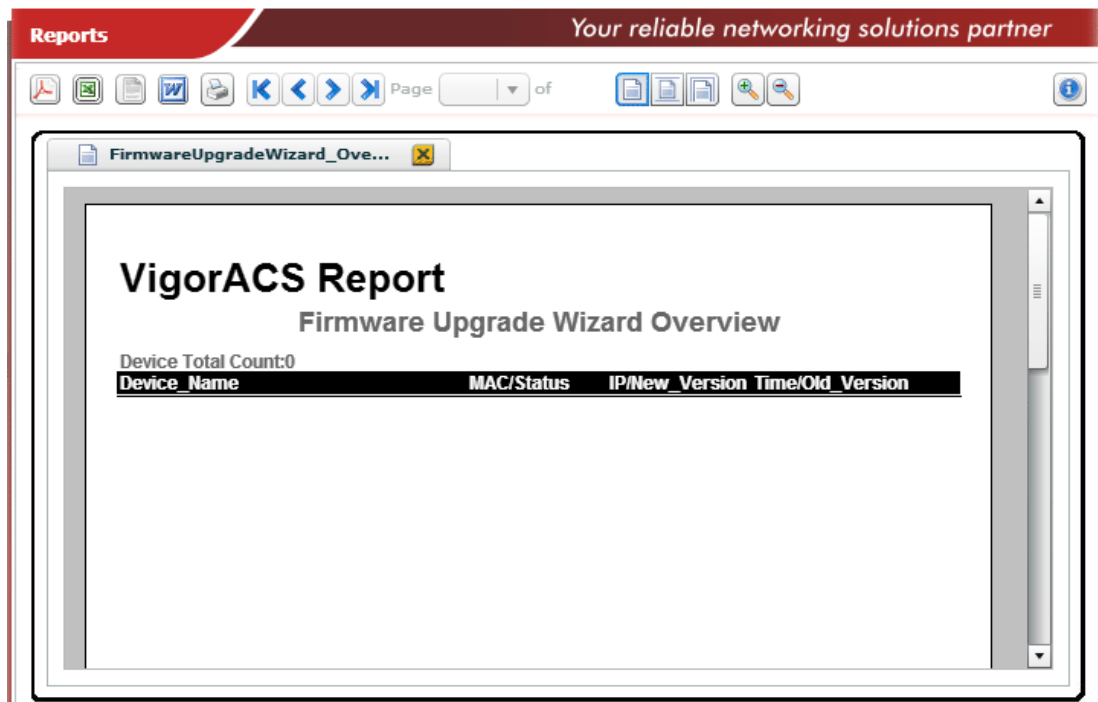
6.4.6 Firmware Upgrade Wizard

Choose **Firmware >> Firmware Upgrade Wizard** from **Reports**. A dialog box will appear.



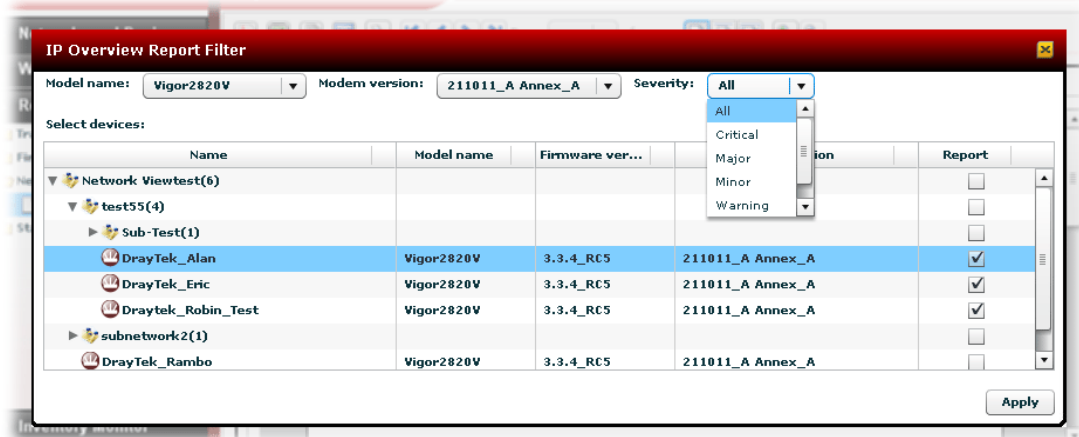
All the CPEs which match the conditions specified in Model name, Modem version and Severity will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

Next, please **Apply**. **VigorACS Report** containing the records of network IP settings ordered with device names for different CPEs will be shown as the following.



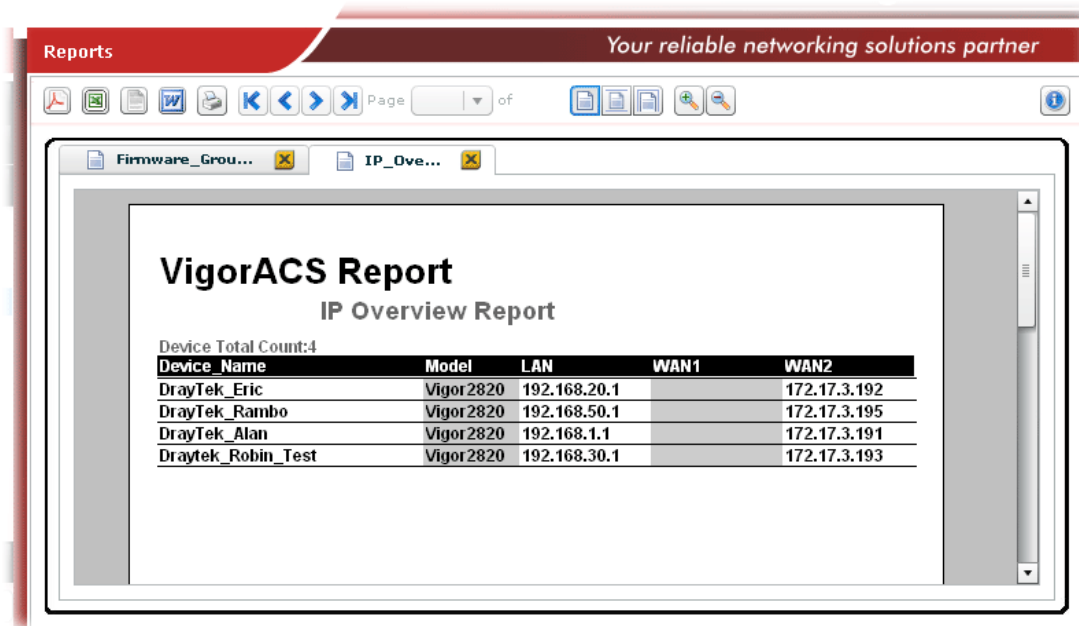
6.4.7 Network IP Overview (WAN/LAN)

Choose **Network>>IP Overview (WAN/LAN)** from **Reports**. A dialog box will appear.



All the CPEs which match the conditions specified in Model, Modem version and Severity will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

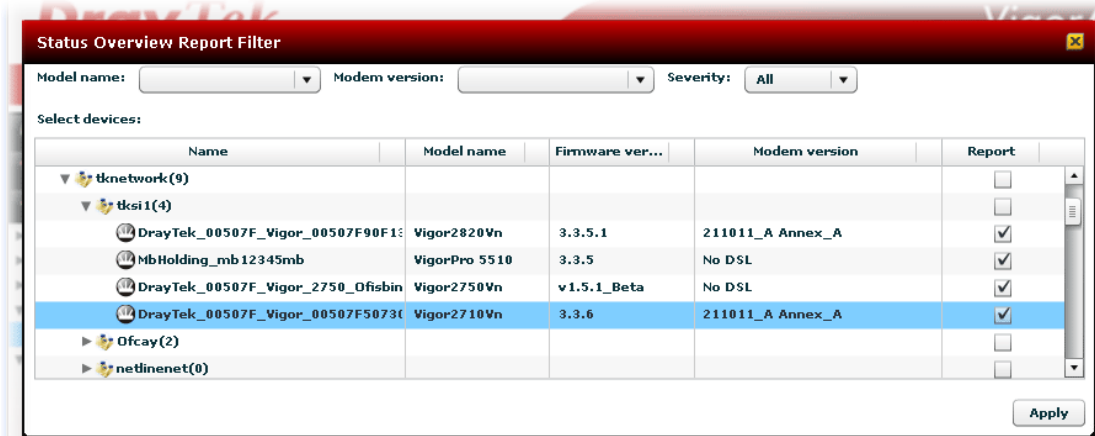
Next, please **Apply**. **VigorACS Report** containing the records of network IP settings ordered with device names for different CPEs will be shown as the following.



Now, you can print such report as a PDF file or print it out via specified printer.

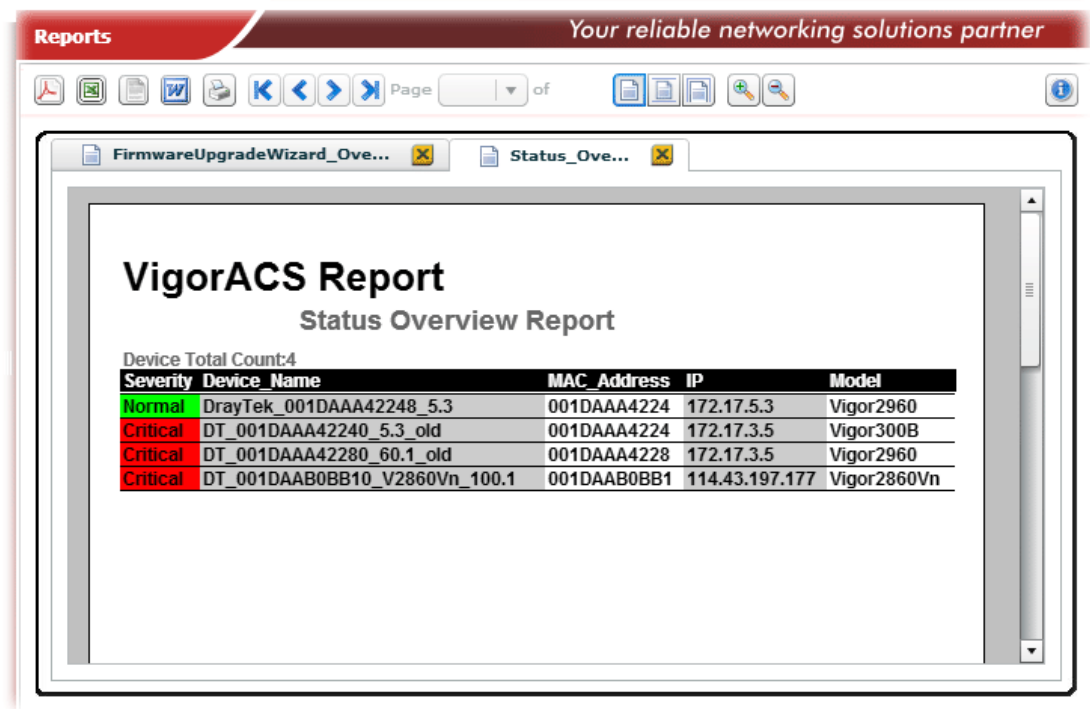
6.4.8 Status Overview

Choose **Status>>Status Overview** from **Reports**. A dialog box will appear.



All the CPEs which match the conditions specified in Model, Modem version and Severity will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

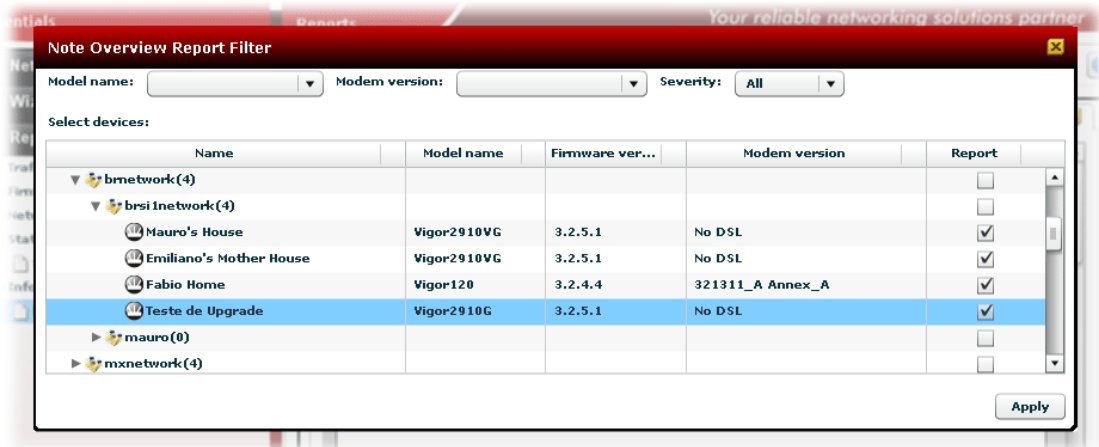
Next, please **Apply**. **VigorACS Report** containing the records of router status ordered with device names for different CPEs will be shown as the following.



Now, you can print such report as a PDF file or print it out via specified printer.

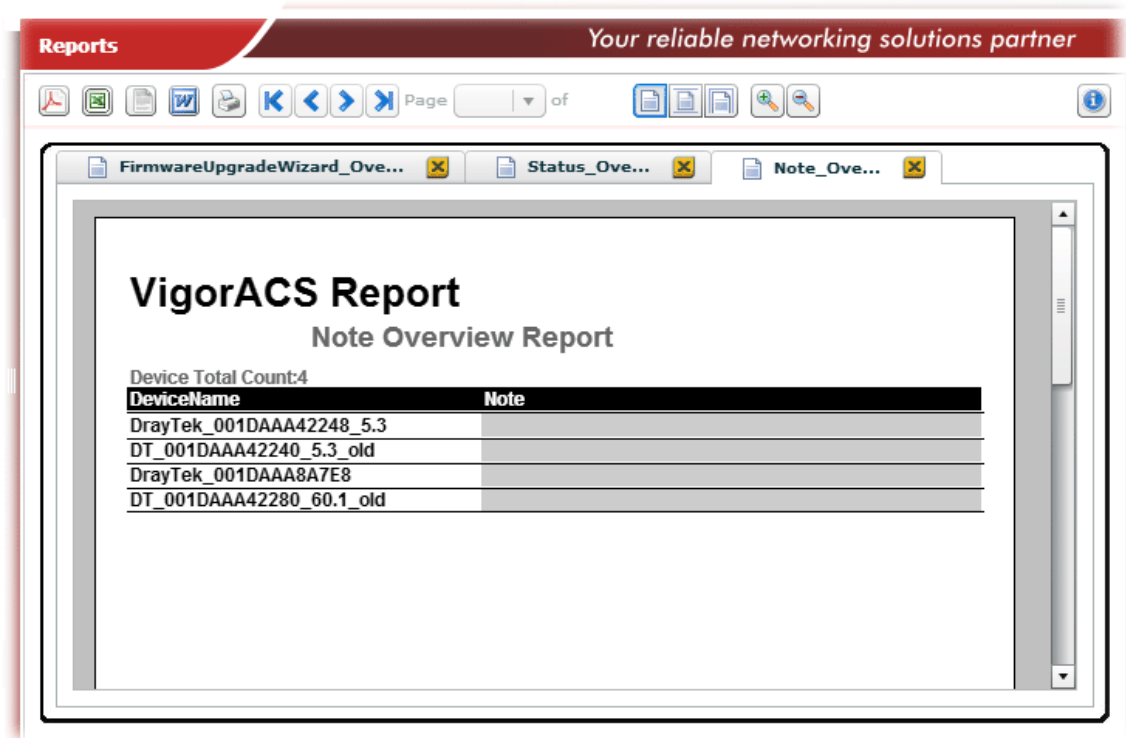
6.4.9 Information Note Overview

Choose **Information>>Note** from **Reports**. A dialog box will appear.



All the CPEs which match the conditions specified in Model, Modem version and Severity will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

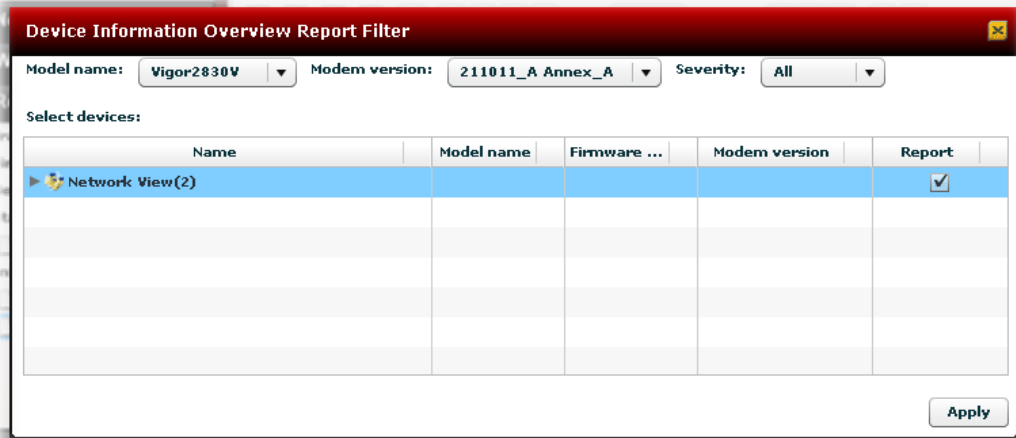
Next, please **Apply**. **VigorACS Report** containing the records of notes ordered with device names for different CPEs will be shown as the following.



Now, you can print such report as a PDF file or print it out via specified printer.

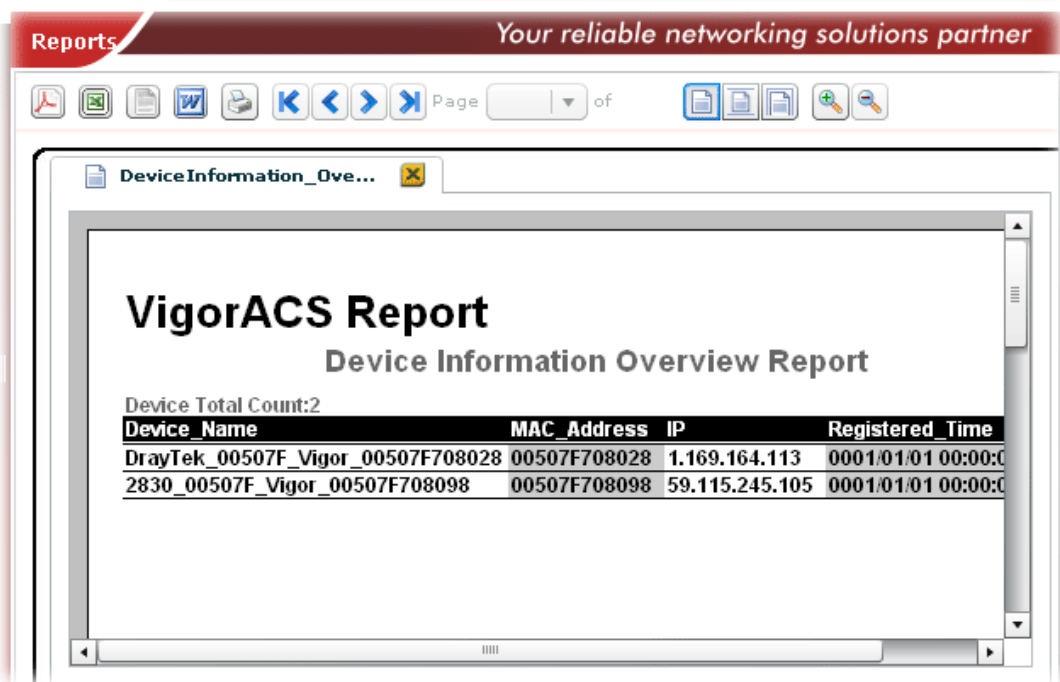
6.4.10 Device Information Overview

Choose **Information>>Device Information** from **Reports**. A dialog box will appear.



All the CPEs which match the conditions specified in Model, Modem version and Severity will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

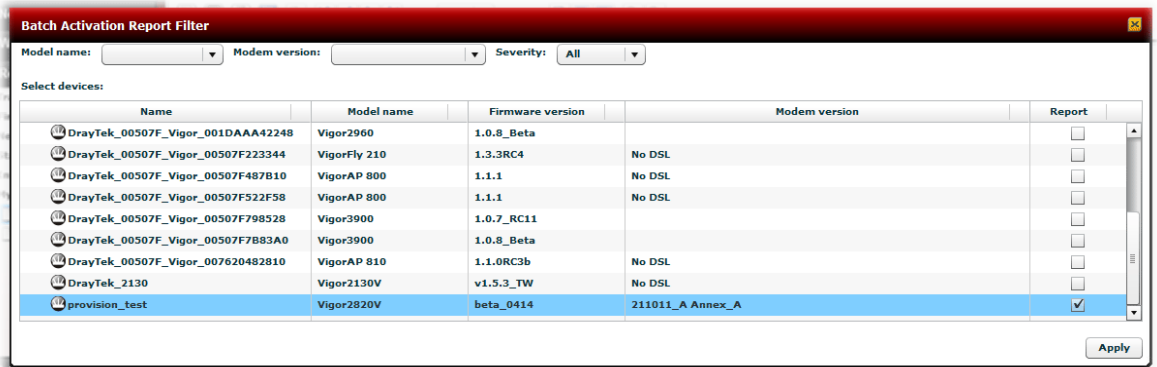
Next, please **Apply**. **VigorACS Report** containing the records of device information ordered with device names for different CPEs will be shown as the following.



Now, you can print such report as a PDF file or print it out via specified printer.

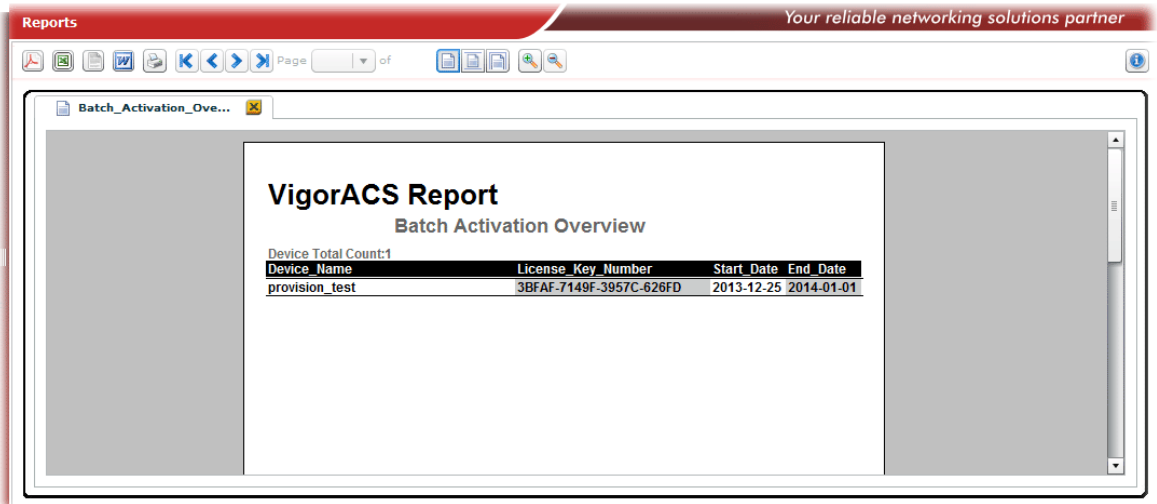
6.4.11 Batch Activation Overview

Choose **Information>> Batch Activation** from **Reports**. A dialog box will appear.



All the CPEs which match the conditions specified in Model, Modem version and Severity will be displayed. Please choose the one(s) you want to print out and check the **Report** box.

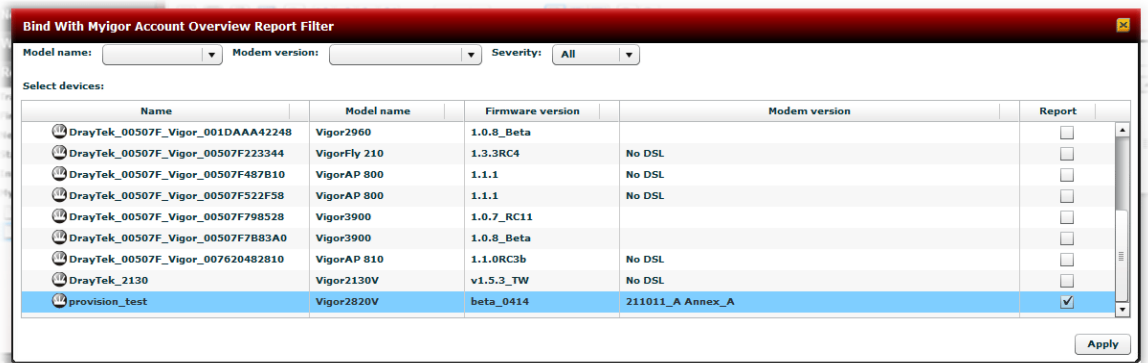
Next, please **Apply**. **VigorACS Report** containing the records of device information ordered with device names for different CPEs will be shown as the following.



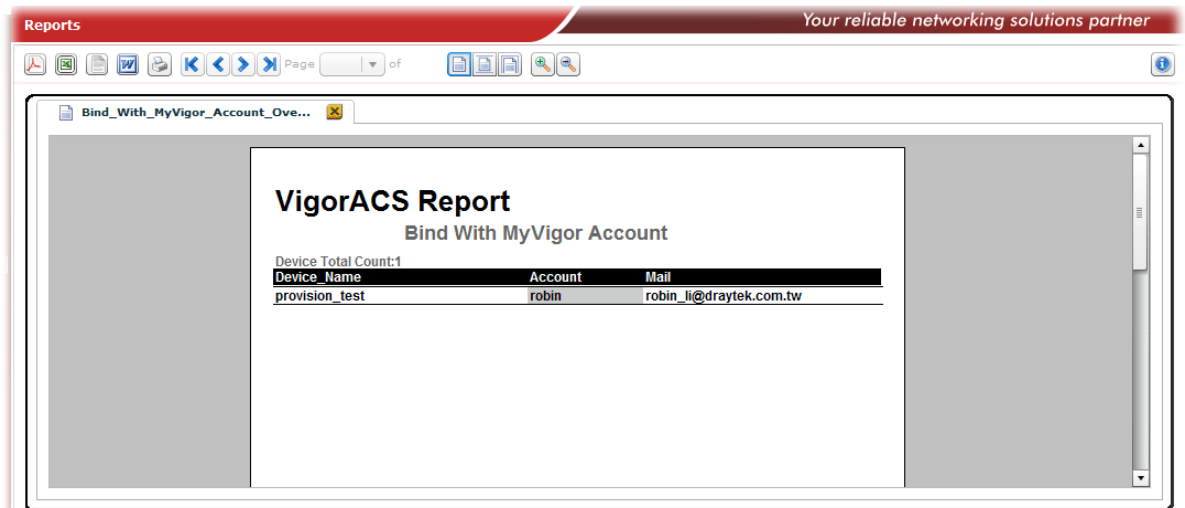
Now, you can print such report as a PDF file or print it out via specified printer.

6.4.12 Bind with MyVigor Account Overview

Choose **Information>>Bind with MyVigor Account** from **Reports**. A dialog box will appear.

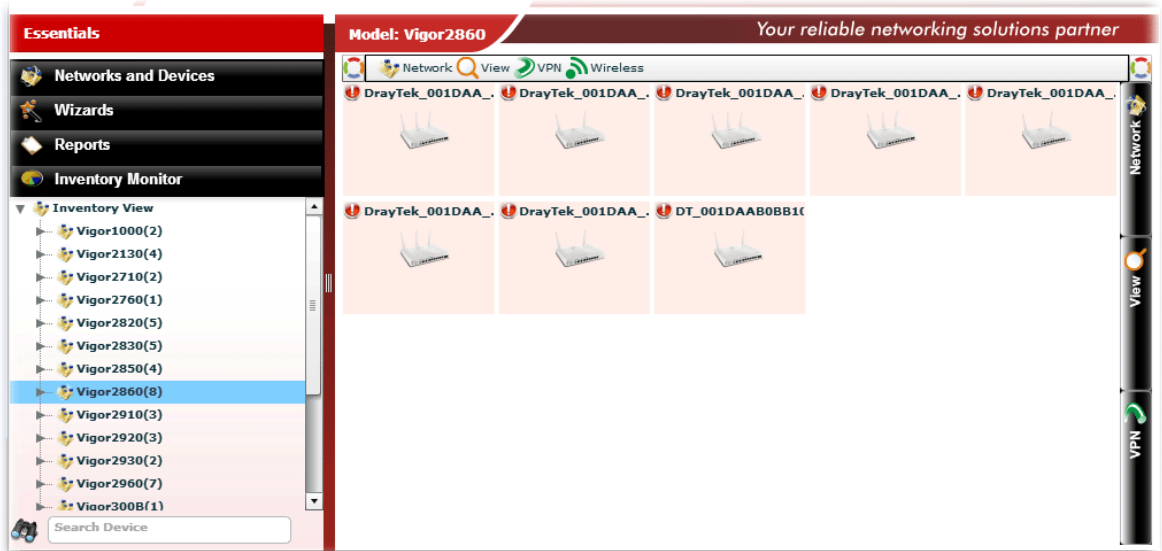


All the CPEs which match the conditions specified in Model, Modem version and Severity will be displayed. Please choose the one(s) you want to print out and check the **Report** box.



6.5 Inventory Monitor

Here, VigorACS SI provides another view for displaying the controlled CPEs. In this view, devices will be divided and categorized with the model series, such as Vigor2860 series, Vigor3900 series, and so on.



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Chapter 7 System Operation

System operation provides system parameters related to VigorACS itself.



Click the **System** tab to open the following web page.




| ParameterID | ParameterName | Value |
|-------------|------------------------------|-------|
| 53 | DisableOpenDoorAnimation | false |
| 52 | DeleteOldDeviceBySameIP | false |
| 51 | DisableAlarmMailByACSReboot | false |
| 50 | KeepProfileRebootByBOOTSTRAP | false |
| 49 | DefaultSetDeviceKnown | false |
| 48 | EnableBatchActivation | true |
| 47 | AutoDetectRouterName | false |
| 46 | EnableRRD | true |
| 45 | DeviceListMode | 0 |
| 44 | CPEDetectMode | 1 |
| 43 | VPNEnablePingKeepAlive | true |
| 42 | EnableOperatorNote | false |
| 41 | HidePassword | false |
| 40 | MaxDeviceShow | 500 |
| 39 | WebStyle | 1 |
| 38 | EnableWebServices | false |

7.1 System Parameter Setting

This page displays all of the parameters used by VigorACS and allows you to modify the system parameters slightly.

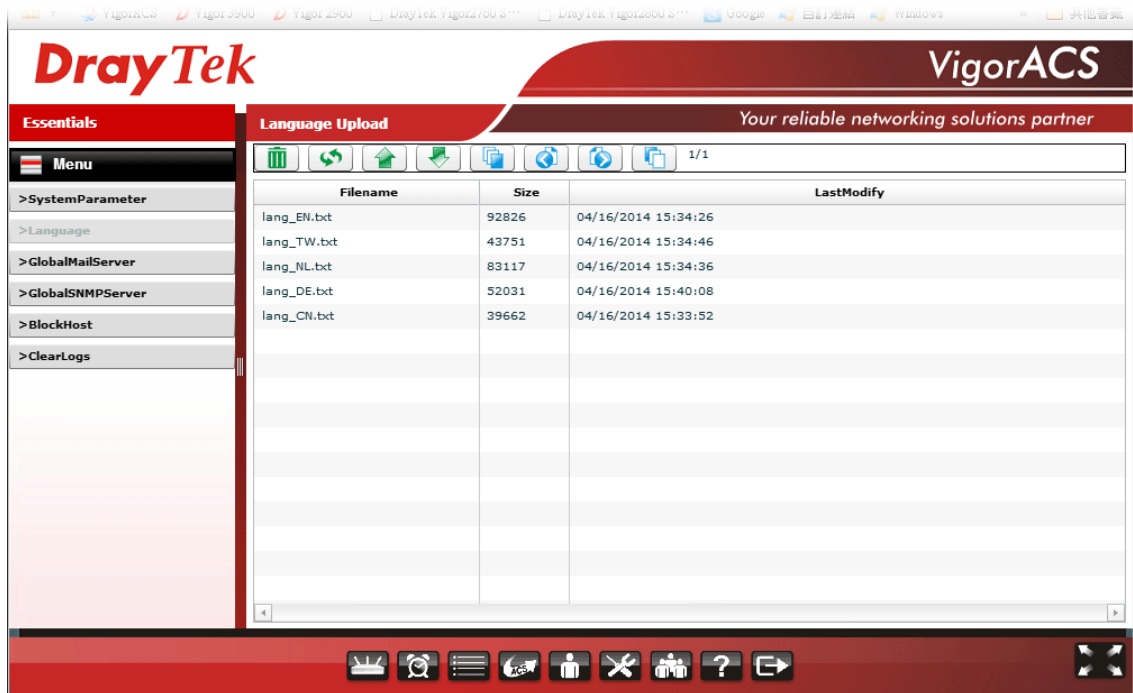


Available settings for such feature will be shown as follows:









| Items | Description |
|---|---|
|  Save | Click this button to save the record. |
|  Cancel | Click it to exit the screen without saving any change. |
|  Refresh | Click this button to refresh current page. |
| ParameterID | Display the sequence number of the parameter. |
| ParameterName | Display the name of the system parameters. |
| Value | List the available vales for each parameter . Different parameters have different values including true/false, 0/1, major/minor... and so on. Use the drop down list to choose the value you want. |

7.2 Language Setting

This page allows you to upload the language settings to VigorACS, and choose the language that you want to use for logging onto VigorACS.



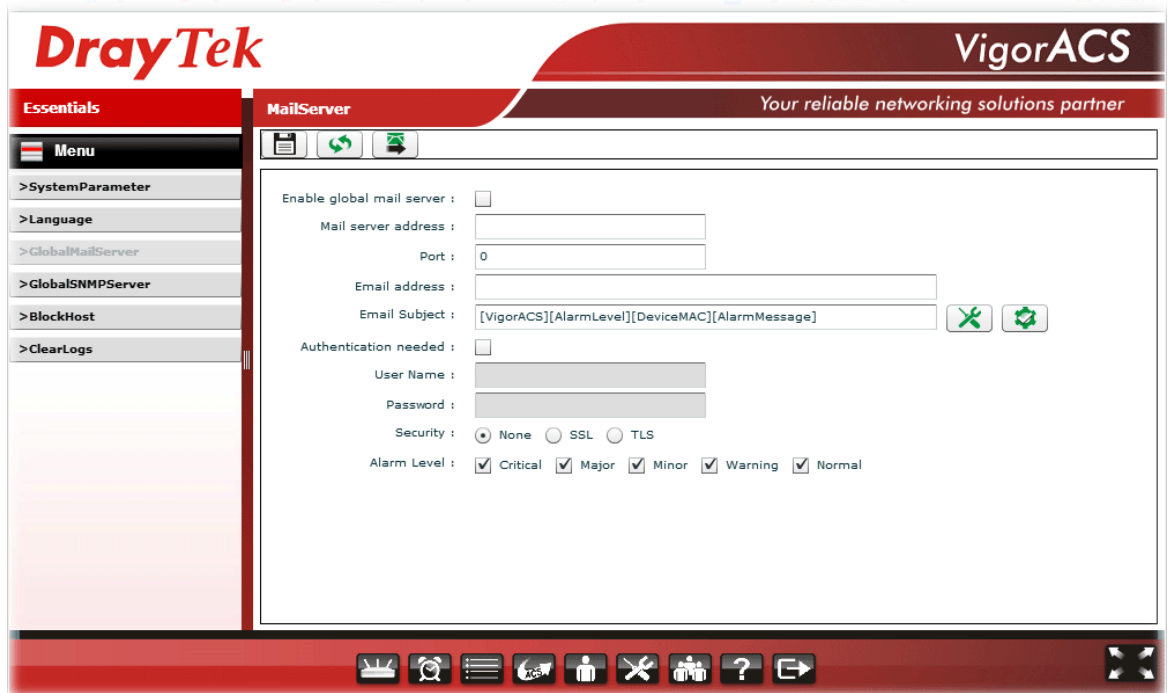
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Delete | Click this button to delete the selected language file. |
|  Refresh | Click this button to refresh uploaded files. |
|  Upload File | Click this button to upload a language file from your host to VigorACS. The file you upload will be shown on the screen immediately. |
|  Download File | Click this button to download a language file from VigorACS to your computer. |
|  First | When there is more than one page for the language files in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the language files in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the language files in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the language files in this user group, click this button to display the last page. |
| Filename | Display the name of the language file. |





| Items | Description |
|------------|--|
| Size | Display the size of the file. |
| LastModify | Display the date and time for the last modification. |

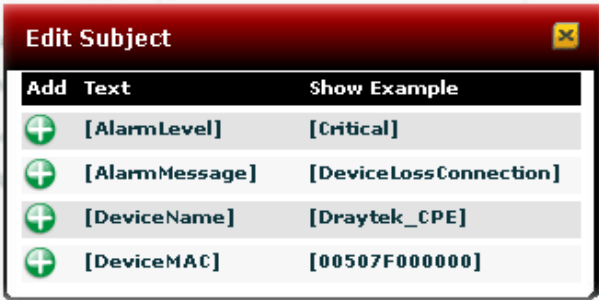

7.3 Global Mail Server Setting

All of the user groups can apply the mail server settings configured in this page.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Save mail server setting | Click this button to save the record. |
|  Refresh mail server setting | Click this button to refresh uploaded files. |
|  Send a test mail | Click this button to send a test mail to the email address specified below. |
| Enable global mail server | Check this box to enable global settings. |
| Mail server address | Type the IP address of the SMTP server. |
| Port | Assign a port for the mail server. |
| Email address | Assign an IP address for sender. |
| Email Subject | Specify the subject of the mail server.  - Click this button to open the following dialog. Click the icon under Add to make the selected subject to be added as a Email Subject. |

| Items | Description |
|------------------------------|--|
| |  <p>  - Click this button to reset to default subject items including VigorACS, AlarmLevel, DeviceMAC and AlarmMessage. </p> |
| Authentication needed | Check this box to activate this function while using e-mail application. |
| User Name | Type the user name for authentication. |
| Password | Type the password for authentication. |
| Security | Choose None / SSL / TLS for the security of the mail transferring. |
| Alarm Level | Specify the severity level of the mail. |



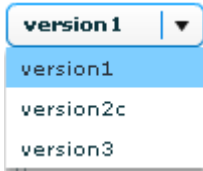
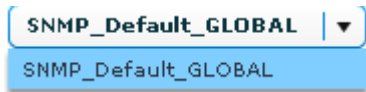
7.4 Global SNMP Server Setting

All of the user groups can apply SNMP server settings configured in this page.

The screenshot shows the DrayTek VigorACS web interface. The top navigation bar includes the DrayTek logo and the VigorACS title. Below the navigation bar, there is a sidebar menu with options like SystemParameter, Language, GlobalMailServer, GlobalSNMPServer, BlockHost, and ClearLogs. The main content area is titled 'SNMPServer' and contains the following configuration options:

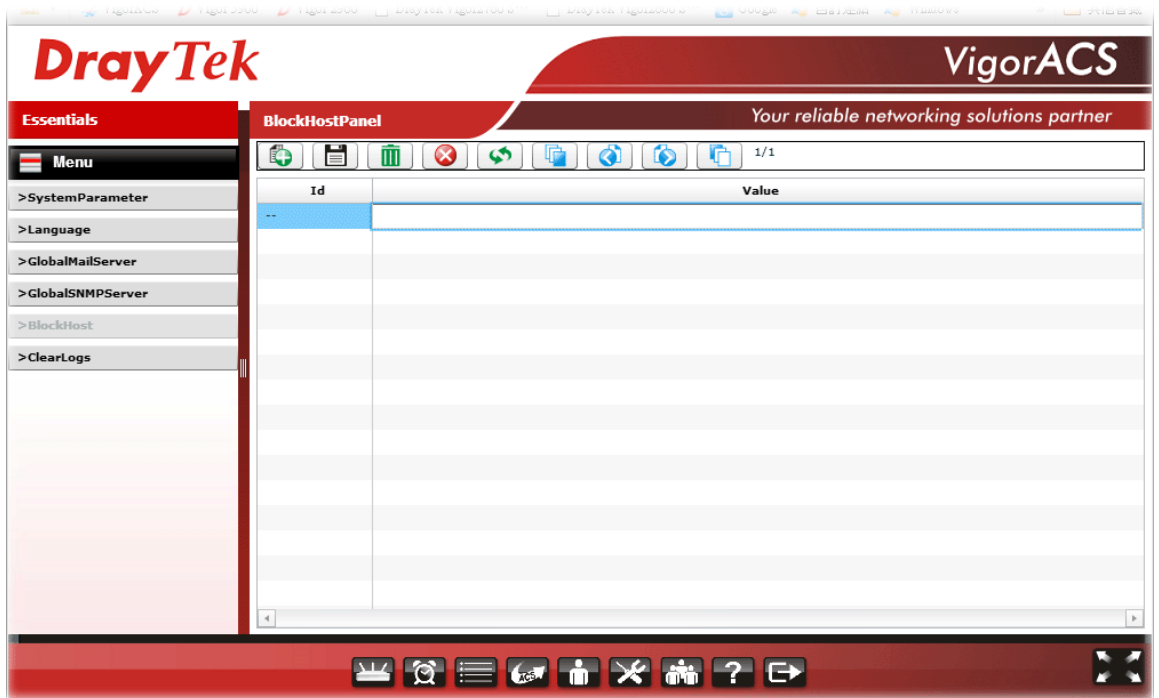
- Enable global SNMP server:
- SNMP server address:
- Port:
- Community:
- SNMP version:
- SNMP API:
- Alarm Level: Critical Major Minor Warning Normal

Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Save SNMP server setting | Click this button to save the record. |
|  Refresh | Click this button to refresh uploaded files. |
| Enable global SNMP server | Check the box to enable SNMP server. |
| SNMP server address | Type the IP address for the SNMP server. |
| Port | Type the port number for the SNMP server. |
| Community | Set the name for getting community by typing a proper character. In general, it depends on the setting that SNMP service provider offers. The default setting is public . |
| SNMP version | Choose the version of the SNMP server that you apply to.  |
| SNMP API | Choose SNMP API from the drop down list. At present, only SNMP_Default_GLOBAL is available.  |
| Alarm Level | Specify the severity level of the mail. |

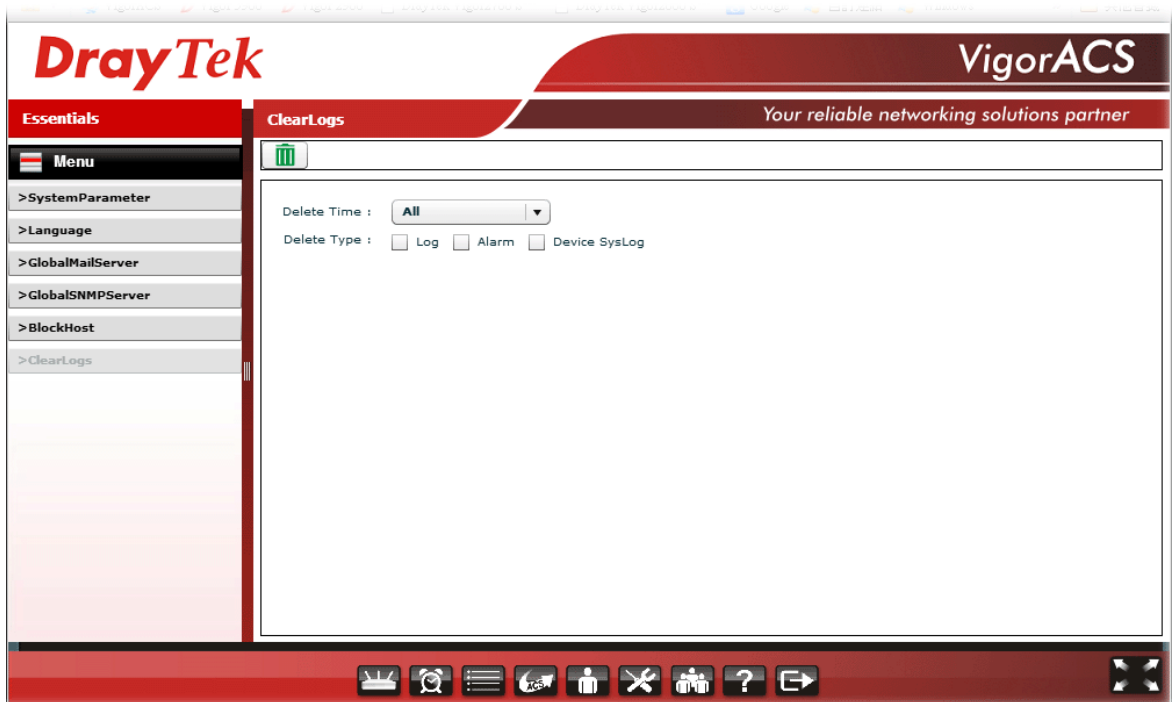
7.5 BlockHost Setting

This feature is used to block CPE which is allowed to register to VigorACS.

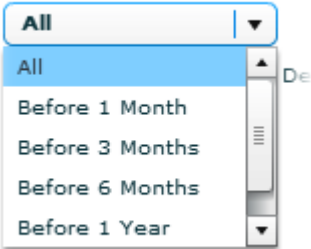


7.6 ClearLogs Setting

VigorACS will keep log until overload the capacity of hard disk. To avoid such trouble, use ClearLogs to delete the log periodically.



Available settings for such feature will be shown as follows:

| Items | Description |
|---------------------------|---|
| <p>Delete Time</p> | <p>Use the drop down list to specify the timing to delete the log.</p>  |
| <p>Delete Type</p> | <p>At present, there are three types that corresponding log can be deleted through such feature.</p> |

Chapter 8 Alarm Information

To monitor the normal and abnormal actions for CPEs, you will need to set Alarm.









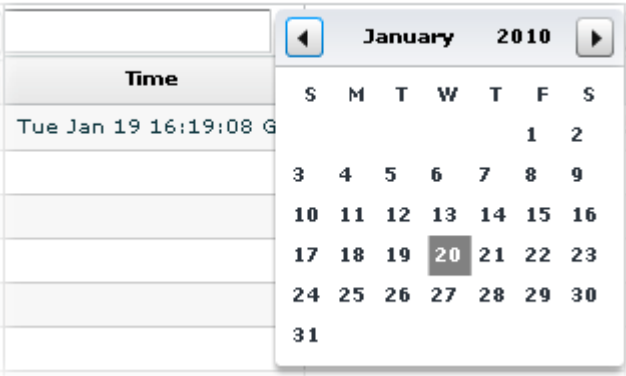
8.1 Alarm

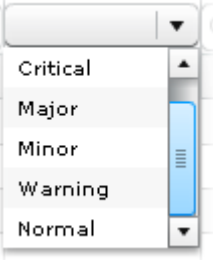
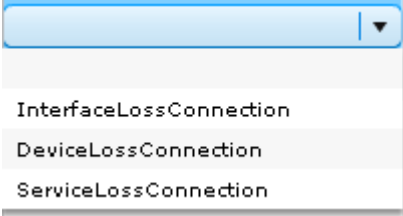
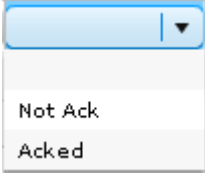
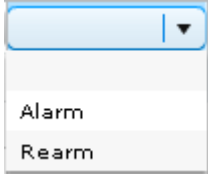
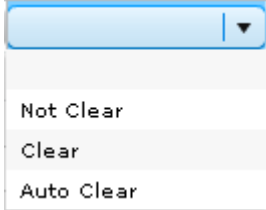
Alarm message will be recorded on VigorACS server when there is a trouble happened to the device (CPE). Only the users within the same user group will be notified for the message.

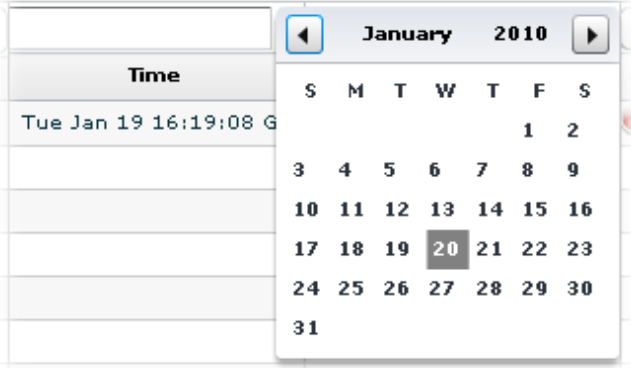
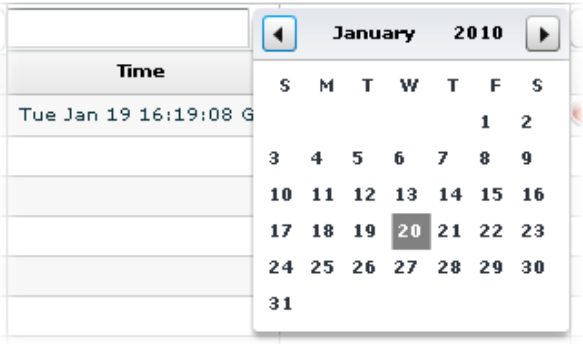
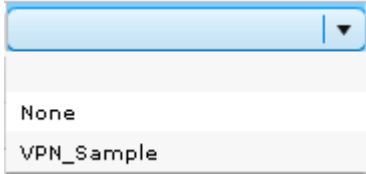
| No. | Time | Device Name | MAC Address | Alarm Level | Alarm Message |
|--------|---------------------|--------------------------|--------------|-------------|----------------------|
| 173080 | 2014/05/26 09:49:36 | DT_001DAAA8A840_5_7 | 001DAAA8A840 | Critical | DeviceLossConnection |
| 173078 | 2014/05/26 02:02:50 | DT_001DAAA7CE90 | 001DAAA7CE90 | Critical | DeviceLossConnection |
| 173077 | 2014/05/26 02:02:02 | DrayTek_00507F_Vigor_001 | 001DAAA61908 | Critical | DeviceLossConnection |
| 173073 | 2014/05/26 01:18:40 | DT_001DAAA42280_60.1_o | 001DAAA42280 | Critical | DeviceLossConnection |
| 173072 | 2014/05/26 01:18:05 | DT_001DAAA42240_5_3_olc | 001DAAA42240 | Critical | DeviceLossConnection |
| 173066 | 2014/05/25 23:59:31 | DT_00507F7CBC88_2960 | 00507F7CBC88 | Critical | DeviceLossConnection |
| 173058 | 2014/05/25 23:03:02 | DrayTek_00507F_Vigor_001 | 00507F522F58 | Critical | DeviceLossConnection |
| 173049 | 2014/05/25 21:17:44 | DrayTek_00507F_Vigor_001 | 001DAAA8A830 | Critical | DeviceLossConnection |
| 173045 | 2014/05/25 20:44:09 | DrayTek_00507F_Vigor_001 | 00507F7B83A0 | Critical | DeviceLossConnection |
| 173044 | 2014/05/25 20:18:59 | DrayTek_00507F_Vigor_001 | 001DAAA422A0 | Critical | DeviceLossConnection |
| 173027 | 2014/05/25 16:20:26 | DT_00507F710720_5_1 | 00507F710720 | Critical | DeviceLossConnection |
| 173006 | 2014/05/24 20:32:06 | DrayTek_00507F_Vigor_001 | 001DAA9CF01C | Critical | DeviceLossConnection |
| 172882 | 2014/05/24 16:28:12 | DrayTek_00507F_Vigor_001 | 00507F7FFD21 | Critical | DeviceLossConnection |
| 172725 | 2014/05/23 19:15:25 | DrayTek_00507F_Vigor283 | 00507FEDB6AD | Critical | DeviceLossConnection |

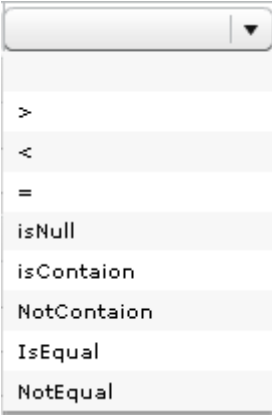
Available settings for such feature will be shown as follows:

| Items | Description |
|-----------------|---|
| Refresh | Click this button to refresh this page. |
| Ack Alarm | Click this button to make the alarm being captured based on the threshold value and waiting for solving manually. |
| UnAck Alarm | Disable the Ack Alarm mechanism. |
| Clear Alarm | Click this button to clear the alarm record which has been solved by VigorACS. |
| Clear All Alarm | Click this button to clear all of the alarm records which has been solved by VigorACS. |

| Items | Description |
|--|---|
|  Export to CSV | Click this button to save alarm log as a CSV file. |
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | When there is more than one page for the alarm records in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the alarm records in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the alarm records in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the alarm records in this user group, click this button to display the last page. |
| No. | Display the index number of the alarm. It is offered by VigorACS automatically. |
| Time | <p>Display the time of the alarm recorded. You can use the drop down calendar to inspect other alarms.</p>  |
| Device Name | Display the name of the CPE which gets trouble. |
| MAC Address | Display the MAC address of the device. |

| Items | Description |
|----------------------|--|
| Alarm Level | <p>Choose one of the alarm levels from the drop down list to display the alarm message with the severity specified.</p>  |
| Alarm Message | <p>Display a brief explanation for the alarm sent by VigorACS automatically.</p> |
| Alarm Type | <p>There are three types of Alarm Type. Choose any one of them to display the alarm message with the type specified.</p>  |
| Ack Status | <p>Display the status of the records with the type specified here (Not Ack or Acked).</p>  |
| Alarm Status | <p>Display the status of the records with the type specified here (Alarm or Rearm).</p>  |
| Clear Status | <p>Display the clear status for the alarm records. To view different clear status, use the drop down list to specify the one you want to see on the screen.</p>  |

| Items | Description |
|------------------------|--|
| Ack Time | Display the record (waiting for solving) based on the date chosen here.  |
| Ack User | Display the record (waiting for solving) based on the user accounts. |
| Clear Time | Alarm message record cleared by user will be removed to Alarm History . Choose the date to display the removed record.  |
| Clear User | Display which user clears such record. |
| UnAck Time | Display the cancelled job of the record (waiting for solving) based on the date chosen here. |
| UnAck User | Display which user cancels the job of the record. |
| Parameter | VigorACS will send the alarm based on the parameter specified here. User will know which parameter got troubles when he/she receives the alarm messages. |
| Parameter Group | Display the alarm record based on the VPN group selected here.  |
| Value | Display the threshold value that VigorACS will send alarm message to the CPE. |





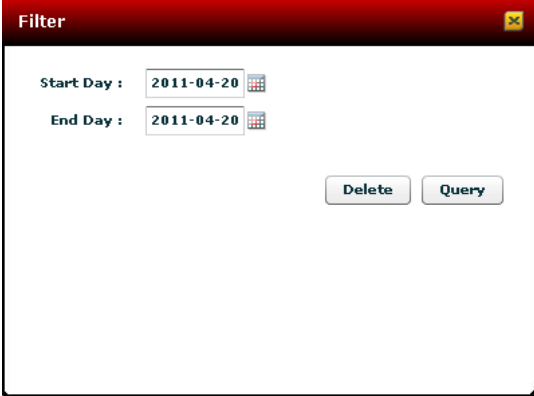

| Items | Description |
|------------------------|--|
| Threshold | <p>Set the condition for data traffic.</p>  <p>> - when the threshold value is greater than the configured value, an alarm message will be sent out. < - when the threshold value is smaller than the configured value, an alarm message will be sent out. = - when the threshold value equals to the configured value, an alarm message will be sent out. isNull - when the threshold value is null, an alarm message will be sent out. isContain - when the threshold value contains the configured value, an alarm message will be sent out. NotContain - when the threshold value does not contain the configured value, an alarm message will be sent out. IsEqual - when the threshold value equals to the configured value, an alarm message will be sent out. NotEqual - when the threshold value does not equal to the configured value, an alarm message will be sent out.</p> |
| Threshold Value | Set the value to fit the requirement of threshold. |
| Rearm | For cleaning an alarm record, please configure Rearm value. |






8.2 AlarmHistory

This page will display all the alarm records that have been solved and cleared.

| No. | Time | Clear Time | Device Name | MAC Address | Alarm Level |
|--------|---------------------|---------------------|--------------------------|--------------|-------------|
| 173085 | 2014/05/26 14:50:45 | 2014/05/26 14:51:00 | DrayTek_00507F_Vigor2850 | 00507F5D1630 | Critical |
| 173084 | 2014/05/26 14:23:22 | 2014/05/26 14:32:38 | DT_001DAAA8A880_5.5 | 001DAAA8A880 | Critical |
| 173083 | 2014/05/26 14:18:23 | 2014/05/26 14:21:17 | DrayTek_2830_115 | 001DAAA2DF10 | Critical |
| 173082 | 2014/05/26 14:01:28 | 2014/05/26 14:02:13 | DrayTek_2820_114 | 00507FA666E8 | Critical |
| 173081 | 2014/05/26 13:12:49 | 2014/05/26 13:32:52 | DT_001DAAA8A880_5.5 | 001DAAA8A880 | Critical |
| 173079 | 2014/05/26 09:01:47 | 2014/05/26 12:36:47 | DrayTek_00507F_Vigor_001 | 001DAAA2A828 | Critical |
| 173076 | 2014/05/26 01:48:02 | 2014/05/26 01:57:15 | DT_001DAAA7CE90 | 001DAAA7CE90 | Critical |
| 173075 | 2014/05/26 01:47:14 | 2014/05/26 01:54:52 | DrayTek_00507F_Vigor_001 | 001DAAA61908 | Critical |
| 173074 | 2014/05/26 01:32:19 | 2014/05/26 01:38:08 | DrayTek_00507F_Vigor_001 | 001DAAA61908 | Critical |
| 173071 | 2014/05/26 01:17:18 | 2014/05/26 01:18:30 | DrayTek_00507F_Vigor_001 | 001DAAA61908 | Critical |
| 173070 | 2014/05/26 01:02:14 | 2014/05/26 01:05:21 | DrayTek_00507F_Vigor_001 | 001DAAA61908 | Critical |
| 173069 | 2014/05/26 00:47:14 | 2014/05/26 00:52:02 | DrayTek_00507F_Vigor_001 | 001DAAA61908 | Critical |
| 173068 | 2014/05/26 00:03:24 | 2014/05/26 01:42:29 | DT_001DAAA7CE90 | 001DAAA7CE90 | Critical |
| 173067 | 2014/05/26 00:02:30 | 2014/05/26 00:19:58 | DrayTek_00507F_Vigor_001 | 001DAAA61908 | Critical |

Available settings for such feature will be shown as follows:

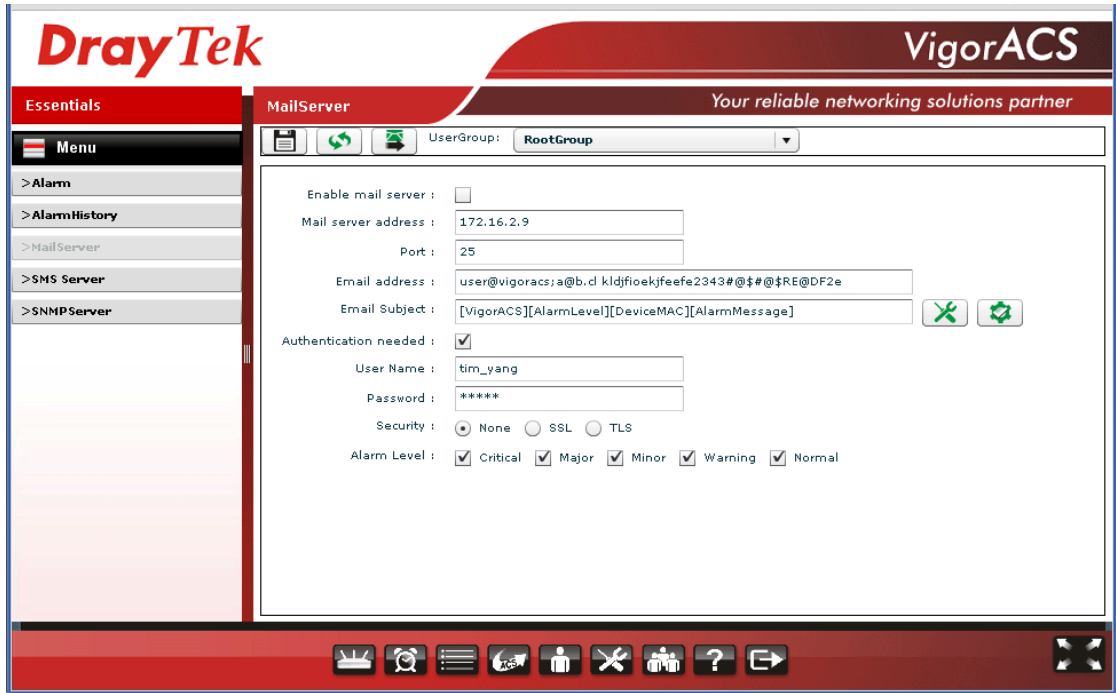
| Items | Description |
|--|--|
|  Delete | Click this button to delete a selected record. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  Filter | Click this button to specify which records within certain period will be deleted or queried.  |
|  Export to CSV | Click this button to save alarm log as a CSV file. |

| Items | Description |
|---|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | <p>When there is more than one page for the alarm records in this user group, click this button to display the first page.</p> |
|  Previous | <p>When there is more than one page for the alarm records in this user group, click this button to display the previous page.</p> |
|  Next | <p>When there is more than one page for the alarm records in this user group, click this button to display the next page.</p> |
|  Last | <p>When there is more than one page for the alarm records in this user group, click this button to display the last page.</p> |





As for detailed information of each item (such as No., Time, Device Name, Alarm Level, Alarm Message....) in AlarmHistory, please refer to section 8.1.



8.3 Mail Server

VigorACS can notify the user by e-mail whenever an error is detected.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Save mail server setting | Click this button to save the settings configured in this page. |
|  Refresh mail server setting | Click this button to refresh this page. |
|  Send a Test Mail | Click this button to send a test mail to the email address specified below. |
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
| Enable email server | Check this box to enable such function. |
| Mail server address | Type the IP address of the mail server for VigorACS. |




| Items | Description | | | | | | | | | | | | | | | |
|------------------------------|---|------------------------|------|--------------|---|--------------|------------|---|----------------|------------------------|---|--------------|---------------|---|-------------|----------------|
| Port | Type the port number of the mail server. | | | | | | | | | | | | | | | |
| Email address | Type the email address of the mail server. | | | | | | | | | | | | | | | |
| Email Subject | <p>Specify the subject of the mail server. The types to be specified contain AlarmLevel, AlarmMessage, DeviceName and DeviceMAC.</p> <p> - Click this button to open the following dialog. Click the icon under Add to make the selected subject to be added as an Email Subject.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Edit Subject ✕</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Add</th> <th style="width: 60%;">Text</th> <th style="width: 30%;">Show Example</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">+</td> <td>[AlarmLevel]</td> <td>[Critical]</td> </tr> <tr> <td style="text-align: center;">+</td> <td>[AlarmMessage]</td> <td>[DeviceLossConnection]</td> </tr> <tr> <td style="text-align: center;">+</td> <td>[DeviceName]</td> <td>[Draytek_CPE]</td> </tr> <tr> <td style="text-align: center;">+</td> <td>[DeviceMAC]</td> <td>[00507F000000]</td> </tr> </tbody> </table> </div> <p> - Click this button to reset to default subject items including VigorACS, AlarmLevel, DeviceMAC and AlarmMessage.</p> | Add | Text | Show Example | + | [AlarmLevel] | [Critical] | + | [AlarmMessage] | [DeviceLossConnection] | + | [DeviceName] | [Draytek_CPE] | + | [DeviceMAC] | [00507F000000] |
| Add | Text | Show Example | | | | | | | | | | | | | | |
| + | [AlarmLevel] | [Critical] | | | | | | | | | | | | | | |
| + | [AlarmMessage] | [DeviceLossConnection] | | | | | | | | | | | | | | |
| + | [DeviceName] | [Draytek_CPE] | | | | | | | | | | | | | | |
| + | [DeviceMAC] | [00507F000000] | | | | | | | | | | | | | | |
| Authentication needed | Check this box to activate this function while using e-mail application. | | | | | | | | | | | | | | | |
| User Name | Type the user name for authentication. | | | | | | | | | | | | | | | |
| Password | Type the password for authentication. | | | | | | | | | | | | | | | |
| Security | Choose None / SSL / TLS for the security of the mail transferring. | | | | | | | | | | | | | | | |
| Alarm Level | Specify the severity level of the mail. | | | | | | | | | | | | | | | |


8.4 SMS Server

This page allows you to choose which ISP with SMS service you want to use.



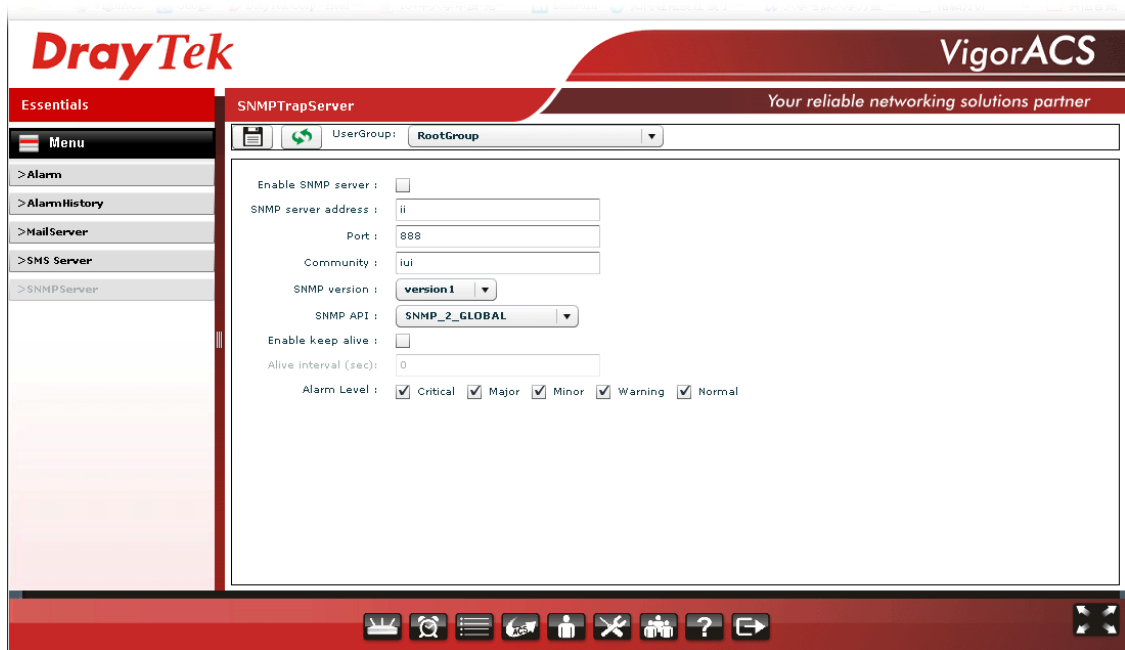
Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Save SMS server setting | Click this button to save the settings configured in this page. |
|  Refresh SMS server setting | Click this button to refresh this page. |
| UserGroup of this SMS server | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
| Enable SMS server | Check this box to enable such function. |
| From Telephone | Type the telephone number of the one who sends the SMS. |
| User Name | Type a username for authentication. |



| Items | Description |
|--------------------|---|
| Password | Type a password for authentication. |
| SMS API | Use the drop down list to choose the SMS service provider according to the location of the CPE.  |
| Alarm Level | Specify the severity level of the mail. |

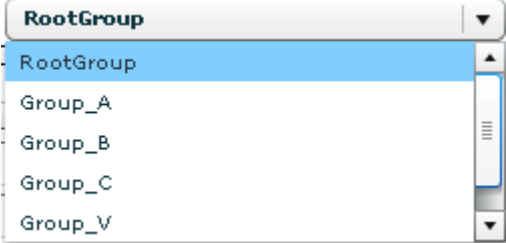

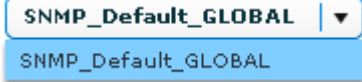
8.5 SNMP Server

This page allows you to manage the settings for SNMP server. When there is alarm detected, VigorACS will transfer the message to the SNMP server specified in this page.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Save SNMP server setting | Click this button to save the settings configured in this page. |
|  Refresh SNMP server setting | Click this button to refresh this page. |

| Items | Description |
|-----------------------------|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
| Enable SNMP server | Check the box to enable SNMP server. |
| SNMP server address | Type the IP address for the SNMP server. |
| Port | Type the port number for the SNMP server. |
| Community | Set the name for getting community by typing a proper character. In general, it depends on the setting that SNMP service provider offers. The default setting is public . |
| SNMP version | <p>Choose the version of the SNMP server that you apply to.</p>  |
| SNMP API | <p>Choose SNMP API from the drop down list. At present, only SNMP_Default_GLOBAL is available.</p>  |
| Enable keep alive | Check the box to enable the keep alive function. |
| Alive interval (sec) | Type the interval for the system to keep alive. |
| Alarm Level | Specify the severity level of the mail. |

8.6 Latest Alarms

The latest alarm will be displayed on the home page, tabbed with Latest Alarms. If the area is blank, it means there is no alarm or the alarm has been solved.

The screenshot displays the DrayTek VigorACS web interface. The top header features the DrayTek logo on the left and 'VigorACS Your reliable networking solutions partner' on the right. A navigation menu on the left includes 'Essentials', 'Networks and Devices', 'Wizards', 'Reports', 'Inventory Monitor', and 'Search Device'. The main content area is titled 'Network: Network View' and contains several panels:

- Networks And Device:** Managed networks and devices. Total number of networks:13, Alarm networks:13, Total number of devices:0, Number of alarmed devices:0.
- Unknown Devices:** A table with columns: IP Address, Device Name, Device Type, Action.
- Latest Alarms:** A table with columns: Level, Time, Device Name, Network, Description, Action. The table is currently empty, and a yellow warning icon is visible in the top-left corner of the panel.

The interface also includes a search bar for devices and a bottom navigation bar with various icons.

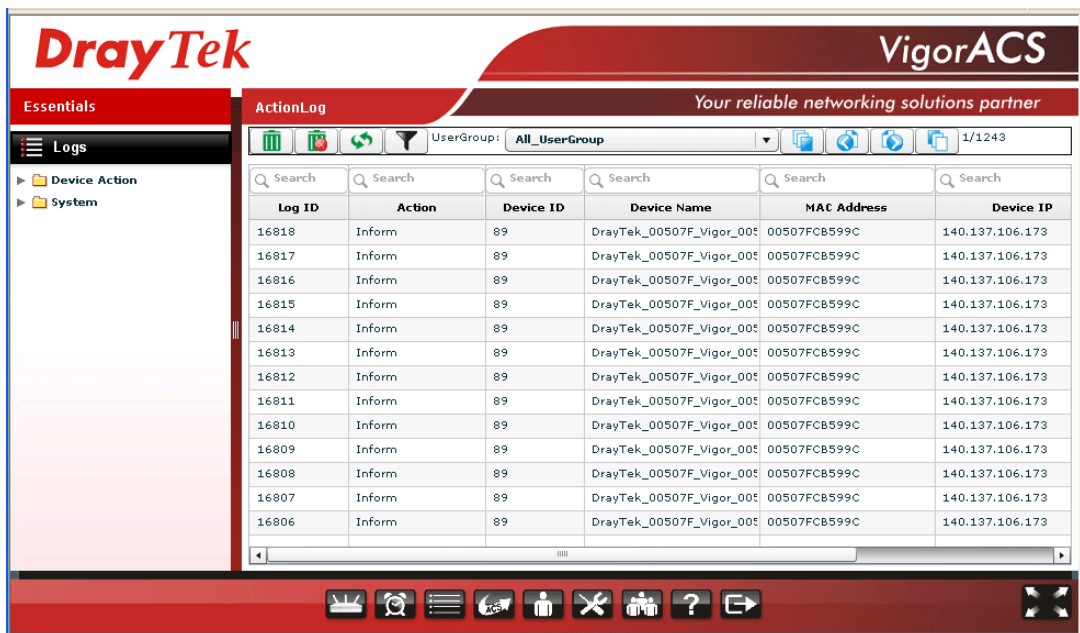
This page is left blank.

Chapter 9 Log View

Log provides administrator records for action, downloading, rebooting, parameter values, object adding and deleting executed by VigorACS.



When you choose this function, the following screen will appear with all the information offered by VigorACS. Please click any one of the links on the left side. The detailed information will be shown on the right side box.



The screenshot displays the VigorACS ActionLog interface. The top header includes the DrayTek logo and the VigorACS title. Below the header, there is a navigation menu on the left with 'Essentials' and 'Logs' sections. The main content area shows a table of log entries with columns for Log ID, Action, Device ID, Device Name, MAC Address, and Device IP. The table contains 11 rows of data, all with 'Inform' actions. The interface also includes search bars, a 'UserGroup' dropdown menu, and a '1/1243' indicator.

| Log ID | Action | Device ID | Device Name | MAC Address | Device IP |
|--------|--------|-----------|-------------------------|--------------|-----------------|
| 16818 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16817 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16816 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16815 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16814 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16813 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16812 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16811 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16810 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16809 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16808 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16807 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |
| 16806 | Inform | 89 | DrayTek_00507F_Vigor_00 | 00507FCB599C | 140.137.106.173 |





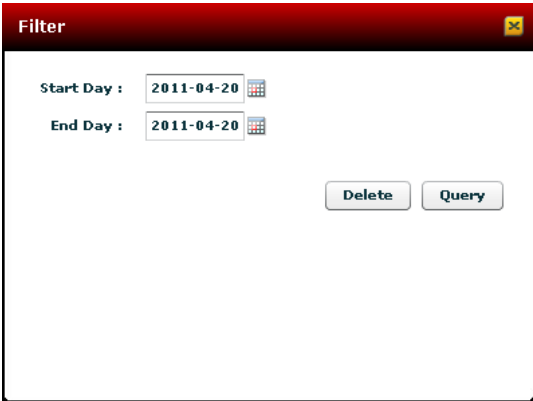
9.1 Device Action

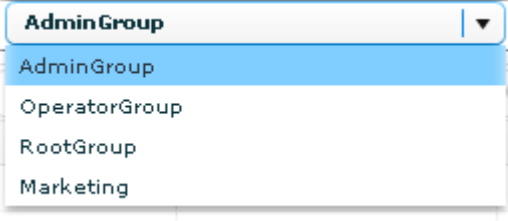




9.1.1 Action Log

Such page displays all the actions executed by VigorACS for your reference.

| Log ID | Action | Device ID | Device Name | MAC Address | Device IP |
|--------|--------|-----------|--------------------------|--------------|-----------------|
| 16818 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16817 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16816 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16815 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16814 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16813 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16812 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16811 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16810 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16809 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16808 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16807 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |
| 16806 | Inform | 89 | DrayTek_00507F_Vigor_005 | 00507FCB599C | 140.137.106.173 |

Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Delete | Click this button to delete the selected log. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  Filter | Click this button to specify which records within certain period will be deleted or queried.  |







| Items | Description |
|---|--|
| UserGroup | Use the drop down list to choose a user group. CPEs under such group will be displayed on the window.  |
|  First | When there is more than one page for the Action Log in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the Action Log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the Action Log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the Action Log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| Action | Display the action done by VigorACS to certain device. |
| Device ID | The number displayed here is specified by VigorACS automatically. |
| Device Name | Display the name of the CPE. |
| MAC Address | Display the MAC address of the CPE. |
| Device IP | Display the WAN IP address of the CPE. |
| Action ID | Display the identification number of the action. |
| Time | Display the time that such action is done. |

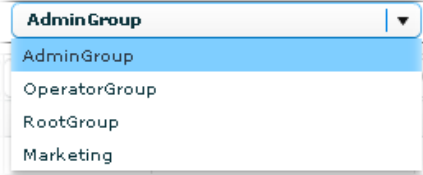




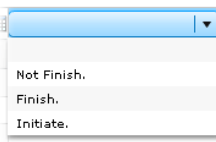
9.1.2 Reboot Log

Such page displays all the reboot actions initiated by VigorACS for your reference.

| RebootLog Your reliable networking solutions partner | | | | | | |
|---|-----------|---------------------------------|--------------|----------------|---------|---------------|
| | | UserGroup: All_UserGroup | | 1/1 | | |
| Log ID | Device ID | Device Name | MAC Address | Device IP | User ID | CommandKey |
| 10 | 116 | AP800_A_00507F_Vigor_00: | 00507F522F58 | 192.168.92.2 | root | 1334714644581 |
| 9 | 116 | AP800_A_00507F_Vigor_00: | 00507F522F58 | 192.168.92.2 | root | 1334714534769 |
| 8 | 116 | AP800_A_00507F_Vigor_00: | 00507F522F58 | 192.168.92.2 | root | 1334714315019 |
| 7 | 140 | 2710_00507F_Vigor_00507 | 00507FA05138 | 59.115.241.116 | root | 1332159261082 |
| 6 | 140 | 2710_00507F_Vigor_00507 | 00507FA05138 | 59.115.241.116 | root | 1332159024184 |
| 5 | 133 | 2830_00507F_Vigor_00507 | 00507F708098 | 59.115.240.18 | root | 1331544343445 |
| 4 | 133 | 2830_00507F_Vigor_00507 | 00507F708098 | 59.115.240.18 | root | 1331542048962 |
| 2 | 80 | 2920_A_00507FC93B24 | 00507FC93B24 | 1.169.159.46 | root | 1328597416833 |

Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Delete | Click this button to delete the selected log. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  Filter | Click this button to specify which records within certain period will be deleted or queried. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Filter</p> <p>Start Day : <input type="text" value="2011-04-20"/> </p> <p>End Day : <input type="text" value="2011-04-20"/> </p> <p style="text-align: right;"><input type="button" value="Delete"/> <input type="button" value="Query"/></p> </div> |

| Items | Description |
|---|---|
| UserGroup | Use the drop down list to choose a user group. CPEs under such group will be displayed on the window.  |
|  First | When there is more than one page for the Reboot Log in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the Reboot Log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the Reboot Log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the Reboot Log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| Device ID | The number displayed here is specified by VigorACS automatically. |
| Device Name | Display the name of the CPE. |
| MAC Address | Display the MAC address of the CPE. |
| Device IP | Display the WAN IP address of the CPE. |
| User ID | Display which user reboots the device. |
| CommandKey | Display the key that VigorACS sends to CPE while performing download/upload job. |
| CurrentTime | Display current time. |
| Status | If you do not specify the condition, the server will display information for all of the CPEs which are rebooting, finish rebooting or are initiating.  |

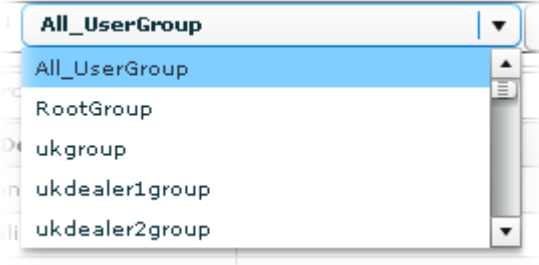




9.1.3 RebootByCPELog

Such page displays all the reboot actions initiated by CPE controlled under VigorACS for your reference.

| RebootByCPELog | | Your reliable networking solutions partner | | | |
|----------------|-----------|--|--------------|----------------|--------|
| | | UserGroup: All_UserGroup | | | 1/35 |
| Log ID | Device ID | Device Name | MAC Address | Device IP | Comman |
| 504 | 9 | Stephen's lovely 2820 | 00507F8F44A8 | 124.11.214.131 | |
| 503 | 60 | TNeutelia_Vigor_00507F38E | 00507F38B120 | 77.239.148.75 | |
| 502 | 60 | TNeutelia_Vigor_00507F38E | 00507F38B120 | 77.239.148.75 | |
| 501 | 63 | DrayTek_00507F_Vigor_005 | 00507F782268 | 10.0.16.59 | |
| 500 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | |
| 499 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | |
| 498 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | |
| 497 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | |
| 496 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | |
| 495 | 9 | Stephen's lovely 2820 | 00507F8F44A8 | 124.11.214.131 | |
| 494 | 55 | DrayTek_00507F_Vigor_005 | 00507F507FA0 | 88.247.22.34 | |
| 493 | 47 | MbHolding_mb12345mb | 00507FCA482C | 212.156.79.70 | |
| 492 | 9 | Stephen's lovely 2820 | 00507F8F44A8 | 124.11.214.131 | |









Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------|---|
| Delete | Click this button to delete the selected log. |
| Delete All | Click this button to delete all of the records. |
| Refresh | Click this button to refresh this page. |
| Filter | Click this button to specify which records within certain period will be deleted or queried. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Filter ✖</p> <p>Start Day : 2011-04-20 </p> <p>End Day : 2011-04-20 </p> <p style="text-align: right;"> <input type="button" value="Delete"/> <input type="button" value="Query"/> </p> </div> |







| Items | Description |
|---|---|
| UserGroup | <p>Use the drop down list to choose a user group. CPEs under such group will be displayed on the window.</p>  |
|  First | <p>When there is more than one page for the Reboot By CPE Log in this user group, click this button to display the first page.</p> |
|  Previous | <p>When there is more than one page for the Reboot By CPE Log in this user group, click this button to display the previous page.</p> |
|  Next | <p>When there is more than one page for the Reboot By CPE Log in this user group, click this button to display the next page.</p> |
|  Last | <p>When there is more than one page for the Reboot By CPE Log in this user group, click this button to display the last page.</p> |
| Search | <p>Click this box to type the search condition and press Enter. The server will display the data based on your request.</p> |
| Log ID | <p>The number displayed here is specified by VigorACS automatically.</p> |
| Device ID | <p>The number displayed here is specified by VigorACS automatically.</p> |
| Device Name | <p>Display the name of the CPE.</p> |
| MAC Address | <p>Display the MAC address of the CPE.</p> |
| Device IP | <p>Display the WAN IP address of the CPE.</p> |
| CommandKey | <p>Display the key that VigorACS sends to CPE while performing download/upload job.</p> |
| CurrentTime | <p>Display current time.</p> |



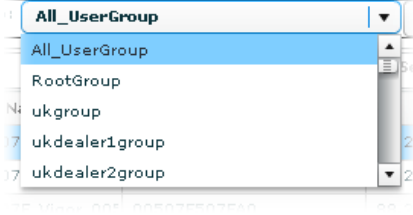




9.1.4 SetParameterLog

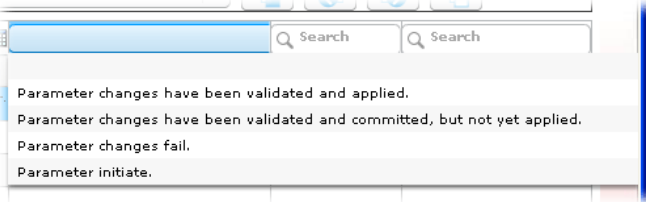
Such page displays all the values of parameters of CPE devices controlled by VigorACS for your reference.

| SetParameterValuesLog | | Your reliable networking solutions partner | | | |
|---|-----------|--|---|---------------|---------|
|     | | UserGroup: All_UserGroup |     | | 1/1 |
| Log ID | Device ID | Device Name | MAC Address | Device IP | User ID |
| 114 | 55 | DrayTek_00507F_Vigor_005 | 00507F507FA0 | 88.247.22.34 | root |
| 113 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | root |
| 112 | 55 | DrayTek_00507F_Vigor_005 | 00507F507FA0 | 88.247.22.34 | root |
| 111 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | root |
| 110 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | root |
| 109 | 55 | DrayTek_00507F_Vigor_005 | 00507F507FA0 | 88.247.22.34 | root |
| 108 | 54 | DrayTek_00507F_Vigor_005 | 00507F5073C8 | 88.247.22.244 | root |
| 107 | 55 | DrayTek_00507F_Vigor_005 | 00507F507FA0 | 88.247.22.34 | root |
| 106 | 85 | DrayTek_00507F_Vigor_005 | 00507FE0875C | 192.168.1.160 | mbadmin |
| 105 | 85 | DrayTek_00507F_Vigor_005 | 00507FE0875C | 192.168.1.160 | mbadmin |
| 104 | 84 | DrayTek_00507F_Vigor_005 | 00507FC95CD8 | 192.168.1.126 | mbadmin |
| 103 | 84 | DrayTek_00507F_Vigor_005 | 00507FC95CD8 | 192.168.1.126 | mbadmin |
| 102 | 85 | DrayTek_00507F_Vigor_005 | 00507FE0875C | 192.168.1.160 | mbadmin |

Available settings for such feature will be shown as follows:

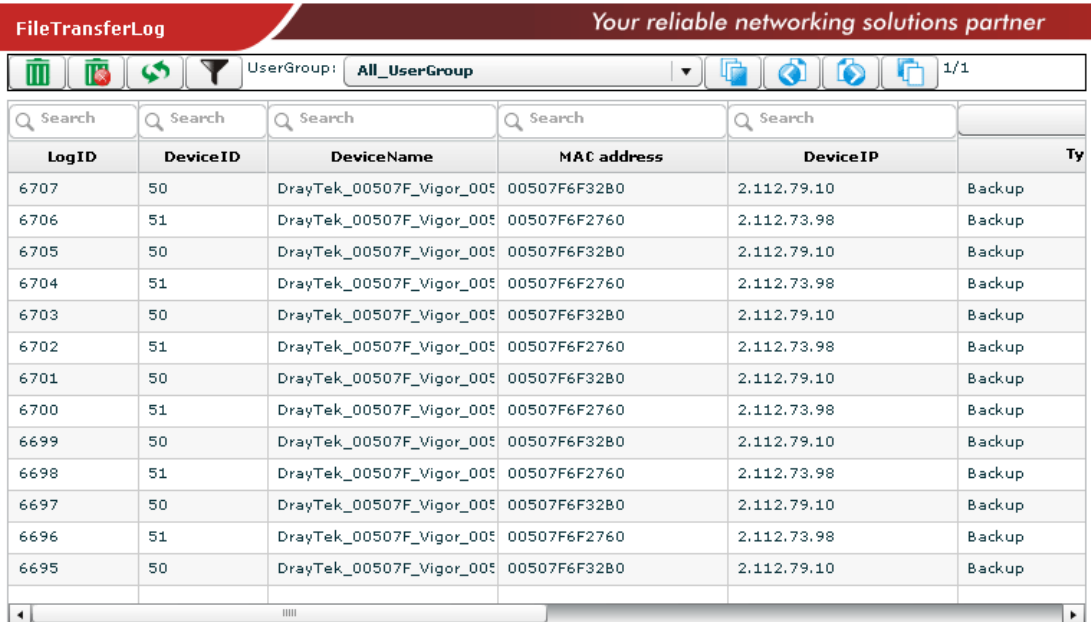
| Items | Description |
|---|--|
|  Delete | Click this button to delete the selected log. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  Filter | Click this button to specify which records within certain period will be deleted or queried. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Filter ✖</p> <p>Start Day : <input type="text" value="2011-04-20"/> </p> <p>End Day : <input type="text" value="2011-04-20"/> </p> <p style="text-align: right;"> <input type="button" value="Delete"/> <input type="button" value="Query"/> </p> </div> |

| Items | Description |
|---|---|
|  Detail | <p>Such button will bring up another dialog and display detailed information for the selected CPE.</p>  |
| UserGroup | <p>Use the drop down list to choose a user group. CPEs under such group will be displayed on the window.</p>  |
|  First | <p>When there is more than one page for the set parameter log in this user group, click this button to display the first page.</p> |
|  Previous | <p>When there is more than one page for the set parameter log in this user group, click this button to display the previous page.</p> |
|  Next | <p>When there is more than one page for the set parameter log in this user group, click this button to display the next page.</p> |
|  Last | <p>When there is more than one page for the set parameter log in this user group, click this button to display the last page.</p> |
| Search | <p>Click this box to type the search condition and press Enter. The server will display the data based on your request.</p> |
| Log ID | <p>The number displayed here is specified by VigorACS automatically.</p> |
| Device ID | <p>The number displayed here is specified by VigorACS automatically.</p> |
| Device Name | <p>Display the name of the CPE.</p> |
| MAC Address | <p>Display the MAC address of the CPE.</p> |
| Device IP | <p>Display the WAN IP address of the CPE.</p> |
| User ID | <p>Display the user name that creates such profile.</p> |
| ParameterKey | <p>Display the key that VigorACS sends to CPE while performing parameter configuration.</p> |
| Create Time | <p>Display the time that the parameters created.</p> |

| Items | Description |
|---------------------|---|
| Finish Time | Display the time that the parameters enabled. |
| Status | <p>VigorACS can display if the parameters configured for CPEs are successful or failed under four different conditions. Choose any one of them to display the status for your necessity.</p>  |
| Fault Code | Display a code which is sent by CPE device to VigorACS when VigorACS server fails to perform the job of parameter configuration. |
| Fault String | Display the error message which is sent by CPE device to VigorACS when VigorACS server fails to perform the job of parameter configuration. |



9.1.5 FileTransferLog



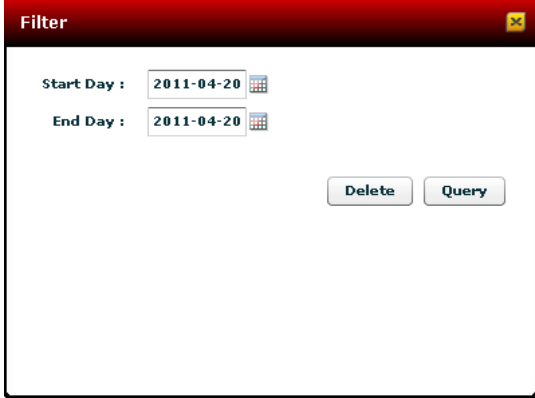





This page displays the record for firmware upload and download configuration for all CPEs controlled by VigorACS.

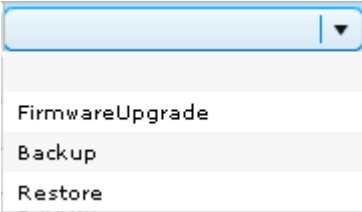
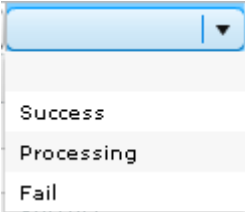
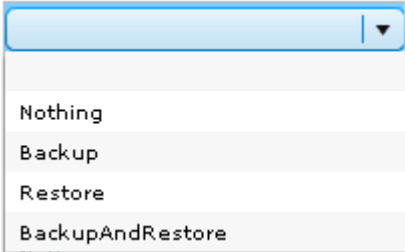


| LogID | DeviceID | DeviceName | MAC address | DeviceIP | Ty |
|-------|----------|--------------------------|--------------|-------------|--------|
| 6707 | 50 | DrayTek_00507F_Vigor_005 | 00507F6F32B0 | 2.112.79.10 | Backup |
| 6706 | 51 | DrayTek_00507F_Vigor_005 | 00507F6F2760 | 2.112.73.98 | Backup |
| 6705 | 50 | DrayTek_00507F_Vigor_005 | 00507F6F32B0 | 2.112.79.10 | Backup |
| 6704 | 51 | DrayTek_00507F_Vigor_005 | 00507F6F2760 | 2.112.73.98 | Backup |
| 6703 | 50 | DrayTek_00507F_Vigor_005 | 00507F6F32B0 | 2.112.79.10 | Backup |
| 6702 | 51 | DrayTek_00507F_Vigor_005 | 00507F6F2760 | 2.112.73.98 | Backup |
| 6701 | 50 | DrayTek_00507F_Vigor_005 | 00507F6F32B0 | 2.112.79.10 | Backup |
| 6700 | 51 | DrayTek_00507F_Vigor_005 | 00507F6F2760 | 2.112.73.98 | Backup |
| 6699 | 50 | DrayTek_00507F_Vigor_005 | 00507F6F32B0 | 2.112.79.10 | Backup |
| 6698 | 51 | DrayTek_00507F_Vigor_005 | 00507F6F2760 | 2.112.73.98 | Backup |
| 6697 | 50 | DrayTek_00507F_Vigor_005 | 00507F6F32B0 | 2.112.79.10 | Backup |
| 6696 | 51 | DrayTek_00507F_Vigor_005 | 00507F6F2760 | 2.112.73.98 | Backup |
| 6695 | 50 | DrayTek_00507F_Vigor_005 | 00507F6F32B0 | 2.112.79.10 | Backup |

Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Delete | Click this button to delete the selected log. |
|  Delete All | Click this button to delete all of the records. |

| Items | Description |
|---|--|
|  Refresh | Click this button to refresh this page. |
|  Filter | <p>Click this button to specify which records within certain period will be deleted or queried.</p>  |
| UserGroup | <p>Use the drop down list to choose a user group. CPEs under such group will be displayed on the window.</p>  |
|  First | When there is more than one page for the Log in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the Log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the Log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the Log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| Device ID | The number displayed here is specified by VigorACS automatically. |
| DeviceName | Display the name of the device. |
| MAC Address | Display the MAC address of the device. |
| DeviceIP | Display the WAN IP address of the device. |

| Items | Description |
|--------------------------|---|
| Type | <p>Display the file transfer type (firmware upgrade, backup or restore) for the specified CPE. If you do not specify the condition, the server will display information for all of the CPEs which have done firmware upgrade, backup and restore configurations.</p>  |
| Status | <p>Display the result (success, processing or fail) for the file transfer action. If you do not specify the condition, the server will display information of the backup and restore no matter the job is successful, processing or failed.</p>  |
| Event | <p>Display the job (nothing, backup, restore or backup and restore) that the selected CPE is performing. You can specify which event to be displayed on the window. Simply choose any one of the event from the drop down list. If you choose Nothing, no record will be shown.</p>  |
| FirmwareUpgradeID | Display the identification number of the firmware upgrade profile. |
| CommandKey | Display the key that VigorACS sends to CPE while performing download/upload job. |
| Count | Display the times of firmware upgrade for such device. |
| Time | Display the time that such log is done. |






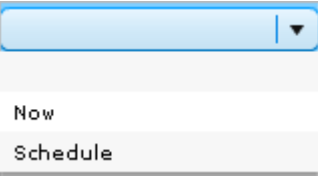
9.1.6 FirmwareUpgradeWizard

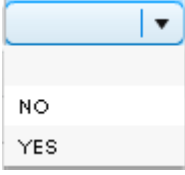
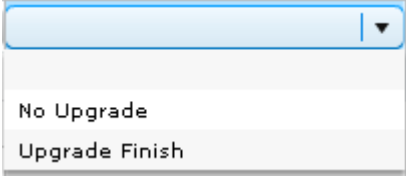
This page displays the record for firmware upgrade done by using wizard.

| FirmwareUpgradeWizardLog | | Your reliable networking solutions partner | | | |
|--------------------------|-----------|--|-----------|---------------------------------|-----|
| | | | | UserGroup: All_UserGroup | 1/5 |
| Log ID | Device ID | Device Name | Time Type | Start Day | |
| 59 | 82 | | Schedule | 2012-12-21 | 00 |
| 58 | 27 | Teste de Upgrade | Now | 2011-03-01 | 00 |
| 57 | 27 | Teste de Upgrade | Now | 2011-03-01 | 00 |
| 56 | 8 | Mauro's House | Now | 2011-03-01 | 00 |
| 55 | 8 | Mauro's House | Now | 2011-03-01 | 00 |
| 54 | 27 | Teste de Upgrade | Now | 2011-02-25 | 00 |
| 53 | 32 | Vigor1 | Now | 2011-02-25 | 00 |
| 52 | 27 | Teste de Upgrade | Now | 2011-02-24 | 00 |
| 51 | 27 | Teste de Upgrade | Now | 2011-02-24 | 00 |
| 50 | 27 | Teste de Upgrade | Now | 2011-02-24 | 00 |
| 49 | 27 | Teste de Upgrade | Now | 2011-02-24 | 00 |
| 48 | 9 | Stephen's lovely 2820 | Now | 2011-02-24 | 00 |
| 47 | 9 | Stephen's lovely 2820 | Now | 2011-02-24 | 00 |

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------|--|
| Delete | Click this button to delete the selected log. |
| Delete All | Click this button to delete all of the records. |
| Refresh | Click this button to refresh this page. |
| Filter | Click this button to specify which records within certain period will be deleted or queried. <div style="border: 1px solid black; padding: 5px;"> <p>Filter</p> <p>Start Day : <input type="text" value="2011-04-20"/> </p> <p>End Day : <input type="text" value="2011-04-20"/> </p> <p style="text-align: right;"><input type="button" value="Delete"/> <input type="button" value="Query"/></p> </div> |

| Items | Description |
|---|---|
| UserGroup | Use the drop down list to choose a user group. CPEs under such group will be displayed on the window.  |
|  First | When there is more than one page for the Log in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the Log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the Log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the Log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| Device ID | The number displayed here is specified by VigorACS automatically. |
| Device Name | Display the name of the device. |
| Time Type | Display the log of certain time (now or schedule).  |
| Start Day | Display the firmware upgrade starting date that is configured in firmware upgrade profile. |
| Start Time | Display the firmware upgrade starting time that is configured in firmware upgrade profile. |
| End Time | Display the firmware upgrade ending time that is configured in firmware upgrade profile. |
| Upgrade File | Display the file name of the firmware used to upgrade for the selected CPE. |

| Items | Description |
|-----------------|--|
| Current | Display if such log has been processed or not. If yes, please choose NO ; if not, please choose YES .  |
| Status | Choose from the drop down menu to display the records of upgrade finished or no upgrade.  |
| Time | Specify one day (by using the calendar icon) to display the records of that time. |
| UserName | Display the user name that creates such profile. |

9.1.7 SettingProfileLog





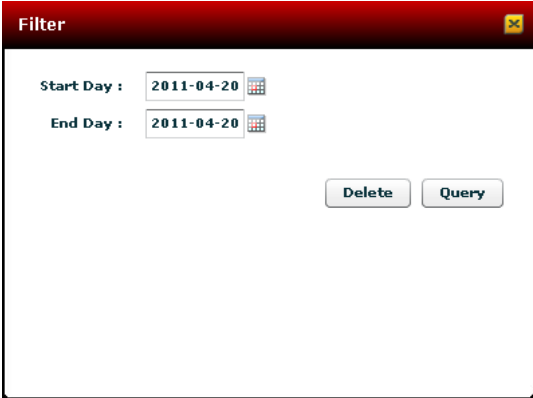


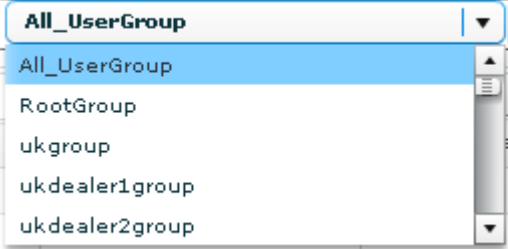

After uploading the profile to the selected CPE, VigorACS will search from the database to find the proper configuration to the specified CPE when it tries to connect to VigorACS server. If the specified CPE receives the configuration, it will return confirmation information to VigorACS server.




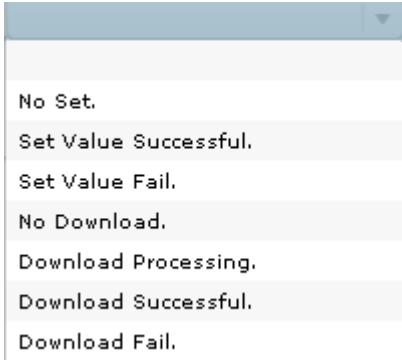
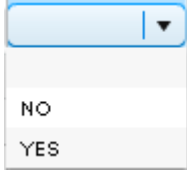
This page will list **current** status of the returning message of the CPE to VigorACS server.

| SettingProfileLog | | Your reliable networking solutions partner | | | | |
|--------------------------|--------------|--|-------------|---------------------|-------------|---------|
| UserGroup: All_UserGroup | | 1/1 | | | | |
| Log ID | MAC / IP | Status | Retry Count | Time | Renew Count | Current |
| 23 | 00507F445566 | No Set. | 0 | 2012/04/25 16:20:55 | 0 | YES |
| 22 | 00507F112233 | No Set. | 0 | 2012/04/25 16:20:55 | 1 | YES |
| 21 | 00507F112233 | No Set. | 0 | 2012/04/25 16:19:25 | 0 | NO |
| 20 | 00507FC93263 | No Set. | 0 | 2012/03/30 15:40:43 | 1 | YES |
| 19 | 00507FC93263 | No Set. | 0 | 2012/03/30 15:39:42 | 0 | NO |
| 18 | 00507F708098 | Set Value Successful. | 1 | 2012/03/12 17:21:06 | 0 | NO |
| 17 | 00507F708098 | Set Value Successful. | 1 | 2012/03/12 16:46:35 | 0 | NO |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Available settings for such feature will be shown as follows:

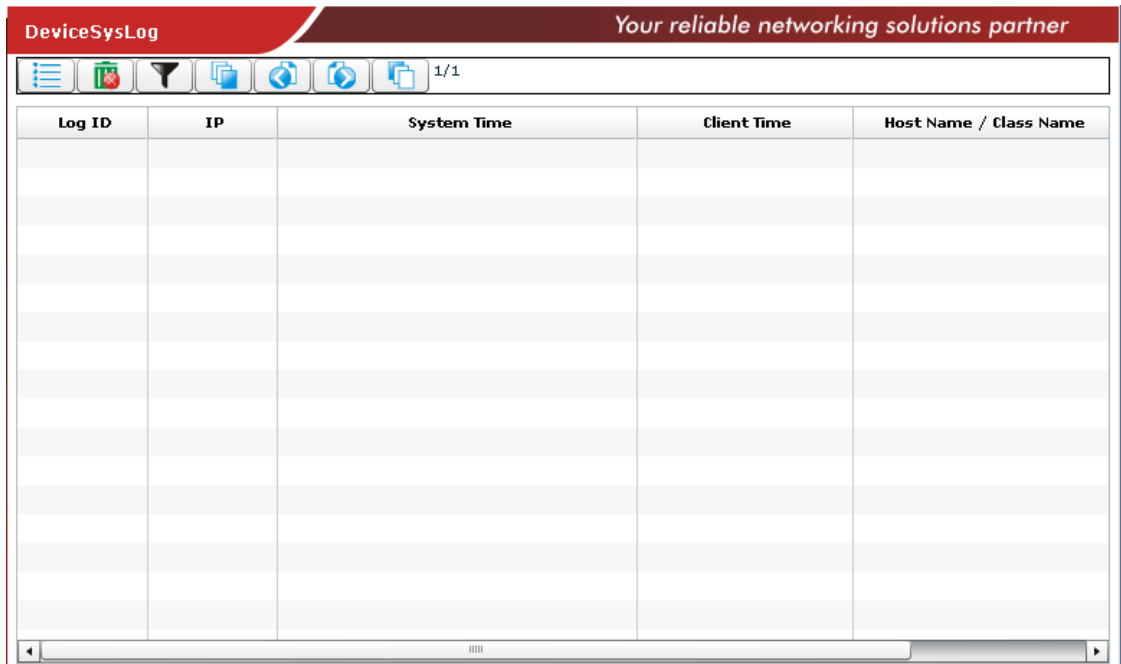
| Items | Description |
|-------|-------------|
|-------|-------------|

| Items | Description |
|---|---|
|  Delete | Click this button to delete the selected log. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  Filter | <p>Click this button to specify which records within certain period will be deleted or queried.</p>  |
|  Detail | <p>Click this button to open a window with detailed information for checking the parameter settings of the selected log.</p>  |
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | <p>When there is more than one page for the setting profile log in this user group, click this button to display the first page.</p> |


| Items | Description |
|---|---|
|  Previous | When there is more than one page for the setting profile log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the setting profile log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the setting profile log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| MAC Address | Display the MAC address of the CPE. |
| Status | Specify the condition listed below. If you do not specify the condition, the server will display all of the information for the profile uploaded.  |
| Retry Count | Display the time that VigorACS tries to set parameters to the selected CPE. |
| Time | Display the time recorded for the log. |
| Renew Count | Display how many times that such profile is uploaded. |
| Current | Display if such log has been processed or not. If yes, please choose NO ; if not, please choose YES .  |
| UserName | Display the user name that creates such profile. |
| Action | Choose to begin or stop using such profile. |
| Field | Display the file ID number of the uploaded profile. |

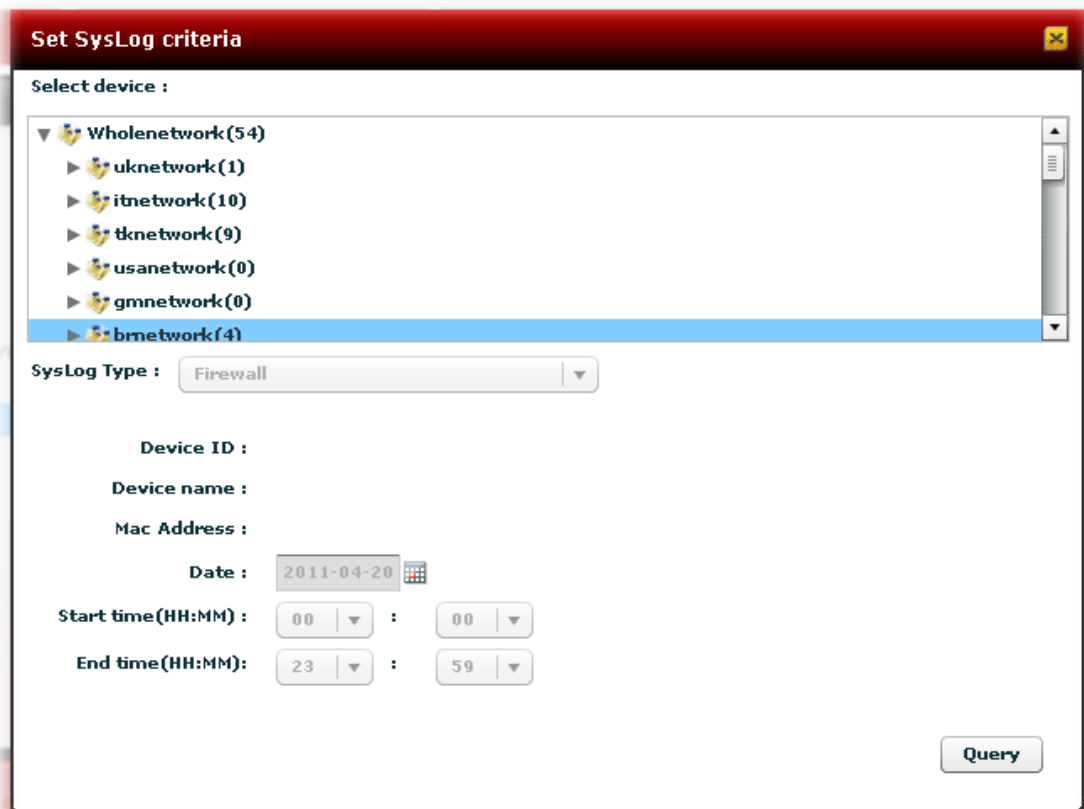
9.1.8 DeviceSysLog

Such page displays the system log of connected CPEs.



The screenshot shows the top portion of the DeviceSysLog interface. At the top, there is a red header bar with the text "DeviceSysLog" on the left and "Your reliable networking solutions partner" on the right. Below the header is a toolbar with several icons: a list icon, a filter icon, a refresh icon, a search icon, a back icon, and a forward icon. To the right of the toolbar, the text "1/1" is displayed. Below the toolbar is a table with the following columns: "Log ID", "IP", "System Time", "Client Time", and "Host Name / Class Name". The table is currently empty, showing only the header row.

To view syslog information of specified CPE, please click  **Set SysLog Criteria** button first. The following dialog will appear.









The screenshot shows the "Set SysLog criteria" dialog box. The dialog has a title bar with the text "Set SysLog criteria" and a close button (X). The main content area is divided into several sections:


- Select device :** A tree view showing a hierarchy of devices. The root is "Wholenetwork (54)", which is expanded to show several sub-nodes: "uknetwork (1)", "itnetwork (10)", "tknetwork (9)", "usanetwork (0)", "gmnetwork (0)", and "bnetwork (4)". The "bnetwork (4)" node is currently selected and highlighted in blue.
- SysLog Type :** A dropdown menu with "Firewall" selected.
- Device ID :** A text input field.
- Device name :** A text input field.
- Mac Address :** A text input field.
- Date :** A date picker showing "2011-04-20".
- Start time(HH:MM) :** Two dropdown menus for hours and minutes, both set to "00".
- End time(HH:MM) :** Two dropdown menus for hours and minutes, set to "23" and "59" respectively.
- Query :** A button at the bottom right of the dialog.

Choose the device you want to check; specify the syslog type (Firewall, VPN, UA, Call, WAN, others); specify the time; and click **Query**. The corresponding information will be shown as the following.

| SystemLog | | Your reliable networking solutions partner | | | |
|-----------|--------------|--|-----------------|-----------|--------------|
| 1/36 | | | | | |
| Log ID | IP | System Time | Client Time | Host Name | |
| 1242334 | 172.17.3.191 | Fri Jan 15 15:14:07 GMT+0800 2010 | Jan 15 07:52:29 | Vigor | DSL: DSL ret |
| 1242335 | 172.17.3.191 | Fri Jan 15 15:14:07 GMT+0800 2010 | Jan 15 07:52:30 | Vigor | IKE <==, Nes |
| 1242336 | 172.17.3.191 | Fri Jan 15 15:14:07 GMT+0800 2010 | Jan 15 07:52:30 | Vigor | IKE ==>, Nes |
| 1242338 | 172.17.3.191 | Fri Jan 15 15:14:08 GMT+0800 2010 | Jan 15 07:52:31 | Vigor | DSL: loading |
| 1242339 | 172.17.3.191 | Fri Jan 15 15:14:09 GMT+0800 2010 | Jan 15 07:52:31 | Vigor | DSL: Enter t |
| 1242340 | 172.17.3.191 | Fri Jan 15 15:14:09 GMT+0800 2010 | Jan 15 07:52:31 | Vigor | DSL: Status |
| 1242342 | 172.17.3.191 | Fri Jan 15 15:14:10 GMT+0800 2010 | Jan 15 07:52:32 | Vigor | DSL: Status |
| 1242344 | 172.17.3.191 | Fri Jan 15 15:14:11 GMT+0800 2010 | Jan 15 07:52:33 | Vigor | DSL: Status |
| 1242346 | 172.17.3.191 | Fri Jan 15 15:14:12 GMT+0800 2010 | Jan 15 07:52:34 | Vigor | DSL: Status |
| 1242348 | 172.17.3.191 | Fri Jan 15 15:14:13 GMT+0800 2010 | Jan 15 07:52:34 | Vigor | DSL: Status |
| 1242350 | 172.17.3.191 | Fri Jan 15 15:14:14 GMT+0800 2010 | Jan 15 07:52:34 | Vigor | DSL: Status |
| 1242352 | 172.17.3.191 | Fri Jan 15 15:14:15 GMT+0800 2010 | Jan 15 07:52:38 | Vigor | DSL: Status |
| 1242354 | 172.17.3.191 | Fri Jan 15 15:14:16 GMT+0800 2010 | Jan 15 07:52:39 | Vigor | DSL: Status |

Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Set SysLog Criteria | Click this button to query syslog for certain CPE. |
|  Delete All | Click this button to delete all of the records. |
|  Filter | Click this button to specify which records within certain period will be deleted or queried. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Filter</p> <p>Start Day : 2011-04-20</p> <p>End Day : 2011-04-20</p> <p style="text-align: right;">Delete Query</p> </div> |
|  First | When there is more than one page for the device system log in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the device system log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the device system log in this user group, click this button to display the next page. |

| Items | Description |
|---|--|
|  Last | When there is more than one page for the device system log in this user group, click this button to display the last page. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| IP | Display the WAN IP address of the CPE. |
| System Time | Display the time when the function is executed for the CPE. |
| Client Time | Display the time of CPE when it sends system log out. |
| Host Name / Class Name | Display the name of the host sent by CPE. |
| Message | Display a brief description for such log. |

9.2 System





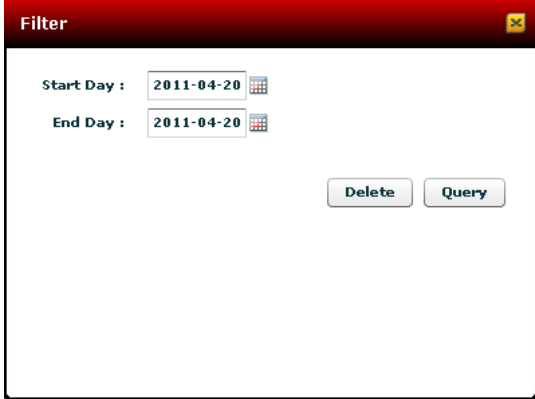
9.2.1 System Log

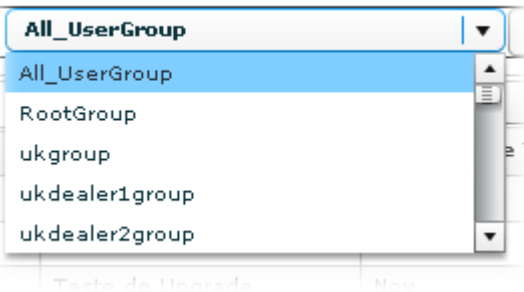




VigorACS will record the modification or changes of the CPE(s) done by VigorACS. For example, CPE will be attributed to another network, name of CPE will be changed or location of CPE on Google map will be modified, and etc. Refer to the following example:

The screenshot shows the 'SystemLog' interface with a red header bar containing the text 'Your reliable networking solutions partner'. Below the header is a toolbar with icons for delete, delete all, refresh, and filter, along with a 'UserGroup: All_UserGroup' dropdown menu. The main area contains a table with the following data:

| Log ID | Source | Description | Result | Time |
|--------|--------|---------------------------------|---------|-------------------|
| 1 | aaa | Device has changed name to aaa, | Success | 2012/02/07 13:46: |

Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Delete | Click this button to delete the selected log. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  Filter | Click this button to specify which records within certain period will be deleted or queried.  |

| Items | Description |
|---|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | <p>When there is more than one page for the system log in this user group, click this button to display the first page.</p> |
|  Previous | <p>When there is more than one page for the system log in this user group, click this button to display the previous page.</p> |
|  Next | <p>When there is more than one page for the system log in this user group, click this button to display the next page.</p> |
|  Last | <p>When there is more than one page for the system log in this user group, click this button to display the last page.</p> |
| Search | <p>Click this box to type the search condition and press Enter. The server will display the data based on your request.</p> |
| Log ID | <p>The number displayed here is specified by VigorACS automatically.</p> |
| Source | <p>Display the device name.</p> |
| Description | <p>Display a brief explanation for the change to the CPE.</p> |
| Result | <p>Success - the change or modification succeeds and is recorded. Fail – the change or modification fails and is recorded.</p> |
| Time | <p>Display the time recorded for the log.</p> |

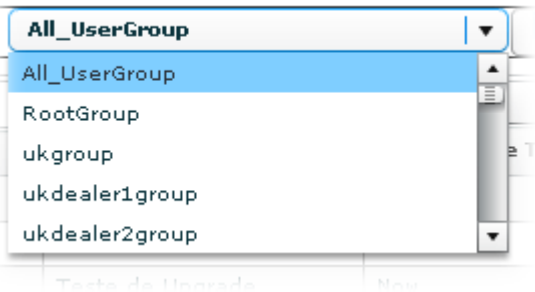




9.2.2 LoginLog

VigorACS will record the login information for every login user. Refer to the following example:

| LoginLog | | Your reliable networking solutions partner | | | |
|----------|-----------|--|--------------------------|-------------------------|----------|
| | | UserGroup: All_UserGroup | | | 1/18 |
| Log ID | User Name | Login IP | Login Time | Logout Time | Status |
| 254 | root | 61.216.118.30 | Fri Jul 15 11:16:57 GMT+ | | Success. |
| 253 | root | 61.216.118.30 | Fri Jul 15 10:22:02 GMT+ | | Success. |
| 252 | root | 217.34.235.209 | Thu Jul 14 20:02:49 GMT | | Success. |
| 251 | root | 192.168.93.100 | Thu Jul 14 14:09:37 GMT | | Success. |
| 250 | root | 61.216.118.30 | Thu Jul 14 11:15:36 GMT | | Success. |
| 249 | root | 1.169.132.63 | Thu Jul 14 10:42:24 GMT | Thu Jul 14 11:15:08 GMT | Success. |
| 248 | root | 192.168.93.100 | Thu Jul 14 10:40:39 GMT | | Success. |
| 247 | root | 61.216.118.30 | Thu Jul 14 09:46:01 GMT | | Success. |
| 246 | root | 61.216.118.30 | Thu Jul 14 09:41:00 GMT | | Success. |
| 245 | root | 61.216.116.80 | Wed Jul 13 14:02:19 GM | | Success. |
| 244 | root | 192.168.93.100 | Wed Jul 13 13:48:05 GM | | Success. |
| 243 | root | 61.216.234.177 | Wed Jul 13 13:45:49 GM | Wed Jul 13 13:46:42 GM | Success. |
| 242 | root | 61.216.116.80 | Wed Jul 13 13:43:44 GM | | Success. |
| 241 | root | 61.216.232.220 | Tue Jul 12 19:39:33 GMT | | Success. |

Available settings for such feature will be shown as follows:

| Items | Description |
|-------------------|---|
| Delete | Click this button to delete the selected log. |
| Delete All | Click this button to delete all of the records. |
| Refresh | Click this button to refresh this page. |
| Filter | Click this button to specify which records within certain period will be deleted or queried. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Filter ✕</p> <p>Start Day : <input type="text" value="2011-04-20"/> </p> <p>End Day : <input type="text" value="2011-04-20"/> </p> <p style="text-align: right;"> <input type="button" value="Delete"/> <input type="button" value="Query"/> </p> </div> |





| Items | Description |
|---|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | When there is more than one page for the login log in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the login log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the login log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the login log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| User Name | Display the user name that the user adopts for accessing into VigorACS. |
| Login IP | Display the public IP address of the user. |
| Login Time | Display the time that the user accesses into VigorACS. |
| Logout Time | Display the time that the user exits VigorACS. |
| Status | Display the status (success or fail) that the user access into VigorACS. |




9.2.3 DeviceInformationLog

This page displays the general information of CPE registered to VigorACS SI.

| DeviceInformationLog | | Your reliable networking solutions partner | | |
|---------------------------------|--------------------------|--|----------------|---------------------|
| UserGroup: All_UserGroup | | 1/2 | | |
| Device ID | Device Name | MAC Address | Device IP | Registered Time |
| 153 | DrayTek_001DAA_Vigor_00 | 00:1d:aa:00:00 | 61.216.231.25 | 2012/05/07 19:13:28 |
| 151 | DrayTek_00507F_Vigor_005 | 00507FAFB3A0 | 59.115.247.206 | 2012/04/26 18:46:43 |
| 149 | 2910_00507F_Vigor_00507 | 00507F267257 | 192.168.91.1 | 2012/04/25 13:35:28 |
| 148 | DrayTek_00507F_Vigor_005 | 00507F77D0E8 | 61.216.232.88 | 2012/04/18 14:14:53 |
| 147 | DrayTek_00507F_Vigor_005 | 00507FCBC654 | 192.168.93.50 | 0/12/30 00:00:00 |
| 146 | DrayTek_00507F_Vigor_005 | 00507F7FFB41 | 37.46.160.162 | 0/12/30 00:00:00 |
| 140 | 2710_00507F_Vigor_00507 | 00507FA05138 | 59.115.241.116 | 0/12/30 00:00:00 |
| 139 | DrayTek_00507F_Vigor_005 | 00507F9FAE98 | 1.169.165.67 | 0/12/30 00:00:00 |
| 133 | 2830_00507F_Vigor_00507 | 00507F708098 | 59.115.240.18 | 0/12/30 00:00:00 |
| 131 | DrayTek_00507F_Vigor_005 | 00507FC8432C | 192.168.92.2 | 0/12/30 00:00:00 |
| 130 | DrayTek_00507F_Vigor_005 | 00507FCC1AB4 | 114.44.48.170 | 0/12/30 00:00:00 |
| 129 | DrayTek_00507F_Vigor_005 | 001D000000DC | 1.169.156.19 | 0/12/30 00:00:00 |
| 116 | AP800_A_00507F_Vigor_005 | 00507F522F58 | 192.168.92.2 | 0/12/30 00:00:00 |
| 80 | 2920_A_00507FC93B24 | 00507FC93B24 | 1.169.159.46 | 0/12/30 00:00:00 |

Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Refresh | Click this button to refresh this page. |
|  Export to CSV | Click this button to export the all the logs as an Excel file. |
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | When there is more than one page for the device operate log in this user group, click this button to display the first page. |





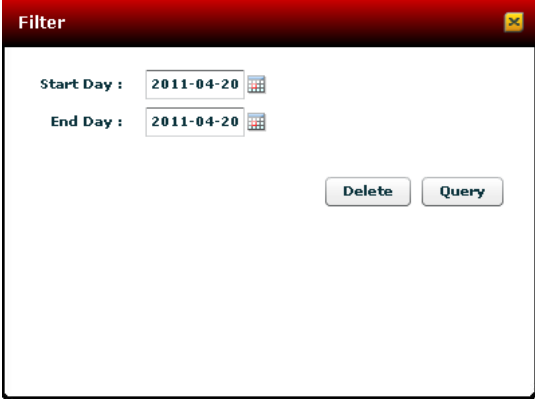


| Items | Description |
|---|---|
|  Previous | When there is more than one page for the device operate log in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the device operate log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the device operate log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Device ID | The number displayed here is specified by VigorACS automatically. |
| Device Name | Display the name of the CPE. |
| MAC Address | Display the MAC address of the CPE. |
| Device IP | Display the IP address of the CPE. |
| Registered Time | Display the time that such CPE registers to VigorACS SI. |



9.2.4 DeviceOperateLog

This page displays the log about which CPE connects to VigorACS successfully or unsuccessfully.

| DeviceOperateLog | | | | | Your reliable networking solutions partner | |
|------------------|---|--------------|-------------------|--------------|--|--|
| Log ID | Message | MAC Address | IP Address | Manufacturer | | |
| 107 | AuthError' User:ayman,Mac:,URL:,Manufacturer:' | | | | 2012/C | |
| 106 | AuthError' User:2910,Mac:00507F267257,URL:http:// | 00507F267257 | http://192.168.91 | DrayTek | 2012/C | |
| 105 | AuthError' User:acs,Mac:00507FAFB3A0,URL:http://5 | 00507FAFB3A0 | http://59.115.247 | DrayTek | 2012/C | |
| 104 | AuthError' User:2710,Mac:00507FA05138,URL:http:// | 00507FA05138 | http://61.216.117 | DrayTek | 2012/C | |
| 103 | AuthError' User:root,Mac:,URL:,Manufacturer:' | | | | 2012/C | |
| 102 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://61.216.119 | DrayTek | 2012/C | |
| 101 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://61.216.119 | DrayTek | 2012/C | |
| 100 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://61.216.119 | DrayTek | 2012/C | |
| 99 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://61.216.119 | DrayTek | 2012/C | |
| 98 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://61.216.119 | DrayTek | 2012/C | |
| 97 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://61.216.119 | DrayTek | 2012/C | |
| 96 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://61.216.119 | DrayTek | 2012/C | |
| 95 | AuthError' User:2820,Mac:00507F77D0E8,URL:http:// | 00507F77D0E8 | http://59.115.244 | DrayTek | 2012/C | |

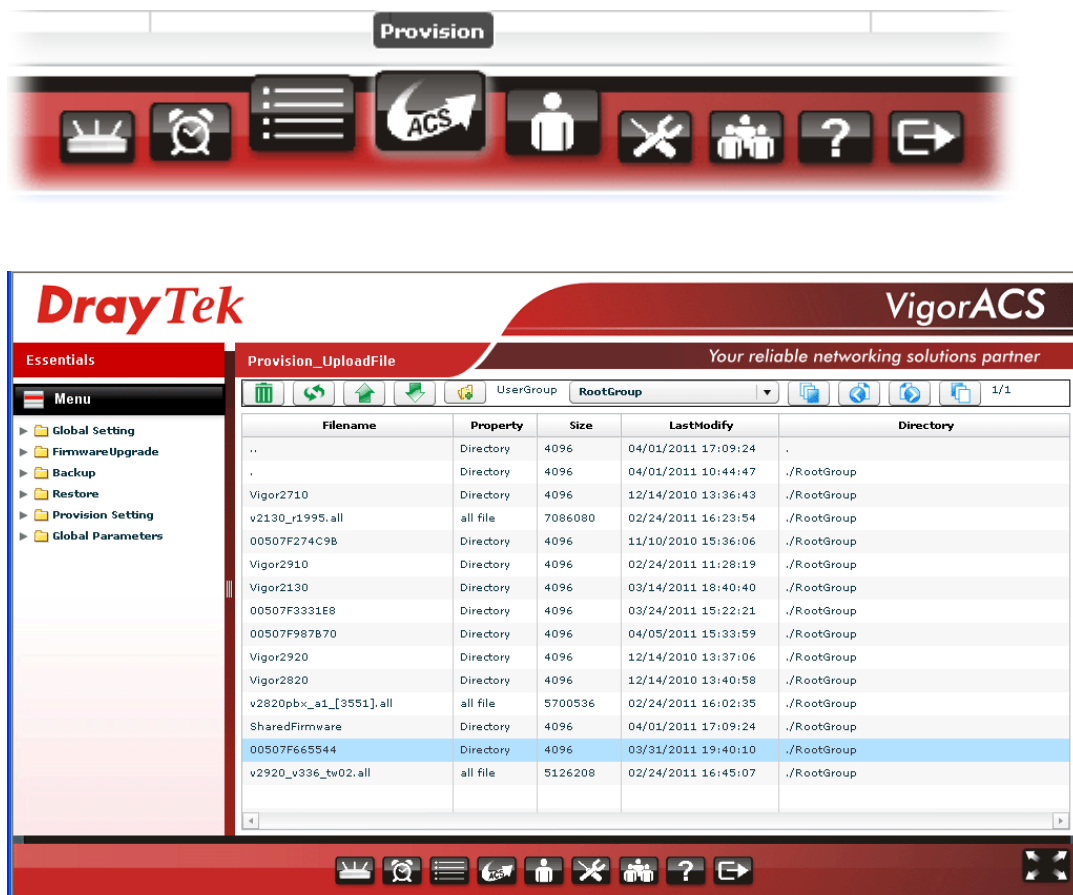
Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Delete | Click this button to delete the selected log. |
|  Delete All | Click this button to delete all of the records. |
|  Refresh | Click this button to refresh this page. |
|  Filter | Click this button to specify which records within certain period will be deleted or queried.  |
|  First | When there is more than one page for the device operate log in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the device operate log in this user group, click this button to display the previous page. |

| Items | Description |
|---|--|
|  Next | When there is more than one page for the device operate log in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the device operate log in this user group, click this button to display the last page. |
| Search | Click this box to type the search condition and press Enter . The server will display the data based on your request. |
| Log ID | The number displayed here is specified by VigorACS automatically. |
| Message | Display related information for the CPE. |
| MAC Address | Display the MAC address of the CPE. |
| IP Address | Display the IP address of the CPE. |
| Manufacturer | Display the manufacturer for the CPE. |
| Create Time | Display the time that the operation created. |

Chapter 10 Provision Configuration

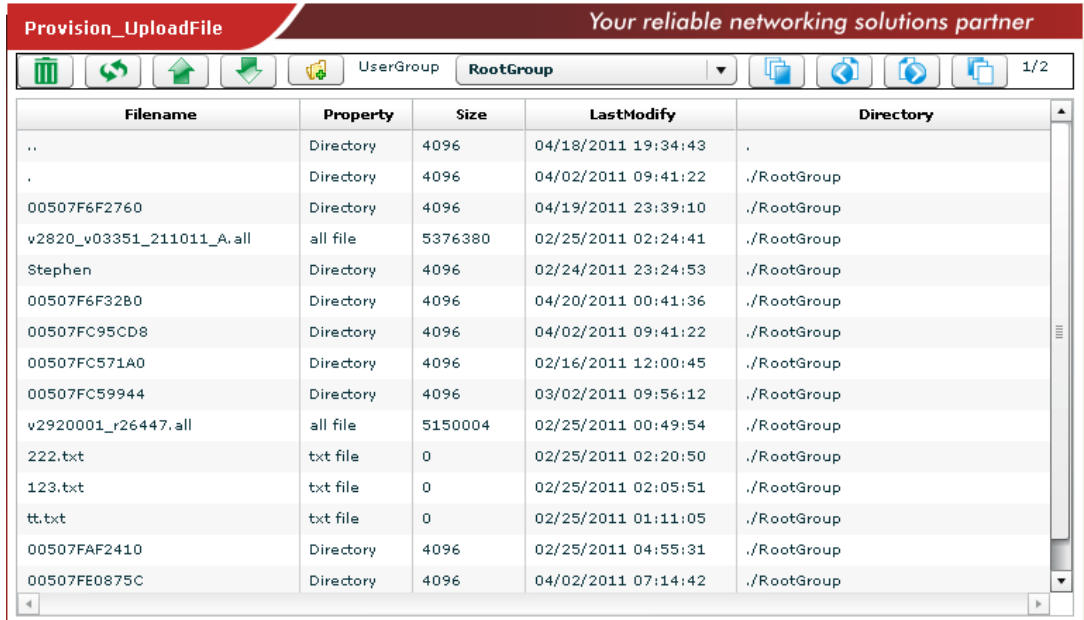
Provision functions allow users to set provision profiles for applying in numerous TR-069 CPEs instead of configuring settings for each CPE one by one.








10.1 Global Setting






10.1.1 Upload File

Upload File function allows users to upload the file to VigorACS, including configuration and firmware image files.



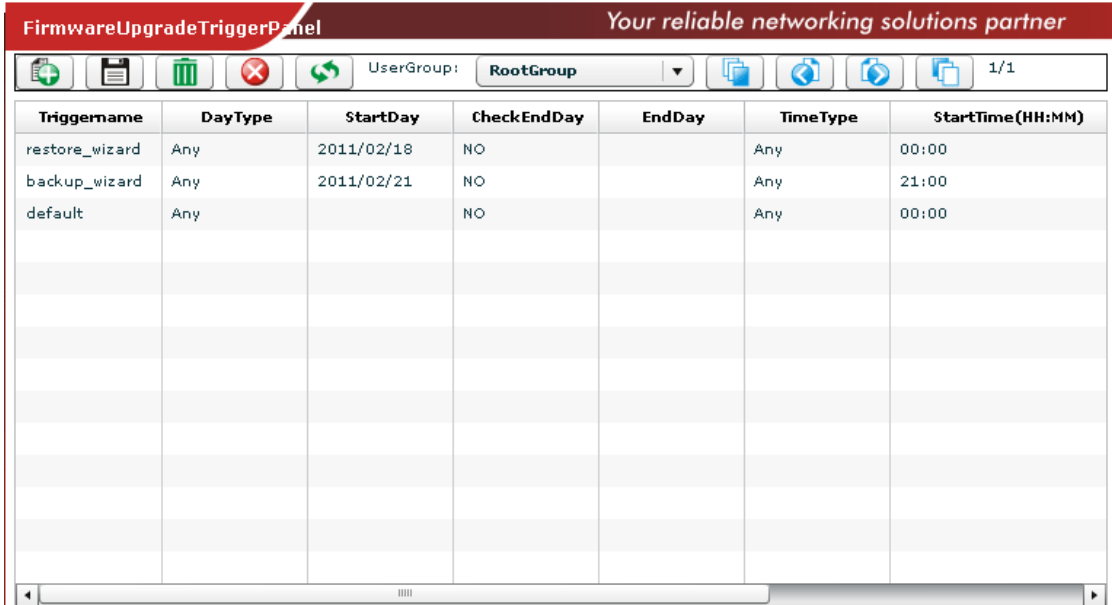
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Delete | Click this button to delete the selected provision file. |
|  Refresh | Click this button to refresh uploaded files. |
|  Upload File | Click this button to upload a provision file from your host to VigorACS. The file you upload will be shown on the screen immediately. |
|  Download File | Click this button to download a file from VigorACS to your computer. |
|  Create Folder | <p>Click this button to create a new folder for storing and managing the uploaded files. It will be displayed under filename field.</p> <div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Create Folder</p> <p>Folder Name: <input type="text"/></p> <p style="text-align: center;"> <input type="button" value="Create"/> <input type="button" value="Cancel"/> </p> </div> <p>Type the name for the new folder and click Create. The new folder will be displayed on the screen.</p> |

| Items | Description |
|---|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | <p>When there is more than one page for the upload files in this user group, click this button to display the first page.</p> |
|  Previous | <p>When there is more than one page for the upload files in this user group, click this button to display the previous page.</p> |
|  Next | <p>When there is more than one page for the upload files in this user group, click this button to display the next page.</p> |
|  Last | <p>When there is more than one page for the upload files in this user group, click this button to display the last page.</p> |
| Filename | <p>Display the name of the download/upload file or created folder.</p> |
| Property | <p>Display whether this is a folder or a file. If it is a folder, it will display “Directory”, otherwise, it will display extension name of the file.</p> |
| Size | <p>Display the file size of the file or folder.</p> |
| LastModify | <p>Display the latest time the file has been modified.</p> |
| Directory | <p>Display the relative path of this file/folder.</p> |







10.1.2 Trigger






This page allows administrator to set special time to trigger the provision for firmware upgrade. You can specify a name for it.



| Triggername | DayType | StartDay | CheckEndDay | EndDay | TimeType | StartTime(HH:MM) |
|----------------|---------|------------|-------------|--------|----------|------------------|
| restore_wizard | Any | 2011/02/18 | NO | | Any | 00:00 |
| backup_wizard | Any | 2011/02/21 | NO | | Any | 21:00 |
| default | Any | | NO | | Any | 00:00 |

Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Add firmware upgrade trigger | Click this button to create a new trigger profile for firmware upgrade, backup and restore. |
|  Save trigger setting | Click this button to save the trigger settings after finish the configuration. |
|  Delete firmware upgrade trigger | Click this button to delete the selected trigger. |
|  Cancel | Click this button to cancel the operation. |
|  Refresh | Click this button to refresh current page. |
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |

| Items | Description |
|---|---|
|  First | When there is more than one page for the triggered files in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the triggered files in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the triggered files in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the triggered files in this user group, click this button to display the last page. |
| Triggername | Type a special and easy to identify name for the time trigger. After you click  Save , the new name will be displayed on the screen. |
| DayType | Choose Any to activate such trigger every day. Choose Schedule to activate such trigger according to the date and time set in this page. |
| StartDay | Use the pop-up calendar window to set the starting day for CPE firmware update. Move your mouse cursor to choose one day and click the mouse. The selected date will be shown on the entry box. |
| CheckEndDay | Check this box to let VigorACS check the end of the schedule automatically. YES means the trigger will not be activated after the end day. No means the trigger will be activated everyday to execute the provision. |
| EndDay | Use the pop-up calendar window to set the ending day for CPE firmware update. Move your mouse cursor to choose one day and click the mouse. The selected date will be shown on the entry box. |
| TimeType | Choose Any to activate such trigger for the next time CPE sends information to VigorACS. In default, CPE sends information to VigorACS every 15 minutes. Choose Schedule to activate such trigger according to the date and time set in this page. |
| StartTime(HH:MM) | Type the start time (HH:MM) in this filed for such trigger. |
| EndTime(HH:MM) | Type the end time (HH:MM) in this filed for such trigger. |
| CreateTime | Display the time of such time trigger created. |
| CreateUser | Display the name of the user/administrator who made such time triggering. |

10.2 FirmwareUpgrade

10.2.1 GlobalSetting






This web page allows you to **specify** required information for matching with the CPE device. The profiles created here will be regarded as a basis that VigorACS server uses to compare information coming from CPE router with the information stored in VigorACS server’s database.


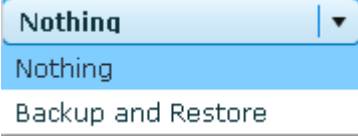
When VigorACS server receives information from CPE about firmware upgrade, it will check if the received model name, modem firmware version, parameters of manufacturer OUI and software version correspond to the information recorded in VigorACS server. If everything can match but software version not, VigorACS will judge that the remote CPE requiring firmware upgrade. Next, VigorACS server will execute firmware upgrade with the file listed in FirmwareFile field automatically at specified time.

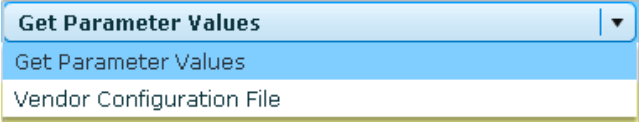
| FirmwareUpgradeGlobalSettingPanel | | Your reliable networking solutions partner | | | | |
|-----------------------------------|--------|--|----------------------|----------------|-----------------|--------|
| | | UserGroup: | RootGroup | | | 1/1 |
| Id | Name | ModelName | ModemFirmwareVersion | ManufactoryDui | Software Vesion | |
| 1 | sample | Vigor2700 Series: | 100_A Annex_A | 00507F | 3.1.1.1_RC6 | v2k7v_ |
| | | | | | | |
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Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
| Add firmware upgrade global setting | Click this button to add global setting name on the screen. |
| Save firmware upgrade global setting | Click this button to save the configuration. |
| Delete firmware upgrade global setting | Click this button to delete the selected parameter. |
| Cancel | Click this button to cancel the operation. |
| Refresh | Click this button to refresh current page. |

| Items | Description |
|---|--|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | When there is more than one page for the global setting files in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the global setting files in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the global setting files in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the global setting files in this user group, click this button to display the last page. |
| Id | Display the number of the global setting. |
| Name | Type a name for such global setting profile. |
| ModelName | Type the model of the CPE device that needs to upgrade firmware. |
| ModemFirmwareVersion | <p>Type the firmware version of the CPE device, e.g., Annex A, Annex B and etc.</p> <p>Note: Before performing firmware upgrade for the CPE, VigorACS will check if the received model name, modem firmware version, parameters of manufacturer OUI and software version match with the information recorded in VigorACS server or not. If you type “*” in this filed, the modem firmware version will not be regarded as a comparison condition in the process of firmware upgrade. It will be ignored.</p> |
| ManufactoryOui | <p>Type the characters of OUI. OUI means “organizationally unique identifier” of the device manufacturer.</p> <p>Note: Before performing firmware upgrade for the CPE, VigorACS will check if the received model name, modem firmware version, parameters of manufacturer OUI and software version match with the information recorded in VigorACS server or not. If you type “*” in this filed, the manufacturer OUI will not be regarded as a comparison condition in the process of firmware upgrade. It will be</p> |

| Items | Description |
|------------------------|---|
| | ignored. |
| SoftwareVersion | Type the version of the firmware. |
| FirmwareFile | <p>Double click this filed to open a dialog for choosing one provision file created in section 7.1.1 UploadFile for this profile.</p>  |
| TriggerName | Choose one of the trigger profiles from the drop down list. |
| Status | Click Disable to give up the upgrade procedure or click Enable to activate the upgrade procedure after clicking Save . |
| Event | <p>While upgrading firmware for CPE device, the required parameters (e.g, WAN, LAN, VPN...) on CPE device can be backup in VigorACS server and can be restored in the future if required. Please choose the one you need.</p>  <p>Nothing – All the parameters configured in CPE device will not be saved / restored and will be written after VigorACS server executes firmware upgrade for it.</p> <p>Backup and Restore – All the parameters configured in CPE device will be saved and restored in a place before VigorACS server executes firmware upgrade for it.</p> |



| Items | Description |
|------------|---|
| Event Type | <p>If you choose Backup and Restore as the event selection, you have to specify event type additionally.</p>  <p>Get Parameter Values – Generally, VigorACS server will scan all the parameters configured in CPE device while connecting CPE device. You can choose this item to use current configured parameters obtained from CPE device as the basis for parameters backup and restore.</p> <p>Vendor Configuration File – Choose this time to use the parameters recorded in cfg file of CPE device as the basis for back and restore.</p> |


After you finished all of the settings, remember to click  **Save** to save your record.

10.2.2 IncludeList

This page displays the quantities of profiles created in FirmwareUpgrade_GlobalSetting. You can specify which CPE device required to execute firmware upgrade.




FirmwareUpgradeIncludeNetwork
Your reliable networking solutions partner

UserGroup: RootGroup ProvisionName: sample



| Name | User Group | Select Device |
|--|------------|---------------|
|  Wholenetwork(54) | RootGroup | NO |
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Available settings for such feature will be shown as follows:

| Items | Description |
|-------|-------------|
|-------|-------------|

| Items | Description |
|--|--|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  <p>All the devices controlled under the group will be shown on the screen.</p> |
| ProvisionName | Use the drop down list to choose a global setting profile for firmware upgrade. |
|  Save | Click this button to save the configuration. |
|  Refresh | Click this button to refresh current page. |


Move your mouse to the tree view of Network View. Select the ones (representing CPE devices) that needed to have firmware upgrade. Next, choose **YES** in the field of Select Devices.

FirmwareUpgradeIncludeNetwork
Your reliable networking solutions partner

UserGroup: RootGroup ProvisionName: sample  

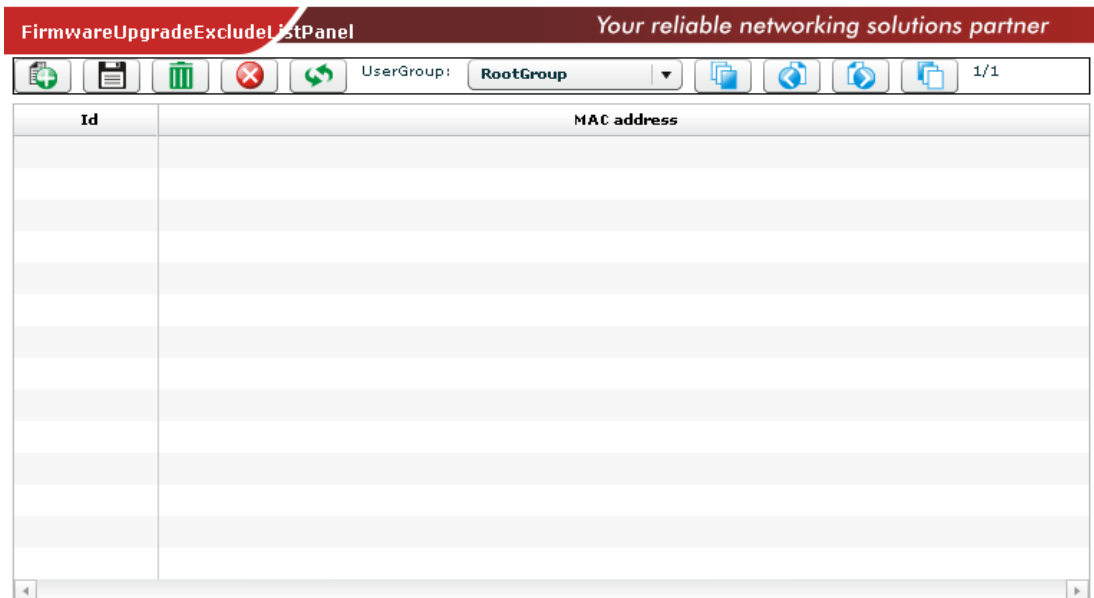
| Name | User Group | Select Device |
|-------------------|------------|---------------|
| ▼ Main network(6) | RootGroup | NO |
| ▶ Draytek(0) | RootGroup | |
| ▶ Marketing(1) | RootGroup | |
| 中文測試中 | RootGroup | |
| Draytek_Alan | RootGroup | |
| Draytek_Eric | RootGroup | |
| Draytek_Jenny | RootGroup | |
| DrayTek_Rambo | AdminGroup | YES |
| | | NO |
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Later, VigorACS server will judge the necessity of firmware upgrade for the selected CPE device(s) specified here to do firmware upgrade by comparing the parameters settings stored in VigorACS server with the information received from the selected CPE device.


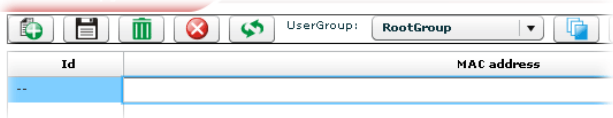




After you finished all of the settings, remember to click  **Save** to save your record.






10.2.3 ExcludeList

Not all the CPEs controlled by VigorACS need to upgrade firmware at any time. VigorACS provides excluding mechanism for the CPEs that do not need to upgrade firmware. This web page allows you to set excluded CPEs for firmware upgrade. Simply type the MAC address of the CPE on MAC address field and click **Save**. The one will be shown on the list. Next time, if you want to do firmware upgrade for the specified CPE, simple open this page and remove the item.





Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Add excluded device | Click this button to add CPEs which will not be upgraded.  Type the MAC address of the CPE that does not need to do firmware upgrade. |
|  Save exclude setting | Click this button to save the configuration. |
|  Delete exclude device | Click this button to delete the selected parameter. |
|  Cancel | Click this button to cancel the operation. |
|  Refresh | Click this button to refresh current page. |




| Items | Description |
|---|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | <p>When there is more than one page for the excluded setting files in this user group, click this button to display the first page.</p> |
|  Previous | <p>When there is more than one page for the excluded setting files in this user group, click this button to display the previous page.</p> |
|  Next | <p>When there is more than one page for the excluded setting files in this user group, click this button to display the next page.</p> |
|  Last | <p>When there is more than one page for the excluded setting files in this user group, click this button to display the last page.</p> |
| Id | <p>Display the number of the firmware upgrade.</p> |
| MAC address | <p>Display the MAC address of the</p> |

10.2.4 RemoteFileList

This page displays the firmware of CPE which is located / stored in FTP server.

| Remote FTP File | | Your reliable networking solutions partner | | |
|--|-----------|--|---------------------|-----------|
|   UserGroup RootGroup | | | | |
| Filename | Property | Size | LastModify | Directory |
| .. | Directory | 0 | | . |
| . | Directory | 0 | | . |
| 2011 databook | Directory | 4096 | 03/01/2011 09:00:00 | . |
| ACS SI | Directory | 4096 | 06/15/2010 00:00:00 | . |
| DSLVIgor_USB_MODEM | Directory | 4096 | 08/24/2008 00:00:00 | . |
| Declaration of Conformity | Directory | 4096 | 03/18/2010 00:00:00 | . |
| Document | Directory | 4096 | 02/03/2009 00:00:00 | . |
| France | Directory | 4096 | 08/24/2008 00:00:00 | . |
| ISDNVigor128 | Directory | 4096 | 08/24/2008 00:00:00 | . |
| MiniVigor128 | Directory | 4096 | 08/24/2008 00:00:00 | . |
| Signature | Directory | 4096 | 05/21/2010 00:00:00 | . |
| Vigor N61 | Directory | 4096 | 08/28/2008 00:00:00 | . |
| Vigor120 | Directory | 4096 | 06/15/2010 00:00:00 | . |
| Vigor120 V2 | Directory | 4096 | 12/17/2009 00:00:00 | . |

Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Refresh | Click this button to refresh current page. |
|  Download File | Click this button to download a file from VigorACS to your computer. |
| UserGroup | If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group. <div style="border: 1px solid gray; padding: 5px; margin-top: 10px;">  </div> |
| Filename | Display the name of the download/upload file or created folder. |
| Property | Display whether this is a folder or a file. If it is a folder, it will display "Directory", otherwise, it will display extension name of the file. |
| Size | Display the file size of the file or folder. |
| LastModify | Display the latest time the file has been modified. |

| Items | Description |
|-----------|--|
| Directory | Display the relative path of this file/folder. |

10.3 Backup


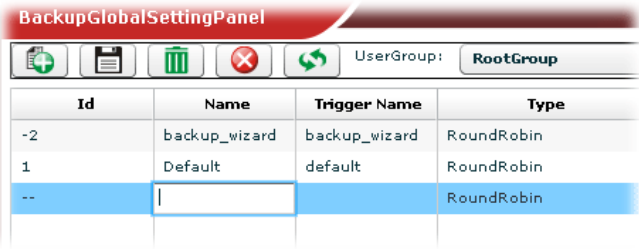



10.3.1 GlobalSetting







Such page can determine the trigger time and method for firmware backup. Profiles configured here can be selected in the page of **Backup>>Backup**.


The screenshot shows the BackupGlobalSettingPanel interface. At the top, there is a header with the title "BackupGlobalSettingPanel" and the tagline "Your reliable networking solutions partner". Below the header is a toolbar with icons for adding, saving, deleting, and refreshing, along with a "UserGroup:" dropdown menu set to "RootGroup" and a "1/1" indicator. The main area contains a table with the following data:

| Id | Name | Trigger Name | Type | Period(days) | Descripton |
|----|---------------|---------------|------------|--------------|------------------------|
| -2 | backup_wizard | backup_wizard | RoundRobin | 1 | for backup wizard use |
| 1 | Default | default | RoundRobin | 1 | default backup setting |

Available settings for such feature will be shown as follows:

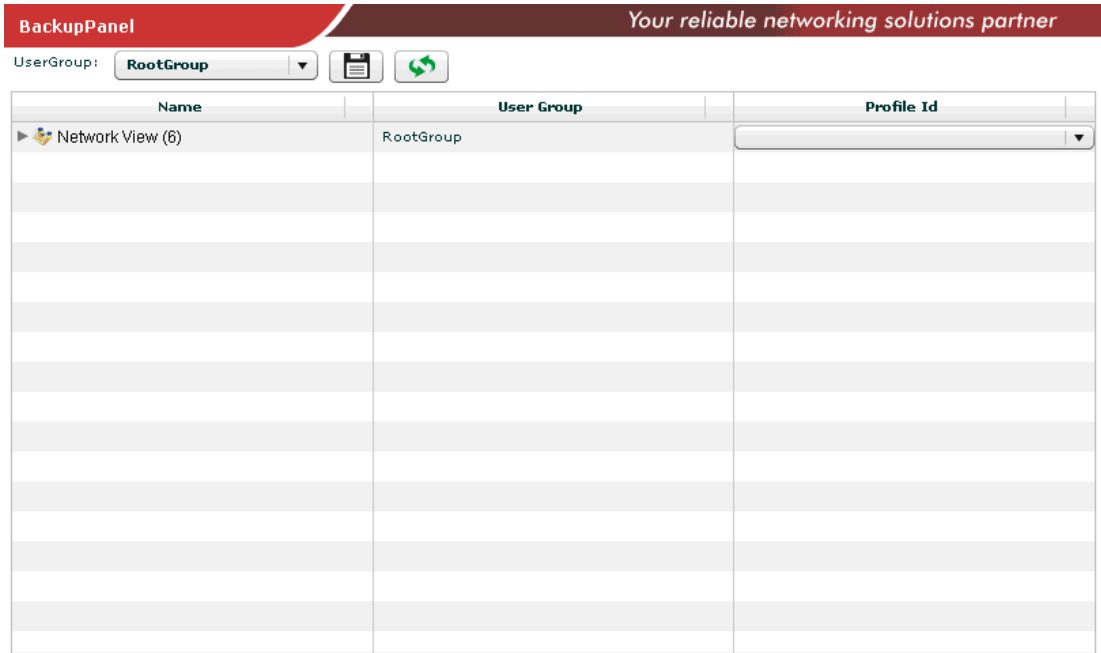
| Items | Description |
|---|---|
|  Add backup global setting | Click this button to add a new backup profile with global settings.  Type a new name in the blank box; specify a trigger name and type by using the drop down list; type the period value and give a brief description. |
|  Save backup global setting | Click this button to save the backup profile. |
|  Delete backup global setting | Click this button to delete the selected backup profile. |
|  Cancel | Click this button to cancel the operation. |

| Items | Description |
|---|---|
|  Refresh | Click this button to refresh current page |
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | When there is more than one page for the global setting files in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the global setting files in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the global setting files in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the global setting files in this user group, click this button to display the last page. |
| Id | Display the number of the global setting. |
| Name | Type a name the global setting. |
| Trigger Name | Choose one of the trigger profiles from the drop down list. |




| Items | Description |
|----------------------------|---|
| <p>Type</p> | <p>Choose the type for the configuration backup.</p>  <p>RoundRobin – Choose this type to execute the backup (with global settings). The backup files will be recorded with the filename from <i>1.cfg</i> to <i>20.cfg</i>. Only 20 filenames will be kept in the same directory.</p> <p>Always – Choose this type to execute the backup (with global settings) according to the schedule. The backup files will be recorded with the filename one by one (e.g, <i>1.cfg</i>, <i>2.cfg</i>,..., <i>1000cfg</i>,..., <i>10000cfg</i>,...no limit in file number). All of the backup files will be kept in the same directory.</p> |
| <p>Period(days)</p> | <p>The number typed here means the interval for the backup executed by VigorACS. The unit is “day”. If you type 1, that means the backup will be executed one time by one day.</p> |
| <p>Description</p> | <p>Type a brief description for profile.</p> |

10.3.2 Backup

Such page can determine which device or network will be applied with backup profiles.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  <p>Later, the corresponding devices will be shown in this page.</p> |
|  Save | Click this button to save the backup profile. |
|  Refresh | Click this button to refresh current page. |
| Name | Display the CPEs with the authority of the selected group. |
| User Group | Display the user group for the selected device. |
| Profile Id | Choose a profile (with global settings) defined in GlobalSetting (section 7.6.1) to be applied in such selected CPE. |


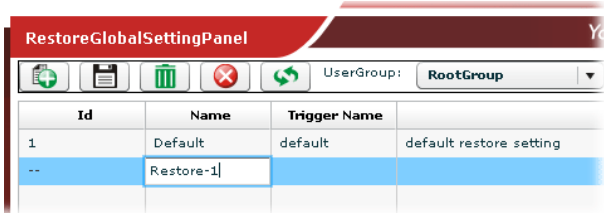




10.4 Restore






10.4.1 RestoreSetting

Such page can determine the trigger time and method for firmware restoration.

| Id | Name | Trigger Name | Description |
|----|----------------|----------------|-------------------------|
| -3 | restore_wizard | restore_wizard | for restore wizard use |
| 1 | Default | default | default restore setting |
| 6 | 2920 | restore_wizard | restore cfg |

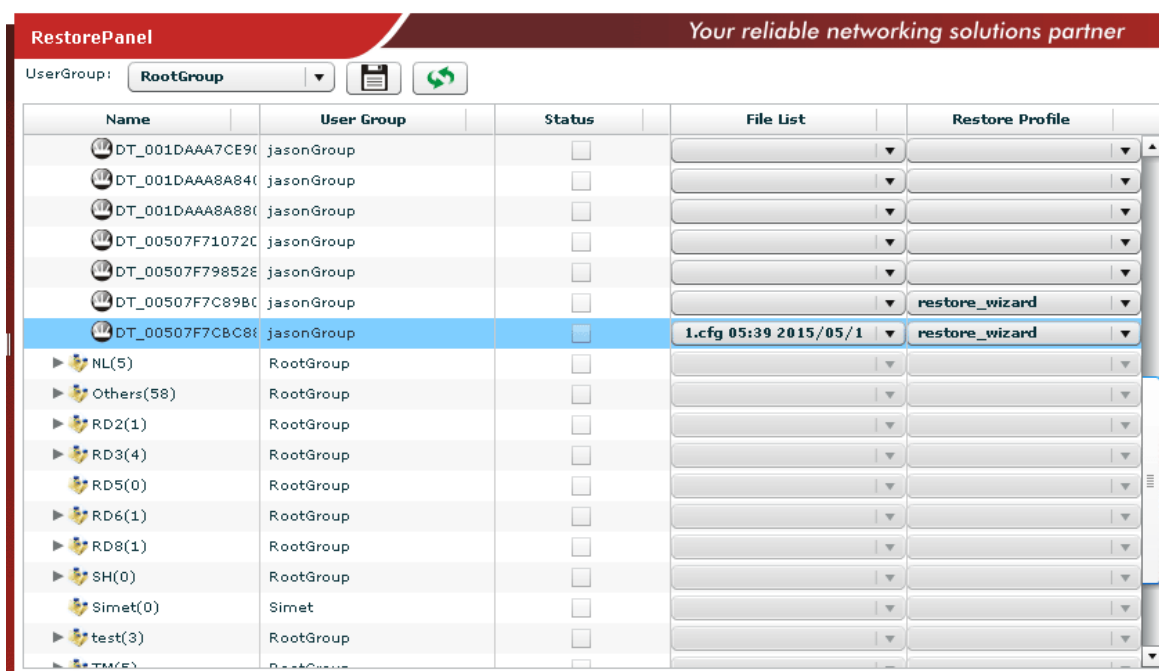
Available settings for such feature will be shown as follows:

| Items | Description |
|--|--|
|  Add restore global setting | Click this button to add a new restore profile with global settings. To configure a profile with global settings, please refer to 7.1.2 Trigger for detailed information.  |
|  Save restore global setting | Click this button to save the restore profile. |
|  Delete restore global setting | Click this button to delete the selected restore profile. |
|  Cancel | Click this button to cancel the operation. |
|  Refresh | Click this button to refresh current page. |

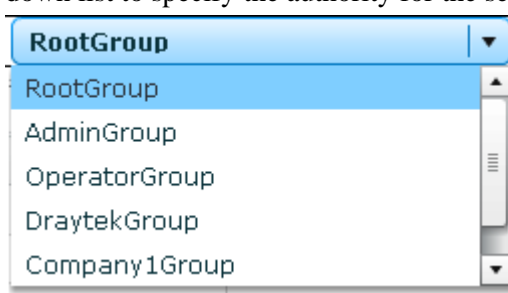


| Items | Description |
|---|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | When there is more than one page for the global setting files in this user group, click this button to display the first page. |
|  Previous | When there is more than one page for the global setting files in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the global setting files in this user group, click this button to display the next page. |
|  Last | When there is more than one page for the global setting files in this user group, click this button to display the last page. |
| Id | Display the number of the global setting. |
| Name | Type a name for such record. |
| Trigger Name | Choose one of the trigger profiles from the drop down list. |
| Description | Type a brief description for such profile. |

10.4.2 Restore

Such page can determine which device or network will be applied with restore profiles.



Available settings for such feature will be shown as follows:

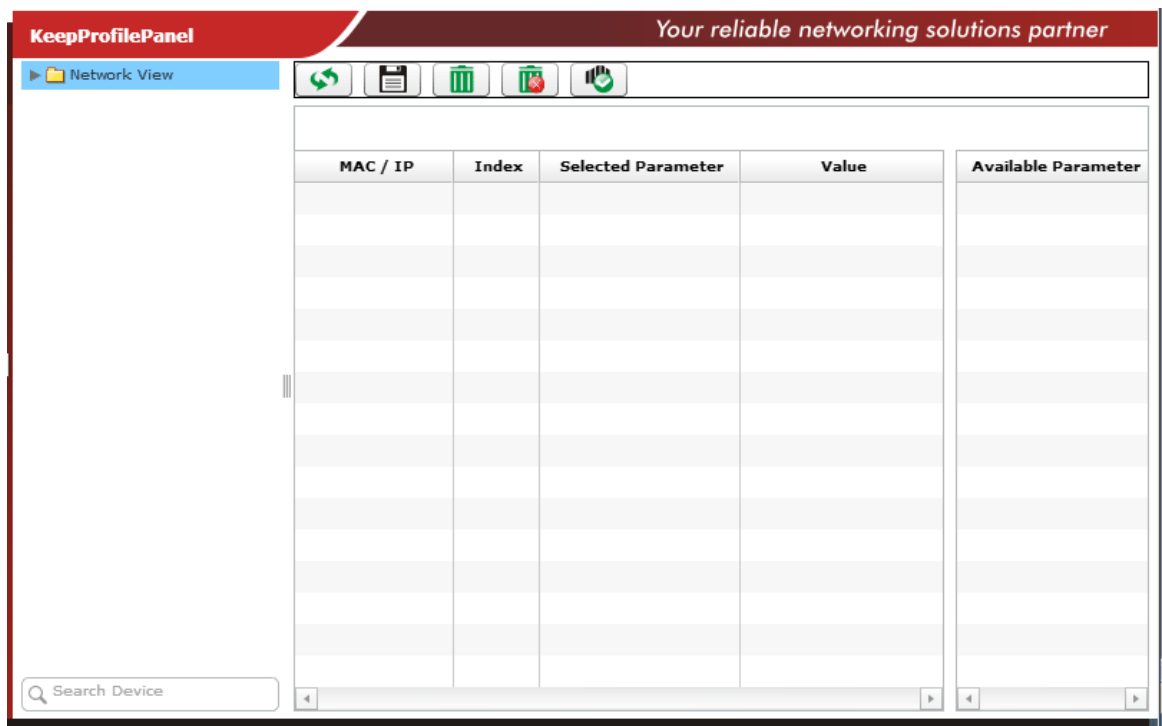
| Items | Description |
|--|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  <p>Later, the corresponding devices will be shown in this page.</p> |
|  Save | Click this button to save the restore profile. |
|  Refresh | Click this button to refresh current page. |
| Name | Display the names of CPEs with the authority of the selected group. |
| User Group | Display the user group for the selected device. |
| Status | Check this box to execute file restoration for the selected CPE. |
| File List | Use the drop down list to choose one of the files (with the date of the configuration file created) to be applied for the |

| Items | Description |
|------------------------|---|
| | file restoration of the selected CPE. |
| Restore Profile | Use the drop down list to choose one of the time profiles (with global settings, section 7.1.2) to be applied for the file restoration of the selected CPE. |






10.5 Provision Setting


10.5.1 KeepProfile Setting

Some ISPs do not wish CPE client changing the parameters of CPE device. If the parameters of CPE device were modified by the users, VigorACS (the administrator) server could use the parameters listed in this web page to **restore the original parameters**.

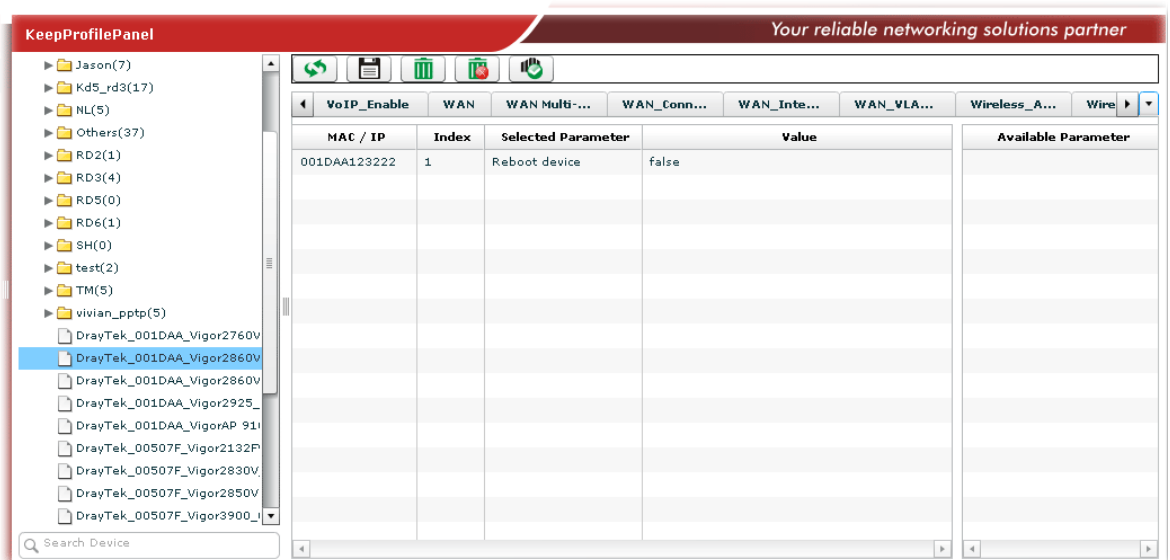


Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
|  Refresh | Click this button to refresh current page. |
|  Save | Click this button to save the configuration. |
|  Delete | Click this button to delete the selected parameter. |
|  Delete All | Click this button to delete all of the parameters. |
|  Complete Parameter | Click this button to open KeepProfilePanel Detail Table for adding new user-defined parameter with value for the selected device. |

| Items | Description |
|--------------------|--|
| |  |
| MAC Address | Display the MAC address for the selected CPE. |
| Index | Display the index number for the parameter. |
| Parameter | Display the parameter name that you want to configure. |
| Value | Based on the parameters selected above, type the required value for the selected device. |

Settings will be shown on the right side. **Reboot, LAN, WAN, VPN, NAT, VoIP, Firmware** tabs and others (**displayed based on the CPE you choose**) will appear for you to click to configure. In the field of **Available Parameter**, all the available parameters for the selected tab will be displayed.



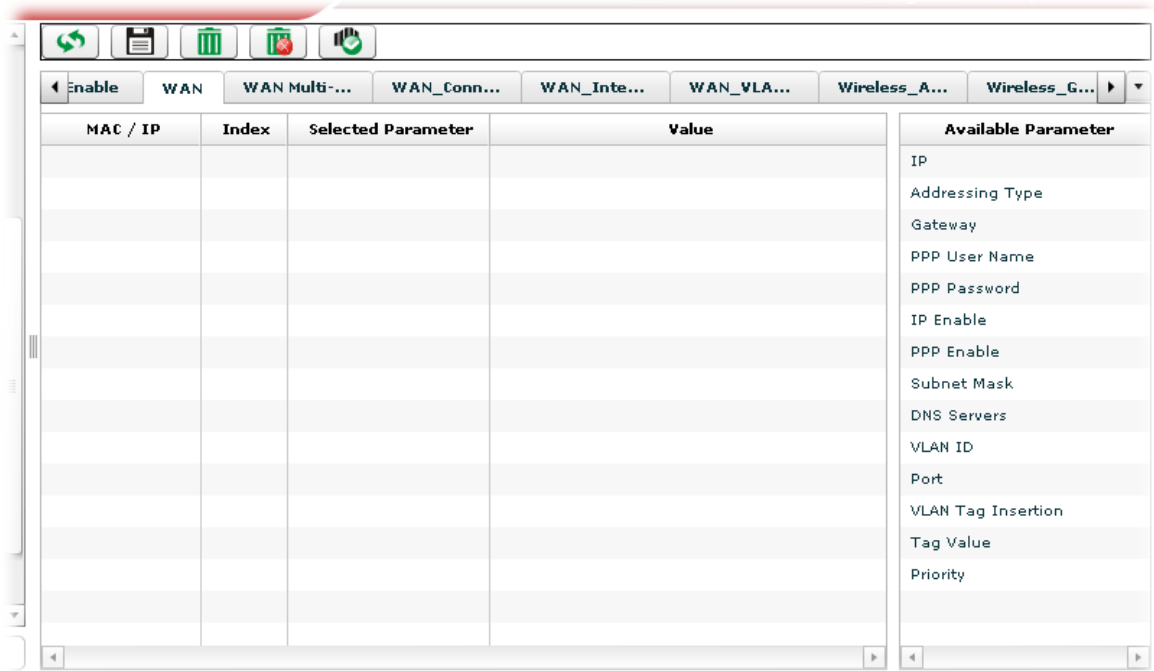
Note: Available parameters tabs will be different according to the CPE selected and the firmware used by that CPE. In addition, you can click the arrows on top-right to scroll the setting tabs to find the one you want to configure.



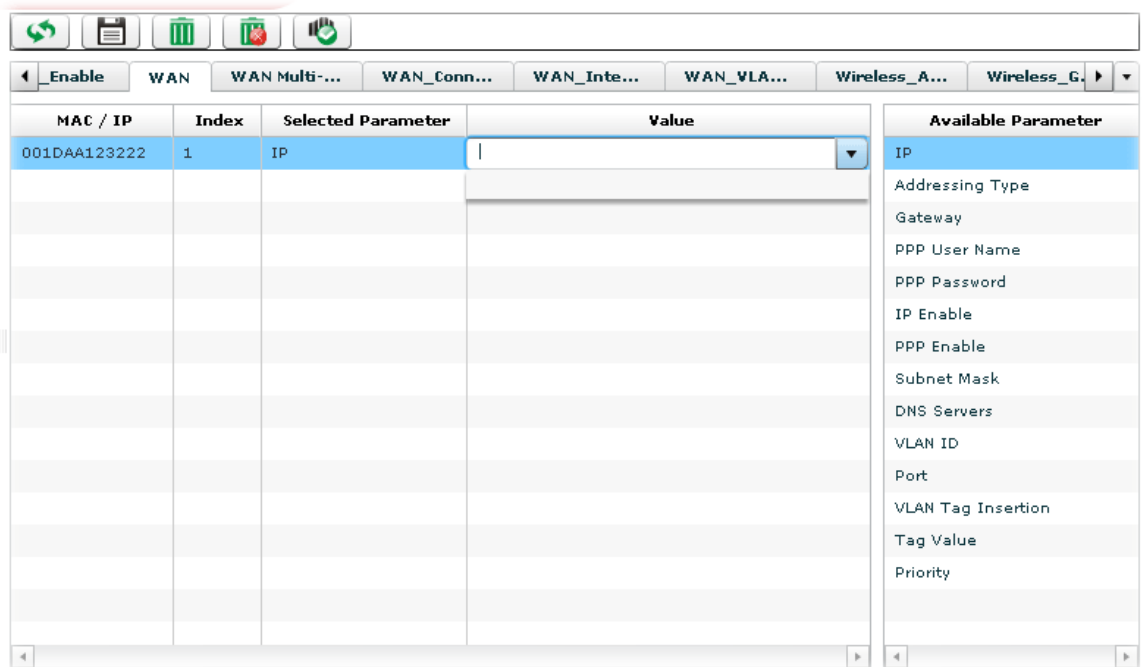
Here, we take the **WAN** settings (for Vigor2860) as an example:

WAN Settings

To configure the WAN settings, please double click on the parameter in the right side. Then, MAC Address and the selected parameter with value will be shown on the right side.

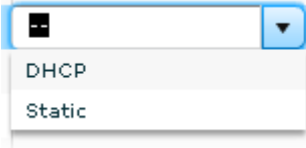


To edit the value for the selected parameter, move the mouse cursor to the box under value and click it. An entry box will appear for you to type the value for that parameter. After typing the value, click the **Save** button to save it.



Available parameters for WAN include:

| Items | Description |
|-------|---|
| IP | Type the WAN IP address for the selected CPE. |

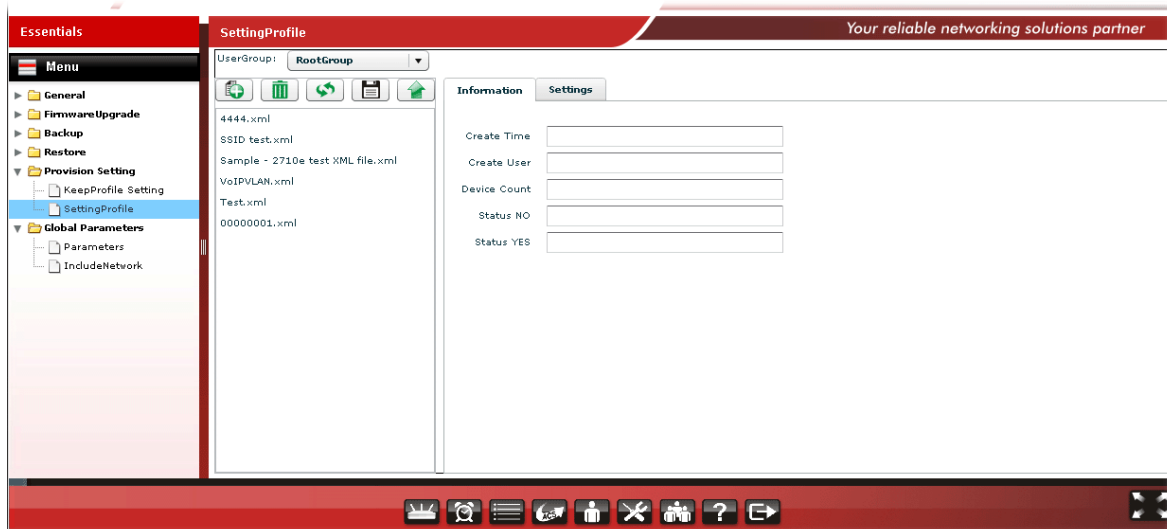
| Items | Description |
|---------------------------|---|
| Addressing Type | Choose the type from the drop down list for WAN settings.  |
| Gateway | Type the gateway for the selected CPE. |
| PPP User Name | Type the user name offered by ISP for PPP connection. |
| PPP Password | Type the password offered by ISP for PPP connection. |
| IP Enable | Choose True to enable settings for DHCP or Static IP connection. |
| PPP Enable | Choose True to enable settings for PPP connection. |
| Subnet Mask | Type the subnet mask for the selected CPE if IP Enabled is set to "True". |
| DNS Servers | Type the IP address of DNS Server for the selected CPE. |
| VLAN Tag Insertion | Type "enable" or "disable" to enable/disable such function. |
| Tag Value | Type the value as the VLAN ID number. The range is form 0 to 4095. |
| Priority | Type the packet priority number for such VLAN. The range is from 0 to 7. |

Note: For detailed explanation for each parameter, refer to User's Guide of Vigor router if required.



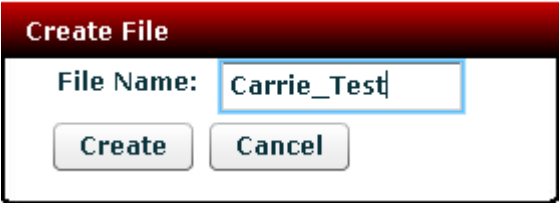
After finished the configuration, click **Save** to save the settings. Then, the parameter information for the selected router (CPE) that you modified in such page is changed.

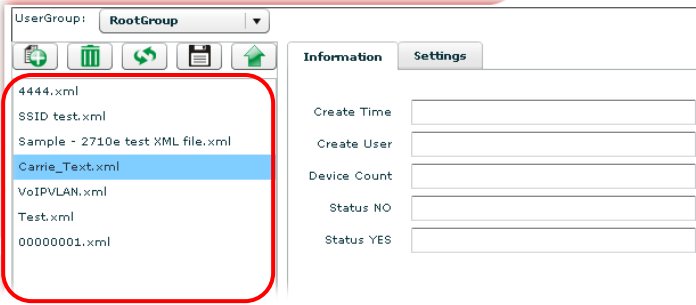




10.5.2 SettingProfile

This page allows you to **create** provision profiles for CPEs. Important information (such as Create Time, Create User, Device Count, Status NO and Status YES) for the provision will be shown under **Information** tab. If you want to modify the settings (such as MAC/IP, Reboot, Name, Network, Status and etc.), simply click the **Settings** tab.



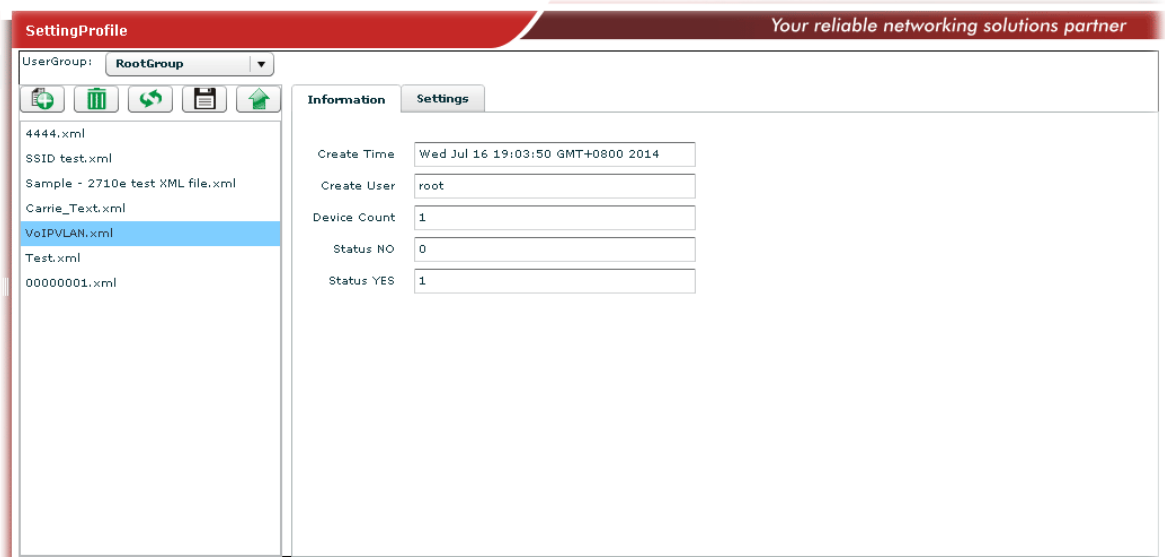
Available settings for such feature will be shown as follows:

| Items | Description |
|---|---|
| <p>UserGroup</p> | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
| <p> Add Profile</p> | <p>Click this button to add a new provision file. When the following dialog appears, simply type a name for the profile in the field of File Name and click Create.</p>  <p>The new profile name will be shown on the field beneath the Add Profile button.</p> |

| | |
|---|---|
| |  <p>Next, you can configure the settings for the new created profile, e.g., adding new devices.</p> |
|  Delete Profile | Click this button to delete the selected profile. |
|  Refresh | Click this button to refresh current page. |
|  Deploy Profile | <p>Click this button to transfer the configuration to the VigorACS server.</p> <p>Usually, settings profiles are stored in the memory. When you press the Deploy Profile button, that profile will be applied to the CPEs.</p> |
|  Upload file | Click this button to upload a user defined XML file to VigorACS SI server. Such file can be used for configuring the parameters for CPE. |

Information Tab

It displays the basic information of the selected provision profile created including create time, create user, device count, status on/off and so on.



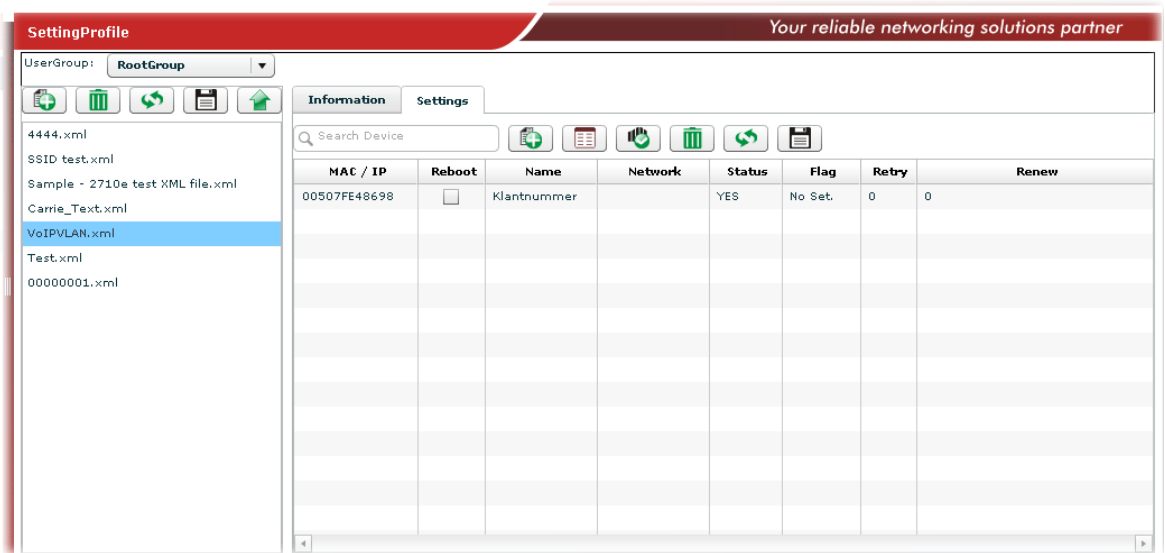
Available settings for such feature will be shown as follows:

| Items | Description |
|--------------------|---|
| Create Time | Display the creation time of the selected provision file. |
| Create User | Display the user group for the selected provision file. |


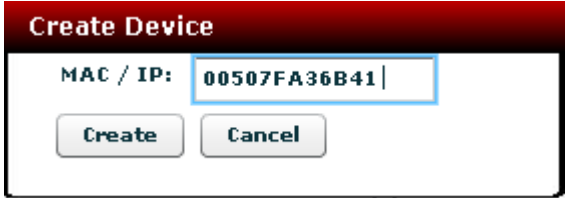
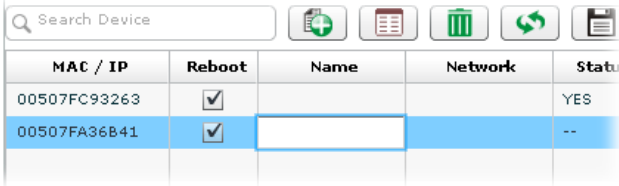

| | |
|---------------------|--|
| Device Count | Display the number of devices apply such provision file. |
| Status NO | Display the number of devices which are inactive now. |
| Status YES | Display the number of devices which are active. |

Settings Tab

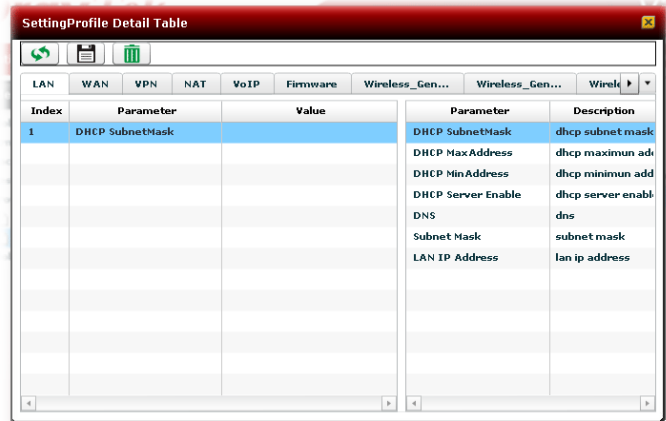
To configure the settings for the selected provision profile, please click **Settings** tab. The following screen will appear.



Available settings for such feature will be shown as follows:

| Items | Description |
|---|--|
|  Add Device | <p>Click this button to add CPEs to current selected provision profile. When the following dialog appears, simply type MAC address of the device in the field of MAC/IP and click Create.</p>  <p>The new added device will be shown on the screen. Next, you can configure the settings for the new device, e.g., name of the device, specify the user group, and etc.</p>  |
|  Detail Setting | <p>Click this button to open Detail Setting window to add, modify and view the whole settings (e.g., WAN, LAN,</p> |

NAT, VoIP, Firewall, Wireless...) for the selected provision profile.



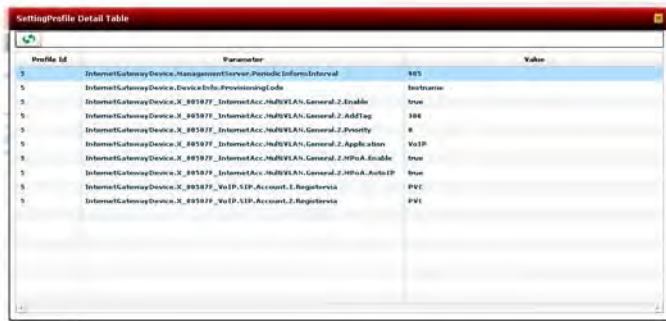
Note: Each parameter configured in **Detail Setting** can be found in **Complete Parameters** window, too.



Complete Parameters

The pop-up window displays parameters configured in **Detail Setting**.

The difference is that *full name* of the configured parameter can be seen on the window. It is convenient for people who want to edit the parameters by modifying the parameter directly.



Delete Device

Click this button to delete the selected parameter.



Refresh

Click this button to refresh current page.



Save Profile

Click this button to save the configuration.

MAC / IP

Display the MAC address or IP Address of CPE.

Reboot

Check this box to reboot the CPE automatically after finishing the profile settings.

Name

Set the name of the CPE.
The name of the CPE will be changed with the one set here when it connects to VigorACS for next time.

Network

Set the network of the CPE.
The CPE will be moved and grouped under the network specified here when it connects to VigorACS for next time.

Status

YES- means such profile has been configured.
NO- means such profile has not been configured.

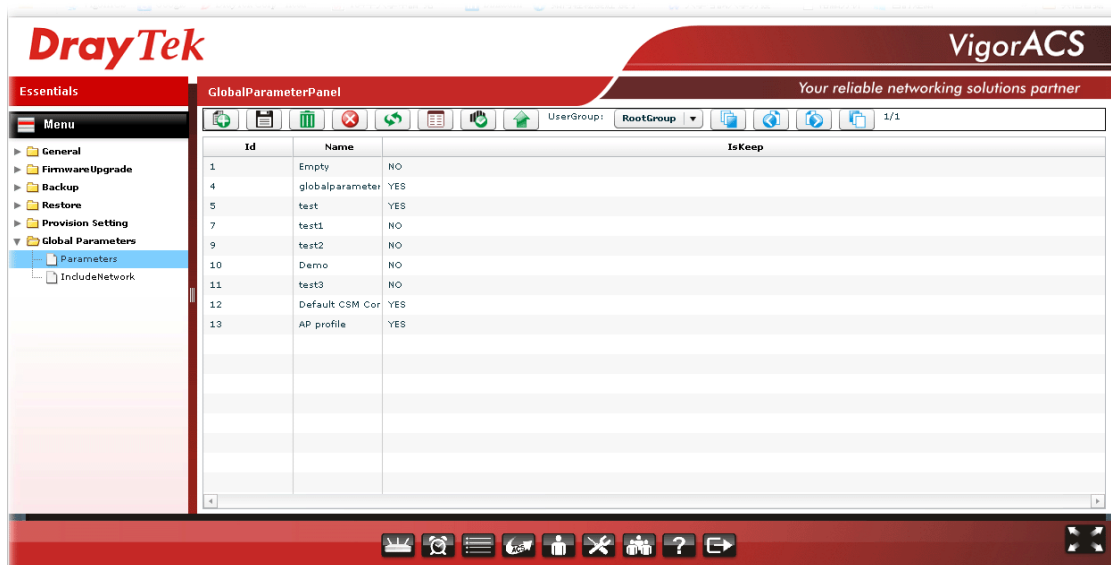
| | |
|--------------|--|
| Flag | Display the setting result of the profile. |
| Retry | If the provision profile is applied to CPE but failed, VigorACS will try to configure the settings again. The number of the retry time will be 3, at most. |
| Renew | Display the times that this profile has been modified. |

10.6 Global Parameters






Global Parameters allows users to set parameters which can be applied to all of the CPEs at the same time by using VigorACS instead of configuring one by one.

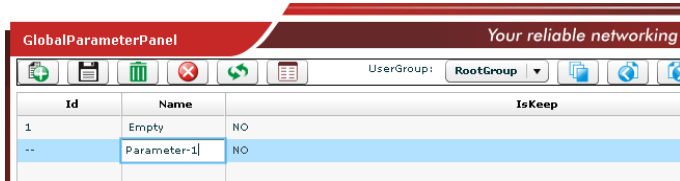
10.6.1 Parameters


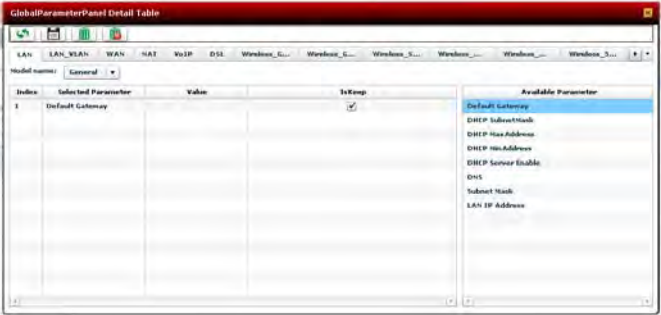





This web page allows users to set profiles which will be used to configure parameters for lots of selected CPE devices at one time.






Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
|  Add global parameter | Click this button to add a new global parameter profile name. Type a new name in the blank box. |
|  Save global parameter setting | Click this button to save the restore profile. |
|  Delete global parameter | Click this button to delete the selected restore profile. |
|  Cancel | Click this button to cancel the operation. |
|  Refresh | Click this button to refresh current page. |

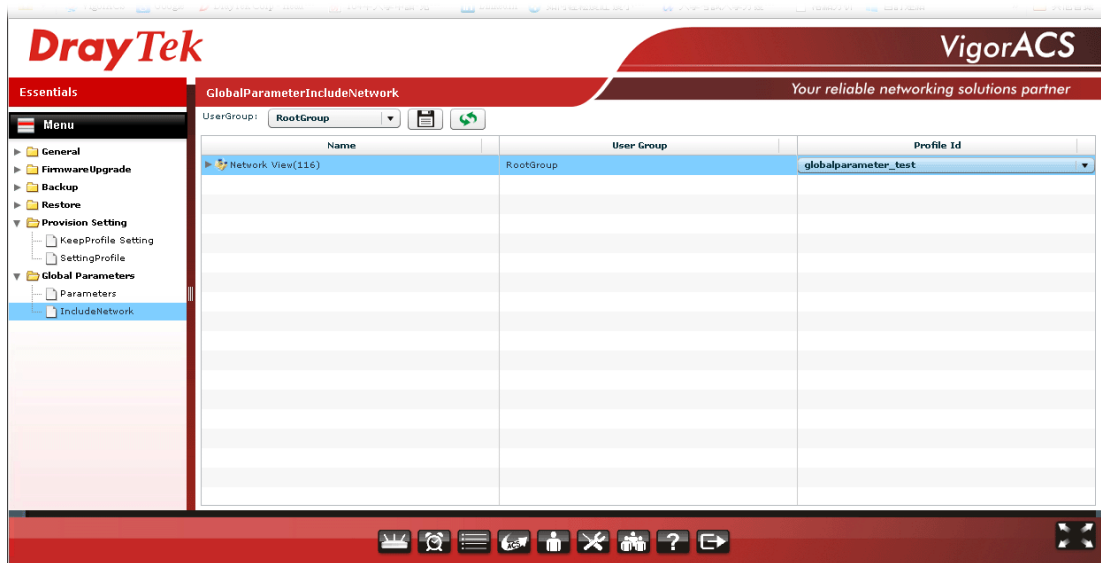


| Items | Description |
|---|---|
|  Detail | <p>Click this button to view and modify the whole settings (e.g., WAN, LAN, NAT, VoIP, Firewall, Wireless...) for the selected device manually.</p>  |
|  Complete Parameter | <p>The pop-up window displays parameters configured in Detail Setting. The difference is that full name of the configured parameter can be seen on the window. It is convenient for people who want to edit the parameters by modifying the parameter directly.</p>  |
|  Upload file | <p>Click this button to upload a user defined XML file to VigorACS SI server. Such file can be used for configuring the parameters for CPE.</p> |
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  First | <p>When there is more than one page for the global parameter files in this user group, click this button to display the first page.</p> |

| Items | Description |
|---|---|
|  Previous | When there is more than one page for the global parameter files in this user group, click this button to display the previous page. |
|  Next | When there is more than one page for the global parameter files in this user group, click this button to display the previous page. |
|  Last | When there is more than one page for the global parameter files in this user group, click this button to display the last page. |
| Id | Display the number of the profile. |
| Name | Type the name for the global parameter profile, which will be applied in GlobalParameter_Includenetwork. |
| IsKeep | Choose YES to make such profile being kept. |

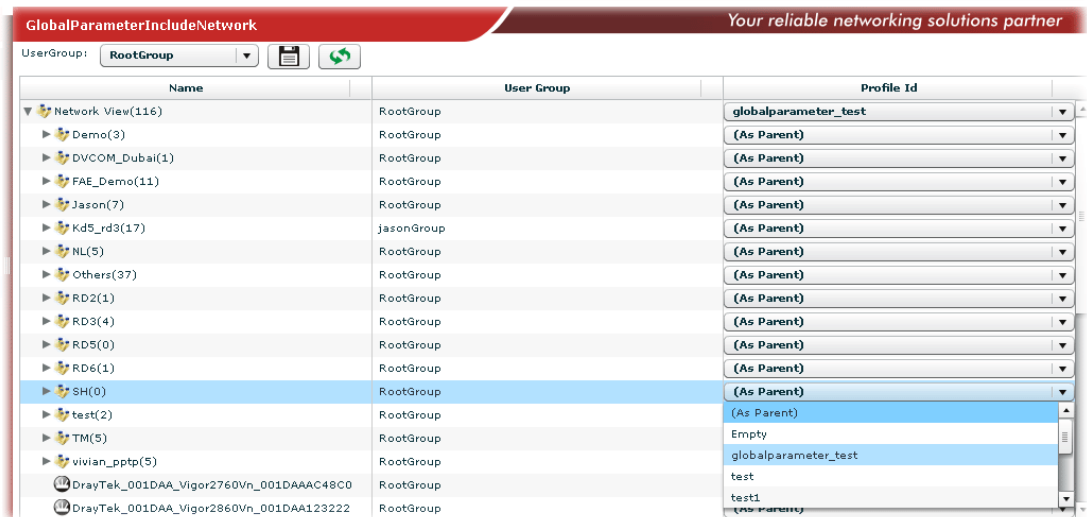
10.6.2 IncludeNetwork

If you have created several parameters profiles in **Global Parameters>>Parameters**, you can specify which CPE device to be applied with the new created profile. If you do not specify any profile for the connected CPE device, the default profile configuration is “Empty” (displayed in the field of Profile ID). No parameters will be applied to the connected CPE device.






Specify certain profile (global parameter) to be applied in selected network, selected CPE by clicking on the tree view structure.

Locate a CPE by unfolding the tree view structure of Network View. Use the drop down list of **Profile Id** to specify the global parameter profile required for that CPE.



Available settings for such feature will be shown as follows:

| Items | Description |
|--|---|
| UserGroup | <p>If there are many user groups with different authorities for the user account you use to access into VigorACS, you can use the drop down menu to choose one of the user groups to view the files stored under the user group. Use the drop down list to specify the authority for the selected group.</p>  |
|  Save | Click this button to save the restore profile. |
|  Refresh | Click this button to refresh current page. |
| Name | Display the CPEs with the authority of the selected group. |
| User Group | Display the user group for the selected device. |
| Profile Id | <p>Choose a profile (with global settings) defined in GlobalSetting (section 7.3.1) to be applied in such selected CPE.</p> <p>(As Parent)- Choose the same setting as the previous layer.</p> |

Chapter 11 Help for License

Help page displays version information for VigorACS SI, as well as license key information and license agreements. Besides, it provides a channel to get new license from MyVigor website.

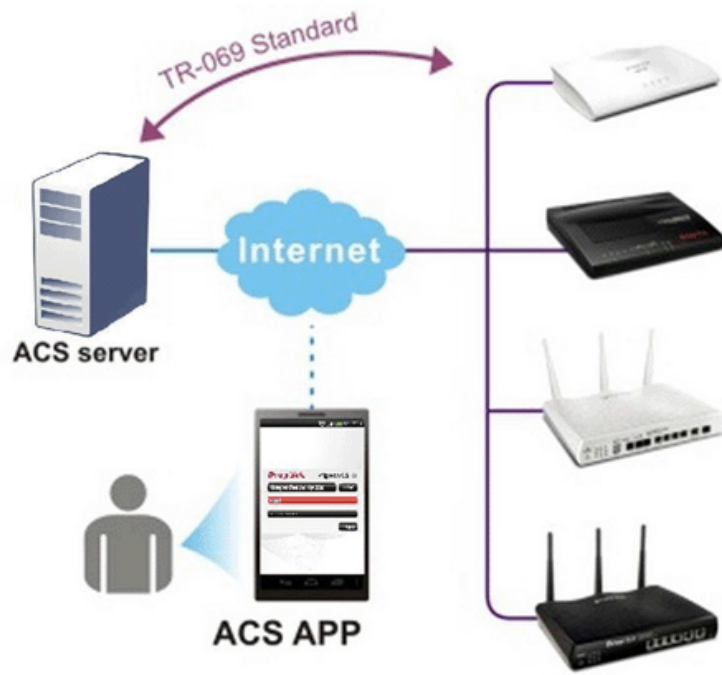


11.1 About VigorACS

Android APP and software version information for VigorACS will be displayed as follows:



If your mobile phone is supported by Android system, you can use it to scan Android APP or Server Address QR code to connect to VigorACS system.



11.2 License Key Information

This page displays relational information for license key current used by VigorACS SI. In addition, it offers a channel to new the license key for VigorACS SI when it is going to be expired.

The screenshot shows the VigorACS SI web interface. The top header features the DrayTek logo on the left and the VigorACS logo on the right, with the tagline "Your reliable networking solutions partner" below it. A navigation menu on the left includes "Essentials" and "Menu" with sub-items: "About VigorACS", "License Key Information", and "License Agreements". The main content area is titled "License Key Information" and contains the following details:

- License Id: 00001ef
- Start Date: 2012-02-23
- Expire Date: 2012-12-31
- Max Node: 1000
- Trial license: Yes

At the bottom of the interface is a toolbar with various icons for navigation and system functions.

11.3 License Agreements

This page displays relational license information required by VigorACS SI.

The screenshot shows the VigorACS SI web interface for License Agreements. The top header and navigation menu are identical to the previous screenshot. The main content area is titled "License Agreements" and displays the following information:

ACS use following library and license agreement.

LGPL V3

| Name | Author | License Page |
|---------------|--------|---|
| Blazeds | | opensource.adobe.com/wiki/display/blazeds/License |
| JasperReports | | www.gnu.org/copyleft/lesser.html |
| JDIC | | www.gnu.org/copyleft/lesser.html |

LGPL V2.1

| Name | Author | License Page |
|----------------|--------|---|
| JRobin API | | oldwww.jrobin.org/license.html |
| JBoss-4.0.4.GA | | docs.jboss.org/jbossas/admin/level326/html/apa.html |
| Hibernate | | www.hibernate.org/356.html |
| SendTrap | | sendtrap.sourceforge.net/license.txt |

Apache License, Version 2.0

| Name | Author | License Page |
|------|--------|--------------|
|------|--------|--------------|

The interface includes a scrollbar on the right side of the table area and a toolbar at the bottom.

This page is left blank.

Part III Application

This page is left blank.

Chapter 12 Tutorials

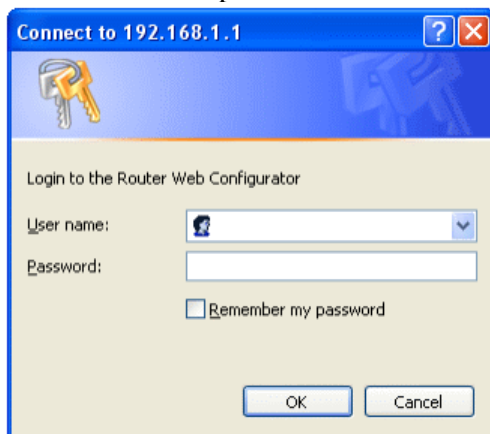
This chapter offers several examples for using VigorACS.

12.1 How to Manage CPE through VigorACS

12.1.1 Set ACS URL on CPE

To manage CPEs through VigorACS, you have to set ACS URL on CPE first and set username and password for VigorACS.

1. Connect one CPE (e.g., Vigor2910 series).
2. Open a web browser (for example, **IE**, **Mozilla Firefox** or **Netscape**) on your computer and type **http://192.168.1.1**.
3. Please type username and password on the window. If you don't know the correct username and password, please consult your dealer to get them. In this section, we take the figures displayed on Windows as examples.



4. Open **System Maintenance >> TR-069**.

System Maintenance >> TR-069 Setting

ACS and CPE Settings

ACS Server

URL:

Username:

Password:

CPE Client

Enable Disable

URL:

Port:

Username:

Password:

Periodic Inform Settings

Disable Enable

Interval Time: second(s)

OK

- If the connected CPE needs to be authenticated, please set URL as the following and type username and password for ACS server:

http://{IP address of VigorACS}:80/ACSServer/services/ACSServlet

- If the connected CPE does not need to be authenticated please set URL as the following:
http://{ IP address of VigorACS}:80/ACSServer/services/UnAuthACSServlet
 - If the connected CPE needs to be authenticated and the data transmission between CPE and VigorACS needs to be encrypted (SSL), please set URL as the following:
https://{IP address of VigorACS}:443/ACSServer/services/ACSServlet
 - If the connected CPE needs not to be authenticated but the data transmission between CPE and VigorACS needs to be encrypted (SSL), please set URL as the following:
https://{IP address of VigorACS}:443/ACSServer/services/UnAuthACSServlet
5. Fill Username and Password for VigorACS Server for authentication. Please type as the following:
Username: *acs*
Password: *password*
 6. For the username and password of CPE client, it is not necessary for you to type them. Refer to section 3.2 for detailed information.

12.1.2 Invoke Remote Management for CPE

You have to make sure that the CPE device you want to connect supports VigorACS features. Please consult your dealer if you have no idea in it.

1. Suppose WAN IP of CPE device has been setup successfully. And you can access into Internet without difficulty.
2. Login the device by web.
3. Go to **System Maintenance>>Management Setup**.

Check **Enable remote firmware upgrade (FTP)** and **Allow management from the Internet** to set management access control.

System Maintenance >> Management

Management Setup

Management Access Control

- Allow management from the Internet
- FTP Server
- HTTP Server
- HTTPS Server
- Telnet Server
- SSH Server
- Disable PING from the Internet

Access List

| List | IP | Subnet Mask |
|------|----------------------|----------------------|
| 1 | <input type="text"/> | <input type="text"/> |
| 2 | <input type="text"/> | <input type="text"/> |
| 3 | <input type="text"/> | <input type="text"/> |

Management Port Setup

User Define Ports Default Ports

Telnet Port: (Default: 23)

HTTP Port: (Default: 80)

HTTPS Port: (Default: 443)

FTP Port: (Default: 21)

SSH Port: (Default: 22)

SNMP Setup

Enable SNMP Agent

Get Community:

Set Community:

Manager Host IP:

Trap Community:

Notification Host IP:

Trap Timeout: seconds

OK

12.1.3 Enable WAN Connection on CPE

You have to make sure the CPE device you want to connect has configured properly, and are able to access Internet.

1. Login the device by web.
2. Go to **Internet Access>>MPoA**.
3. Click **Enable** for MPoA.
4. Click **Specify an IP address**. Type correct WAN IP address, subnet mask and gateway IP address for your CPE. Then click **OK**.

WAN >> Internet Access

WAN 1

Static or Dynamic IP (DHCP Client)
 Enable Disable

ISDN Dial Backup Setup
Dial Backup Mode: None

Keep WAN Connection
 Enable PING to keep alive
PING to the IP:
PING Interval: 0 minute(s)

WAN Connection Detection
Mode: ARP Detect
Ping IP:
TTL:

MTU: 1442 (Max: 1500)

RIP Protocol
 Enable RIP

WAN IP Network Settings WAN IP Alias
 Obtain an IP address automatically
Router Name: *
Domain Name: *
* : Required for some ISPs

Specify an IP address
IP Address: 172.16.3.229
Subnet Mask: 255.255.0.0
Gateway IP Address: 172.16.3.4

DNS Server IP Address
Primary IP Address:
Secondary IP Address:

Default MAC Address
 Specify a MAC Address
MAC Address: 00:50:7F:DD:15:19

OK Cancel

Note: Reboot the CPE device and re-log into VigorACS SI. CPE which has registered to VigorACS will be captured and displayed on the home page of VigorACS SI.

12.1.4 Connect to ACS Server through PVC Channel

1. Login the device by web.
2. Go to **Internet Access>>MPoA**.
3. Click **Enable** for MPoA.
4. Choose 1483 Bride IP LLC as encapsulation. And set VPI and VCI with 8 and 35.
5. Click **Specify an IP address**. Type correct WAN IP address, subnet mask and gateway IP address for your CPE. Then click **OK**.

Internet Access >> MPoA (RFC1483/2684)

MPoA (RFC1483/2684) Mode
 Enable Disable

DSL Modem Settings
 Multi-PVC channel: Channel 1
 Encapsulation: 1483 Bridged IP LLC
 VPI: 8
 VCI: 35
 Modulation: Multimode

RIP Protocol
 Enable RIP

Bridge Mode
 Enable Bridge Mode

WAN IP Network Settings
 Obtain an IP address automatically
 Router Name:
 Domain Name:
 *: Required for some ISPs
 Specify an IP address
 IP Address: 172.17.3.163
 Subnet Mask: 255.255.255.0
 Gateway IP Address: 172.17.3.1
 Default MAC Address
 Specify a MAC Address
 MAC Address: 00-50-7F-D8-C2-01

- Go to **Internet Access>>Multi-PVCs**. Enable Channel 3 WAN check box and set VPI and VCI as 9 & 36.

Multi-PVCs

| Channel | Enable | VPI | VCI | QoS Type | Protocol | Encapsulation |
|---------|-------------------------------------|-----|-----|----------|----------|---------------------|
| 1. | <input checked="" type="checkbox"/> | 8 | 35 | UBR | MPoA | 1483 Bridged IP LLC |
| 2. | <input checked="" type="checkbox"/> | 8 | 38 | UBR | MPoA | 1483 Bridged IP LLC |
| 3. WAN | <input checked="" type="checkbox"/> | 9 | 36 | UBR | PPPoA | VC MUX |
| 4. WAN | <input type="checkbox"/> | 1 | 44 | UBR | PPPoA | VC MUX |
| 5. WAN | <input type="checkbox"/> | 1 | 45 | UBR | PPPoA | VC MUX |
| 6. | <input type="checkbox"/> | 1 | 46 | UBR | PPPoA | VC MUX |
| 7. | <input type="checkbox"/> | 1 | 47 | UBR | PPPoA | VC MUX |
| 8. | <input type="checkbox"/> | 1 | 48 | UBR | PPPoA | VC MUX |

Note: VPI/VCI must be unique for each channel!

OK Clear Cancel

- Click **WAN** link to open the following page for configuring in details.

WAN for Router-borne Application: Management

Enable Disable

DSL Modem Settings
 VPI: 9
 VCI: 36
 QoS Type: UBR
 Protocol: MPoA
 Encapsulation: 1483 Bridged IP LLC

PPPoE/PPPoA Client
ISP Access Setup
 ISP Name:
 Username:
 Password:
 PPP Authentication: PAP or CHAP
 Always On
 Idle Timeout: -1 second(s)
IP Address From ISP
 Fixed IP Yes No (Dynamic IP)

MPoA (RFC1483/2684)
 Obtain an IP address automatically
 Router Name:
 Domain Name:
 *: Required for some ISPs
 Specify an IP address
 IP Address: 172.17.3.162
 Subnet Mask: 255.255.255.0
 Gateway IP Address: 172.17.3.1
DNS Server IP Address

8. Set **WAN for Router-borne Application** as **Management**. And set VPI and VCI with 9 & 36. Choose **MPoA** as the protocol and choose **1483 Bridge IP LLC** as Encapsulation. Finally set a static IP address. Click **Ok**.
9. Open **System Maintenance >>TR-069**. Choose **PVC** for ACS Server On. Type correct URL for the ACS server. Type username and password for ACS Server.

ACS and CPE Settings

ACS Server On [PVC]

ACS Server

URL [http://172.17.3.165:8080/ACSServer/services/ACSServlet]

Username [acs]

Password [*****]

CPE Client

URL [http://172.17.3.162/cwm/CRN.html]

Port [80]

Username [vigor]

Password [*****]

10. Click **OK** to save the settings. Now, reboot the CPE device and re-log into VigorACS SI. CPE which has registered to VigorACS will be captured and displayed on the home page of VigorACS SI.

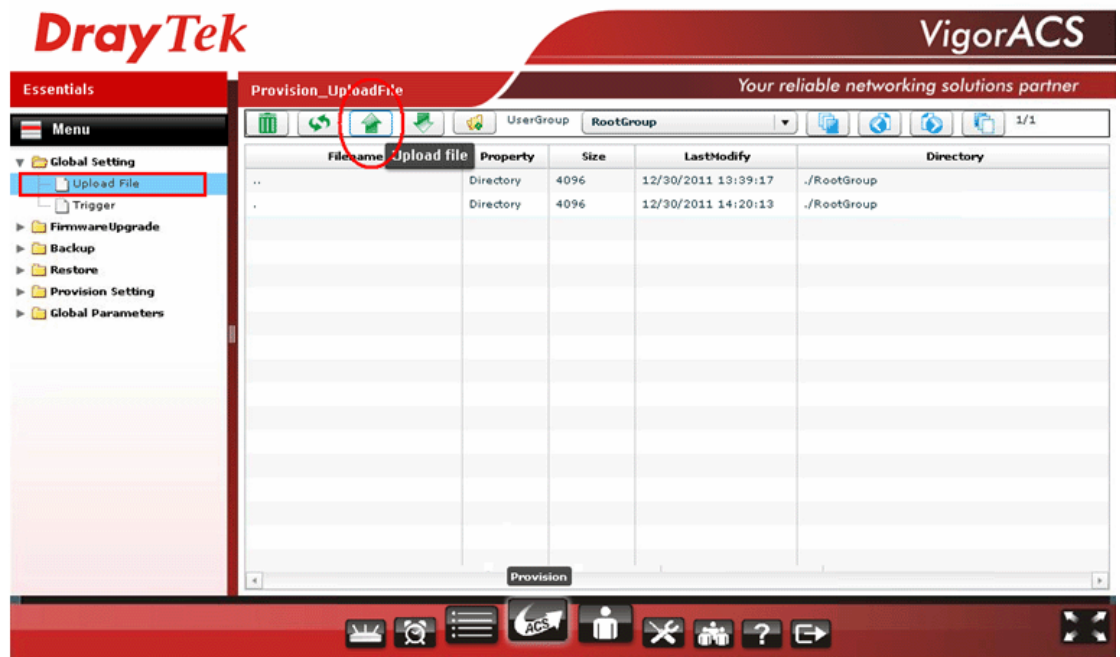
12.2 How to upgrade CPE firmware by using VigorACS SI Provision

I. Import firmware file to VigorACS SI server

There are two ways to import firmware file to VigorACS server:

Upload to VigorACS server from your PC

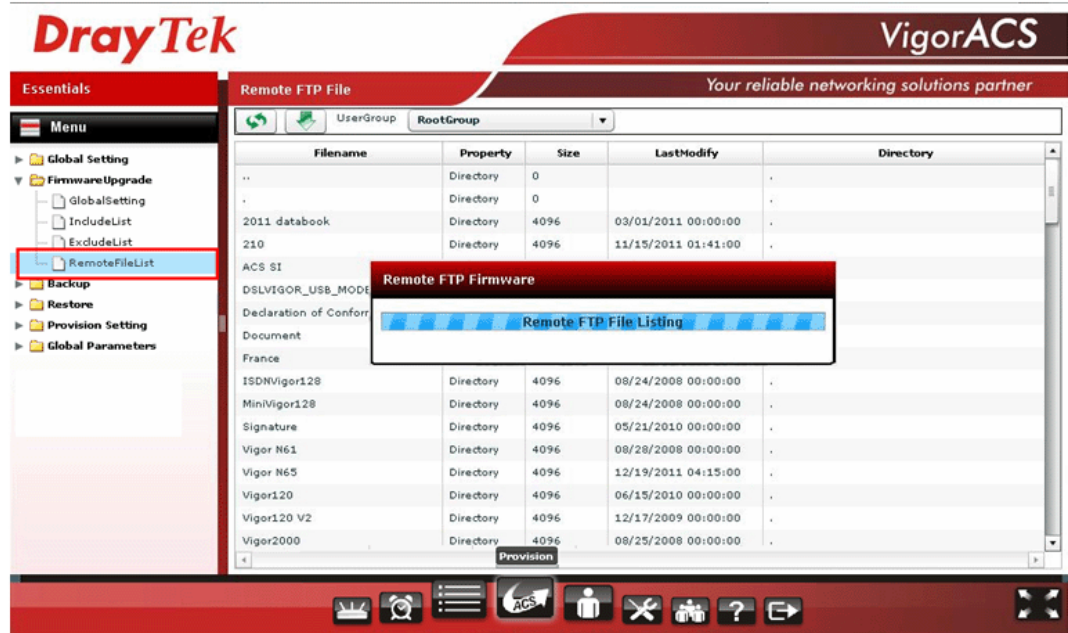
1. The newest firmware file (e.g., V3.3.7 in this case) is located on your PC. You can upload it from your PC to VigorACS SI. Just click the **Provision** tab. From the menu tree view on the right side, click the grey triangle near to **Global Setting** to unfold it.



2. Then click **Upload File** to choose the file to be uploaded to VigorACS SI server.

Download from our FTP site

1. The newest firmware file (e.g., V3.3.7 in this case) is located on FTP site. You can download it from the FTP to VigorACS SI. Just click the **Provision** tab. From the menu tree view on the right side, click the grey triangle near to **FirmwareUpgrade** to unfold it.



2. Then click **FirmwareUpgrade** to choose the file to be downloaded and uploaded to VigorACS SI server.

II. Check the firmware status of the CPE you want to upgrade

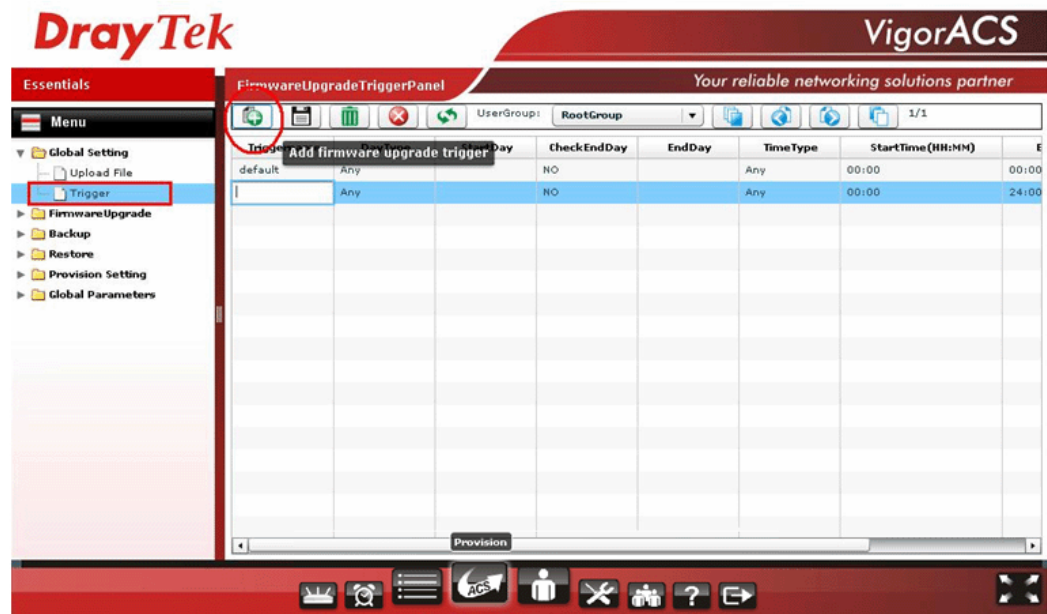
Now you can check the firmware information of the CPE that you want to upgrade. Click the **Device** tab. Open **System >> Firmware status**. Write down the following items:

- Modem Firmware Version
- Manufacturer OUI
- Model Name



III. Set a new trigger profile

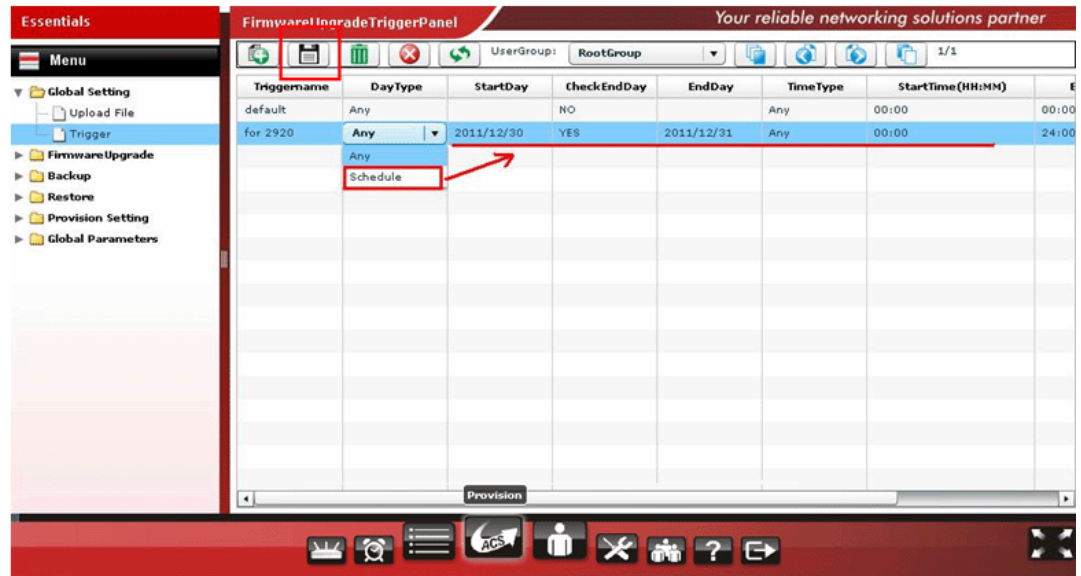
1. Click the **Provision** tab. Open **Global Setting >> Trigger** to add a new trigger profile.



2. Click the **Add firmware upgrade trigger** button.
3. For the **DayType**, you can choose **Any** or **Schedule** for your necessity. Then, click **Save** to save the settings.

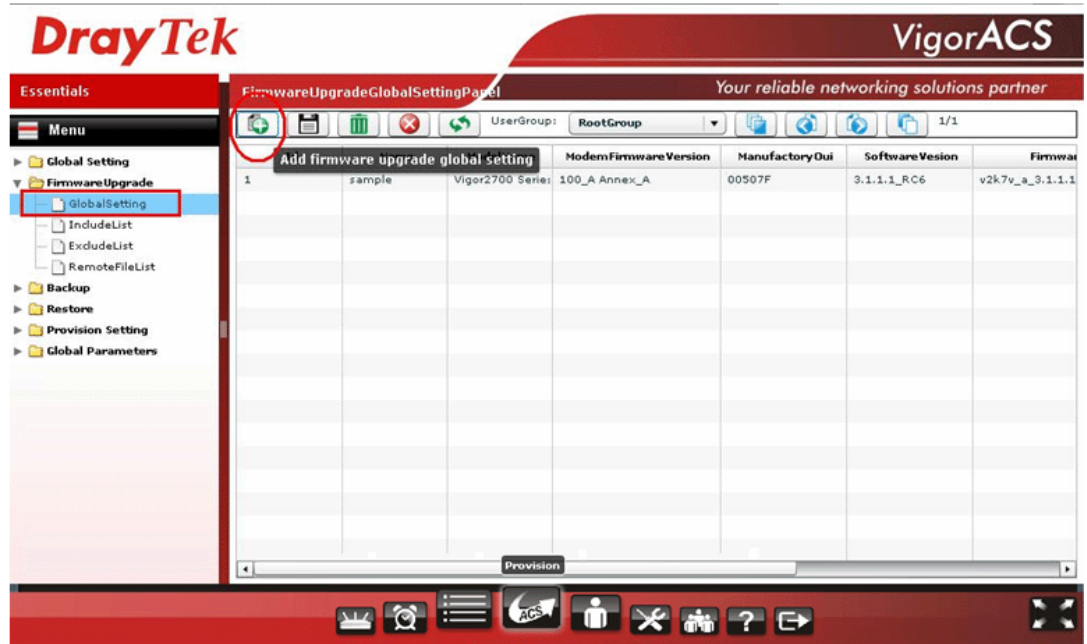
Any – firmware upgrade will be done whenever VigorACS SI server gets the inform packet from the CPE.

Schedule -VigorACS SI server gets the inform packet from CPE based on the time settings.

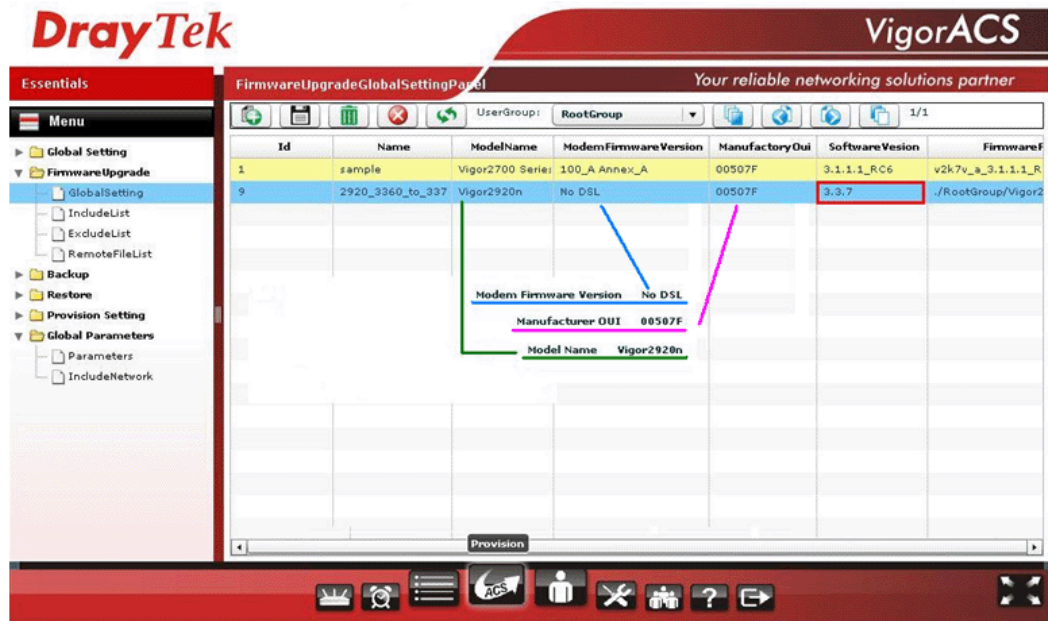


IV. Set a new firmware upgrade profile

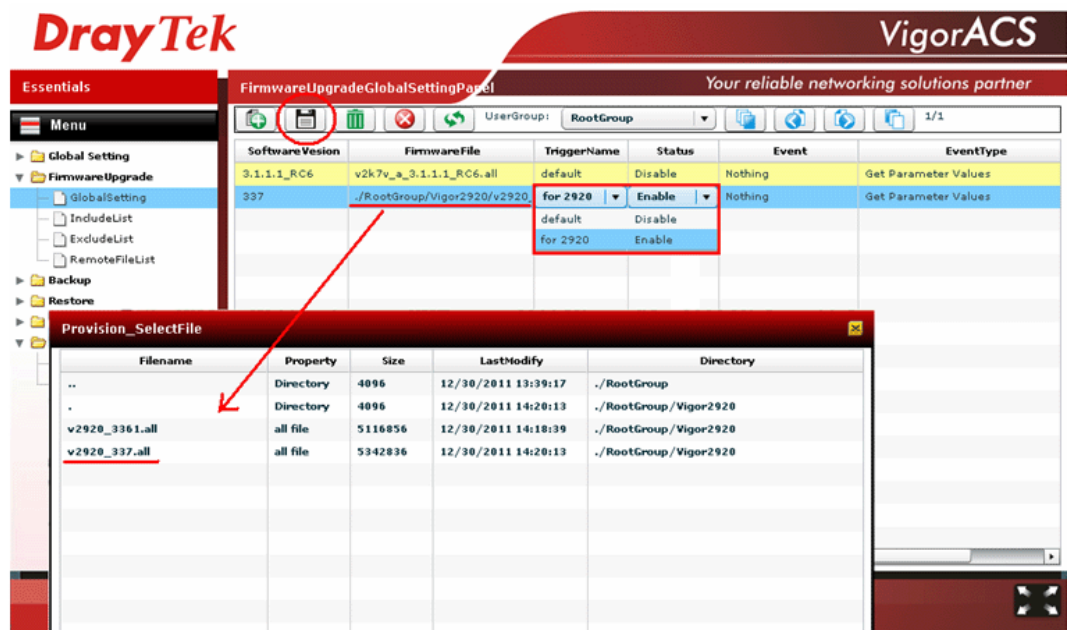
1. Click the **Provision** tab. Open **FirmwareUpgrade** >> **GlobalSetting** to add a new upgrade profile.



2. Click the **Add firmware upgrade global setting** button.
3. Type a name for such profile (e.g., 2920_336_to337) and configure the Model Name, Modem Firmware Version and Manufacturer OUI obtained from **System** >> **Firmware status** in the step above.

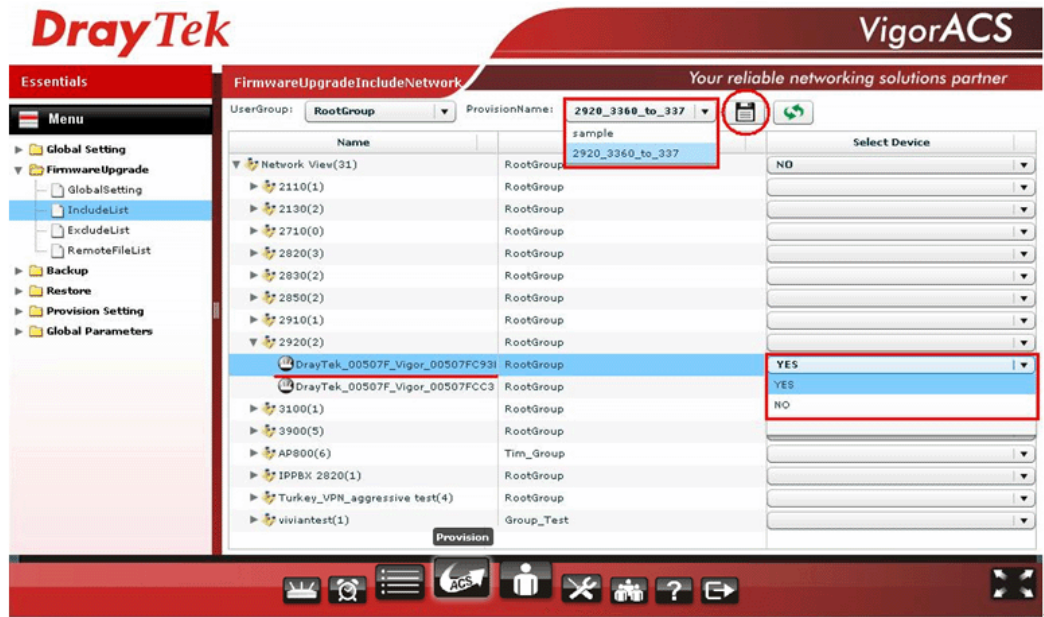


4. Type the version number (e.g., 3.3.7 in this case) for **SoftwareVersion** the same as the firmware version (e.g., V3.3.7 mentioned above in this case) that you want to upgrade to. Otherwise VigorACS SI server will keep trying to upgrade the CPE's firmware to this version.
5. Select the firmware file and the trigger profile. Remember to enable them. Then, click **Save** to save the settings.



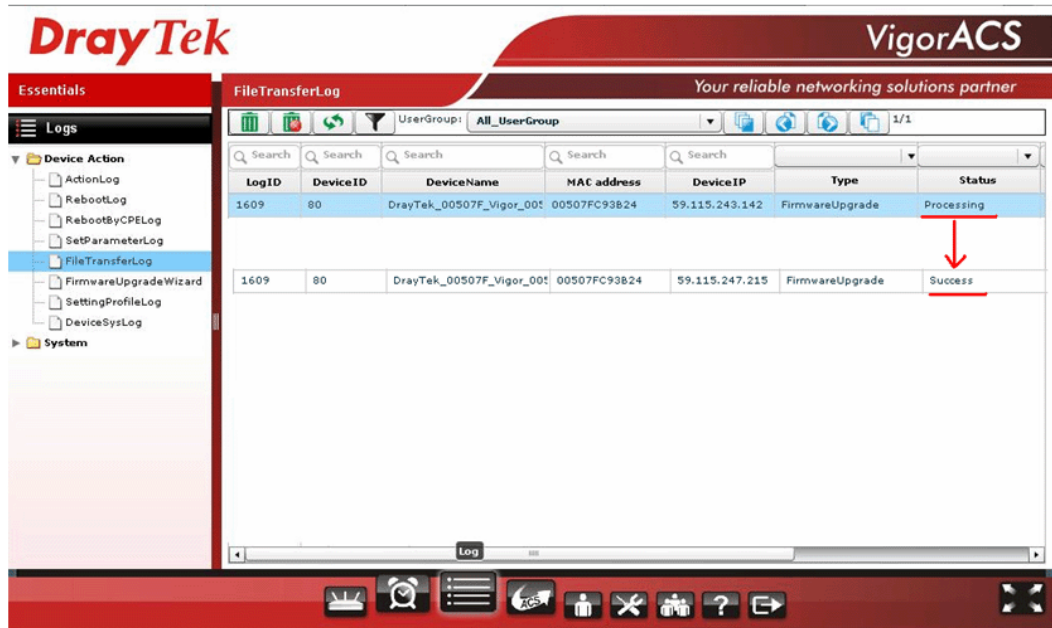
V. Choose the CPE for implementing the firmware upgrade

1. Click the **Provision** tab. Open **FirmwareUpgrade >> IncludeList**.
2. In the field of **ProvisionName**, choose the profile (e.g., 2920_336_to337) created in **Firmware Upgrade Global Setting** profile.
3. Choose **YES** in the field of **Select Device** for the selected CPE and click the **Save** button.



VI. Log of the File Transfer

To check if the firmware upgrade is successful or not, just click the **Log** tab. Open **Device Action** >> **FileTransferLog**. A log list will be displayed with the firmware upgrade status.



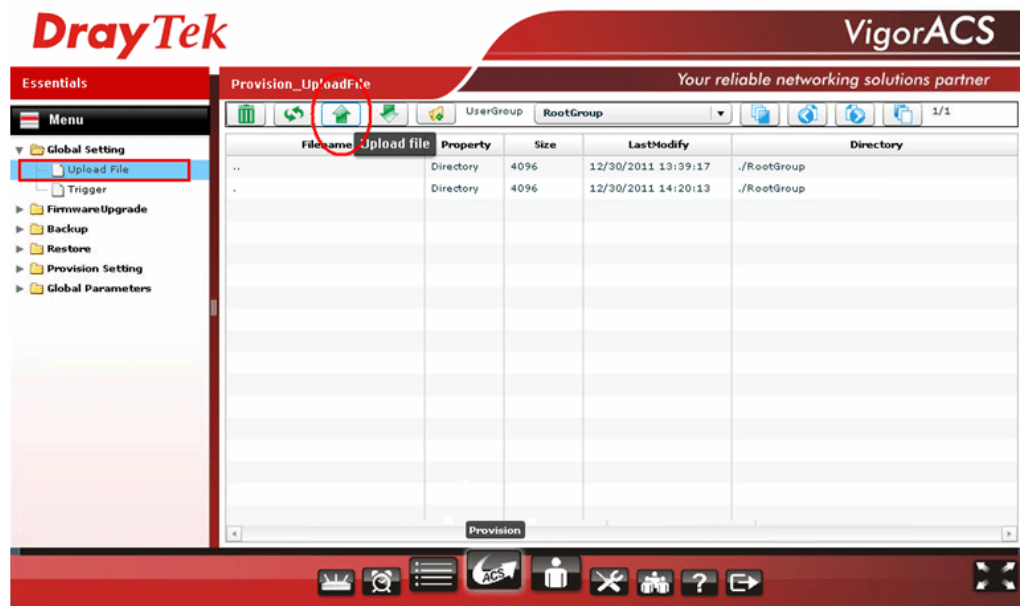
12.3 How to upgrade CPE firmware by using VigorACS SI Firmware Upgrade Wizard

I. Import firmware file to VigorACS SI server

There are two ways to import firmware file to VigorACS server:

Upload to VigorACS server from your PC

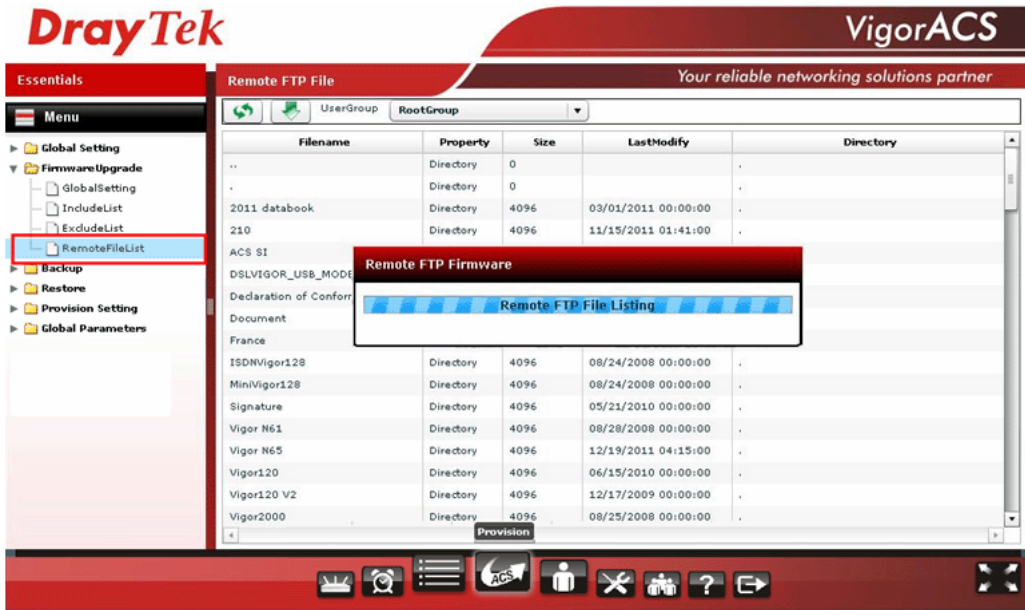
1. The newest firmware file (e.g., V3.3.7 in this case) is located on your PC. You can upload it from your PC to VigorACS SI. Just click the **Provision** tab. From the menu tree view on the right side, click the grey triangle near to **Global Setting** to unfold it.



2. Then click **Upload File** to choose the file to be uploaded to VigorACS SI server.

Download from our FTP site

1. The newest firmware file (e.g., V3.3.7 in this case) is located on FTP site. You can download it from the FTP to VigorACS SI. Just click the **Provision** tab. From the menu tree view on the right side, click the grey triangle near to **FirmwareUpgrade** to unfold it.

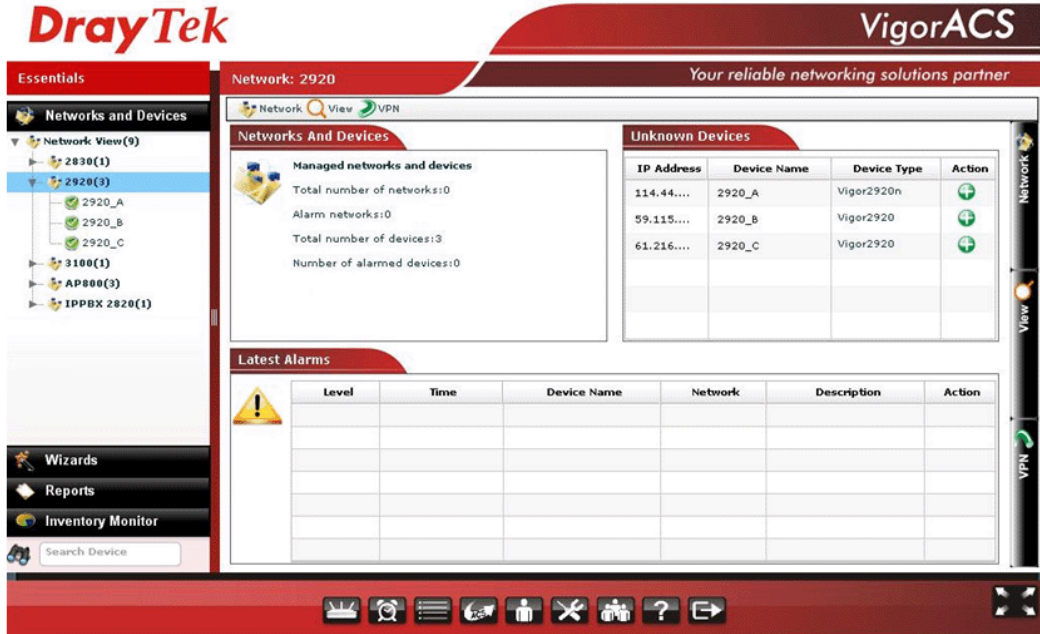


2. Then click **FirmwareUpgrade** to choose the file to be downloaded and uploaded to VigorACS SI server.

12.4 How to use Copy Parameter

VigorACS SI supports to copy parameters from one of the registered CPE(s) to other CPE(s) with the same model. It is convenience for duplication and configuration with large setting profiles.

For example, there are three Vigor2920 devices (named 2920_A, 2920_B and 2920_C) under the network view, and we want to copy the **port redirection setting** from 2920_A to 2920_B and 2920_C.



Take a look at the port redirection setting of 2920_A.

NAT >> Port Redirection

| Index | Service Name | Public Port | Private IP | Status |
|-------|--------------|-------------|---------------|--------|
| 1. | http server | 80 | 192.168.1.100 | v |

Index No. 1

| | |
|--|--------------------------------|
| <input checked="" type="checkbox"/> Enable | |
| Mode | Single |
| Service Name | http server |
| Protocol | TCP |
| WAN IP | 2.WAN1 IP Alias[1]14.44.50.213 |
| Public Port | 80 |
| Private IP | 192.168.1.100 |
| Private Port | 8080 |

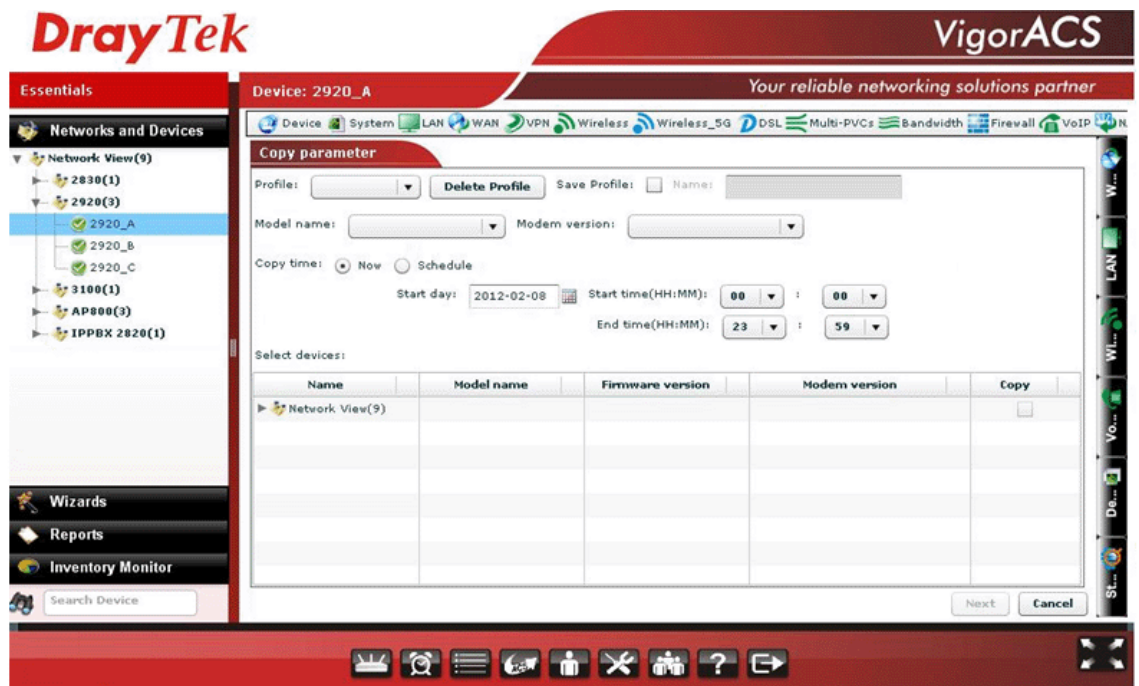
Note: In "Range" Mode the End IP will be calculated automatically once the Public Port and Start IP have been entered.

Follow the steps listed below:

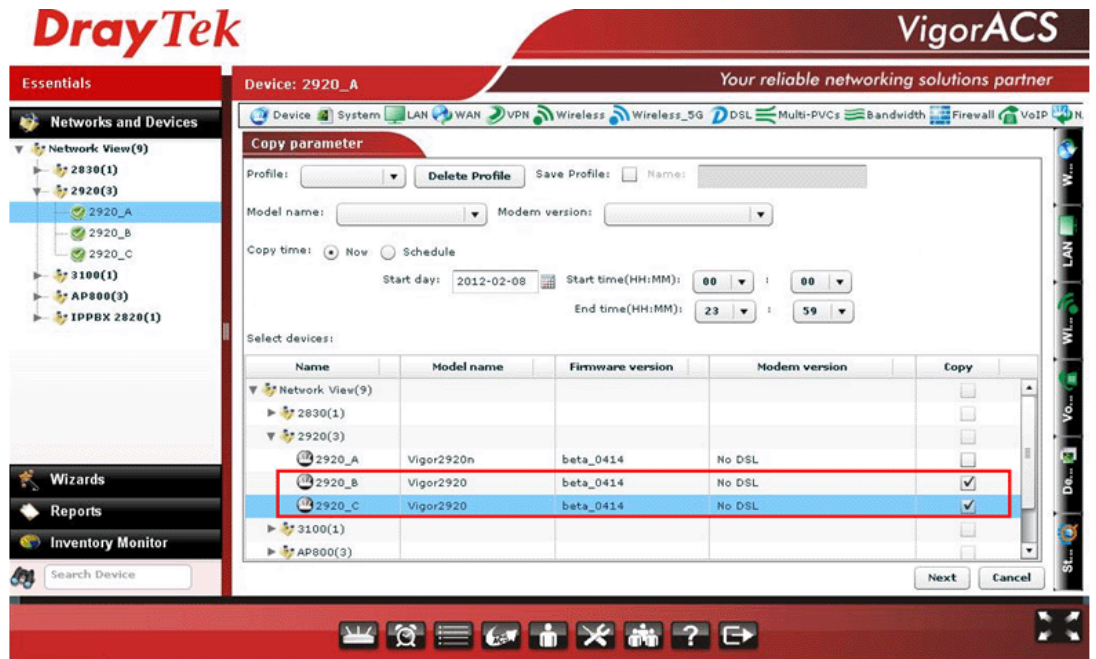
1. Access into the VigorACS SI web user interface. From the network view area located on the left side of VigorACS SI, choose and click the device (e.g., 2920_A) to select it.



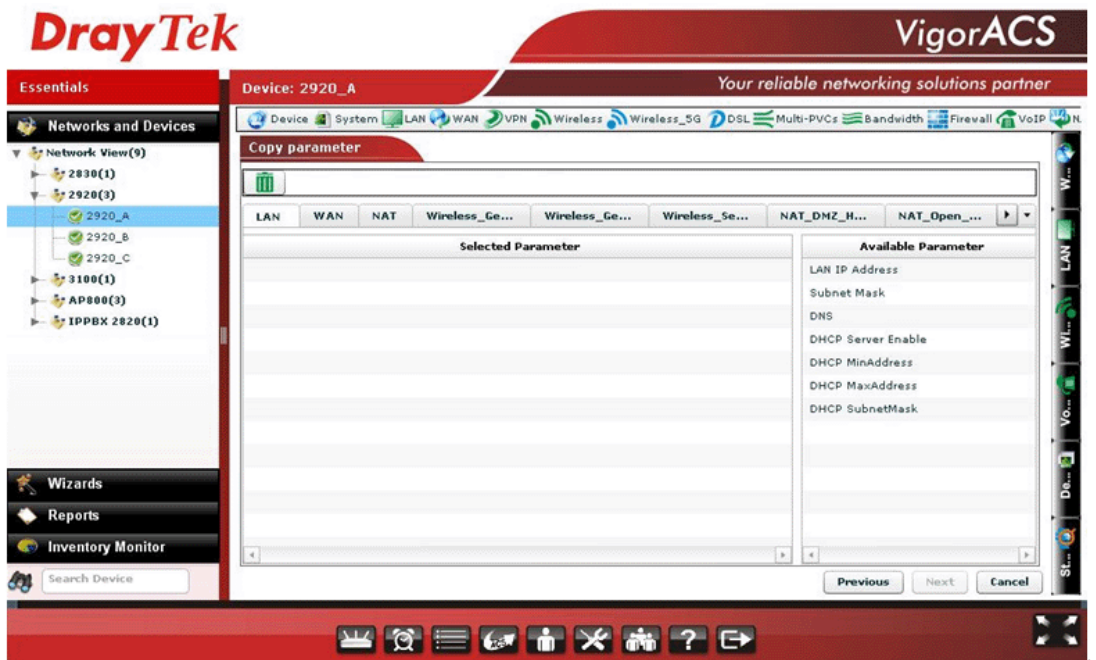
2. From the top menu bar, choose the **System >> Copy Parameters** item to open the following page.



- On the **Select devices** list, select devices (e.g., 2920_B and 2920_C) that you want to copy the parameters settings from other device. Check the box of **Copy**.



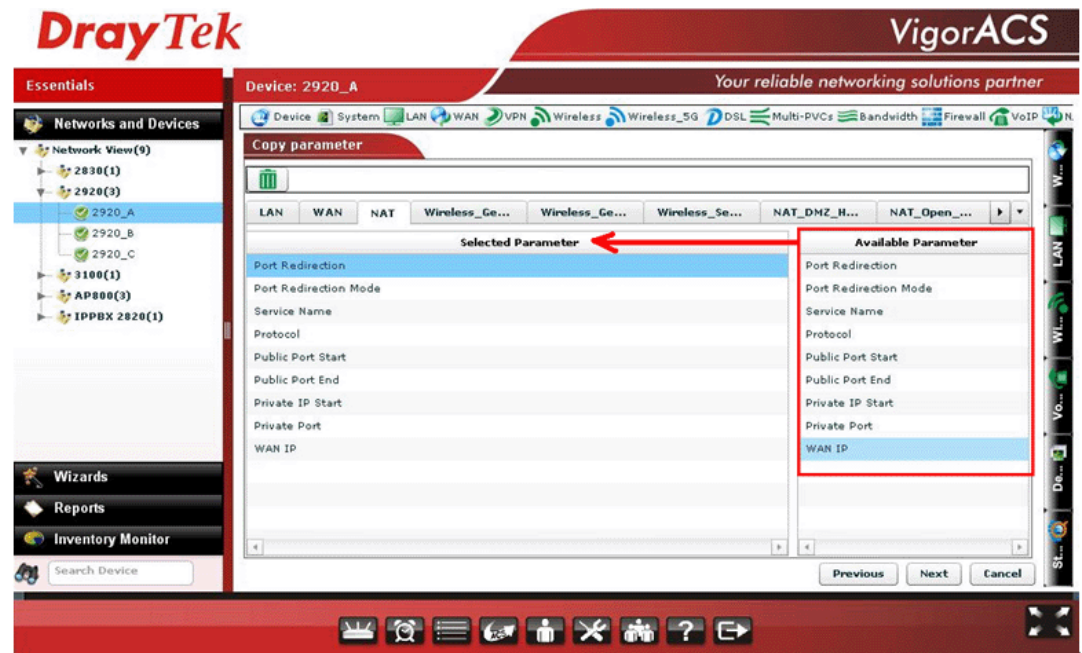
- Click the **Next** button to open the following page.



- From the drop down list, find the NAT menu to locate port redirection parameter (from 2920_A) that you want to copy from.



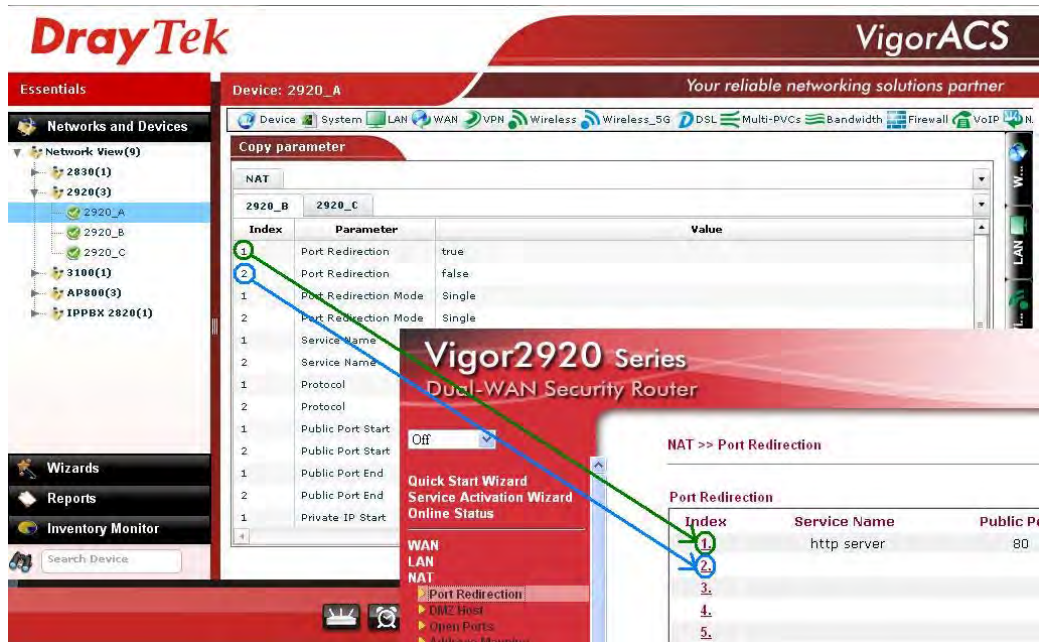
- Double click the parameters which you want to copy from 2920_A at **Available Parameter** list, then the chosen parameter will be shown under **Selected Parameter**. Press the **Next** button:



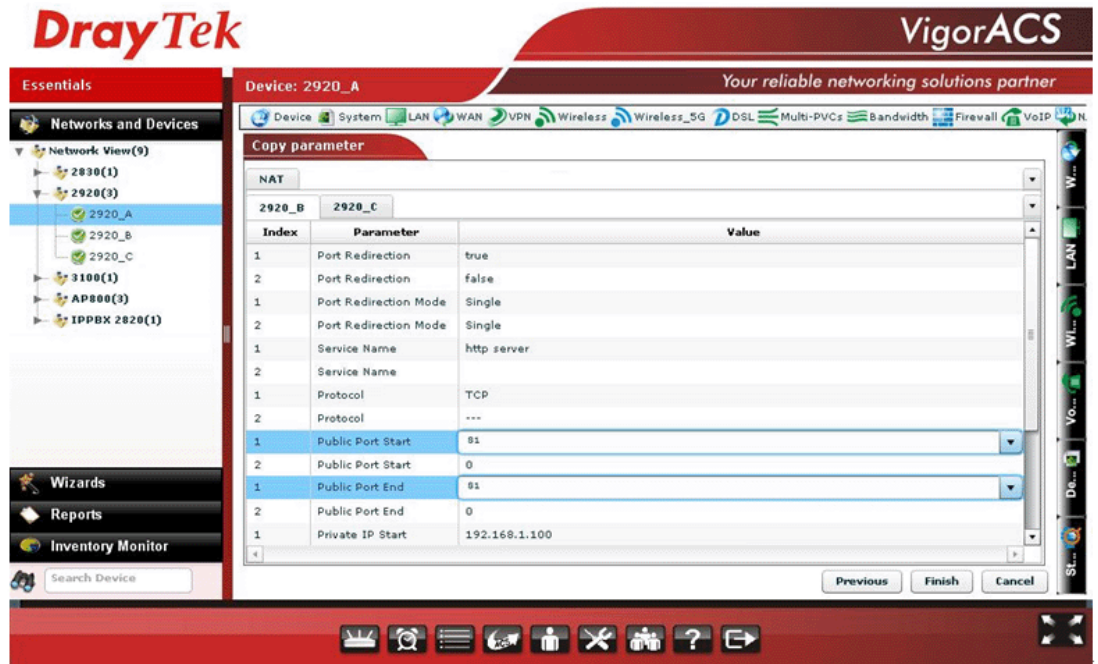
7. In the following page, all of the selected parameters with values will be shown as follows for devices respectively.



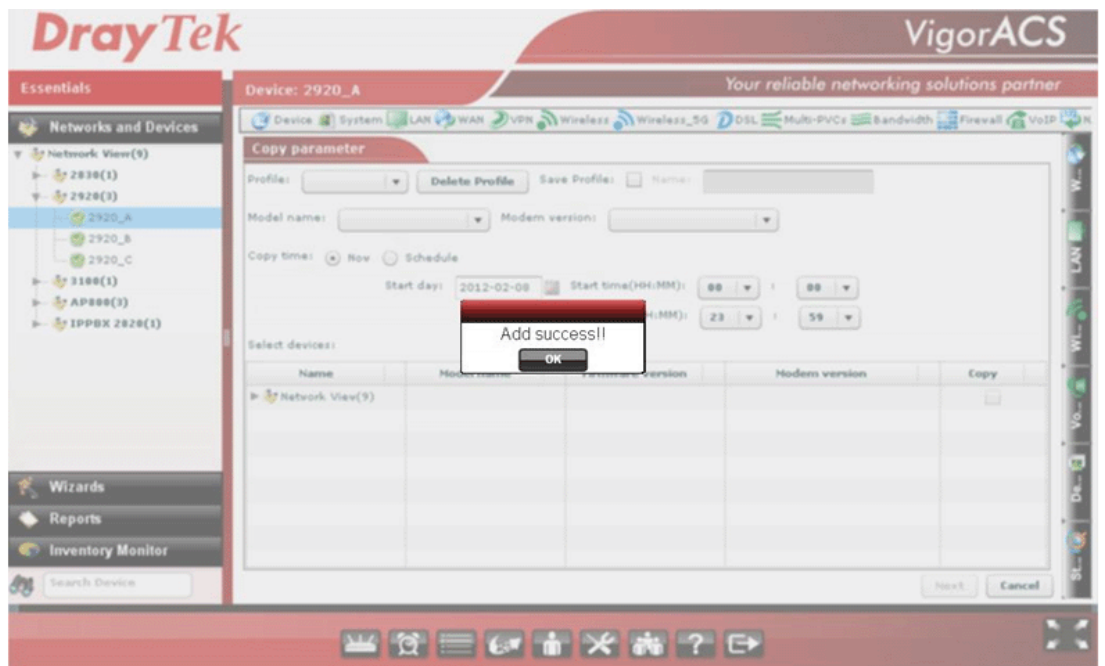
8. Parameter of index 1 is the one we want to copy to 2920_B and 2920_C. Choose index 1.



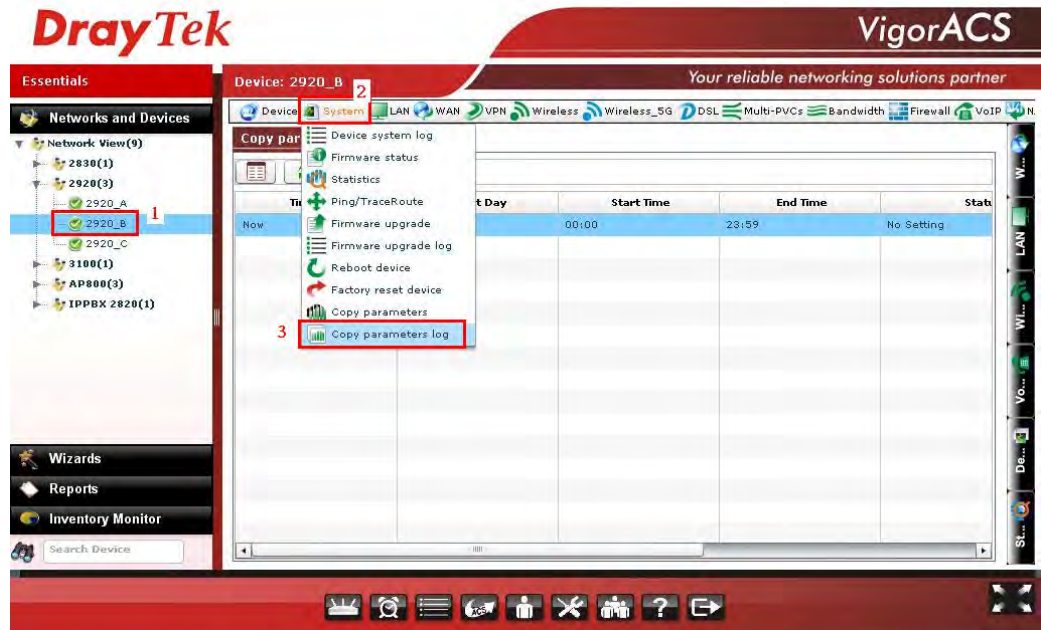
- If you want to change the value of parameter, you should redefine it now. If not, simply click **Finish**.



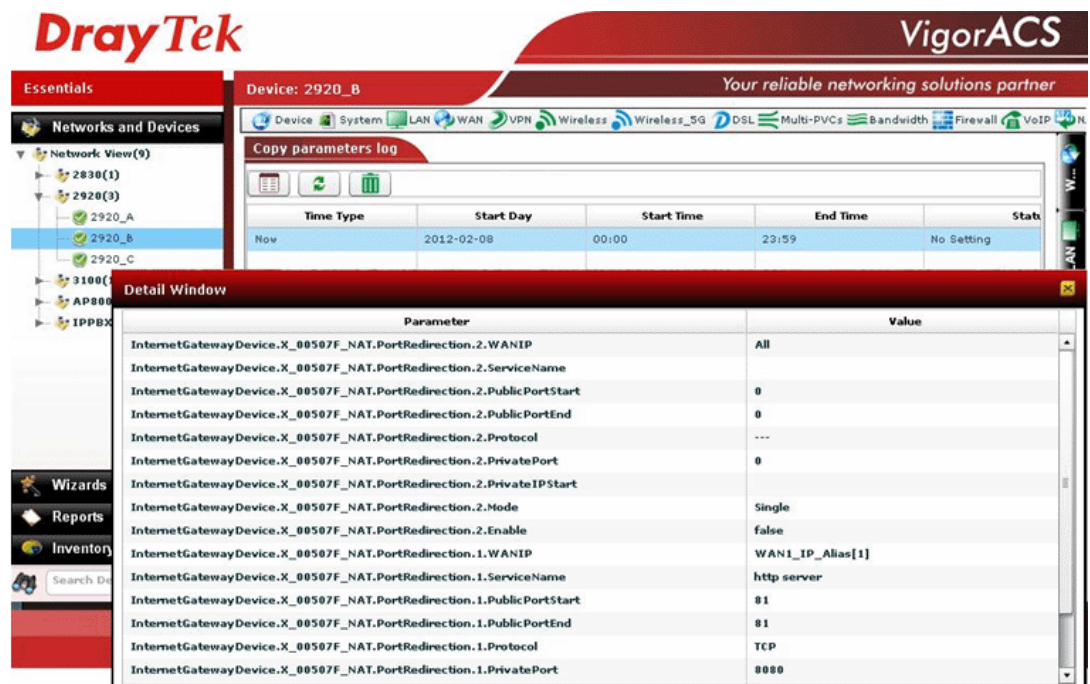
- A window will be popped up to tell you the process of copy parameter is successful.



- Next, check the status for the routers. Click the 2920_B or 2920_C on the network view area then open **System >> Copy parameter log** item. You will see there is a log in the list and waiting to be implemented when VigorACS SI server gets the inform packets from the CPE.



- Double click the log to open the Detail Window for checking the details about the parameters. The log will disappear after it has been done. Therefore, if you want to cancel the copy parameter action, simply delete the log from the log list (clicking the **Delete** button on the top).



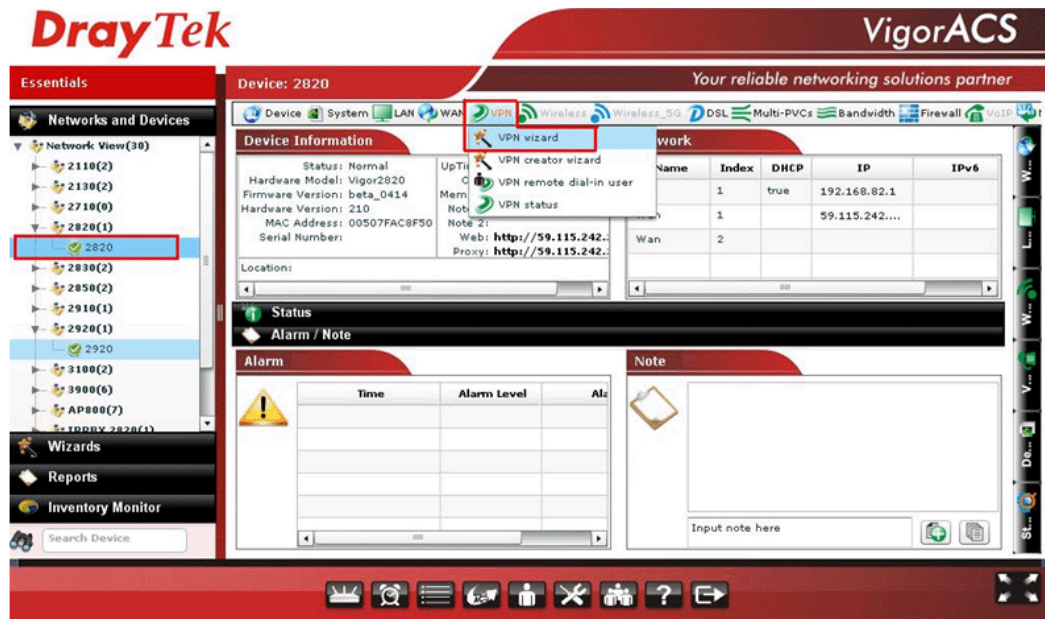
12.5 How to create a VPN by using VPN Wizard

Vigor ACS SI supports VPN Wizard which provides an easy way to create a LAN to LAN VPN tunnel between two Vigor routers. The following shows an example for PPTP tunnel created between Vigor2820 and Vigor2920.

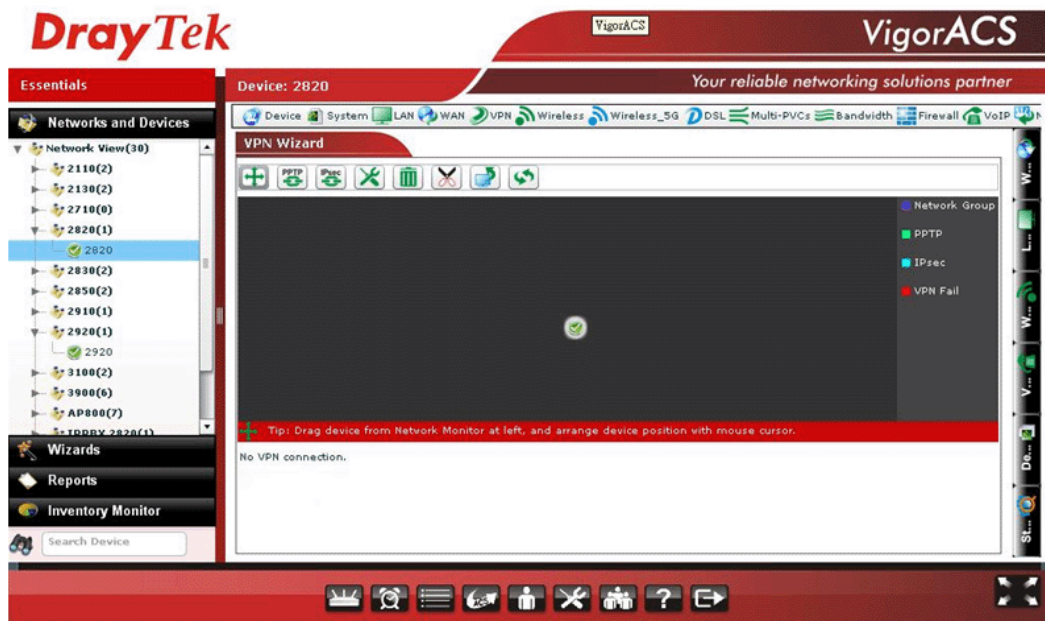
VPN server => Vigor2820, LAN network: 192.168.82.0/24

VPN client => Vigor2920, LAN network: 192.168.92.0/24

1. Click the **Device** tab and choose Vigor2820 as the VPN server from the Network View on the left side of ACS SI web.
2. Open **VPN>> VPN wizard** function on the top menu of VigorACS SI.



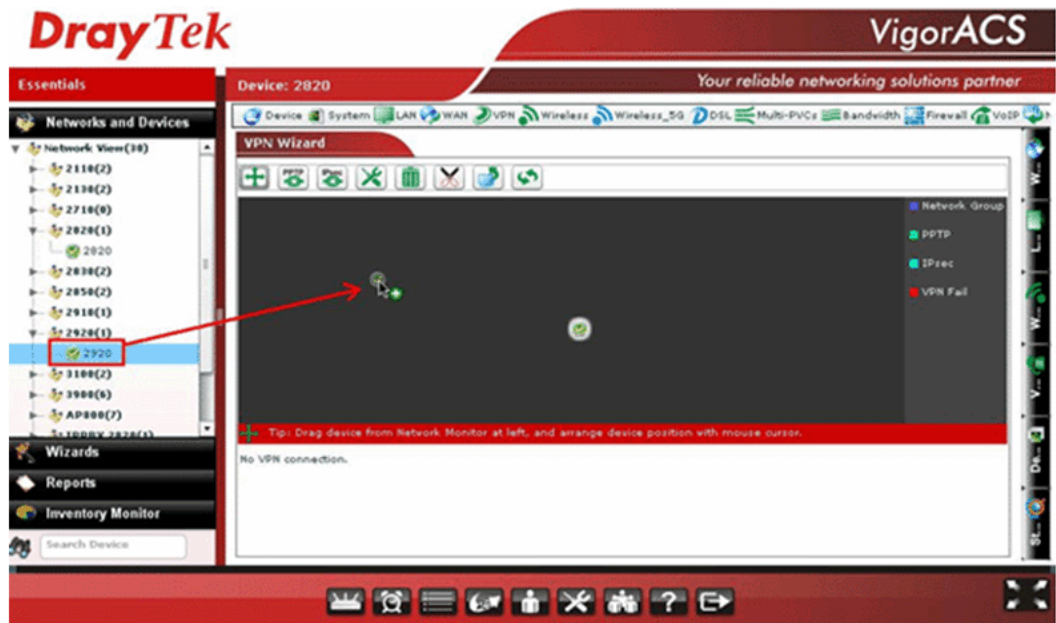
3. Then the VPN wizard web page will appear as the follows:



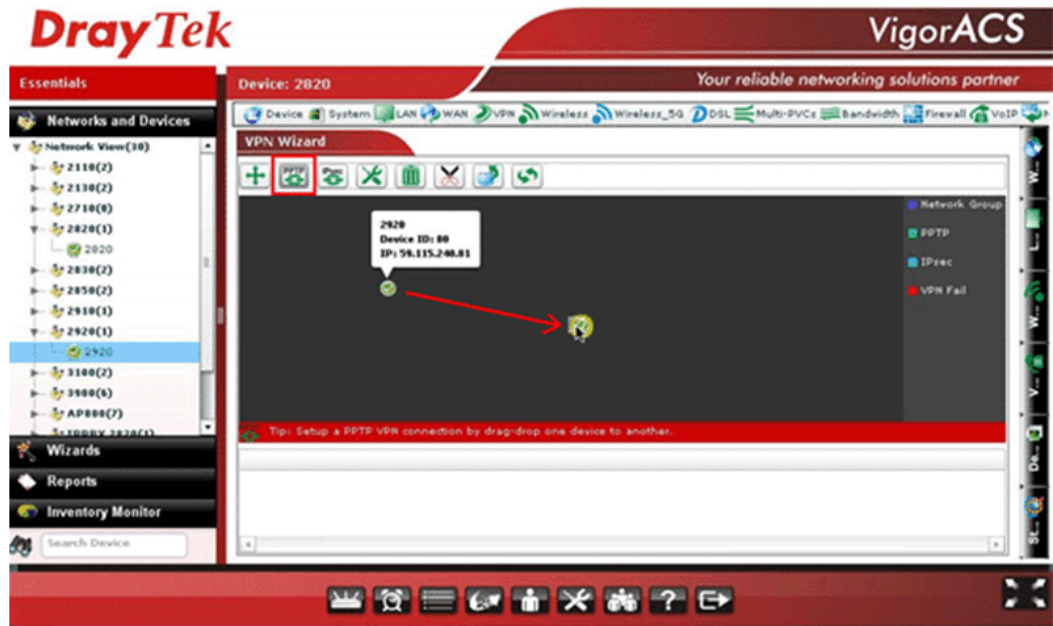
4. Press the **Add device** button, then choose the VPN client (Vigor2920) at the Network View on the left side of the ACS SI web.



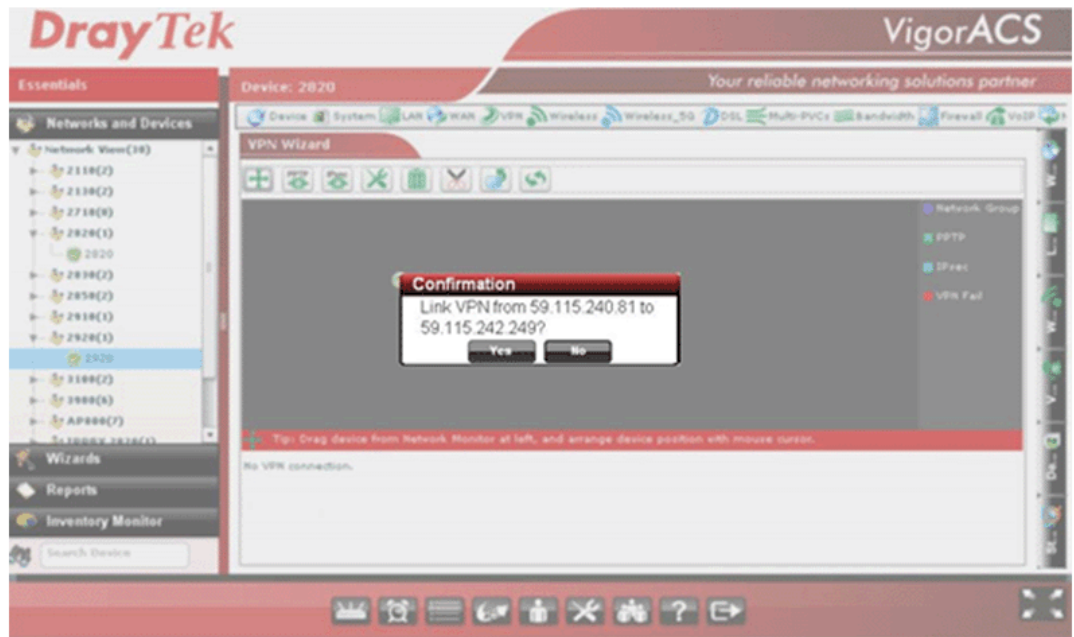
5. Click the VPN client (Vigor2920) and drag it to the black area on the right side. Then release it.



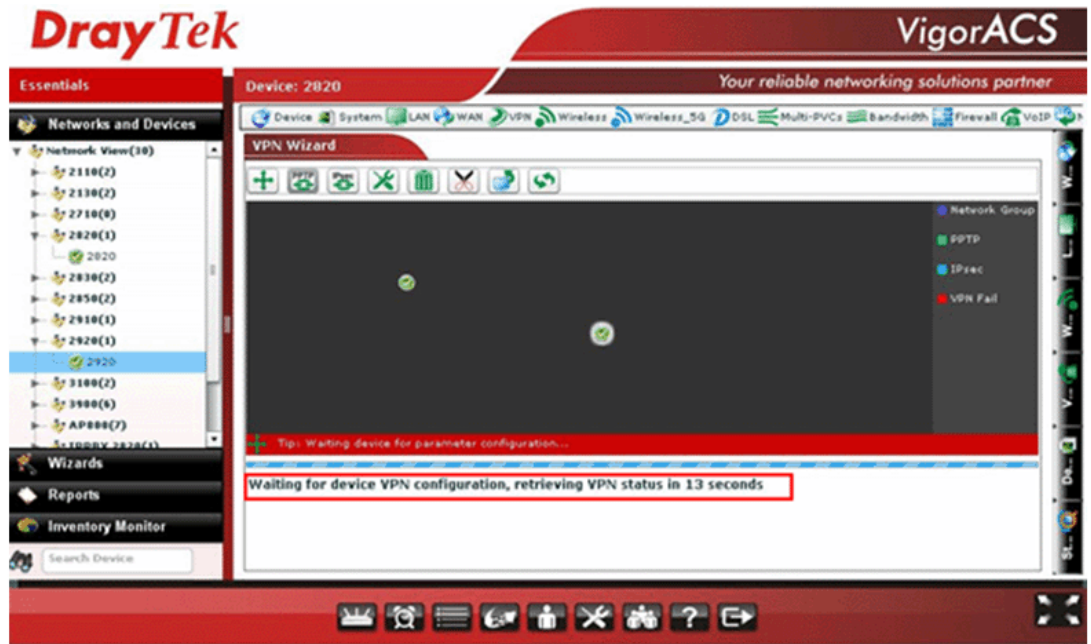
6. Press PPTP button, then Press the VPN client icon (Vigor2920) and drag it to the VPN server icon (Vigor2820), release it when you see a yellow ring surrounding the VPN server icon.



7. VigorACS SI will pop-up a confirmation window, please click the Yes button.



- Wait for device VPN configuration.



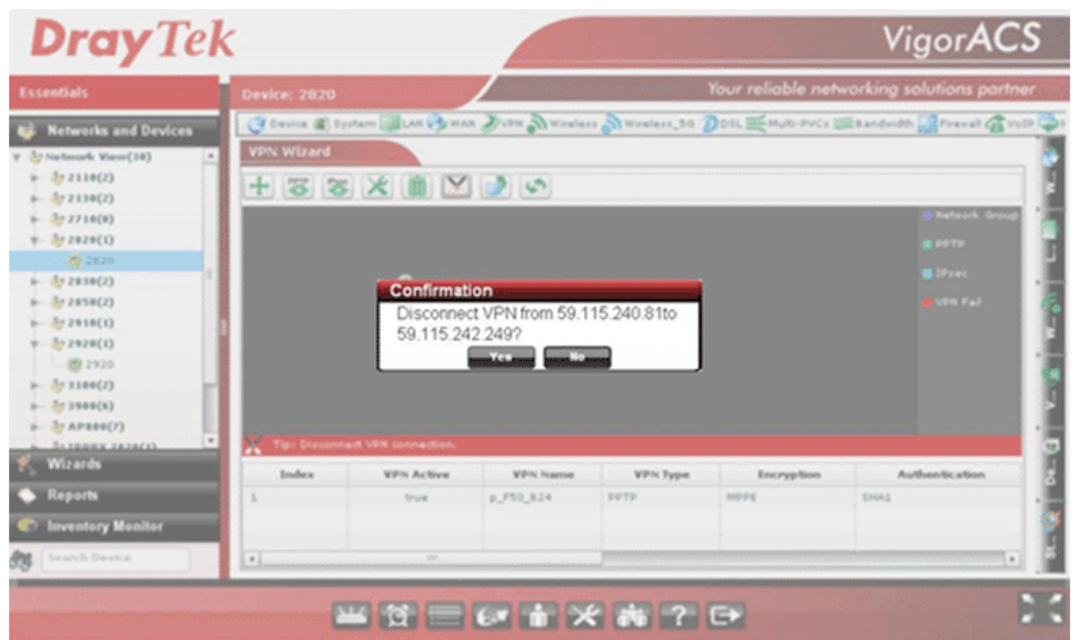
- After PPTP connection working, there will be a green arrow from VPN client to VPN server, you could check the VPN tunnel status on the bottom of the VigorACS SI web as well.



10. If you want to disconnect the VPN tunnel, to press the **Disconnect** button, then there will be a pair of scissors icon on the VPN line, click it.



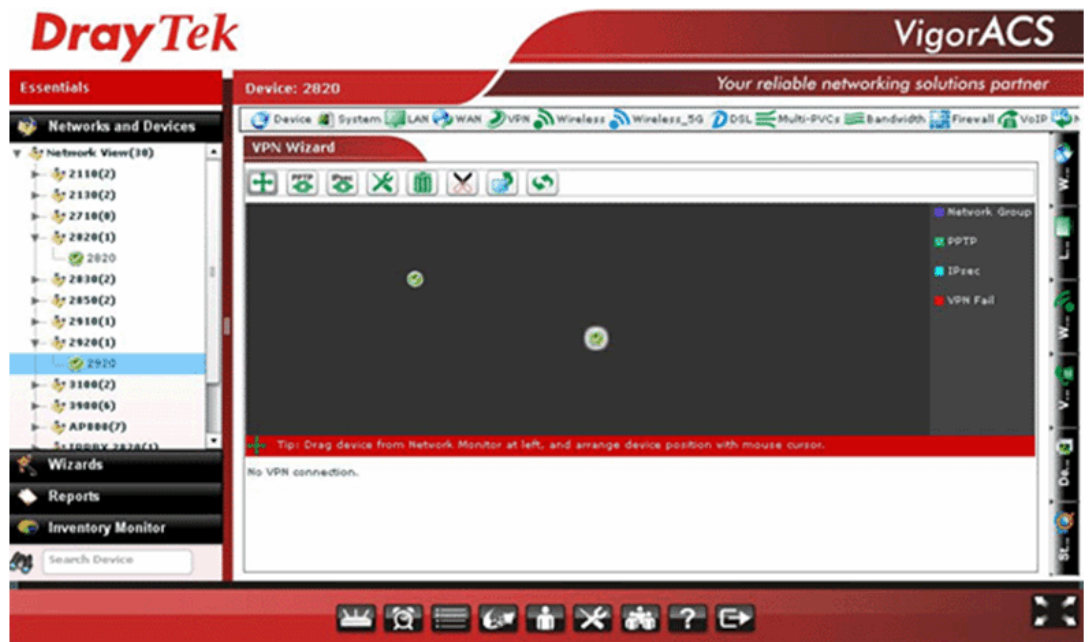
11. VigorACS SI will pop-up a confirmation window, please click the **Yes** button.



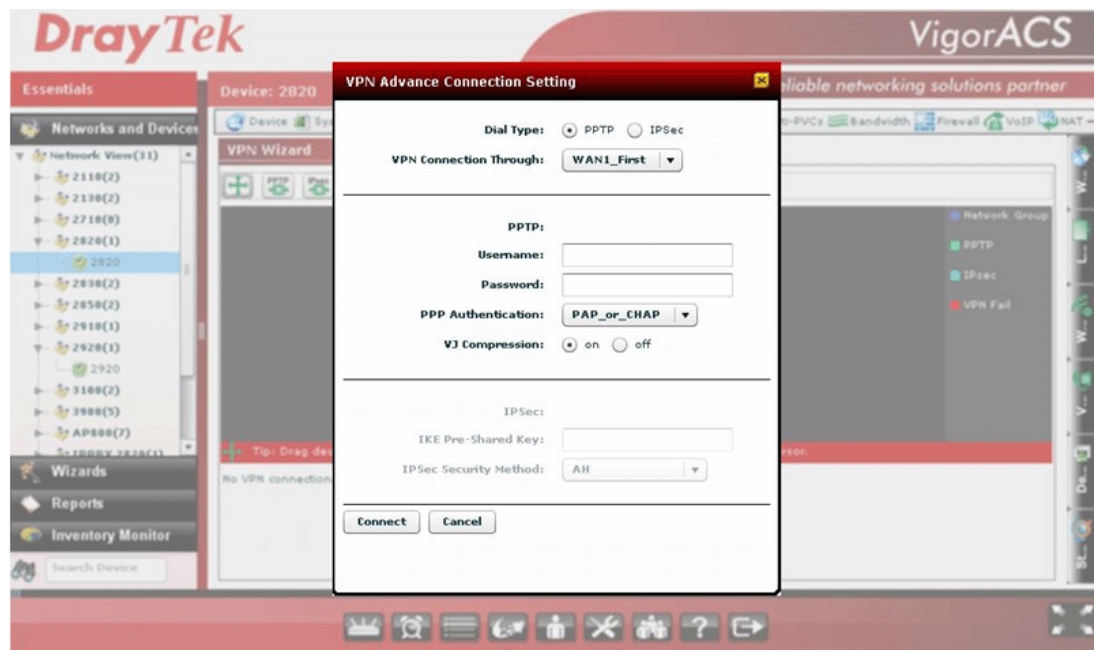
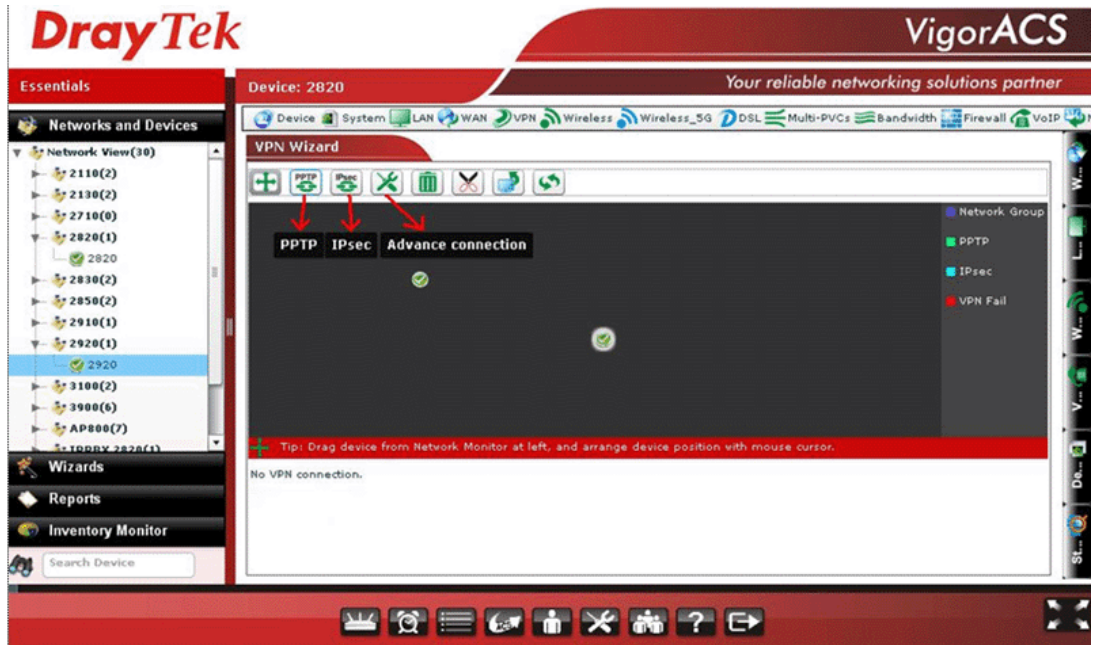
12. Wait for device VPN configuration.



13. After VPN tunnel disconnection, the message will show “No VPN connection”.



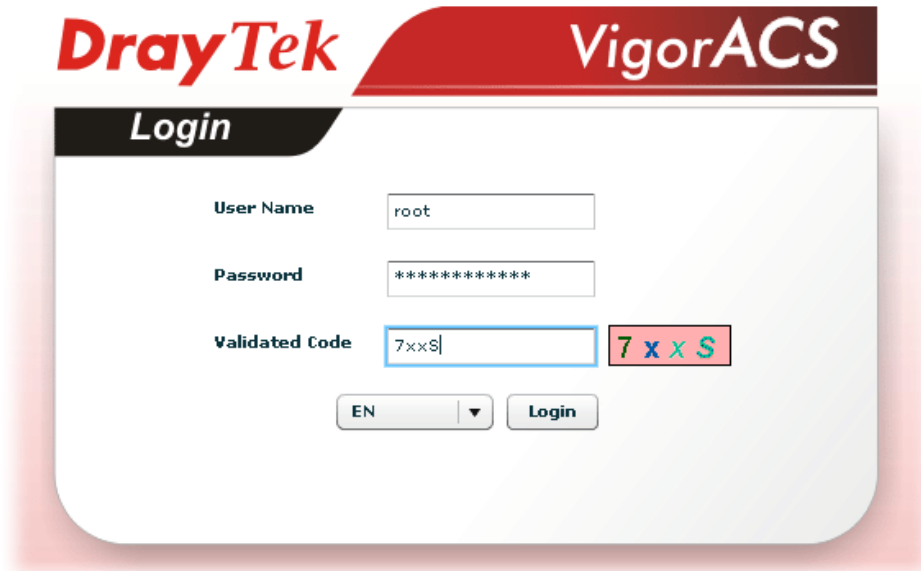
Note: VigorACS SI wizard supports PPTP and IPsec tunnel, the default encryption for PPTP Tunnel is MPPE, for IPsec Tunnel is AH-SHA1. If you want to set more details for VPN connection, you can use **Advance** connection button instead at step 5.



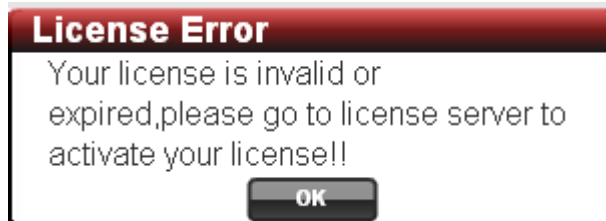
12.6 Creating an Account for MyVigor

12.6.1 Creating an Account via VigorACS SI


1. Click **Programs> VigorACS SI> VigorACS Web Page** to access into VigorACS. The login page of VigorACS will be shown as the following:



2. Please type **“root”** as user name and **“admin123”** as password. Then click **Login**. A License Error dialog appears as follows:



3. Click **OK**. A login page for MyVigor web site will pop up automatically.



Please take a moment to register.
Membership Registration entitles you to upgrade firmware for your purchased product and receive news about upcoming products and services!

LOGIN

UserName :

Password :

Auth Code : **t xxhdd**

If you cannot read the word, [click here](#)

[Forgotten password?](#)

Don't have a MyVigor Account ? [Create an account now](#)

If you are having difficulty logging in, contact our customer service.
Customer Service : (886) 3 597 2727 or

4. Click the link of **Create an account now**.
5. Check to confirm that you accept the Agreement and click **Accept**.

Register

Create an account - Please enter personal profile.

1 Agreement

2 Personal Information

3 Preferences

4 Completion

===== MyVigor Agreement =====

1. Agreement
Draytek provides MyVigor(myvigor.draytek.com) service according to this agreement. When you use MyVigor service, it means that you have read, understand and agree to accept the items listed in this agreement. Draytek can modify or change the content of the items without any reasons. It is suggested for you to notice the modifications or changes at any time. If you still use MyVigor service after knowing the modifications and changes of this service, it means you have read, understand and agree to accept the modifications and changes. If you do not agree the content of this agreement, please stop using MyVigor service.

2. Registration
To use this service, you have to agree the following conditions:
(a) Provide your complete and correct information according to the registration steps of this service.
(b) If you provide any incorrect or fake information here, DrayTek has the right to pause or terminate your account.

I have read and understand the above Agreement. (Use the scroll bar to view the entire agreement)

6. Type your personal information in this page and then click **Continue**.

7. Choose proper selection for your computer and click **Continue**.

8. Now you have created an account successfully. Click **START**.

9. Check to see the confirmation *email* with the title of **New Account Confirmation Letter from myvigor.draytek.com portal.**

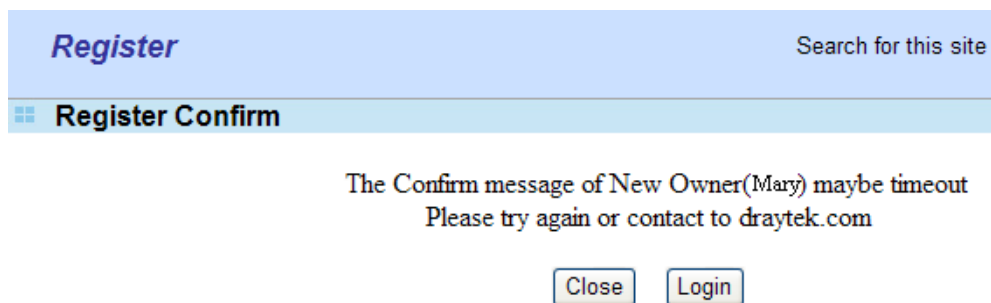
***** This is an automated message from myvigor.draytek.com.*****

Thank you (**Mary**) for creating an account.

Please click on the activation link below to activate your account

Link : [Activate my Account](#)

10. Click the **Activate my Account** link to enable the account that you created. The following screen will be shown to verify the register process is finished. Please click **Login**.



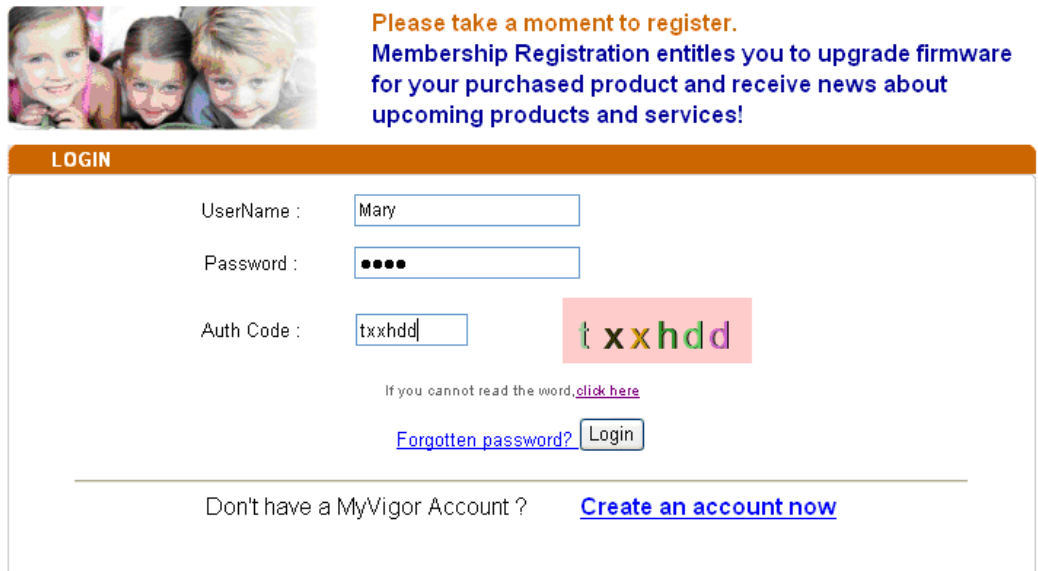
Register Search for this site

Register Confirm

The Confirm message of New Owner(Mary) maybe timeout
Please try again or contact to draytek.com

Close Login

11. When you see the following page, please type in the account and password (that you just created) in the fields of **UserName** and **Password**. Then type th

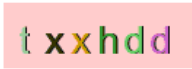


Please take a moment to register.
Membership Registration entitles you to upgrade firmware
for your purchased product and receive news about
upcoming products and services!

LOGIN

UserName :

Password :

Auth Code : 

If you cannot read the word, [click here](#)

[Forgotten password?](#)

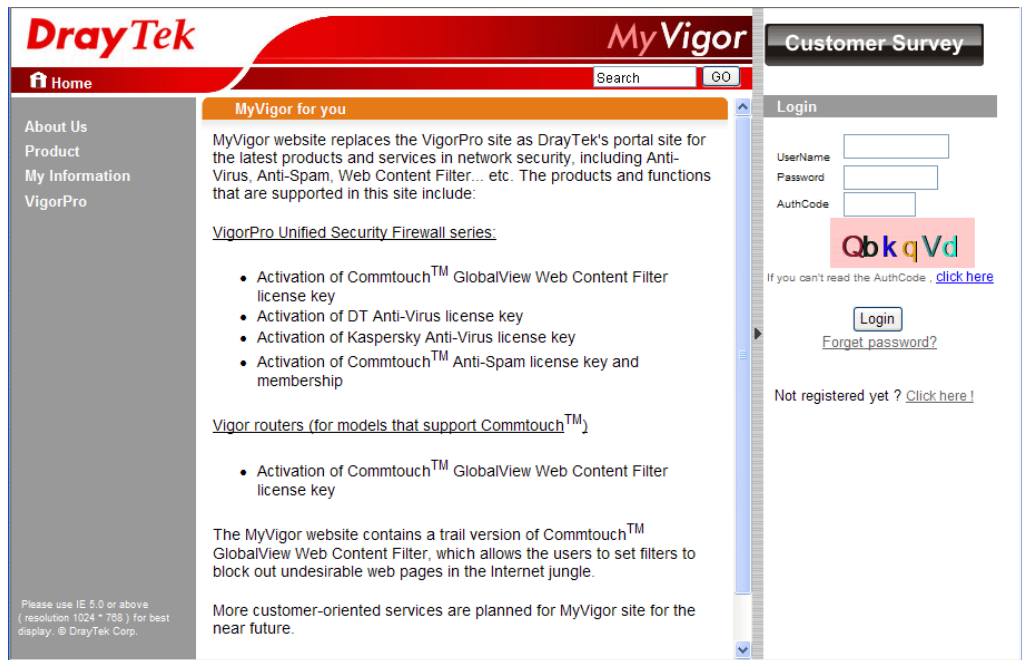
Don't have a MyVigor Account ? [Create an account now](#)

If you are having difficulty logging in, contact our customer service.
Customer Service : (886) 3 597 2727 or

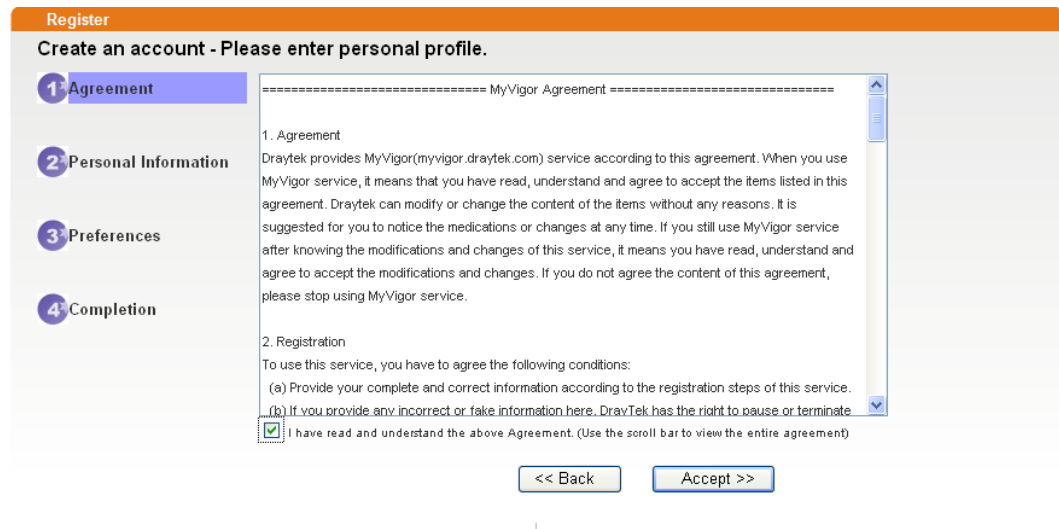
12. Now, click **Login**. Your account has been activated.

12.6.2 Creating an Account via MyVigor Web Site

1. Access into <http://myvigor.draytek.com>. Find the line of **Not registered yet?**. Then, click the link **Click here!** to access into next page.



2. Check to confirm that you accept the Agreement and click **Accept**.



3. Type your personal information in this page and then click **Continue**.

4. Choose proper selection for your computer and click **Continue**.

5. Now you have created an account successfully. Click **START**.

6. Check to see the confirmation *email* with the title of **New Account Confirmation Letter from myvigor.draytek.com**.

***** This is an automated message from myvigor.draytek.com.*****

Thank you (**Mary**) for creating an account.

Please click on the activation link below to activate your account

Link : [Activate my Account](#)

7. Click the **Activate my Account** link to enable the account that you created. The following screen will be shown to verify the register process is finished. Please click **Login**.

The Confirm message of New Owner(Mary) maybe timeout
Please try again or contact to draytek.com

Close Login

8. When you see the following page, please type in the account and password (that you just created) in the fields of **UserName** and **Password**. Then type the code in the box of Auth Code according to the value displayed on the right side of it.



Please take a moment to register.
Membership Registration entitles you to upgrade firmware for your purchased product and receive news about upcoming products and services!

LOGIN

UserName :

Password :

Auth Code : t x x h d d

If you cannot read the word, [click here](#)

[Forgotten password?](#)

Don't have a MyVigor Account ? [Create an account now](#)

If you are having difficulty logging in, contact our customer service.
Customer Service : (886) 3 597 2727 or

Now, click **Login**. Your account has been activated.

Note: To register VigorACS SI, please return to Chapter 3 and follow the corresponding steps for registration.


12.7 Upgrade VigorACS with New License Key

To control and manage the CPEs effectively, the administrator must acquire a new license from DrayTek regularly. Usually, the valid time of the license is one year. You have to renew your license when it is going to be expired.

Please follow the steps listed below to get a new license for your VigorACS SI.

12.7.1 License Is Invalid or Expired

1. Click **Programs> VigorACS SI> VigorACS Web Page** to access into VigorACS. The login page of VigorACS will be shown as the following:



2. Please type user name and password. Then click **Login**. A License Error dialog appears as follows. It indicates that you cannot access into VigorACS SI due to the invalid license. Please purchase a new one and return here to upgrade the license for using VigorACS SI. When you have prepared a new license, click the **OK** button.



3. A login page for MyVigor web site will pop up automatically. Type your account (user name) and password in this page. Enter the authentication code with the characters displayed on the screen. Then, click **Login**.



Please take a moment to register.
 Membership Registration entitles you to upgrade firmware for your purchased product and receive news about upcoming products and services!

LOGIN

UserName :

Password :

Auth Code : t xxhdd

If you cannot read the word, [click here](#)

[Forgotten password?](#)

Don't have a MyVigor Account ? [Create an account now](#)

If you are having difficulty logging in, contact our customer service.
 Customer Service : (888) 3 697 2727 or

4. MyVigor will verify and authenticate if the user account you typed is allowed to access into the web site. If yes, Device Information will appear as follows. Find and click **Renew** for the service item of ACS.

My Product

Device Information

Nickname : carrie_yfn
 Host ID :
 Model : VigorACS

Device's Service
Expired License

| Service | Provider | Action | Status | Start Date | Expired Date | Nodes |
|---------|----------|--------------------------------------|--------|------------|--------------|-------|
| ACS | DT-ACS | <input type="button" value="Renew"/> | ● On | - | - | |

● Means such service is in use.

● Means such service is not in use.

● Means such service has not been activated yet.

● Means such service is in use and will be invalid soon(less than one month).

Allows you to have the free trial for service.

Allows you to renew service license.

Allows you to activate service.

From the page, you can see the basic information for the trial version of VigorACS.

- You will be guided to the following page. Type the new license number you purchase from the service provider in the corresponding field. And click **Add License**.

Apply For A License Number

Service Name: **ACS**
 Service Provider: **DT-ACS**

STEP 1

License Number :

Tip : Please ensure that the licence key you enter is for the correct (your preferred) service provider.

- The new added license number will be displayed on the screen as shown below. Click **Next** for next page.

Apply For A License Number

Service Name: **ACS**
 Service Provider: **DT-ACS**

STEP 1

License Number :

Tip : Please ensure that the licence key you enter is for the correct (your preferred) service provider.

| Flag | License | Provider | Nodes | Status |
|------------------------------------|-------------------------|----------|-------|--------|
| <input type="button" value="del"/> | FD234-B61E3-3676F-B37B7 | DT-ACS | 1000 | valid |

7. Check the box of “**I have read and accepted the above...**” and click **Next**.

Confirm Message

Cancel

User Name : yfn
 Serial : 20100128013339
 Model : VigorACS

| License Number | Service Provider | Status | Nodes |
|-------------------------|------------------|--------|-------|
| FD234-B61E3-3676F-B37B7 | DT-ACS | valid | 1000 |

DrayTek VigorACS SI Series End-User License Agreement

IMPORTANT:

DrayTek IS WILLING TO LICENSE THE ENCLOSED SOFTWARE TO YOU ONLY UPON THE CONDITION THAT YOU ACCEPT ALL OF THE TERMS CONTAINED IN THIS LICENSE AGREEMENT. PLEASE READ THE TERMS CAREFULLY BEFORE COMPLETING THE INSTALLATION PROCESS AS INSTALLING THE SOFTWARE WILL INDICATE YOUR ASSENT TO THEM. IF YOU DO NOT AGREE TO THESE TERMS, THEN DrayTek IS UNWILLING TO LICENSE THE

I have read and accept the above Agreement. (Please check this box).

Next

8. The activation date will be displayed automatically. Simply click **Next**.

Apply For A License Number

Cancel

Service Name: ACS

STEP 2

Activation Date (MM-DD-YYYY):

9. A confirm message page will be shown as follows. If there is no problem, please click **Confirm**.

Confirm Message

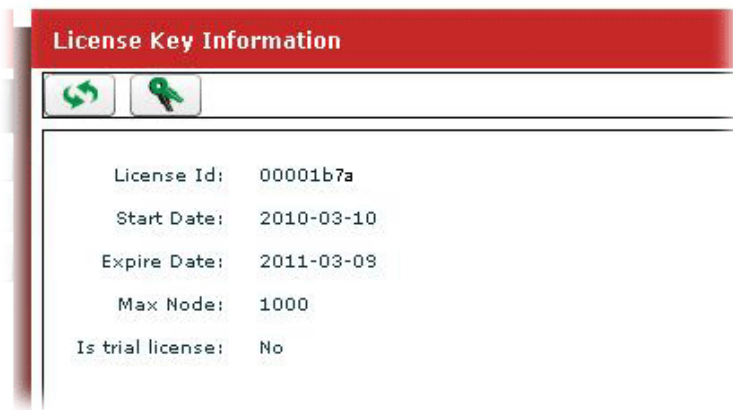
User Name : carrie_yfn
 Host ID :
 Activate Date : 2010-03-10
 Expired Date : 2011-03-09

| License Number / Host ID | Service Provider | Status | Nodes |
|--------------------------|------------------|--------|-------------------|
| FD234-B61E3-3676F-B37B7 | DT-ACS | valid | 1000 |
| | | | Total: 1000 nodes |

- When the following screen appears, it means the new license for VigorACS SI has been activated. Click **Login to VigorACS**.

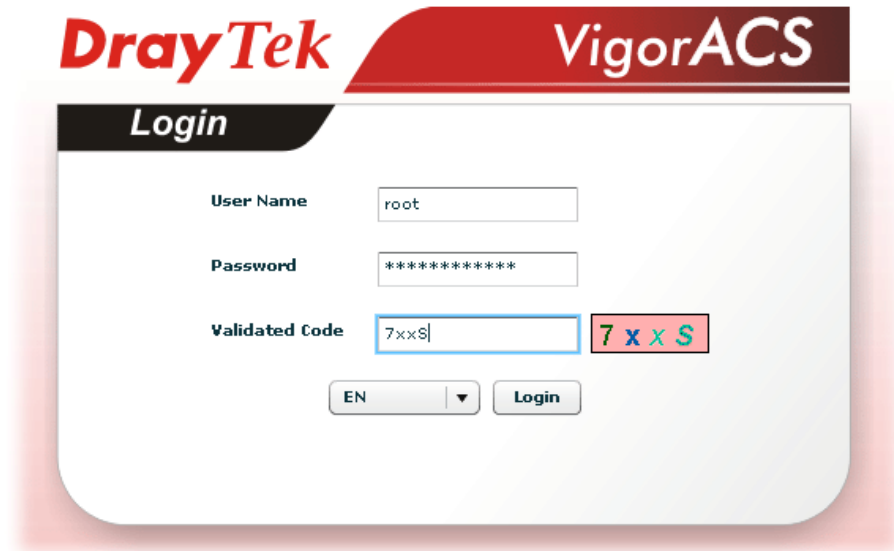


- Click **Login to ACS**. You will see the following screen with the new license information.



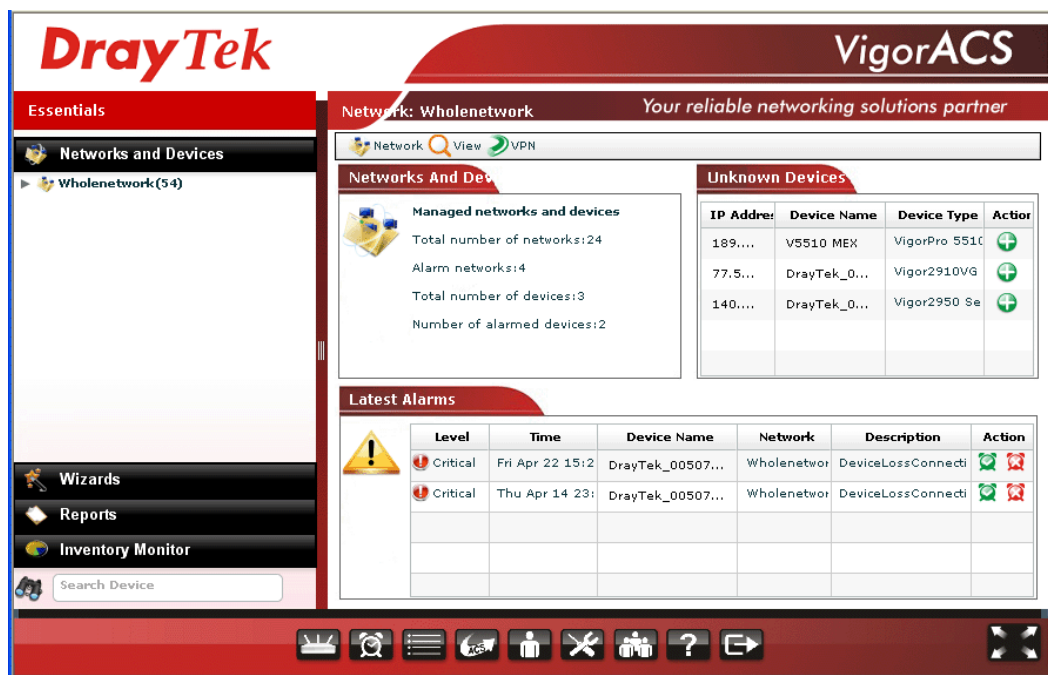
12.7.2 License Is Valid Still

1. Click **Programs> VigorACS SI> VigorACS Web Page** to access into VigorACS. The login page of VigorACS will be shown as the following:



The image shows the VigorACS login page. At the top, there is a red header with the DrayTek logo on the left and the VigorACS logo on the right. Below the header is a white login box with a black 'Login' tab. Inside the box, there are three input fields: 'User Name' with 'root' entered, 'Password' with '*****' entered, and 'Validated Code' with '7xXS' entered. To the right of the 'Validated Code' field is a red box containing the text '7 x x S'. Below the input fields are two buttons: 'EN' with a dropdown arrow and a 'Login' button.

2. Please type “root” as user name and “admin123” as password. Then click **Login**.

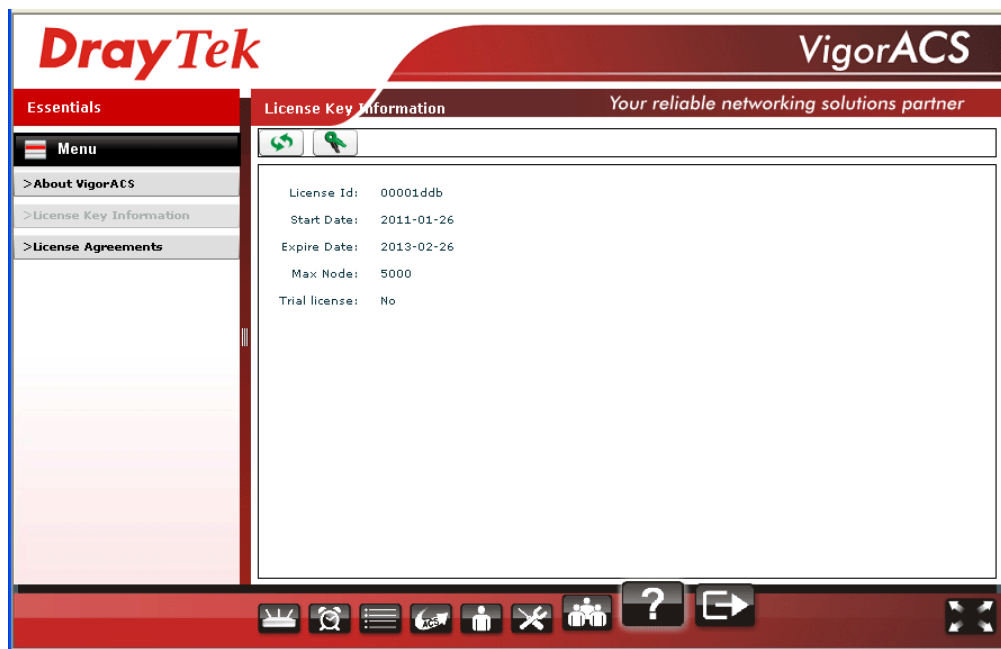



The image shows the VigorACS dashboard after login. The top header is red with the DrayTek logo on the left and the VigorACS logo on the right. Below the header is a navigation bar with 'Network: Wholenetwork' and 'Your reliable networking solutions partner'. The main content area is divided into several sections:

- Essentials:** A sidebar on the left with 'Networks and Devices' (Wholenetwork (54)), 'Wizards', 'Reports', and 'Inventory Monitor'.
- Networks And Dev:** A section showing 'Managed networks and devices' with statistics: Total number of networks:24, Alarm networks:4, Total number of devices:3, and Number of alarmed devices:2.
- Unknown Devices:** A table with columns: IP Address, Device Name, Device Type, and Action. It lists three devices: 189... (V5510 MEX, VigorPro 5510), 77.5... (DrayTek_0..., Vigor2910VG), and 140... (DrayTek_0..., Vigor2950 Se).
- Latest Alarms:** A table with columns: Level, Time, Device Name, Network, Description, and Action. It shows two critical alarms: 'DeviceLossConnecti' on Fri Apr 22 15:2 and Thu Apr 14 23:.

At the bottom of the dashboard is a red navigation bar with various icons for network management, search, and help.

3. Open **Help**.



4. Click  from License Key Information page.
5. The welcome screen will be shown as follows. Type the username and password, and click **Login**.



Please take a moment to register.
Membership Registration entitles you to upgrade firmware for your purchased product and receive news about upcoming products and services!

LOGIN

UserName :

Password :

Auth Code : 

If you cannot read the word, [click here](#)

[Forgotten password?](#)

Don't have a MyVigor Account ? [Create an account now](#)

If you are having difficulty logging in, contact our customer service.
Customer Service : (888) 3 597 2727 or

6. The following screen will appear. Find and click **Renew** for the service item of ACS.

My Product

Device Information
 Nickname : **carrie_yfm**
 Host ID :
 Model : **VigorACS**

| Service | Provider | Action | Status | Start Date | Expired Date | Nodes |
|---------|----------|--------------------------------------|--------|------------|--------------|-------|
| ACS | DT-ACS | <input type="button" value="Renew"/> | ● On | 2010-03-03 | 2010-04-02 | 20 |

● Means such service is in use.
● Means such service is not in use.
● Means such service has not been activated yet.
● Means such service is in use and will be invalid soon(less than one month).

Allows you to have the free trial for service.
 Allows you to renew service license.
 Allows you to activate service.

7. You will be guided to the following page. Type the new license number you purchase from the service provider in the corresponding field. And click **Add License**.

Apply For A License Number

Service Name: **ACS**
 Service Provider: **DT-ACS**

STEP 1

License Number :

Tip : Please ensure that the licence key you enter is for the correct (your preferred) service provider.

8. The new added license number will be displayed on the screen as shown below. Click **Next** for next page.

Apply For A License Number

Service Name: **ACS**
 Service Provider: **DT-ACS**

STEP 1

License Number :

Tip : Please ensure that the licence key you enter is for the correct (your preferred) service provider.

| Flag | License | Provider | Nodes | Status |
|------------------------------------|-------------------------|----------|-------|--------|
| <input type="button" value="del"/> | FD234-B61E3-3676F-B37B7 | DT-ACS | 1000 | valid |

- Check the box of “**I have read and accepted the above...**” and click **Next**.

Confirm Message Cancel

User Name : yfn
 Serial : 20100128013339
 Model : VigorACS

| License Number | Service Provider | Status | Nodes |
|-------------------------|------------------|--------|-------|
| FD234-B61E3-3676F-B37B7 | DT-ACS | valid | 1000 |

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I have read and accept the above Agreement. (Please check this box).

Next

- The activation date will be displayed automatically. Simply click **Next**.

Apply For A License Number Cancel

Service Name: ACS

STEP 2

Activation Date (MM-DD-YYYY): Next

- A confirm message page will be shown as follows. If there is no problem, please click **Confirm**.

Confirm Message

User Name : carrie_yfn
 Host ID :
 Activate Date : 2010-04-03
 Expired Date : 2011-04-02

| License Number / Host ID | Service Provider | Status | Nodes |
|--------------------------|------------------|--------|--------------------------|
| FD234-B61E3-3676F-B37B7 | DT-ACS | valid | 1000 |
| | | | Total: 1000 nodes |

12. When the following screen appears, it means the new license for VigorACS SI has been added. You can access into VigorACS.

VigorACS License Information

| | |
|------------------|---------------------------|
| Operation | 1000 : Service activation |
| License id | 00001b7a |
| Start date | 2010-03-03 |
| Expire date | 2010-04-02 |
| Max node | 00000020 |
| Is trial license | Yes |

Note: For the trial version is still in valid period, you will see VigorACS SI with two licenses controlled under My Vigor website.

When the trial version is expired, please click the **On** (with red light) button to activate the new added license for VigorACS SI.

Host ID :
Model : VigorACS

| Device's Service | | Expired License | | | | |
|------------------|----------|--------------------------------------|--------|------------|--------------|-------|
| Service | Provider | Action | Status | Start Date | Expired Date | Nodes |
| ACS | DT-ACS | <input type="button" value="Renew"/> | On | 2010-03-03 | 2010-04-02 | 20 |
| ACS | DT-ACS | <input type="button" value="Renew"/> | On | 2010-04-03 | 2011-04-02 | 1000 |

Trial Version

- Means such service is in use.
- Means such service is not in use.
- Means such service has not been activated yet.
- Means such service is in use and will be invalid soon(less than one month).

Allows you to have the free trial for service.
 Allows you to renew service license.
 Allows you to activate service.

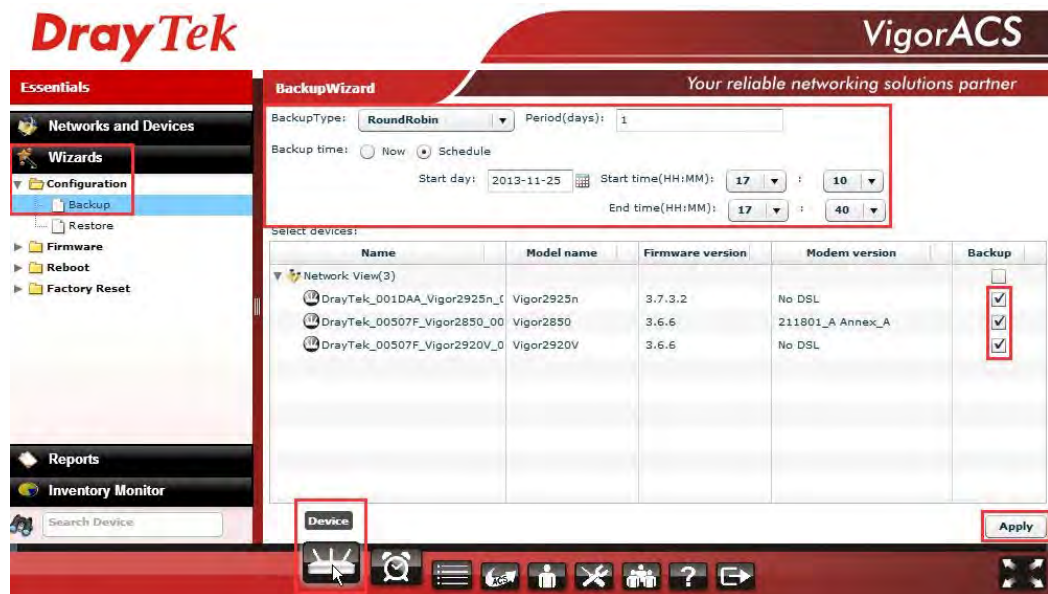
12.8 How to Backup CPE's Configuration via Wizards

Settings for several CPEs can be back up by VigorACS SI wizards. It can save time for it is very convenient to execute setting backup for the administrator.

1. Click the icon of **Device**.



2. Open **Wizards >> Configuration >> Backup**.



Determine the **Backup Type**. Here we use **RoundRobin** as an example. (RoundRobin: The file name will be tagged as 1~20. The system can save at most 20 files. The 21st file will cover the 1st file.)

Type the number you want as **Period (days)**. Here we use “1” as an example. It means backup configuration will be executed once a day. Then, choose the type of Backup time. Here we use **Schedule** as an example and set time with 17:10~17:40).

Choose the CPE(s) to apply the configuration backup by checking the Backup box(s).

3. After finished the above settings, click **Apply** to save the settings.
4. Click the icon of **Log**.



- Open **Device Action** >> **FileTransferLog**. We can see all of the specified CPEs have already finished backup configuration.

| LogID | DeviceID | DeviceName | MAC address | DeviceIP | Type | Status | Event | FirmwareUp |
|-------|----------|--------------------------|--------------|---------------|--------|---------|---------|------------|
| 29 | 12 | DrayTek_00507F_Vigor2850 | 00507FE83088 | 118.160.95.20 | Backup | Success | Nothing | 0 |
| 28 | 11 | DrayTek_00507F_Vigor2920 | 00507FC9962C | 118.160.86.54 | Backup | Success | Nothing | 0 |
| 27 | 10 | DrayTek_001DAA_Vigor2925 | 001DAAAC96F8 | 192.168.106.1 | Backup | Success | Nothing | 0 |

- Check where the configurations are saved. Click the icon of **Provision**.



- Open **General** >> **Upload File**. Three entries named by MAC addresses are displayed under **Filename**. Each CPE's configuration is saved in its folder.

| Filename | Property | Size | LastModify | Di |
|----------------|-----------|------|---------------------|-------------|
| .. | Directory | 4096 | 2013/11/22 17:08:01 | . |
| . | Directory | 4096 | 2013/11/25 16:28:00 | ./RootGroup |
| SharedFirmware | Directory | 4096 | 2013/11/25 16:29:07 | ./RootGroup |
| 00507FC9962C | Directory | 4096 | 2013/11/25 17:19:48 | ./RootGroup |
| 00507FE83088 | Directory | 4096 | 2013/11/25 17:20:37 | ./RootGroup |
| 001DAAAC96F8 | Directory | 4096 | 2013/11/25 17:19:48 | ./RootGroup |

Double-click on one of the entries named by MAC address, the configuration file (named with 1.cfg) for the selected entry will be displayed on the screen.

| Filename | Property | Size | LastModify | Directory |
|----------|-----------|------|---------------------|--------------------------|
| .. | Directory | 4096 | 2013/11/25 16:28:00 | ./RootGroup |
| . | Directory | 4096 | 2013/11/25 17:19:48 | ./RootGroup/00507FC9962C |
| 1.cfg | cfg file | 6376 | 2013/11/25 17:19:48 | ./RootGroup/00507FC9962C |

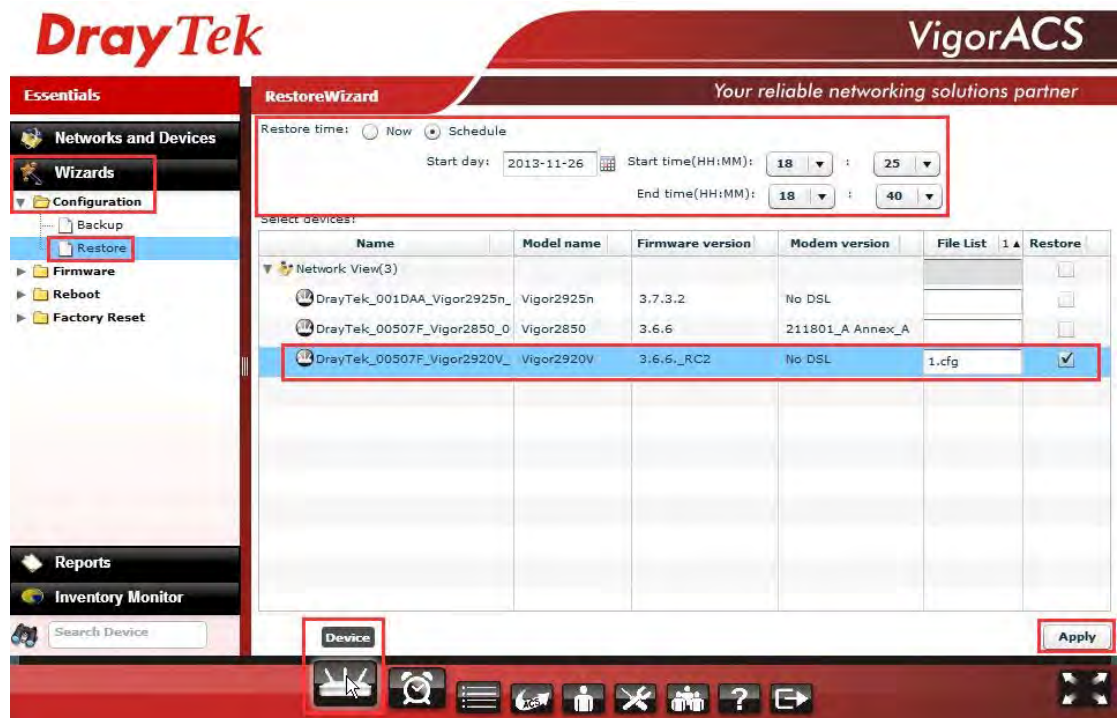
12.9 How to Restore CPE's Configuration via Wizards

Settings for several CPEs can be restored by VigorACS SI wizards. It can save time for it is very convenient to execute setting restoration for the administrator.

1. Click the icon of **Device**.



2. Open **Wizards >> Configuration >> Restore**.



Choose the type of **Restore time**. Here we use **Schedule** as an example and set time with 18:25~18:40).

Choose the model (e.g., Vigor2920 in this example) you want to restore the configuration file for it. Use the File List drop down list to select the configuration file you want (here we choose "1.cfg" file). Then, check the **Restore** box.

3. After finished the above settings, click **Apply** to save the settings.
4. Click the icon of **Log**.



- Open **Device Action** >> **FileTransferLog**. We can see LogID: 32 indicating that Vigor2920 has successfully restored the configuration.

| FileTransferLog | | | | | | | | |
|-----------------|----------|------------------------------|--------------|----------------|---------|---------|---------|------|
| | | | | | | | | |
| LogID | DeviceID | DeviceName | MAC address | DeviceIP | Type | Status | Event | Time |
| 32 | 11 | DrayTek_00507F_Vigor2920V... | 00507FC9962C | 118.160.93.20 | Restore | Success | Nothing | 0 |
| 31 | 10 | DrayTek_001DAA_Vigor2925n... | 001DAAAC96F8 | 192.168.106.1 | Backup | Success | Nothing | 0 |
| 30 | 12 | DrayTek_00507F_Vigor2850_00 | 00507FE83088 | 118.160.89.151 | Backup | Success | Nothing | 0 |
| 29 | 12 | DrayTek_00507F_Vigor2850_00 | 00507FE83088 | 118.160.89.151 | Backup | Success | Nothing | 0 |
| 28 | 11 | DrayTek_00507F_Vigor2920V... | 00507FC9962C | 118.160.93.20 | Backup | Success | Nothing | 0 |
| 27 | 10 | DrayTek_001DAA_Vigor2925n... | 001DAAAC96F8 | 192.168.106.1 | Backup | Success | Nothing | 0 |
| | | | | | | | | |
| | | | | | | | | |

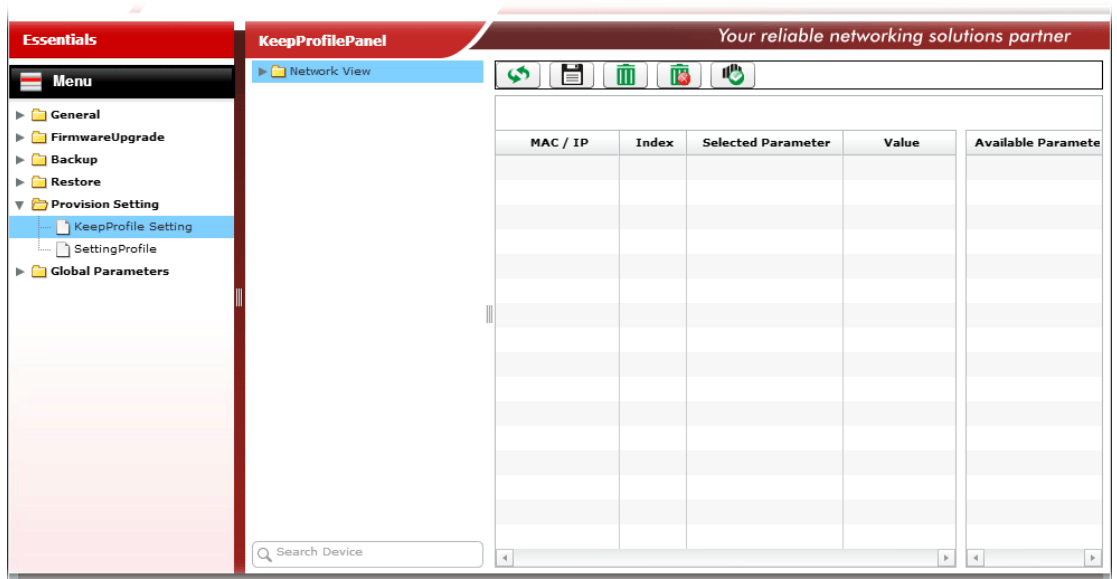
12.10 How to apply KeepProfile Setting in Provision for a New CPE

Suppose VigorACS SI has made KeepProfile configuration for a CPE. Later, due to some reason, the CPE is replaced by another CPE with the same model. The administrator can use KeepProfile setting to maintain some parameters of the new CPE the same as the old one.

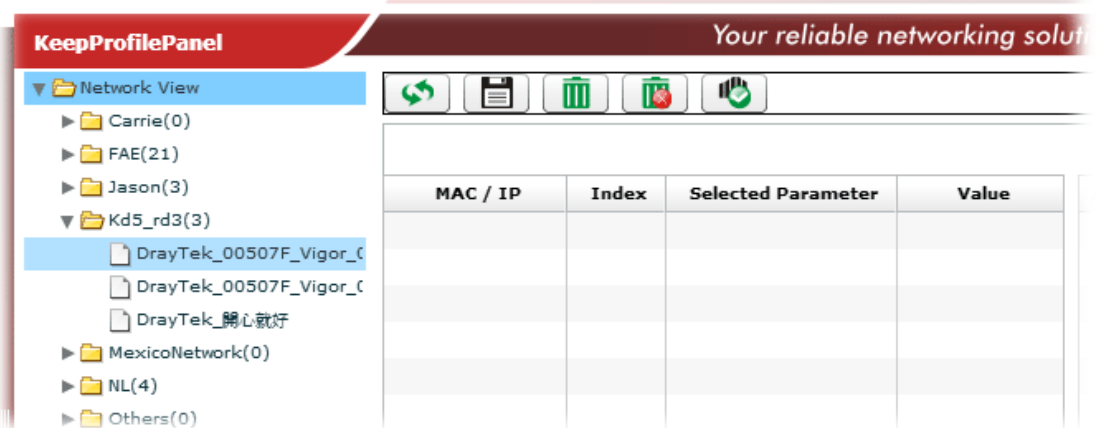
1. Click the icon of **Provision**.



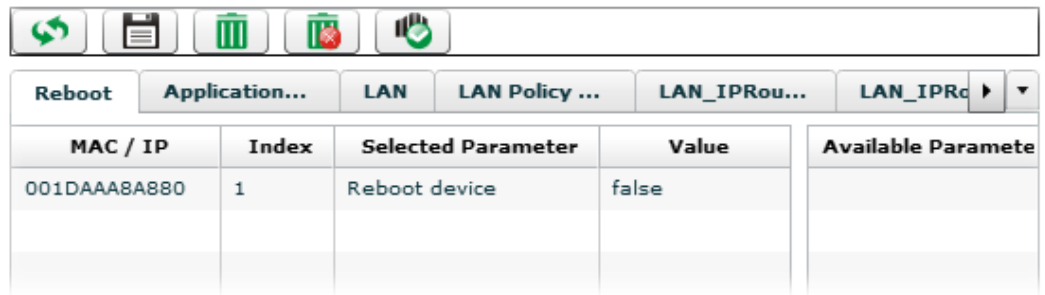
2. Open **Provision Setting>>KeepProfile Setting**.



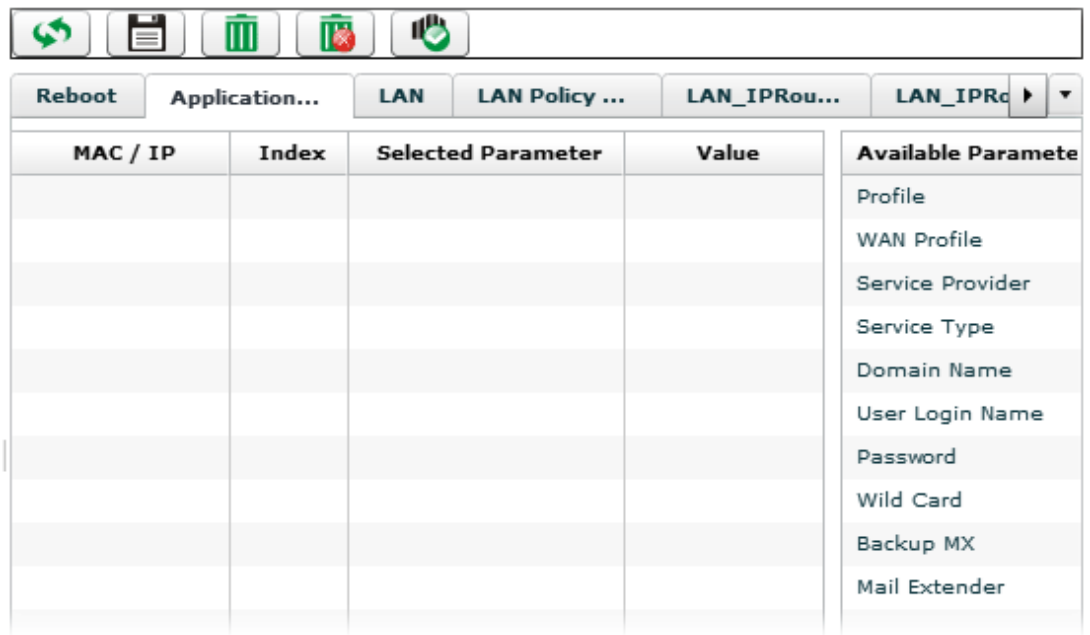
3. Expand **Network View** by clicking the triangle and locate the new CPE.



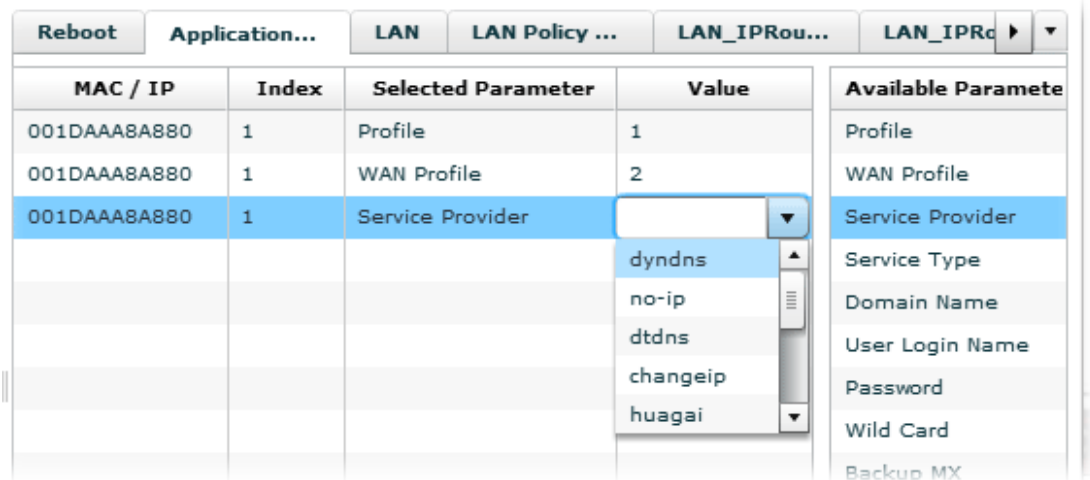
4. Double click the CPE you want. Wait for a moment until the menu tabs displayed.



5. Click the menu tab needed to be modified, e.g., Application in this case.



6. On the **Available Parameter** field, double click the one you want to modify (e.g., Service Provider in this case). Related settings will be displayed on the screen. All you have to do is changing the value.



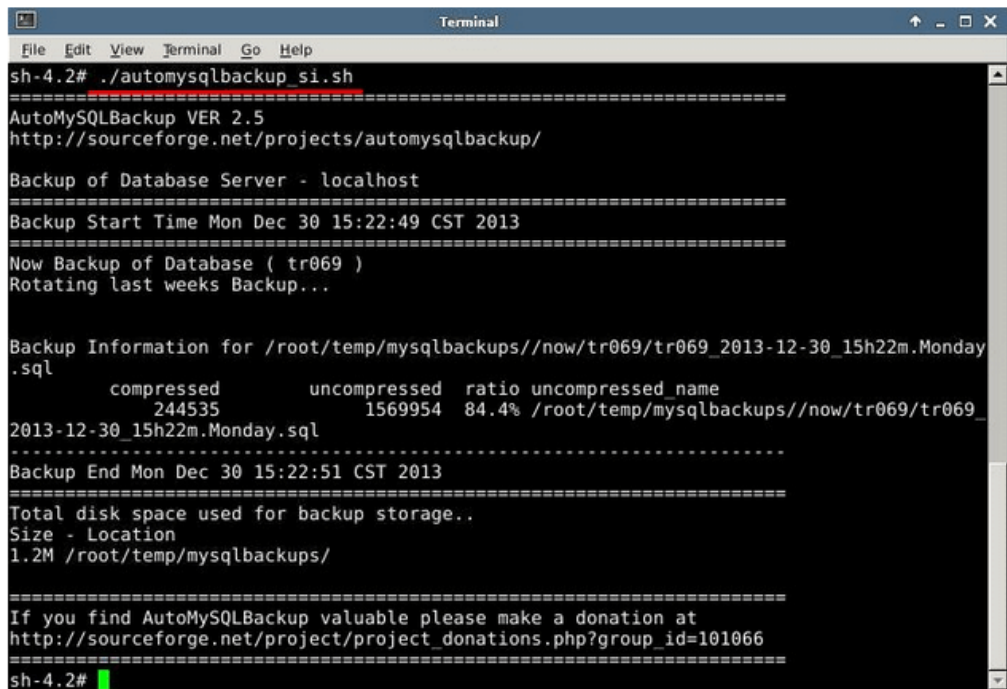
- After you finished the parameter modification, click **Save** to save the modification.

The screenshot shows a web interface with a toolbar at the top containing icons for Refresh, Save, Delete, Add, and Check. Below the toolbar is a navigation menu with buttons for Reboot, Save, LAN, LAN Policy..., LAN_IPRou..., and LAN_IPRc. The main content area features a table with the following data:

| MAC / IP | Index | Selected Parameter | Value | Available Paramete |
|--------------|-------|--------------------|--------|--------------------|
| 001DAAA8A880 | 1 | Profile | 1 | Profile |
| 001DAAA8A880 | 1 | WAN Profile | 2 | WAN Profile |
| 001DAAA8A880 | 1 | Service Provider | dyndns | Service Provider |
| | | | | Service Type |
| | | | | Domain Name |
| | | | | User Login Name |
| | | | | Password |
| | | | | Wild Card |

- Now, even anyone changed the service provider of the CPE remotely, VigorACS will restore the settings configured here for that CPE automatically.

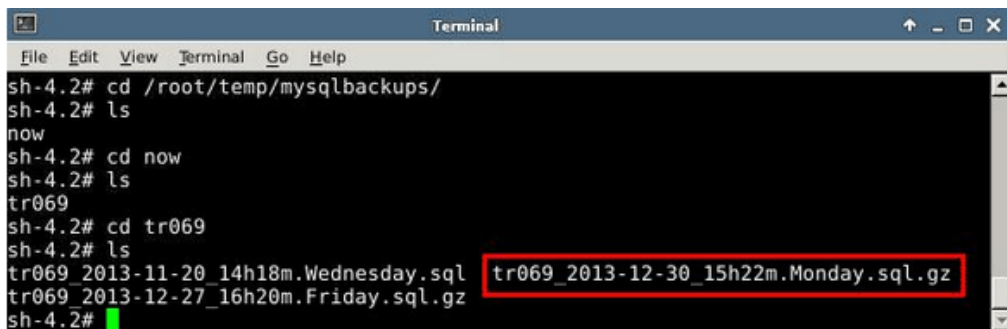
3. Run `"automysqlbackup_si.sh"` to back up database.



```
sh-4.2# ./automysqlbackup_si.sh
=====
AutoMySQLBackup VER 2.5
http://sourceforge.net/projects/automysqlbackup/
=====
Backup of Database Server - localhost
=====
Backup Start Time Mon Dec 30 15:22:49 CST 2013
=====
Now Backup of Database ( tr069 )
Rotating last weeks Backup...

Backup Information for /root/temp/mysqlbackups//now/tr069/tr069_2013-12-30_15h22m.Monday
.sql
      compressed      uncompressed  ratio uncompressed_name
-----
      244535           1569954   84.4% /root/temp/mysqlbackups//now/tr069/tr069_
2013-12-30_15h22m.Monday.sql
-----
Backup End Mon Dec 30 15:22:51 CST 2013
=====
Total disk space used for backup storage..
Size - Location
1.2M /root/temp/mysqlbackups/
=====
If you find AutoMySQLBackup valuable please make a donation at
http://sourceforge.net/project/project_donations.php?group_id=101066
=====
sh-4.2#
```

4. Check the backup file just created.



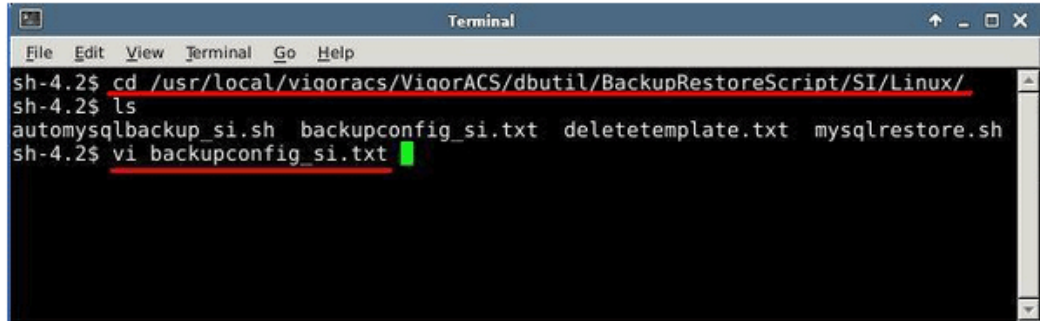
```
sh-4.2# cd /root/temp/mysqlbackups/
sh-4.2# ls
now
sh-4.2# cd now
sh-4.2# ls
tr069
sh-4.2# cd tr069
sh-4.2# ls
tr069_2013-11-20_14h18m.Wednesday.sql  tr069_2013-12-30_15h22m.Monday.sql.gz
tr069_2013-12-27_16h20m.Friday.sql.gz
sh-4.2#
```


12.11.2 For Linux Platform – Backup by Schedule

1. Enter the path and edit the file “backupconfig_si.txt”.

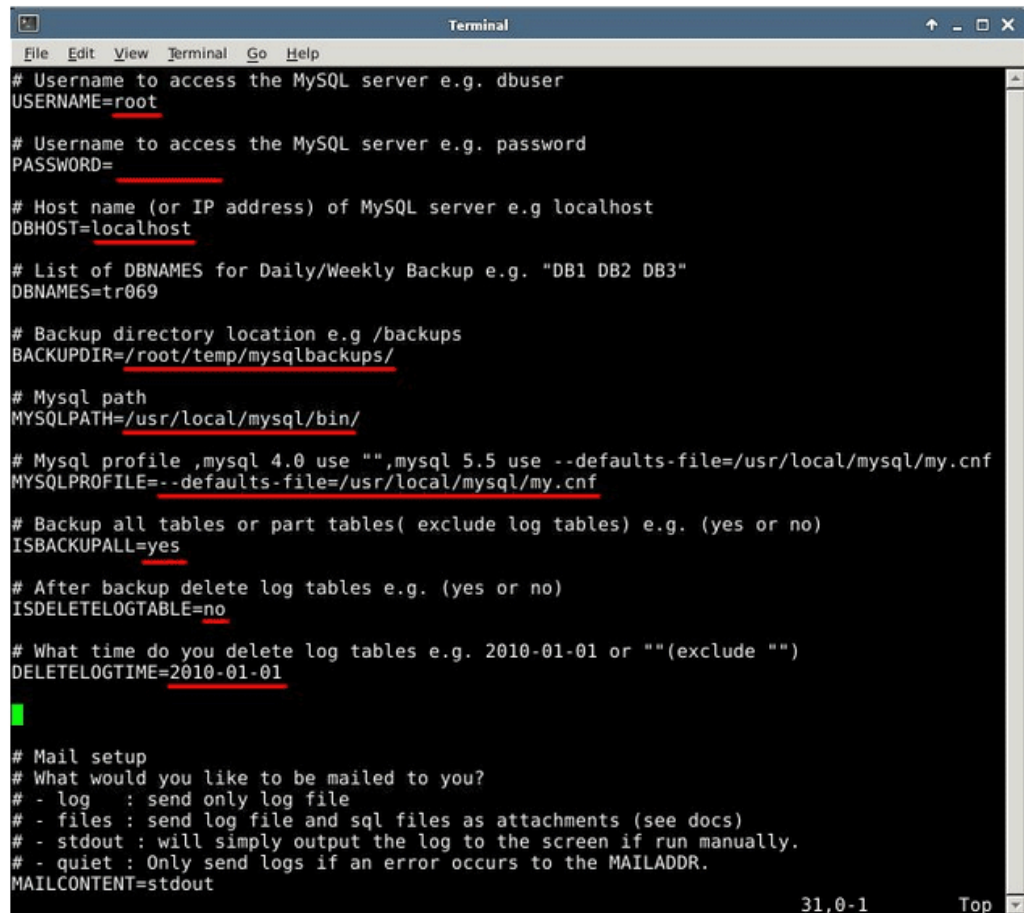
Path: /usr/local/vigoracs/VigorACS/dbutil/BackupRestoreScript/SI/Linux/

Command: # vi backupconfig_si.txt



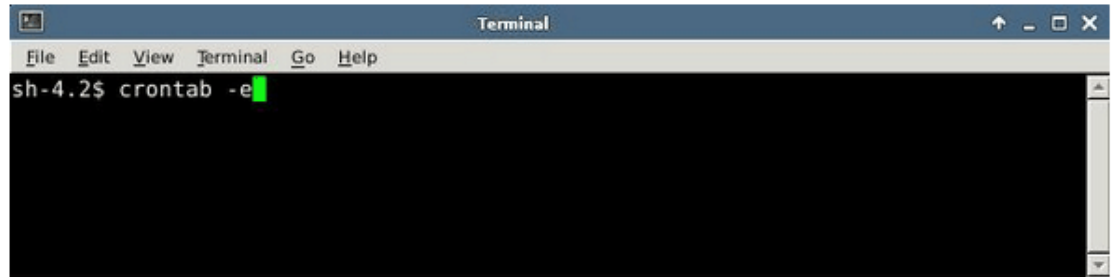
```
Terminal
File Edit View Terminal Go Help
sh-4.2$ cd /usr/local/vigoracs/VigorACS/dbutil/BackupRestoreScript/SI/Linux/
sh-4.2$ ls
automysqlbackup_si.sh backupconfig_si.txt deletetemplate.txt mysqlrestore.sh
sh-4.2$ vi backupconfig_si.txt
```

2. Confirm the parameters with red underlines are correct. Please create the backup directory (/root/temp/mysqlbackups) first if you don't have.



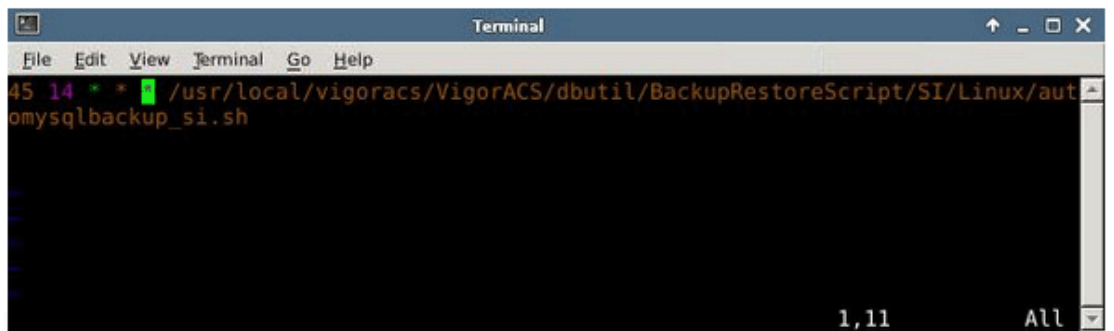
```
Terminal
File Edit View Terminal Go Help
# Username to access the MySQL server e.g. dbuser
USERNAME=root
# Username to access the MySQL server e.g. password
PASSWORD=
# Host name (or IP address) of MySQL server e.g. localhost
DBHOST=localhost
# List of DBNAMES for Daily/Weekly Backup e.g. "DB1 DB2 DB3"
DBNAMES=tr069
# Backup directory location e.g /backups
BACKUPDIR=/root/temp/mysqlbackups/
# Mysql path
MYSQLPATH=/usr/local/mysql/bin/
# Mysql profile ,mysql 4.0 use "",mysql 5.5 use --defaults-file=/usr/local/mysql/my.cnf
MYSQLPROFILE=--defaults-file=/usr/local/mysql/my.cnf
# Backup all tables or part tables( exclude log tables) e.g. (yes or no)
ISBACKUPALL=yes
# After backup delete log tables e.g. (yes or no)
ISDELETELOGTABLE=no
# What time do you delete log tables e.g. 2010-01-01 or ""(exclude "")
DELETELOGTIME=2010-01-01
#
# Mail setup
# What would you like to be mailed to you?
# - log : send only log file
# - files : send log file and sql files as attachments (see docs)
# - stdout : will simply output the log to the screen if run manually.
# - quiet : Only send logs if an error occurs to the MAILADDR.
MAILCONTENT=stdout
31,0-1 Top
```

3. Set up the file “crontab -e”. Input the command “crontab -e”.



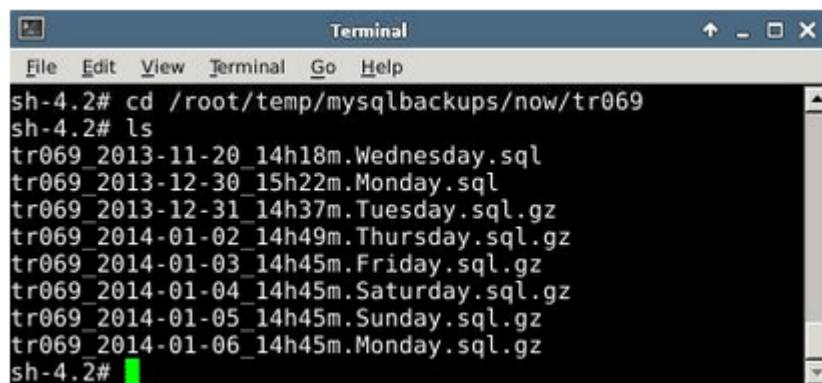
```
Terminal
File Edit View Terminal Go Help
sh-4.2$ crontab -e
```

Enter the value “45 14 * * *
/usr/local/vigoracs/VigorACS/dbutil/BackupRestoreScript/SI/Linux/automysqlbackup_si.sh”, which means we will back up ACS SI once a day at 14:45.



```
Terminal
File Edit View Terminal Go Help
45 14 * * * /usr/local/vigoracs/VigorACS/dbutil/BackupRestoreScript/SI/Linux/automysqlbackup_si.sh
1,11 All
```

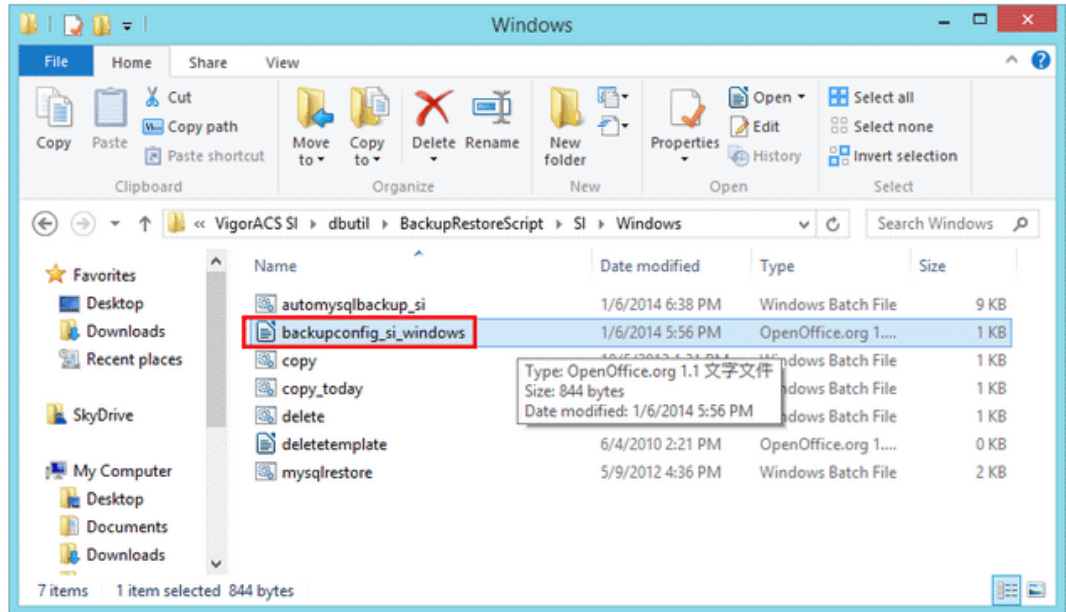
4. Check the file just created.



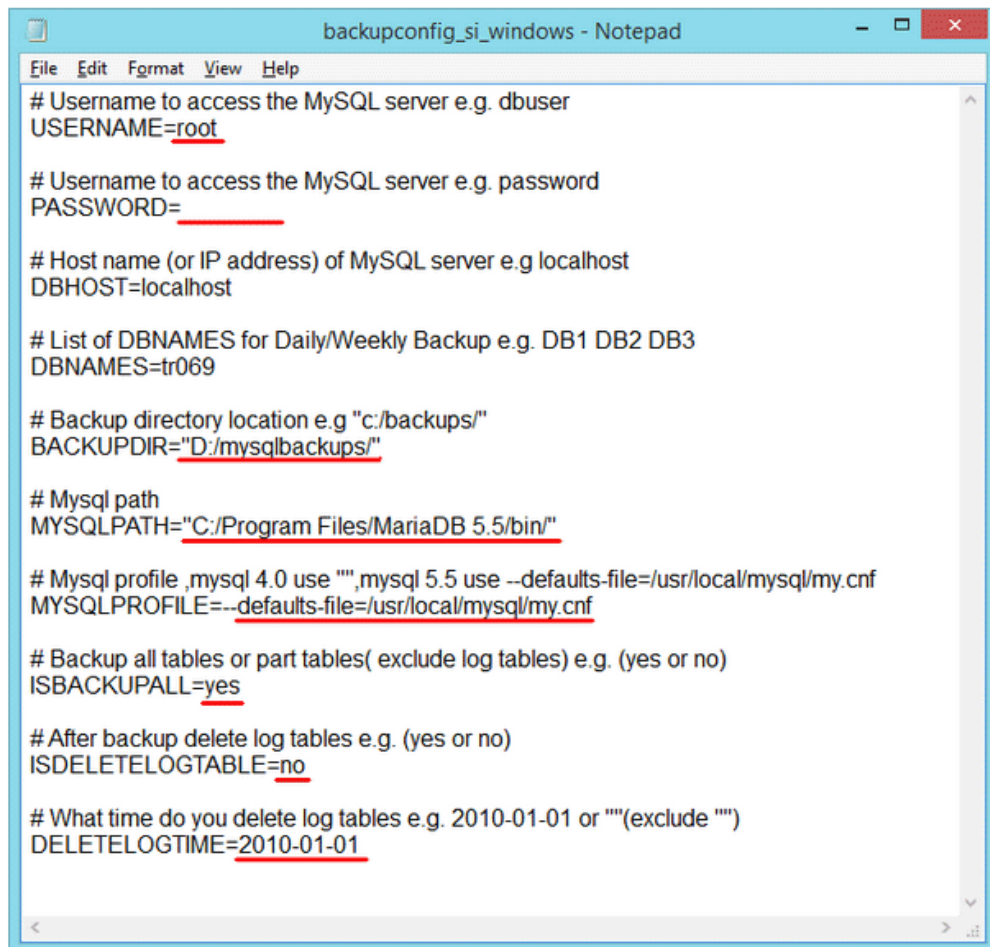
```
Terminal
File Edit View Terminal Go Help
sh-4.2# cd /root/temp/mysqlbackups/now/tr069
sh-4.2# ls
tr069_2013-11-20_14h18m.Wednesday.sql
tr069_2013-12-30_15h22m.Monday.sql
tr069_2013-12-31_14h37m.Tuesday.sql.gz
tr069_2014-01-02_14h49m.Thursday.sql.gz
tr069_2014-01-03_14h45m.Friday.sql.gz
tr069_2014-01-04_14h45m.Saturday.sql.gz
tr069_2014-01-05_14h45m.Sunday.sql.gz
tr069_2014-01-06_14h45m.Monday.sql.gz
sh-4.2#
```


12.11.3 For Windows Platform – Backup Instantly

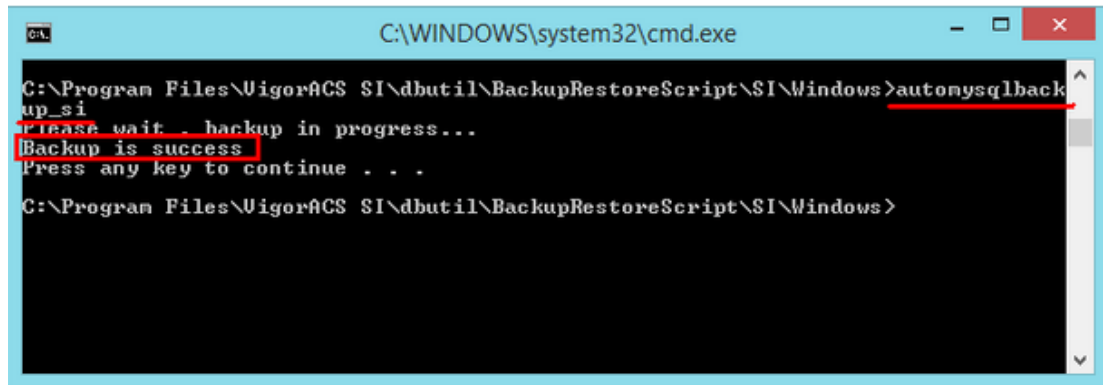
1. Edit file “backupconfig_si_windows.txt”.



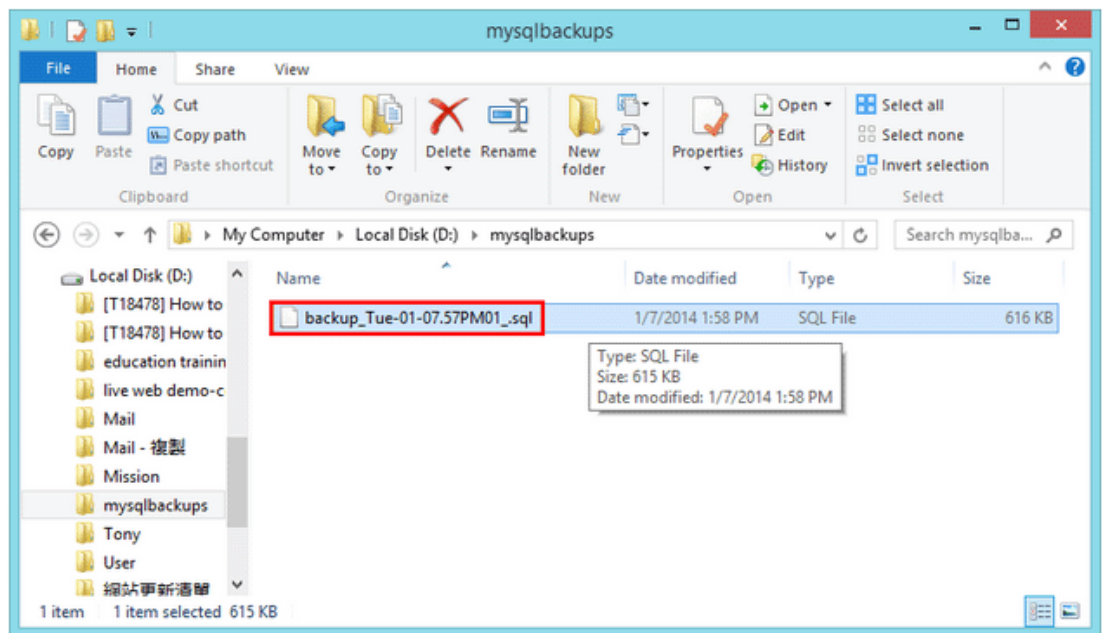
2. Confirm the parameters with red underlines are correct.



3. Run "automysqlbackup_si.sh" to back up database.

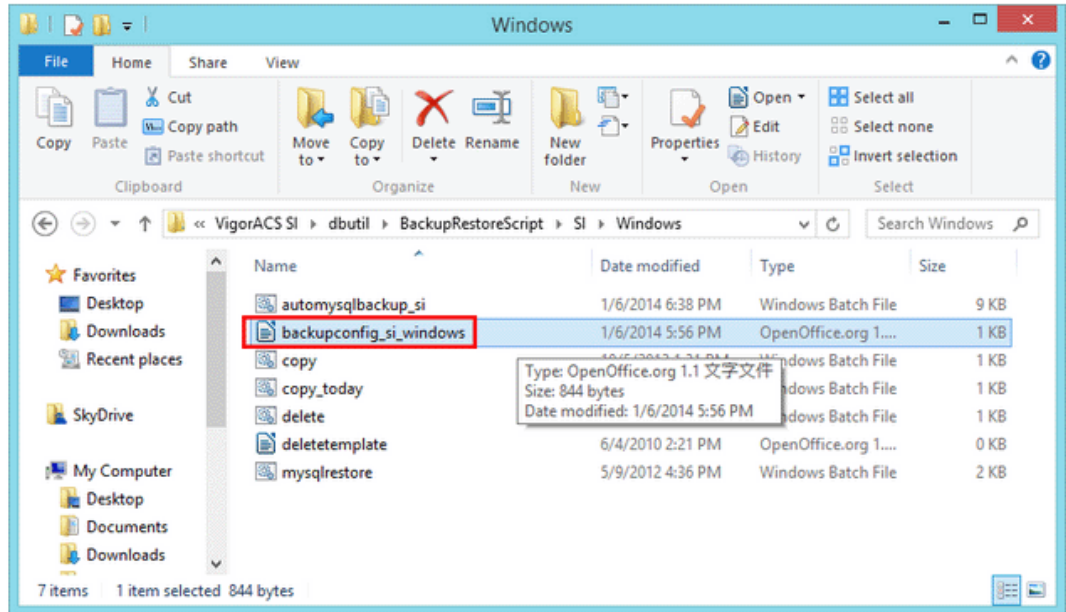


4. Check the backup file just created.

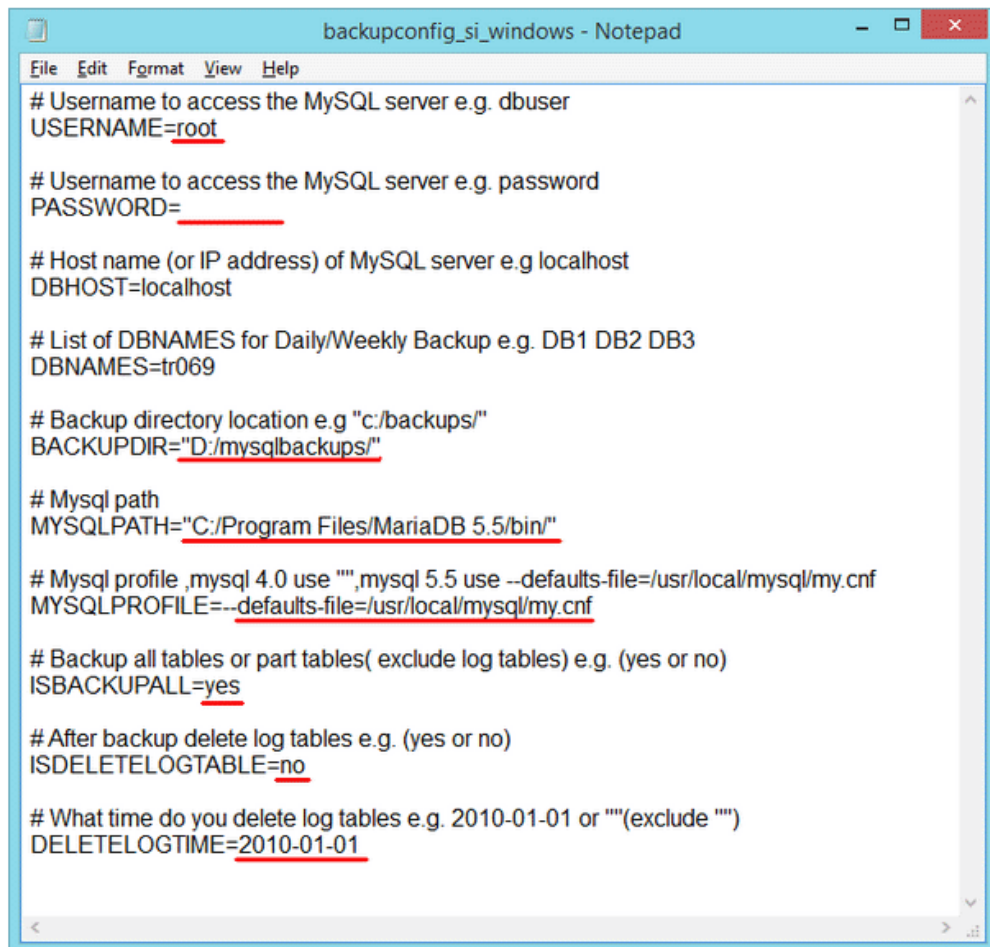


12.11.4 For Windows Platform – Backup by Schedule

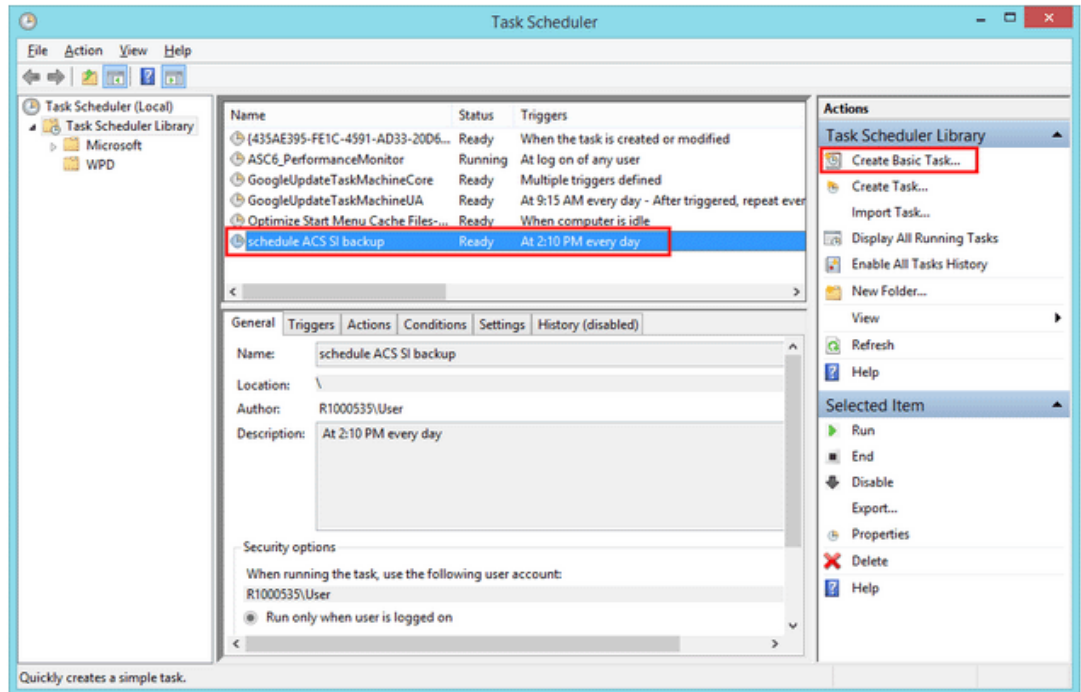
1. Edit file “backupconfig_si_windows.txt”.



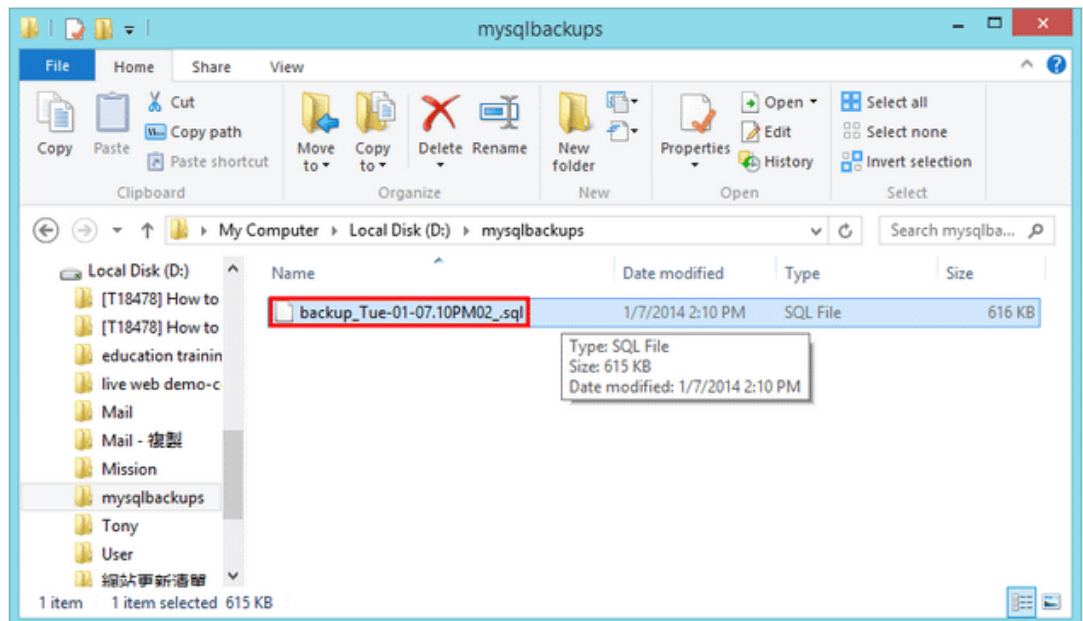
2. Confirm the parameters with red underlines are correct.



3. Create an ACS SI backup Task. In the following example we create a task to back up ACS SI once a day at 14:10.



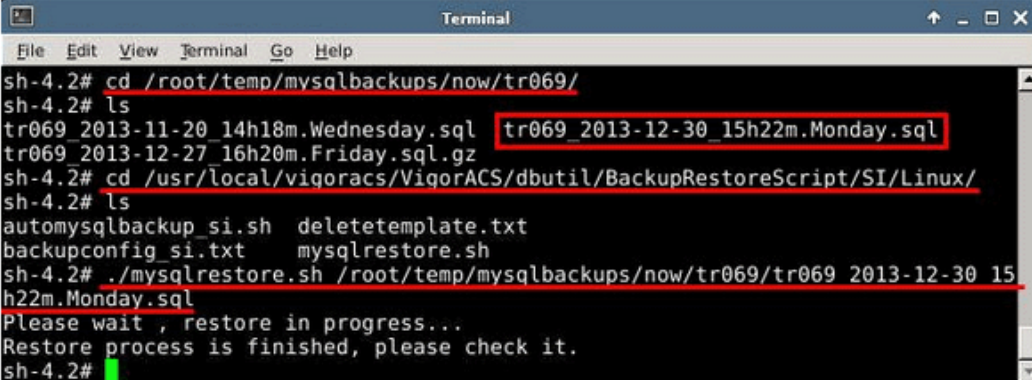
4. Check the file just created.



12.12 How to Restore the Database of VigorACS SI

For Linux Platform

1. Check your backup file path and name that you want to restore.
Note: If your file extension is “.gz”, please decompress it first. For example:
file path: /root/temp/mysqlbackups/now/tr069/
file name: tr069_2013-12-30_15h22m.Monday.sql
2. Change the path into “/usr/local/vigoracs/VigorACS/dbutil/BackupRestoreScript/SI/Linux”.
3. Run "mysqlrestore.sh" to restore VigorACS SI database.
command: # ./mysqlrestore.sh
/root/temp/mysqlbackups/now/tr069/tr069_2013-12-30_15h22m.Monday.sql
4. Check the restore status.
5. You will see “Restore process is finished, please check it”.



```
Terminal
File Edit View Terminal Go Help
sh-4.2# cd /root/temp/mysqlbackups/now/tr069/
sh-4.2# ls
tr069_2013-11-20_14h18m.Wednesday.sql tr069_2013-12-30_15h22m.Monday.sql
tr069_2013-12-27_16h20m.Friday.sql.gz
sh-4.2# cd /usr/local/vigoracs/VigorACS/dbutil/BackupRestoreScript/SI/Linux/
sh-4.2# ls
automysqlbackup_si.sh deletetemplate.txt
backupconfig_si.txt mysqlrestore.sh
sh-4.2# ./mysqlrestore.sh /root/temp/mysqlbackups/now/tr069/tr069_2013-12-30_15h22m.Monday.sql
Please wait , restore in progress...
Restore process is finished, please check it.
sh-4.2#
```

For Windows Platform

1. Check your backup file path and name (of VigorACS SI) that you want to restore. For example,
file path: D:\mysqlbackups\
file name: backup_Tue-01-07.57PM01_.sql
2. Change the path into
“C:\Program Files\VigorACS SI\dbutil\BackupRestoreScript\SI\Windows”.
3. Run "mysqlrestore.sh" to restore database.
4. Check the restore status. You will see “Restore process is finished, please check it”.

```
C:\WINDOWS\system32\cmd.exe
C:\Program Files\UigorACS SI\dbutil\BackupRestoreScript\SI\Windows>dir
Volume in drive C has no label.
Volume Serial Number is A202-D3A6

Directory of C:\Program Files\UigorACS SI\dbutil\BackupRestoreScript\SI\Windows

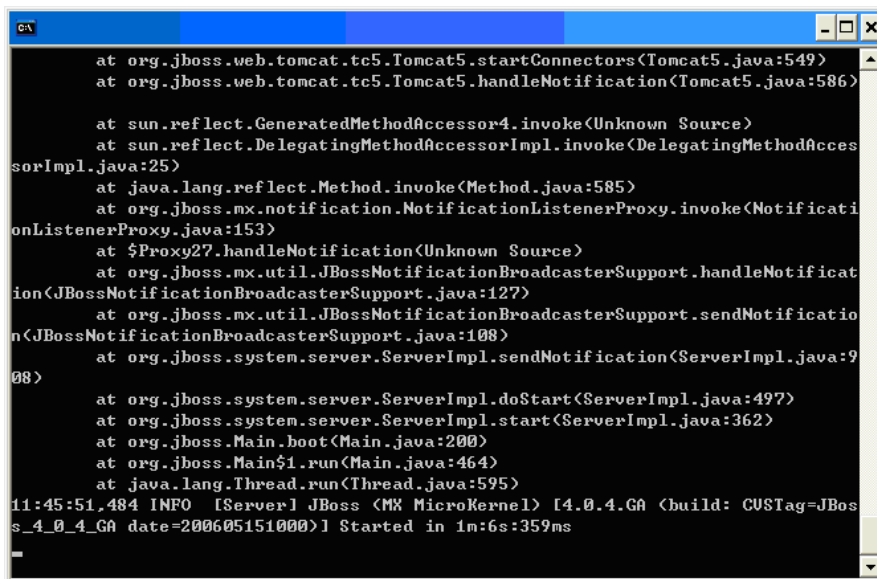
01/06/2014  06:38 PM    <DIR>          .
01/06/2014  06:38 PM    <DIR>          ..
01/07/2014  01:55 PM           8,674  automysqlbackup_si.bat
01/06/2014  05:56 PM           844  backupconfig_si_windows.txt
10/05/2012  01:31 PM           138  copy.bat
10/05/2012  03:05 PM           204  copy_today.bat
10/05/2012  01:30 PM           169  delete.bat
06/04/2010  02:21 PM            0  deletetemplate.txt
05/09/2012  04:36 PM           1,190  mysqlrestore.bat
              7 File(s)           11,219 bytes
              2 Dir(s)  61,779,529,728 bytes free

C:\Program Files\UigorACS SI\dbutil\BackupRestoreScript\SI\Windows>mysqlrestore.
bat D:\mysqlbackups\backup_Tue-01-07.57PM01_.sql
Please wait , restore in progress...
Restore process is finished, please check it.
Press any key to continue . . .
```


Chapter 13 Trouble Shooting

This appendix will guide you to solve abnormal situations if you cannot access into the Internet after installing the router and finishing the web configuration. Please follow sections below to check your basic installation status stage by stage.

When you try to invoke VigorACS and get the following error message, please locate the file of “*server.log*” from **C:/Program Files/VigorACS SI/server/default/log** and send the file to your dealer for further assistance.



```
at org.jboss.web.tomcat.tc5.Tomcat5.startConnectors(Tomcat5.java:549)
at org.jboss.web.tomcat.tc5.Tomcat5.handleNotification(Tomcat5.java:586)

at sun.reflect.GeneratedMethodAccessor4.invoke(Unknown Source)
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccess
sorImpl.java:25)
at java.lang.reflect.Method.invoke(Method.java:585)
at org.jboss.mx.notification.NotificationListenerProxy.invoke(NotificationLi
stenerProxy.java:153)
at $Proxy27.handleNotification(Unknown Source)
at org.jboss.mx.util.JBossNotificationBroadcasterSupport.handleNotificat
ion(JBossNotificationBroadcasterSupport.java:127)
at org.jboss.mx.util.JBossNotificationBroadcasterSupport.sendNotificatio
n(JBossNotificationBroadcasterSupport.java:108)
at org.jboss.system.server.ServerImpl.sendNotification(ServerImpl.java:9
08)

at org.jboss.system.server.ServerImpl.doStart(ServerImpl.java:497)
at org.jboss.system.server.ServerImpl.start(ServerImpl.java:362)
at org.jboss.Main.boot(Main.java:200)
at org.jboss.Main$1.run(Main.java:464)
at java.lang.Thread.run(Thread.java:595)
11:45:51,484 INFO [Server] JBoss (MX MicroKernel) [4.0.4.GA (build: CVSTag=JBoss
_4_0_4_GA date=200605151000)] Started in 1m:6s:359ms
```

For Linux system, please locate the file of “*server.log*” from **/usr/local/vigoracs/VigorACS/server/default/log/** and send the file to your dealer for further assistance.

13.1 Contacting DrayTek

If the router 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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Chapter 14 Reference Information

14.1 For Linux System

Corresponding files on Linux system required for VigorACS will be stored in the following paths:

```
java: /usr/local/jdk1.5.0_07
mysql: /usr/local/mysql
vigoracs: /usr/local/vigoracs/VigorACS/

log: /usr/local/vigoracs/VigorACS/server/default/log/server.log
bind ip: /usr/local/vigoracs/VigorACS/bin/startway.txt
mysql data: /usr/local/mysql/data/tr069
start/stop vigoracs : /usr/local/vigoracs/VigorACS/bin/vigoracs.sh
```

To check the current process of VigorACS, please use the following commands to inquire

```
ps(vigoracs): ps -ef | grep "/usr/javase/bin/java -server" |grep -v grep
ps(mysql): ps -ef | grep safe_mysql|grep -v grep
or
ps -ef | grep mysqld_safe|grep -v grep
```

Some link files are required for VigorACS running under Linux system properly. If any one of them is missed, unexpected problems might be happened.

```
ln(java): /usr/javase >> /usr/local/jdk1.5.0_07/
ln(mysql): /usr/local/mysql >> /usr/local/mysql-5.1.41-linux-i686-glibc23
ln(mysql): /tmp/mysql.sock >> /var/lib/mysql/mysql.sock
```

14.2 For Windows XP System

Corresponding files on Windows XP system required for VigorACS will be stored in the following paths:

```
java: C:\Program Files\Java\jdk1.5.0_07
mysql: C:\mysql
vigoracs: C:\Program Files\VigorACS SI

log: C:\Program Files\VigorACS SI\server\default\log\server.log
license key: C:\Program Files\VigorACS SI version\license.key
bind ip: C:\Program Files\VigorACS SI\bin\bindip.txt
mysql data: C:\mysql\data\tr069
start vigoracs : C:\Program Files\VigorACS SI\bin\StartVigorACS.bat
stop vigoracs : C:\Program Files\VigorACS SI\bin\ShutdownVigorACS.bat
```

