

ZyXEL ENC

Enterprise Network Center

Network Management

Support Notes

Version FCS
August 2010



INDEX

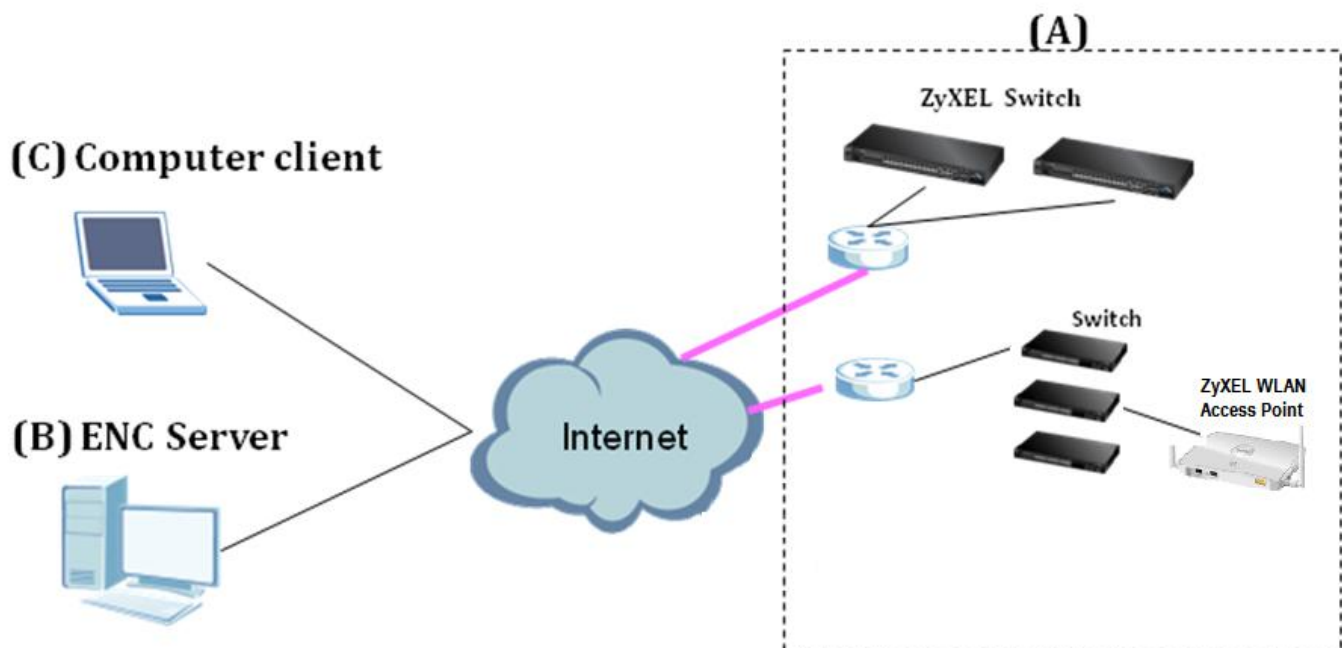
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Product Application Diagram

General Application Notes

ZyXEL Enterprise Network Center (ENC) is a Centralized Network Management tool for supporting ZyXEL Ethernet switches and Enterprise WLAN access points.

ENC allows multiple network administrators to monitor and manage up to 1000 (A) ZyXEL Enterprise Ethernet switches and Enterprise access points. The administrator can perform management through the ENC server (B) itself or through another computer (C).



Product Operation Scenario

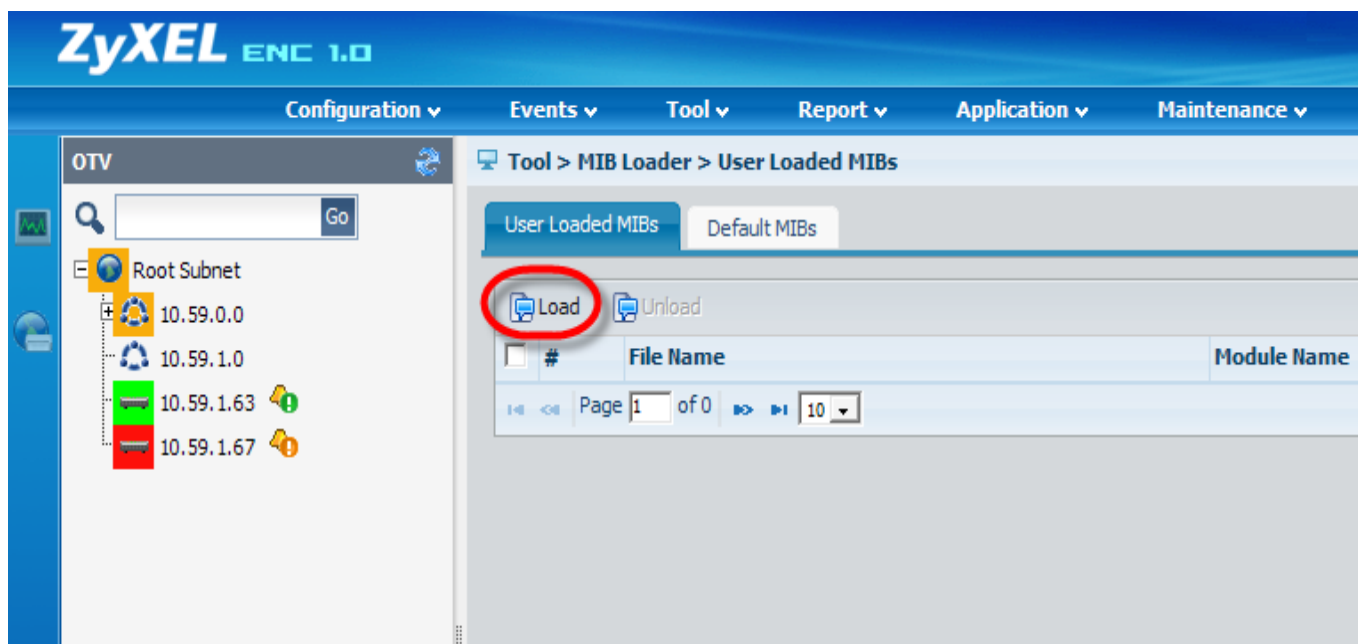
This chapter provides some examples of using the Web Configuration to set up the common Administrator scenarios.

Flexibility to manage un-specific products

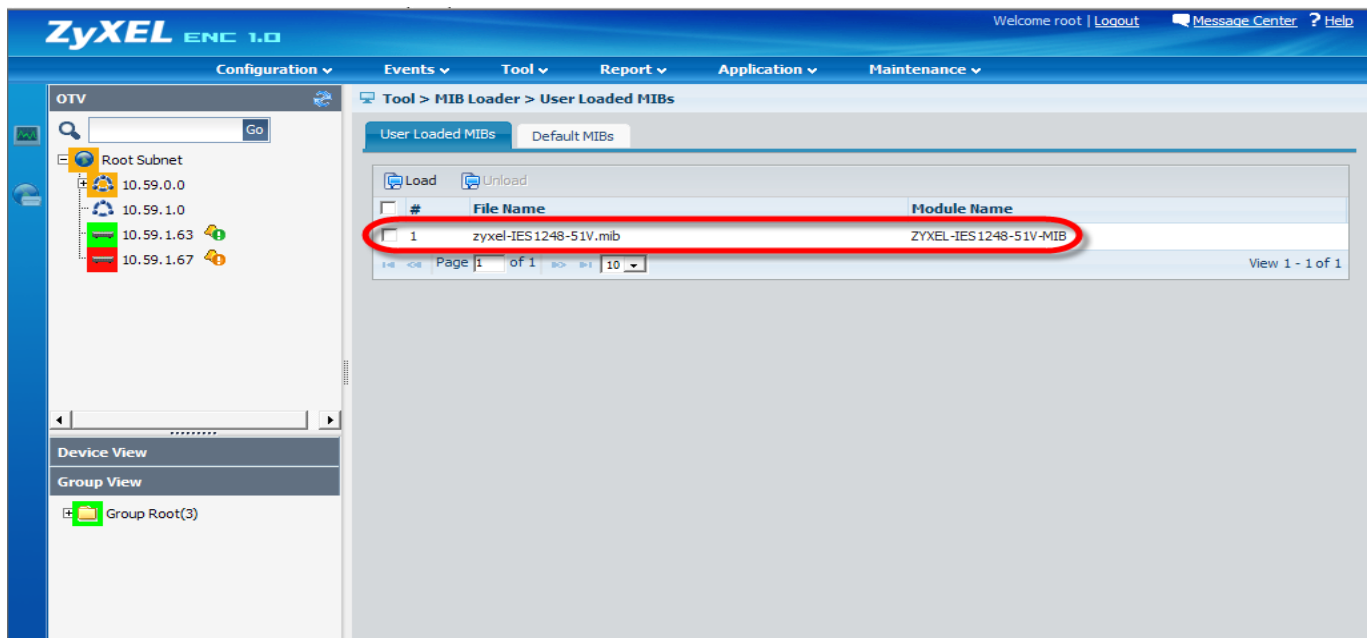
Although ZyXEL ENC is designed for ZyXEL Ethernet Switch and Enterprise WLAN access point management purposes, administrators can use ENC to manage other manufacturer's products which support SNMP MIB as well. This will let administrators manage all their devices via a single tool to simplify the operation.

We use the ZyXEL IES-1248-51V to demonstrate how administrators can manage network devices.

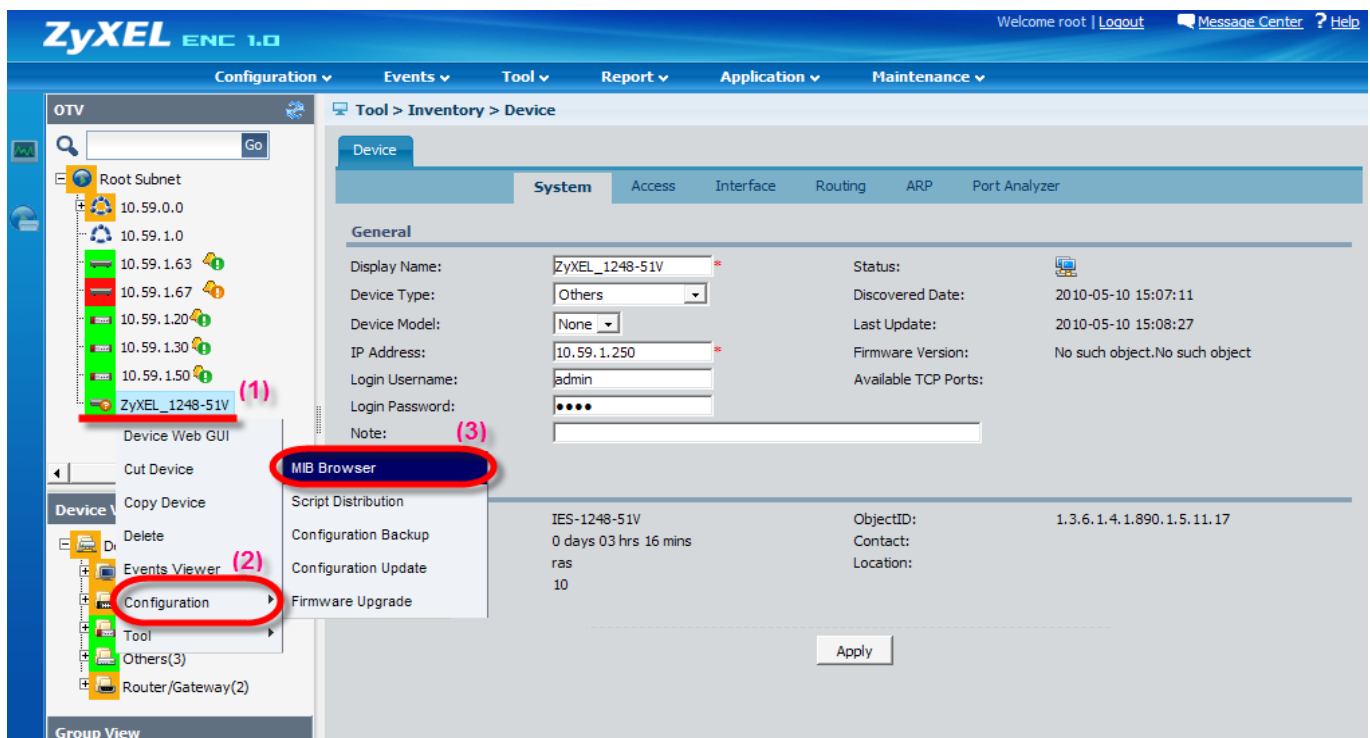
1. First, please prepare the IES-1248-51V private MIB file. Then go to **Tools > MIB Loader** page. Click **Load** to select the MIB file to be imported.



- When the file is loaded, the administrator can manage the available private MIB files on **Tool > MIB Loader > User Loaded MIBs** page. System default MIB files are listed at **Tool > MIB Loader > Default MIBs**.



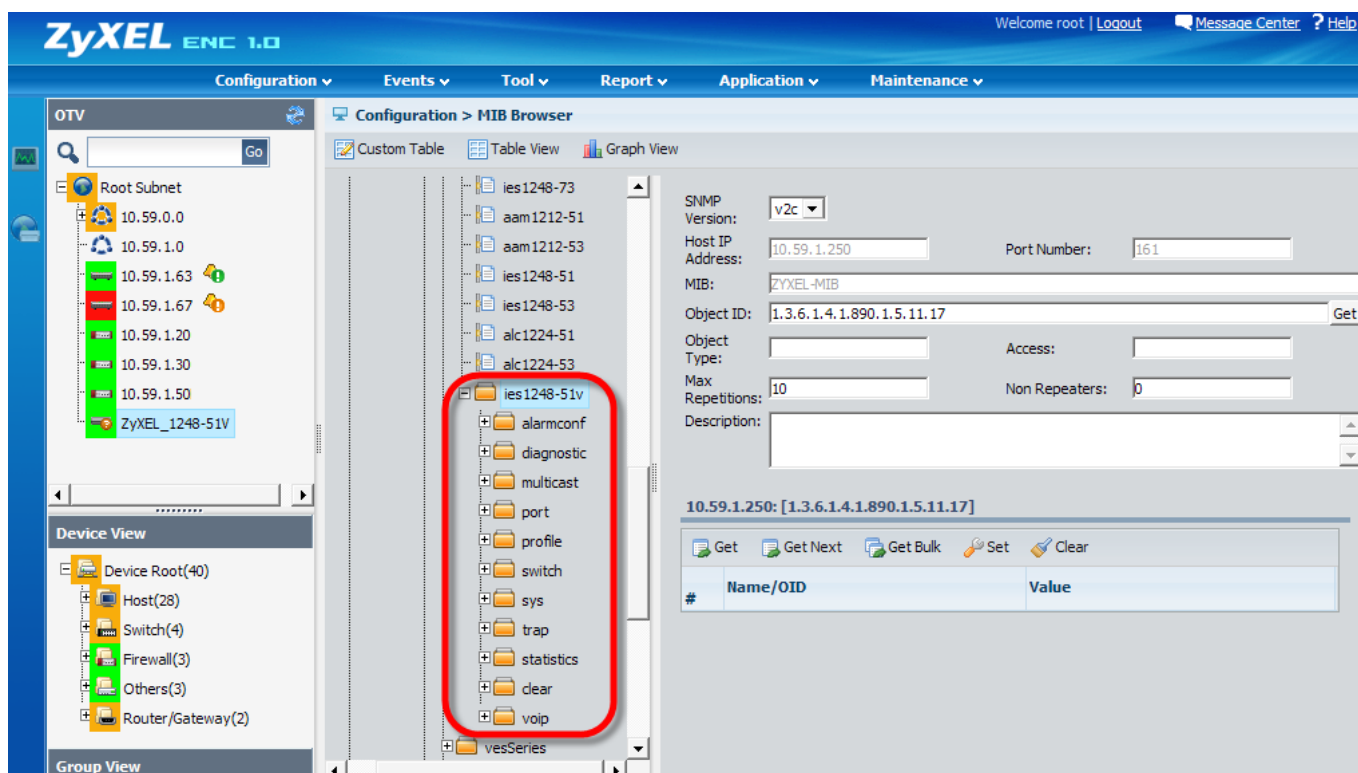
- After importing the private MIB file, the administrator can use the MIB Browser to check the related MIB information. Please right click the managed device and click **Configuration > MIB Browser**.



4. The MIB Browser allows you to access device attributes through the interpretation in an MIB file. For example, the MIB file: IES-1248-51V contains the following description:

```
zyxel      OBJECT IDENTIFIER ::= { enterprises 890 }
products  OBJECT IDENTIFIER ::= { zyxel 1 }
accessSwitch OBJECT IDENTIFIER ::= { products 5 }
aesSeries  OBJECT IDENTIFIER ::= { accessSwitch 11 }
ies1248_51v MODULE=IDENTITY
...
...
DESCRIPTION "IES-1248-51V (3.53(ARY.0)) MIB" ::= { aesSeries 17 }
```

Administrators can access the attributes through a path in the MIB tree as shown below.



- After clicking an attribute in the MIB tree, the corresponding information will be listed on right side automatically. The Get and Set commands can be used to obtain or change attribute values. For more detailed usage instructions, please refer to the MIB Browser chapter of the User Guide.

The screenshot displays the ZyXEL ENC 1.0 MIB Browser. On the left, the 'OTV' tree shows the selected path: Root Subnet > 10.59.1.250 > ZyXEL_1248-51V > mcastDefaultBandwidth (1). The right pane shows the details for this object (2):

- SNMP Version: v2c
- Host IP Address: 10.59.1.250
- Port Number: 161
- MIB: ZYXEL-IES1248-51V-MIB
- Object ID: 1.3.6.1.4.1.890.1.5.11.17.7.4.1.0
- Object Type: INTEGER
- Access: read-write
- Max Repetitions: 10
- Non Repeaters: 0
- Description: Default bandwidth requirement for a multicast channel.

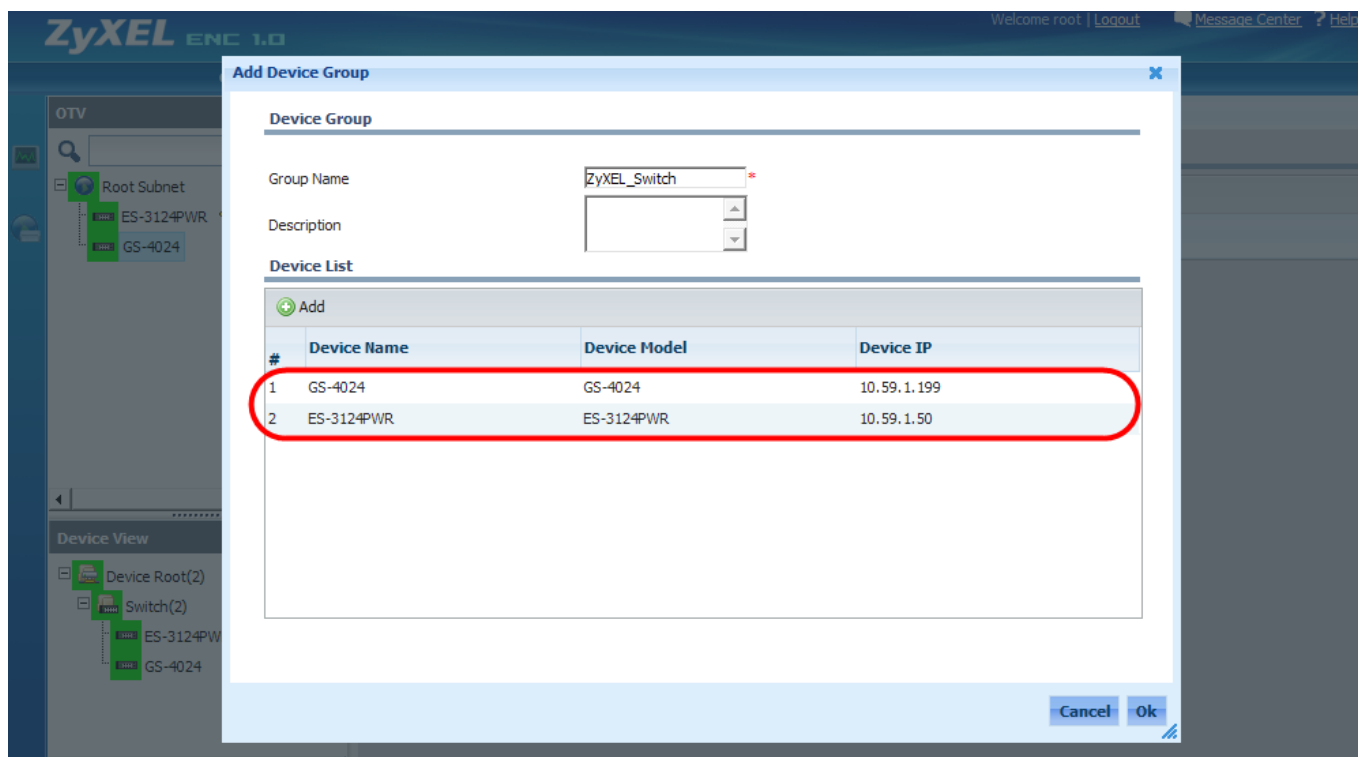
Below the details, the current value is shown as 512. A table (3) lists the value:

#	Name/OID	Value (3)
1	1.3.6.1.4.1.890.1.5.11.17.7.4.1.0	512

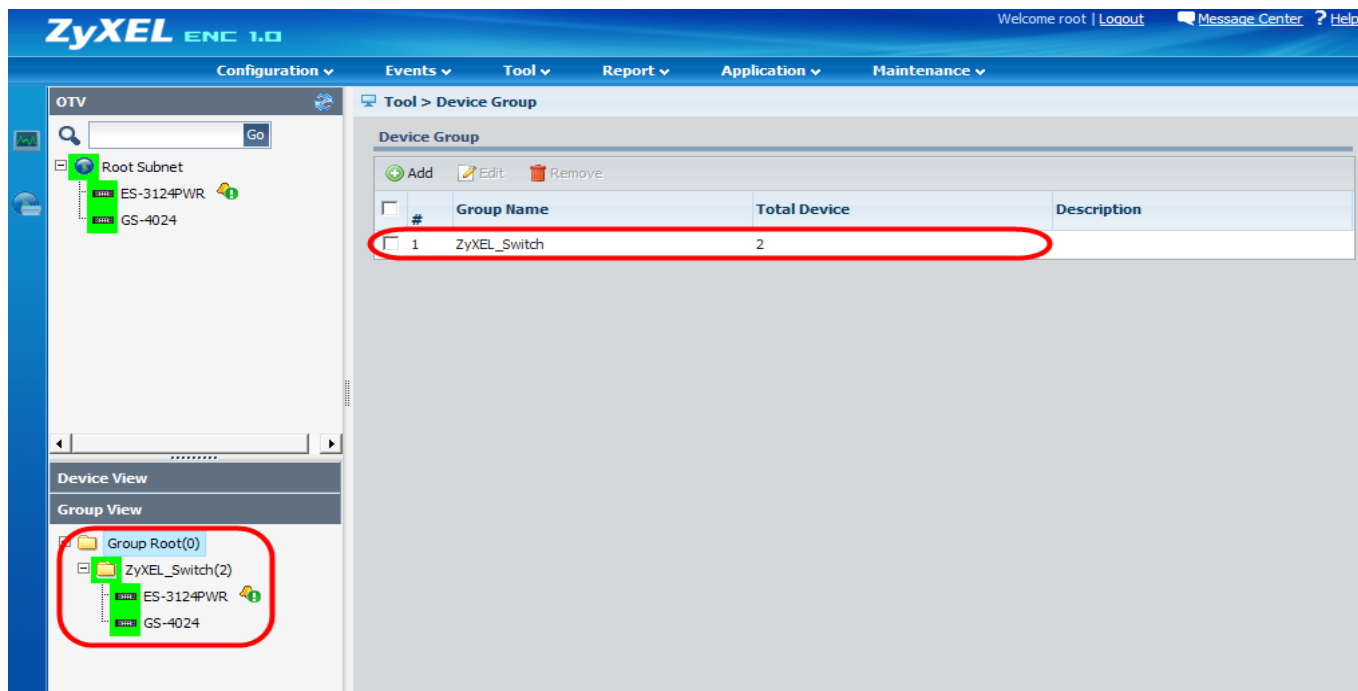
Group Firmware Upgrade

The ENC allows administrators to upgrade firmware of multiple devices simultaneously, cutting down on the required configuration and management time. Advanced management allows administrators to organize multiple devices into groups and then apply the update to whole groups at once. Below are the steps necessary to realize this goal.

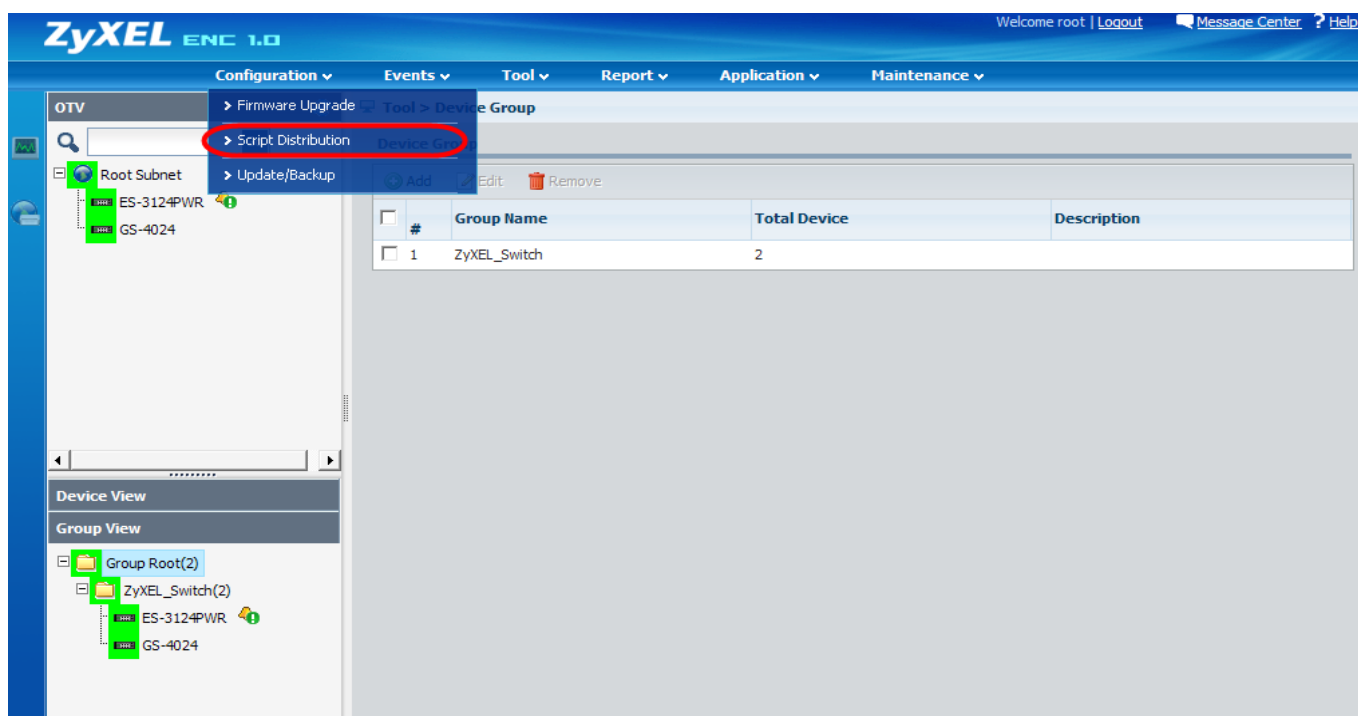
1. Click **Tool > Device Group**. Click **Add** to display a pop-up dialog and then enter the name (e.g. "ZyXEL_Switch") and description of the device group.
2. Click **Add** on the Device List section to select the devices which will be managed by this group.



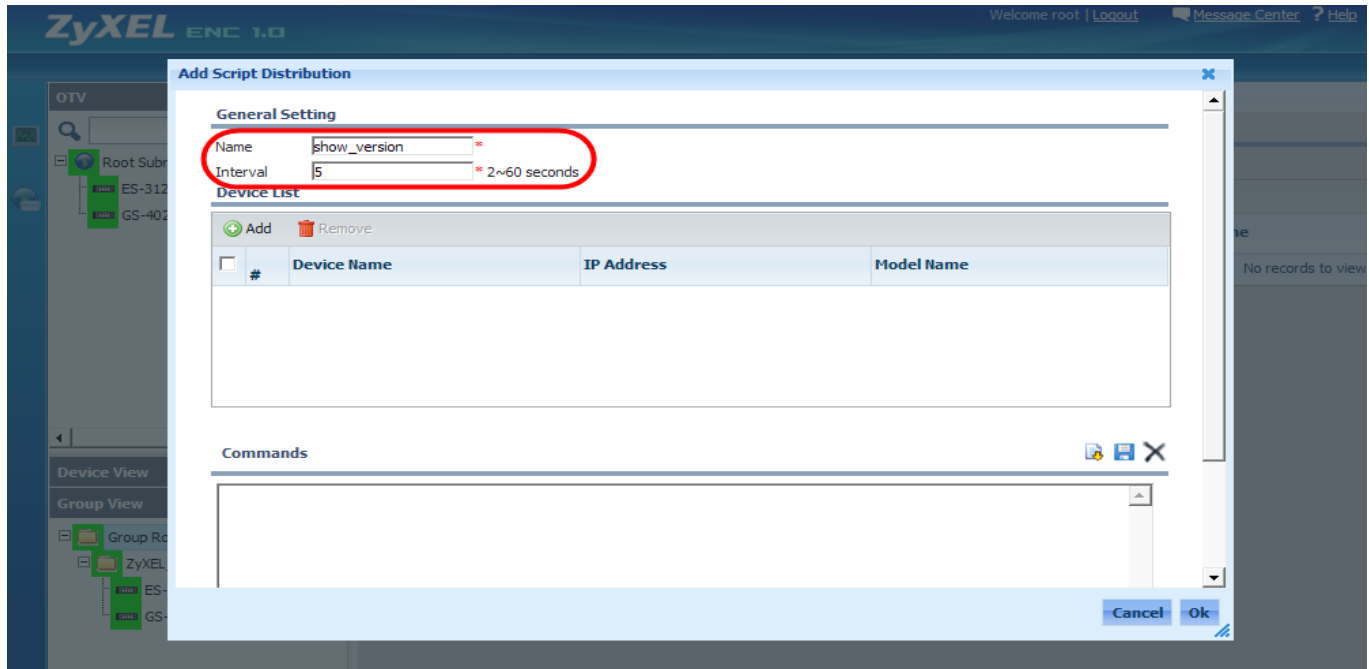
- After saving the settings a new device group will appear. The details of the configured group will be shown in Group View.



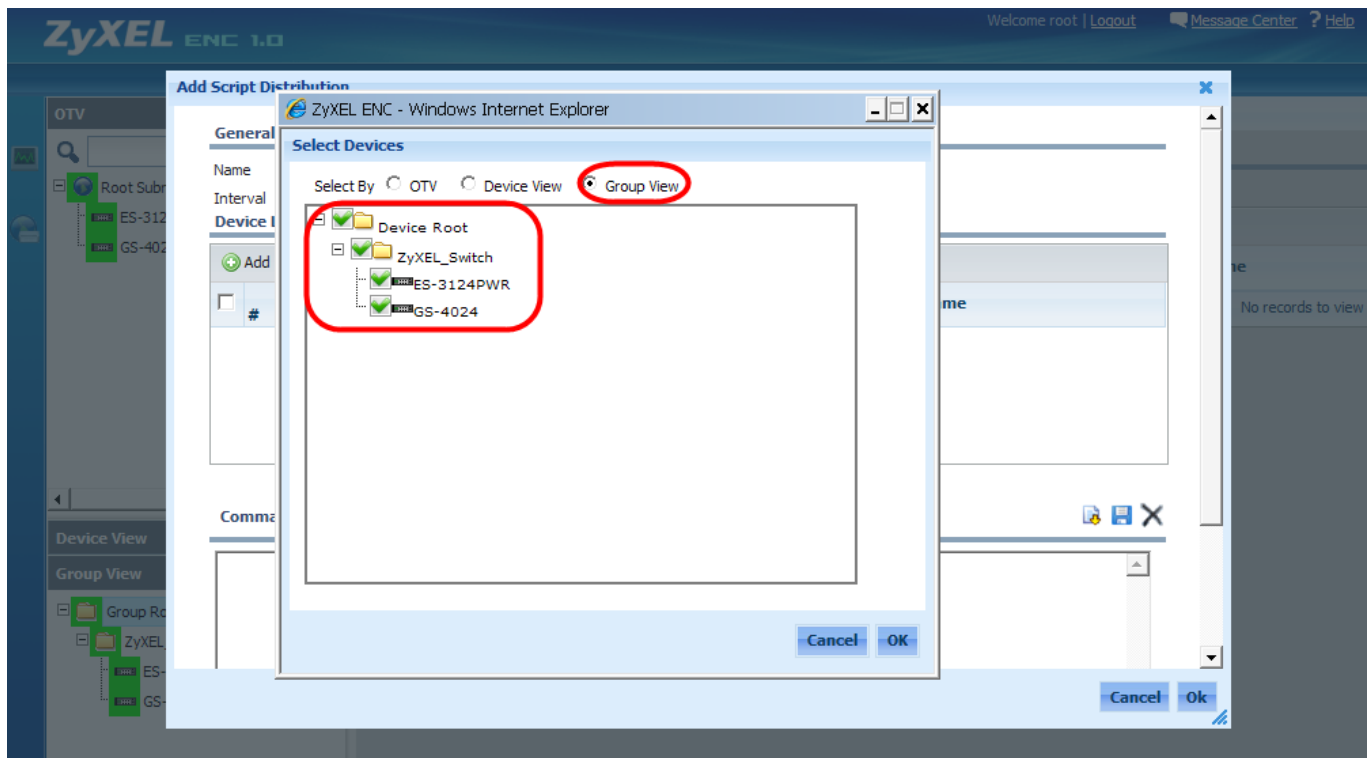
- Before dispatching the firmware file to devices, the administrator might need to check the device firmware version first. This can be done easily by sending a script to the configured group. Click **Configuration > Script Distribution** for this function.



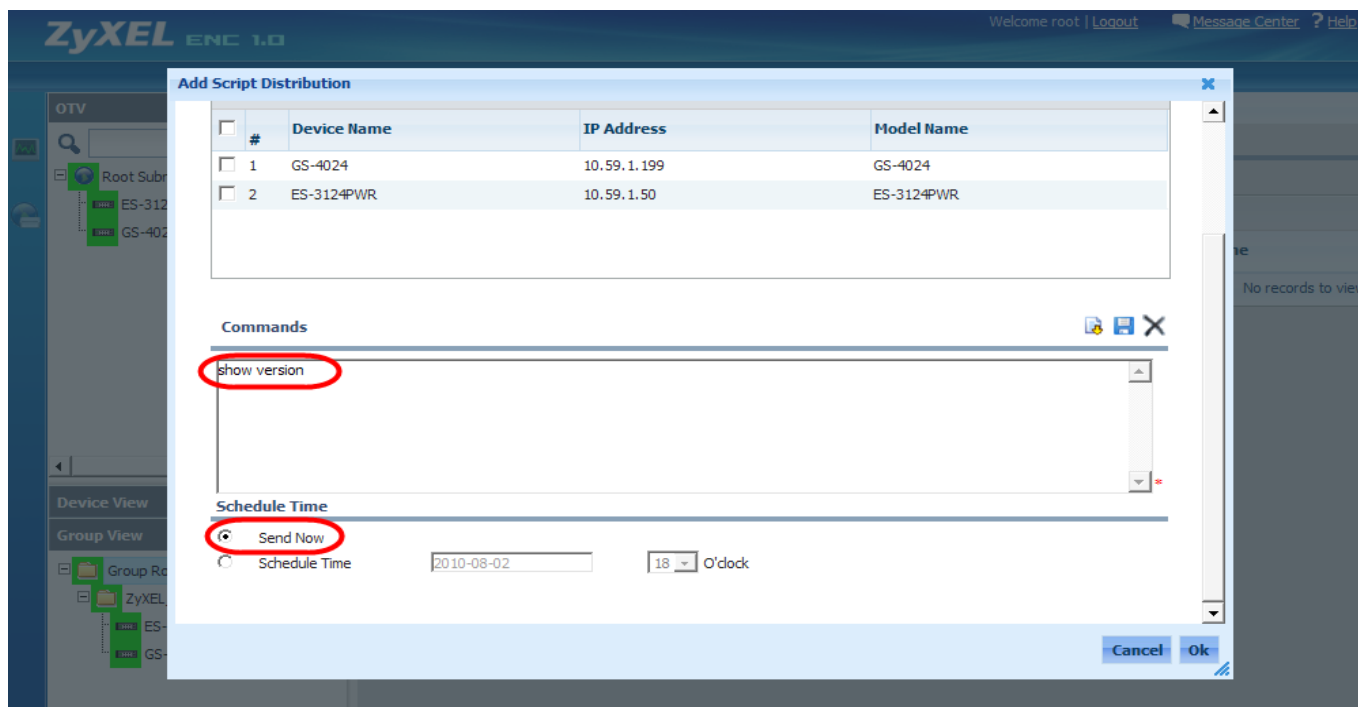
- Click **Add** to pop-up an edit dialog. Here, enter a name (e.g. “show_version”) for the script rule and an interval value (5) for the pause between performing the command on individual devices.



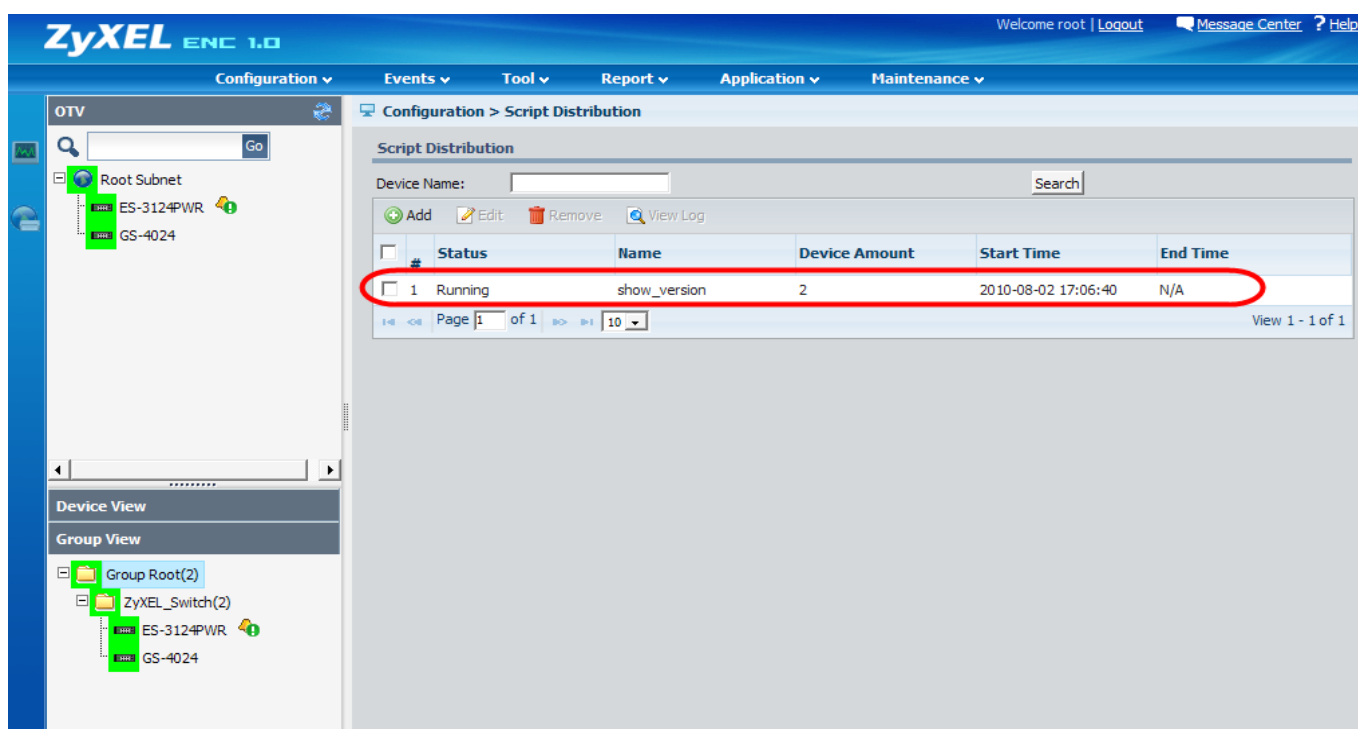
- Click **Add** on the Device List section to select the affected devices. Since we have already configured a device group, we can select the whole group to simplify management.



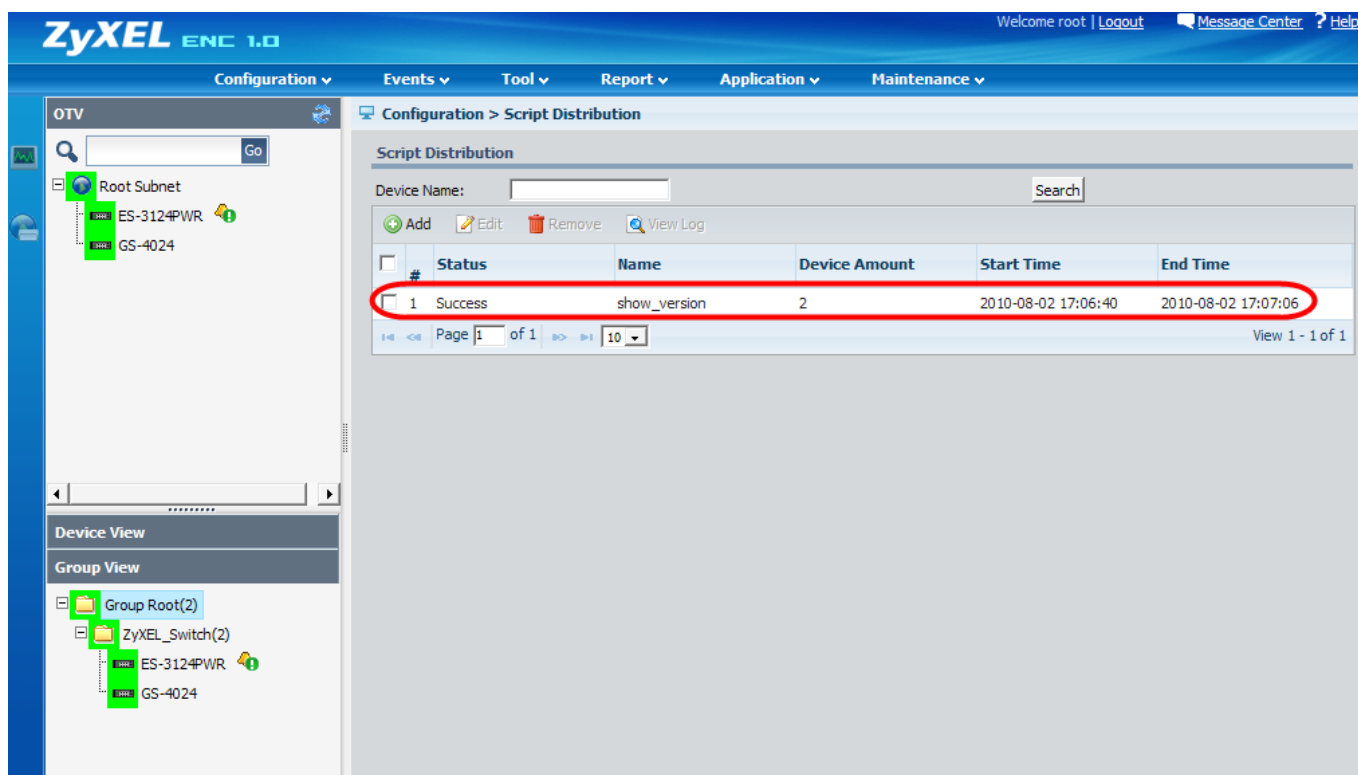
- Enter the command ("**show version**" in this example) into the Commands field and select the execution schedule time.



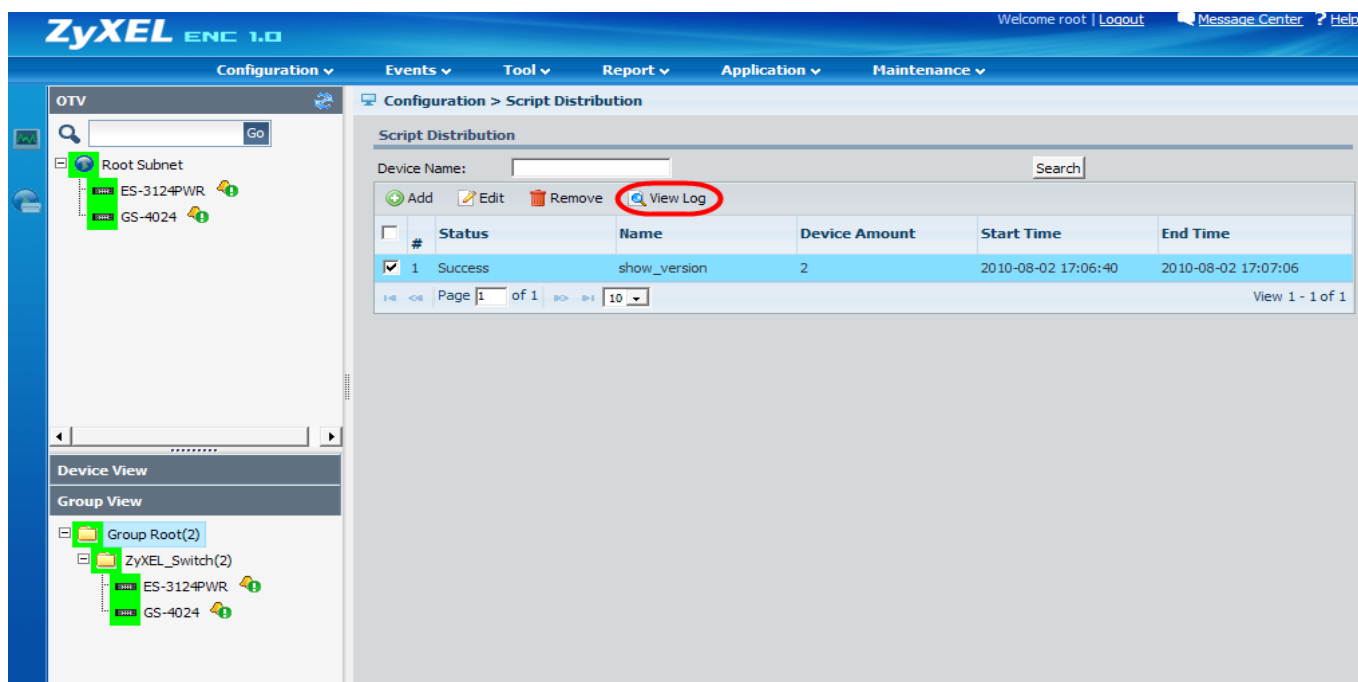
- Click **Ok**, and the script will dispatch to the group of devices and execute on scheduled time. Once the task starts, its status will show as "Running".



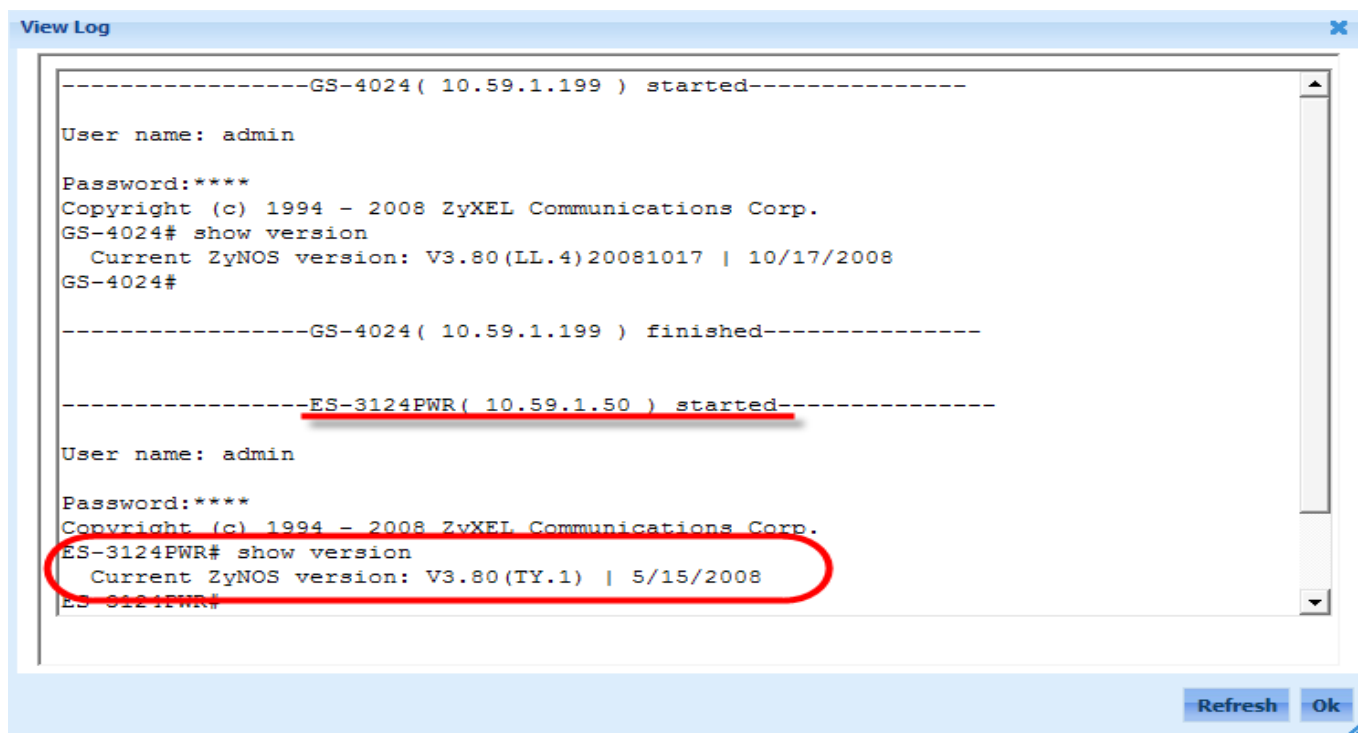
- When the task finishes, the status will change to “Success” and the finishing time will be recorded.



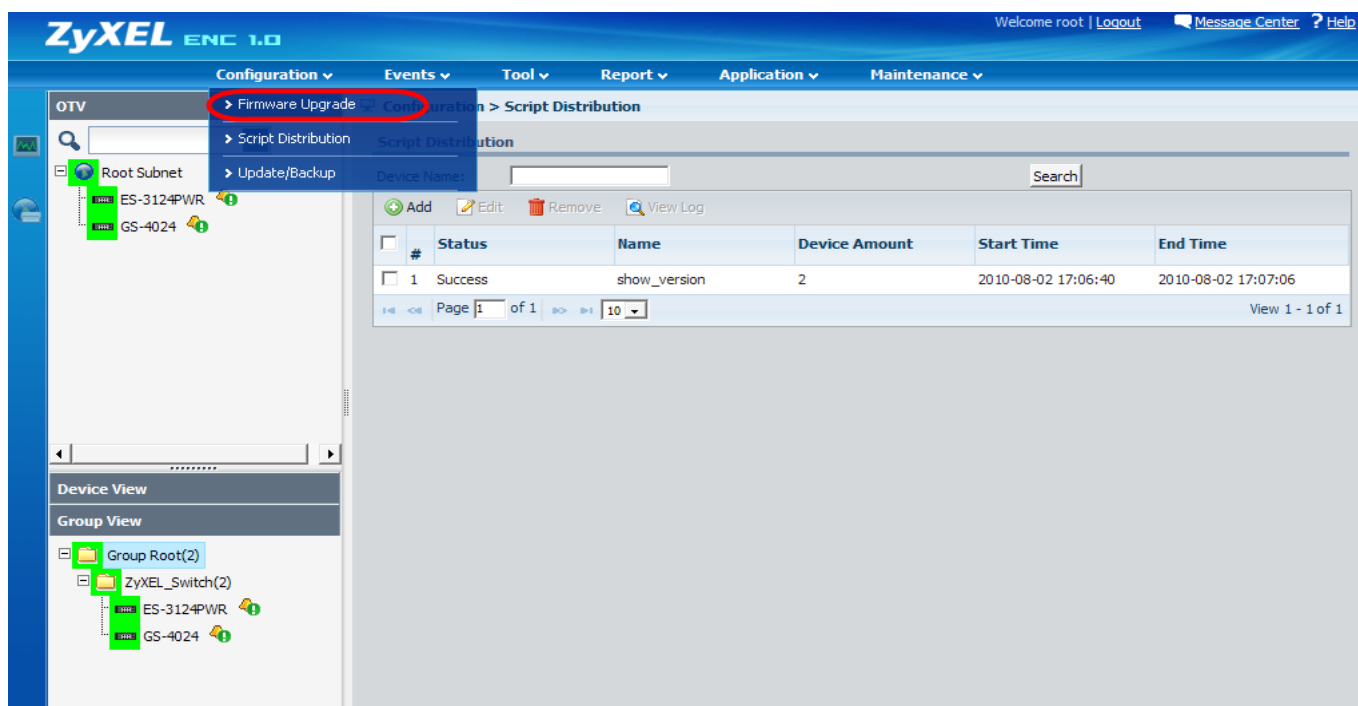
- To check the result, the administrator does not need to log into the individual devices; a complete log of the script execution will be available under the **View Log** button.



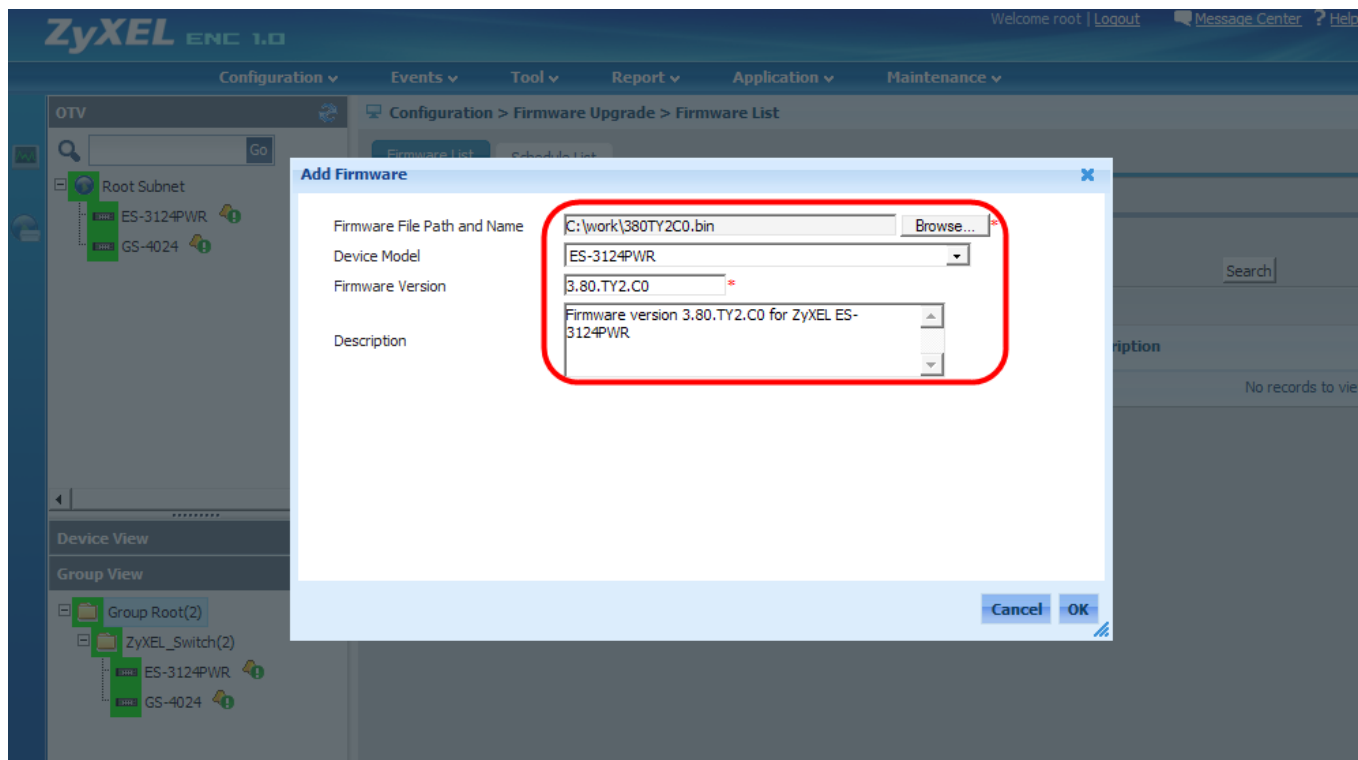
- The log contains complete results of the script execution and shows the ZyXEL switch ES-3124PWR is running with an old firmware image. Thus the administrator can use the **Firmware Upgrade** feature to upgrade the firmware remotely.



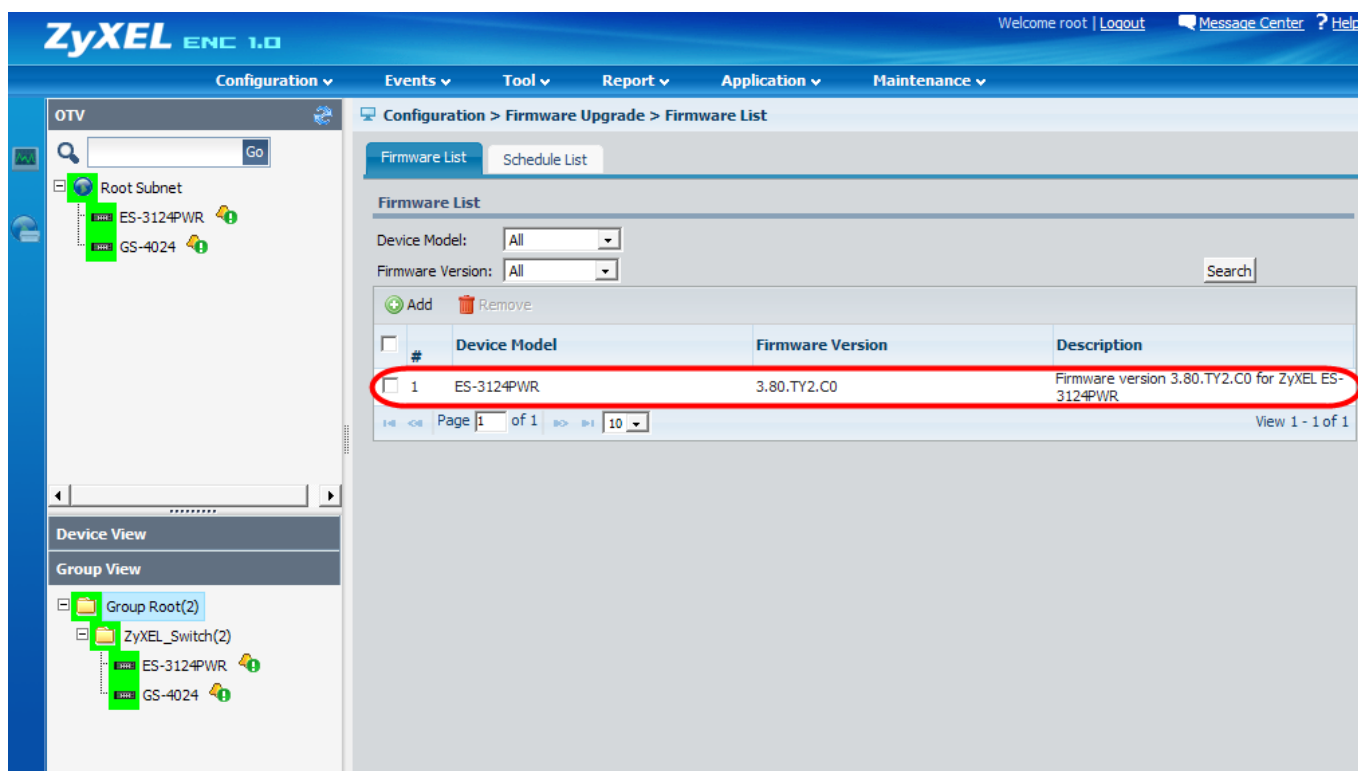
- Click **Configuration > Firmware Upgrade** to launch the function.



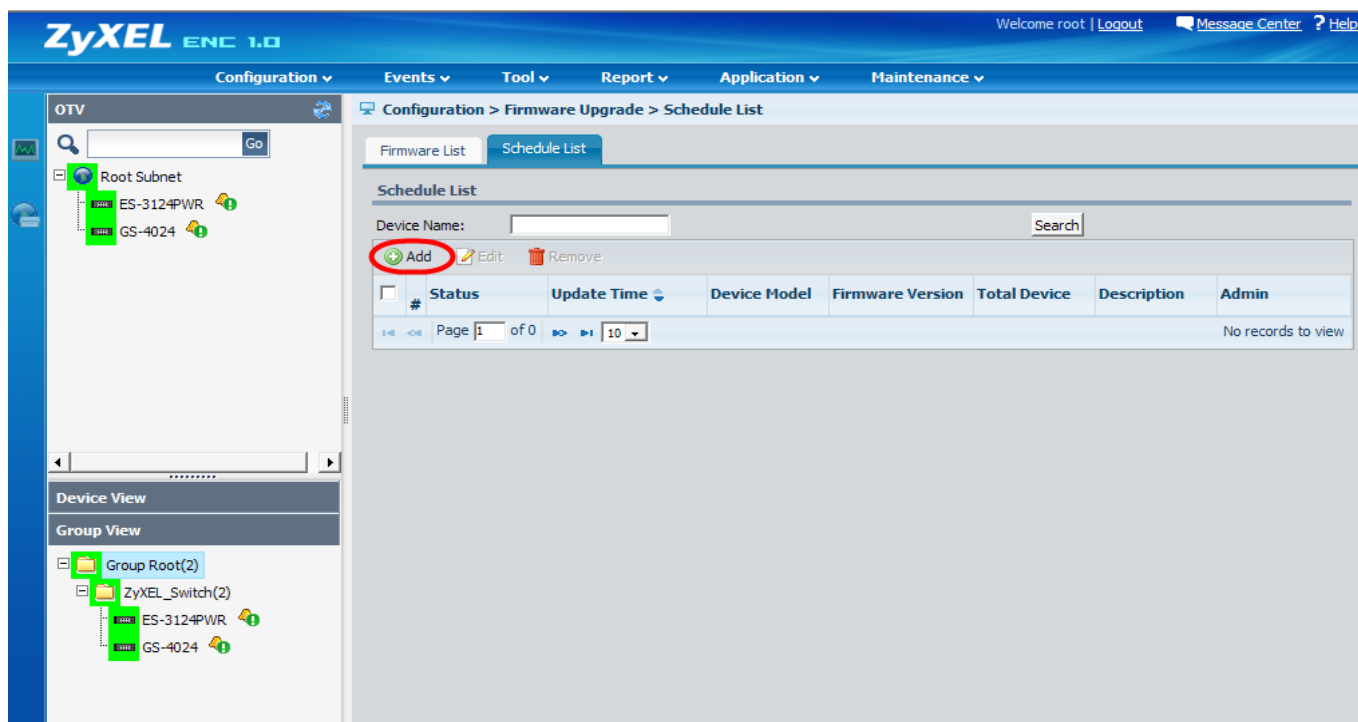
13. First, select a firmware file by clicking **Add** in **Configuration > Firmware Upgrade > Firmware List**.
14. Enter the file path, device model, firmware version and description of the file.



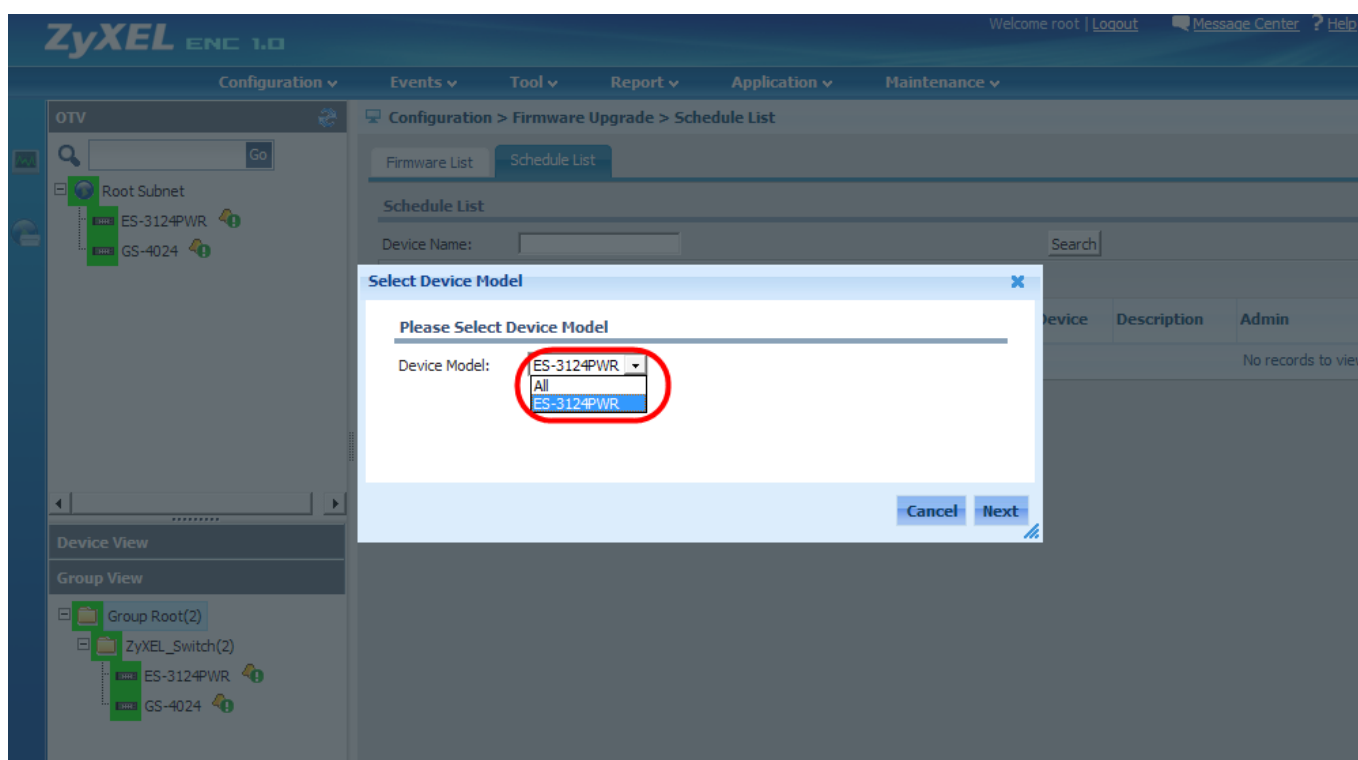
15. After clicking **OK**, the new firmware will be listed in the available firmware pool.



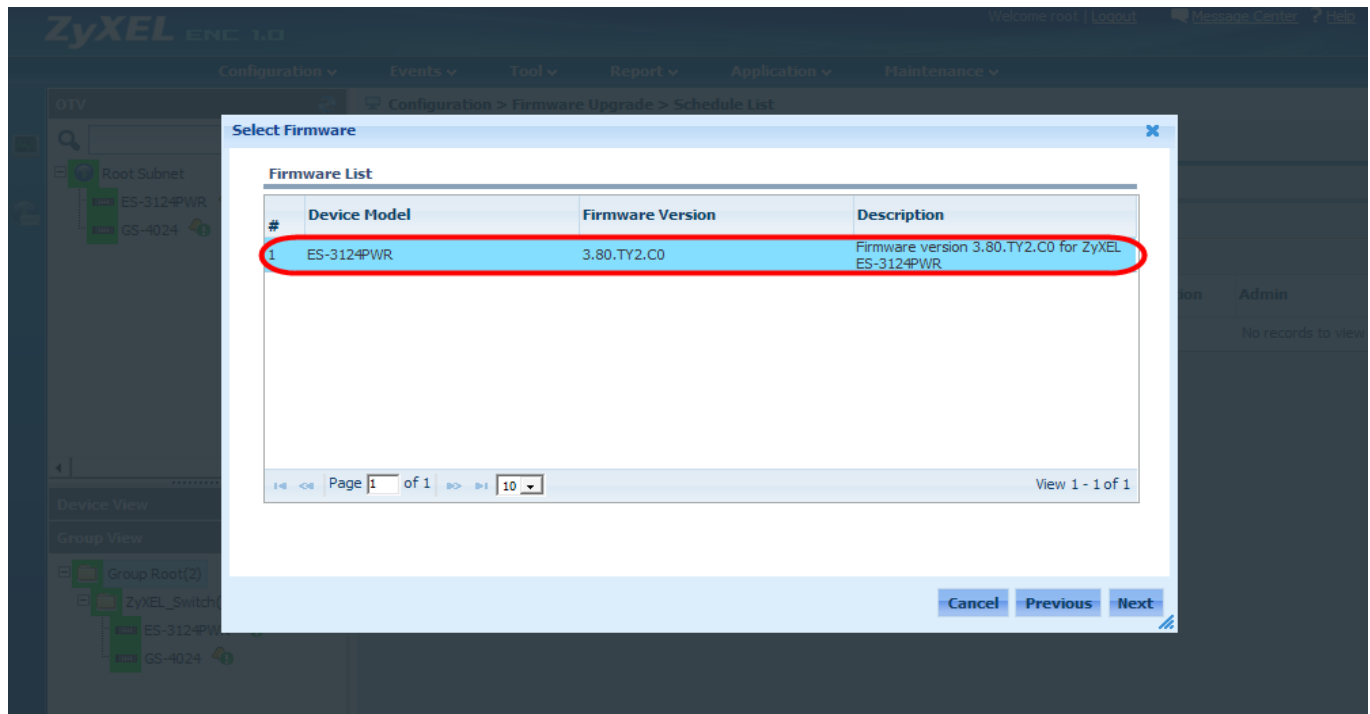
16. The second step is to schedule the time to perform the firmware upgrade process. Click **Configuration > Firmware Upgrade > Schedule List** and click **Add**.



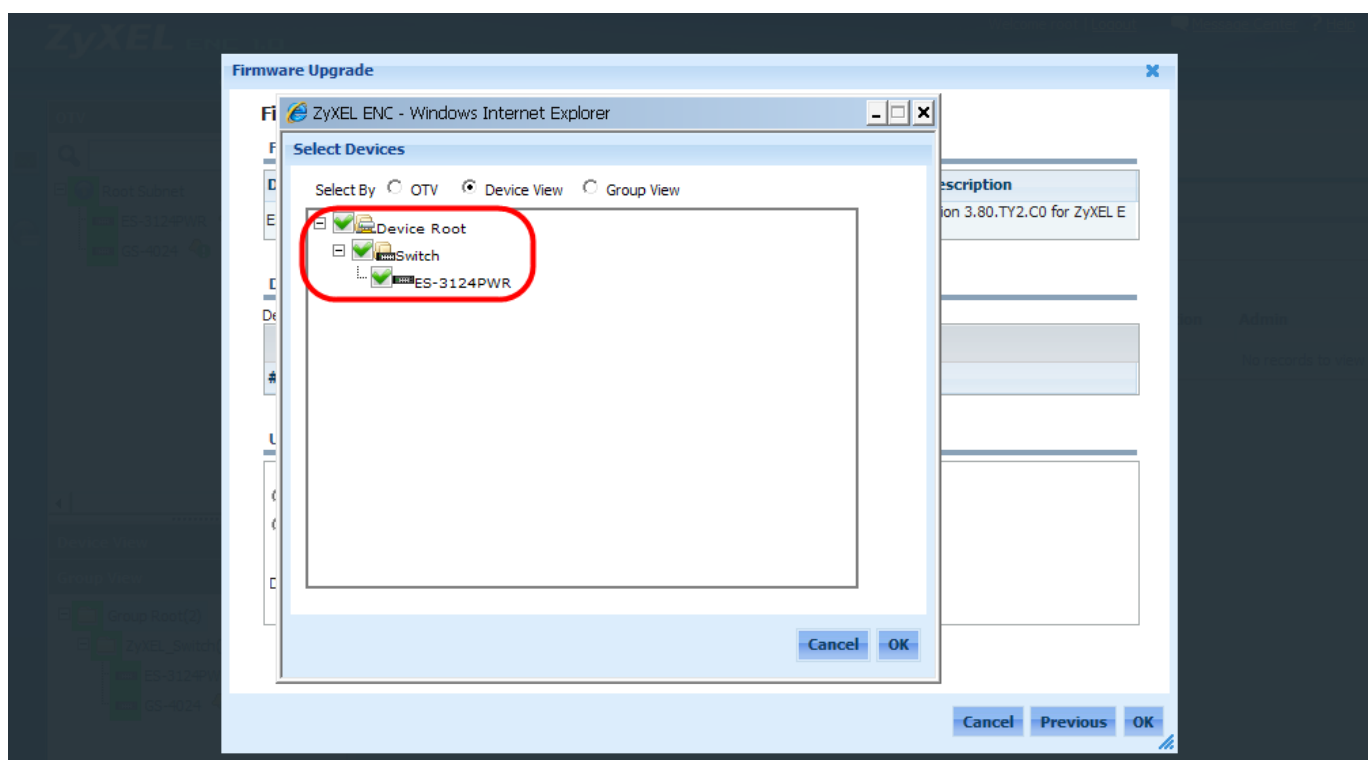
17. The first dialog lets the administrator select the model name that needs the firmware upgrade.



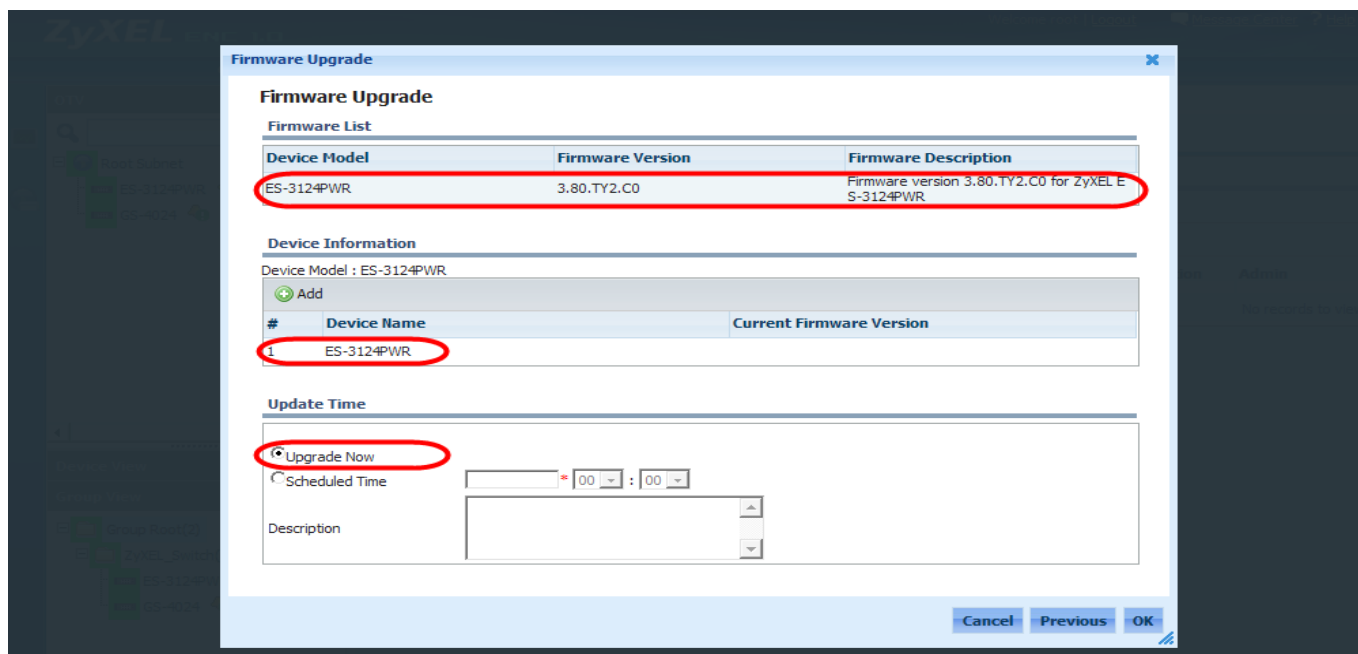
18. The second dialog will list all available firmware for this model, allowing the administrator to select the right image to perform the firmware upgrade.



19. In the third dialog the Administrator needs to select the device he wishes to upgrade to the selected firmware version.



20. When the firmware file and target devices are ready, the administrator needs to configure the execution time in the **Update Time** section. If Upgrade Now is selected, the firmware will be dispatched to devices immediately after clicking **OK**.



21. When the task is finished, the status will show “Success”. The Administrator can run the firmware version script again to verify the device firmware has been successfully upgraded.
- PS.: When upgrading ZyXEL switches, we need to reboot the devices to finish the firmware upgrade process.

