Centralized Management

NetAtlas

Ethernet Switch

ZyNOS 3.7

Support Notes

Version 3.70

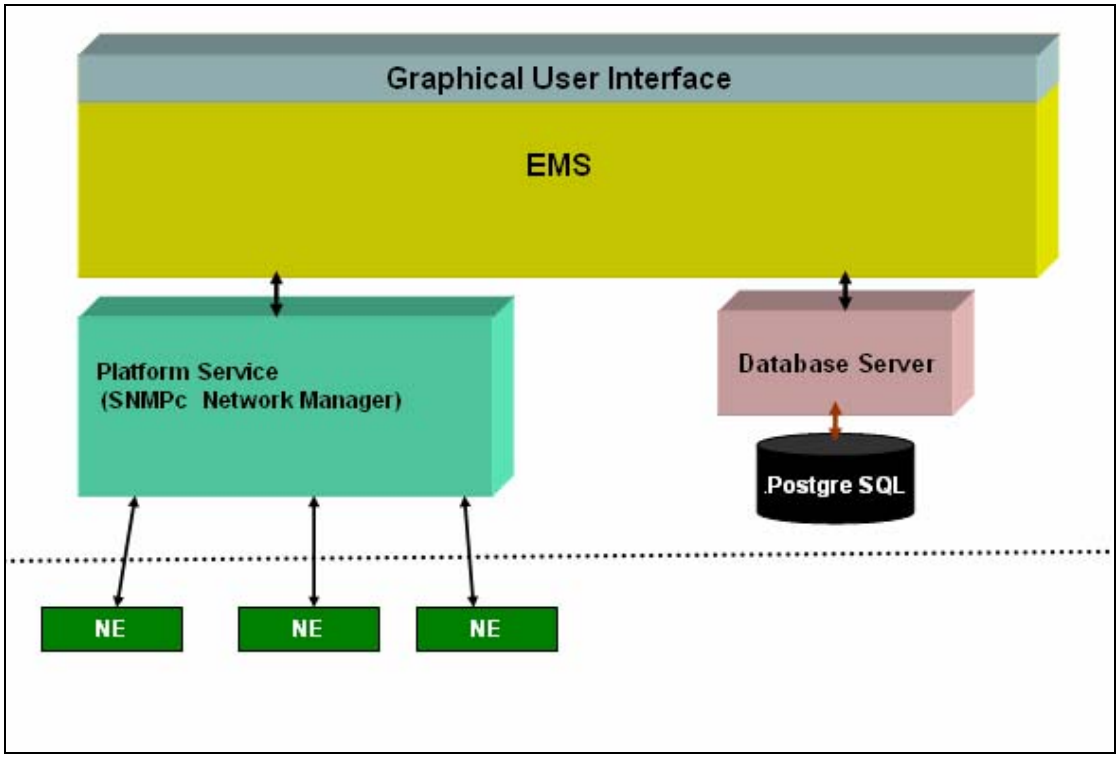
August 2006

Introduction of SNMPc and NetAtlas

With the number of network device increasing, the need to detect and respond to the network failure or external event in a very short time posts a great challenge for a network administrator. Finding a way how to easily manage and monitor network devices across networks becomes more and more important in network management.

Figure 1 presents main elements of the system architecture. Element Management System (EMS), NetAtlas provides a centralized remote management platform and acts as SNMPc manager to perform network configuration, system management, event/alarm management, performance management and security for all ZyXEL's Ethernet Switch solutions. SNMPc is network management software produced by Castle Rock that constantly probes the network element (NE) and collects information of those NE for EMS. Underneath the EMS is Postgres SQL, the enterprise relational database system, providing query for EMS.

Figure 1 System Architecture



Overview of SNMPc

The following diagram shows the main elements of SNMPc. SNMPc includes the following functions:

- **Main Button Bar**: Button and controls to execute commands quickly
- **Edit Button Bar**: Button to quickly insert map element
- **Event Log Tool**: Button to display filtered event log entries
- **View Window Area**: Map View, Mib Tables and Mib Graph windows are displayed here.
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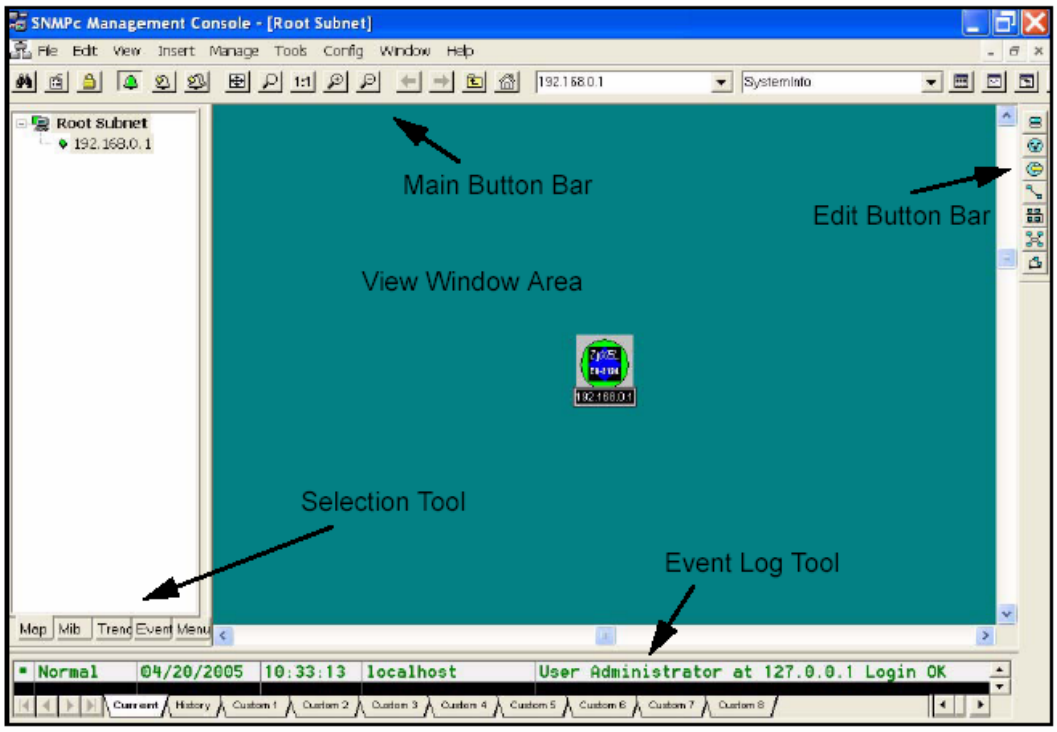
Figure 2 Main elements of SNMPc



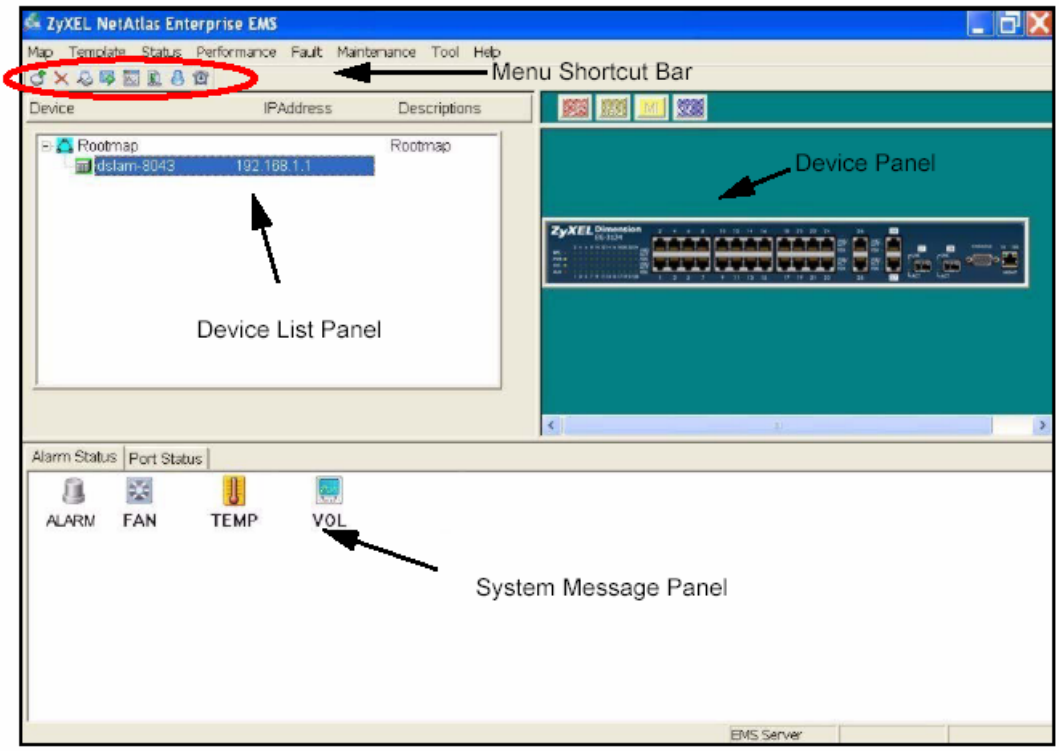
Overview of EMS

The following diagram illustrates the main elements in EMS. EMS contains four main functions.

- **Menu Shortcut Bar**: The buttons execute common commands
- **Device Panel**: This is a graphical device display.

- **Device List Panel**: Shows devices in a tree structure. The colors of the device indicate the status of the devices. Green means working and red means no response from the device.
- **System message Panel**: Shows the alarm Status and port status of the selected switch.

Figure 3 Overview of EMS

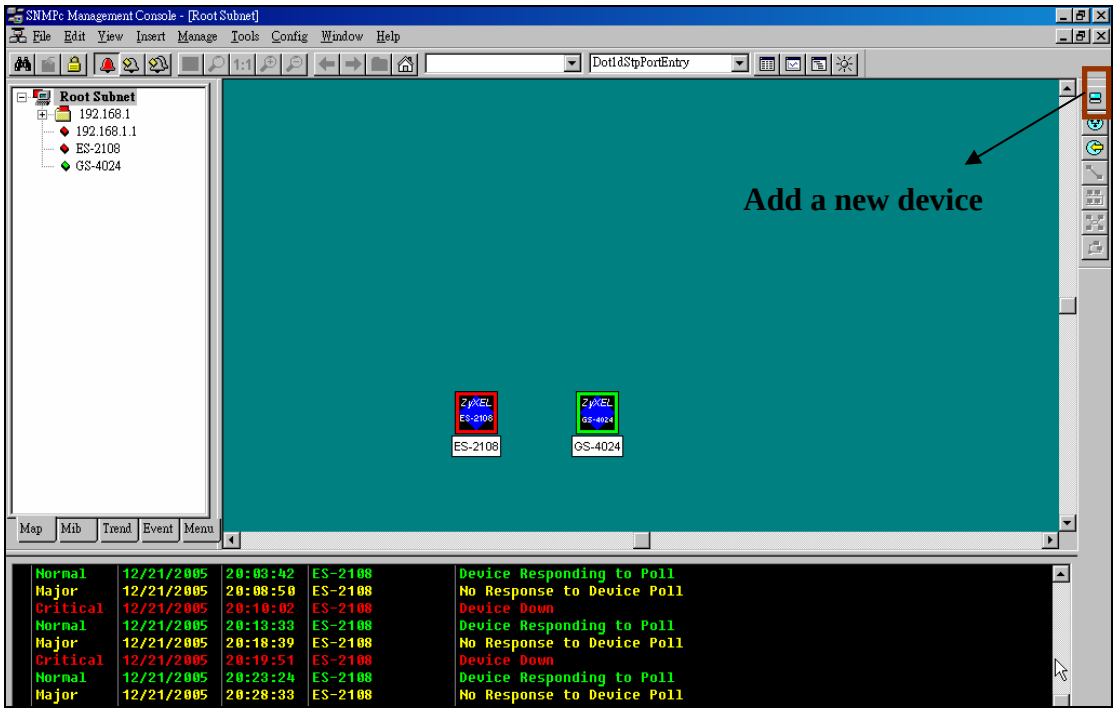


Adding a new device via SNMPc

In the following example, we will illustrate how to get started with adding a new device with SNMPc and NetAtlas. Follow the procedures from Step 1 to Step 11.

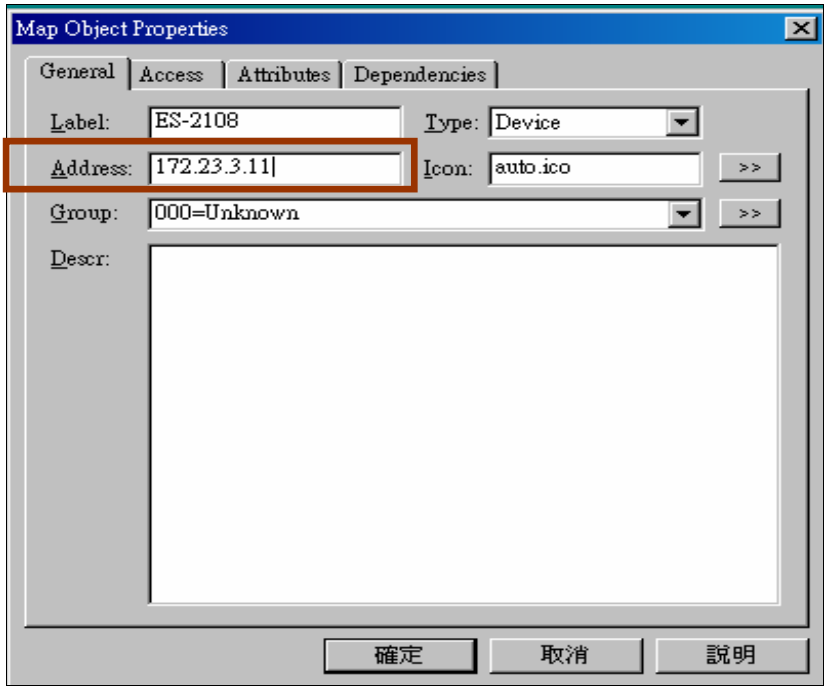
Step 1: In the edit button bar shown in the Figure 4, click the icon to insert a new element.

Figure 4 Adding a new Device



Step 2: In the map object properties, insert the label name and the IP address of the selected device. In this example, we set 172.23.3.11 as the IP address of your Switch as shown on Figure 5

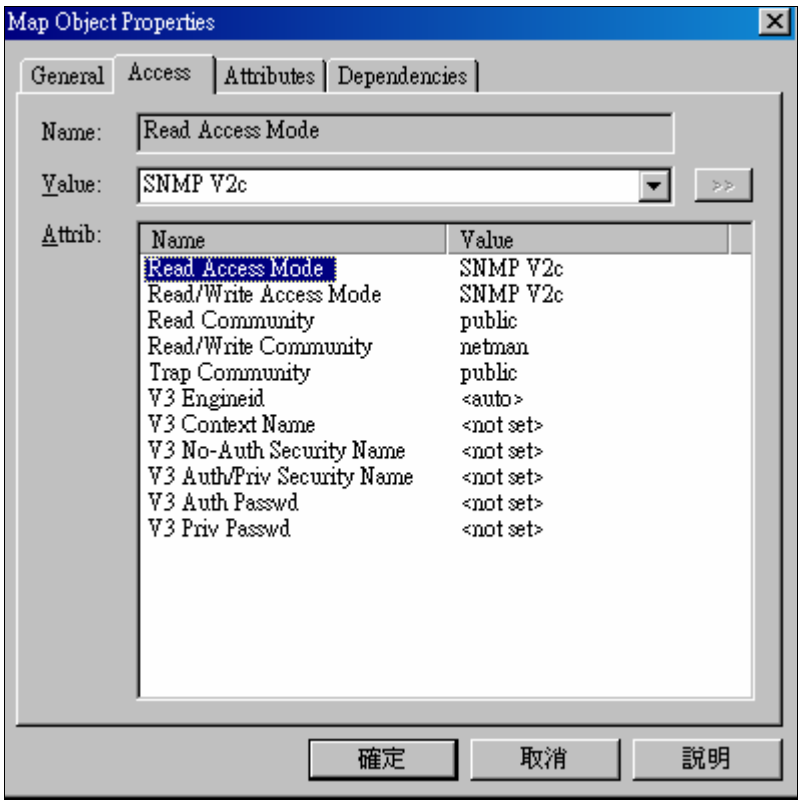
Figure 5 Map Object Properties



Step 4: In the map object properties, select **Access** tab to set the parameters of Read Access Mode to SNMP V2c shown on Figure 6. Change the value of

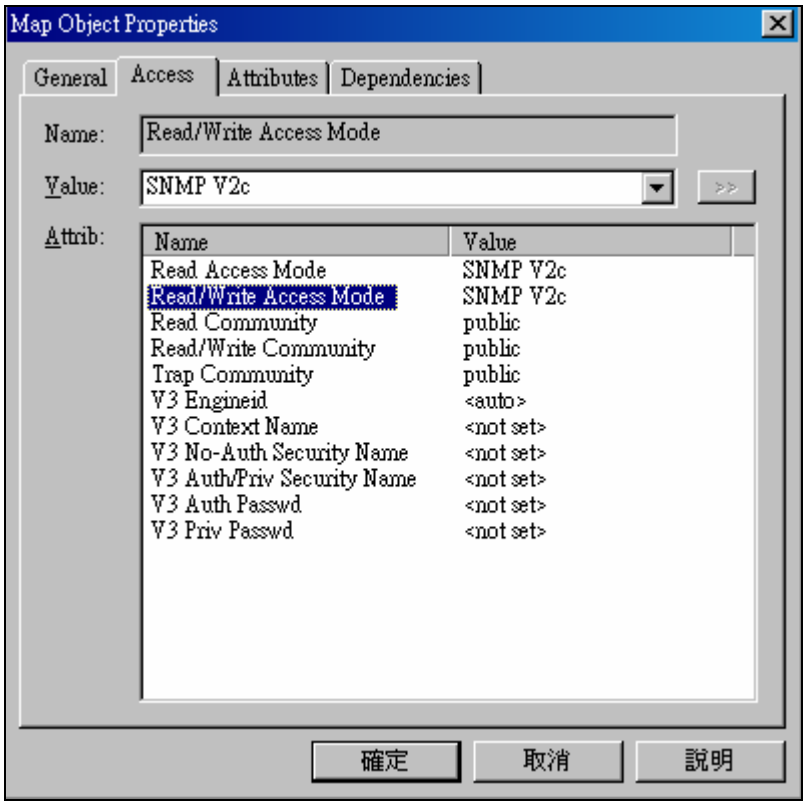
Read Access Mode to SNMP V2c.

Figure 6 Read Access mode



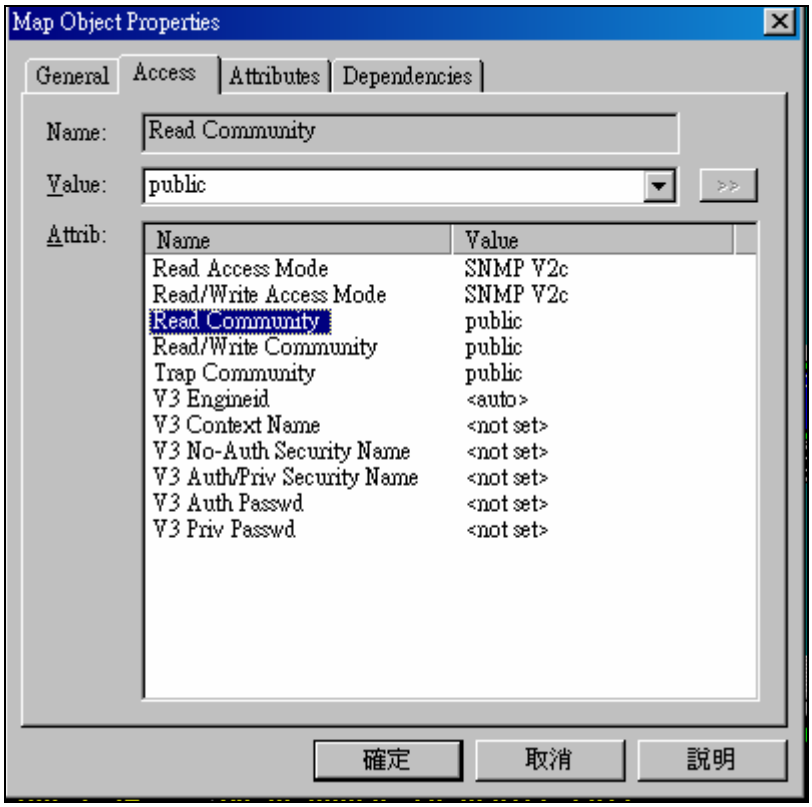
Step 5: In the map object properties, select **Access** tab to set the parameters of Read /Write Access Mode to SNMP V2c shown on Figure 7. Change the value of Read/write Access Mode to SNMP V2c.

Figure 7 Read/Write Access Mode



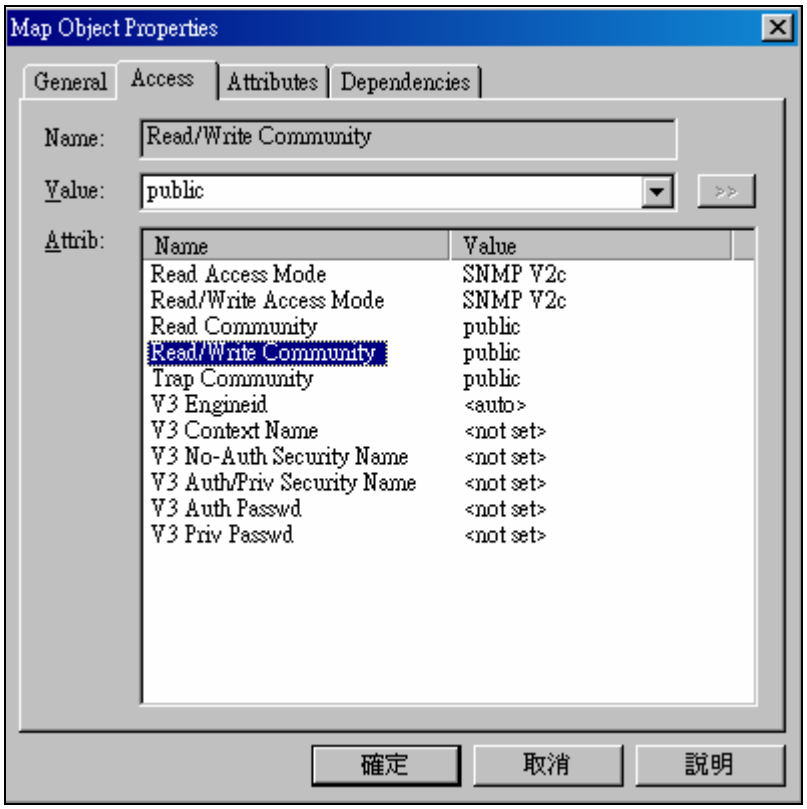
Step 6: In the map object properties, select **Access** tab to set the parameters of Read community to public as shown on Figure 8.

Figure 8 Read Community



Step 7: In the map object properties, select **Access** tab to set the parameters of Read community to public as on Figure 9. Change the value of Read//write Community to Public.

Figure 9 Read/write Community

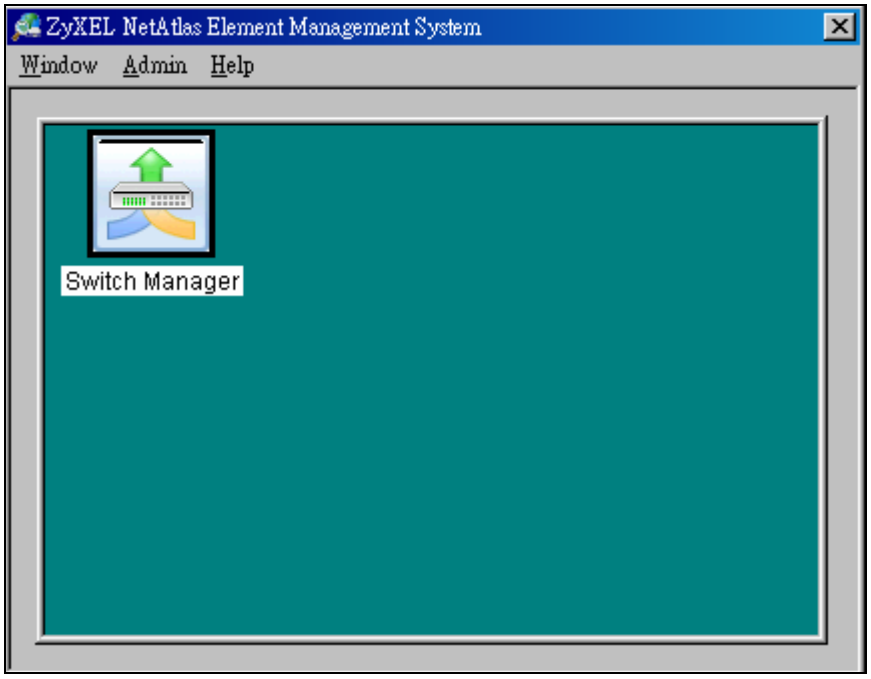


Step 8: In the Selection tool menu, Click the name of your Switch to manage the device.

Figure 10 Device Selection

Step 9: After the selection, a pop-up menu will display the NetAtlas switch manager diagram. Click the **Switch Manager** to enter the EMS Mapping as shown on Figure 11.

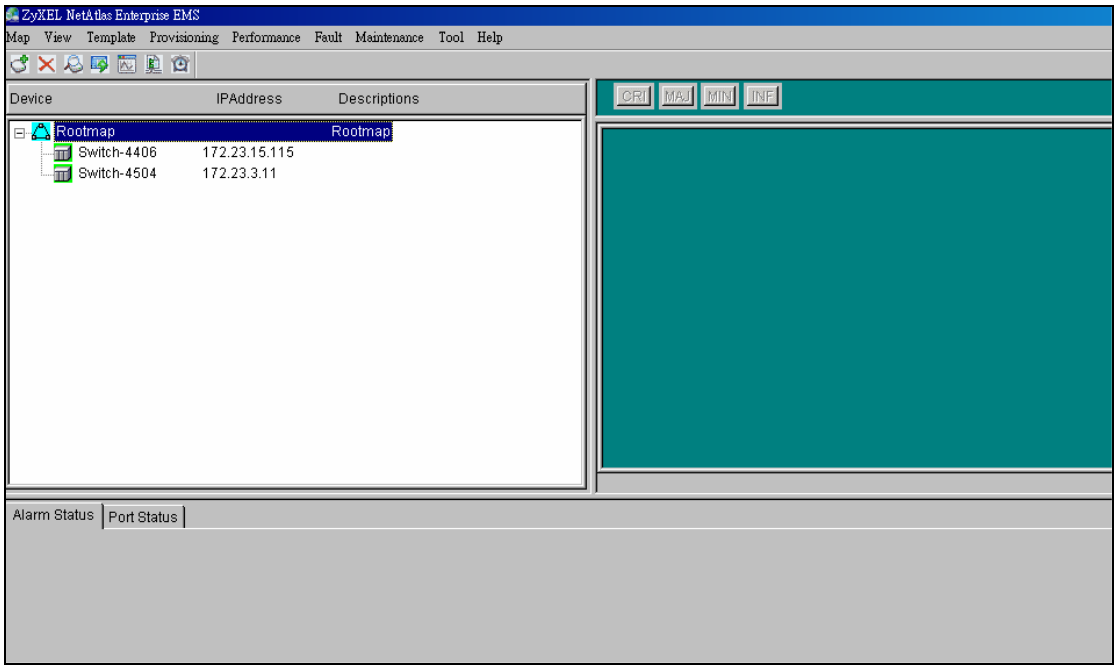
Figure 11 Device Selection



Step 10: In the EMS mapping, there is a logical hierarchy for the device displayed. In the device list, you can see that the devices are added in the

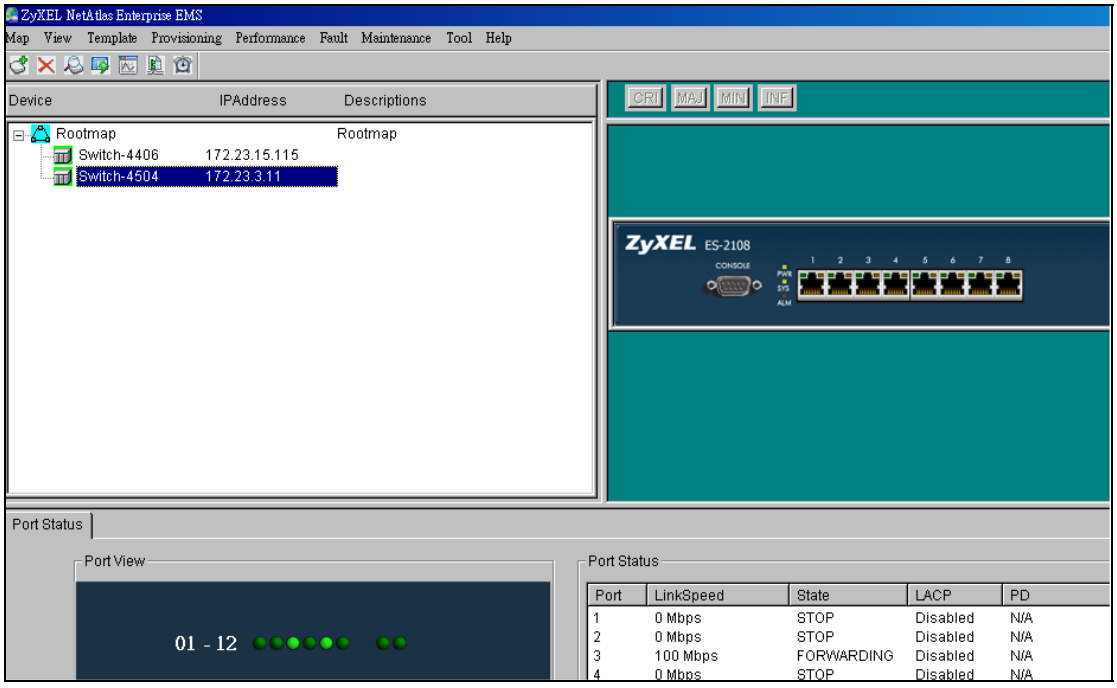
Rootmap as shown on Figure 12.

Figure 12 Rootmap



Step 11: Click at your Switch to configure the device as shown on Figure 13.

Figure 13 Device mapping



VLAN Configuration via EMS

In this section, we will give an example to illustrate how to use EMS to create a VLAN2 with ZyXEL Management Switch. Here are the procedures.
Step 1: In the device panel list shown on Figure 12, right-click **Configuration**, **Switch Configuration** and then **Switch Setup** tab as shown on Figure 12 and Figure 13.

Step 2: Define the VLAN type. There are two types of VLAN, one is **802.1Q** and the other is **Port-based VLAN**. Select **802.1Q** as the VLAN type and click Apply in the Figure 14.

Figure 12 Device panel list

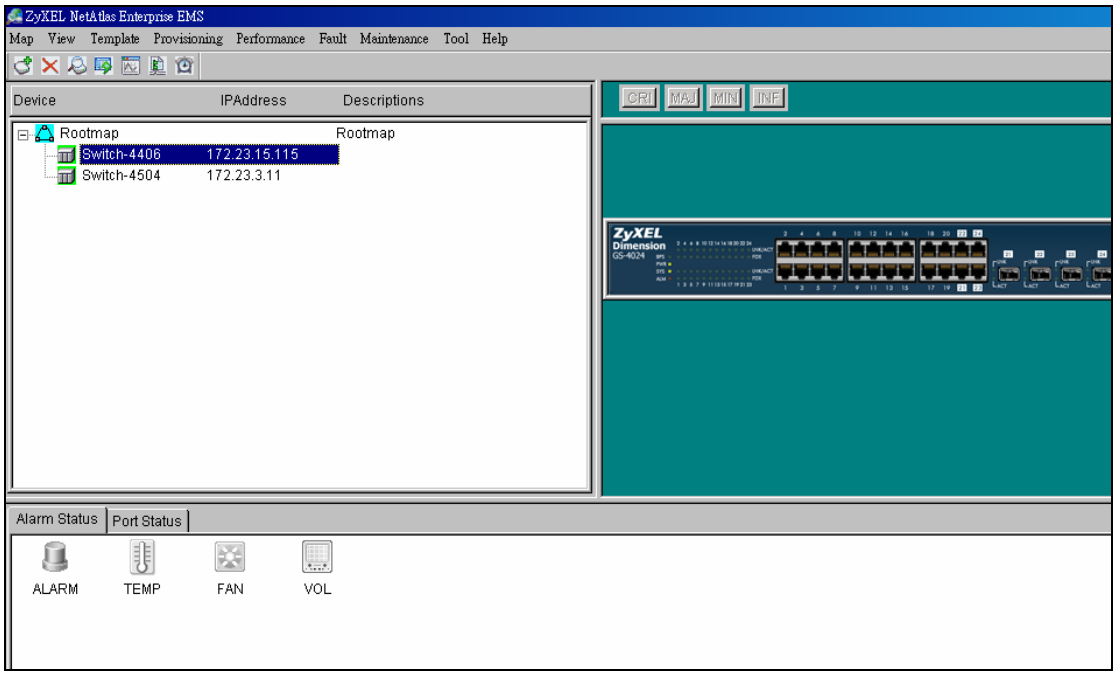


Figure 13 Switch Configuration

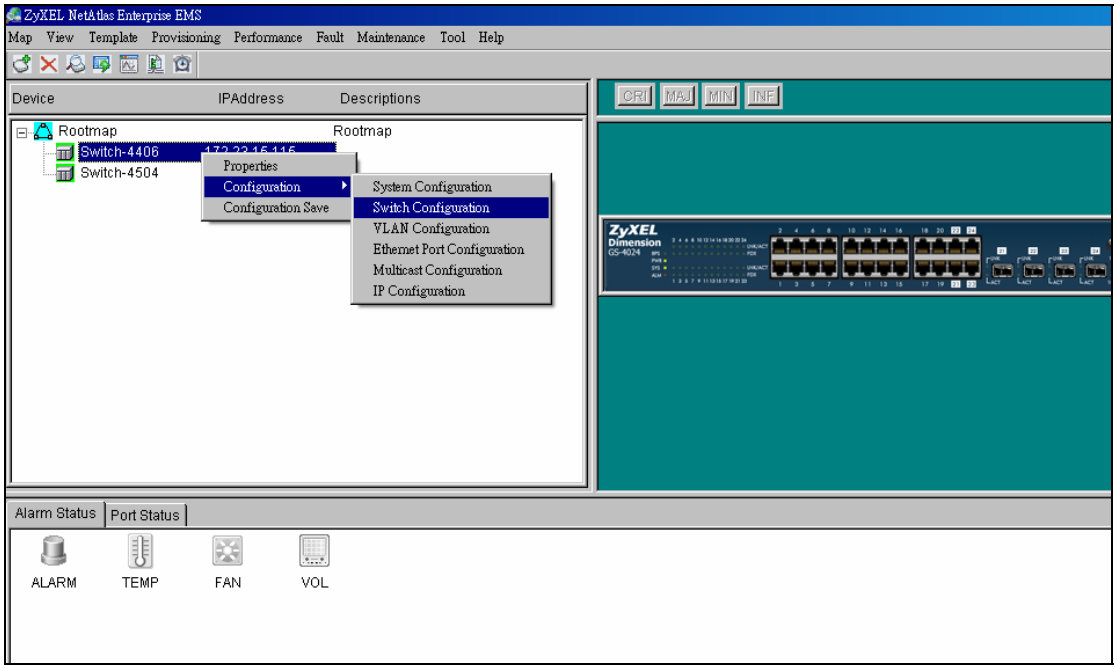
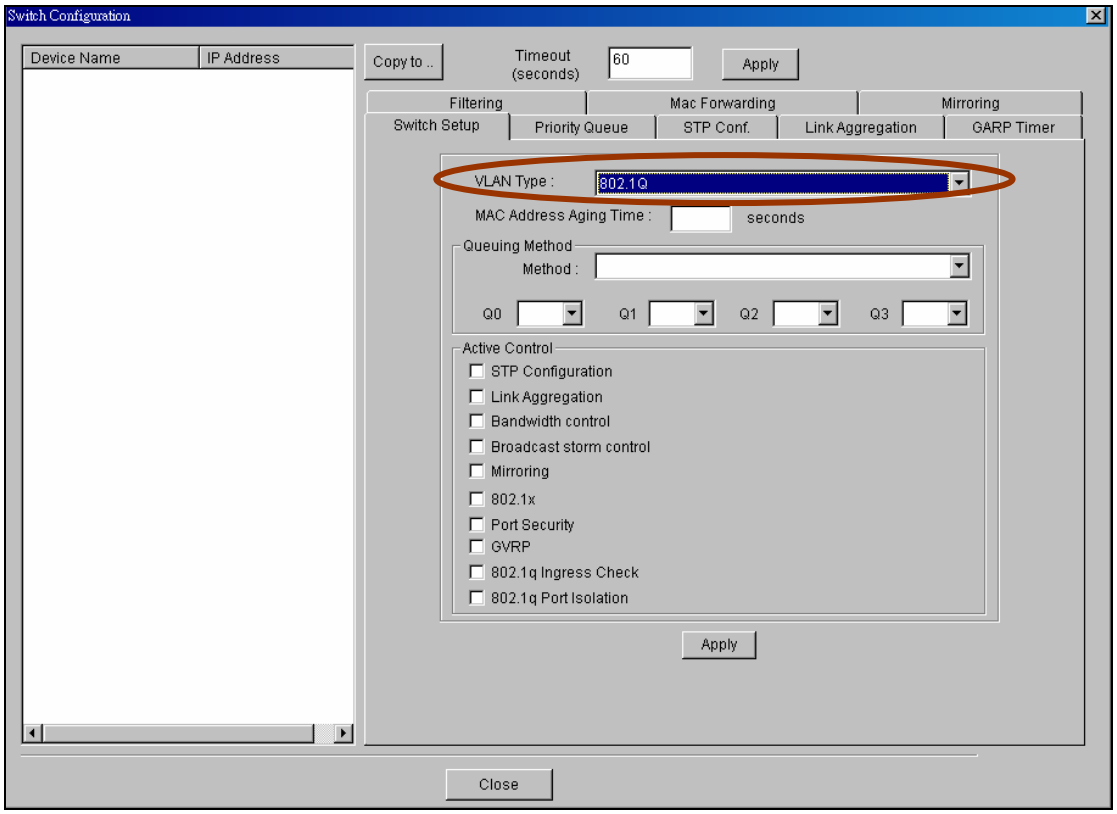
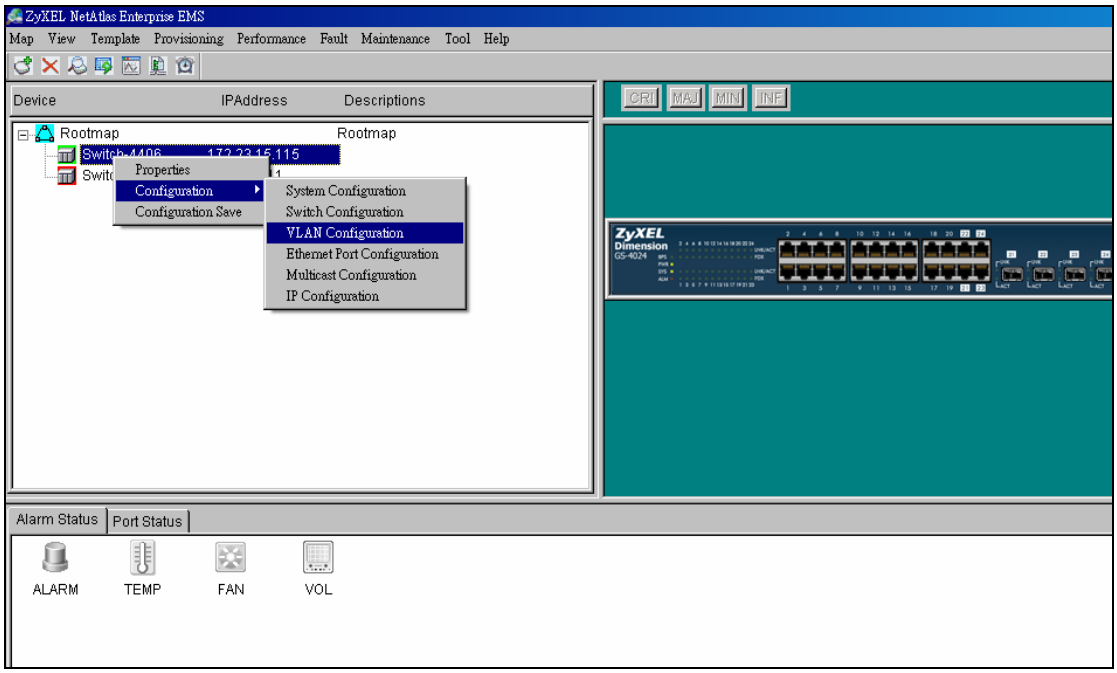


Figure 14 Selecting a VLAN Type



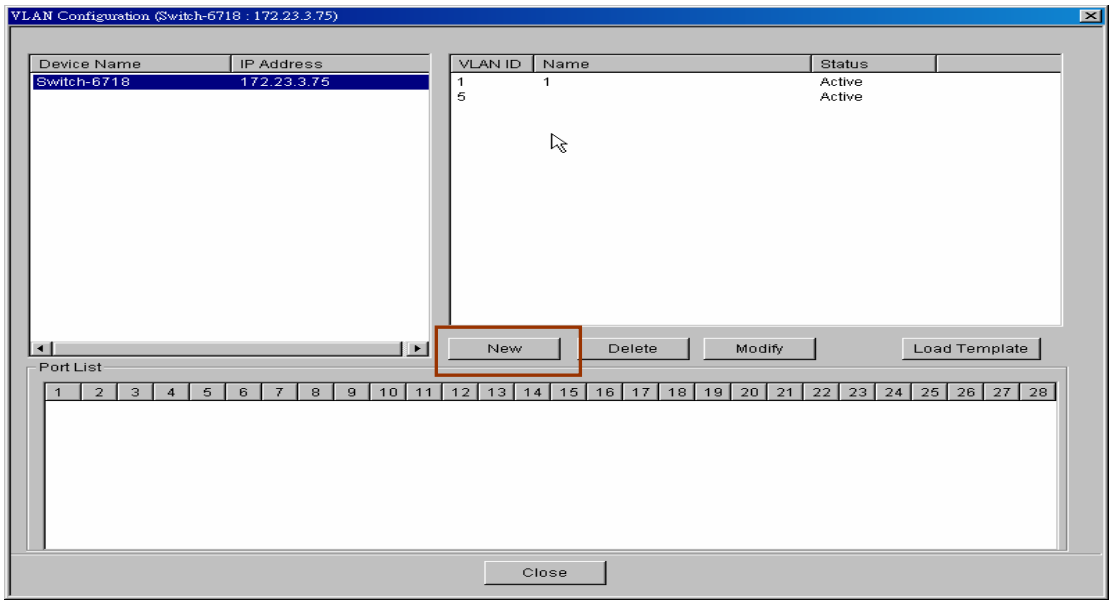
After the VLAN type selection, a pop-up window indicates that you have finished the configuration. Then after we have set the VLAN type to be 802.1Q, go back and click Configuration and then VLAN configuration as on Figure 15.

Figure 15 VLAN Configuration



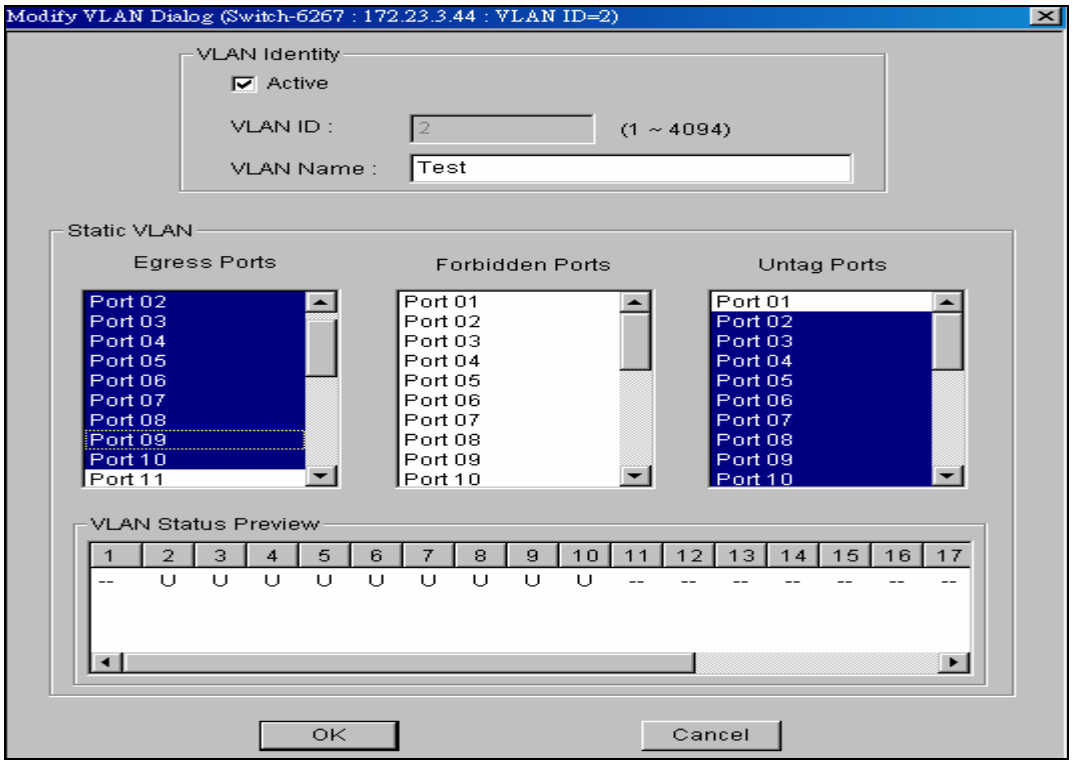
Click the New button to create a new VLAN ID on Figure 16.

Figure 16 Creating a new VLAN ID



Selecting Egress ports and defines them to be tagged or untagged on Figure 17

Figure 17 Selecting the ports



For more information, refer to the user guide of NetAtlas.