NetAtlas

(NetAtlas Workgroup)

Ethernet Switch

Support Notes

Version 1.00

March 2006

ZyXEL

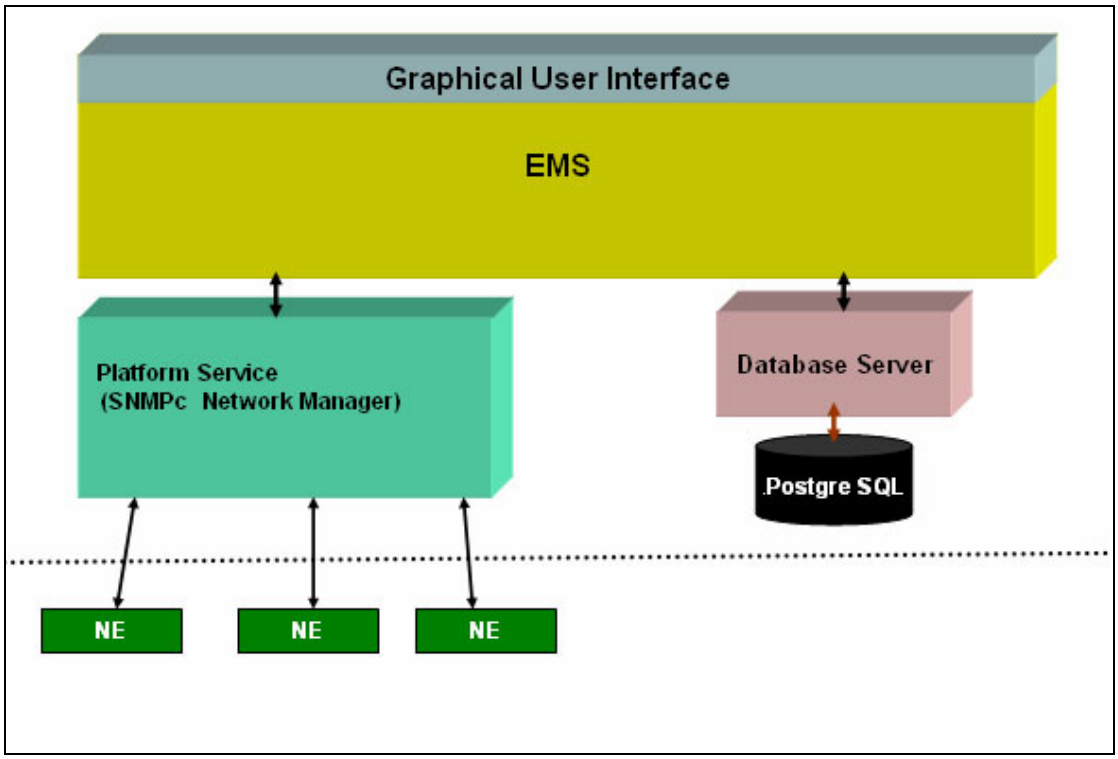
Unleash Networking Power

Introduction of SNMPc and NetAtlas

With the number of network device increase, the demand to detect and respond to the network failure or external event in a very short time posts a great challenge to network administrator. How to easily manage and monitor network devices across networks becomes more and more important in network management.

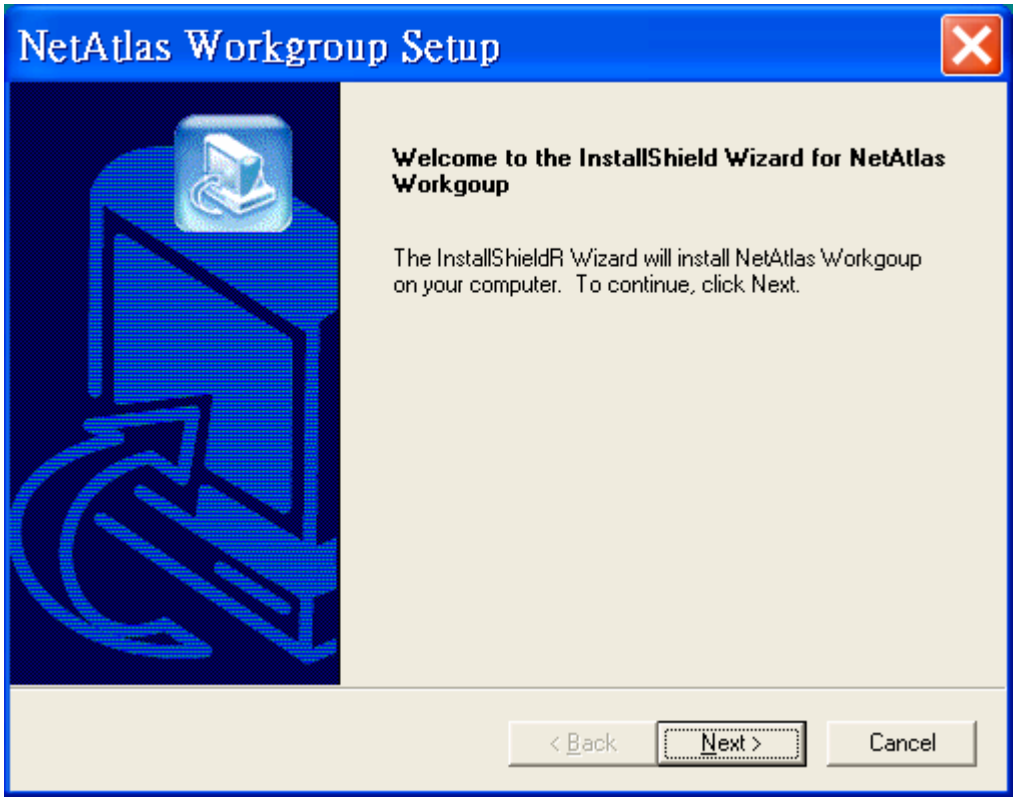
Figure 1 presents main elements of the system architecture. Element Management System (EMS), NetAtlas provides a centralized remote management platform and acts as SNMPc manager to perform network configuration, system management, event/alarm management, performance management and security for all ZyXEL's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

Figure 1 System Architecture

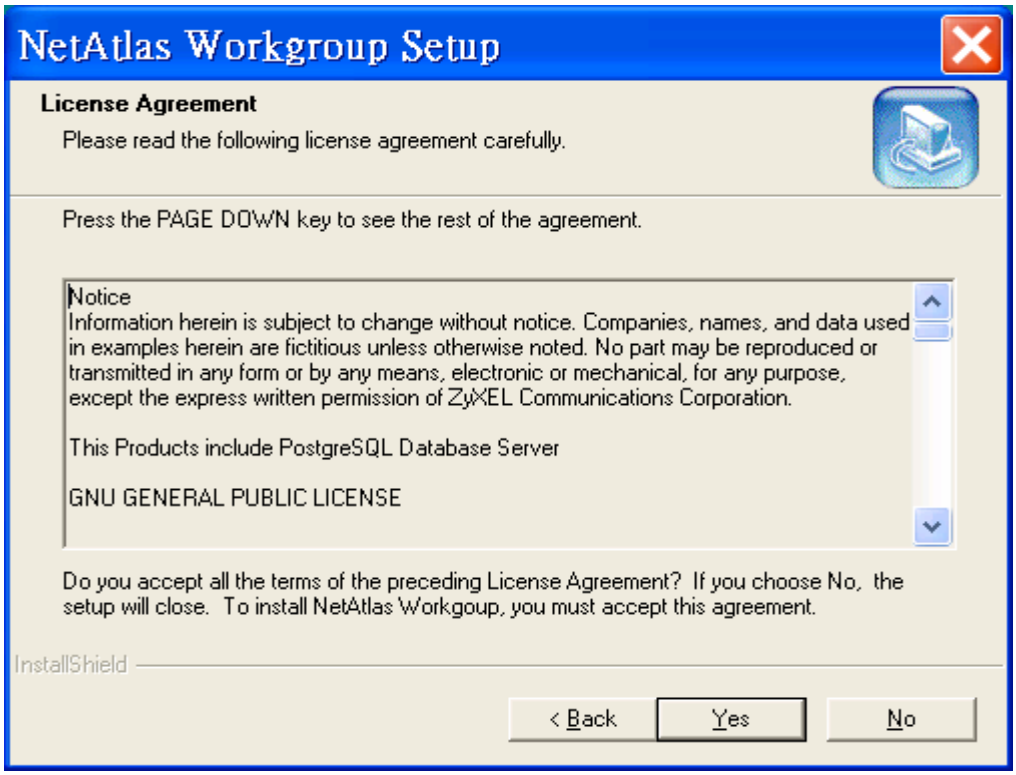


Installation of Netatlas workgroup

1. Double click the installation file located on the Netatlas CD.

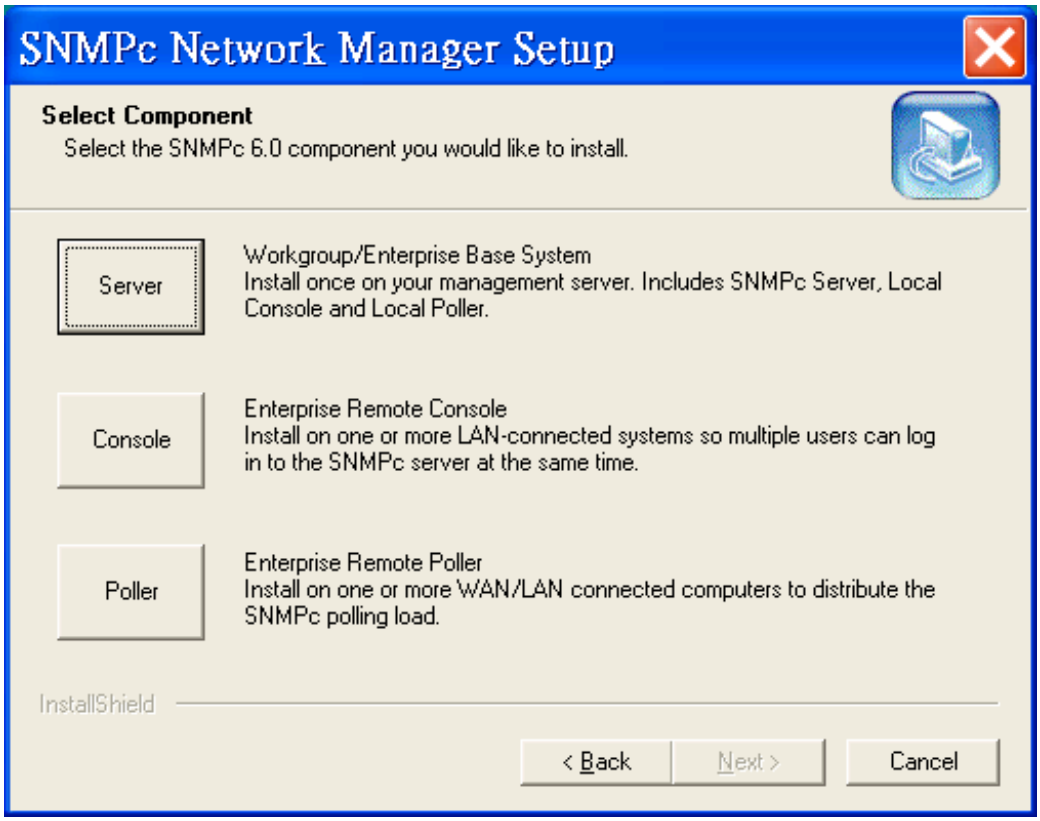


2. Read the license information, if you agree with the license, click “yes” to continue.

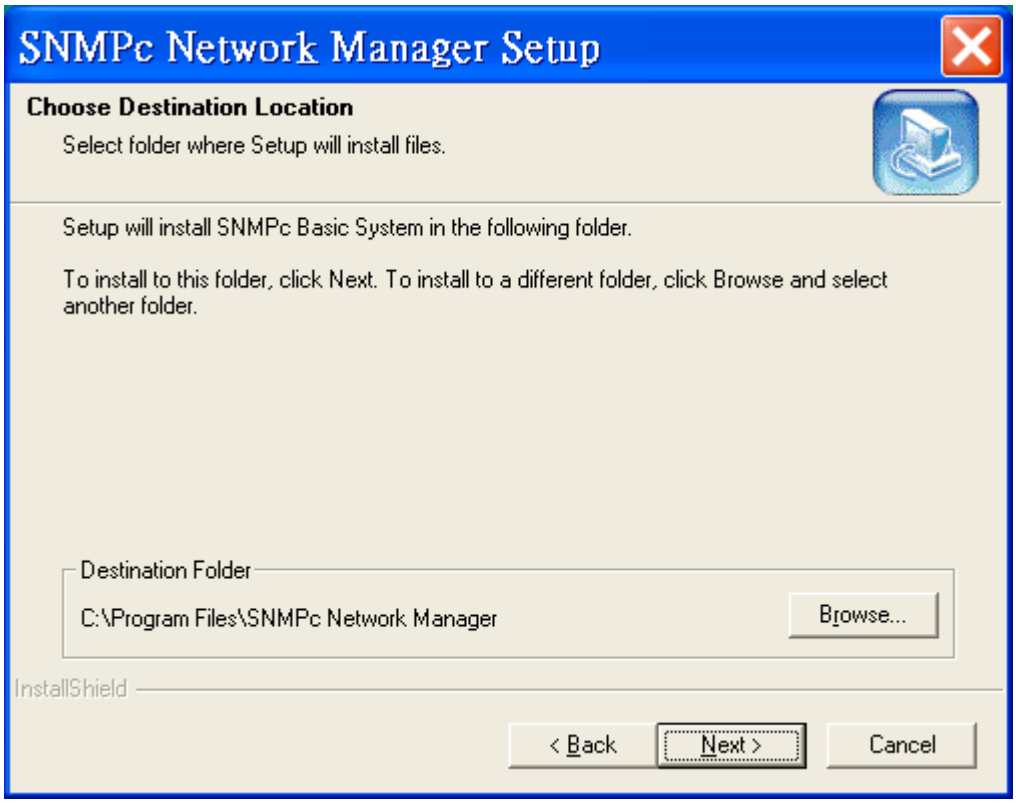


At this time, if SNMPc does not exist in your PC, the Netatlas installation program will install SNMPc for you.

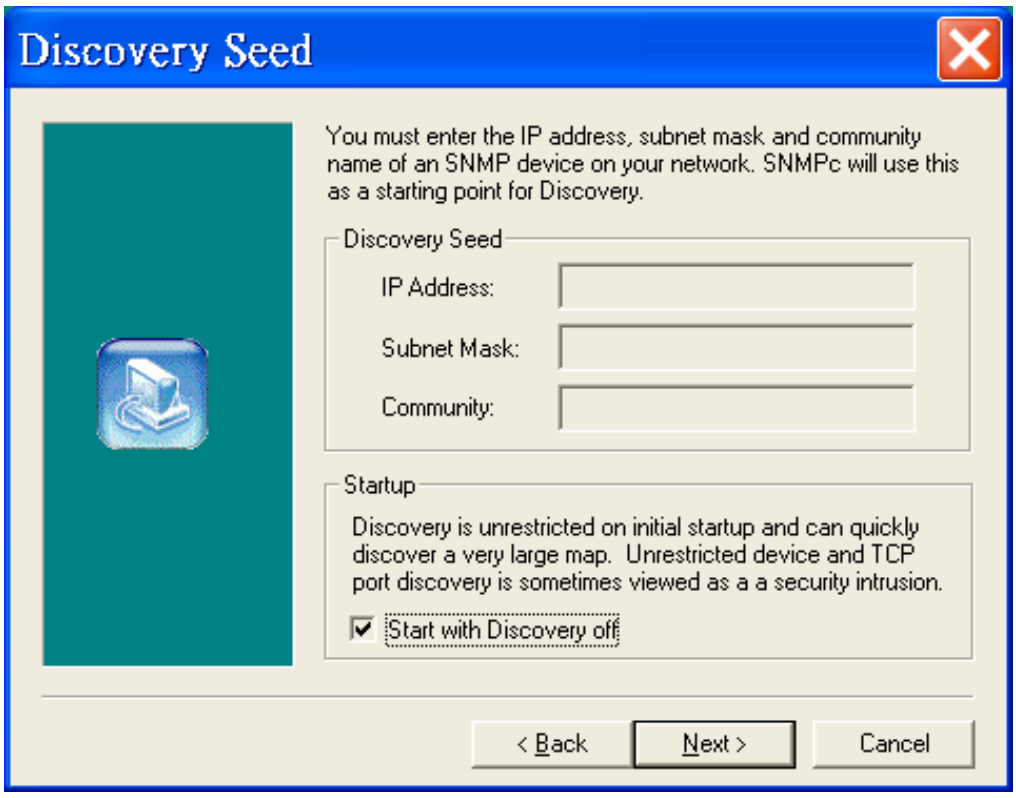
3. Choose “Server” and then click “Next”



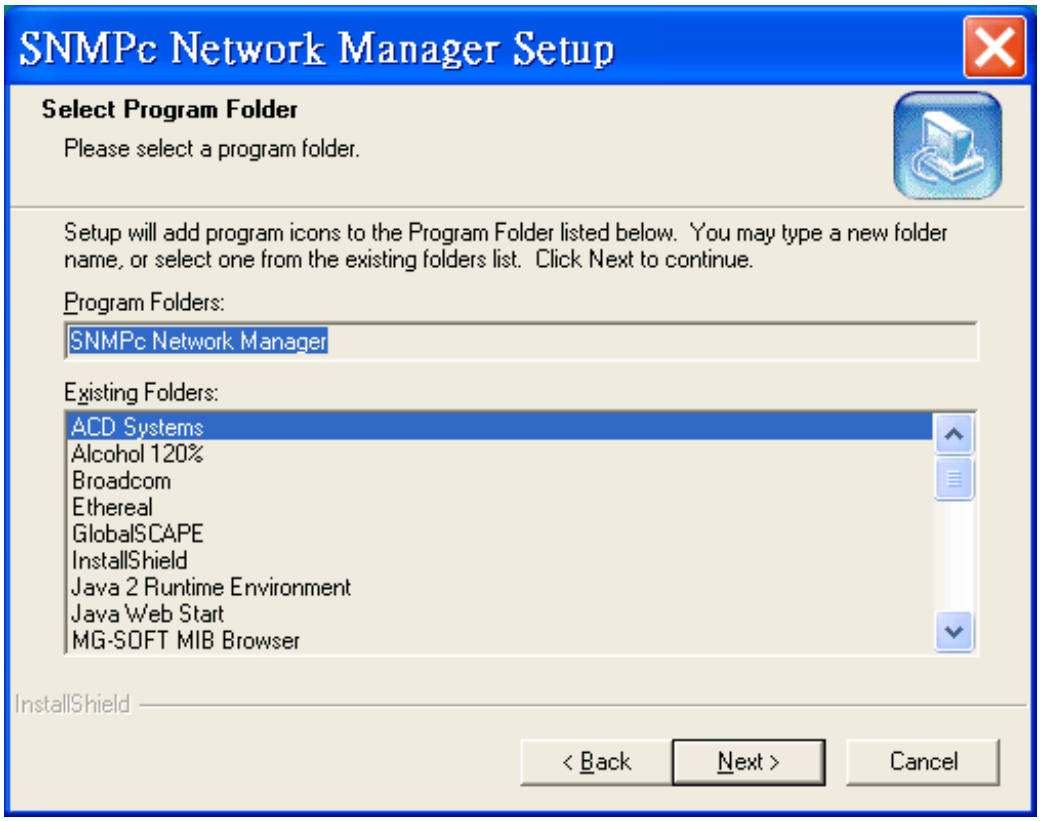
4. Choose the location that you want to install Netatlas, then click “Next”



5. Netatlas comes with a feature called “Auto Discovery”, if you are not going to use this “Auto Discovery” at this time, check the box “Start with Discovery off”. Then click “Next”



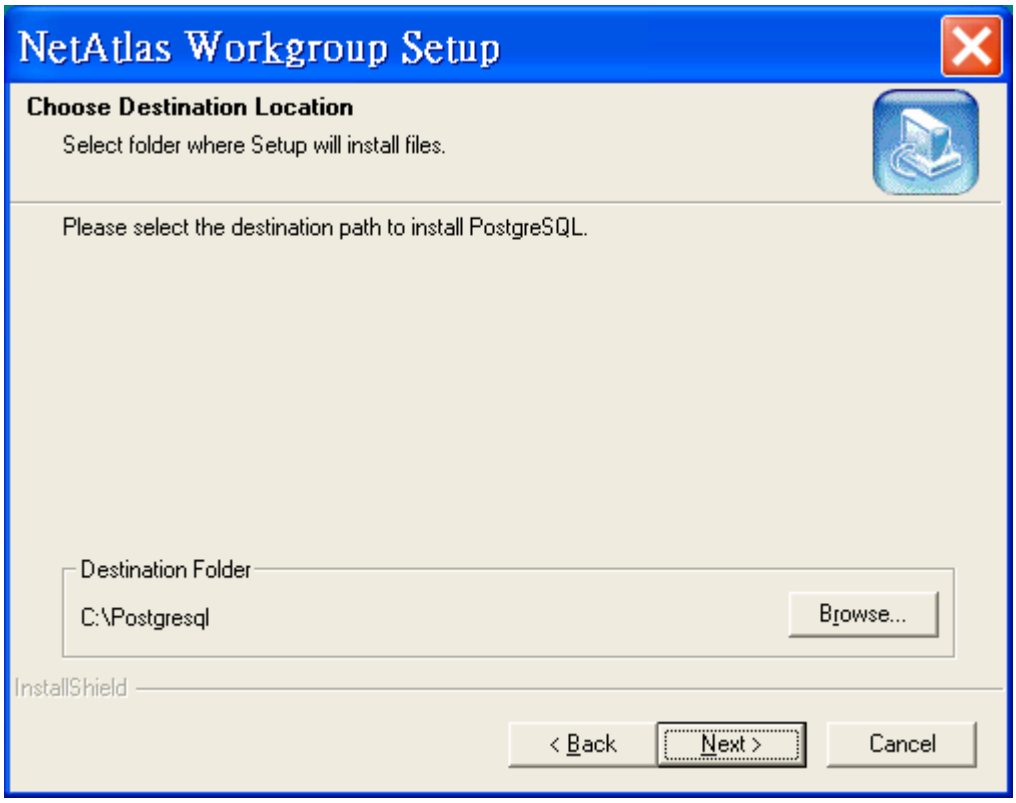
6. Here it shows the default program folder that Netatlas is going to install. Click “Next” to continue.



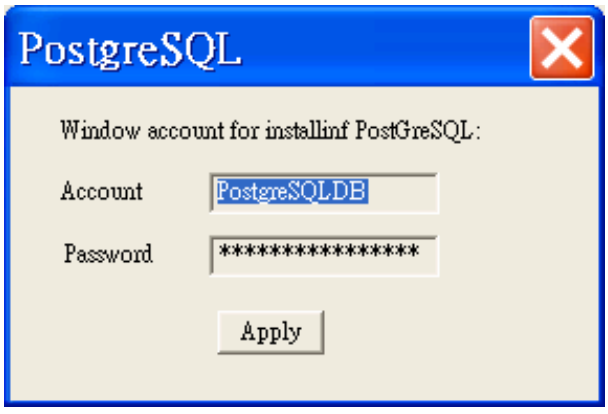
At this moment, the installation of SNMPc is completed.

7. If PostgreSQL does not exist in your PC, the Netatlas installation program will also install it for you.

8. Please select Postgresql Install Path. Then click “Next”

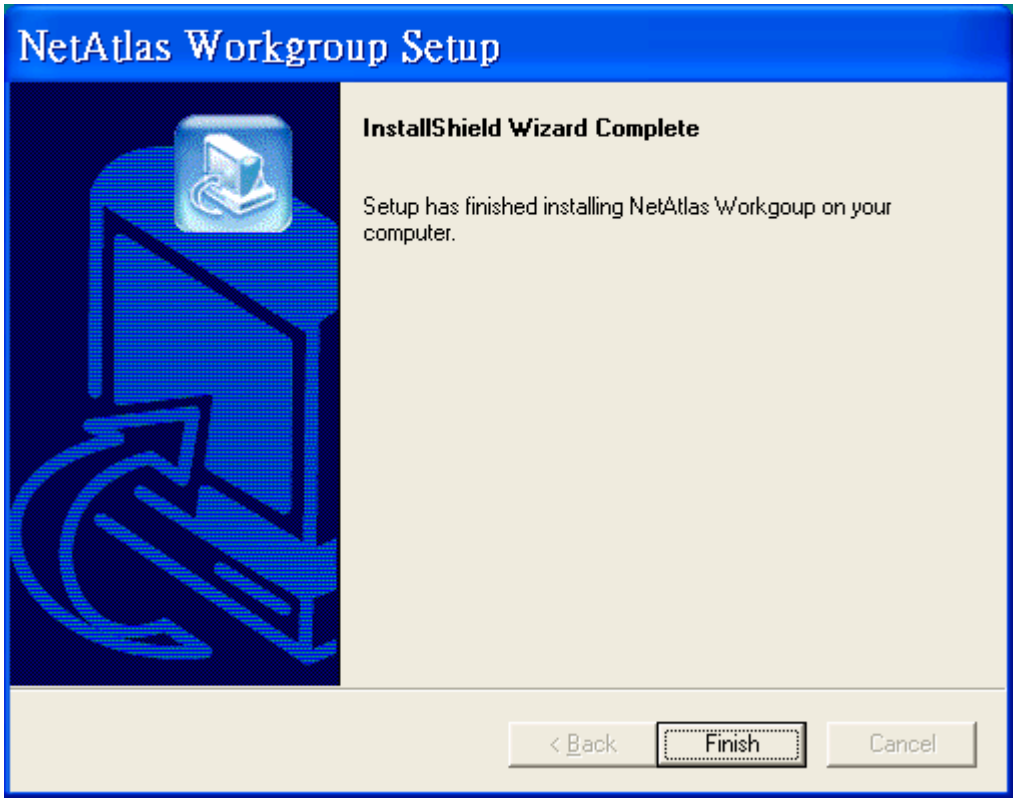


9. It is NOT recommend changing the default account/password here. Just click “Apply” to continue.



10. When the installation of PostgreSQL is done, it will pop up the following message.

11. When everything is set, the installation program will start to install Netatlas Workgroup. Finally, click “finish” to complete the whole installation process.

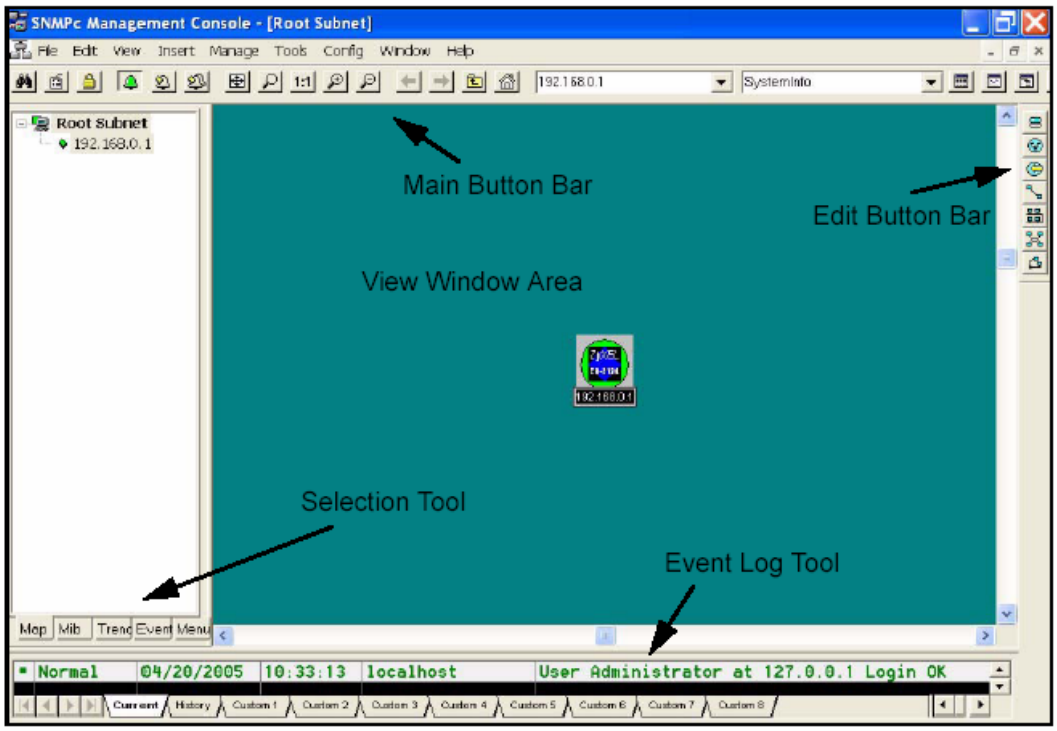


Overview of SNMPc

The following diagram shows the main elements of SNMPc. SNMPc includes the following function

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

Figure 2 Main elements of SNMPc



Overview of EMS

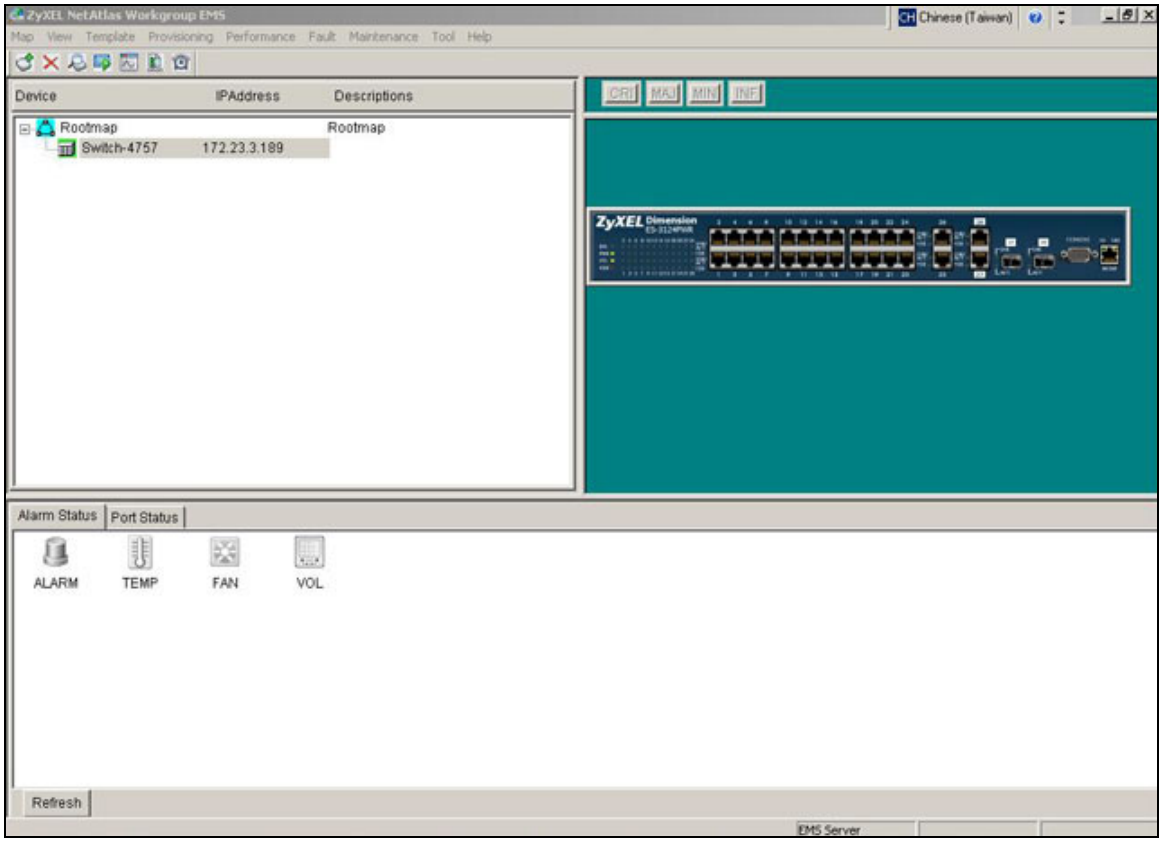
The following diagram illustrates the main elements in EMS. EMS contains the four main functions.

- **Menu Shortcut Bar**: The buttons execute common commands
- **Device Panel**: This is a graphical device display.
- **Device List Panel**: View devices in a tree structure. The colors of the device

indicate the status of the devices. Green is working and Rd is no response from the device.

- **System message Panel**: View the alarm Status and port status of the selected switch.

Figure 3 Overview of EMS

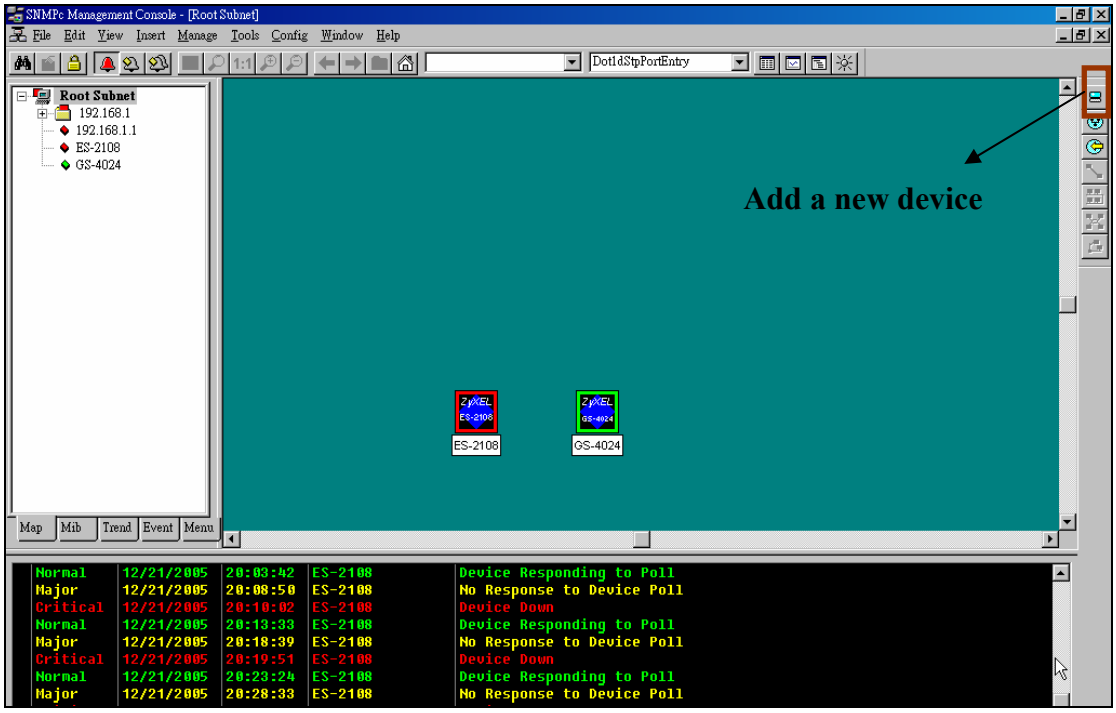


Configuration of adding a new device via SNMPc

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

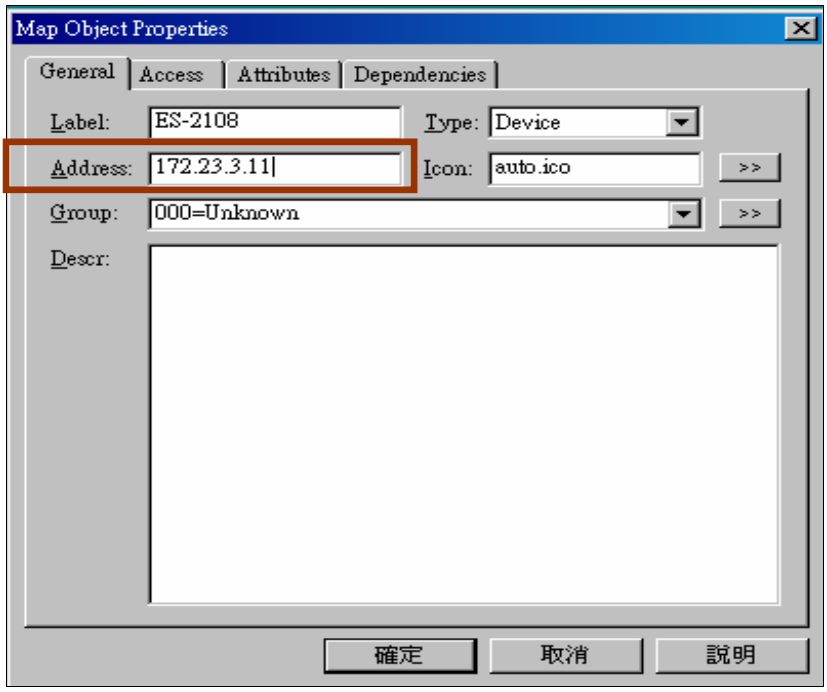
Step 1: In the edit button bar shown in the Figure 4 where you may select the icon to insert a new element.

Figure 4 Adding a new Device



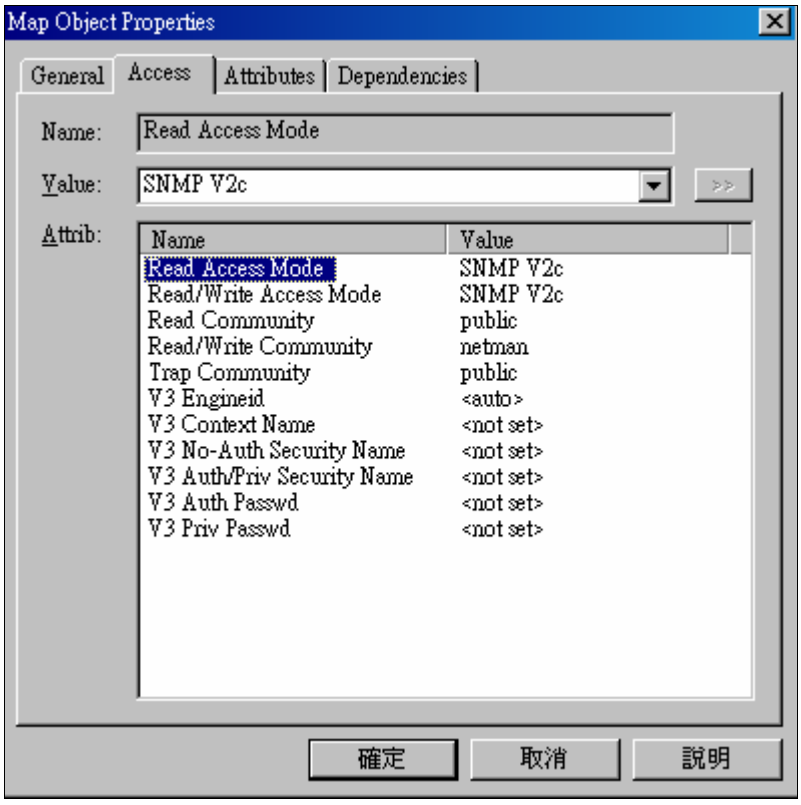
Step 2: In the map object properties, give the label name and enter the IP address of the selected device. In this example, we configure 172.23.3.11 as its IP address of ES-2108 as shown in Figure 5

Figure 5 Map Object Properties



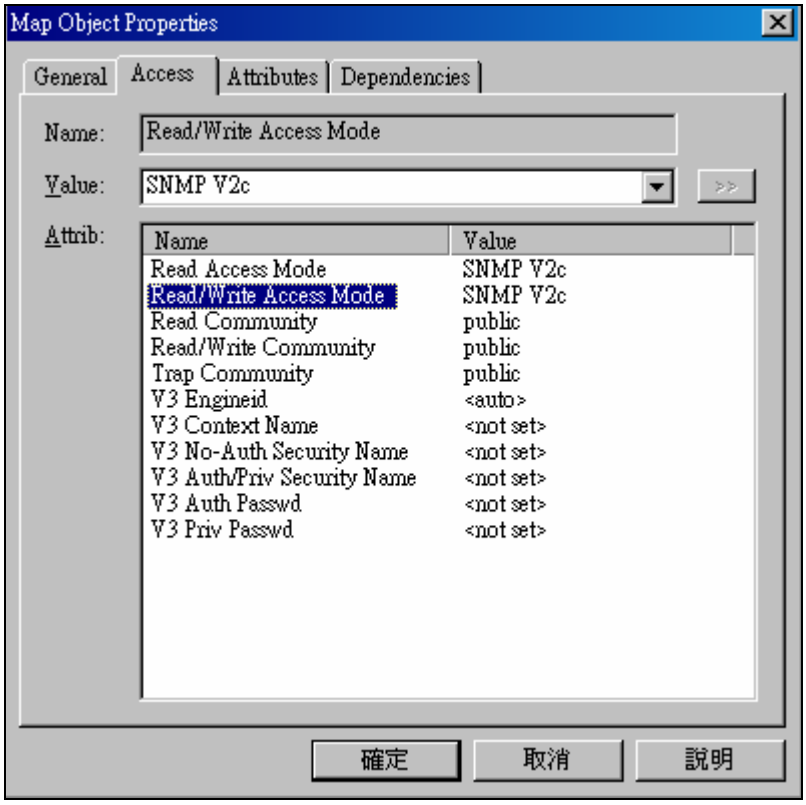
Step 4: In the map object properties, select **Access** tab to set the parameters of Read Access Mode to SNMP V2c shown in Figure 6. Change the value of Read Access Mode to SNMP V2c.

Figure 6 Read Access mode



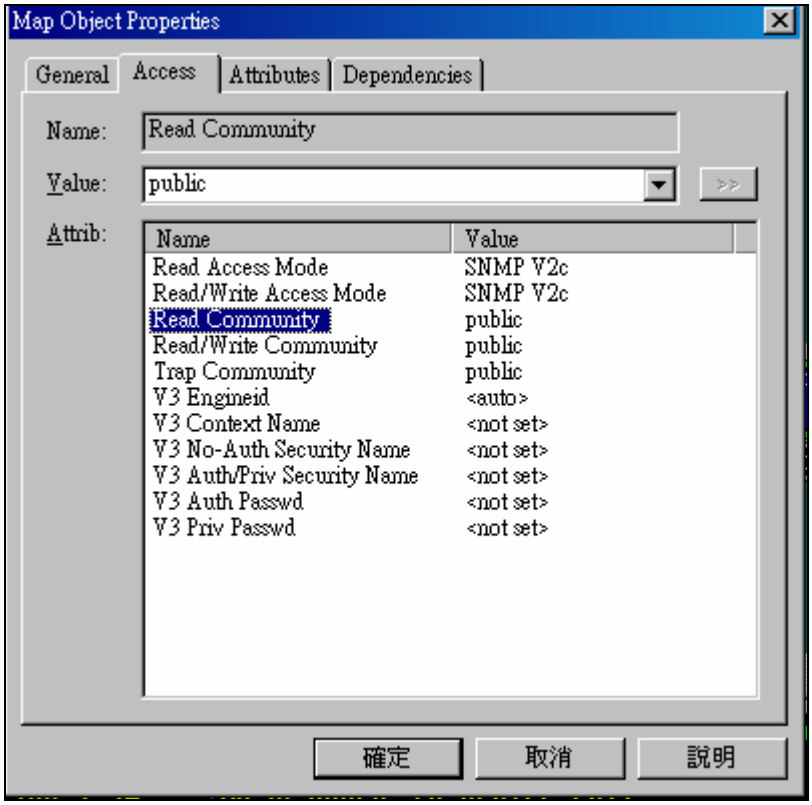
Step 5: In the map object properties, select **Access** tab to set the parameters of Read /Write Access Mode to SNMP V2c shown in Figure 7. Change the value of Read/write Access Mode to SNMP V2c.

Figure 7 Read/Write Access Mode



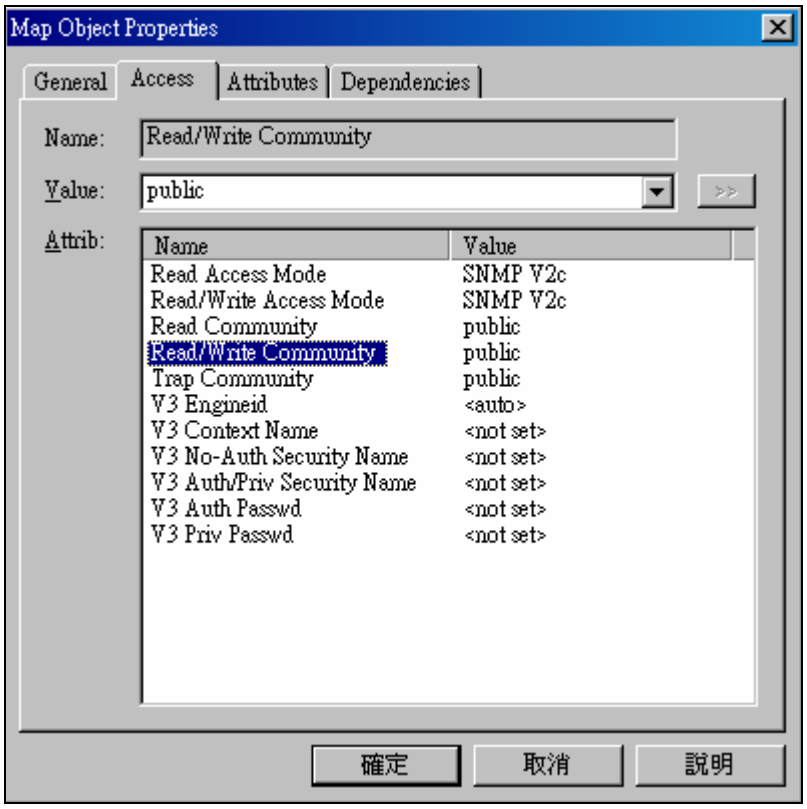
Step 6: In the map object properties, select **Access** tab to set the parameters of Read community to public as shown in Figure 8.

Figure 8 Read Community



In the map object propeies, select **Access** tab to set the parameters of Read community to public in Figure 9. Change the value of Read//write Community to Public.

Figure 9 Read/write Community



Step 7: On the SNMPc main window. Select SNMPc->Config->MIB Database menu function. You need to add (and compile) the following Mib files **in order**:

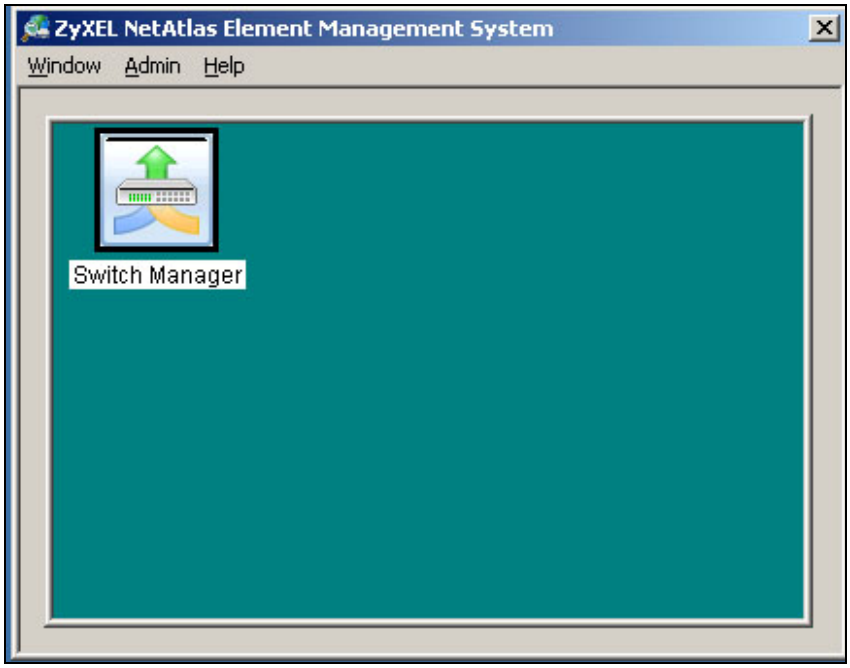
- ✓ rfc2674.mib
- ✓ rfc2925.mib
- ✓ rfc3291.mib
- ✓ rfc3621.mib
- ✓ OSPF-MIB.mib
- ✓ zyxel-ES3124.mib
- ✓ zyxel-ES3124PWR.mib
- ✓ zyxel-ES2024A.mib
- ✓ zyxel-GS2024.mib
- ✓ zyxel-GS4024.mib
- ✓ zyxel-GS4012F.mib
- ✓ zyxel-ES2108.mib
- ✓ zyxel-ES2108G.mib

Step 8: In the Selection tool menu, Click ES-2108 to manage the device.

Figure 10 Device Selection

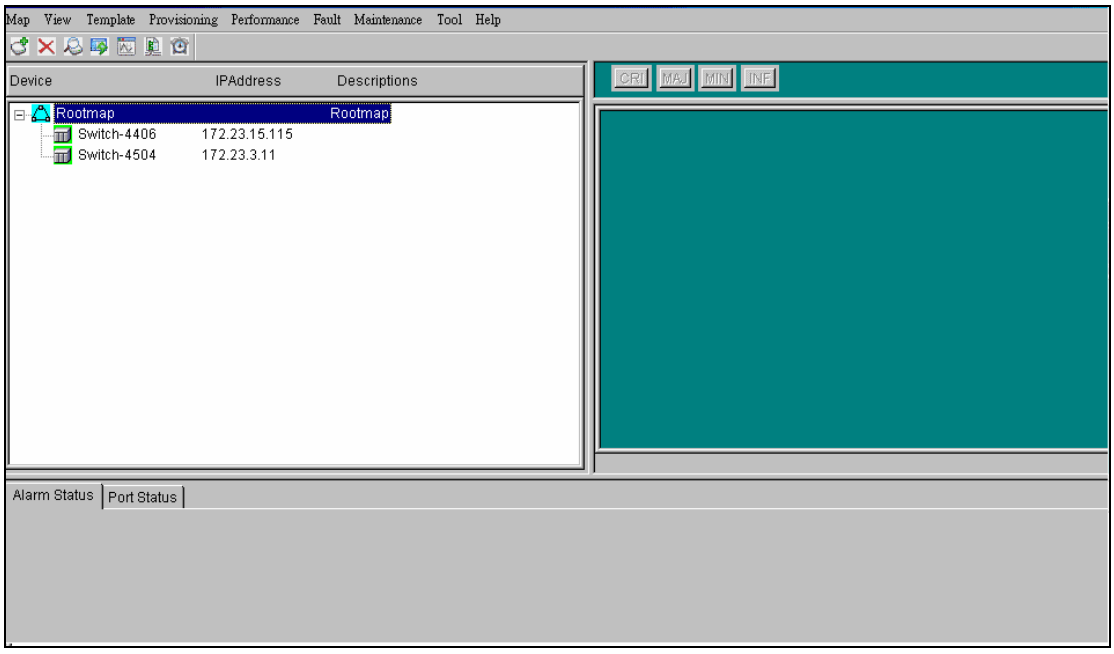
Step 9: After the selection, a pop-up menu will display the NetAtlas switch manager diagram. Click the **Switch Manager** to enter the EMS Mapping shown in Figure 11

Figure 11 Device Selection



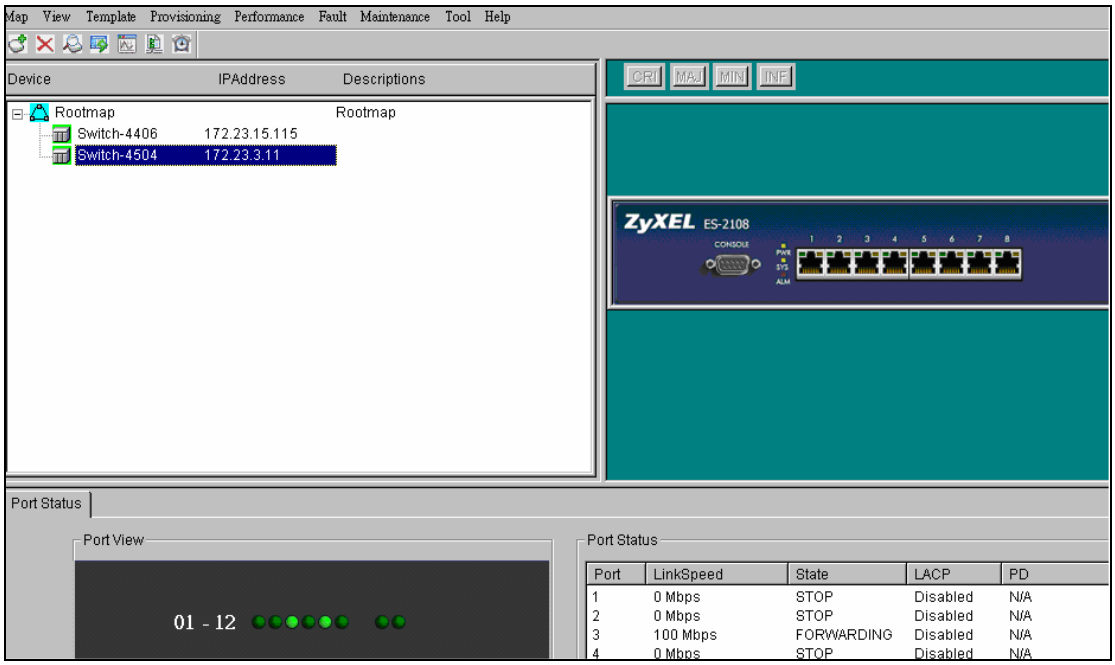
Step 10: In the EMS mapping, it display a logical hierarchy for the device. In the device list, you may see the devices are added in the Rootmap shown in Figure 12.

Figure 12 Rootmap



Step 11: Click the ES-2108 to configure the device shown in 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 in GS-4024. Here are the procedures.
Step 1: In the device panel list shown in Figure 12, right-click **Configuration**, **Switch Configuration** and then **Switch Setup** tab as shown in 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

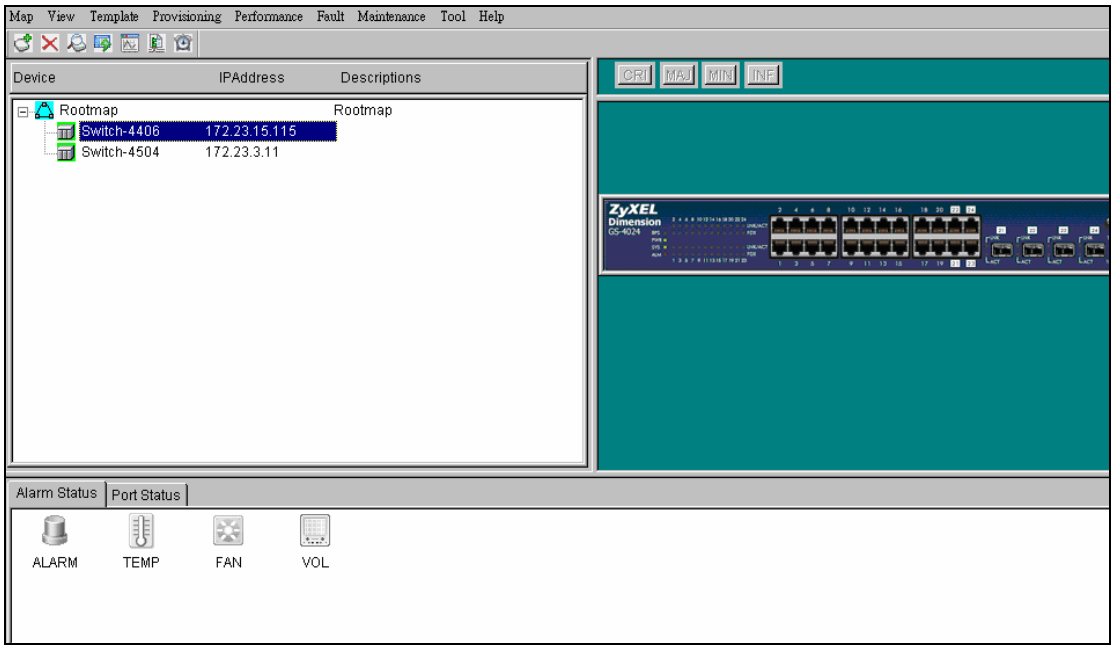


Figure 13 Switch Configuration

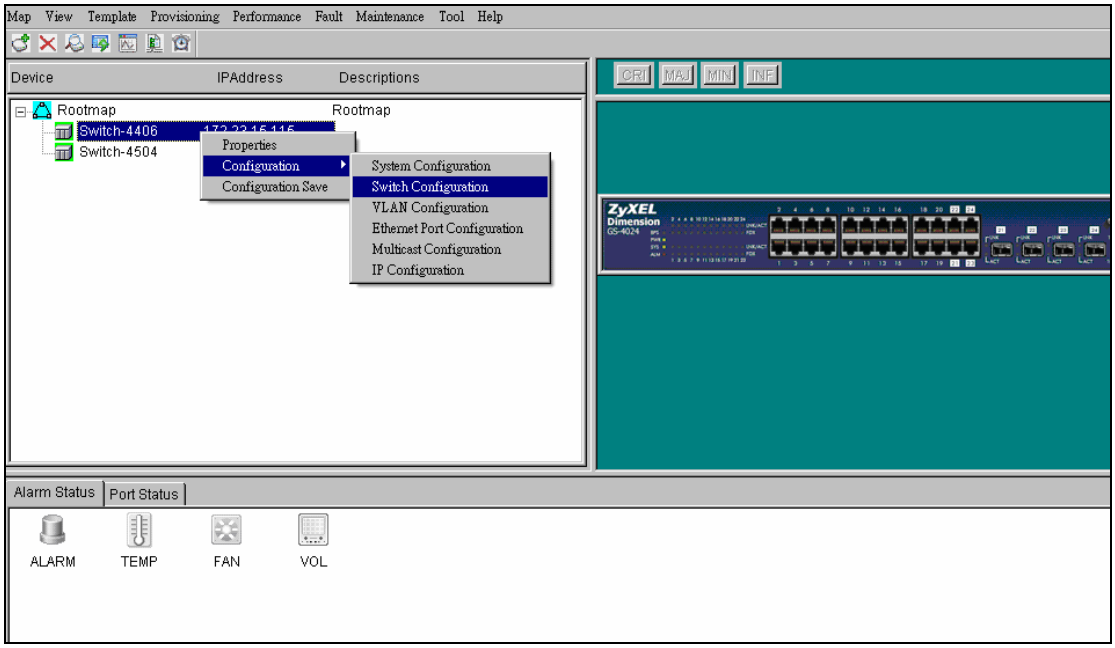
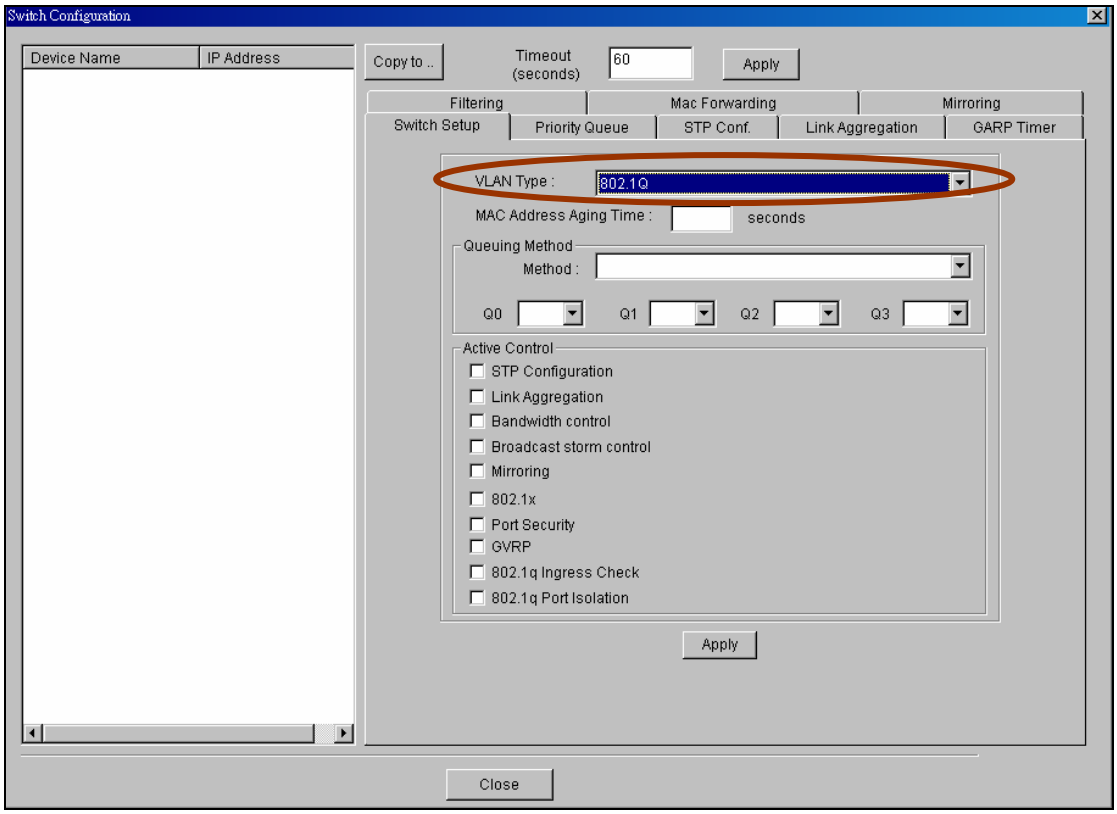
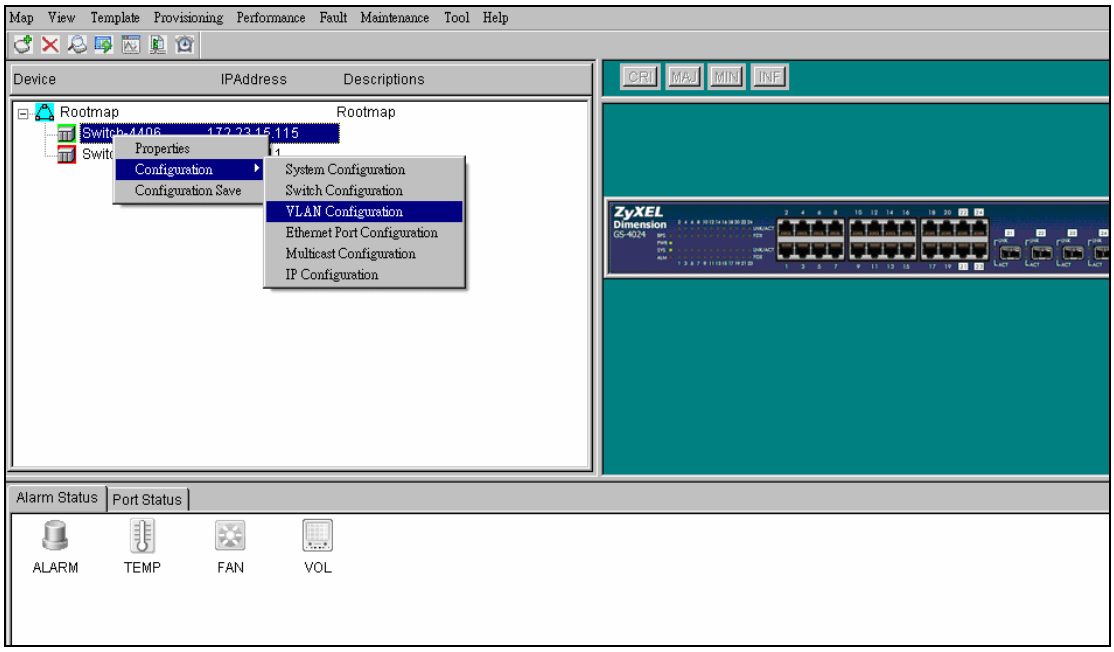


Figure 14 Selecting a VLAN Type



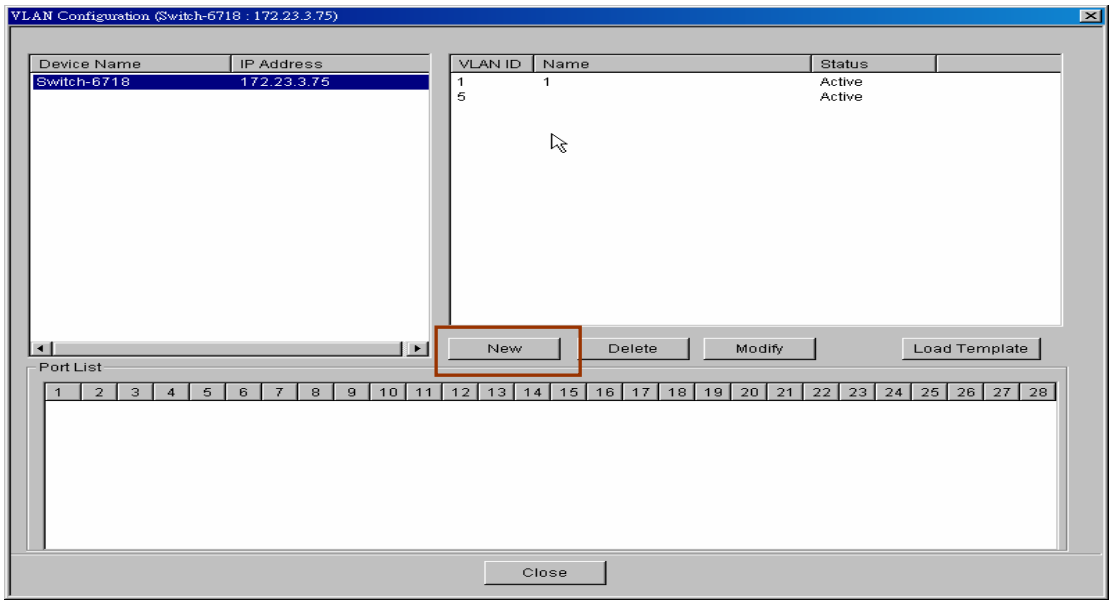
After the VLAN type selection, a pop-up window indicates that you have finished the configuration. Then after we have defined the VLAN type to be the 802.1Q, go back to click the Configuration and then VLAN configuration in Figure 15.

Figure 15 VLAN Configuration



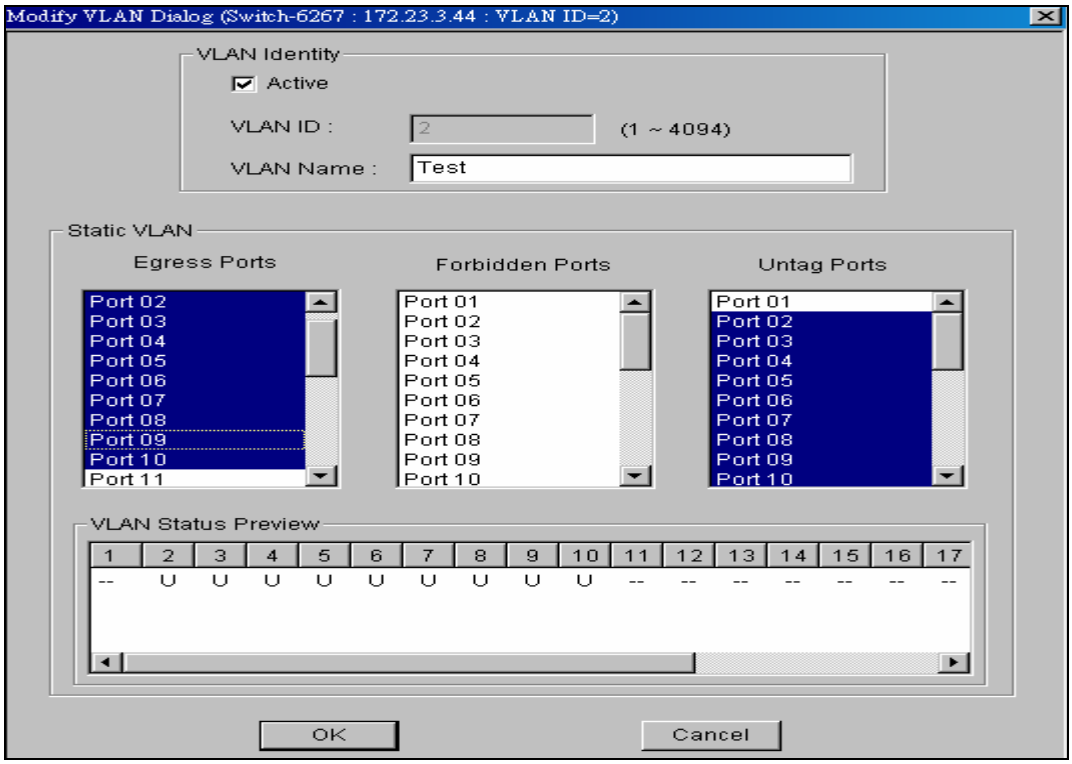
Click the New button to create a new VLAN ID in Figure 16.

Figure 16 Creating a new VLAN ID



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

Figure 17 Selecting the ports



For more information, reference the user guide of NetAtlas.

Troubleshooting

Question: SNMPc, EMS and/or PostgreSQL will not install properly.
Answer:

- Make sure that the computer on which you want to install the SNMPc, EMS and PostgreSQL meets the minimum hardware and software requirements.
- To install PostgreSQL, make sure your computer is using NTFS file system.
- Shut down any running services or applications which may affect the installation.
- Remove any previous versions of PostgreSQL and SNMP software from your computer.
- Re-install SNMPc and EMS in that order.

Question: I cannot find my device in the SNMPc Management screen.
Answer:

- Check that you have added and compiled the MIBs correctly. Make sure that the orders are followed exactly.
- Check that you have enabled auto-discovery;
- Check that the map object properties are correct for initial installation; Make sure the IP address entered is the IP address of the switch you want to manage via the EMS.
- Check that the ODBC driver is correctly configured;
- Make sure that PostgreSQL is running.
- Make sure that the computer you have installed the EMS on, is connected to the network where the switch is located.
- Make sure your computer's Ethernet card is working properly.
- If the problem still persists, uninstall and re-install the EMS software.

Appendix –
Comparison of NetAtlas Enterprise & NetAtlas WorkGroup

Feature	Netatlas Enterprise	Netatlas WorkGroup
Management Architecture	Distributed Architecture(Client-Server)	Local
Remote Management	Yes	No
Multiple User Access	Yes(concurrent 10 users)	Single User
Database	OBDC support (SNMPc)	Text only (SNMPc)
Trend Reporting	Yes	No
SNMPc Online 2005 advanced reporting engine	Yes	No
Live / Standby Backup Server Option	Yes	No
Device Support	Up to 25,000 Network Devices	Up to 1,000 Network Devices