User Guide

ProximVision ES
Installation and Management Guide

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Introduction

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This chapter contains information on the following:

- ProximVision ES
- Integrating ProximVision ES into the Network

1.1 ProximVision ES

ProximVision ES is an element management system that helps you manage your wireless network effectively and efficiently. ProximVision ES combines industry-leading functionality with an intuitive user interface, enabling network administrators and Help Desk staff to support and control a wireless network.

ProximVision ES offers you a single intelligent console from which you can manage, monitor, analyse and even configure your wireless system. ProximVision ES supports only Proxim devices, Refer to ProximVision ES Supported Devices. The core components of ProximVision ES are as follows:

- Network Discovery
- Configuring Devices
- Creating Groups
- Assigning Newly Discovered Devices to Groups
- Configuring Individual Device Settings
- Monitoring Diagnostic Information of the Device
- Configuring Bulk Device Setting
- TFTP Server
- Trap Log Viewer
- SysLog Viewer
- Device Pages
- Inventory Reports
- Maps
- Graphs
- Performance Monitoring

This User Guide provides instructions for the installation, configuration, and operation of the Proxim Management Platform. If you have any queries, contact Technical Services and Support.

1.2 Integrating ProximVision ES into the Network

ProximVision ES generally resides in the windows machine and communicates with various components of your WLAN infrastructure. In any deployment, ProximVision ES seamlessly integrates and communicates with Access Points, Multipoint devices, Point-to-point devices and Mesh devices. From a central location, you can manage your network, real-time monitoring screen provides you information who is connected to your network and its status. With the help of ProximVision ES, you can plan your network usage and ensure optimum utilization of your network. ProximVision ES communicates over-the-air or over-the-wire utilizing a variety of protocols.

Installation 2

This chapter contains information on the following:

- System Requirements
- License Policy
- Install Software and Documentation
- Initialization of ProximVision ES
- Software Updates

2.1 System Requirements

Before installing ProximVision ES, check for system requirements for best results:

- Windows 2003/ XP/ Windows 7*****/ Vista*****
- Dual Core 2 GHz or more
- 2 GB RAM
- An additional of 250 MB Hard Disk space

* In case you have installed PVES in Microsoft Vista or Windows 7, ensure that you run the PVES application in XP compatibility mode with Admin privileges.

> **NOTE:** In case you have installed Microsoft Vista, ensure that you use 3 GB RAM.

2.2 License Policy

The following is a brief summary of the ProximVision ES license policy

- By default and without additional licenses, ProximVision ES will allow you to configure and monitor up to three devices. In order to configure and monitor more devices, you will need to purchase a 20, 100, 500 or 1000 nodes license from Proxim Wireless.
- When you first install ProximVision ES, a **Licensedata.lic** file is generated in the **lic** subdirectory of ProximVision ES install directory. This Licensedata.lic file is needed to validate a license purchase.
- To validate a license purchase, please go to Proxim Support Website (http://support.proxim.com/) Product Download Page.

2.3 Install Software and Documentation

> **NOTE:** *If an earlier version of PVES is already installed on your system, uninstall it before proceeding with the installation of ProximVision ES application v2.0. To install the software and documentation, follow the following steps.*

1. Double-click the PVES executable file.
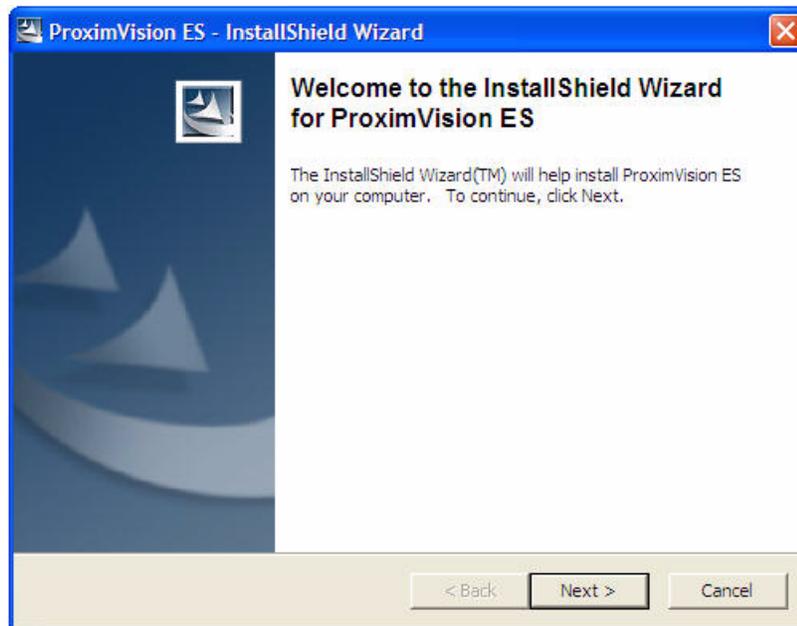
Figure 2-1 PVES InstallShield Wizard

2. Click **Next** to proceed with the installation. This extracts the contents of the package and displays the ProximVision ES Setup page. It provides two Setup options:
    – Install ProximVision ES
    – Install SolarWinds TFTP Server

    *NOTE: Proxim recommends you to install the SolarWinds TFTP Server. Select "**Install SolarWinds TFTP Server**" to install the SolarWinds TFTP Server.*
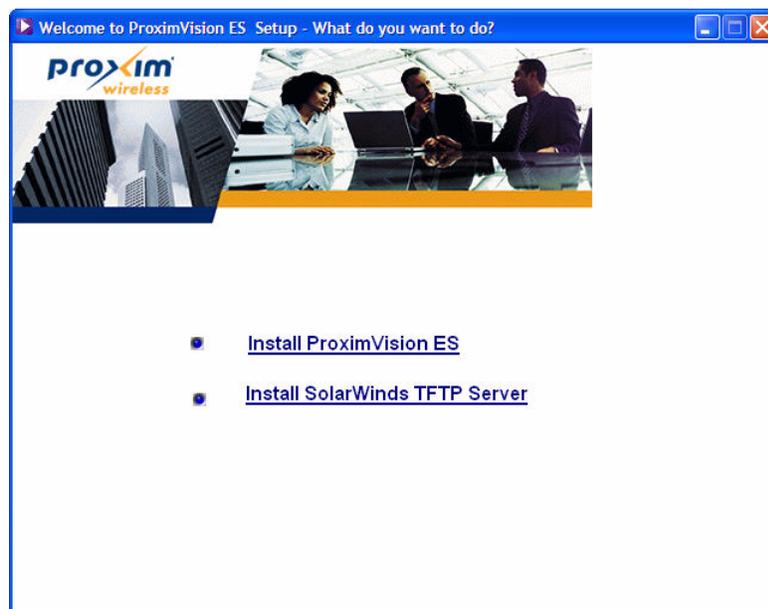
Figure 2-2 PVES Setup

NOTE: Close all other applications before installing the PVES application.

3. Click "**Install ProximVision ES**" link to install ProximVision ES application.

4. Click **Next** to display the License Agreement window. Read the license Agreement and then select "**I accept the terms of the license agreement**", and click **Next.**
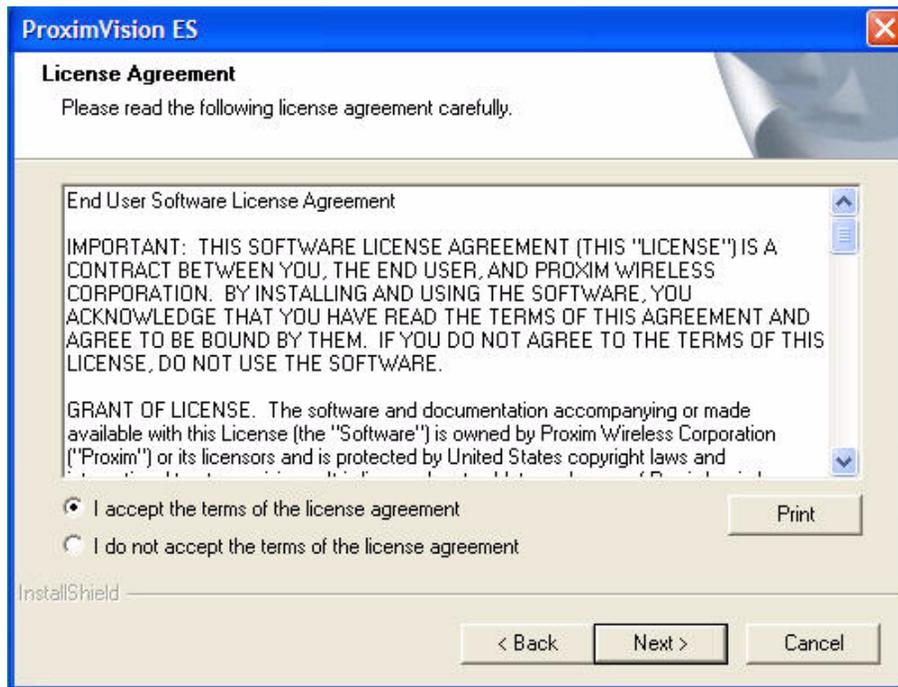
Figure 2-3 License Agreement

5. Enter User Name and Company Name in the Customer Information window, and then click **Next**.
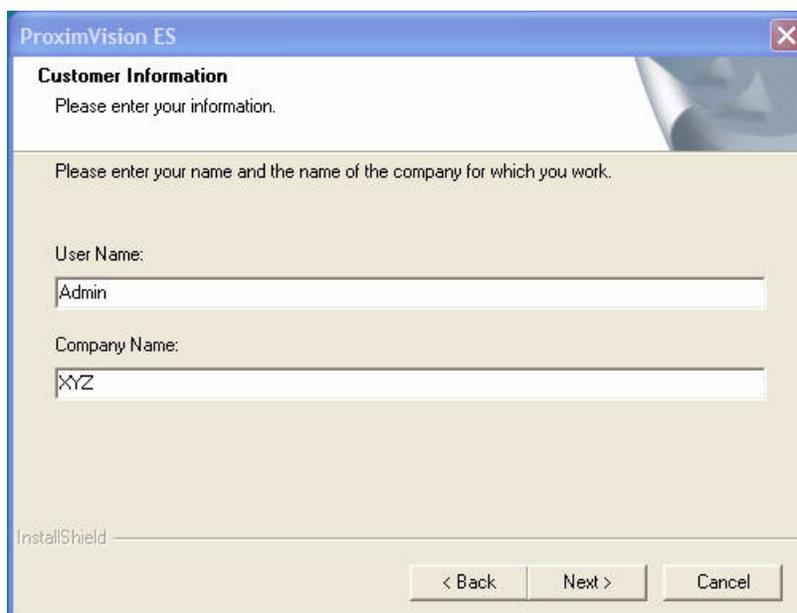
Figure 2-4 PVES Customer Information

6. Select the Setup Type as either **Complete** or **Custom** and then click **Next**.
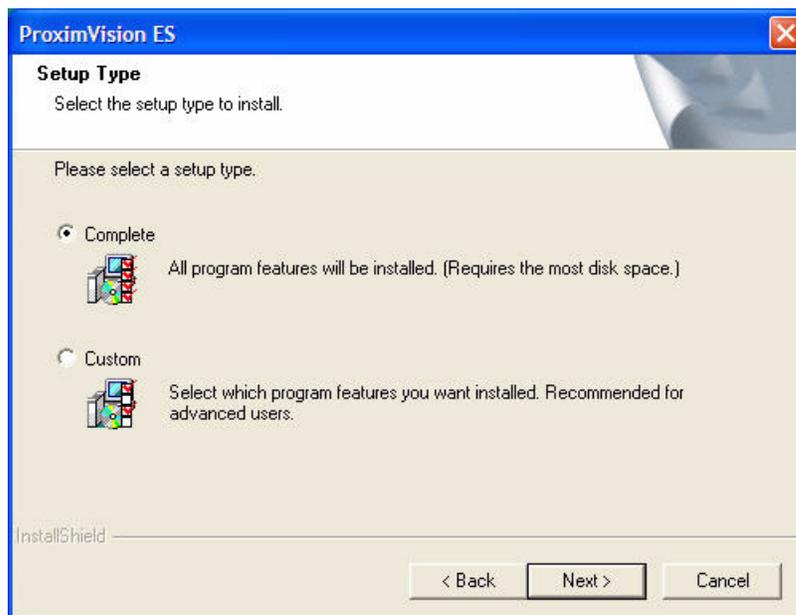
Figure 2-5 Setup Type

7. Select the Setup type that you would like to install and click **Next**. Selecting **Complete** as your setup type leads you to a default pathway of installation; whereas, selecting **Custom** prompts you to customize your installation pathway.

a) If you selected **Custom** in the Setup Type window, the following screen appears.
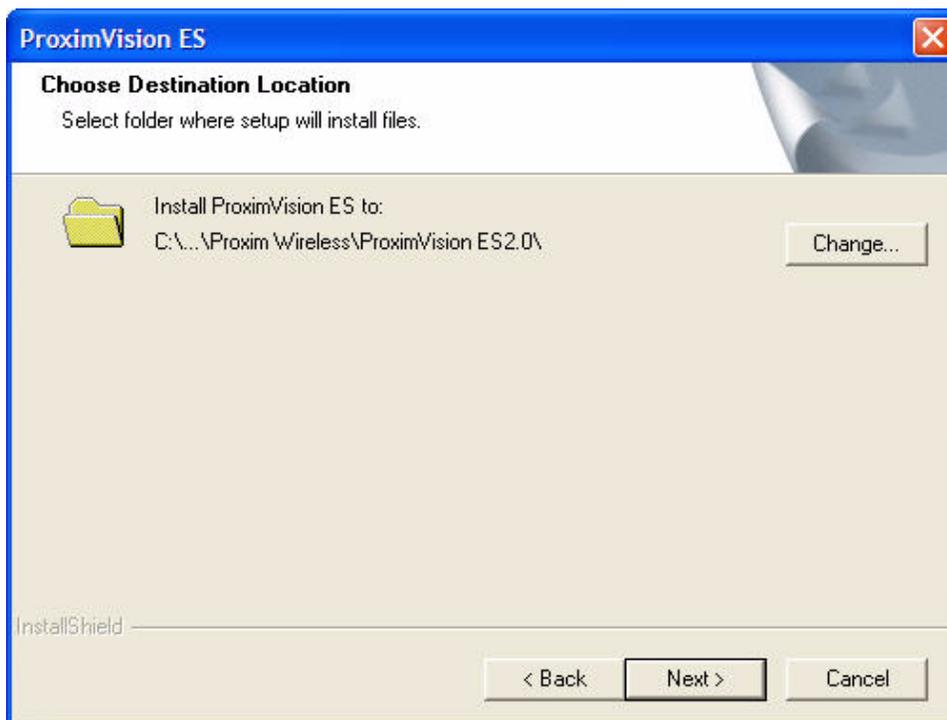
Figure 2-6 Choose Destination Location

— Click **Change** and select a folder where you want to install the files. Click **OK**.
— Click **Next**. The **Select Features** window appears as shown below.
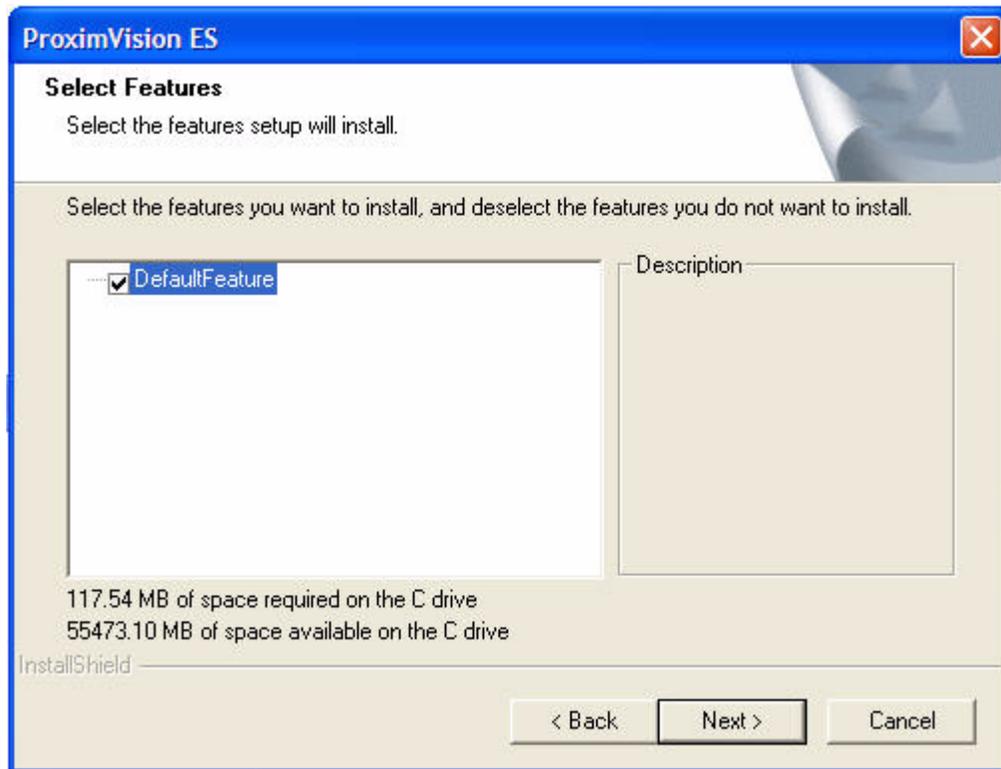
Figure 2-7 Select Features

— Select **Default Features** and click **Next**. The **Ready to Install the Program** window is displayed.

b) If you selected **Complete** in the **Setup Type** window, the following screen appears.
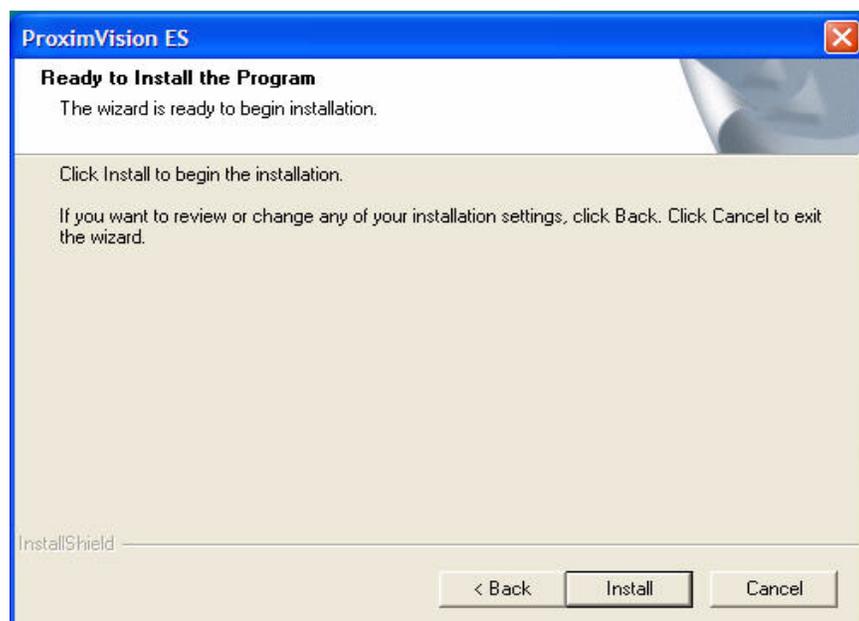
Figure 2-8 Ready to Install the Program

8. Click **Next** to display the **Setup Status** window.
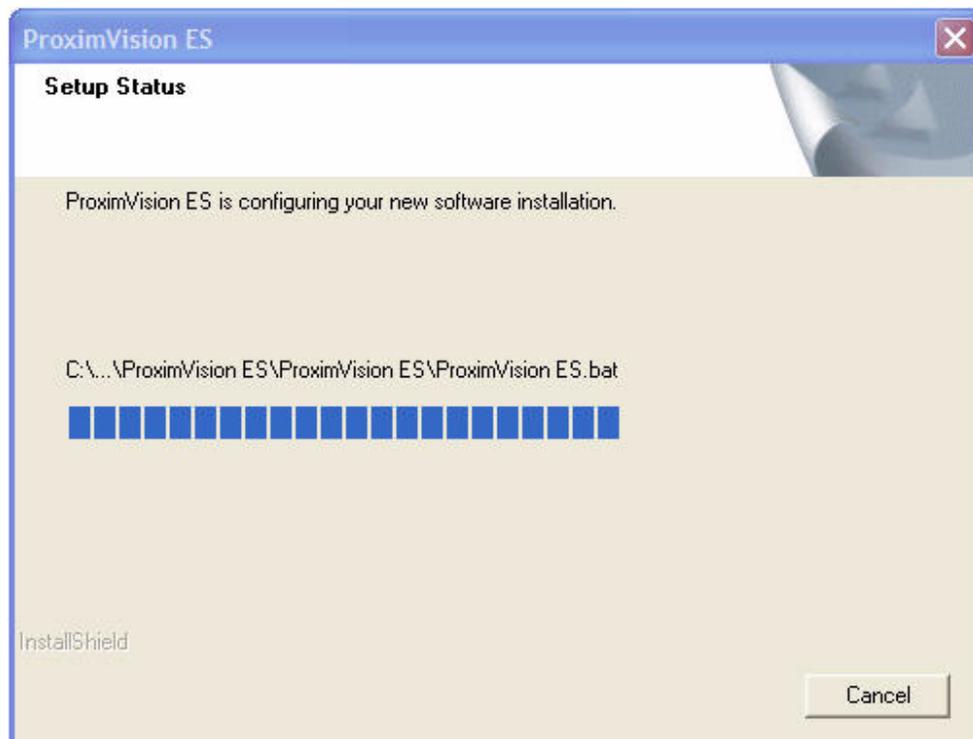
Figure 2-9 Setup Status

9. Click **Finish** to complete the installation procedure.
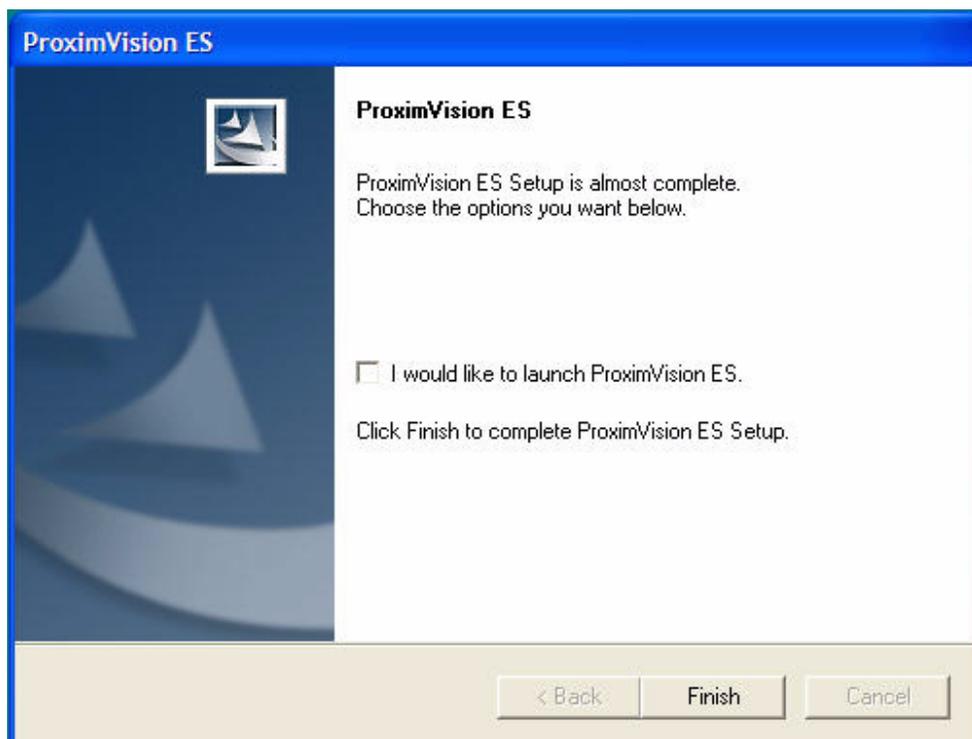
Figure 2-10 PVES Complete Setup

WARNING: Sometimes an error message appears in Microsoft Vista saying, "THIS PROGRAM MIGHT NOT HAVE INSTALLED CORRECTLY" as shown below. Close the dialog box or click Cancel. The PVES is installed perfectly in your system.
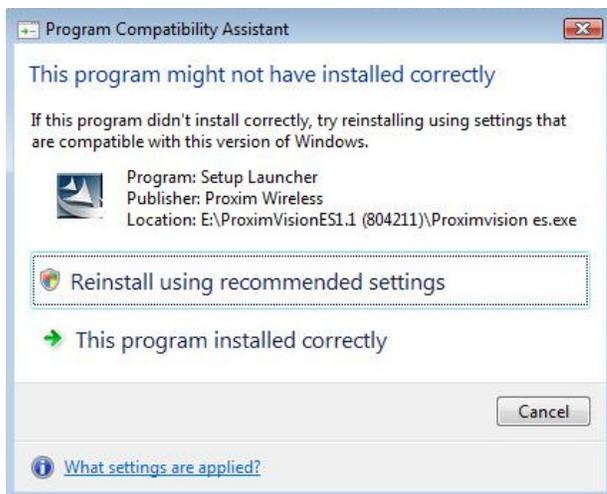
2.4 Initialization of ProximVision ES

Load the License file from the location: **Start > All Programs > Proxim Wireless > ProximVision ES > Upload License** for the PVES tool to get launched.
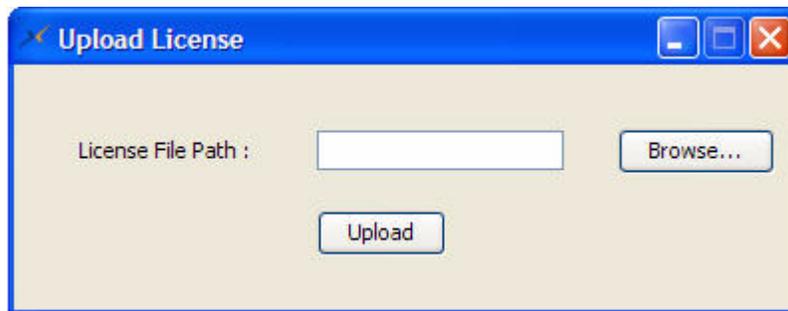
Figure 2-11 Upload License

Follow the steps explained below to initialize ProximVision ES:

1. Point to **Start** > **All Programs > Proxim Wireless > ProximVision ES2.0**. The following options are displayed:
   - **Auto Discovery Defaults**: Click this option to set all auto discovery configurations to factory.
   - **Delete All Devices**: Click this option to delete all devices discovered.
   - **Export Data**: Click this option to export registry information to a defaults folder.
   - **GenereteLicData**: Click this option to regenerate license information.
   - **Import Data**: Click this option to import the registry data exported, back to registry.
   - **ProximVision ES**: Click this option to start the application.
   - **Scan tool**: Click this option to invoke scan tool.
   - **Upload License**: Click this option to upload license file obtained from the customer support.
2. From these options, click **ProximVision ES** to launch ProximVision ES. Alternatively, you can also launch PVES application by clicking the ProximVision ES icon on the desktop.
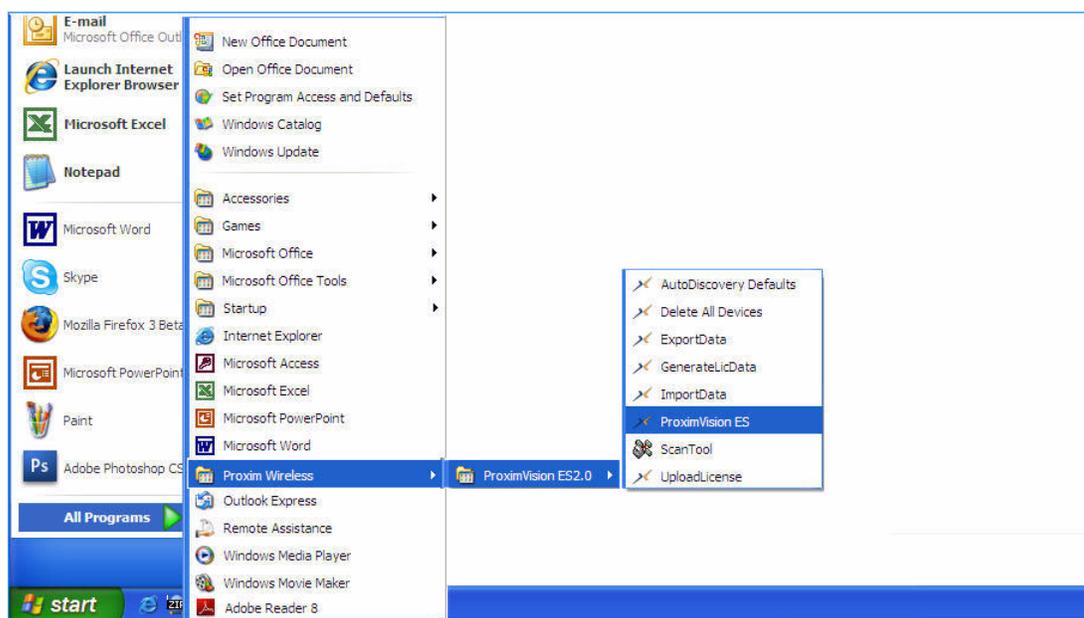
Figure 2-12 Launch PVES from Start Menu

NOTE: *This step initializes the ProximVision ES application.*

Figure 2-13 Initializing ProximVision ES

2.5 Software Updates

Proxim releases new versions of ProximVision ES software from time to time. So it is recommended to check the Proxim website for latest updates after you have installed the software. To download and install the latest software, follow these steps below:

1. In your web browser, open the link http://support.proxim.com.
2. Log into the support page with your username and password. If you have not created an account, create an account to gain access.
3. Click on the appropriate link to access the products download page.
4. Download the latest release of the ProximVision ES software to your desktop.
5. Run the.**exe** on your desktop to install the software.
6. If you have any trouble installing the software, contact Proxim Customer Support.

3

ProximVision ES Overview

This chapter contains the following information:

- User Interface
- TFTP Server
- Telnet
- Additional Features of ProximVision ES

NOTE: *Ensure that your system is connected to the network on which all the devices are configured.*

3.1 User Interface

After successful launch of ProximVision ES, the ProximVision ES Home page is displayed.

CAUTION: *If a device is down and cannot be configured or monitored, then that specific device is highlighted in Red.*

The left-hand side panel is termed as Device Tree of ProximVision ES, whereas the right-hand side panel is the Configuration table. ProximVision ES page contains seven basic menus:

- Discovery Menu
- Configure Menu
- Tools Menu
- Mode Menu
- Monitor Menu
- Exit Menu
- Help Menu
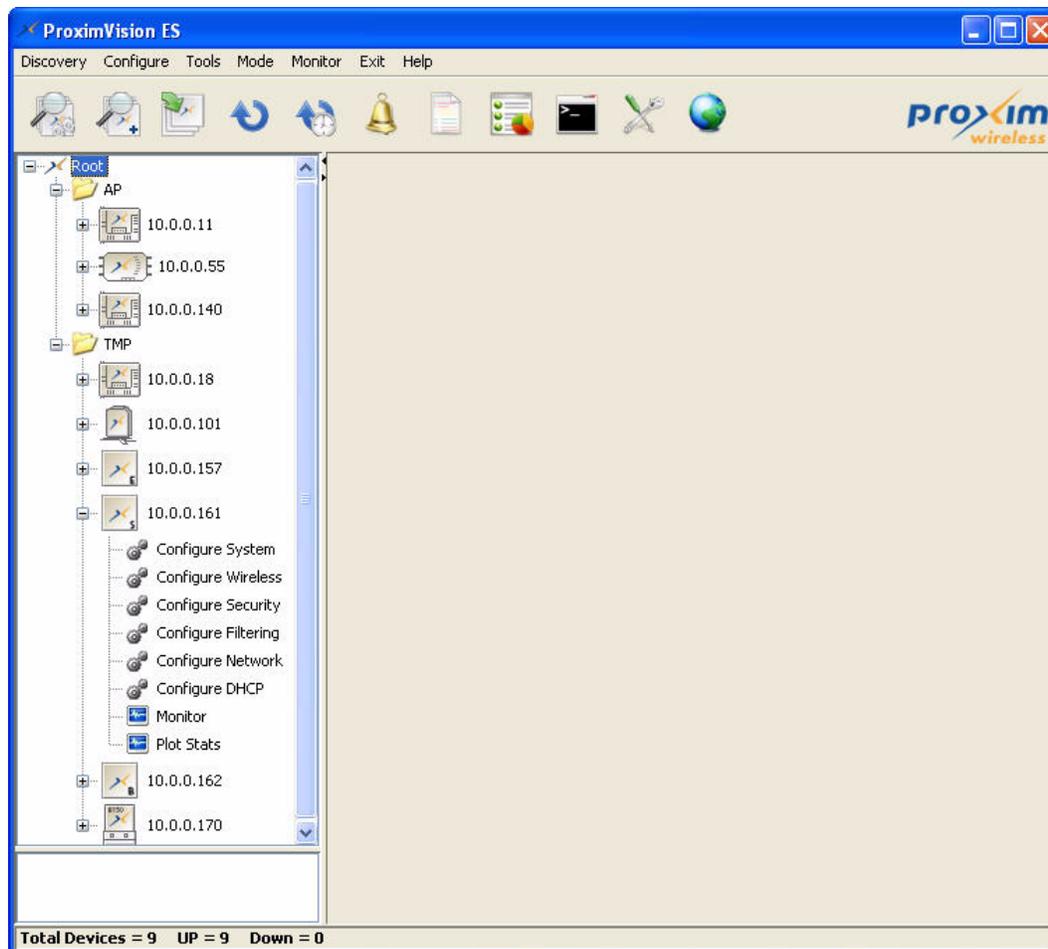
Figure 3-1 ProximVision ES Overview

3.1.1 Discovery Menu

The Discovery menu contains three submenus which enable you to discover devices that are available in the network and also locate a device in your device tree.
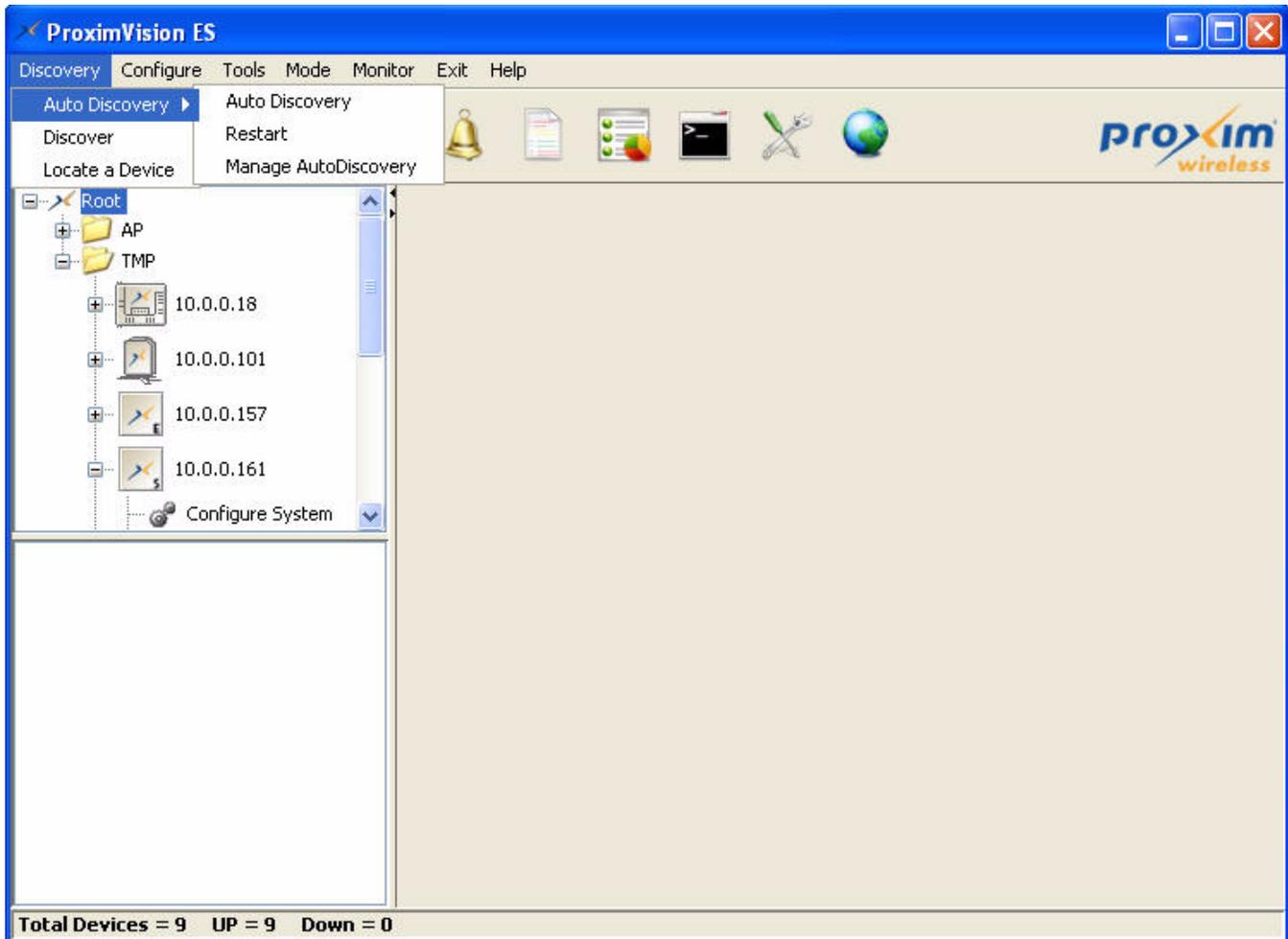
Figure 3-2 ProximVision ES - Discovery Menu

3.1.1.1 Auto Discovery

Using the **Auto Discovery** submenu, you can discover all devices available in the specified IP range and subnet that ProximVision ES manages. You must specify the IP address and the subnet for auto discovery process. Refer to Enabling Auto Discovery.

3.1.1.2 Discover

Using the **Discover** submenu you can discover the devices manually. You must specify the IP address to discover the devices. Refer to Manually Discover Device.

3.1.1.3 Locate a Device

Using the **Locate a Device** submenu, you can locate a specific device in the Device Tree. You must specify the IP address of the specific device for it to be discovered. Refer to Locate a Device

3.1.2 Configure Menu

The three submenus available under the Configure menu enable you to configure devices in bulk. This menu also provides the Telnet and Change Map Location options. All the submenus are explained below.
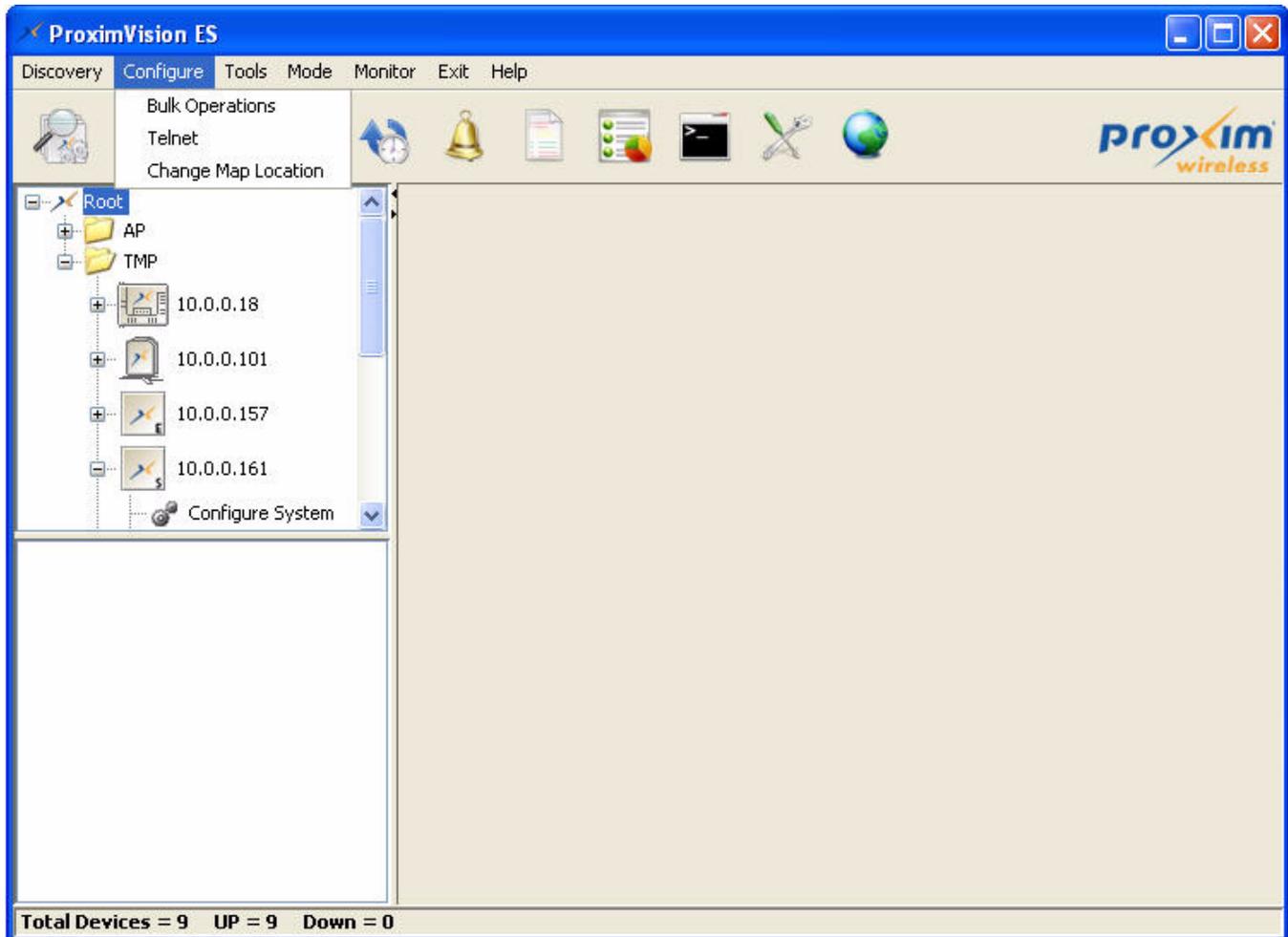
Figure 3-3 ProximVision ES - Configure Menu

3.1.2.1 Bulk Operations

Using this submenu, you can configure devices in bulk. Refer to Bulk Operations.

3.1.2.2 Telnet

Using the Telnet submenu, you can access, manage and configure your device. Refer to Telnet.

3.1.2.3 Change Map Location

Using this submenu, you can change the Map Location. Refer to Configure a Location.

3.1.3 Tools Menu

Using the Tools menu, you can view the status of the device, events of devices and device log that gets generated when it encounters irregularities. Tools menu contains seven submenus that are explained below.
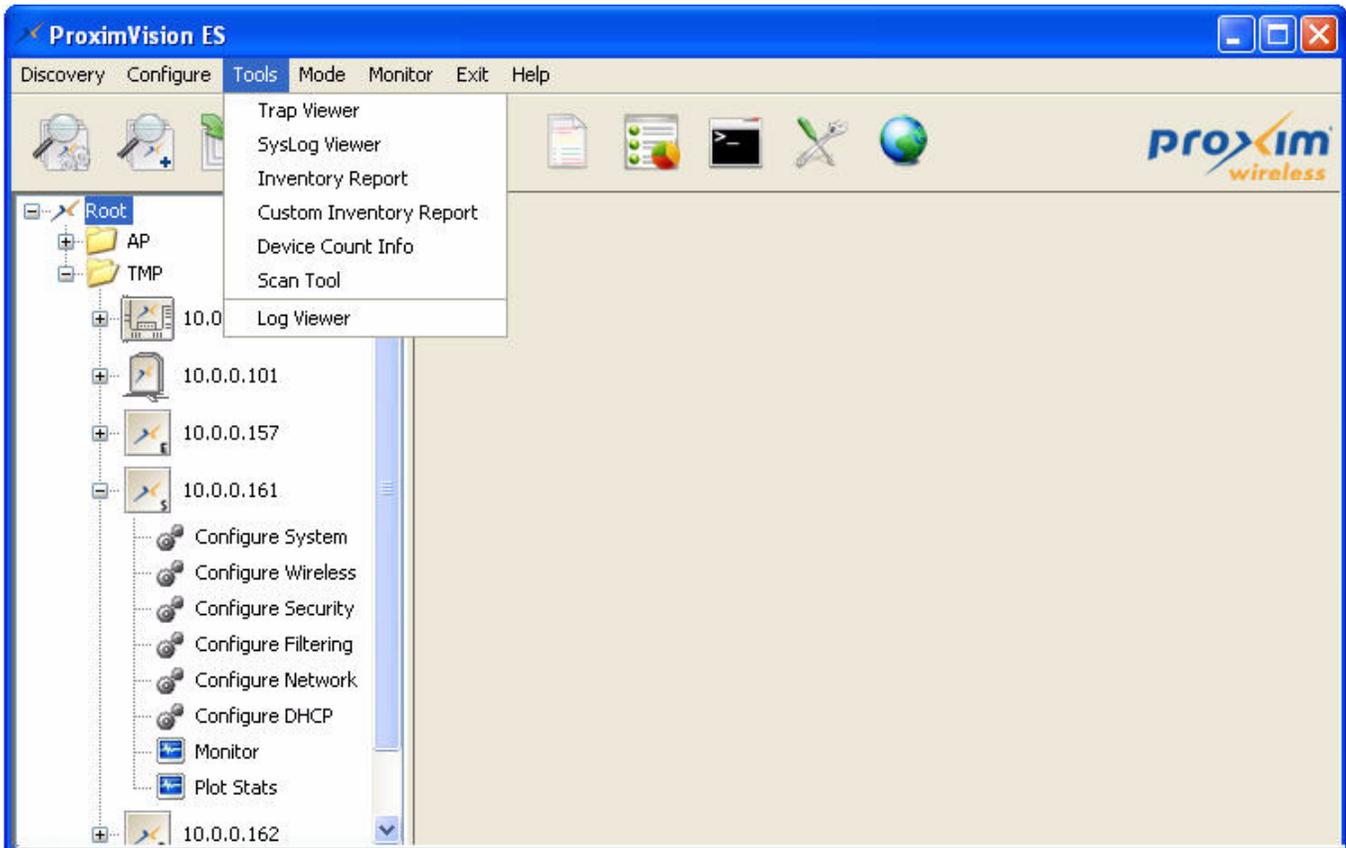
Figure 3-4 ProximVision ES - Tools Menu

3.1.3.1 Trap Viewer

Trap Viewer submenu provides information about traps that a device encounters. Refer to TrapLog Viewer.

3.1.3.2 Syslog Viewer

SysLog Viewer submenu lists the logs that a device sends periodically about their status. Refer to SysLog Viewer.

3.1.3.3 Inventory Report

Inventory Report submenu generates a report about the devices connected to your network. Refer to Inventory Report.

3.1.3.4 Custom Inventory Report

Custom Inventory Report submenu displays all Inventory options and enables you to select the desired options to generate inventory report for the devices connected to your network. Refer to Custom Inventory Report.

3.1.3.5 Device Count Info

This submenu provides you with the information on the total number of devices available in the network. Refer to Device Count Info.

3.1.3.6 ScanTool

ScanTool scans all the devices used in your network and displays them.

3.1.3.7 Log Viewer

Log Viewer submenu provides logs for the ProximVision ES application.

3.1.4 Mode Menu

Using the Mode menu, you can toggle between Configure Mode and Map Mode. For details on these modes, refer to Configuring Individual Device Settings and Map Mode.

3.1.5 Monitor Menu

Using the Monitor menu option, you can monitor and view the performance statistics of the configured devices. For more information on performance monitoring, refer to Performance Monitoring through Graphs.
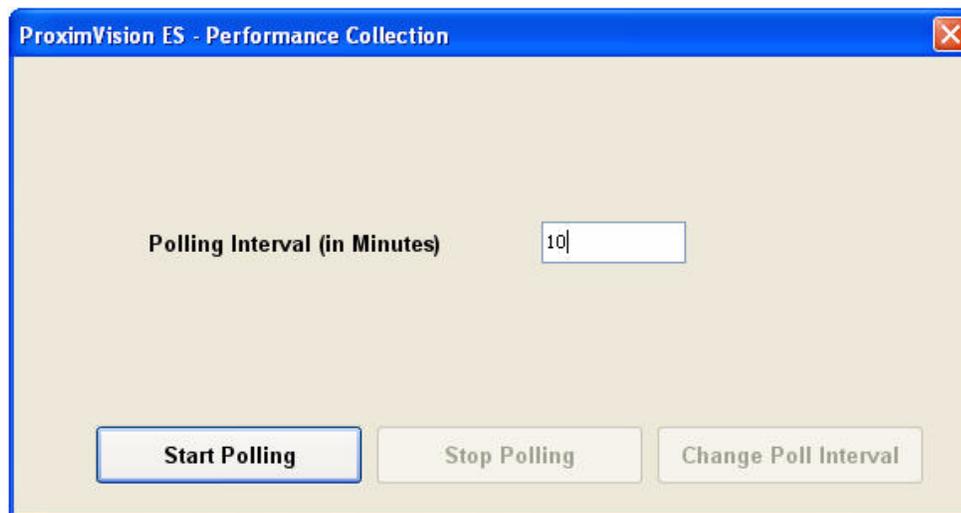
Figure 3-5 Performance Collection

3.1.6 Exit Menu

The Exit menu closes the application. To exit from the application:

1. Click on **Exit** menu and then click the submenu **Exit ProximVision ES**.
2. This displays **Confirm close** window. Click **Yes** to close the application.
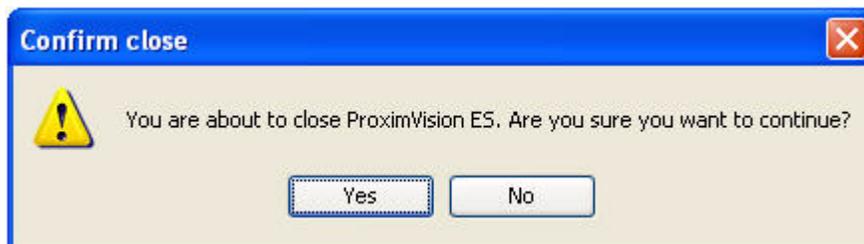
Figure 3-6 Confirm close window

3.1.7 Help Menu

The Help menu provides information about ProximVision ES and its version. Click **Help** to display the following window.
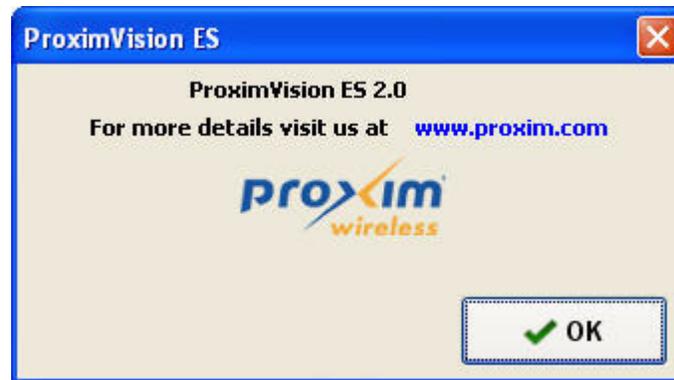
Figure 3-7 ProximVision ES - Help Menu

3.2 Toolbar Icons

ProximVision ES provides icons that enable you to perform certain tasks directly from the toolbar:
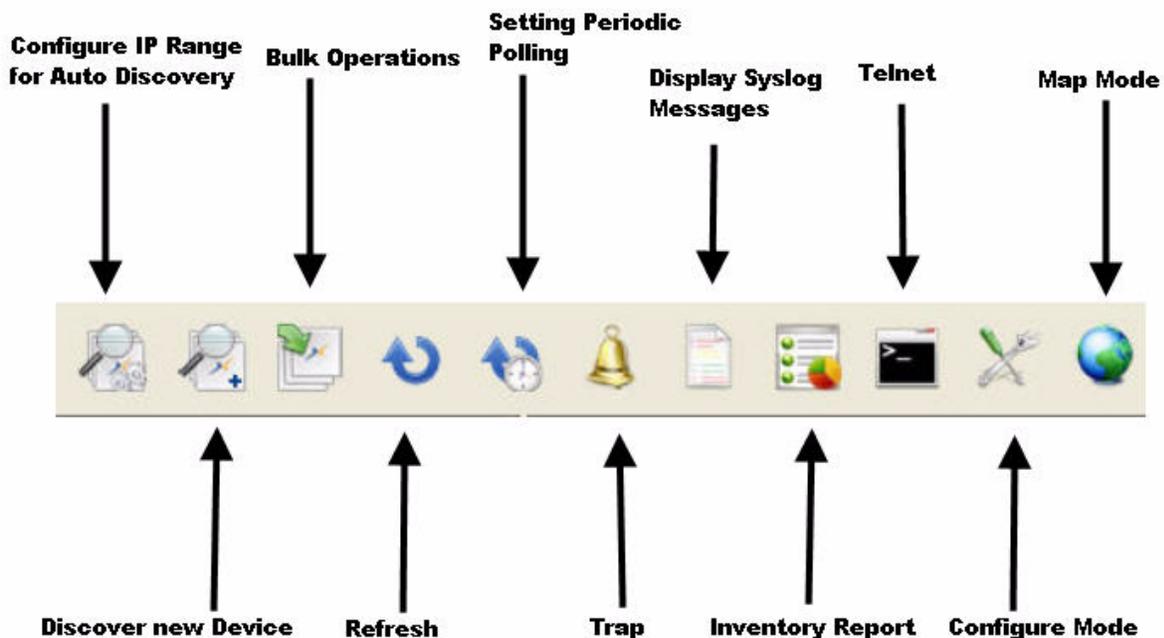
Figure 3-8 Toolbar Icons

- Click on **Configure IP Range for Auto Discovery** icon to discover devices for a certain IP range/subnet range.
- Click on **Discover New Device** icon to discover a device manually.
- Click on **Bulk Operations** icon to configure devices in bulk.
- Click on **Refresh** icon, if you want to refresh all the devices.
- Click **Setting Periodic Polling** icon to set the polling interval. The Polling Interval window is displayed. Specify a value in the "Interval" field and click **Set**. Set the polling interval as minimum as possible to get the accurate status of network. This will increase bandwidth usage on the network.

NOTE: *By default the polling interval is 10 mins. You can set the minimum value of polling interval as 3 mins and maximum value as 1440 mins.*
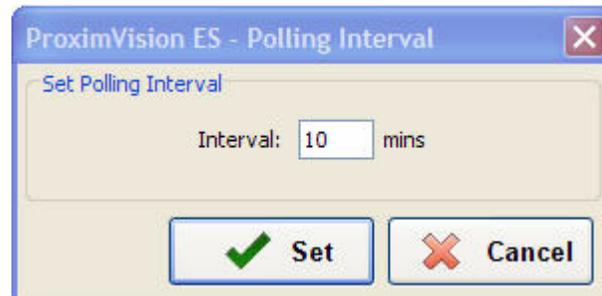
Figure 3-9 Polling Interval

- Click on **Trap** icon, to display the Trap Log.
- Click on **Displays SysLog Messages** icon to display the SysLog messages of all devices.
- Click on **Inventory Report** icon to display the inventory report of all devices that are available on the network.
- Click on **Telnet** icon to manage the CLI commands.
- Click on **Configure Mode** icon to toggle to Configure mode.
- Click on **Map Mode** icon to toggle to Map mode.

3.3 TFTP Server

The "Trivial File Transfer Protocol" (TFTP) server allows you to transfer files across a network. You can upload configuration files from the device for backup or copying, and you can download configuration files or new software images. The TFTP software is located on the installation CD. If a TFTP server is not configured and running, you will not be able to download and upload images and configuration files to/from the device. Remember that the TFTP server does not have to reside on the same server as Proxim Vision ES, it can reside on any Windows PC or Server that is network accessible from Proxim Vision ES and Proxim devices. Note that you do not need a TFTP server running unless you want to transfer files to or from the device.

- Check to see that the TFTP is configured to point to the directory containing the device Image.
- Ensure that the proper TFTP server device Address, the proper device Image file name, and that the TFTP server is connected.
- Ensure that the TFTP server is configured to both Transmit and Receive files (on the TFTP server's Security tab), with no automatic shutdown or time-out (on the Auto Close tab).

NOTE: *For more information on how to configure TFTP Server for AP and MP Devices, refer to* Configuring Individual Device Settings.

3.4 Telnet

The CLI commands can be used to access, configure, and manage the device using Telnet. Follow these steps:

1. Confirm that your computer's IP address is in the same IP subnet as the device.

NOTE: *If you have not previously configured the device's IP address and do not have a DHCP server on the network, the device will revert to its default IP address.*

2. Select a device and then click **Configure > Telnet** to display the Telnet window or click the Telnet icon from the toolbar.

3. Alternatively, Telnet option is also available on the right click of a device.

4. Enter the CLI username and password (default password is public).

> **NOTE:** The **CLI username** is required only in MP-8100, MP-8150-CPE, QB-8100, AP-800 and AP-8000 devices. For all other devices, only **CLI password** is required.

3.5 Additional Features of ProximVision ES

ProximVision ES provides you additional features that you can use while using a particular device. Right-click on a device and following features are listed:

Edit

The Edit feature edits the device information, such as changing the User Version of the device.

Ping

The Ping feature enables you to ping a particular device. It provides information, such as time delay in relay etc.

Telnet

For more information, Refer to Telnet.

Refresh

The Refresh feature refreshes the particular device.

Delete

The Delete feature deletes the selected device.

Reboot

The Reboot feature reboots the selected device.

Web Configure

The Web Configure feature launches the Web Configure of the selected device, that you can configure.

Reset

The Reset feature enables you to reset the device.

> **NOTE:** The ProximVision ES application cannot manage the device that is reset. You need to configure the settings of the device to manage them.

Commit

Clicking **Commit** affects the changes in the configuration of different parameters of the software. This button is available in MP-8100, MP-8150-CPE, QB-8100, AP-800 and AP-8000 devices.

Discovery of Devices

4

This chapter contains information on the following:

- Enabling Auto Discovery
  - Restart
  - Manage AutoDiscovery
- Manually Discover Device
- Locate a Device

4.1 Overview

Once you have configured ProximVision ES on the network, the next step is to discover the existing AP and MP devices connected to your network and assign them to a Group to manage them using ProximVision ES.

Following are the icons used in the PVES tool to represent different devices.

AP-700 and AP-4000 TMP.11 5012 SUI	
AP-800	
AP-8000	
TMP.11 5012 SUR	
TMP.11 5054 BSU and SU TMP.11 5054-SUi	
AP-4900M AP-4000MR AP-4000MR-LR AP-4900MR-LR	
TMP.11-5054-R-BSU TMP.11-5054-R-LR QB.11-5054 QB.11 5054-LR	
MP 8100 BSU MP 8100 SU	
QB 8100 EP	
MP-8150-CPE	

4.2 Enabling Auto Discovery

The Auto Discovery process discovers all the available Proxim devices in the IP network that ProximVision ES manages.

To Enable Auto Discovery:

1. Navigate to **Discovery** > **Auto Discovery** > **Auto Discovery** page.
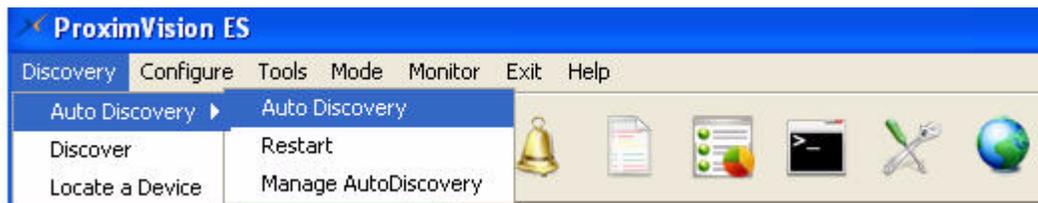
Figure 4-1 Discovery - Auto Discovery

> **NOTE:** *This launches the Auto Discovery window. Using the Auto Discovery window, enter the required parameteres to discover the devices that are available for that Subnet.*

2. ProximVision ES provides four items in the **Filter Type** drop-down list:
   a. Filter Type: Include Address Range - Subnet
   b. Filter Type: Include Address Range - IP Address Range
   c. Filter Type: Exclude Address Range - Subnet
   d. Filter Type: Exclude Address Range - IP Address Range

> **NOTE:** *The details of each option is described below. Follow the steps to get the desired output.*

3. Specify the required parameters, click **Discover**.

4.2.1 Filter Type: Include Address Range - Subnet

1. Define the subnet range (or the first address on the network) to be scanned in the **Subnet** field (example., 192.168.9.0).

> **NOTE:** *Specify an IP address for the device in the field. You must be able to ping that IP Address from your system where PVES is installed.*

2. Specify the **Subnet Mask** for the network to be scanned (example, 255.255.255.0).
3. Specify the **Port** number. ProximVision ES uses this port to communicate with the devices.

> **NOTE:** *By default, ProximVision ES displays Port number as 161. Ensure that you specify the port number in which the device SNMP agent is listening for SNMP requests.*

4. Specify a value for **Timeout** field. This timeout (in seconds) is the period of time ProximVision ES will wait for a response from a device after sending a SNMP request.

5. Specify the value for **Retries** field. This is number of times ProximVision ES will try to poll a device when it does not receive a response within the SNMP Timeout period. If ProximVision ES does not receive an SNMP response from the device after the specified number of retries, ProximVision ES will classify the device as "Down".

6. Select the appropriate **User Version** to discover the devices.

   • **SNMPv1/2c,** then under the SNMPv1/2c heading the Read/Write Community String capability password is set to "**public**" by default. Community String is used for communication between the devices.

Figure 4-2 Auto Discovery - SNMPv1/v2c (Include Address Range - Subnet)

   • If **SNMPv3** is selected, then under the SNMPv3 heading you must enter the following:

   *NOTE: AP-800 and AP-8000 can not be discovered under **Manual** and **Autodiscovery** mode in SNMPv3.*

   – **User Name** as "admin" or "administrator".
   – **Auth Protocol** is sha. By default Auth Protocol is displayed.
   – **Auth Password**. This is SNMPv3 authentication password.
   – **Privacy Protocol** is des. By default Privacy Protocol is displayed.
   – **Privacy Password**. This is SNMPv3 privacy password.

   *NOTE: The default password is "**public**" for Auth Password and Privacy Password fields. You can modify this if desired.*

Figure 4-3 Auto Discovery - SNMPv3 (Include Address Range - Subnet)

4.2.2 Filter Type: Include Address Range - IP Address Range

1. Specify the IP address range in the **From** (example., 192.168.9.0) and **To** (example., 192.168.9.22) fields to be scanned.

   NOTE: Specify a static IP address for the device in the field. You must assign the unit a unique address that is valid on your IP subnet. Contact your network administrator if you need assistance selecting the IP address for the unit.

2. Specify the **Port** number. ProximVision ES uses this port to communicate with the devices.

   NOTE: By default, ProximVision ES displays Port number as 161. Ensure that you specify the port number in which the device SNMP agent is listening for SNMP requests.

3. Specify a value for **Timeout** field. This timeout (in seconds) is the period of time ProximVision ES will wait for a response from a device after sending a SNMP request.

4. Specify a value for **Retries** field. This is number of times ProximVision ES will try to poll a device when it does not receive a response within the SNMP Timeout period. If ProximVision ES does not receive an SNMP response from the device after the specified number of retries, ProximVision ES will classify the device as "Down".

5. Select the appropriate **User Version** to discover the devices.
   - **SNMPv1/2c,** then under the SNMPv1/2c heading the Read/Write Community String capability password is set to "**public**" by default. Community String is used for communication between the devices.
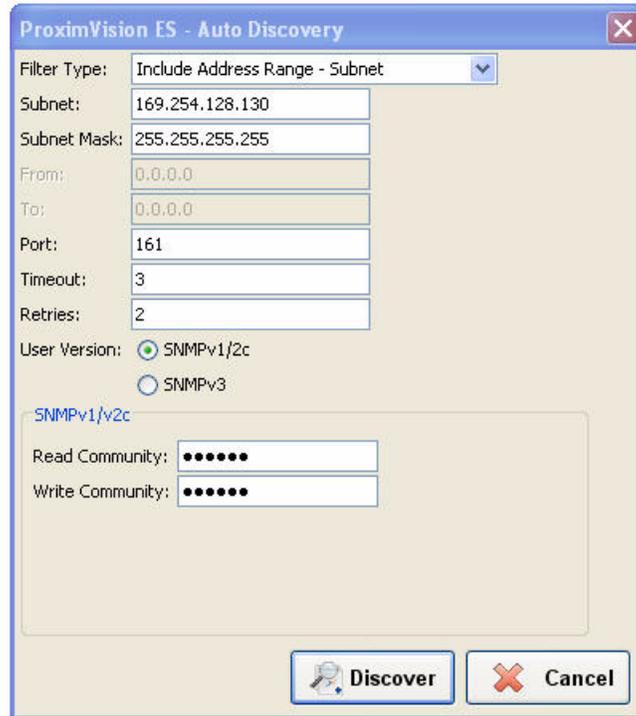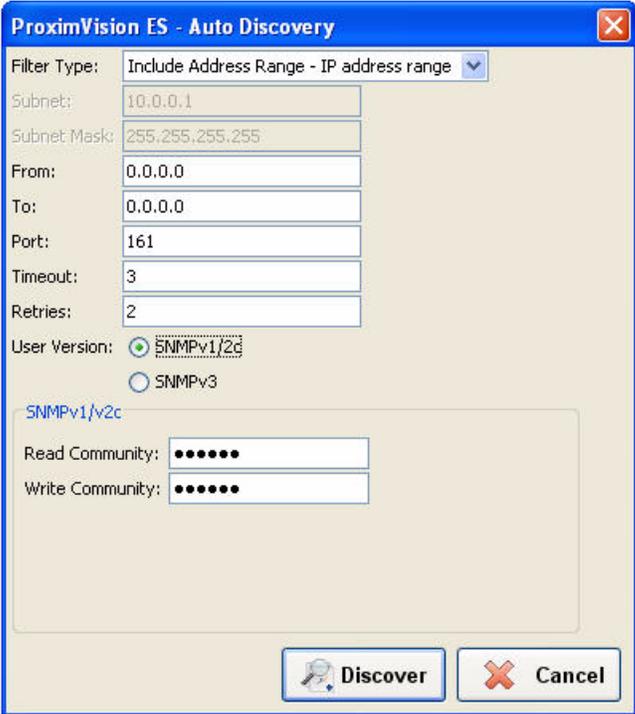
Figure 4-4 Auto Discovery - SNMPv1/v2c (Include Address Range - IP Address Range)

• If **SNMPv3** is selected, then under the SNMPv3 heading you need to enter the following:

   *NOTE: AP-800 and AP-8000 devices cannot be discovered under **Manual** and **Autodiscovery** mode in SNMPv3.*

   – **User Name** as "administrator".
   – **Auth Protocol** is sha. By default Auth Protocol is displayed.
   – **Auth Password**. This is SNMPv3 authentication password.
   – **Privacy Protocol** is des. By default Privacy Protocol is displayed.
   – **Privacy Password**. This is SNMPv3 privacy password.

NOTE: *By default, "public" is the password for Auth Password and Privacy Password fields. This default password should be changed and it should contain 8 characters.*

NOTE: *SNMPv3 supports three security levels: (1) No authentication and no encryption; (2) authentication and no encryption; and (3) authentication and encryption. Currently, ProximVision ES supports only "authentication and encryption".*

Figure 4-5 Auto Discovery - SNMPv3 (Include Address Range - IP Address Range)

4.2.3 Filter Type: Exclude Address Range - Subnet

CAUTION: *If you have excluded any IP address/range/subnet, then that particular range will be excluded for all the Auto Discovery process thereafter.*

1. Define the subnet range (or the first address on the network) that is to be excluded from the scanned in the **Subnet** field (example, 192.168.9.0).

   NOTE: Specify a static IP address for the device in the field. You must assign the unit a unique address that is valid on your IP subnet. Contact your network administrator if you need assistance selecting the IP address for the unit.

2. Specify the **Subnet Mask** for the network to be excluded form being scanned (example, 255.255.0.0). The largest subnet accepted by ProximVision ES is 255.255.0.0

3. Specify the **Port** number. ProximVision ES uses this port to communicate with the devices.

   NOTE: By default, ProximVision ES displays Port number as 161. Ensure that you specify the port number in which the device SNMP agent is listening for SNMP requests.

Figure 4-6 Auto Discovery - (Exclude Address Range - Subnet)

4.2.4 Filter Type: Exclude Address Range - IP Address Range

1. Specify the IP address range in the **From** (example., 192.168.9.0) and **To** (example., 192.168.9.22) fields that needs to be excluded from being scanned.

    NOTE: *Specify a static IP address for the device in the field. You must assign the unit a unique address that is valid on your IP subnet. Contact your network administrator if you need assistance selecting the IP address for the unit.*

2. Specify the **Port** number. ProximVision ES uses this port to communicate with the devices.

    NOTE: *By default, ProximVision ES displays Port number as 161. Ensure that you specify the port number in which the device SNMP agent is listening for SNMP requests.*
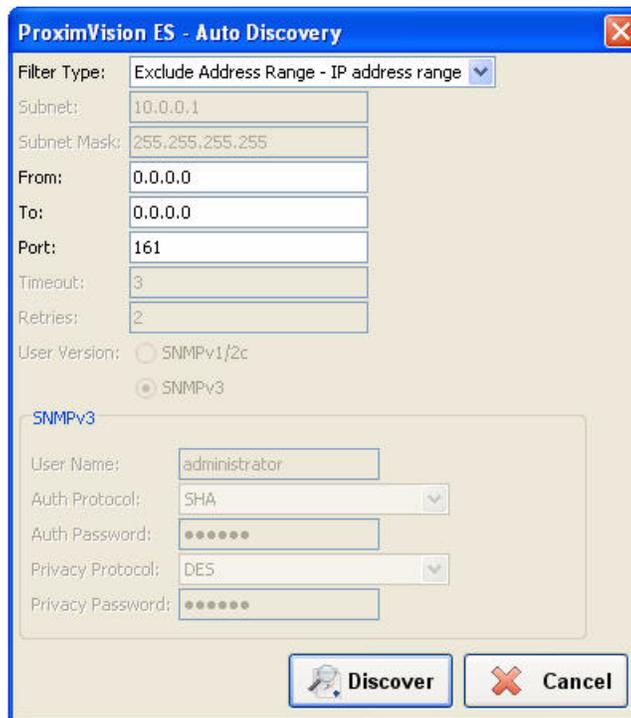
Figure 4-7 Auto Discovery - (Exclude Address Range - IP Address Range)

> **NOTE:** *Once the option* **Exclude Subnet or IP Address Range** *is selected, then it will always exclude those IP addresses or subnet for every auto discovery of devices.*

4.3 Restart

ProximVision ES provides you with Restart feature for Auto Discovery service. Using this feature you can restart the Auto Discovery process. Restart feature restarts the Auto Discovery feature with the previously used network or IP range.

1. Navigate to the **Discovery** > **Restart**
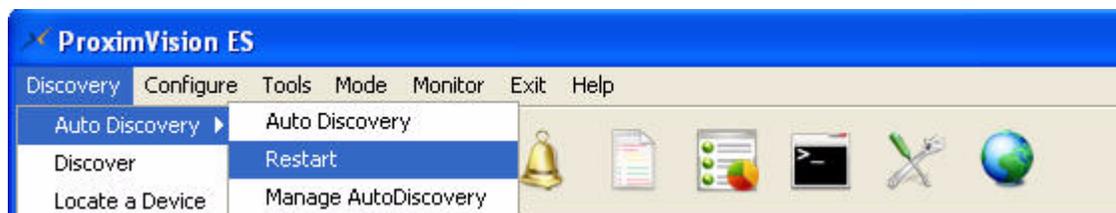
Figure 4-8 Restart Auto Discovery

2. The **Auto Discovery Service** window displays. Select **Yes**, if you want to restart the Auto Discovery. Otherwise select **No**.

Figure 4-9 Auto Discovery Service

4.4 Manage AutoDiscovery

ProximVision ES provides you with Manage AutoDiscovery feature. Using this feature you can manage Auto Discovery process. This feature stores all the IP Address and Subnets that has been used to discover the devices available in your network. If you have excluded any IP Address or Subnet, then you need to manually rediscover the IP Address or Subnet to be included in the list.

Navigate to the **Discovery** > **Auto Discovery > Manage AutoDiscovery**
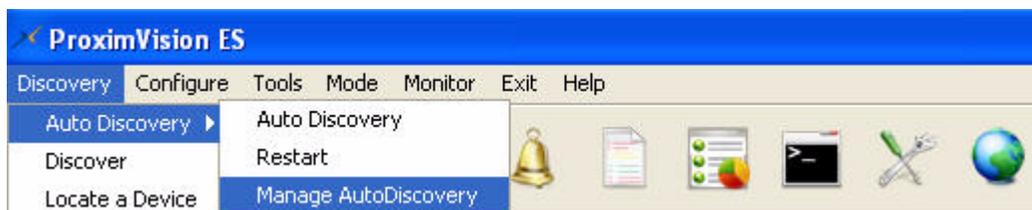
Figure 4-10 Manage AutoDiscovery

4.5 Manually Discover Device

Although ProximVision ES has very robust discovery capabilities, there are deployment situations which dictate manually adding the devices to ProximVision ES.

1. Navigate to **Discovery** > **Discover**.

Figure 4-11 Discovery > Discover

2. The Discover window is displayed. Enter the following information:

   Specify the IP address (example., 192.168.9.x) in the **Device Address** field that you are need to discover.

   NOTE: Specify a static IP address for the device in the field. You must assign the unit a unique address that is valid on your IP subnet. Contact your network administrator if you need assistance selecting the IP address for the unit.

3. Specify the Port number. ProximVision ES uses this port to communicate with the devices.

NOTE: *By default, ProximVision ES displays Port number as 161. Ensure that you specify the port number in which the device SNMP agent is listening for SNMP requests.*

4. Select the appropriate **User Version** to discover the devices.

    •   **SNMPv1/2c,** then under the SNMPv1/2c heading the Read/Write Community String password is set to "**public**" by default. Community String is used for communication between the devices.
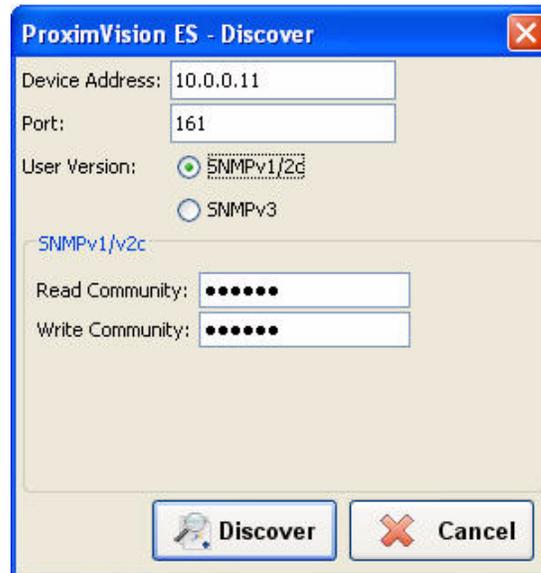
Figure 4-12 Discover - SNMPv1/v2c

    •   If **SNMPv3** is selected, then under the SNMPv3 heading you need to enter the following:

    NOTE: *AP-800 and AP-8000 can not be discovered under **Manual** and **Autodiscovery** mode in SNMPv3.*

    —   Enter the **User Name** as "administrator".
    —   **Auth Protocol** is sha. By default Auth Protocol is displayed.
    —   Specify **Auth Password**. This is SNMPv3 authentication password.
    —   **Privacy Protocol** is des. By default Privacy Protocol is displayed.
    —   Specify **Privacy Password**. This is SNMPv3 privacy password.

NOTE: *By default, "public" is the password for Auth Password and Privacy Password fields. This default password should be changed and it should contain 8 characters.*

NOTE: *SNMPv3 supports three security levels: (1) No authentication and no encryption; (2) authentication and no encryption; and (3) authentication and encryption. Currently, ProximVision ES supports only "authentication and encryption".*

Figure 4-13 Discover - SNMPv3

5. Click **Discover**.

4.6 Locate a Device

Using this functionality, you can locate a particular device.

1. Navigate to **Discovery** > **Locate a Device**. The **Locate a Device** window is displayed.
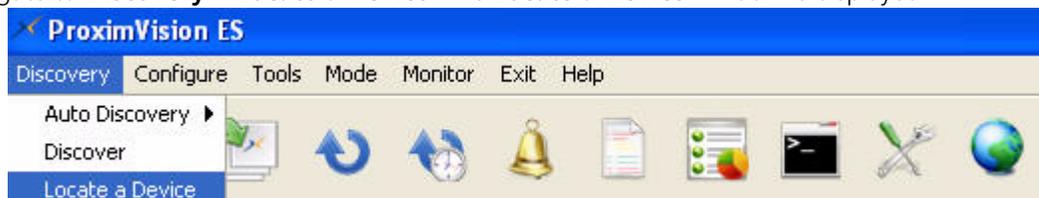
Figure 4-14 Discovery > Locate a Device

2. Specify the IP address of the device that you want to locate and click **Find**.

   NOTE: *Specify an already discovered IP address.*

Figure 4-15 Specifying IP Address

4. This displays the device for which you have specified the IP address.

Creating Groups

5

This chapter contains information on the following:

- • Creating New Groups
- • Deleting Groups
- • Renaming Groups
- • Viewing Groups
- • Adding Newly Discovered Devices to Groups

5.1 Overview

You need to configure devices to achieve optimal performance and network security. Individual configuration of each device is a time consuming process and prone to human error. To address this issue, ProximVision ES allows group creation and configuration of devices under that group. This enables you to configure all the devices of that particular group in one go and more efficiently.

The devices on the wireless network, ranging in size from one device to hundred of devices, can be easily dragged and dropped. The devices of a particular group share certain common configuration settings.

With ProximVision ES, you can create as many different groups as required. ProximVision ES users usually establish groups that range in size from 5 to 100 wireless devices.

WARNING: A device can be moved from the default group Root, AP folder and TMP folder to User defined folder, whereas it cannot be done vice-versa.
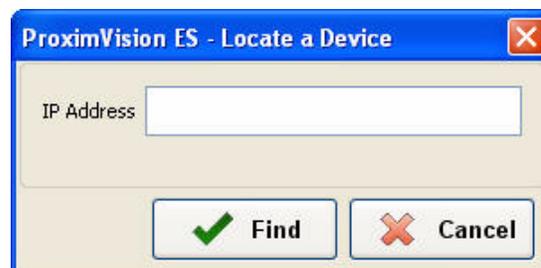
5.2 Creating New Groups

ProximVision ES enables you to create a new group by defining an entirely new Group. Pre-defined groups would be the root under which devices will be discovered. You can add a new group under user-defined groups.

NOTE: While creating Groups, you can create groups up to 3 levels.

To Create a New Group,

1. Browse to the default Group Root, right-click and select **Create User Group**.
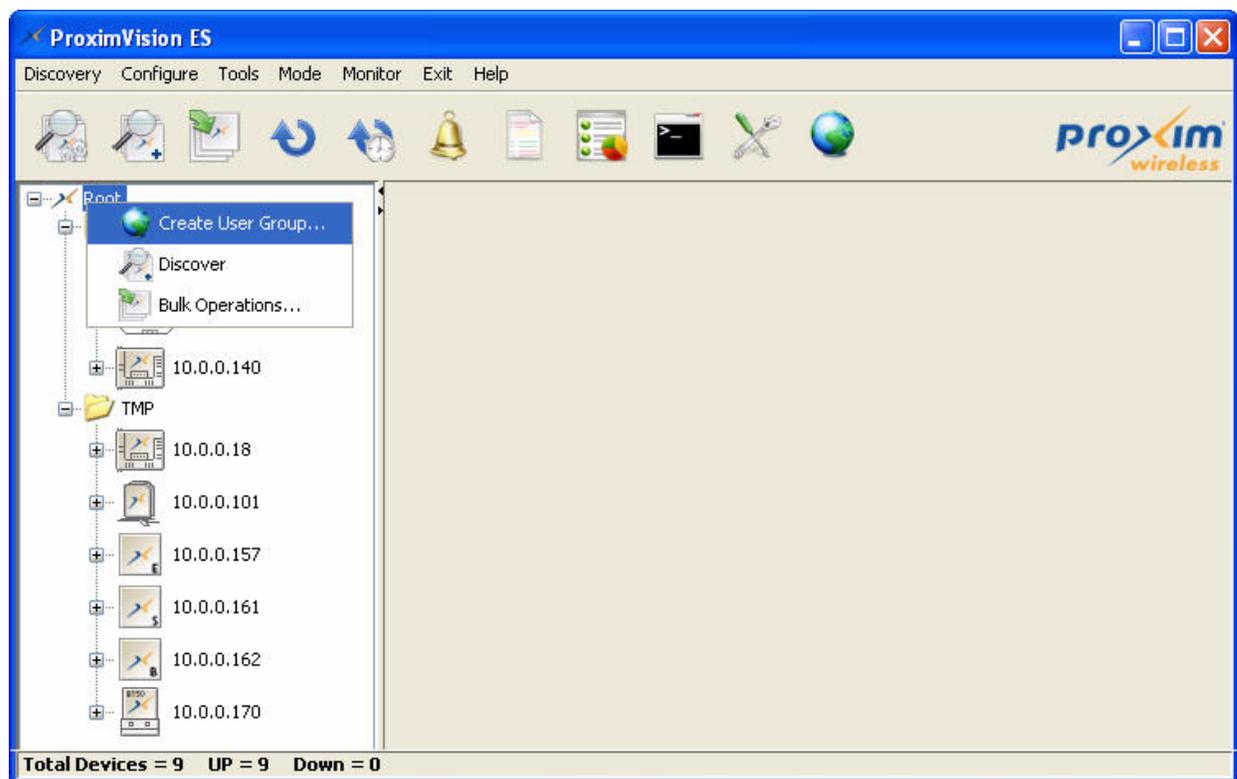
Figure 5-1 Creating User Group

2. Enter a name for the new Group in the **User Group** field and select the device that you want to assign to the User Group in the **Images** drop-down list.

Figure 5-2 Adding a User Group to a Domain

3. Click **Create.**

5.2.1 Multi-Level Grouping

ProximVision ES allows the creation of user-defined multi-level User Groups. Users can create up to three levels of grouping. For example, you can create a main group, a subgroup, and a sub-subgroup as shown in the following figure.
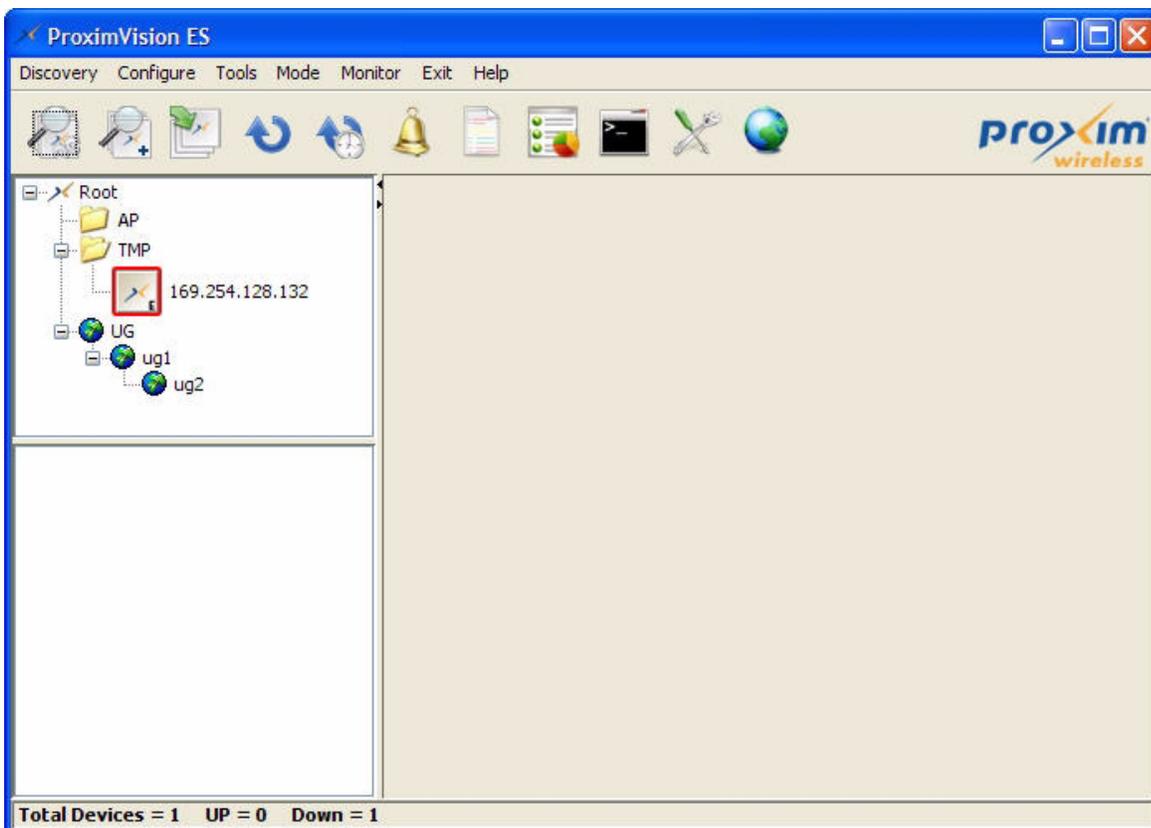
Figure 5-3 Multi-Level Groups

5.3 Deleting Groups

To Delete an Existing Group from ProximVision ES's database:

1. Browse to the default Group on the left-hand side panel, select the Group that you wish to delete.
2. Right-click and click **Delete**.
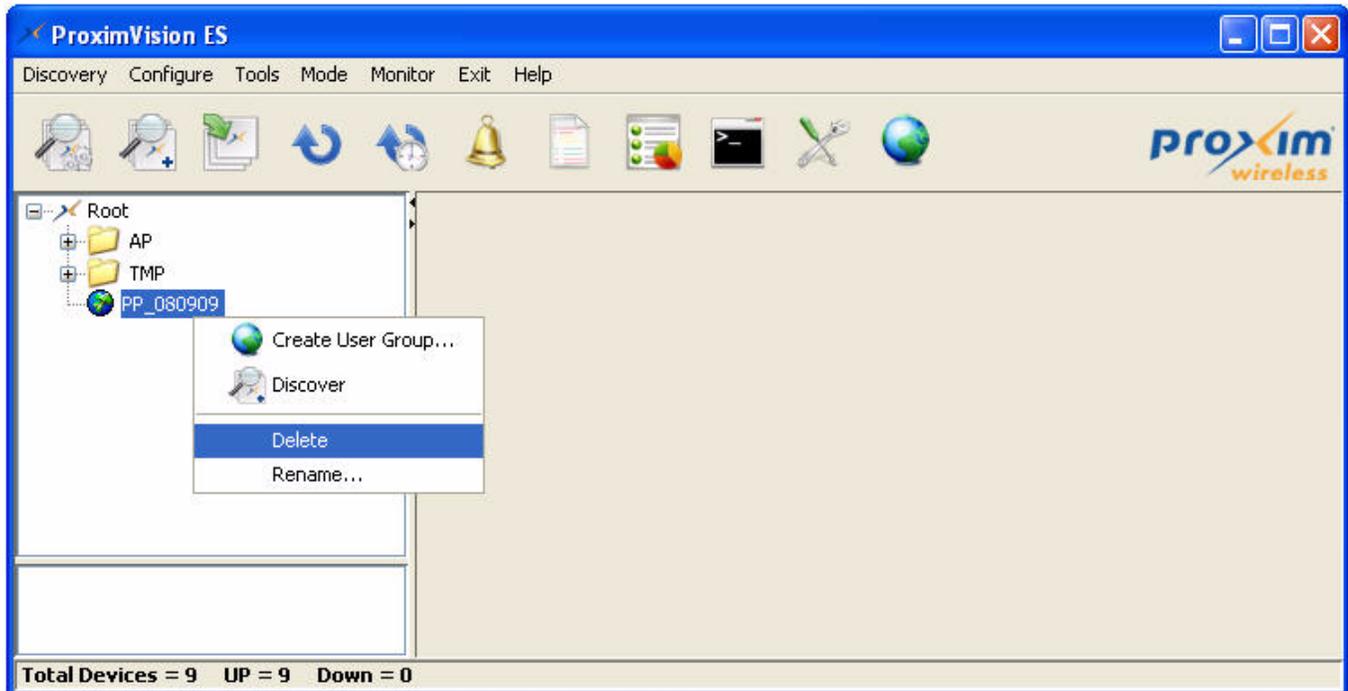
Figure 5-4 Deleting a User Group

3. Ensure that the Group you wish to delete is not marked as the "default" group and there are no devices are attached to the Group.

   NOTE: *ProximVision ES will not permit you to delete the current default Group and the Group which has devices attached to it.*

5.4 Renaming Groups

To Rename an Existing Group from ProximVision ES's database:

1. Browse to the Group on the left-hand side panel, select the Group that you wish to rename.
2. Right-click and click **Rename**.
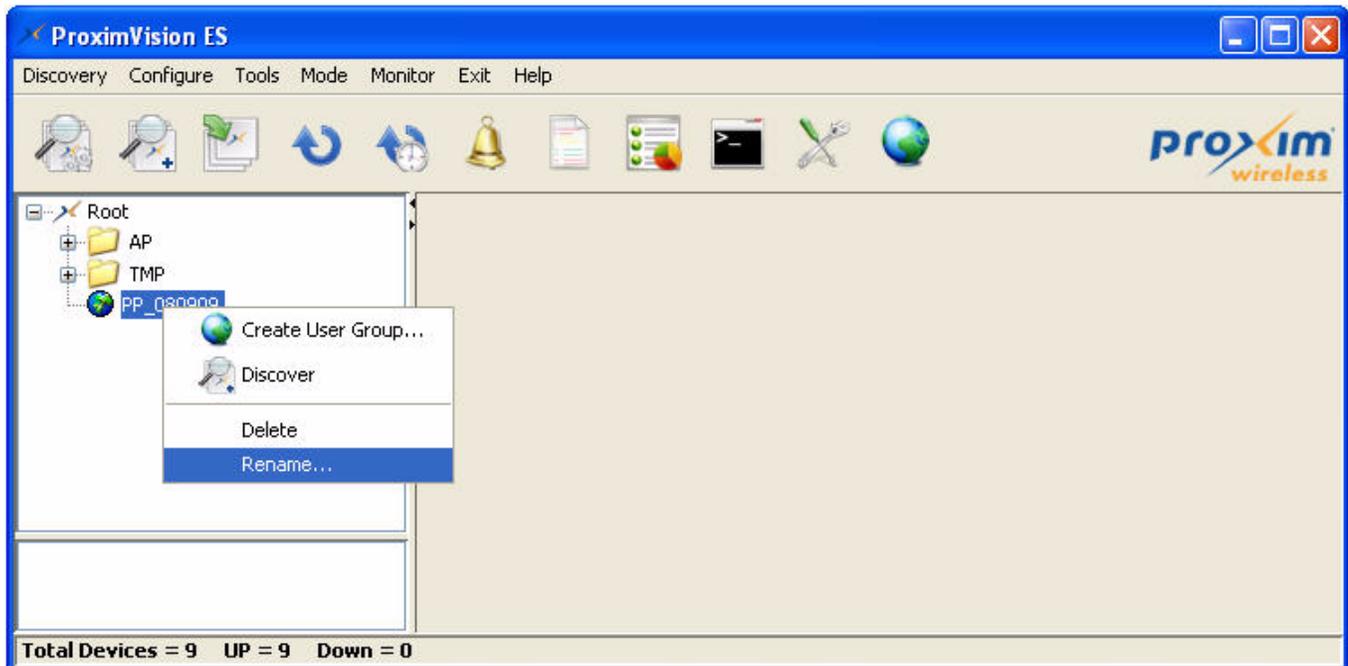
Figure 5-5 Renaming a User Group

3. In the Rename User Group window, enter the new name in the User Group field and click **Rename**.
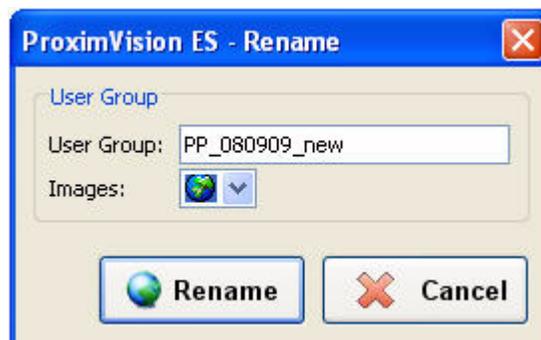
Figure 5-6 Renamed User Group

4. Once the group is renamed, it will be displayed in the Device Tree.
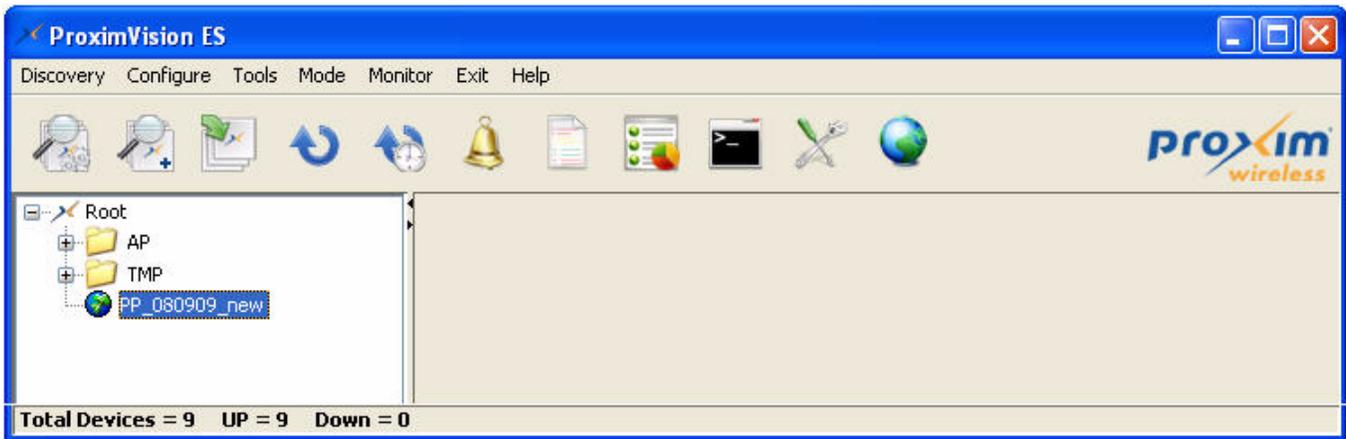
Figure 5-7 Renamed Group

5.5 Viewing Groups

ProximVision ES allows you to view the list of groups that you have created. All the groups that are created/renamed are listed below the default group - Root.

5.6 Discover

ProximVision ES allows you to discover a device and add it directly to a group.

Select the User Group under which you want to discover a device. Right-click and click **Discover.** For more information on how to discover a device, Refer to Manually Discover Device.
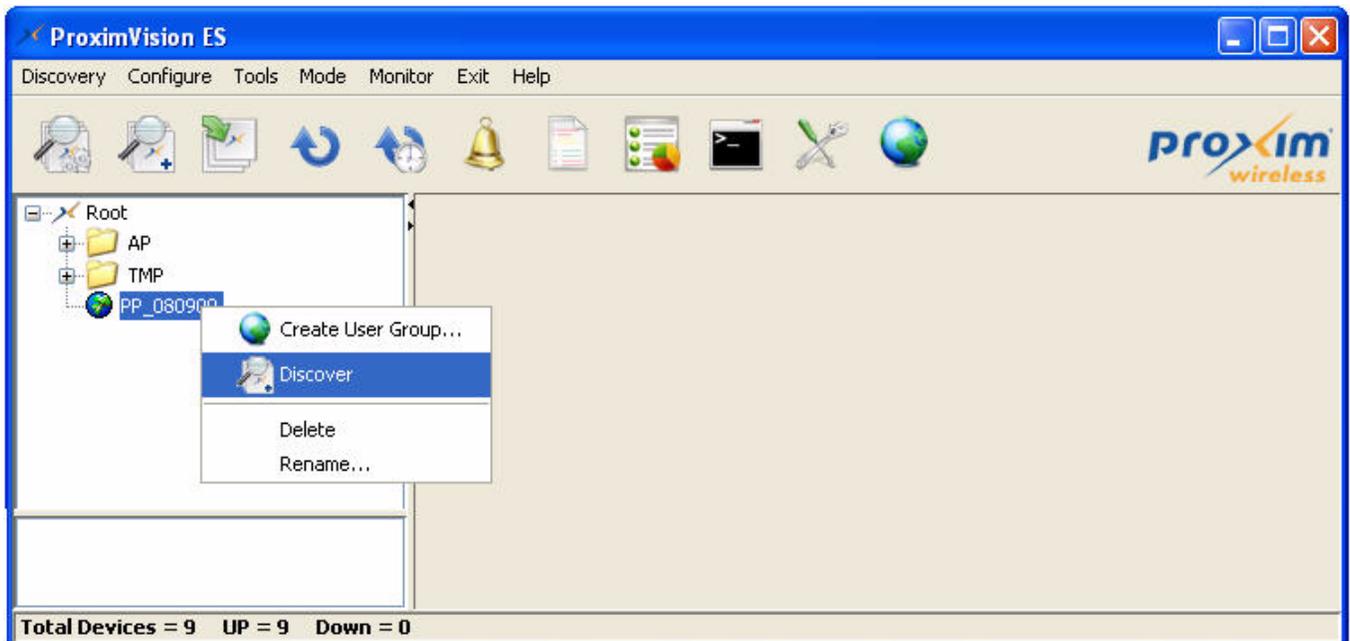
Figure 5-8 Adding a Device to a Group

5.7 Adding Newly Discovered Devices to Groups

Once you have discovered devices on your network, you must assign these devices to a Group. To create a new group, see Creating Groups. When you have added several devices to a Group verify that no unexpected or undesired configuration changes will be made to the devices.

5.7.1 Adding Newly Discovered Devices to a Group

After you have discovered a device, you need to drag and drop the selected device to the particular group.

5.7.2 Verifying that Devices have been Successfully Added to a Group

Navigate to the Configuration column and locate the device in the on-screen list.

Configuring Individual Device Settings

6

6.1 Overview

While most device configuration settings are managed by ProximVision ES at a Group level to enable efficient change management, certain settings must be managed at a individual device level. For example, since devices within a Group are often contiguous with one another and have overlapping coverage area it would not make sense to configure RF channel settings at a Group level. Instead, channel settings are managed at an individual device level to avoid interference.

> **NOTE:** Any changes made at individual device level will automatically override Group level device settings. Ensure that your system is configured to the network on which all the devices are configured.

Using ProximVision ES, you can configure the following devices:

- ORiNOCO 802.11n draft 2.0 Access Points
    - AP-800
    - AP-8000
- ORiNOCO Access Points and Mesh series
    - AP-700
    - AP-4000, AP-4000M, AP-4000MR and AP-4000MR-LR
    - AP-4900M and AP-4900MR-LR
- Tsunami MP 8100 series
    - MP-8100 BSU and SUA
    - MP-8150 SUR
    - MP-8150 CPE
- Tsunami QB 8100 series
    - QB-8100 EPA
    - QB-8150 EPR (and LNK)
- Tsunami MP.11 series
    - TMP.11 5012 SUI, SUR and CPE
    - TMP.11 5054 BSU and SUI
    - TMP.11 5054-R BSU and SU
    - TMP.11 5054-R-LR BSU and SU
- Tsunami QB.11 series
    - QB.11 5054
    - QB.11 5054-LR
- MeshMAX 5054 series
    - MeshMAX 5054W and 5054WM

The following table lists the devices and their features that can be configured using ProximVision ES.

#	Device	Configurable Features
1.	AP 4000/AP 700	• General (System Page) • Download • Upload • IP Configuration • DHCP Server • VLAN • Basic Mesh • Management Services • Transmit Power back-off • Wireless A • Wireless B (Not available for AP 700) • Radius Profile • SSID/VLAN Configuration – Wireless A • SSID/VLAN Configuration – Wireless B (Not available for AP 700) • Security Profile • Trap Groups • MGMT Passwords

#	Device	Configurable Features
2.	AP 8000/800	• System Information • Download • Upload • Network IP Configuration • Ethernet Interface Properties • VLAN • Management Services • Management Access Control Table • Interface-1 VAP • Interface-1 Properties • Interface-1 11n Properties • Interface-2 VAP (will not be there for AP 800) • Interface-2 Properties (will not be there for AP 800) • Interface-2 11n Properties (will not be there for AP 800) • Radius Server Profile • Mac Access Control • Wireless Security Configuration • QoS STA EDCA Table • QoS AP EDCA Table • 802.1 D to DSCP Mapping Table • 802.1 D to 802.1p Mapping Table • QoS Profile • QoS Policy • Global Filtering • Protocol Filtering • Static MAC Address Filter • Advanced Filtering • TCP/UDP Port Filter

#	Device	Configurable Features
3.	Tsunami MP 11 BSU/SU	• General (System Page) • Download • Upload • Downgrade • DHCP Server • IP configuration • Management Services • Wireless • Security Encryption • Security Radius Auth (Not available for SU) • Security Mac Auth (Not available for SU) • Trap Groups • Mgmt Passwords • VLAN BSU (Not available for SU) • VLAN SU

#	Device	Configurable Features
4.	QB-8100/MP-8100/MP-8150-CPE	• System Information • Download • Upload • Ethernet Interface Properties • Management Services • SNMP • Syslog • Management Access Control Table • Licensed features • WORP • Interface-1 Properties • MIMO Properties • Radius Server Profile • Mac Access Control • Wireless Security Configuration • QoS End Point B Entries (for QB-8100) / QoS End SU Entries (For BSU) Note: QoS will not be there in End Point A/ SU • QoS Class Details • QoS Service Flow Entries • QoS PIR MAC Entries • QoS PIR IP Entries • QoS PIR Port Entries • Network Configuration • Ethernet IP Configuration • Wireless IP Configuration • Static route Table • RIP • DHCP Server Interface • DHCP Pool • DHCP Relay Server Note: Filtering will not be available for QB-8100 and MP-8150-CPE. • Global Filtering • Protocol Filter • Static MAC Address Filter • Advanced Filtering • TCP/UDP Port filter

For information on how to configure these devices, refer to their respective Installation and Management Guide that is bundled with the product CD.

Monitoring Devices 7

This chapter contains information on the following:

- Overview
- Performance Monitoring through Graphs
- Access Point Monitoring
- MP.11 Device Monitoring
- QB-8100 and MP-8100 Device Monitoring

7.1 Overview

ProximVision ES has the ability to monitor WLAN switches and the attached devices providing a single location to view the status of your entire WLAN. ProximVision ES is able to gather user statistics and bandwidth usage WLAN switches and controlled Access Points.

7.2 Performance Monitoring through Graphs

PVES supports two types of graphs for monitoring device performance: **SNR** and **Current Statistics**.

1. The **SNR** type stores data for 24 hours. This graph is application specific i.e. once the polling interval is started, data can be collected for the selected devices.

2. The **Current Statistics** type stores the data just for an hour. Any new data that comes in replaces the existing data and becomes the current data.

Using this type of graphs, the data collection can be done for a particular device. This type of graphs also represent the analysis of some specific parameters of the wireless link like in/out octets with Clients/Bases. The graph is plotted using the parameters which are selected from the drop down menu as shown in the following figure.

To view the Performance graphs:

1. On the left-side panel of the ProximVision ES, expand the device icon and click **Plot Stats**, as shown below.

Figure 7-1 Plot Stats

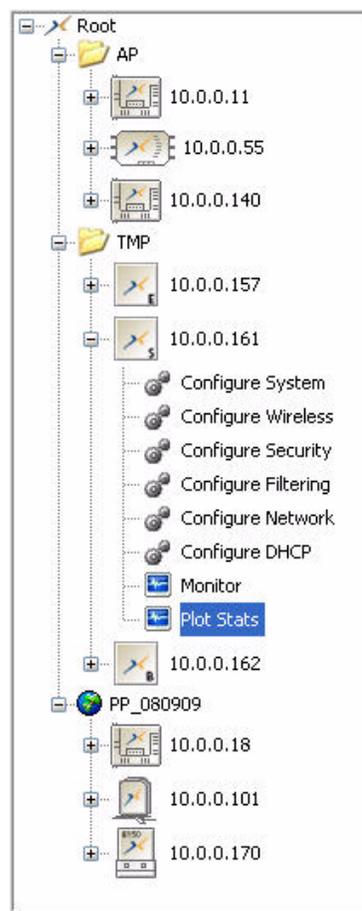2. The following screen will be displayed. To get SNR graph, click the **SNR Plot** tab. To get Current Statics graph, click the **Current Statistics Plot** tab.

Figure 7-2 Current Statistics Plot

3. Select the Device IP Address, Variable Name, and specify the polling interval.
4. Click **Generate Plot**. The graph will be generated and displayed as shown below.
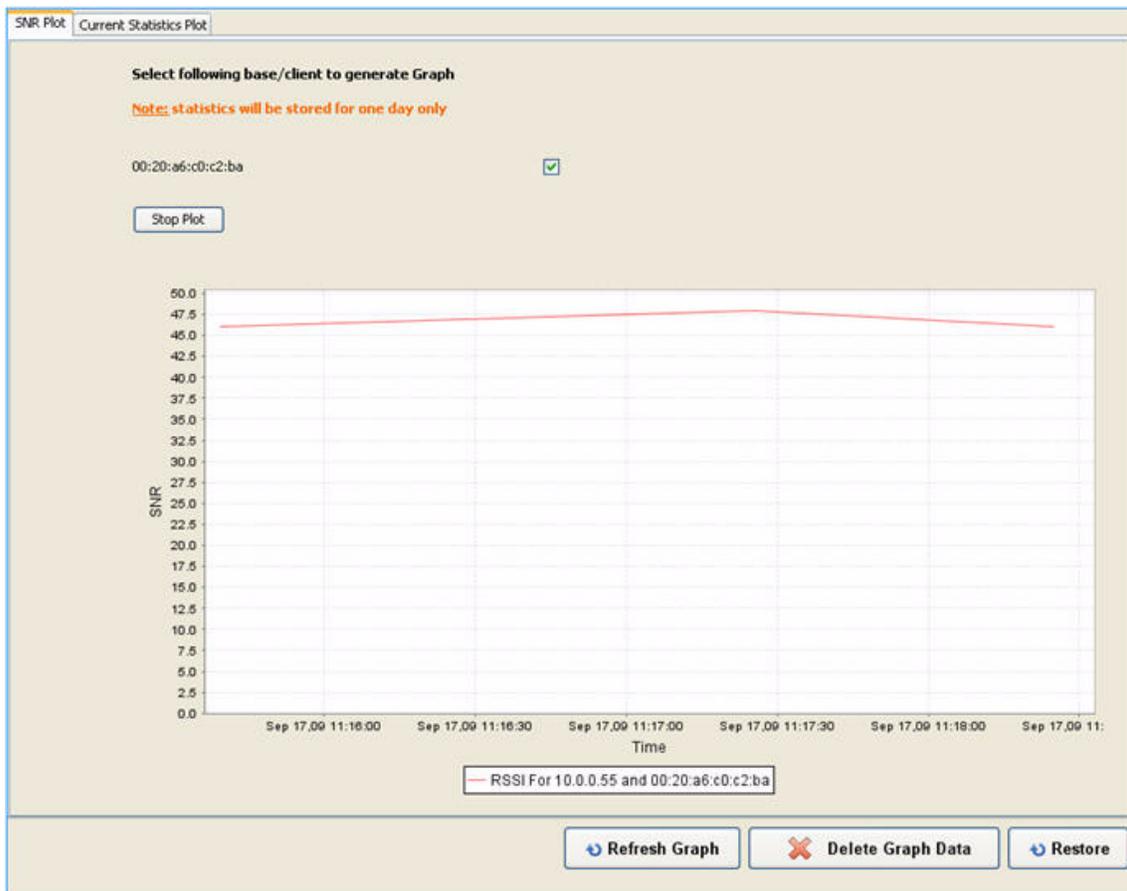

Figure 7-3 SNR Plot
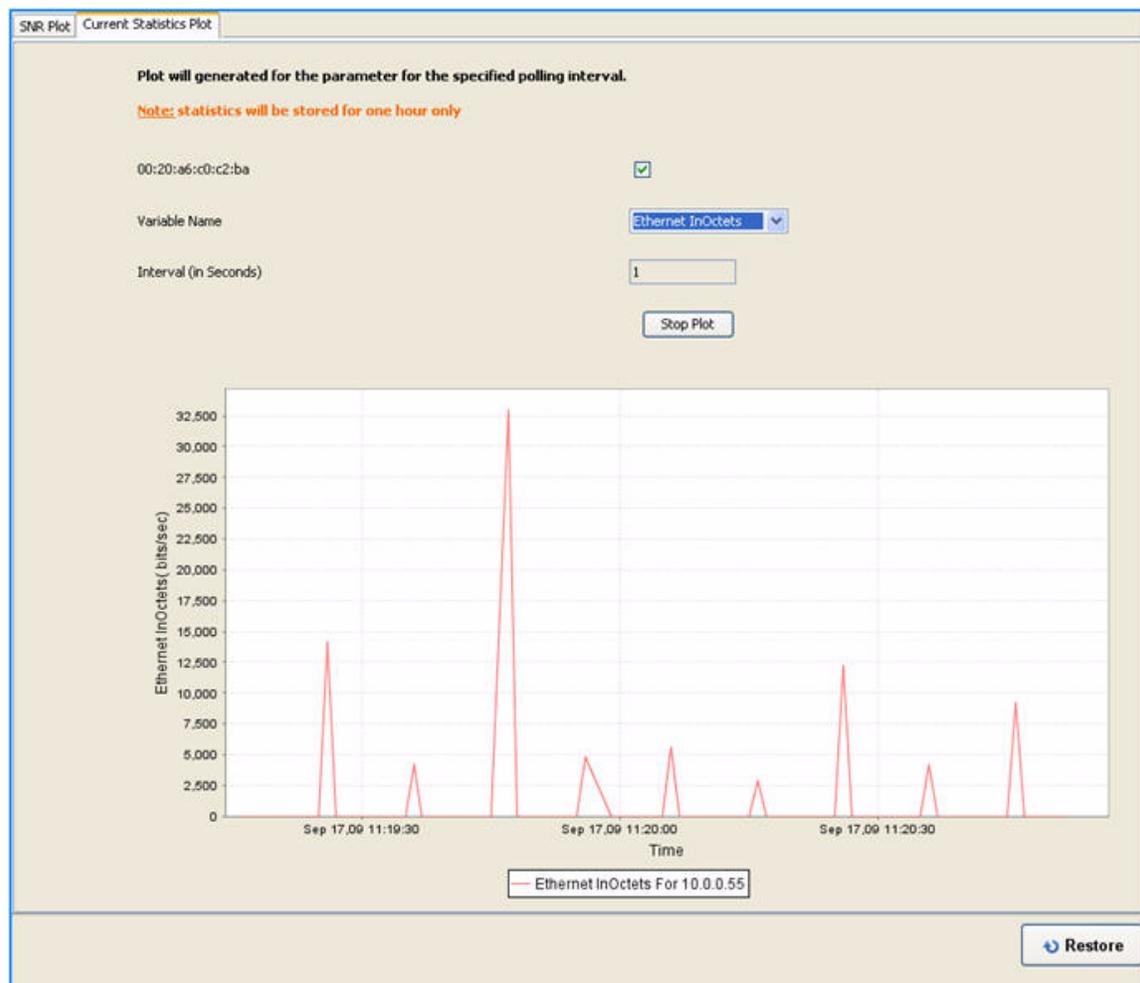
Figure 7-4 Current Statistics Plot

The following points should be considered while plotting **Current Statistics** graph.

1. Click **Stop Plot** to stop the graph and display the default settings.
2. Click **Refresh Graph** to refresh the graph.
3. On right-clicking, a menu appears for the graph with options, such as Properties, Save As, Print, Zoom In, Zoom Out, Auto Range. By clicking the Properties menu, you can edit the properties of the graph, such as Title, Appearance, etc. The Zoom In and Zoom Out options allow you to zoom in or zoom out the Domain Axis, Range Axis, or both. The Auto Range selects the best suitable range for X and Y axis and divides the graph accordingly. These options can be used to change the look and feel of the graph.

Figure 7-5 Graph Right-click Menu

4. Right-click on the graph and click **Save** to save a snapshot of the graph.
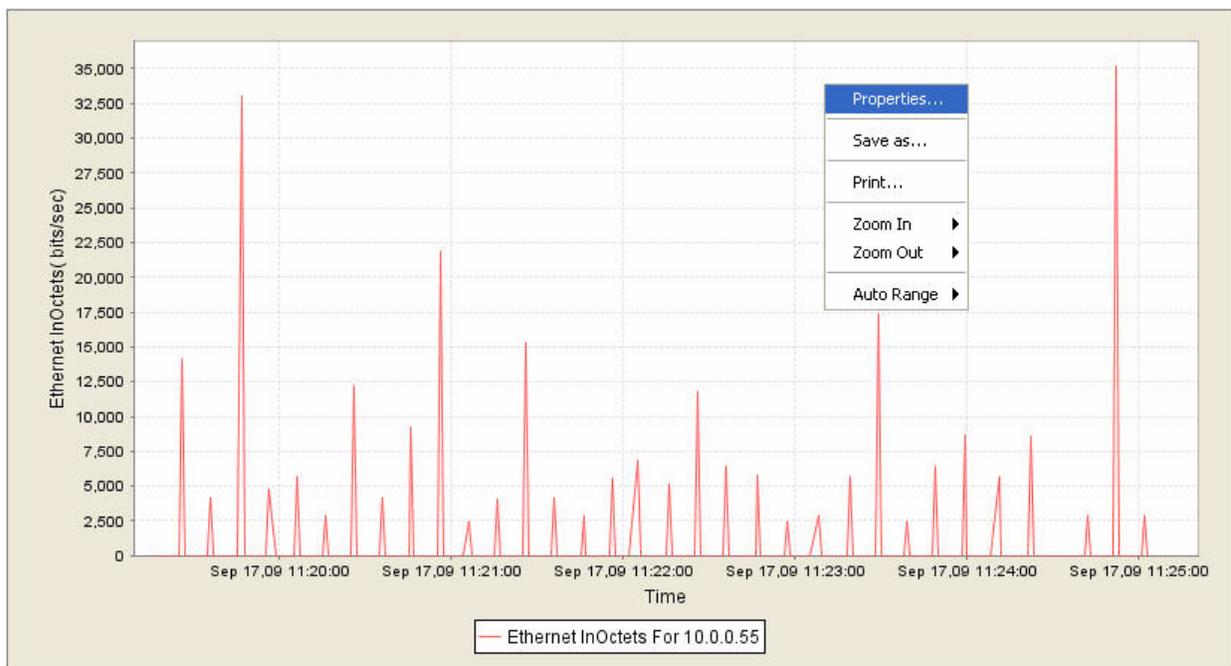5. Right click on the graph and click **Print** to print a copy of the graph.
6. Zooming options are also present for the graphs.
7. Click **Delete Graph Data** to delete all the data stored for the graph.

> **NOTE:** *The Graphs feature is supported only for the AP 8000/800, MP-8100, QB-8100 and MP-8150-CPE devices.*

7.3 Access Point Monitoring

Using ProximVision ES, you can monitor the following statistics of the Access Point devices:

- ICMP Page
- IP ARP Statistics
- RADIUS Client Authentication Statistics
- RADIUS Client Accounting Statistics
- System Log
- Event Log
- SNTP
- Ethernet Statistics
- Bridge Statistics
- Wireless Interface-1 Statistics
- Station Statistics

For more information on monitoring Access Point devices, refer to their respective Installation and Management Guide.

7.4 MP.11 Device Monitoring

MP.11 device monitoring is very similar to access points. You can monitor the following statistics for MP.11 devices:

- ICMP Received
- ICMP Transmitted
- Ethernet Interface Statistics
- Wireless Statistics
- Station Statistics

For more information on monitoring Access Point devices, refer to their respective Installation and Management Guide.

7.5 QB-8100 and MP-8100 Device Monitoring

Using ProximVision ES, you can monitor the following statistics for the MP-8100 and QB-8100 devices:

- WORP Satellite Statistics (BSU only)
- WORP BSU Statistics (SU only)
- WORP Site Survey (SU only)
- WORP Statistics
- General Wireless Statistics
- 11n Wireless Statistics
- Physical Statistics
- ICMP Statistics
- IP ARP Statistics
- RADIUS Client Authentication Statistics
- RADIUS Client Accounting Statistics
- System Log
- Event Log
- SNTP
- Ethernet Statistics
- Bridge Statistics
- Wireless Interface-1 Statistics
- Station Statistics

For more information on monitoring MP and QB devices, refer to their respective Installation and Management Guides.

Configuring Devices in Bulk

8

This chapter contains information on the following:

- Overview
- Bulk Operations

8.1 Overview

Configuring the Access Points and MP devices to achieve optimal performance and network security is a complex, time-consuming process and it is prone to human error. ProximVision ES addresses this problem by automating the processes of device configuration and compliance auditing.

ProximVision ES allows certain settings to be managed efficiently at a "Group Level" while others are managed at an "Individual Device Level". ProximVision ES defines a Group as a subset of the devices on the wireless LAN, ranging in size from one device to hundred of devices, that share certain common configuration settings.

Typical Group Configuration variables include basic settings (SSID, SNMP, polling interval etc), security settings (VLANs, WEP, 802.1x etc), and some radio settings (data settings (data rates, fragmentation threshold, RTS threshold, DTIM, preamble, etc). When configuration changes are applied at a Group level, they are automatically assigned to every device within that Group.

With ProximVision ES, you can create as many different groups as required. ProximVision ES users usually establish groups that range in size from 5 to 100 wireless devices.

CAUTION: *While configuring any page if the password is applicable, then you need to enter the password, then only Apply All configuration will work.*

8.2 Bulk Operations

Bulk Operations feature enables you to configure devices in bulk rather than individually. While configuring you need to ensure that all the devices under a group are either Access Points or MP.11 Series devices.

> **NOTE:** *The details of the device that is selected first will be displayed, and the changes that you make as bulk operations will be applicable for all the devices.*

To perform Bulk Operations

1. Click **Configure** > **Bulk Operations**. This will display the Bulk Operations window.
2. The **Bulk Operations** window displays the **Operations** menu. This menu has following submenus:
    - **Refresh Switches**: This feature refreshes all the devices that are available in the device tree of the Bulk Operations window.
    - **Apply all parameters**: On activating this submenu, it will allow you to set/update the configuration parameters for all devices as soon as click **Set**.
        1. Navigate to **Operations** > **Apply all parameters**.
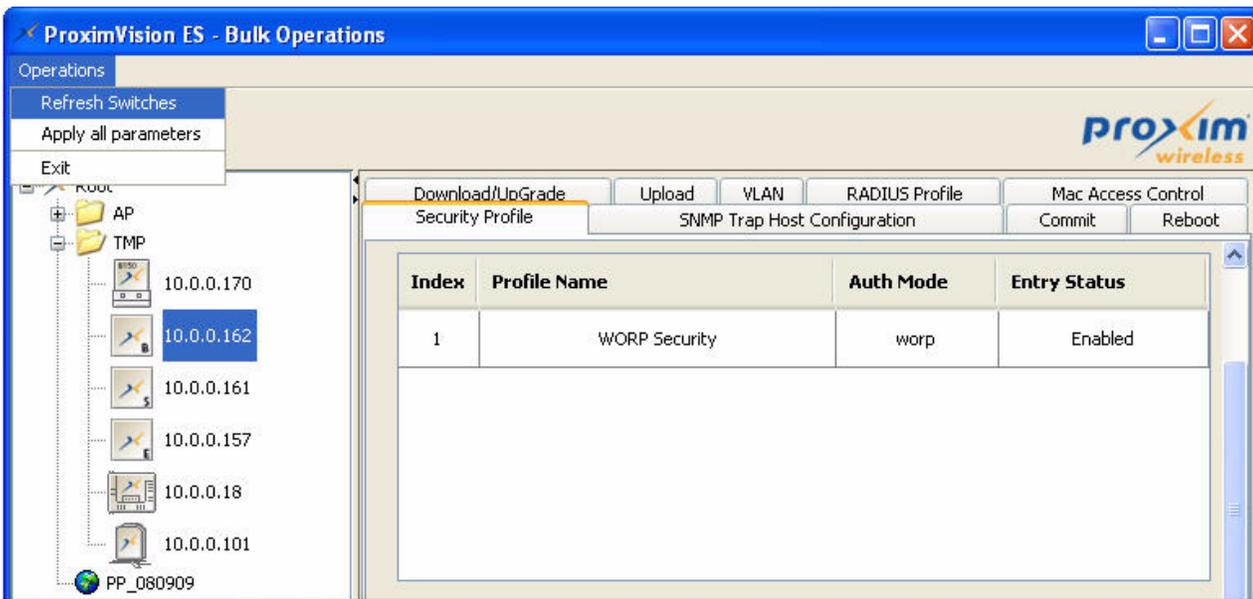   2. Check **Apply Configuration** option and click **OK**.

Figure 8-1 Bulk Operations - Apply All Parameters

Figure 8-2 Apply Configuration

Before you proceed to perform the bulk operation for the devices in the Bulk Operations page, configure a device. **For example**, let us configure the device with an IP Address of **192.168.9.35** as the **Master Device** in the ProximVision ES page. Open the **Bulk Operations** window, and activate the **Apply all parameters**. To activate this submenu, follow the steps that we have mentioned above. Select the Master Device. Navigate to the device tree and select the devices with the IP address say **192.168.9.228** and **192.168.9.139**. Select each page and click **Set**. This will update all the parameters in the page that is selected for all the devices selected for bulk operations according to the Master Device.

WARNING: You need to remember that this Apply all parameters will not be applicable for the RADIUS and Security Profile pages. For these two pages you need to add/modify the parameters for each row.

• Exit: This submenu allows you to close the bulk operations page. Select **Yes** if you want to close the bulk operations, otherwise click **No**.
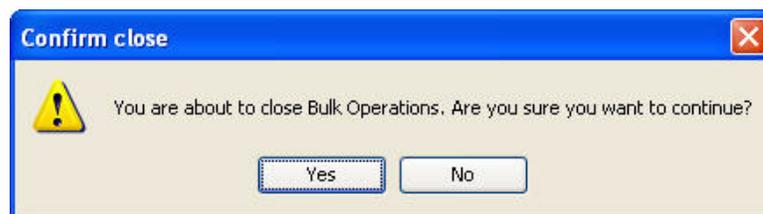

Figure 8-3 Bulk Operations - Exit

Network Mapping of the Devices

9

This chapter contains the following information:

- Overview
- Map Mode
- Map Data
- Device Data

9.1 Overview

It is important to survey the site before initializing the process for the deployment of wireless devices in that region. Needless to say, going to the physical site for feasibility of device installation may cost the installers. To avoid this, network mapping of the devices stands as a strong supportive pillar to contemplate the feasibility of installation for different locations.

You can contemplate and survey the device installation using the maps. This feature gives immense support and ease for the installers to survey the installation sites sitting at a remote single location using PVES map mode.

9.1.1 Scope

You can plan your Proxim devices for installation using this Map functionality from any location in the world. An important advantage is that at the street level of a location, the devices can be mapped with ease. You can locate with the longitude and latitude of the respective places.

9.2 Map Mode

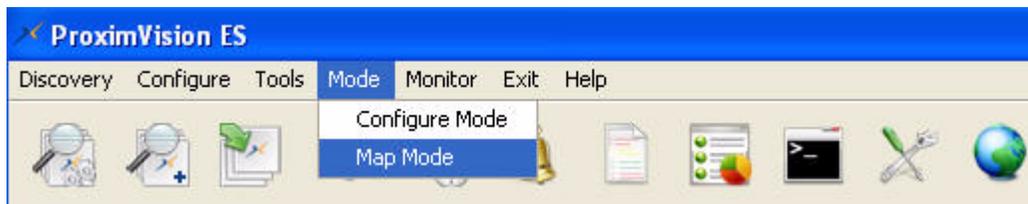Navigate to **Mode > Map Mode** or click [icon] icon to toggle to the Map Mode.

Figure 9-1 Map Mode

> **NOTE:** If you want to use the Map functionality in PVES, internet facility should be available.

9.2.0.1 Configure a Location

The following **Location** window appears. This window enables you to select, add or delete a location.

Figure 9-2 Adding Location

To add a location, click icon in the **Location** window. You can add as many locations as desired.

1. Enter the name of the desired location in the **Location** field.
2. Enter the latitude and longitude values in the **Latitude** and **longitude** fields manually or click icon to select the latitude and longitude automatically from the map. A new window appears as shown in Figure 9-3.
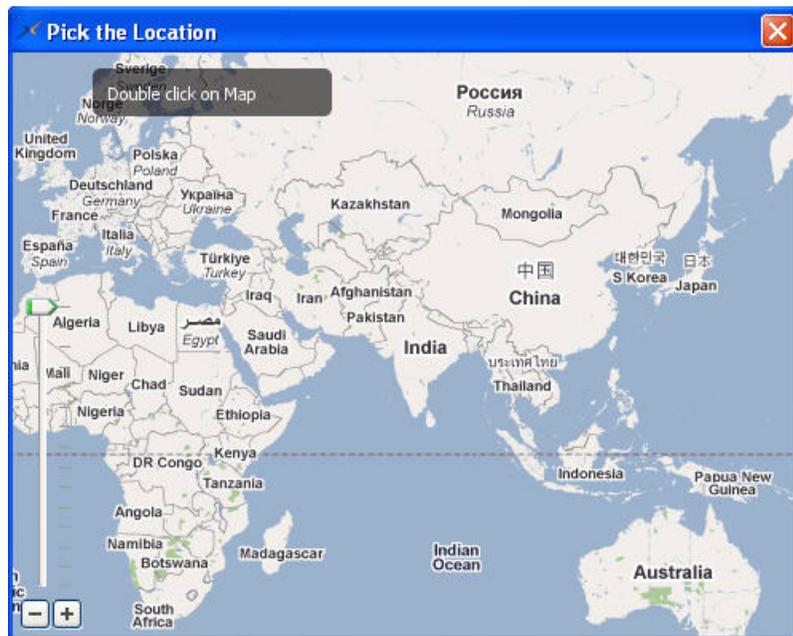

Figure 9-3 Longitude and Latitude Selection

3. Point your cursor to the desired location and double click on it. The longitude and latitudes of that location are automatically loaded.

4. Select the **Set as Current Location** checkbox to set that location as default. Using this option, you can set a default location so that you need not select a location every time you start the Map Mode. To change the default location, select another location as shown in Figure 9-4 and select the **Set as Default Location** check box.

5. Click **Save Location** to save the location.

6. Click **Connect**. This takes you to the specified location on the map displaying the AP, TMP and QB devices.

7. Click **Close** to close the **Location** window.

On the map, all the devices are displayed with their link quality. The devices displayed can be dragged from one place to another for installation.

To delete any location, select the location and click ⊗ icon.

To change a location, click **Configure > Change Map Location**. The **Location Change** window appears.
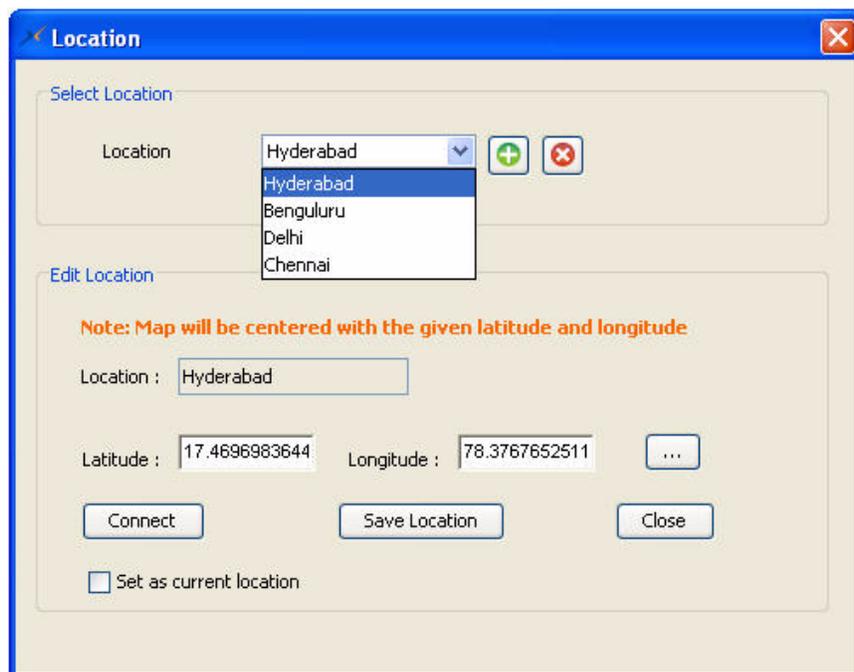

Figure 9-4 Change Map Location Window

Select the location from the **Location** box as shown in the Figure 9-4.

There are two sets of parameters which are map and device specific.

9.3 Map Data

Following are the map specific parameters displayed by right-clicking on the map.
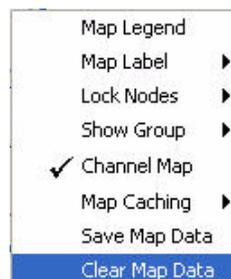

Figure 9-5 Right-click on Map

- **Map Legend:** This parameter displays the link quality (Signal Strength) in different color grids as shown in Figure 9-6. Each color maps to an SNR value of the devices and displays the specific limit of values in the left side. The SNR value decides the quality of the wireless link of the devices.

Figure 9-6 Link Quality of the devices

- **Map Label:** This parameter displays the following details of the devices on the map. The information is displayed as subscript of the devices.
    - **IP address:** This displays the IP Address of the individual devices.
    - **Name:** This displays the name of the individual devices.
    - **MAC Address:** This displays the MAC Address of the individual devices.
- **Lock Nodes:**
    - **Lock All:** This parameter locks the easy drag of all the devices. After locking, you cannot drag and drop a device to another location.

      This parameter is not device specific. You can lock a device individually by right-clicking the device.
    - **Unlock All:** This parameter unlocks all the devices and you can move the devices easily for your location selection. You can unlock an individual device also.
- **Show Group:**
    - All: Displays all the group devices
    - Existing Groups: Displays devices specific to the selected group
- **Channel Map:** This parameter maps the channel number of the devices based on the link colors. Same channel devices are linked up using the same color.

  To view the channel map, right-click and then click **Channel Map**.
- **Channel Link**: Displays the channel on which the linked devices operate.
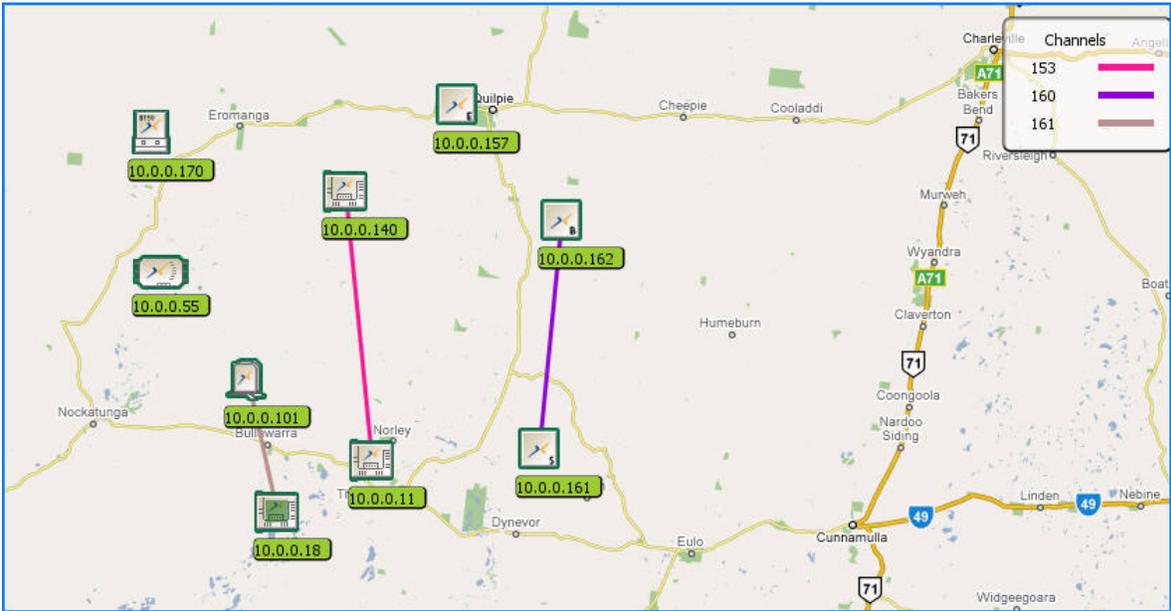

Figure 9-7 Channel Link

Figure 9-8 Channel Map

To view the **Map Legend**, right-click and then click **Map Legend.** This displays the channel number and color used to link the same channel devices. The channel colors can be customized by right clicking the channel link then selecting the required color from the Color Chooser.
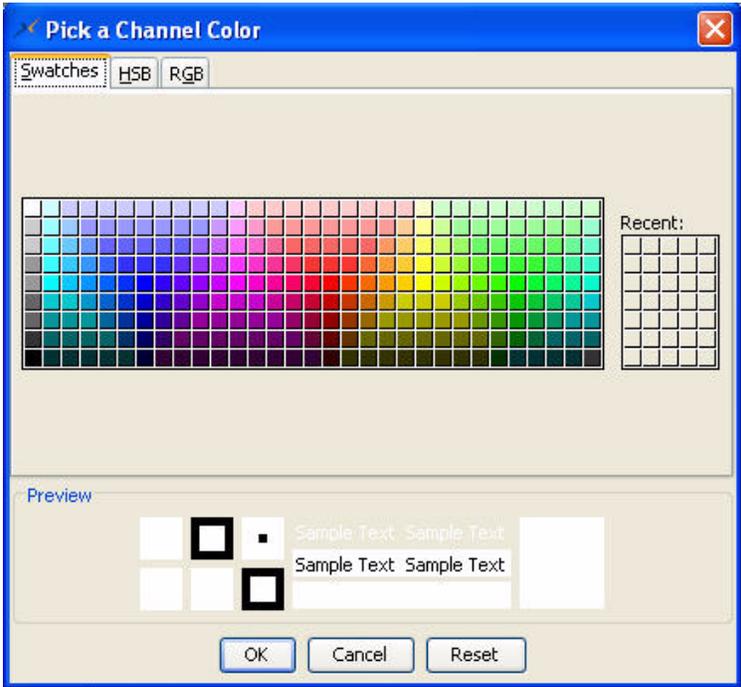


Figure 9-9 Pick a channel Color

- **Map Caching:** Click **Map Caching** to download the Map tiles into the application, which is used to view the map when internet is DOWN. Map Caching can be enabled or disabled by clicking **Map Caching > Enable/Disable**.

  Map Caching can also be cleaned using the option **Clean**. Clicking on it cleans the downloaded map tiles.

  > **NOTE:** Cached content is deleted after every 30 days or when the cache folder size exceeds 100 MBps.

- **Save Map Data:** Clicking on this parameter saves the geological positions of the devices located on the map. The changes of locations of the devices are saved using this parameter. The devices will be placed in the previous locations unless saved the map data.
- **Clear Map Data:** Clicking on this parameter deletes the saved device positions.

9.4 Device Data

Following are the device specific parameters you can get by right-clicking on the device.
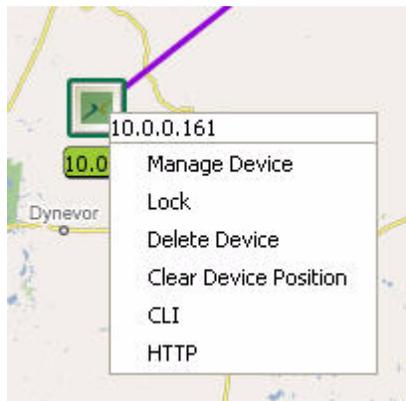
- **IP Address:** This parameter shows the IP address of the device.
- **Manage Device:** This parameter takes you to the Configuration mode to manage the device.
- **Locked:** You can lock the movement of the individual devices for location change.
  - To enable, right-click the device and select **Lock**.
  - To disable, right-click the device and select **Unlock**.
- **Delete Device:** You can delete a device from the map.
  - To delete, right-click the device and select **Delete Device**.
  - Right-click the device IP address you want to delete in the left side device IP pane and click **Delete**.
- **Save/Clear device position:** Click this parameter to save/clear the selected device position. This option appears only when the latitude and longitude parameters have been set.
- **Change device location:** Click this parameter to change the position of the device if latitudes/longitude are known.
- **CLI:** To configure a device using Telnet, right-click the device and select **CLI.** The telnet window appears.
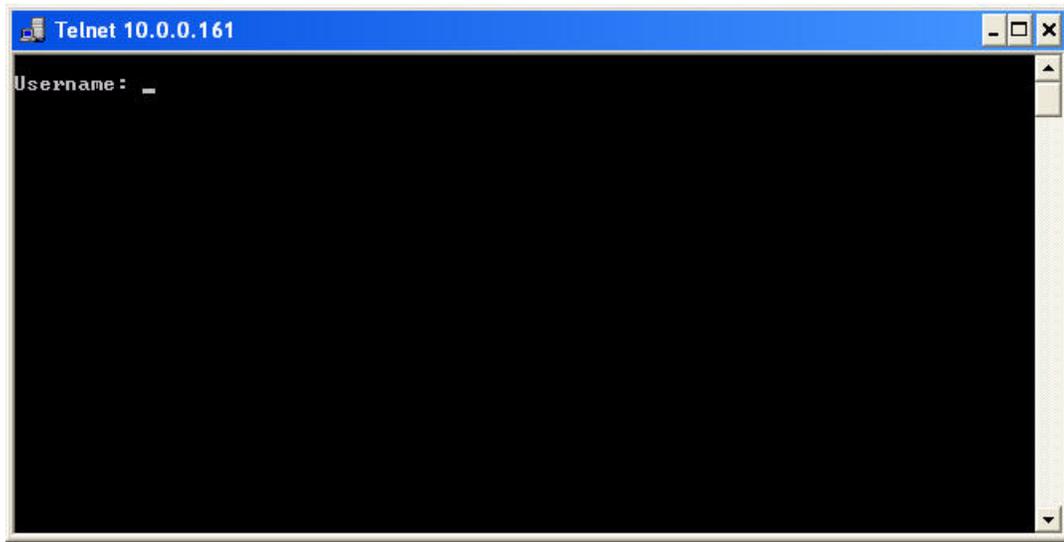
Figure 9-10 Telnet Window

– Enter the username and password and proceed further for configuration.

• **HTTP:** To configure a device using web, right-click the device and select **HTTP**. The following login window appears.

Figure 9-11 Login Window

– Enter the username and password and proceed further for web configuration.

To view the device and link details, point the cursor on the device. The device related information is displayed at the left side pane as shown in Figure 9-13 and remains there as long as you keep the cursor on the device.

You can link the device manually also, but limited only to two devices at a time.

1. Select the two devices to link by holding the Ctrl key and right-click.
2. To add a link, click **Link Devices** to link two devices.
3. To delete a link, click **Delete Link** to delete the link between two devices.
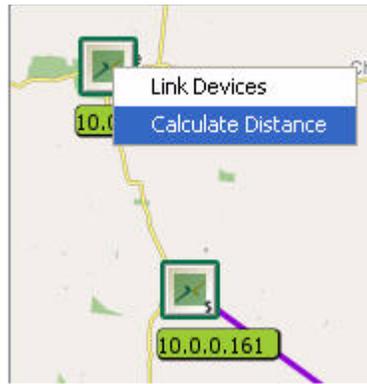
Figure 9-12 Calculate Distance

> **NOTE:** *Only Manual links can be deleted. Manual links are highlighted in black.*

4. To calculate distance between the devices, click **Calculate Distance**.

> **NOTE:** *Clicking **Calculate Distance** calculates the straight line distance between the two devices without taking the road map into consideration.*
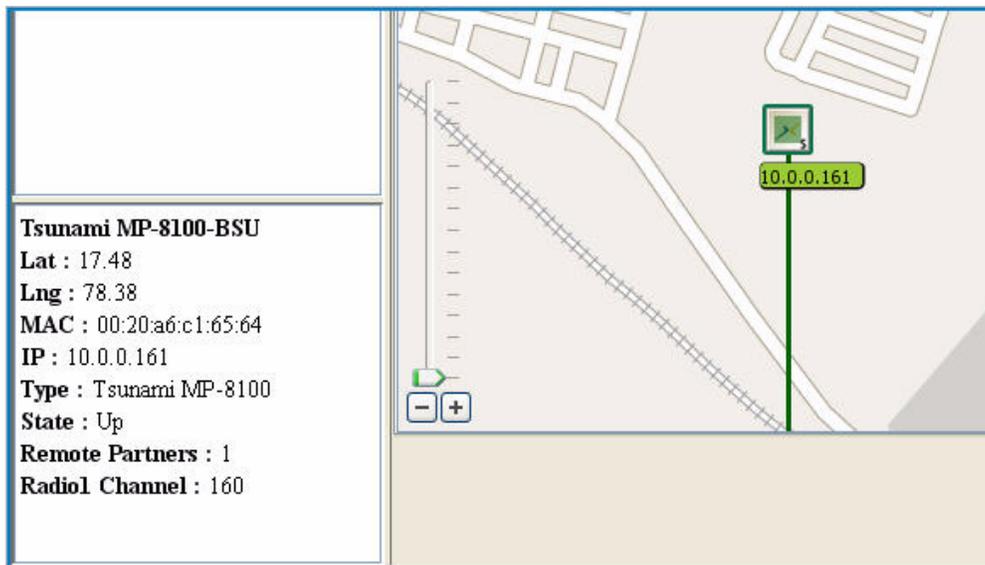

Figure 9-13 Device details

9.4.1 Device Location

To locate a particular device

*   Click **Discovery** > **Locate a Device**.

Tools

10

This chapter contains information on the following:

- TrapLog Viewer
- SysLog Viewer
- Inventory Report
- Device Count Info
- ScanTool
- Log Viewer

10.1 Overview

ProximVision ES provides you a comprehensive trap detection and the inventory report. Thus ProximVision ES enables your organization to leverage their existing network infrastructure without requiring any separate trap viewer devices.

CAUTION: *If you have closed the ProximVision ES, then information available in the Tools menu like Traplog and Syslog will not be available when you open the ProximVision ES again. You can save the logs in Tools menu before closing Proxim Vision ES application if required.*

10.2 TrapLog Viewer

The TrapLog Viewer is a messaging system that enables the ProximVision ES to view traplog messages sent from the devices. The TrapLog server in the device should be configured to send messages to PVES. The TrapLog Viewer provides information about each device. To view the TrapLog, navigate to **Tools** > **Trap Viewer.**
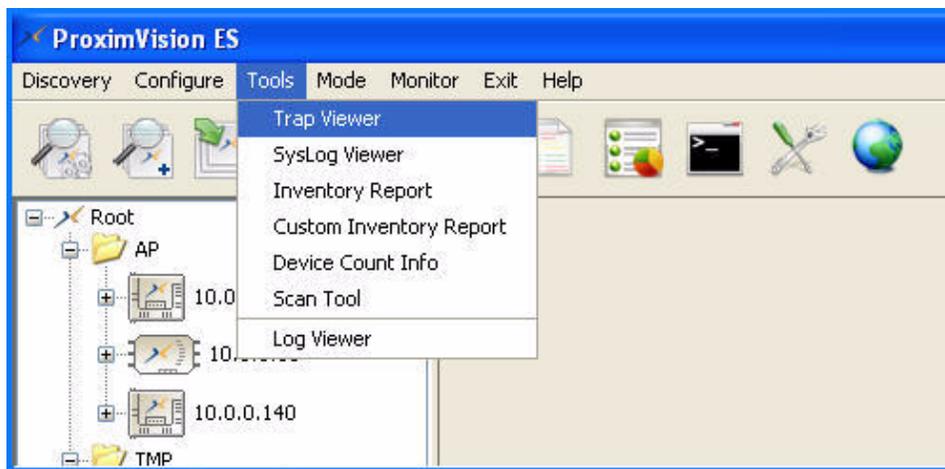

Figure 10-1 Navigation path to Trap Viewer

This viewer provides following information:

- Device Address
- Description of the modification
- Time
- Severity

Figure 10-2 Traplog Viewer Screen

Using **Export**, you can save the information displayed in the TrapLog Viewer window.
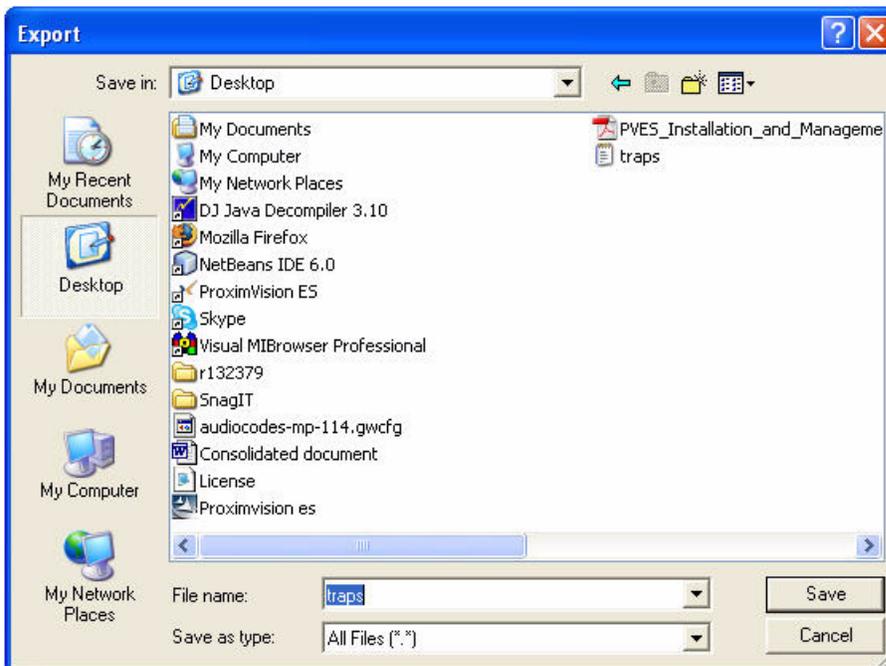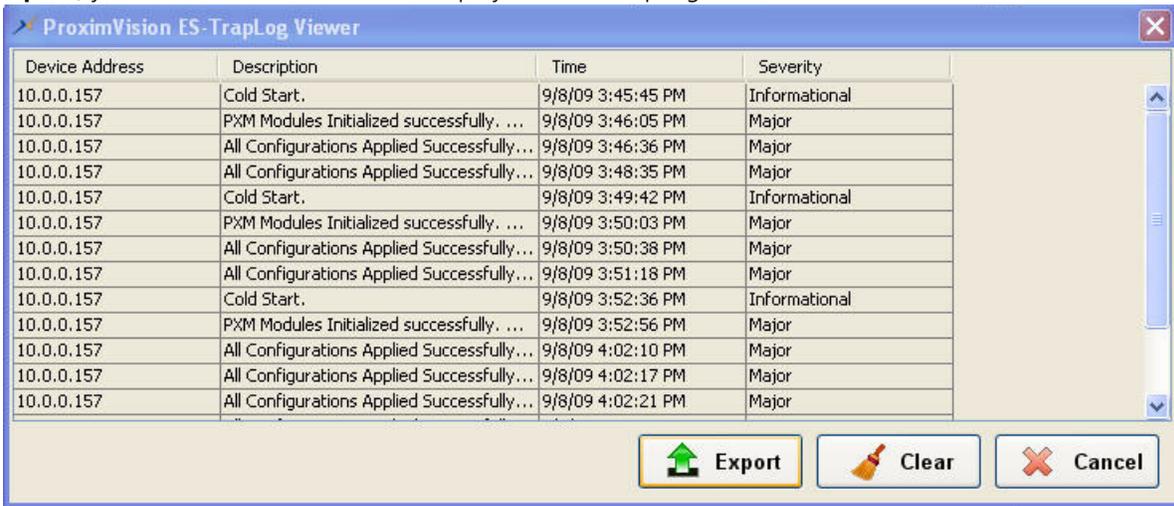
Figure 10-3 Export TrapLog information

10.3 SysLog Viewer

The SysLog Viewer is a messaging system that enables the ProximVision ES to view syslog event messages sent from the devices. The syslog server in the device should be configured to send messages to PVES. The ProximVision ES logs "Session Start (Log-in)" and "Session Stop (Log-out)" events for each wireless client.
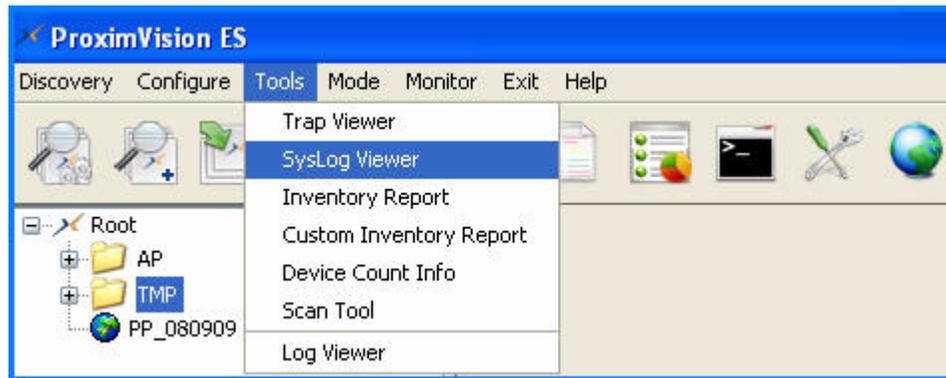
Figure 10-4 Navigation Path to SysLog Viewer

The SysLog Viewer provides the following information about the device:

- Device Address
- Comment
- Status
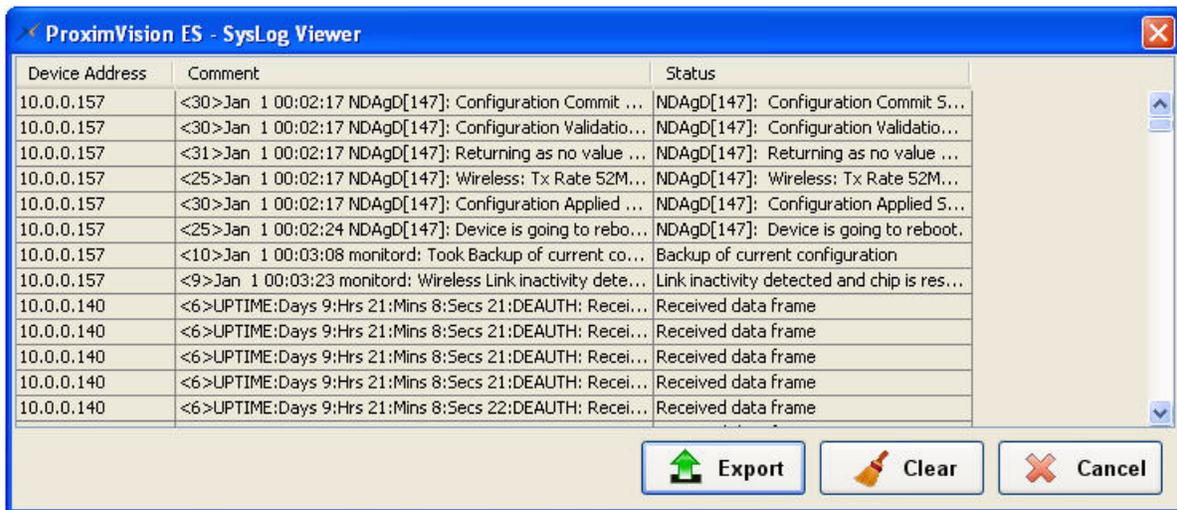
Figure 10-5 SysLog Viewer Screen

Using **Export**, you can save the syslog report.

10.4 Inventory Report

Inventory Report submenu provides information on all devices. To generate Inventory Report:

1. Navigate to **Tools** > **Inventory Report**.
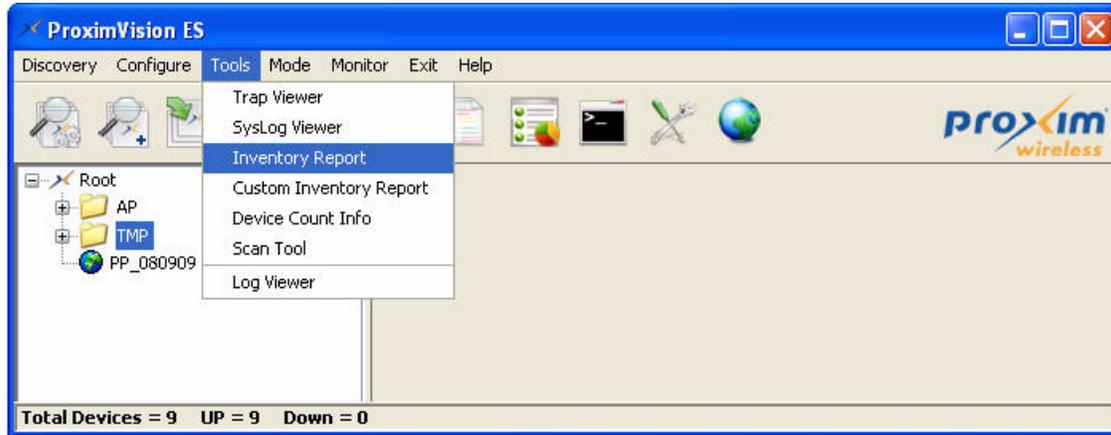
Figure 10-6 Navigation path to Inventory Report
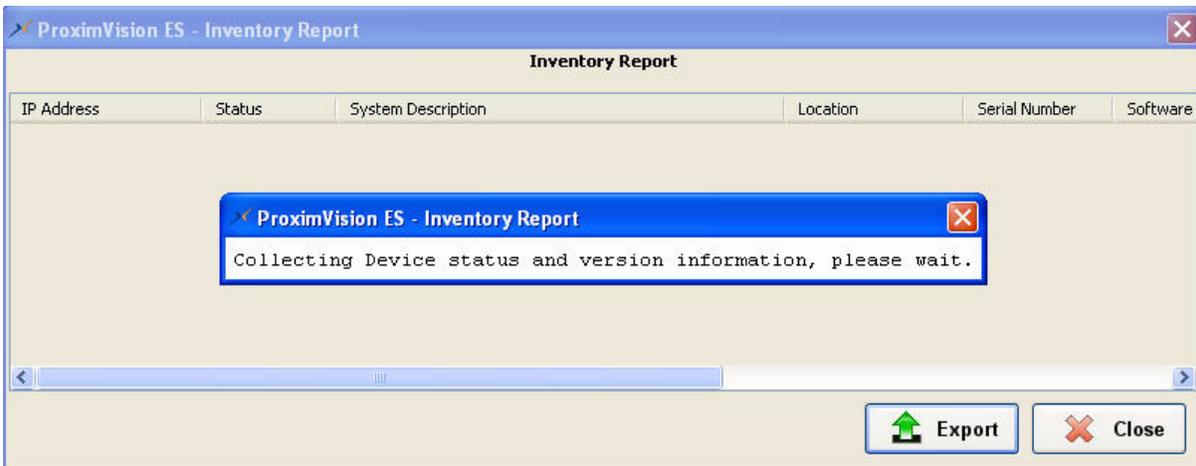
Figure 10-7 Collecting Inventory Information

2. The Inventory Report page is displayed. This report has following information about devices:
   - IP Address
   - Status
   - System Description
   - Location
   - Serial Number
   - Software Version
   - Hardware Version
   - MAC Address
   - Security ID
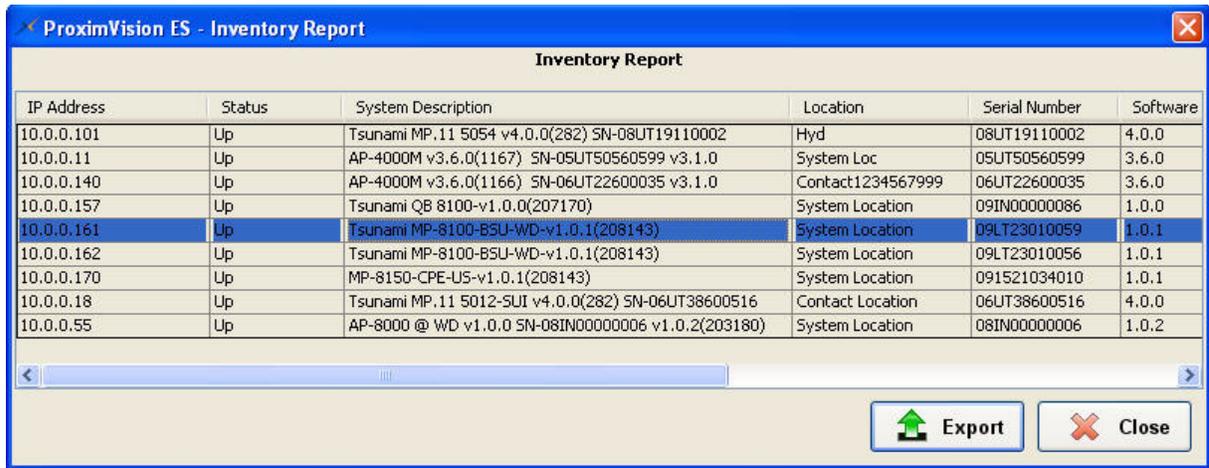
Figure 10-8 Inventory Report Screen

3. Using **Export**, you can save the Inventory Report of devices.
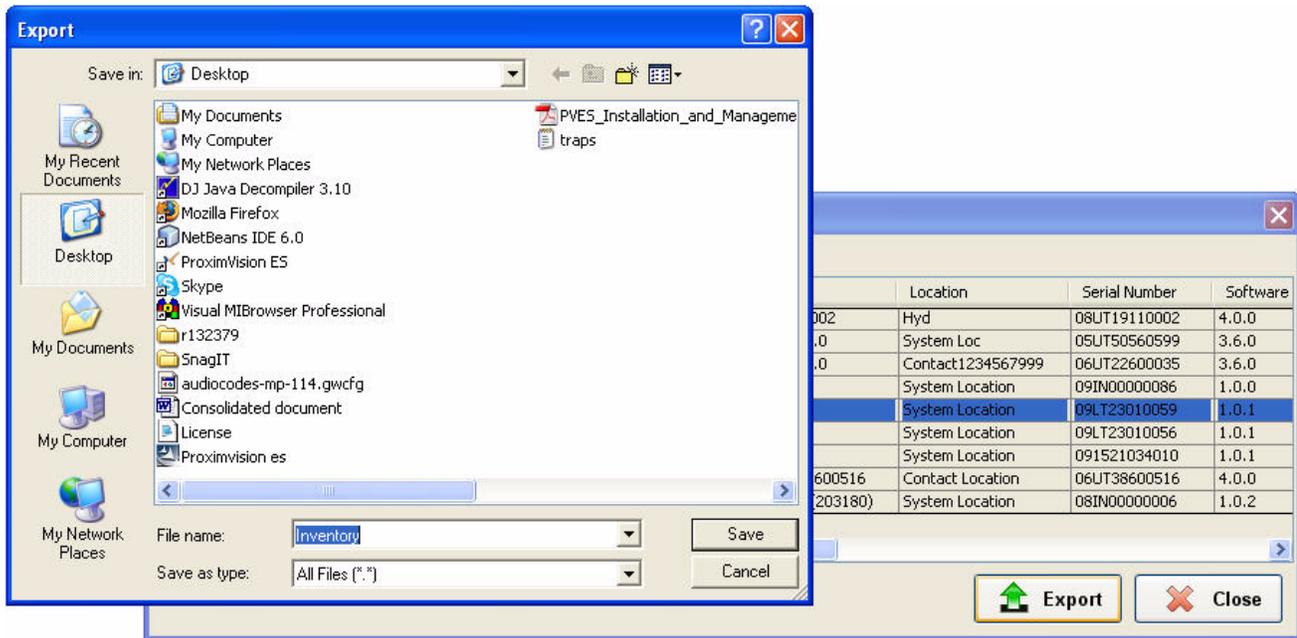
Figure 10-9 Exporting Inventory Report

10.4.1 Custom Inventory Report

The Custom Inventory Report option under the Tools menu allows the users to customize the inventory reports based on their specific requirements.

To customize Inventory Reports

1. Click **Tools** > **Custom Inventory Report**. The **Inventory Options** window is displayed as shown below.
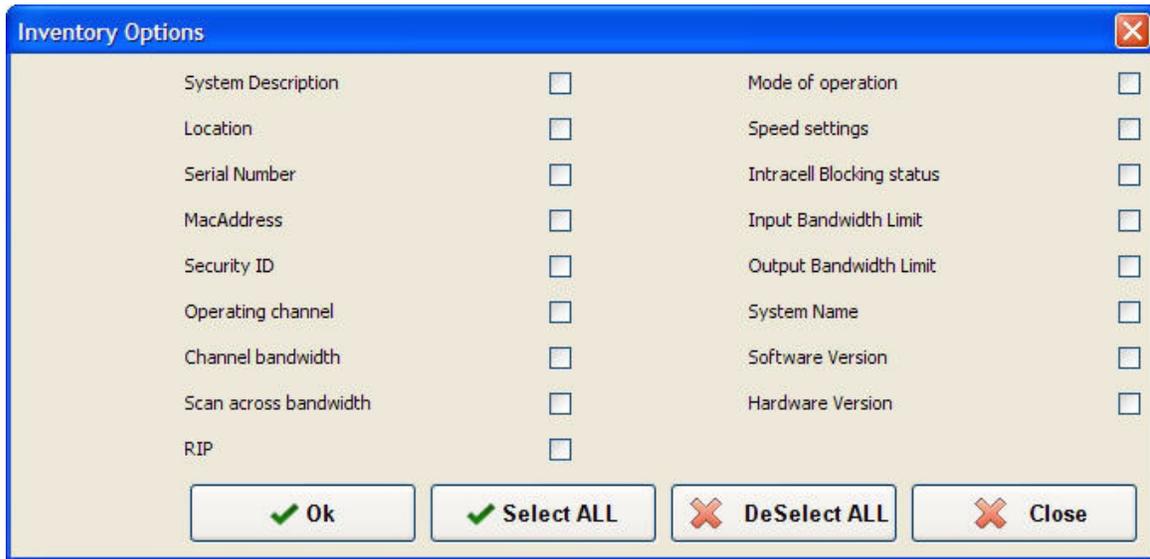
Figure 10-10 Inventory Options

2. From the **Inventory Options** list, select the inventory details that you want to be displayed in the Inventory Report.
3. Click **OK** to generate an Inventory Report with the details that you selected.

10.5 Device Count Info

Using this submenu, ProximVision ES displays the total number of devices that are available in the network.

1. Navigate to Device Count Info submenu, **Tools > Device Count Info**.
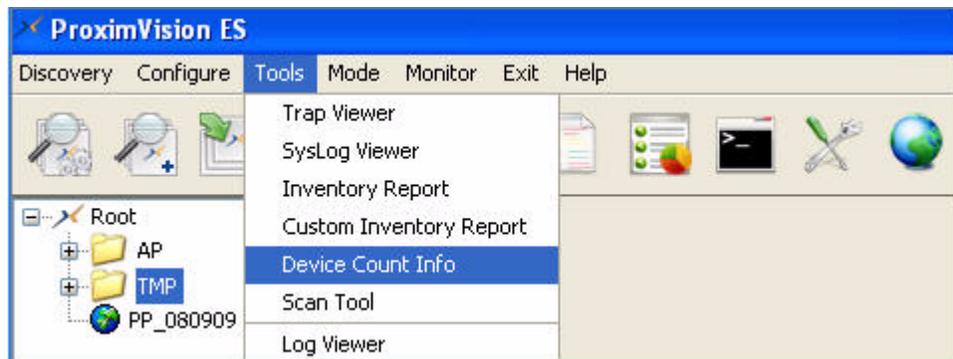
Figure 10-11 Navigation path for Device Count Information

2. The Device Count Info will provide following information:
   • Total number of devices discovered
   • Number of devices that are Up
   • Number of devices that are Down
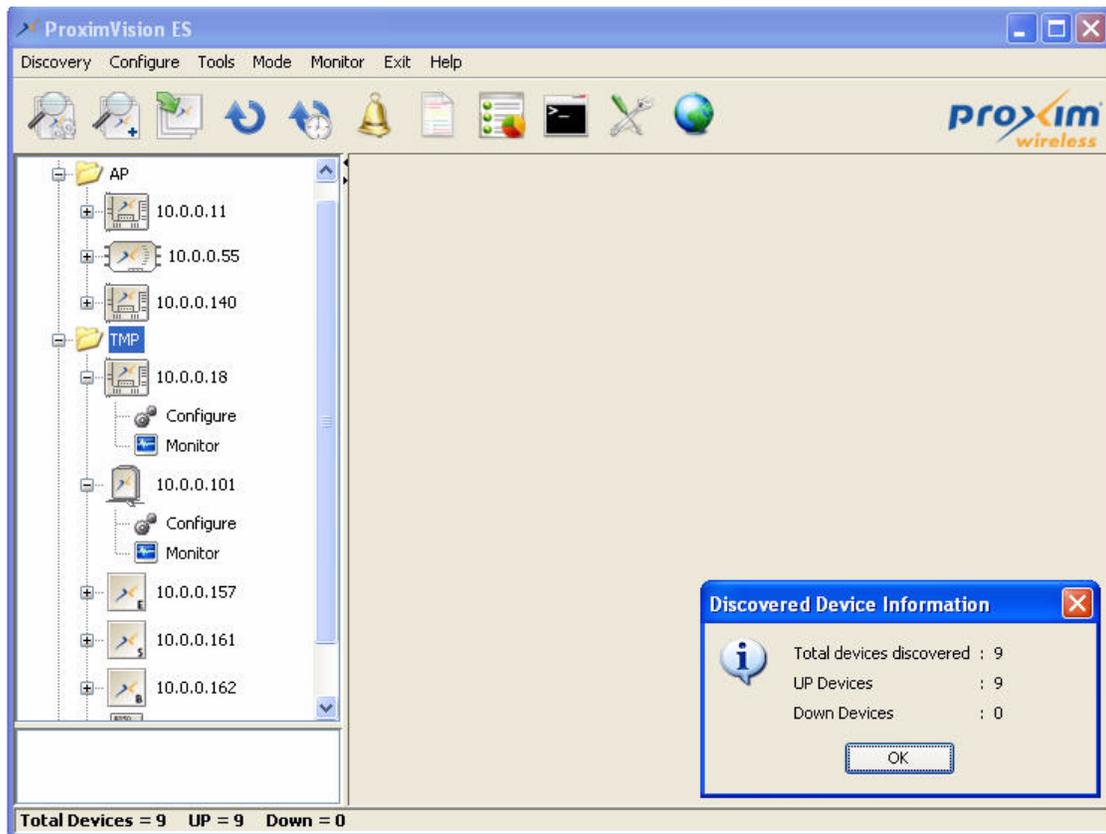
Figure 10-12 Discovered Device Information

10.6 ScanTool

With ScanTool (a software utility that is included in the Tools menu), you can find the current IP address of the devices that are available on the network. Using ScanTool, you can find the IP address of devices by referencing the MAC address in a Scan List. The tool automatically detects the units installed on your network segment, regardless of IP address.

You can launch the ScanTool through following methods:

  – **Tools > ScanTool**
  – **Start > Program > Proxim Wireless > ProximVision ES > Launch ScanTool.exe**

> **NOTE:** *For more information on Scantool, refer to the latest User Manuals at the Proxim support site.*

10.7 Log Viewer

Log Viewer displays events of ProximVision ES along with the date and time.

Troubleshooting 11

This chapter helps you isolate and solve problems with your unit that are discovered using ProximVision ES. If this chapter does not provide a solution, or the solution does not solve your problem, contact the Proxim Customer Support.

Before starting troubleshooting, it is important to check the details in the product documentation. For details about RADIUS, terminal and telnet programs. and Web browsers, refer to the appropriate documentation.

See the following:

- Connectivity Issues
- Unit Does Not Boot
- Serial Link Does Not Work
- RADIUS Profile
- Windows Firewall
- SNMPv1/v2c
- Invalid Subnet Mask or IP address
- Management Passwords
- No Active Devices Available for Bulk Operations
- SNMPv3 Error
- Third Party Server Error
- Unknown Host/Port
- Invalid Entry while Configuring SSID/VLAN
- Troubleshooting Concepts for Miscellaneous Errors in ProximVision ES

11.1 Connectivity Issues

Connectivity issues include any problem that prevents you from powering up and connecting the unit.

11.1.1 Unit Does Not Boot

The unit shows no activity (the power LED is off).

- Ensure that the power supply is properly working and correctly connected.
- Ensure that all cables are correctly connected.
- Check the power source. If you are using PoE, make sure that you are using a Category 5, foiled, twisted pair cable to power the unit.

11.1.2 Serial Link Does Not Work

- Make sure you are using a standard, straight-through serial cable.
- Check the cable connection between the unit and the computer are connected correctly.
- Make sure your PC terminal program is active and configured to the following:
    - For AP units: Com Port, Baud rate, Line Feeds with Carriage Returns.
    - For MP.11 units: Com Port, Bits per second, Stop bits, Flow control and Parity.

11.2 RADIUS Profile

While editing the RADIUS Profile, if you do not enter the value for the Shared Secret field, then the ProximVision ES displays the following error:
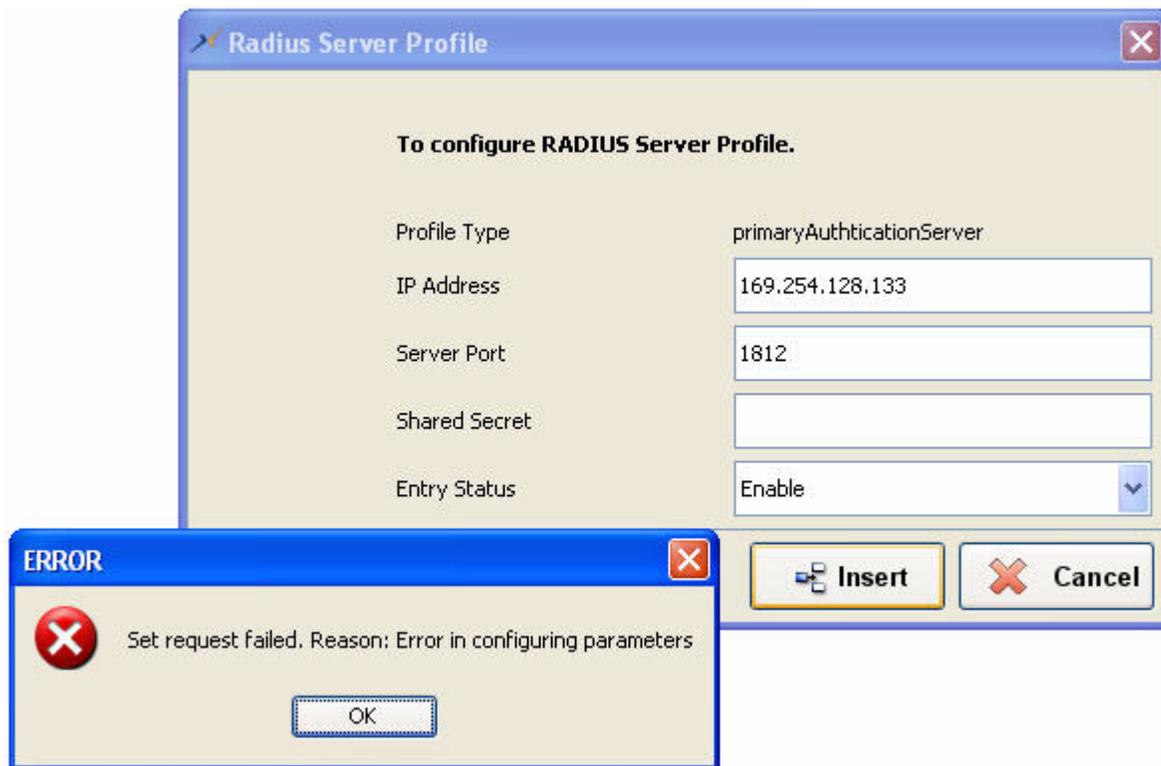
Figure 11-1 Shared Secret error for RADIUS profile

Enter the value for the Shared Secret field, to rectify the error.

11.3 Windows Firewall

Windows Firewall protect the system from unsolicited users and application. If the Windows Firewall is turned on, then the ProximVision ES application will not be able to launch itself. In such a case, you need to turn off the Windows Firewall and relaunch the ProximVision ES application.

11.4 SNMPv1/v2c

ProximVision ES will not be able to manage the AP devices that are discovered in SNMPv1/v2c, but changed to SNMPv3 mode in the Secure Management status. You need to rediscover the APs in the SNMPv3 mode and manage them using the ProximVision ES application.

11.5 Invalid Subnet Mask or IP address

When you provide an invalid IP address or Subnet Mask, then the proximVision ES displays the following error:

Figure 11-2 Invalid Subnet and/or Mask

Enter the valid IP address or Subnet Mask to rectify the error.

11.6 Management Passwords

You cannot make any changes in the Mgmt Passwords page, if the secure manage option is enabled. If the Secure Manage is enabled, then you need to rediscover the device manually in the SNMPv3 mode. Once you rediscover the device, you can modify/edit changes to the Mgmt Passwords page.
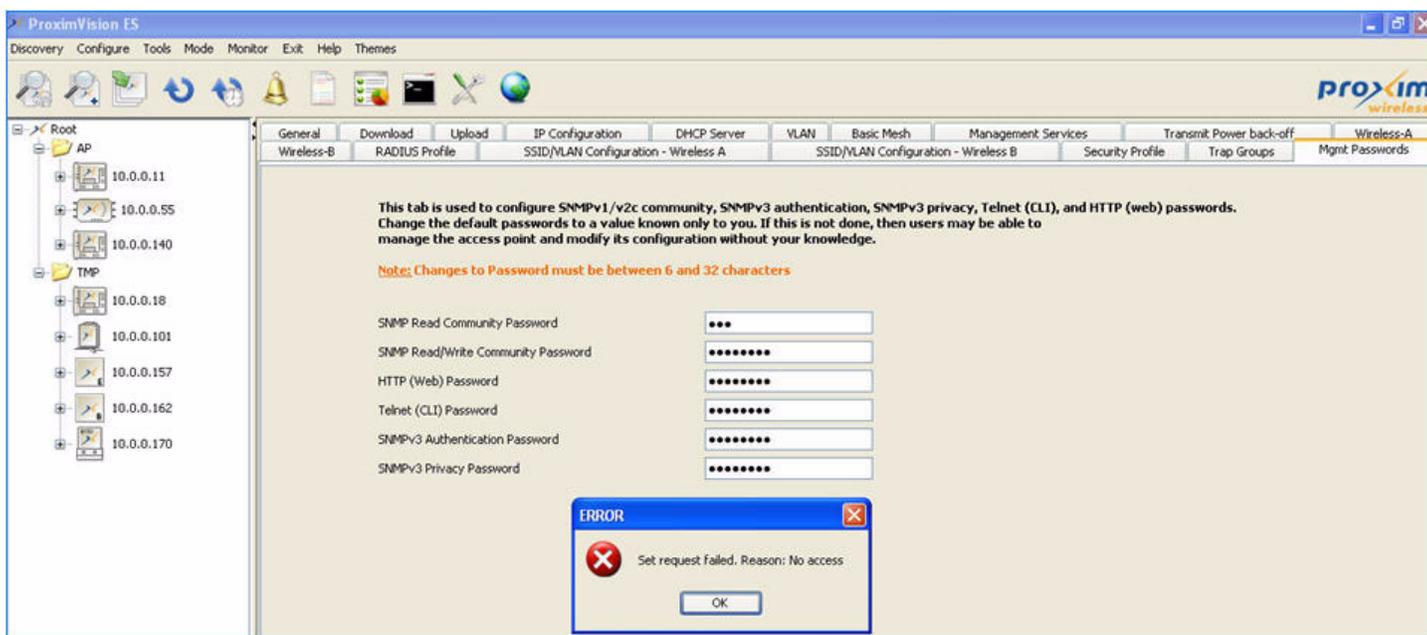
Figure 11-3 No Access in the Mgmt Password Page

11.7 No Active Devices Available for Bulk Operations

When there are no active devices available in the Bulk Operations window, then the following window is displayed:

Figure 11-4 No Active Device available in the Bulk Operations Window

You need to select the active devices in the Bulk Operations window, you perform the bulk operations for the devices.

11.8 SNMPv3 Error

While trying to discover the devices in SNMPv3 version, you need to enter the password of 8 characters. If the password is less than 8 characters, the ProximVision ES application will display the following error:

Figure 11-5 SNMPv3 Error during the Discovery of Devices

11.9 Third Party Server Error

When any third party server (SysLog and TRAP server) is running, then the application displays the following error:
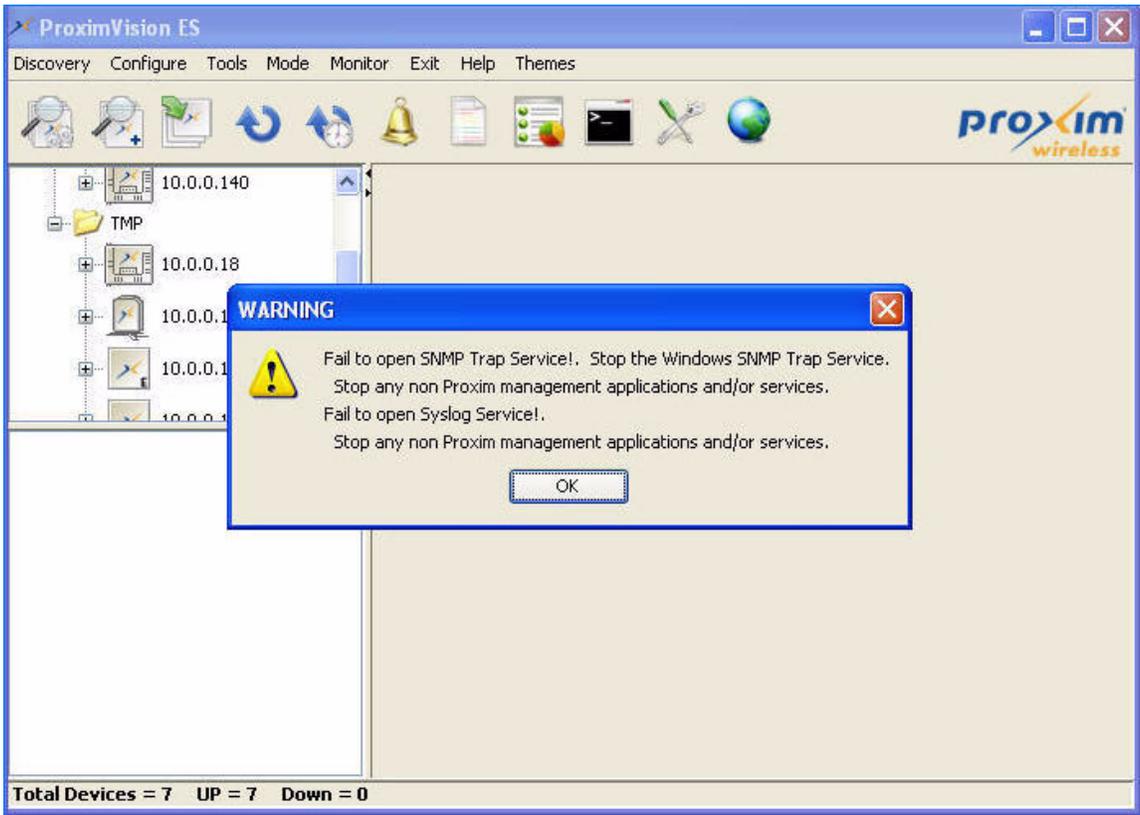
Figure 11-6 SysLog Error

You need to deactivate the external server and run the application again to ensure that the error does not occur.

11.10 Unknown Host/Port

While trying to discover the device that is not avail able in the network, ProximVision ES displays the following error:

Figure 11-7 Unknown Host/Port

To ensure that "Unknown Host/Port" is not displayed again, you need to enter a valid device address.

11.11 Invalid Entry while Configuring SSID/VLAN

Ensure that you have entered all the fields while configuring SSID/VLAN information. If any of the fields are left empty, ProximVision ES will display the following error:
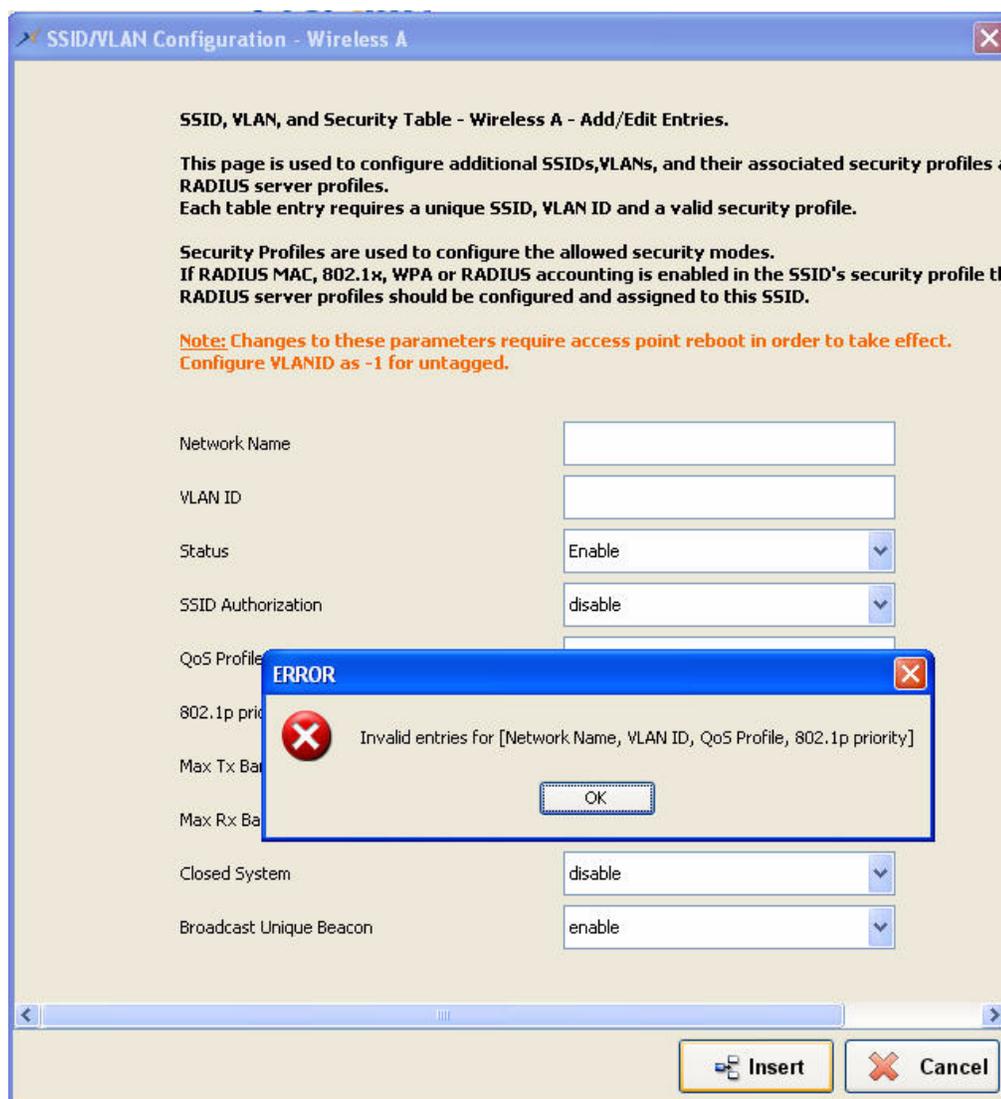
Figure 11-8 Invalid Entry while Configuring SSID/VLAN

11.12 Troubleshooting Concepts for Miscellaneous Errors in ProximVision ES

- If any specific IP Address range is excluded while using the Auto Discovery process, then this IP Address range will be excluded from all the future Auto Discovery processes that would take place. If you want to include the excluded IP Address range, then you need to manually rediscover the devices.
- When there are about 8-10 subnets configured in Auto Discovery, then there are chances that the ProximVision ES may hang. If ProximVision ES application is unresponsive, restart the application.

ProximVision ES Supported Devices

A

ProximVision ES supports the following devices:

- **ORiNOCO 802.11n draft 2.0 Access Points**
  - AP-800
  - AP-8000
- **ORiNOCO Access Points and Mesh series**
  - AP-700
  - AP-4000, AP-4000M, AP-4000MR and AP-4000MR-LR
  - AP-4900M and AP-4900MR-LR
- **Tsunami MP 8100 series**
  - MP-8100 BSU and SUA
  - MP-8150 SUR
  - MP-8150 CPE
- **Tsunami QB 8100 series**
  - QB-8100 EPA
  - QB-8150 EPR (and LNK)
- **Tsunami MP.11 series**
  - TMP.11 5012 SUI, SUR and CPE
  - TMP.11 5054 BSU and SUI
  - TMP.11 5054-R BSU and SU
  - TMP.11 5054-R-LR BSU and SU
- **Tsunami QB.11 series**
  - QB.11 5054
  - QB.11 5054-LR
- **MeshMAX 5054 series**
  - MeshMAX 5054W and 5054WM

B

Technical Services and Support

Obtaining Technical Service and Support

If you are having trouble using the Proxim product, please read this manual and the additional documentation provided with your product. If you require additional support to resolve your issue, please be ready to provide the following information before you contact Proxim's Technical Services:

- Product information
  - Part number of suspected faulty unit
  - Serial number of suspected faulty unit
- Trouble/error information
  - Trouble/symptom being experienced
  - Activities completed to confirm fault
  - Network information (what kind of network are you using?)
  - Circumstances that preceded or led up to the error
  - Message or alarms viewed
  - Steps taken to reproduce the problem
- ServPak information (if a Servpak customer):
  - ServPak account number
- Registration information
  - If the product is not registered, date when you purchased the product
  - If the product is not registered, location where you purchased the product

> **NOTE:** *Technical Support is free for the first 90 days from the date of purchase.*

Support Options

Proxim eService Web Site Support

The Proxim eService Web site is available 7x24x365 at http://support.proxim.com.

On the Proxim eService Web Site, you can access the following services:

- **New Product Registration**: Register your product to gain access to technical updates, software downloads, and free technical support for the first 90 days from receipt of hardware purchase.
- **Open a Ticket or RMA**: Open a ticket or RMA
- **Search Knowledgebase**: Locate white papers, software upgrades, and technical information.
- **ServPak Support**: Learn more about Proxim's ServPak global support service options.
- **Your Stuff**: Track status of your tickets or RMAs and receive product update notifications.
- **Provide Feedback**: Submit suggestions or other types of feedback.
- **Customer Survey**: Submit an On-Line Customer Survey response.

Telephone Support

Contact technical support via telephone as follows:

USA & Canada Customers

Call Technical Support: Phone: 408-383-7700

Toll Free: 866-674-6626

Hours: 6:00 AM to 6:00 P.M. Monday - Friday, Pacific Time

APAC Customers

Call Technical Support: Phone: +91 40 23115490

Hours: 9:00 AM to 6:00 P.M. Monday - Friday, IST (UTC/GMT +5:30 hrs)

International Customers

Call Technical Support: Phone: 408-383-7700

Hours: 6:00 AM to 6:00 P.M. Monday - Friday, Pacific Time

ServPak Support

To provide even greater investment protection, Proxim Wireless offers a cost-effective support program called ServPak. ServPak is a program of enhanced service support options that can be purchased as a bundle or individually, tailored to meet your specific needs. Whether your requirement is round the clock technical support or advance replacement service, we are confident that the level of support provided in every service in our portfolio will exceed your expectations.

- **Advanced Replacement of Hardware**: Can you afford to be down in the event of a hardware failure? Our guaranteed turnaround time for return to factory repair is 30 days or less. Those customers who purchase this service are entitled to advance replacement of refurbished or new hardware guaranteed to be shipped out by the Next Business Day. Hardware is shipped Monday – Friday, 8:00 AM – 2:00 PM (PST).

- **Extended Warranty**: Extend the life of your networking investment by adding 1, 2, or 3 years to your products standard warranty. This service coverage provides unlimited repair of your Proxim hardware for the life of the service contract. The cost of an extended warranty is far less than the cost of a repair providing a sensible return on your investment.

- **7x24x365 Technical Support**: This service provides unlimited, direct access to Proxim's world-class Tier 3 technical support engineers 24 hours a day, 7 days a week, 365 days a year including Holidays. Customers who purchase this service can rest assured that their call for technical assistance will be answered and a case opened immediately to document the problem, troubleshoot, identify the solution and resolve the incident in a timely manner or refer to an escalation manager for closure.

- **8x5 Technical Support**: This service provides unlimited, direct access to Proxim's world-class technical support 8 hours a day, 5 days a week from 8:00 AM - 5:00 PM (PST(US)). Technical Support is available at no charge for the first 90 days from the purchase date. Beyond this period, a ServPak support agreement will be required for technical support. Self-help will be made available by accessing Proxim's extensive eService knowledgebase.

- **Software Maintenance**: It's important to maintain and enhance security and performance of wireless equipment and Proxim makes this easy by providing a Software Maintenance program that enables customers to access new features and functionality, rich software upgrades and updates. Customers will also have full access to Proxim's vast knowledgebase of technical bulletins, white papers and troubleshooting documents.

- **Priority Queuing Phone Support**: This service provides customers with a one hour response time for technical phone support. There is no waiting in line for those urgent calls for technical support.

ServPak Service	24x7Enhanced (Bundled Serv.)	8x5 Standard (Bundled Serv.)	Extended Warranty	Advance Hardware Replacement	Software Maintenance	24x7 Technical Support
Product Coverage Duration	Renewable Contracts	Renewable Contracts	Renewable Contracts	Renewable Contracts	No	Renewable Contracts
Software Coverage Duration	Renewable Contracts	Renewable Contracts	No	No	Renewable Contracts	No
Proxim TAC Support	Yes	Yes	No	No	No	Yes
Software Updates & Upgrades	Yes	Yes	No	No	Yes	No
Registered Access to Proxim.com	Yes	Yes	Yes	Yes	Yes	Yes
Registered Access to Knowledge Tool	Yes	Yes	Yes	Yes	Yes	Yes
Advance Replacement	Yes	No	No	Yes	No	No
Depot Repair	No	Yes	Yes	No	No	No

To purchase ServPak support services, please contact your authorized Proxim distributor. To receive more information or for questions on any of the available ServPak support options, call Proxim Support at 408-383-7700 or send an email to servpak@proxim.com.

Updating Firmware C

Updating individual AP, MP and QB Series Firmware

Proxim periodically releases updated software for the devices on its website, http://support.proxim.com. Check the website for the latest updates after you have installed and initialized the unit.

1. In your web browser, open the link http://support.proxim.com.
2. Log into the support page with your username and password. If you have not created an account, create an account to gain access.
3. Click on the appropriate link to access the products download page.
4. Use the instructions in the following sections to install the new software.