

## 1 SNMP Monitoring and Configuration

Multiple units can be managed by using third-party standard network management tools such as HP Openview, IBM Tivoli, SNMPc, etc.

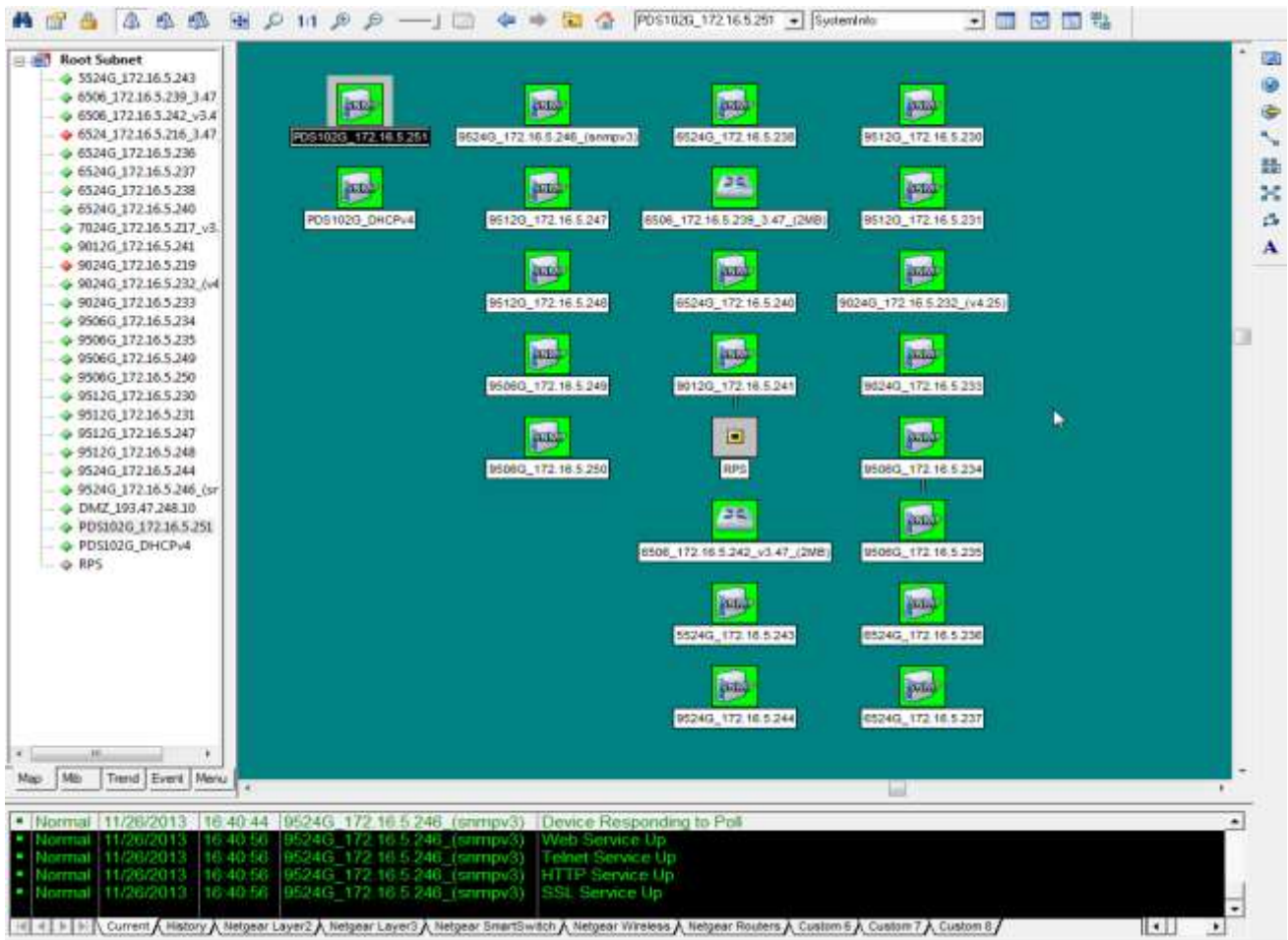


Figure 1-1: SNMPc Network Management Tool



**NOTE:**  
 Due to security concerns the unit is shipped with the **SNMP disabled**. Prior to enabling SNMP, please modify SNMP community strings and only then enable it.

### 1.1 Enabling SNMP

The Network Manager interface supports SNMPv1, SNMPv2c, and SNMPv3 (since SNMPv1 is obsolete, traps will be sent in SNMPv2, SNMPv3 or both).

**To use the SNMP:**

1. Browse to the Configuration Web page and enable SNMPv2 or SNMPv3:
  - For SNMPv2c, make sure that community strings match your SNMP manager configuration.

## SNMP Power over Ethernet User Manual

- For SNMPv3, make sure username, authentication and privacy password and encryption methods match your SNMP manager configuration.

### 2. Traps:

- To enable traps set remote manager IP address in the **Remote IPv4/IPv6 SNMP Trap Managers** window.
- To enable PoE traps (PoE port status changed, unit consumes over xy% of total unit power, or unit now consumes less than xy% of total unit power), please enable PoE Notifications (see image below).

**SNMP Configuration**

**SNMPv2c**

Enable SNMPv2c  ←

Get Community: public

Set Community: private

Trap Community: public

**SNMPv3**

Enable SNMPv3  ←

User Name: admin

Authentication Password: .....

Privacy Password: .....

Authentication and Encryption Mode: MD5+DES

**System Information (MIB-II, v2c/v3)**

SysContact: Someone

SysName: My Name

SysLocation: Over The Globe

**SNMPv3 Notification (Trap)**

User Name: trap

Authentication Password: .....

Privacy Password: .....

Authentication and Encryption Mode: None

**PoE MIB (RFC3621, v2c/v3)**

Enable Notification  →

Notify Exceeded Power Usage (1-99%): 80

**Remote IPv4/IPv6 SNMP Trap Managers (v2c/v3)**

Trap Manager #1: 172.16.3.179

Trap Manager #2:

Figure 1-2: Enable SNMPv2, SNMPv3 and PoE traps

## 1.2 SNMP MIBs

Several MIBs are supported by SNMP manager.

- RFC1213:** MIB-II which provides general IPv4 network statistics, and information on the device being managed.
- RFC3621:** Power Over Ethernet (PoE) MIB which provides various management capabilities (see Figure 1-3)
- Private MIB:** Enhance PoE functionality beyond RFC3621 PoE MIB.

## 1.3 RFC3621 PoE MIB



**NOTE:**

For a detailed PoE MIB description, please refer to Microsemi's Technical Note – 132 (can be found on the CD), which describes in detail PoE MIB functionality.

## SNMP Power over Ethernet User Manual

RFC3621 PoE MIB is located under 1.3.6.1.2.1.105 SNMP MIB tree. The MIB is divided into three sections (see Figure 5-3). The first section deals with PoE ports and provides functionality such as enable/disable, read port status, class, etc. Each OID is accessed as a two-dimensional array table.

The second section deals with the power source that is responsible for providing power to a group of PoE ports. It enables reading total power consumption, power supply status, etc.

The third section enable/disables PoE traps to be sent to remote SNMP managers.

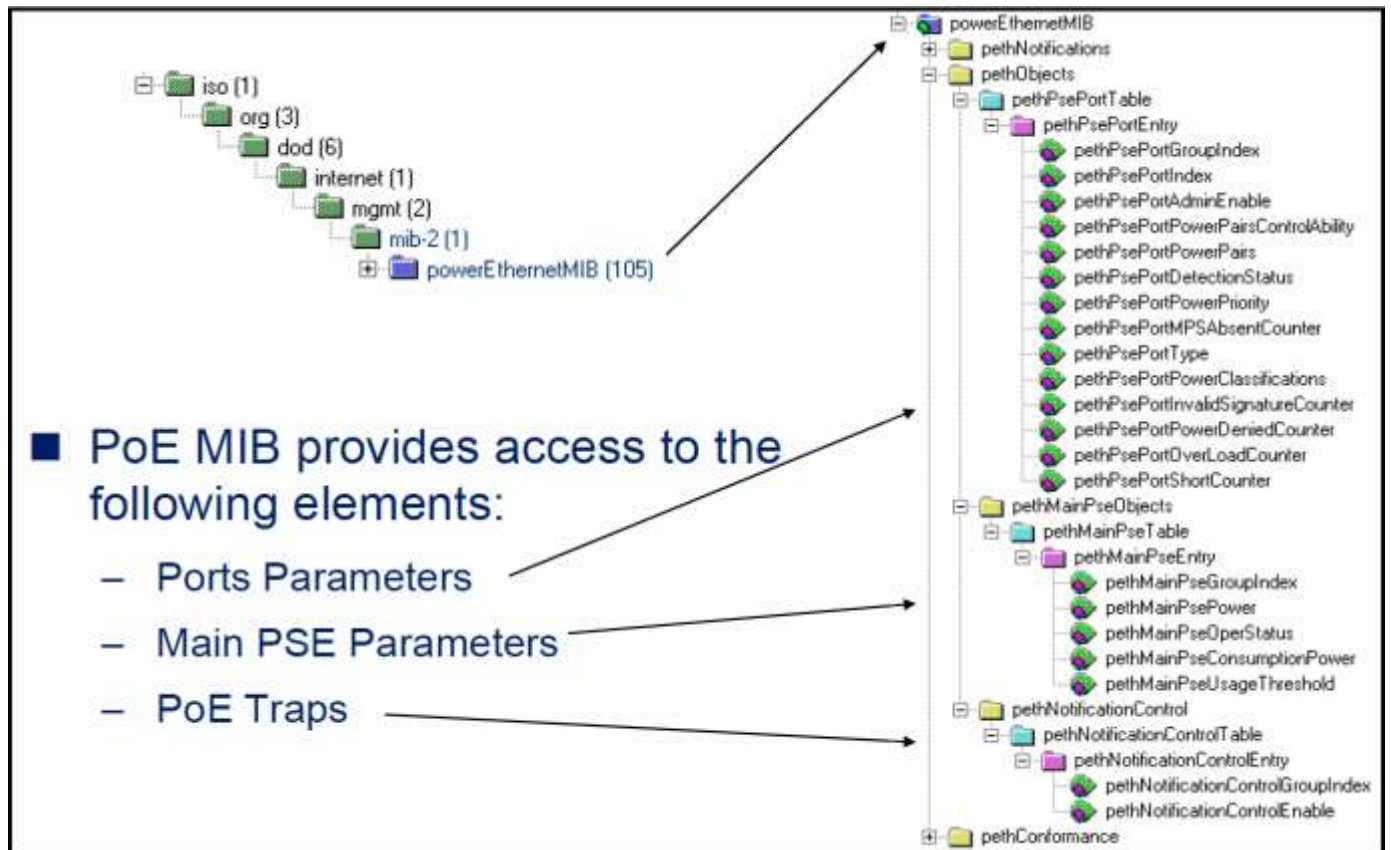


Figure 1-3: MIB Tree Structure

### 1.4 Private MIB

The following SNMP Oid's are supported by the SNMP private MIB

Oid Name	Type (R/W)	Description
poEPortConsumptionPower	R	PoE port power consumption [Watt]
poEPortMaxPower	R	PoE port maximum available power [Watt]
poEPortType	R	PoE port type – Two Pair, 30 [Watt]
mainVoltage	R	Unit Power Supply voltage [Volt]