

SNMP

IT's pre-emptive strike

What group do you belong to?

1- What the @\$^#\$& is SNMP?

2- I know what SNMP is but never used it.

3- I've used SNMP but it works on Macs?

- Simple
- Network
- Management
- Protocol

SNMP Basics

- What it does
- How it works
- What we can do with it
- How the Mac uses it
- SNMP as an automation trigger

What it does?

- Protocol used by devices to transmit:
 - Performance data
 - Health status
 - Notification of events
- Supported by most IT equipment
- Not leveraged much outside the data center
- More versatile than most users know

How it works

- Data made available from the device
 - What's a community?
 - Data format
 - What's a MIB, it's the dictionary stupid!
 - Querying the available data
 - SNMPWalk
 - SNMPGet
 - What is different with a trap?

What can we do with it?

- Performance gathering
- Trending
- Threshold alert
- Event Response

How the Mac uses it

- Enter Net-SNMP
- Same agent used on most linux platforms
- Well documented
- Expandable with custom code
- Can be mass deployed over ARD

Configuring Net-SNMP

- Basic setup of the configuration file
- Turning on the service
- Checking the data exposed
- Advanced setup of the configuration file
- Expanding Net-SNMP with custom scripts

Role of the SNMP agent

- Gather data from devices
- Receive traps from devices
- Graph data
- Send alerts when thresholds triggered

Walkthrough of the Zenoss agent

- Basic interface navigation
- Device tree
- Location tree
- Event console
- Device detail view

Adding a new device

- Modeling data vs performance data
- Modeler plugins
 - Creating new modeler plugins
- Performance templates
 - Creating new performance templates
 - Data points
 - Graphs
 - Thresholds

The versatile command data point

- Gather data with shell scripts
 - Run local on agent
 - Run remotely on devices
- Allows gathering metrics over other protocols
 - Telnet
 - Web queries