



Incorporate network monitoring into any OPC-client application.

## SNMP-OPC Server

### Features

- Real-time network analysis
- Power supply management
- Unmanaged device monitoring
- SNMP network analyst
- SNMP MIB template generator
- Tag filtering
- Pre-built tag databases
- SNMP traps support
- Unmanaged device support
- Auto-discovery

### Specifications

#### Network

- IEEE 802.3 compliant Ethernet networks with SNMP manageable devices

#### Hardware

- 700MHz Pentium
- 128 MB RAM
- 10 MB HD space

#### OS Support

- Windows XP Pro
- Windows 2003 Server
- Windows 2000 Server

#### Any OPC-Client application, including:

- Wonderware InTouch
- Cimplicity HMI
- GE Fanuc iFix
- Siemens WinCC
- Iconics
- Allen-Bradley RSView®



### Overview

Direct-Link™ SNMP Management Suite (SNMP MS) is the original network management SNMP-OPC server software developed specifically for the industrial controls marketplace. Direct-Link SNMP MS seamlessly integrates monitoring and analyzing of both SNMP-managed and unmanaged Ethernet network devices into the leading human-machine interface (HMI) software packages.

Direct-Link SNMP MS provides operators with a real-time view of the health of their Ethernet network devices and the overall Ethernet network traffic volume from within their OPC-client HMI software environment.

Direct-Link SNMP MS also has the ability to analyze the raw data and issue warnings to you about the operating condition of your network. Direct-Link SNMP MS is an OPC 2.0 Server that can interface with any OPC client software.

	SNMP Basic	SNMP Expert	SNMP Enterprise
OPC Data Access(DA) Server	✓	✓	✓
DataViewer/Communicator	✓	✓	✓
Unmanaged Device Support (Heartbeat)	✓	✓	✓
RMON Support	✓	✓	✓
Auto-Discovery	✓	✓	✓
SNMP Traps Support	✓	✓	✓
Pre-built Tag Databases	✓	✓	✓
SNMP Network Analyst		✓	✓
SNMP MIB Template Generator		✓	✓
Unlimited Device Support			✓
SNMP Agent			✓



## Real-time Network Analysis

Raw SNMP network data can be difficult to interpret. For the automobile user, a speedometer can convert the raw number of revolutions of the tires of a car into a more meaningful statistic – speed. SNMP Network Analyst provides a similar service to the industrial Ethernet network user. SNMP Suite Network Analyst gathers raw SNMP data from the network devices, and continually performs calculations to generate data that can be used, such as bandwidth utilization and network error rate statistics. Additionally, SNMP Network Analyst can offer the user a simple green light / yellow light / red light status tag for network devices. The HMI users can then easily summarize the health of their network devices with a simple inclusion of the device status tag.

## Power Supply Management

Uninterruptible power supplies have become necessary to ensure maximum uptime and protect powered network equipment from power surges. Most UPSes have embedded microprocessors and are capable of reporting their status and operating mode information via SNMP. With SNMP MS, operators can integrate UPS status into their HMI databases. Now when a battery needs replacement or a UPS trips, you can have immediate notification in your HMI.

## Unmanaged Device Monitoring

Not all Ethernet network devices are SNMP managed. To help monitor any system from within your HMI, SNMP auto-discovers both managed and unmanaged network devices. SNMP automatically generates OPC tags for each device that represents "heartbeat" and response time.

## SNMP Network Analyst

SNMP MS incorporates a new and powerful network analysis engine. SNMP Network Analyst gathers the raw SNMP data from your network devices and computes meaningful network analysis that you can display in your OPC client application. For example, a speedometer can convert the raw number of revolutions of the car's tires into a more meaningful statistic: speed. Additionally, an automobile's dashboard contains warning lights to alert the driver to problems with the car's internal systems. SNMP Network Analyst provides a similar service to the industrial Ethernet network user. Now even an Ethernet novice can get a simple red light / yellow light / green light summary of overall network health and useful derived network monitoring information, not just raw counters and statistics with no meaningful context. Unprocessed SNMP data needs a network expert to interpret – let SNMP Network Analyst be your network guru.

## SNMP MIB Template Generator

There are literally thousands of SNMP-manageable devices available. To make sure that SNMP users can easily incorporate management information from any SNMP-manageable device they encounter, SNMP MIB template utility has been developed. Simply open the MIB file for the manageable device from within the SNMP MIB template generator, and you can easily map network device MIB addresses to SNMP tag names. Once a template has been created, SNMP's Auto-discovery tool will recognize the network device and automatically pre-build the OPC tag name database for you the next time.

## Tag Filtering

SNMP-manageable devices often have a large amount of tags to sort through to find the information that you wish to monitor. Find the tag you want quickly by using tag filtering in the SNMP Editor interface.

## Pre-built Tag Databases

SNMP MS includes pre-built tags for many popular SNMP-manageable devices. If you are communicating to a supported device or probe, you only have to designate the IP address of the network devices that you wish to communicate to, and SNMP MS will automatically populate your system with a list of logically named system tags. These pre-defined tags have been researched to be the most critical tags to monitor to verify network system health.

## SNMP Traps Support

Some SNMP-manageable devices can be configured to send unsolicited data to network management software systems such as SNMP. By configuring an SNMP device to send data without being "polled" such as when a critical system tag goes into an unfavorable state, you can reduce the need for "polling" the network device. SNMP v3.0 supports receiving SNMP Trap data.

## Unmanaged Device Support

SNMP offers an OSI layer 1 device "heartbeat" feature for any Ethernet network device. Device response and reply latency tags are created for all network devices by SNMP, and are made available to HMI client applications via the SNMP OPC Server.

## Auto-Discovery

Auto-Discovery is a time-saving function. Simply by pressing the Auto-Discover button in SNMP Editor, this powerful tool will search through your Ethernet network for managed and unmanaged network devices. Once the tool has discovered all the network devices, you can choose to add them to your SNMP monitoring system with the click of a button. Additionally, SNMP will pre-build the entire tag database for many supported devices.

## Ordering Information

Part Number	Product Description
<b>DRL-EDS-OPC-BSC</b>	SNMP data server, basic, OPC version 2.0, up to 50 devices
<b>DRL-EDS-OPC-EXP</b>	SNMP data server, expert, OPC version 2.0, up to 50 devices With network analyst and template generator
<b>DRL-EDS-OPC-ENT</b>	SNMP data server, enterprise, OPC version 2.0, unlimited devices With network agent

To contact us: [www.woodhead.com](http://www.woodhead.com)

Reference Number: DW2006180 Date Published: October 2006

**North America:** US +1 800 225 7724 -Canada, +1 519 725 5136

**Europe:** France, +33 2 32 96 04 20 – Germany, +49 711 782 3740 – Italy, +39 010 59 30 77 – United Kingdom, +44 1495 356300

**Asia:** China, +86 21-5835-9885 – Singapore, +65-6261-6533 – Japan, +81-3-5791-4621