NET'SENTINEL



version 4.0

Interface SNMP v1, v2 & v3... MIB browser ... OPC / DDE server ...

The OPC/DDE gateway of your SNMP networks

Net'Sentinel is a monitoring software application dedicated to the control of a TCP/IP network and supervision of all connected SNMP compatible devices from any OPC/DDE client application.

Its performances and capabilities make it particularly popular in industrial applications: SCADA, video network control, infrastructure surveillance (airports, highways, public transportation), etc...





SNMP Supervision

Net'Sentinel is a software dedicated to the supervision of devices connected to a TCP/IP network by using the SNMP protocol (Simple Network Management Protocol, a standard Internet family protocol). It is compatible with the SNMP versions v1, v2 and v3 (MD5 and SHA authentication, DES encryption, time window control).

Net'Sentinel is capable of browsing and identifying all the SNMP manageable devices connected to a network. The devices that are not manageable by SNMP can be browsed by PING polling. The detected devices and information available in every device are displayed in a tree structure form.

The connection status of the devices is controlled cyclically . The devices that are offline, out of order or discarded are reported graphically.

Net'Sentinel gives a real time read and write access to all information described in the devices MIB files (normalized files, provided by the device manufacturers, which describe the accessible data in a device).

Net'Sentinel can also receive asynchronous data (traps) that signal a specific event on a device. These traps are reported graphically in the tree structure. When a trap is received a user message is automatically generated from the actual trap status and the contextual information received with it. This message is logged in the event log and can be sent to client applications, through the OPC (Data Access 2, Alarm & Event) and DDE interfaces.



By using its OPC and DDE server, **Net'Sentinel** can be easily interfaced with any OPC or DDE client application:

All information referenced in the tree representation of the network can be accessed with read and write rights that are specified in the device MIB.

The OPC server proposes a very easy way to select the variables to supervise by browsing from the client applications the entire OPC tree of the available information in every device of the network.

The OPC Alarm & Event interface allows the automatic notification of client applications on trap reception or device change of state by simple definition of event filters.

In order to avoid tricky DCOM configuration for remote OPC connection, one can install the NS_OPCServer module on the client station, which uses an OPC tunneling communication with the Net'Sentinel server station.



The network polling is optimized. Only items that are currently displayed or required by a client application are cyclically polled. The SNMP port of each device is configurable.

The basic cycle time is configurable, globally and at the level of each device. If needed, a device can be discarded.



The Net'Sentinel client server architecture includes 4 modules :

- The NS_Server server module is the operational heart of Net'Sentinel which can run as a Windows service.
- The NS_ServerTray module offers a control interface with the server through an icon in the Windows Notification Area.
- The NS_Viewer user interface module provides a full and user friendly interface to configure and control the network and it can be installed on delocalized client stations for a remote control of the server.
- The NS_OPCServer module which insures the OPC server interface of Net'Sentinel and can be installed on a delocalized OPC client station (OPC tunneling).



The traps issued from the devices can be received on configurable ports. They are time-stamped and recorded with all associated contextual information. A trap can be processed as a simple event or as an alarm state , the return to the normal state being detected by the association of a reverse trap or a specific state of an attached variable.

In each device, mapped variables can be defined to automatically compute expressions of variables of the device MIB (disk usage, network load...). These variables can be accessed from OPC and DDE clients. They can also be used to define a device standard mapping (in order to make the OPC interface independent of the type of implemented device) or to redefine an OPC interface compatible with the syntax of an existing OPC client application. Global virtual variables of the network can also be defined to compute expressions of variables of different devices.

The configuration and maintenance of the network can be greatly facilitated by the use of importation profiles. These profiles predefine the network configuration in a CSV file, with a format fully configurable, defining for each device its external name (OPC name), its DNS name (or IP address), the list of associated MIBs, the eventual mapping file and an initialization file of the device parameters.

Distributed by:

Net'Sentinel user interface is available in English, French and German. Net'Sentinel operates under Windows 2000, XP, Vista, 7, 2003/2008 Server.



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