N-View OPC - OLE for Process Control Server for N-TRON Switches
Transforms your HMI into a Complete Remote Network Monitoring Tool

Port Counters

Switch: STA # 023
IP Address: 192.168.1.61
Port: DRV # 007
Speed: 100   Link: Up   N-Ring Version: 1   N-Ring Member: No
Duplex: Full Enable: Yes   N-Ring Manager: Yes N-Ring State: Ok

Usage: 0 ████ 100%   5.34%

Select the port from the list below:

Tx Octets	4052024
Tx Dropped Packets	0
Tx Broadcast Packets	568
Tx Multicast Packets	14346
Tx Unicast Packets	2992
Tx Collisions	0
Tx Single Collision	0
Tx Mutiple Collision	0
Tx Deferred	0
Tx Late Collision	0
Tx Excessive	0
Tx Frame In Disc	0
Tx Pause Packets	0
64 Packets	264937
65 to 127 Packets	2545888
128 to 255 Packets	10160661
256 to 511 Packets	1442929
512 to 1023 Packets	3740131

Rx Octets	39844501556
Rx Dropped Packets	0
Rx Broadcast Packets	0
Rx Multicast Packets	9
Rx Unicast Packets	17890849
Rx Undersize Packets	0
Rx Oversize Packets	0
Rx Jabbers	0
Rx Alignment Errors	0
Rx Good Octets	3984501780
Rx SA Changes	0
Rx FCS Errors	0
Rx Pause Packets	0
Rx Fragments	0
RX Excessive Disc Size	101606610
Rx Symbol Errors	0
1024 to 1522 Packets	0

Port list: PLC # 001, DRV # 001, DRV # 002, DRV # 003, DRV # 004, DRV # 005, DRV # 006, HMI # 001, HMI # 002, PLC # 002, I/O # 001, I/O # 002, DRV # 007, DRV # 008, I/O #003, CAM # 003

The N-Tron® N-View® OLE for Process Control (OPC) Server Software will work with industrial standard OPC Client software and most popular Human Machine Interface (HMI) packages to provides complete remote network traffic and status monitoring for N-Tron 300-N, 500-N, 500-A, 700, 7000, and NT-24K switch series with the N-View Firmware. N-Tron Industrial Ethernet Switches offer outstanding performance and ease of use. They are ideally suited for connecting Ethernet enabled industrial and/or security equipment requiring mission critical reliability. The N-View OPC Server in combination with one or more of our industrial switches will add complete network visibility to an HMI Control and Monitoring application.

N-View Switch Firmware
N-View capable switches will autocast a small Ethernet packet periodically containing a port-by-port status of the switch. This information includes 5 switch level data points and 41 data points per port. This data is captured by the N-View OPC Server Software and can be displayed by application software running in the same Windows environment with OPC Client capability.

Ease of Use
The N-Tron N-View OPC Software includes the OPC Server and a configuration software utility. The configuration software will automatically search the network for all N-View enabled switches using the unique IEEE MAC addresses to identify each switch.

The Switch MAC address can be selected and assigned a 80 character alias name. Meaningful alias names can also be added to all ports using the configuration software. The switch and port alias names can be saved and used by the N-View OPC Server as part of the switch variable names. The alias names can be used to help identify the location of the switch and the areas or equipment connected to the ports.

N-View OPC Data Variables
N-View OPC Server data variables can be accessed by most popular HMI or other application software packages with OPC client capability. These variables can be divided into three general categories.

Status variables indicate the operating condition of the switch or port.

Traffic variables count the number of OCTETS (BYTES) of a specific type of ethernet packet that have passed through a port since the start of the switch.
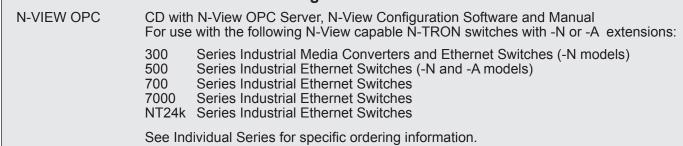
Error variables count the number of packet errors seen at each port since the start of the switch. N-View OPC variables are presented to the OPC Client application software as string variables. Most HMI software packages can convert these variables to the data type required for display, alarming, and trending during the data import process.

High Quality and Reliability
N-Tron is a worldwide leader in Industrial Networking technology and offers proven reliability quality, and service.

industrial networking

N-View OPC and N-View Switch Ordering Information

N-VIEW OPC — CD with N-View OPC Server, N-View Configuration Software and Manual
For use with the following N-View capable N-TRON switches with -N or -A extensions:

- 300 Series Industrial Media Converters and Ethernet Switches (-N models)
- 500 Series Industrial Ethernet Switches (-N and -A models)
- 700 Series Industrial Ethernet Switches
- 7000 Series Industrial Ethernet Switches
- NT24k Series Industrial Ethernet Switches

See Individual Series for specific ordering information.

N-View Variable Specifications

N-View Switch Variables

Switch Alias	User Assigned Alias Name
Switch Status	Online/Offline
Switch Last_Update	Seconds since last unicast update
Switch MAC_Address	Switch MAC Address
Switch Total_Ports	Total number of ports on switch

N-View Port Status Variables

Port Alias	User Assigned Port Alias Name
Port Duplex	Half / Full / NA
Port Link_Status	Up / Down
Port PortId	1 to 24
Port Speed	10 / 100 / NA
Port Usage	0.00 to 100%
Port_Enable/Disable	On / Off

N-View Port Error Variables

Port rx_alignment_errors	BYTE Count from Start
Port rx_drop_pkts	BYTE Count from Start
Port rx_fcs_errors	BYTE Count from Start
Port rx_fragments	BYTE Count from Start
Port rx_jabbers	BYTE Count from Start
Port rx_over_size_pkts	BYTE Count from Start
Port rx_sa_changes	BYTE Count from Start
Port rx_symbols_errors	BYTE Count from Start
Port rx_under_size_pkts	BYTE Count from Start
Port tx_deferred_transmit	BYTE Count from Start
Port tx_drop_pkts	BYTE Count from Start
Port tx_excessive_collision	BYTE Count from Start
Port tx_frame_in_disc	BYTE Count from Start
Port tx_late_collision	BYTE Count from Start

N-View Port Traffic Variables

Port pkts_64_octets	BYTE Count from Start
Port pkts_65to127_octets	BYTE Count from Start
Port pkts_128to255_octets	BYTE Count from Start
Port pkts_256to511_octets	BYTE Count from Start
Port pkts_512to1023_octets	BYTE Count from Start
Port pkts_1024to1522_octets	BYTE Count from Start
Port rx_octets	BYTE Count from Start
Port rx_good_octets	BYTE Count from Start
Port rx_broadcast_pkts	BYTE Count from Start
Port rx_multicast_pkts	BYTE Count from Start
Port rx_unicast_pkts	BYTE Count from Start
Port rx_pause_pkts	BYTE Count from Start
Port tx_octets	BYTE Count from Start
Port tx_collisions	BYTE Count from Start
Port tx_multiple_collision	BYTE Count from Start
Port tx_single_collision	BYTE Count from Start
Port tx_broadcast_pkts	BYTE Count from Start
Port tx_multicast_pkts	BYTE Count from Start
Port tx_unicast_pkts	BYTE Count from Start
Port tx_pause_pkts	BYTE Count from Start

Minimum System Requirements

Windows NT4.0 w/SP4 or later
Windows 2000
Windows XP
Windows Vista (requires administrator privileges)
Windows 2003 Server (requires administrator privileges)
Windows 7, 32-bit

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