

SmartView™ WEB EMS

NEW

- ◆ *Web-based User Interface*
- ◆ *Remote Access and Centralized Device Management*
- ◆ *Real-time visual representations & processing of alarms*
- ◆ *Long term event storage (up to 1 year)*



CTC Union's SmartView™ WEB EMS is a comprehensive device management solution specifically designed for network operators and enterprises. It not only provides real-time performance monitoring, remote configuration, and provisioning, but also delivers instant fault alerts to ensure zero-delay network operations. SmartView™ WEB EMS leverages a robust database server for long-term data storage and presents an intuitive web-based interface, allowing administrators to monitor the entire network anytime, anywhere via a computer or mobile device.

The system connects to and monitors devices in real time using the Simple Network Management Protocol (SNMP), ensuring no alarm notifications are missed. Depending on the hardware performance of a single SmartView™ WEB EMS server, it can manage hundreds to thousands of devices simultaneously. Whether deployed in small-to-medium networks or large-scale environments, it achieves maximum efficiency with minimal resources.

Key Features

- **Performance Monitoring:** Real-time tracking of device operation status to ensure network stability.
- **Remote Configuration & Provisioning:** Supports centralized and cross-site management, reducing maintenance costs.
- **Fault Notification:** Provides instant alerts for quick troubleshooting.
- **Intuitive Web-based Interface:** Accessible via any computer or mobile device browser.
- **Long-term Data Storage:** Integrated with a database server for historical records and trend analysis.
- **Large-scale Management Capability:** A single server can manage hundreds of devices.
- **Auto Discovery and Device Viewer:** Automatically detects devices and provides an intuitive view of the network.
- **Multiple Concurrent Users:** Allows multiple administrators to operate the system simultaneously.

Main Function

- **Fault Management:** Alarm Detection, Alarm Selection, Alarm Notification, Trap Collection, Network Topology.
- **Configuration Management:** Network Element Discovery, Network Element Configuration, Firmware Upgrade.
- **Accounting Management:** Network Inventory.
- **Performance Management:** Performance information Graphs.
- **Security Management:** User Privilege, User Role, User Activity.

Features at a Glance

■ Fault Management

Alarm Detection

SmartView™ WEB EMS continuously polls all network devices under its management and will visually display all alarm conditions found. Alarms will be categorized as Major, Minor or Warning, depending on severity and be cleared when alarm condition recovered.

Alarm Selection

Alarm events of network element are configurable. All alarm events are warned by default, but they can be manually disabled to ignore warning messages.

Alarm Notification

SmartView™ WEB EMS is capable of sending emails to selected administrators when critical alarms occur. Prompt notification of system problems aid in getting problems in the network devices fixed in the shortest time possible.

Trap Collection

When an SNMP agent experiences an abnormal condition, it will send a SNMP trap message to SmartView™ WEB EMS which then receives the message, and records it in the database.

Network Topology

Network elements and connections are monitored and displayed in network topology. Elements in color indicate some alarm condition is present. The screen may be zoomed in or out and a search function may be used to quickly find a device.

■ Configuration Management

Network Element Configuration

SmartView™ WEB EMS is able to provide a single point of configuration for the device elements. Most settings only require mouse clicks and by using a tab format, most scrolling is eliminated. Current settings and status are displayed along with hardware and firmware versions for each element.

Firmware Upgrade

SmartView™ WEB EMS is able to upgrade firmware for a device. The upgrade status is displayed during upgrade process.

Configuration Backup

SmartView™ WEB EMS is able to backup configuration for a device. Backup configuration can be used to restore the settings to a device.

Network Element Discovery

SmartView™ WEB EMS has a tool for automatically discovering SNMP agents on the network. Simply enter an IP address range and the discovery program will ping every IP address looking for SNMP agents. Once discovered, the agents can be selected and brought into the polling.

■ Accounting Management

Network Inventory

SmartView™ WEB EMS is able of accounting the number of network elements and line cards. Firmware version, MAC address and factory programmed serial number are displayed for each element.

■ Performance Management

Performance Monitor

SmartView™ Web EMS is able to monitor device performance parameters through polling of specific OIDs. Graphs of performance information (for example hardware parameters such as fan speed, temperature, optical Tx/Rx power) can be generated on an X Y axis showing different trend data.

■ Security Management

User Privilege

The administrator can add necessary user logins with specific privileges, from Administrator to Operator and lastly to normal user.

User Role

A user role is a group and defines privileges for users to perform management tasks. The access to network elements is also restricted by user role.

User Activity

Provides viewing and clearing of the user login and configuration action logs.

Alarm Detection

Time	Device	Message	Severity	Action
2024-09-19 16:59:09	10.1.1.80	Board temperature high	Minor	Clear
2024-09-19 16:59:09	10.1.1.80	Alarm 1 on.	Minor	Clear
2024-09-19 16:59:09	10.1.1.80	Fan 2 off.	Minor	Clear
2024-09-19 16:59:09	10.1.1.80	Fan 1 off.	Minor	Clear
2024-09-19 16:59:09	10.1.1.80	Power 1 off.	Minor	Clear
2024-09-19 16:59:06	192.168.100.83	Port 10 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.83	Port 9 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.82	Port 11 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.83	Port 7 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.82	Port 10 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.83	Port 6 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.82	Port 9 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.83	Port 5 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.82	Port 6 link down.	Warning	Clear
2024-09-19 16:59:06	192.168.100.83	Port 4 link down.	Warning	Clear

Network Topology

Network Element Configuration

Port	Current	Speed
1	Down	Auto
2	Down	Auto
3	Down	Auto
4	Down	Auto
5	Down	Auto
6	Down	Auto
7	Down	Auto
8	10 FDX	Auto
9 (Fiber1)	Down	Auto
10 (Fiber2)	Down	Auto
11 (Fiber3)	10 FDX	Auto

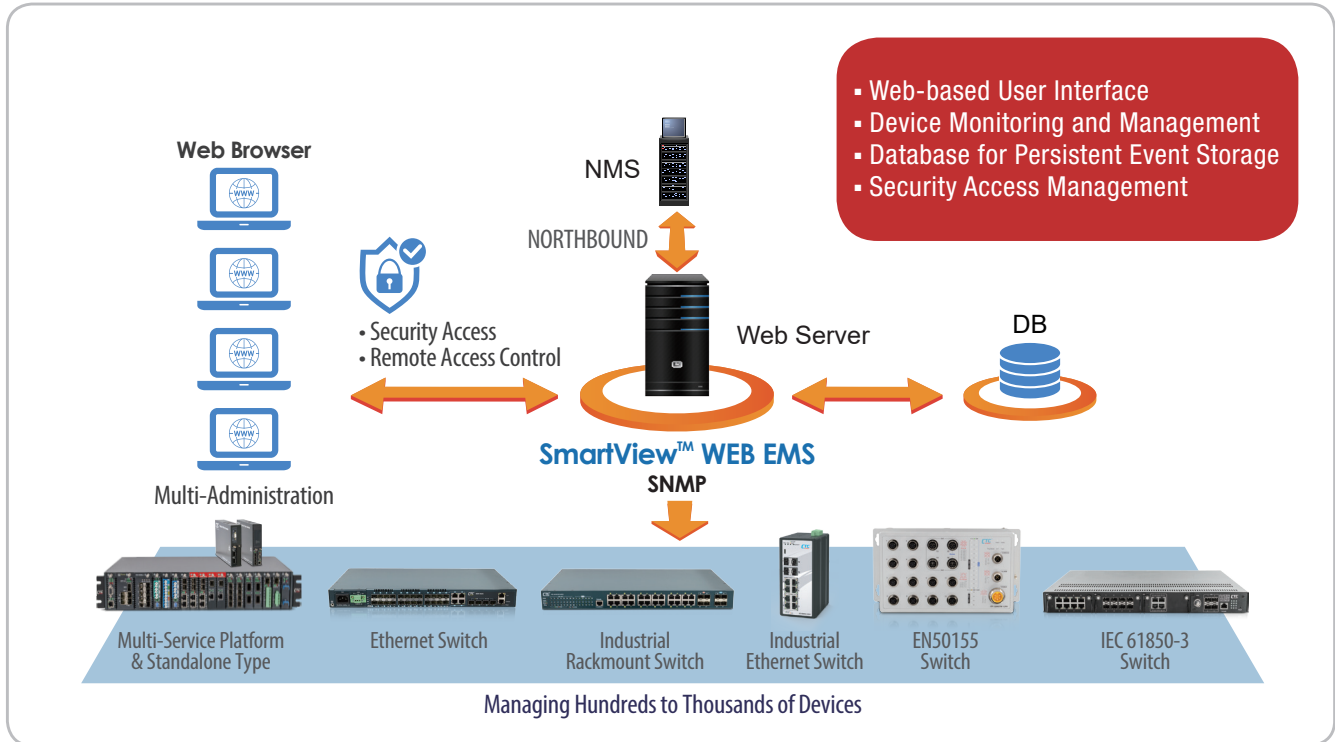
Network Inventory

Device	Type	Location	Version	MAC	Serial Number	Custom Number	Active
10.1.1.80	SNMP	Standalone					Active
10.1.1.73	SNMP	Standalone					Inactive
10.1.1.80	FRM220A-GEWSNMP(in)	Standalone	2.011a	00-02-ab-12-ef-c4	55566		Active
10.1.1.82	SNMP	Standalone			1234567890123456789090		Active
192.168.100.7	SNMP	Standalone					Active
192.168.100.82	IGS-8023M	Standalone	1.200	00-02-ab-35-66-4b			Active
192.168.100.83	IGS-8023M	Standalone	1.200	00-02-ab-4b-69-4b			Active
192.168.100.85	SNMP	Standalone					Inactive
192.168.100.86	GSIW-3424FM	Standalone		00-02-ab-df-2f-29			Inactive
192.168.100.87	SNMP	Standalone					Inactive
192.168.100.88	IGS-402X3M-4PH	Standalone	1.001	00-02-ab-a0-ca-2e			Active
192.168.100.89	IGS-22404M-24PH-AA	Standalone	1.006	00-02-ab-80-cf-5b	777		Inactive
192.168.100.93	IGS-402X3M-4PH	Standalone	1.109	00-02-ab-64-63-25	1234567890123456789090		Inactive
192.168.100.94	IGS-402X3M-4PH-Q4	Standalone	1.108	00-02-ab-07-00-c3	5566		Inactive
192.168.100.95	IGR-MQ240KX3-AA	Standalone	6.25	00-02-ab-14-23-0d	888555		Inactive

Application Scenarios

- **Telecom Operators (Telco / ISP):** Centralized management of large-scale CPE and network devices.
- **Enterprise Networks:** Cross-site device monitoring and remote maintenance.
- **Industrial Networks:** Ensures reliable operation of mission-critical industrial control systems.
- **Smart Transportation & Utilities:** Guarantees uninterrupted connectivity for critical infrastructure.
- **Data Centers:** Centralized management of high-performance, high-density devices.

WEB EMS Topology



System Requirements

▪ **Operating System:**

Windows Server 2016, Win 10 Pro 64bit.

▪ **Hardware:**

Intel Core I5 or Xeon E5 2.4GHz 4 cores Processors, 8GB RAM, 100GB HD

Ordering Information

Model Name	Description
SVW1-AGT-50	SmartView™ WEB EMS management software with 50 nodes
SVW1-AGT-100	SmartView™ WEB EMS management software with 100 nodes
SVW1-AGT-200	SmartView™ WEB EMS management software with 200 nodes
SVW1-AGT-500	SmartView™ WEB EMS management software with 500 nodes