# SmartView™WEB EMS

- 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)

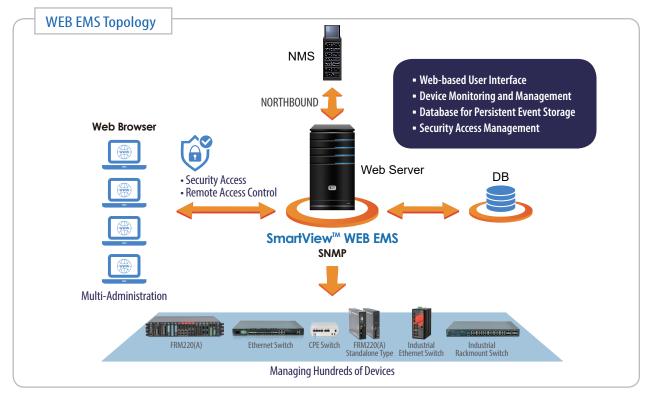


CTC Union's **SmartView™WEB EMS** (Element Management System) is a comprehensive device management solution that monitors performance, enables remote configuration and provisioning and provides fault notification status for CTC Union network devices. Built on the Open JAVA platform, Smartview™ Web EMS uses the Database Server for long term storage along with Web Server to provide a Web based management experience for device administrators. By utilizing a Web based platform, administrators are free to use their favorite Web browser on personal computers or on mobile devices anywhere. All devices under Smartview™ Web EMS management are accessed via the Simple Network Management Protocol or SNMP, as they are constantly polled and monitored for alarm traps. A single Smartview™ Web EMS server is capable of managing hundreds of devices.

# **Functions**

- Main Functions (FCAPS):
- Fault Management,
- Configuration Management,
- Accounting Management,
- Performance Management,
- Security Management

- Remote access control for efficient configuration
- Network element performance monitoring
- Alarm event and notification
- Auto discovery and device viewer
- Allow multiple concurrent operation users



#### SmartView™ WEB EMS Server

The server handles connection with the network devices using SNMP protocol, and is responsible for HTTP requests from management clients. Smartview<sup>TM</sup> Web EMS Server collects the information data from specific SNMP agents, stores the information into a persistent database and sends commands to control network elements.

#### **Microsoft SQL Server Database**

SQL Server is the place where Smartview<sup>TM</sup> Web EMS stores collected data, such as alarms, traps and user actions, for long term retrieval. Smartview<sup>TM</sup> Web EMS supports the free Microsoft SQL Server Express Edition for data storage.

#### **Multi-Administrators**

Management clients use web browser to monitor and control the devices at far end. Multiple operating connections are allowed, up to the limit of hardware and network.



# 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**

The 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 and Forwarding

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. The SmartView™ WEB EMS is capable of forwarding received traps to upper network management.

## 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<sup>™</sup> WEB EMS is able to download firmware to device elements and perform configuration backup/restore.

#### **Network Element Discovery**

SmartView $^{\text{M}}$  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

The accounting management supports reading a factory programmed serial number specific for each line card. The location, status and serial numbers of all assets can be managed and exported.

#### Performance Management

SmartView<sup>™</sup> is able to monitor device performance parameters through polling of specific OIDs. Graphs of performance information (for example PDH PM data such as ES, UAS, etc. as well as hardware parameters such as fan speed, temperature, optical Tx/Rx power) can be generated on an XY 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.

#### <u>User Role</u>

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.

#### <u>User Activity</u>

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

# System Requirements

# Operating System:

#### Hardware:

Windows Server 2016, Win 10 Pro 64bit.

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

**Ordering Information** 

| Model Name   | Description  |
|--------------|--|
| SVW2-AGT-50  | SmartView™WEB EMS management software with 50 nodes  |
| SVW2-AGT-100 | SmartView™WEB EMS management software with 100 nodes |
| SVW2-AGT-200 | SmartView™WEB EMS management software with 200 nodes |
| SVW2-AGT-500 | SmartView™WEB EMS management software with 500 nodes |