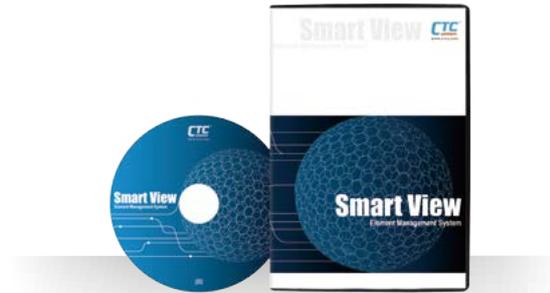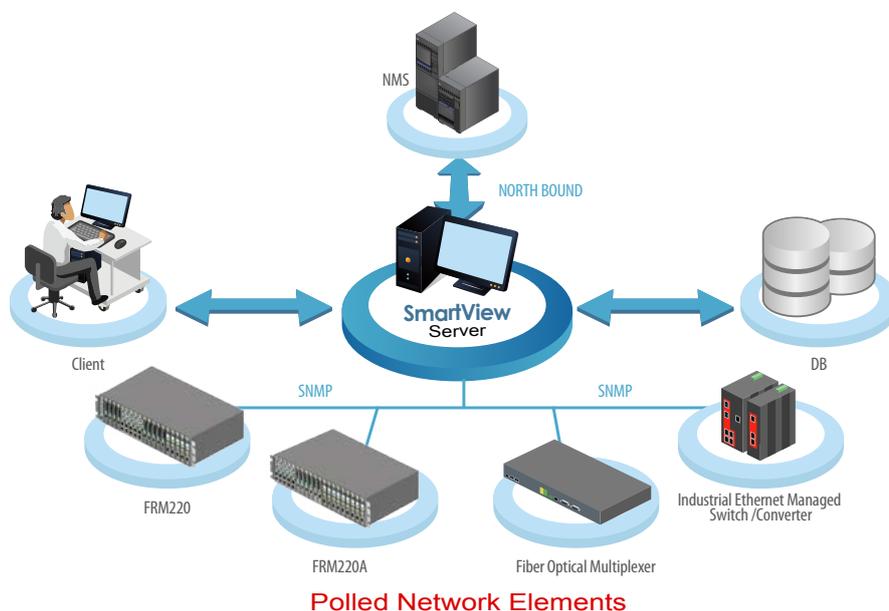# SmartView

Element Management System

- Centralized Network Management Platform
- Real-time visual representations and processing of alarms
- Easy and User-Friendly Operation Interface

- Remote access control for efficient configuration
- Traffic / Performance monitoring and management
- Alarm Trap and event log management

- Auto Discovery and Device Viewer
- Allow up to 25 administrators to login
- Applied to CTC Union's Main Products

Network Scheme Diagram

NMS

NORTH BOUND

SmartView
Server

Client

SNMP   SNMP

DB

FRM220

FRM220A   Fiber Optical Multiplexer

Industrial Ethernet Managed
Switch /Converter

Polled Network Elements

- *User- Friendly Operation Interface*
- *Network Monitoring and Management*
- *Screen-Based User Friendly Network Management*
- *Security Access Management*

● *Agents*

All of the CTC SNMP enabled products are able to add in the CTC Smart View EMS management Platform such as FRM220/220A, multi-service platform, FMUX series, fiber multiplexer, IGS/IFS series L2 managed switch. With the goal of having all of CTC Union's products managed under the umbrella of this single Element Management System

● *SmartView Server*

SmartView Server handles connection management, deliver data and is responsible for communication of requests from clients. SmartView Server collects the information data from specific SNMP agents, stores the information into database and updates it to Workstation-Clients.

● *SQL Server*

SQL Server is the place where the SmartView collected data is storied, The database will store Alarm Trap and all information. CTC Union's Smart View is compatible with Microsoft® SQL 2005, SQL 2005 Express, SQL 2008 and SQL 2008 Express.

● *Workstation-Clients*

Workstations provide the JAVA applet GUI to monitor and control the agents at far end. They also receive the Alarm Traps from the corresponding SNMP Agents. Multiple workstations are allowed in this field.

Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.

CTC UNION TECHNOLOGIES CO., LTD.   www.ctcu.com   *SmartView*   **1-1**

Features at a Glance
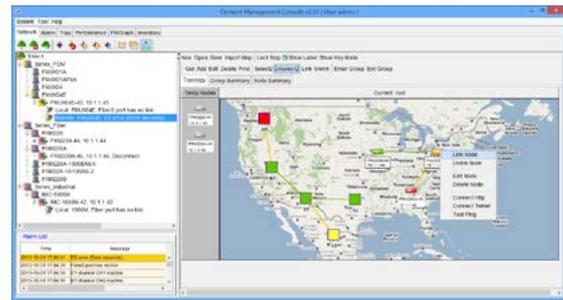
● Configuration Management

Topology

User can load maps to SQL server, load maps from SQL server or delete attached maps. Download procedure is very simple. Map area may be used to layout any objects from Root and Node panel.

Using drag-and-drop, put any object to map area. Any label or network element location name may be added to object. Objects in red color indicate some alarm condition is present in the device. Right clicking an object brings a popup window to select Telnet or http management directly.

Network Element Discovery

The SmartView 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 broker for polling.

Network Topology

● Fault Management
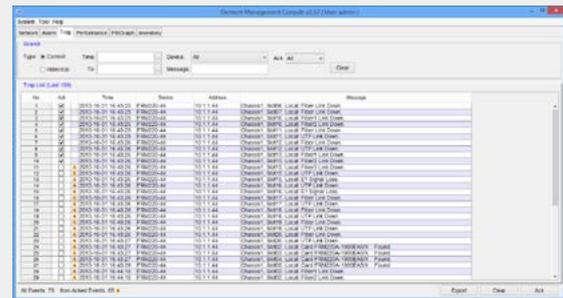
Trap Collection

All alarm traps will be stored in SQL database. When an SNMP agent experiences an abnormal condition it will send an SNMP trap message to Smartview EMS which then receives the message, and records it in the database. Depending on preset conditions, SmartView EMS may sound an audible alarm, send an email or SMS alert message or just simply flash the trap message on the administrative console screen
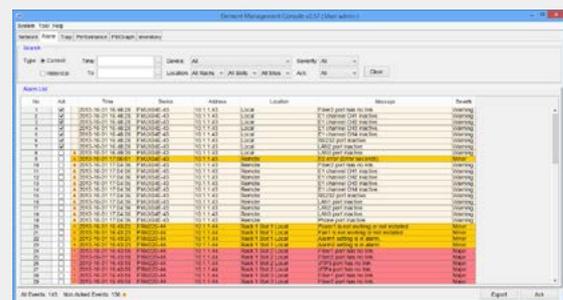

Trap Messgage

Active Alarm

Three kinds of filters can be applied to alarm list. User may select one agent, local or remote rack, and specific status as filters to watch active alarms. The status filter can be categorize Major, Minor, Warning, and all statuses label or network element location name may be added to object

Alarms sent by E-mail & SMS

The SmartView is capable of sending emails and or SMS text messages to selected administrators when critical alarms occur. Prompt notification of system problems aid in getting problems in the network fixed in the shortest time possible.
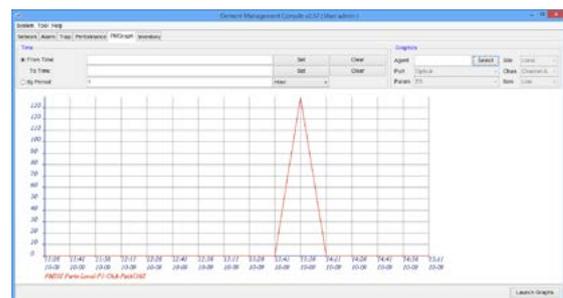

Active Warnning

● Performance Management

Device performance is plotted over time using standard PM data such as ES, UAS, etc. PM data is typically only available for PDH devices such as the ETU01A and ERM01.
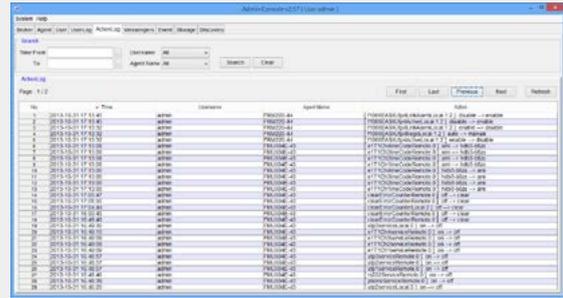

Performance Graphics

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● *Security Management*

User Privilege

- The administrator can add necessary user logins with specific privileges, from Administrator to Operator and lastly to normal user.
- Radius Authentication. Supports authentication login provided by credentials stored on RADIUS server.
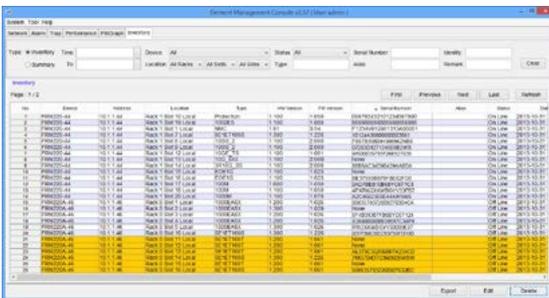
User Activity

Provides viewing and clearing of the user login and configuration action logs. User client login & logouts is recorded including the client's source IP address. All activities performed on any Network Element are logged with time-stamping, the user making changes and the changes made.
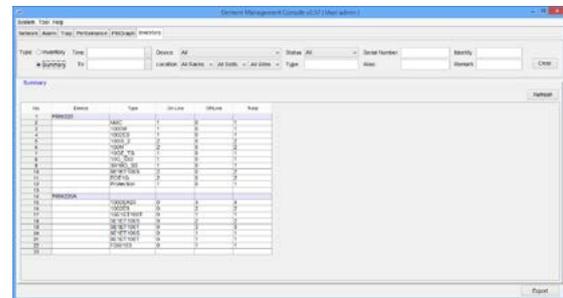

User Activity

● *Inventory Management*

The inventory 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.
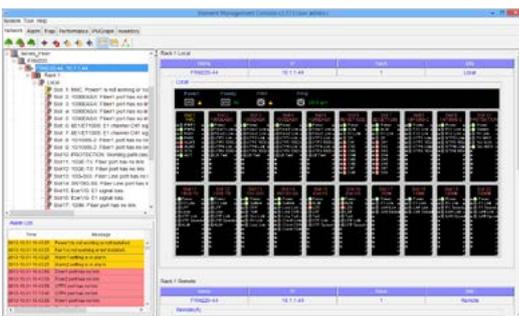

Inventory List

Inventory Summary

Available Models :

Multi-Service and Ethernet Aggregation platfrom, Fiber Optical Multiplexer Series and Industrial Ethernet Switch & Media Converter Series.
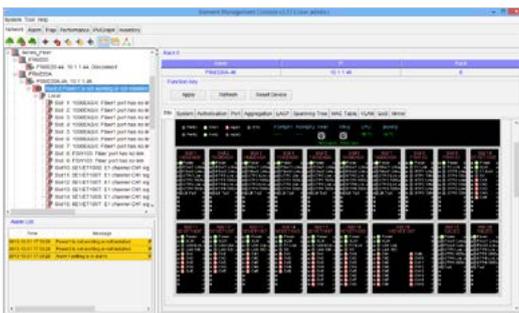
● *Multi-Service Platform*

EMS Interface

Web Interface

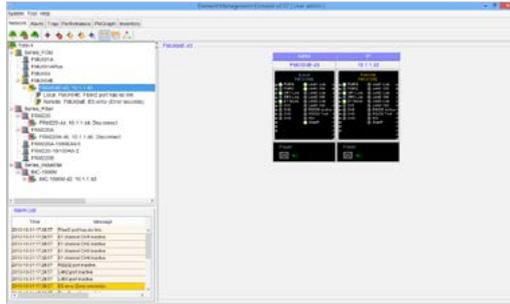## ● *Ethernet Aggregation Platform*

EMS Interface

Web Interface

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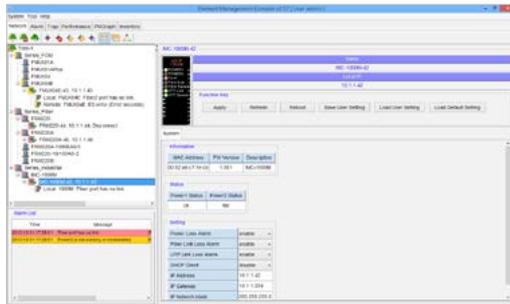
Managed Software

- *Fiber Optical Multiplexer*

EMS Interface

Web Interface

- *Industrial Ethernet Switch & Media Converter*

EMS Interface

Web Interface

Requirements

SmartView	Hardware (minimum)	Software	Operating System
SmartView Server	P4 1.6G or higher, 1024MB RAM, HD >2GB (free)	JAVA JRE. SmartView Kit	Windows server 2003/2008, Windows XP, Vista, Win7
SQL Database Server	P4 1.6G or higher, 1024MB RAM, HD >2GB (free)	MS-SQL Server 2005/2008. SmartView Kit	Windows
Workstation-Clients	P4 1.6G or higher, 512MB RAM, HD >1GB (free)	JAVA JRE, SmartView Kit	Windows
All-In-One	P4 2.8G or higher, 2GB RAM, HD >10GB (free)	JAVA JRE, MS-SQL Server, SmartView kit	Windows server 2003/2008, Windows XP, Vista, Win7

Ordering Information

SmartView Platform Server with Device Agents

Model Name	Description
SV-AGT-50	SmartView Platform with 50 device agents
SV-AGT-100	SmartView Platform with 100 device agents
SV-AGT-200	SmartView Platform with 200 device agents
SV-AGT-500	SmartView Platform with 500 device agents

SmartView Supported Product Lists

Model Name	Description
FOM	FMUX1001, FMUX101, FMUX1600/800, FMUX160/80, FMUX04(E), FMUX01A(/Plus) Series
TDM	ERM-MUX/Plus, ETU01A Series
Fiber	FRM220, FRM220A, PHB-200M Series
Industrial Ethernet	
Ethernet Switch	IFS-402GSM, IGS-404SM, IFS-803GSM, IGS-803SM, IGS-812SM, IFS-1604GSM, IGS-1604SM
Media Converter	IMC-100M, IMC-1000M(S)
PoE Switch	IGS-402SM-4PH24, IFS-402GSM-4PH24, IGS-803SM-8PH24, IFS-803GSM-8PH24
PoE Converter	IMC-100M-PH12, IMC-1000M(MS)-PH12
IEC 61850-3	IPS-G803SM-DD(AD), IPS-803GSM-DD(AD)

SV – ☐☐☐ – ☐☐☐

Example: SV – AGT – 100

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