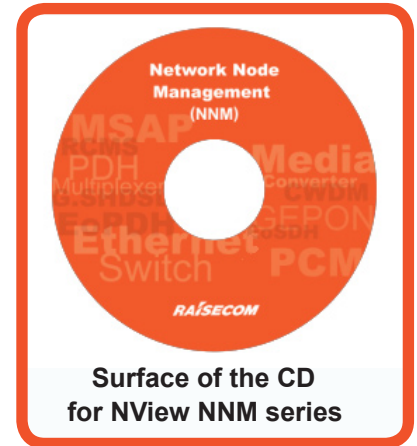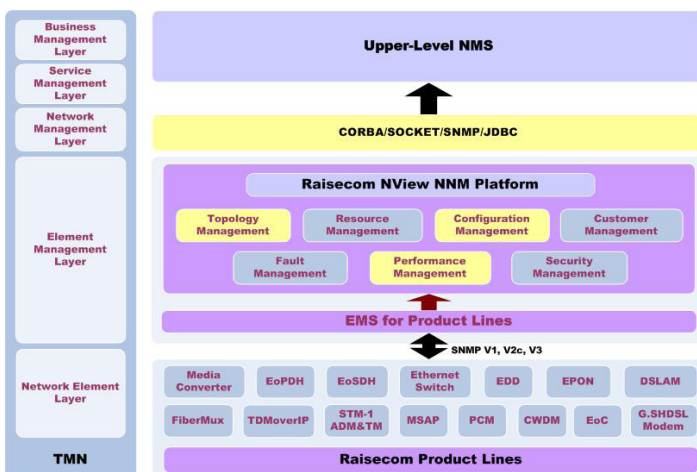# NView NNM Network Management System

Raisecom network management system, NView NNM, covers the lower two layers (Network Element Layer and Element Management Layer) in the TMN architecture and implements fault management, configuration management, performance management, and security management in the FCAPS (Fault, Configuration, Accouting, Performance, Security) model. NView NNM system manages over all Raisecom network manageable devices from over ten product lines. It is a C/S structured system, in which several Clients can work opposite one Server. This provides carriers great convenience when monitoring and managing devices. All Raisecom network manageable devices have either an internal or an external SNMP agent for communicating with EMS (Element Management System), and a uniform platform is designed for managing all devices in the network on one topology.

A northbound interface is available on the system for the integration to network management systems implementing full FCAPS functions on the higher three levels (Network Management Layer, Service Management Layer and Business Management Layer) of TMN architecture.

Surface of the CD for NView NNM series

NView NNM on TMN Architecture

C/S Structure and System Deployment
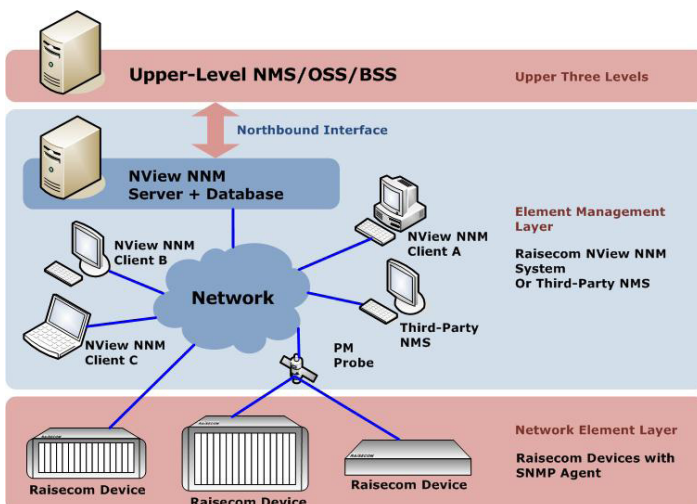

NView NNM Installation and Upgrade

- The installation will install all function components, except for the Performance Management components, and EMS (Element Management System) for all Raisecom product lines.
- Seperate installation, deployment, and un-installation of Performance Management
- Uniform upgrade manager controls all upgrade and version rollback
- Recommended hardware configuration for running NView NNM system

	CPU	RAM	Hard Disc
Complete Installation	Pentium 4 3GHz	4G	80G
Client Only	Pentium 4 2GHz	2G	10G

This is the hardware configuration that we recommend when you deploy a NView NNM system. It guarantees the smooth operating of the system. The requirements on hardware configuration may increase as the capacity of the network under management increases.

- Operation system for running NView NNM system
    Windows 2003 Server
    Windows XP
- Monitor resolution requirements
    Recommended: 1152 x 864
    Minimal: 1024 x 768
- Database in support
    MySQL 5.0 or above
    When choose to intall database during the installation of NView NNM, the system will install MySQL 5.0 as database.
- Client auto-upgrade function
    A distributed deployed Client will detect the upgrades on the Server and automatically complete the corresponding upgrades.
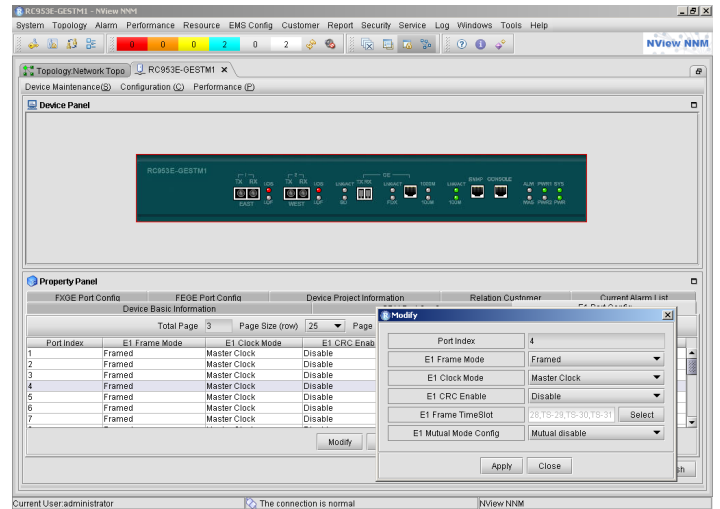
Function and Features

Topology Management
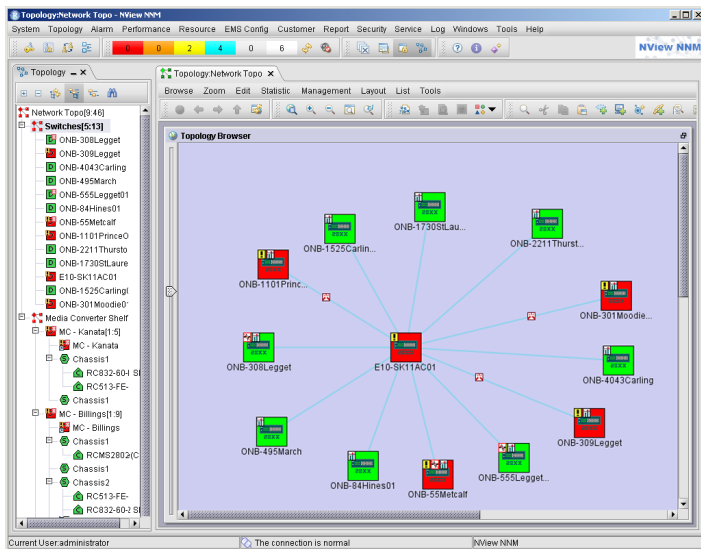
- Multi-level topology displaying
- Manual or automatic topology arrangement
- Device node auto-discovery mechanism
- Device sub-graph auto-drawing mechanism
- Clear indication of current alarm status and device offline status
- Quick location of point of failure in the network
- Topology style customization

Resource Management

- Unified management tool for different resources, like devices, chassis, cards, and ports
- Comprehensive resource description, including customer and fault information
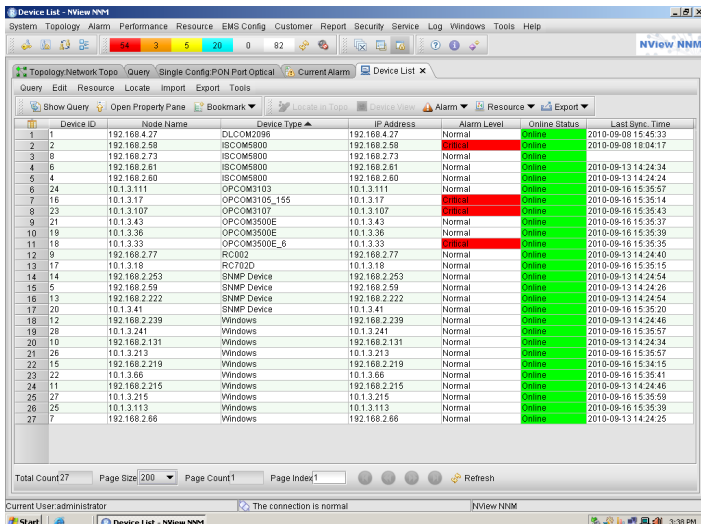- Uniform query platform for quick search of resources

- Synchronization mechanism that guarantees the system showing real-time status of network resources
- Uniform platform for online devices polling and offline device detecting
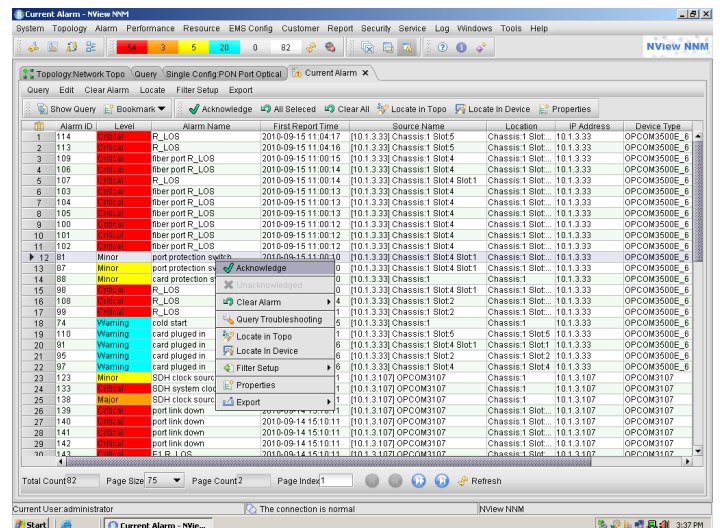- Resource type and idle slot statistics report per subnets

Configuration Management

- Uniform platform for different EMS, different devices sharing topology, reousrce, fault, performance, security functions
- User-friendly device status displaying on device panels drawn by EMS
- Real-time status changing feedback for every operation
- Data center provided for centralized management of firmware upgrade and configuration files upload/download
- Batch configuration of SNMP parameters

Alarm Management

Raisecom Technology Co., Ltd.
Building 2, No.28 Shangdi 6th Street,
Haidian District, Beijing 100085

Tel: +86 10 8288 3305
Fax: +86 10 8288 3056
Email: export@raisecom.com
http://www.raisecom.com

Function and Features

- Standard five-level alarm displaying
- Separate lists for current and historical alarm management
- Grouped alarm monitoring interface defined according to customer's need
- Customized alarm filter rules that filter the displaying of events with less importance
- Automatic alarm list clearing service
- Alarm forward service that forwards alarms received on NView NNM to third-party platform via SNMP
- Alarm locating and troubleshooting library makes fault removal quicker and easier

- Uniform performance management platform for all devices under management
- Tailored deployment for network of different capacity
- Monitor device CPU and RAM utilization
- Collect PON/Ethernet/UNI/SDH port real-time and historical performance data
- Performance graph drawn on the basis of performance data collected
- Performance data export

Customer Management
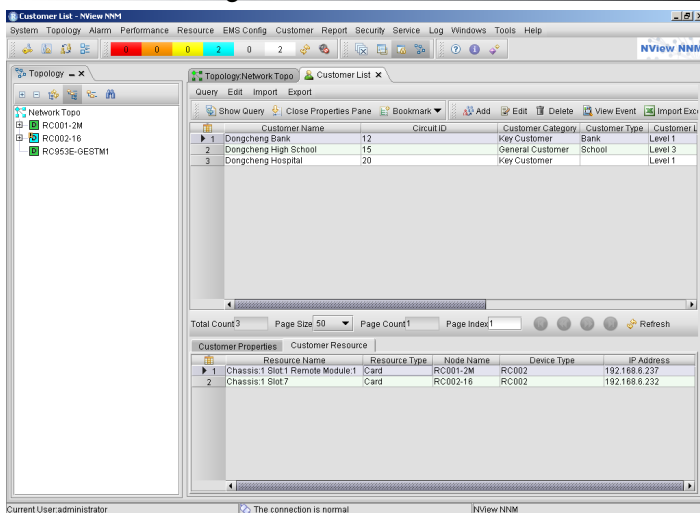
- Centralized customer information management
- Customer-based resource management
- Customer-based fault management
- Customer information import and export

Security Management
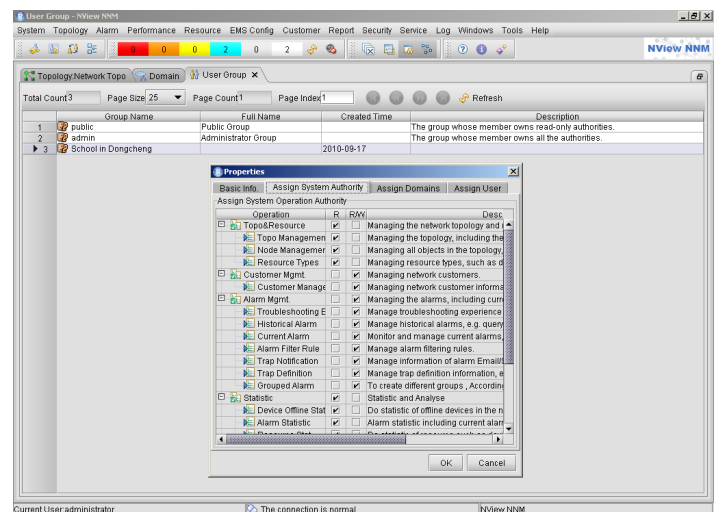
- Multi-domain multi-authority management
- Different user profiles have different read and/or write authorities over devices in different subnets
- Client access control mechanism
- Unauthorized login deny mechanism
- Keeps system and device operation logs and supports log export

Performance Management
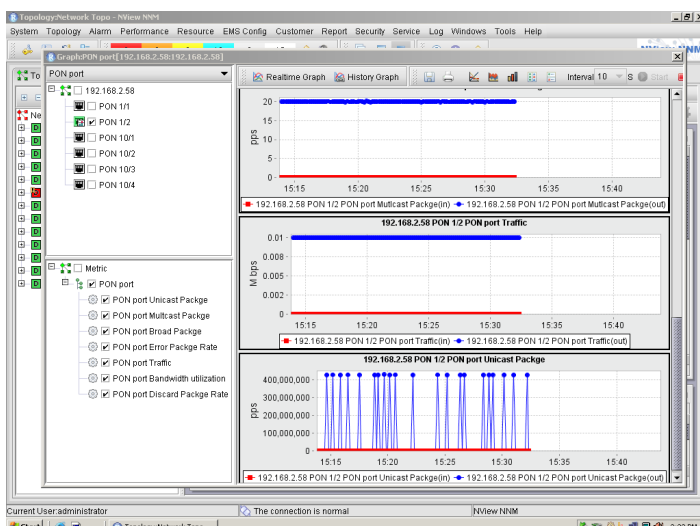
Product Line under NView Management

NView NNM Platform, Components and EMS for different product lines

Element Management System

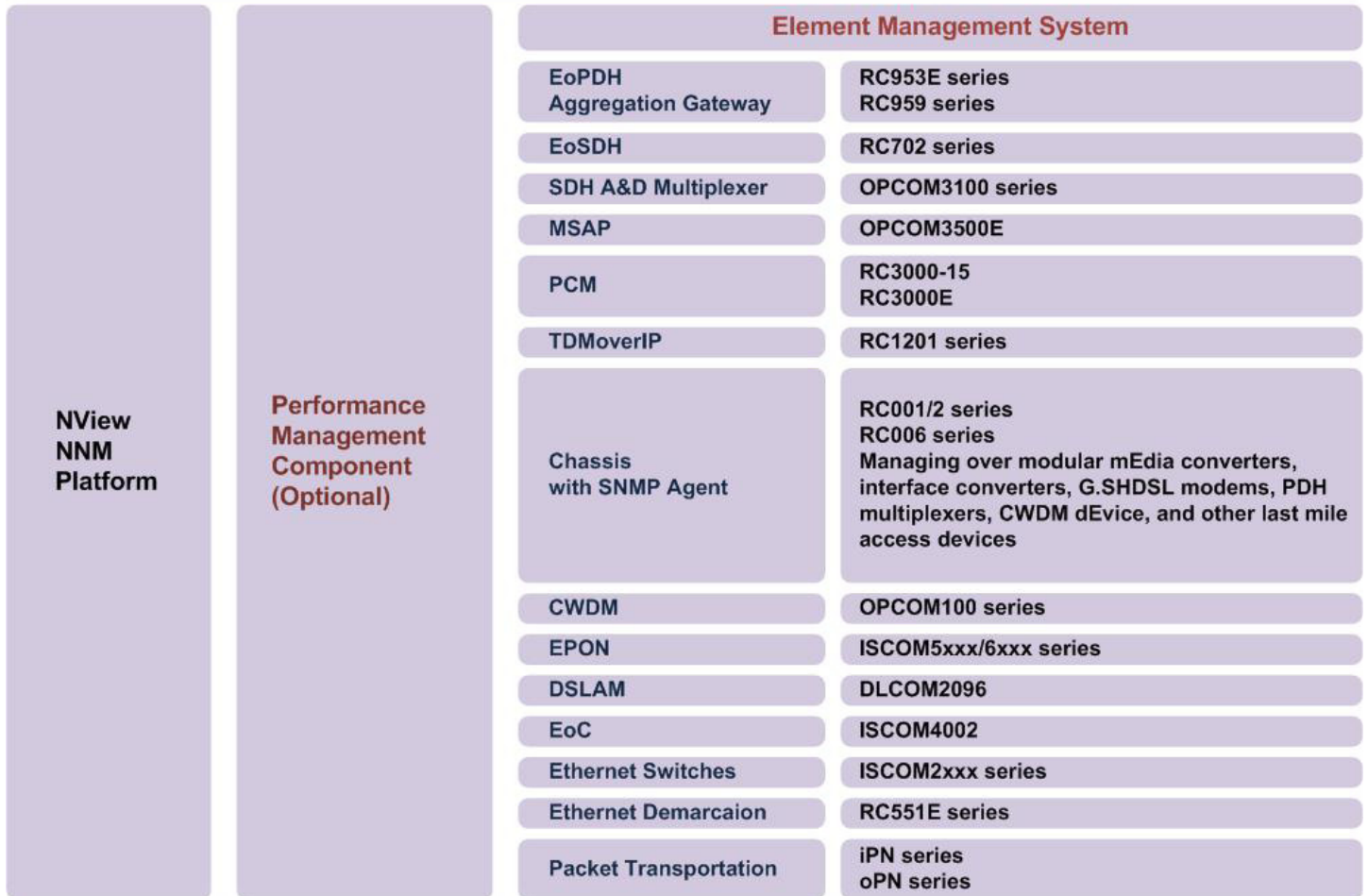| NView NNM Platform	Performance Management Component (Optional)		
		EoPDH Aggregation Gateway	RC953E series RC959 series
		EoSDH	RC702 series
		SDH A&D Multiplexer	OPCOM3100 series
		MSAP	OPCOM3500E
		PCM	RC3000-15 RC3000E
		TDMoverIP	RC1201 series
		Chassis with SNMP Agent	RC001/2 series RC006 series Managing over modular mEdia converters, interface converters, G.SHDSL modems, PDH multiplexers, CWDM dEvice, and other last mile access devices
		CWDM	OPCOM100 series
		EPON	ISCOM5xxx/6xxx series
		DSLAM	DLCOM2096
		EoC	ISCOM4002
		Ethernet Switches	ISCOM2xxx series
		Ethernet Demarcaion	RC551E series
		Packet Transportation	iPN series oPN series

* The Performance Management Component only works with EPON EMS and Ethernet switch EMS at this stage. The support on other product lines is under development.

Ordering Information

NView NNM	NView NNM platform is the network management system developed by Raisecom to manage over all Raisecom devices. NView NNM provides a uniform platform for all Raisecom network manageable devices. Topology management component, resouce management component, alarm management component, security management component, log management component and EMS (Element Management System) for all Raisecom product lines are integrated in.
Performance Management Component	Performance Management Component for NView NNM platform. Collect and manage real-time and historical performance data of devices and different types of ports on devices.
License	License file that verifies the legality of NView NNM series products. The License file defines the device types and the number of nodes to be managed on NView NNM platform.