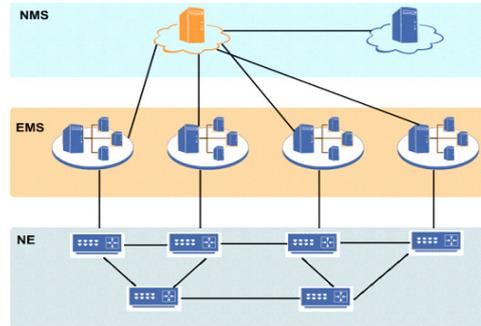


# Kyview & Kyvision Network Management Platform

## » Kyland Network Management Platform



### Network Management System (NMS)

NMS provides operator with various ways to manage networks in different regions and equipments from different suppliers. Its management objects may include all entities in the network. It provides network system administrator with a systemwide network view.

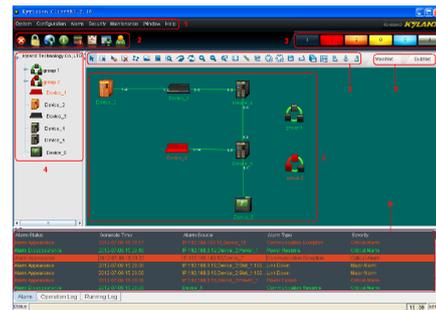
Kyview (NMS) is beneficial for users to obtain network operating status in real time and analyze historical operating trends. It supports multi-level topology, alarms, performance report and other functions.



### Element Management System (EMS)

EMS focus on the element management within regions, networks, and sub-networks, and end-to-end device management and maintenance.

Kyvision (EMS) provides unified monitoring, operation and maintenance of the field networks.



## » Kyview (NMS)

### Key Characteristics



#### Configuration Management

- Supporting dynamic acquisition and statistics of configuration

#### Multi-level View

- Providing multi-level view on the basis of service scenarios, such as view of power bureau or railway bureau, sites view, machine room view, cabinet view, equipment view

#### Comprehensive Monitoring

- Providing real-time monitoring of operating status and performance parameters of equipments, and providing timing status acquisition, performance parameter maintenance and performance trend analysis
- Supporting equipment parameter monitoring, such as optical power of optical module, port bandwidth, CPU utilization and memory utilization

#### Asset Management

- Query and statistics of various equipments and service resources

#### Alarm Management

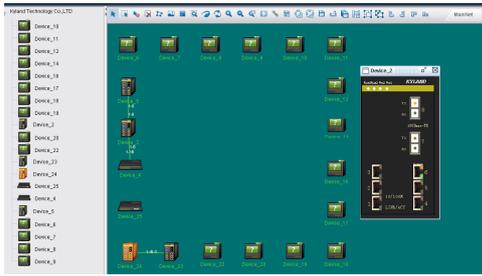
- Providing quick and intelligent processing of alarms. Users can check the detailed alarm information and make a response. The processing methods will be continuously accumulated to form a database of alarm processing experience that can guide the follow-up operation

#### Report Management

- Providing various daily reports of performance, alarms and resources in multiple forms for management

» Kyvision (EMS)

Key Characteristics



- ▼ Support auto-topology of networks by specifying IP address or IP range
- ▼ Show and auto update device status, device connections and port statistics
- ▼ Show alarms with three colors (red, orange, green) to indicate severity levels
- ▼ Import and export configuration
- ▼ Support three user levels
- ▼ Save log information in database, including operation log, running log and alarms

» Kyview & Kyvision Comparison

Positioning Model		EMS Kyvision	NMS Kyview
<b>Specifications and Characteristics</b>			
Maximum number of equipment managed		1000	10000
Number of concurrent clients		10	20
Monitoring third party equipments		Shared MIB	Shared MIB
Supporting customized development		✓	✓
<b>Function Parameters</b>			
Topology management	Automatic topology	✓	Acquisition from accessing to EMS
	Creating the primitive/connection manually	✓	✓
	Multi-level service view	—	✓
	Alarm related to topology view	✓	✓
Equipment management	Real-time performance status	✓	✓
	Port status	✓	✓
	Flow information	✓	✓
	Historical performance status	—	✓
Management of alarms	Classification of alarms	✓	✓
	Redefinition of alarms	—	✓
	Intelligent processing of compression/filtration	—	✓
	Confirmation of alarms	✓	✓
Statistic report	Screening of alarms conditions	✓	✓
	Notification of alarms	✓	✓
	Real-time performance statistics	✓	✓
	Historical performance statistics	✓	✓
Maintenance management	Alarm statistics	✓	✓
	Import/export of batch configuration	✓	—
	Upgrading of batch firmware	✓	—
Acquisition management	Data cleansing	✓	✓
	Setting acquisition period of performance	—	✓
	Setting acquisition period of alarms	—	✓
Security management	Resource management	—	✓
	Self-monitoring of system	—	✓
	Data backup	✓	✓
	Operation log	✓	✓
	System log	✓	✓
System management	Automatic locking	✓	—
	Role management	—	✓
	User management	✓	✓
	Language pack management	✓	✓
<b>Parameters of Performance</b>			
Storage of performance data		—	✓
Storage of alarm data		✓	✓
Storage of log file		✓	✓
Reliability of system		>10000h	>10000h
Maintainability of system		<1h	<1h
Response time of alarm		<10s	<10s
<b>External Interface</b>			
Corba interface		✓	✓
Socket interface		✓	—