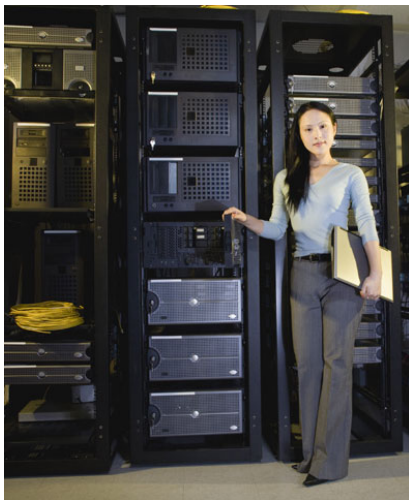


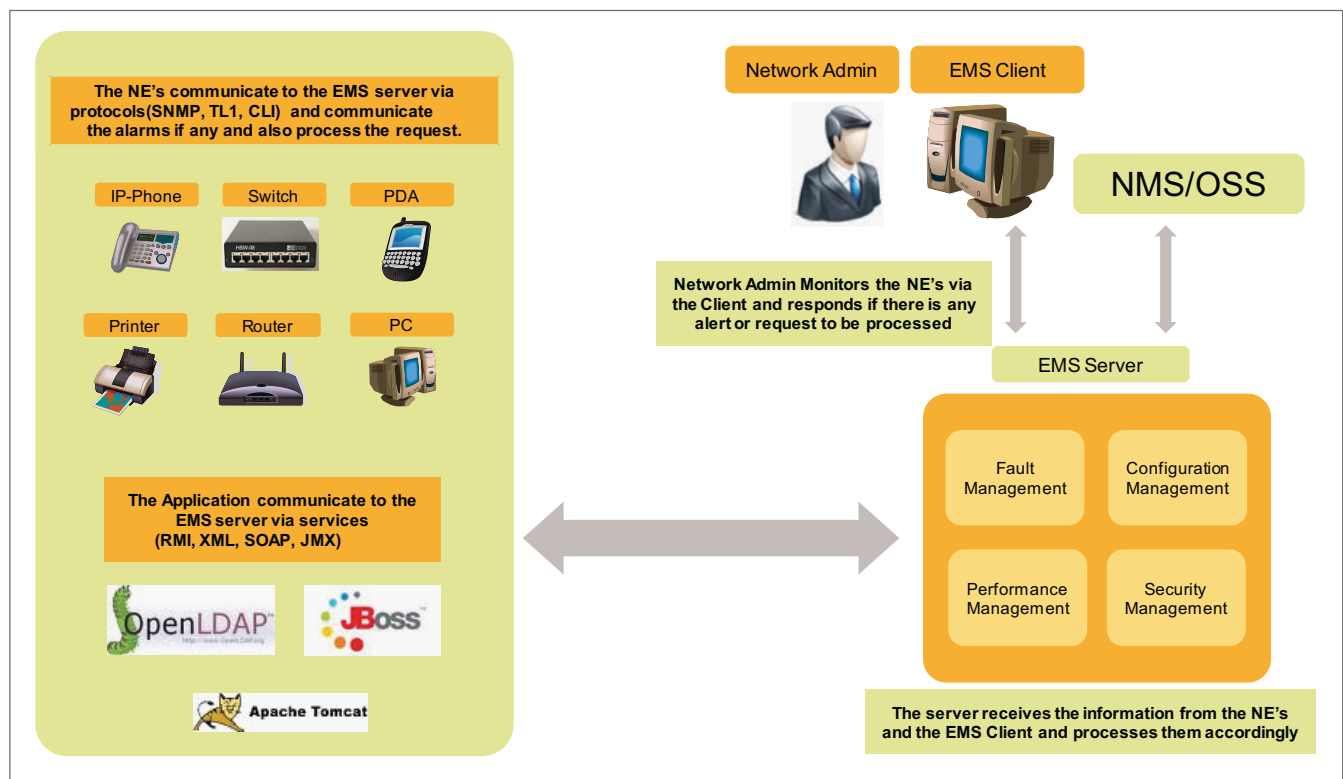
EMS Framework



Overview

Mahindra Satyam EMS-NMS Framework is a software solution managing different types of Network Elements in the telecommunication management network. Its distributed client-server architecture follows prevalent industry standards and is designed to support varied Network Elements from Telecom, Datacom and Wireless world. Mahindra Satyam EMS Framework can apply element and network management functions in different management functional areas such as Fault, Configuration, Accounting, Performance, and Security Management (FCAPS).

High-level Overview



Standard Compliance	
Standard / Technology	Version Supported
TMF	2.5
JDBC	1.1 & 2.0
HTTP	1.0 & 1.1
JFC	JDK 1.4
CORBA	2.3
SNMP	v1.0,v2c
TL1	v1.0

Tools	Technologies
Spring	JIDE
EJB	JNLP
JMX	JUNG
LDAP	JFreeChart
Hibernate	JFreeReport
JMS	Log4j
RMI	HTTP
Swing	Castor

Solution's Highlights

- Implements the basic F.C.P.S functions specified for the Element Management layer of TMN model
- Manages one or more of a specific type of Network Element (NE)
- Manages functions and capabilities within each NE through protocol neutral framework
- Helps top layers like NMS/OSS to meet stringent QoS norms.
- Abstracts the complexity of NE / Network and provides a Swing based GUI to remotely manage the same effectively
- TMF 814 implementation in EMS North Bound
- Open source adaptation: JBOSS, JACORB, Ant, Log4j, PostgreSQL, Castor, Java mail, Open LDAP API, JFree tools etc..
- WiMAX Network Management
- Service Provisioning Framework
- Application Management support
- Correlation Support



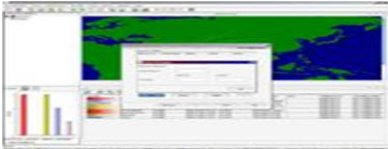
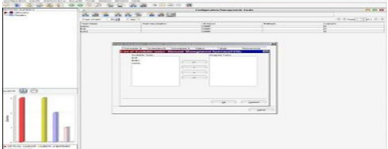

Pre-requisites

- OS: MS Windows XP or later
- Free Hard disk space: 250 MB minimum recommended
- Configuration: Intel Core Pentium Processor 1.2GHz, with 2GB RAM
- Monitor: SVGA monitor, 256 colors, 1024 x 768 minimum (SVGA monitor, 64K colors, 1024 x 768 recommended)
- For Unix platforms, packaging can be done for any platform which supports J2SDK 1.6.
- J2SDK 1.6 will have to be made available in the system in advance.

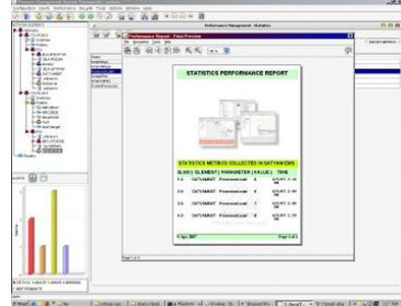
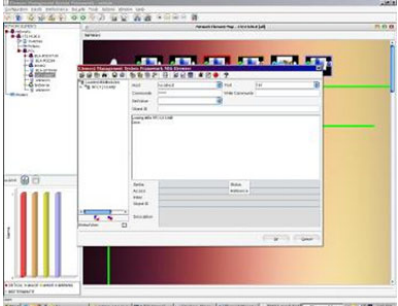
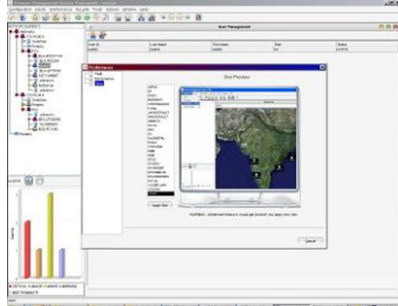
Key Benefits

- One stop solution framework for EMS/NMS customers.
- Providing faster time-to-market solution to the end customer towards delivering customized solution for different types of NEs.
- Low Cost of ownership (built using Open Sources)

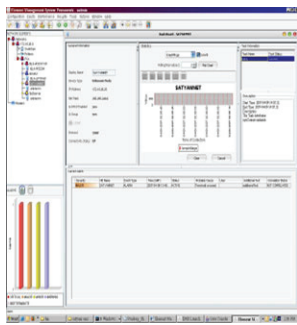
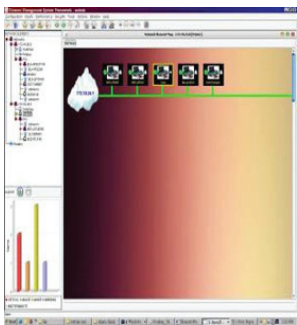
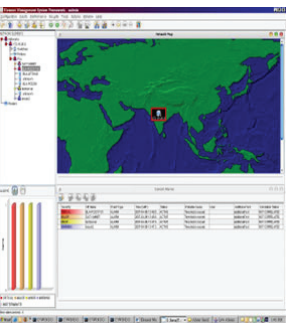
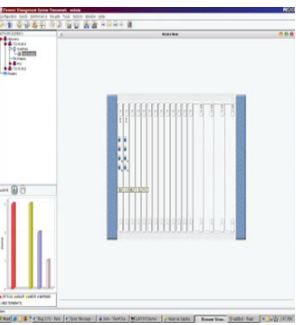
Key Features

Fault Management	Configuration Management	Performance Management
 <p data-bbox="164 464 532 527">Current Alarm Summary for a Network Element</p>  <p data-bbox="164 716 472 772">Chart based view of alarm summary</p> <ul data-bbox="164 810 557 1472" style="list-style-type: none"> • Based on alarm reporting standards (ITU-T X.733) • Highest Alarm and recent alarm severity propagation in tree for easy drill down to Network Element • Supports configuration of Alarm correlation using suppress, repeated filters etc. • Alarm Annotation • Email/SMS notification to field person based on Notification policy. • Generate alarm reports in tabular and chart views based on filters • View live alarms in Live Alarm Browser and Network Element Tree • Update alarm information • Create, View, Update, Delete Notification Policies 	 <p data-bbox="623 464 971 495">Auto discovery configuration</p>  <p data-bbox="623 716 971 747">Task Scheduler configuration</p> <ul data-bbox="623 764 976 1430" style="list-style-type: none"> • Auto discovery of network elements • Publish Managed Object updates to interested subscribers like Maps and NE Tree. • Schedule status polling on all discovered Nes • View, Update and search NE information. • Create, View, Update, Delete, Execute, Audit Configuration Tasks. • Scheduler - Tasks can be scheduled for later execution. • Task Mapping - Tasks can be mapped to any NE group. 	 <ul data-bbox="1078 716 1455 1251" style="list-style-type: none"> • Create, View, Update, Delete Statistics configuration. • Schedule default performance statistics for all discovered NEs. • Plot live and/or collected performance collections in charts. • Create, View, Update and Delete Performance Thresholds. • Raise events/save statistics collections only when associated thresholds are breached

Other Features

Reports based on JFree Charts	MIB-Browser support	GUI skins
		

Views Supported

Dashboard View	Network View	Geographical View	Equipment View
			
<ul style="list-style-type: none">• Provides a summary of all key parameters of a network element• Displays information from Fault, Configuration and Performance models.	<p>Displays the discovered network elements in a network</p>	<p>Networks are shown in a geographical map based on the location of network element</p>	<p>Displays detailed information about the status of ports, card etc. (Device Chassis View)</p>

About Mahindra Satyam

Mahindra Satyam is a leading global business and information technology services company that leverages deep industry and functional expertise, leading technology practices, and an advanced, global delivery model to help clients transform their highest-value business processes and improve their business performance.

The company's professionals excel in enterprise solutions, supply chain management, client relationship management, business intelligence, business process quality, engineering and product lifecycle management, and infrastructure services, among other key capabilities.

Mahindra Satyam is part of the multi-billion Mahindra Group, a global industrial federation of companies and one of the top 10 business houses based in India. The Group's interests span automotive products, aviation, components, farm equipment, financial services, hospitality, information technology, logistics, real estate and retail.

Mahindra Satyam development and delivery centers in the US, Canada, Brazil, the UK, Hungary, Egypt, UAE, India, China, Malaysia, Singapore, and Australia serve numerous clients, including many Fortune 500 organizations.

Contact

For further information, please write to rfi@mahindrasatyam.com