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Successful Implementation of Network Management and support in STC
Thanks to HP and Its partner Fingerprint Consultancy

Fingerprint Consultancy has successfully implemented the (NMS) in STC. STC (Saudi Telecom) is the national telecommunications services provider in the Kingdom of Saudi Arabia with a workforce of more than 21,000 employees proudly servicing their customers Supported by one of the largest infrastructure in the Middle East.
STC provides four key services: (A) Home services, which includes PSTN, broadband DSL; (B) Personal services, which includes mobile telephone services, and value added services; (C) Enterprise, which provides advanced business data solutions provider; (D) Wholesale, provides network services to other local operators.
The (NMS) is responsible for providing a state of the art Network management solution for the STC network environment of 5000 network Devices distributed over 400 cities and 900 sites all over the kingdom serving more than 21,000 employees and supporting STC most critical business services.

STC
الاتصالات السعودية

"NMS Services have helped us to get control over the Network faults and alarms which allowed us to increase the network availability and be able to detect the faults even before the customers start to complain thus saving time and ensuring better service."

Mohamed Ayyash ,
STC Network Operations Technical Manager

STC-NMS Project Objectives

- The Capability to detect and locate any fault within the network environment.
- The capacity to reduce the MTTR.
- Increase the Overall Network Availabily.
- Increase the overall Network performance.
- Create a network Wide KPIs that help both technical teams and decision makers as well.
- Create forecasting and capacity planning reports that help the design teams prepare the network

HP Software components for STC NMS

HP Network Node Manager.

HP Operation Manger for UNIX.

HP Performance Insight.

HP Data Protector.

HP Operations Dashboard.

"NMS Reporting Services is allowing us to make the right decisions when it comes to responding to a design request thus saving cost and ensuring quality of service."

Ali A.Alaseeri ,
STC Network Design Section Manager

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Project Overview

The STC-NMS has created a solution that combines both reliability and scalability in such a way to achieve the NMS objectives using a 6 phased implementation approach.

• During Phase one the team has implemented the fault management solution using HP NNM in a distributed environment to allow management across firewalls with 6 HPUX servers as Collection stations reporting to 2 HPUX clustered MOM servers. The fault management solution introduced integration between NNM and OMU and another integration between OMU and the syslog server to provide more fault data to the NOC personnel. The team has used the OMU application platform to develop an escalation application and escalation.

• In the second phase the objective was to implement a distributed performance management system using HPPI with 6 regional pollers. HPPI was then integrated with NNM to insure a continuous feed of Nodes Information into HPPI and The Open DB Nature of HPPI opened a wide area for DB development to allow for the creation of almost any business report.

• Phase three included the creation of a unified NMS DB that contains all the Network CIs and their relationships combing data from NNM, HPPI and Other external sources like Cisco Works.

• During the Fourth phase the challenge was to transform the Huge Amounts of performance data available with the HPPI implementation into Network Wide KPIs that would provide a simple yet a clear look into the Network Overall Health so the team created the KPIs reports using Crystal Reports with the help of DB development of HPPI, OMU and NNM data. The KPIs includes data for Availability, Resiliency, Manageability, Traffic Utilization and Forecasting.

• The objective of the Fifth Phase was to consolidate all of NMS services and data into one single portal so the team created the NMS portal allowing the NMS customers to :

  - Search NMS Unified DB, for device information like Location, Model, series, IP Address, and interfaces properties as well.
  - Request NMS reports and receive email notifications of the status of the request.
  - Access other NMS applications and services.

• The sixth phase is to make sure that the large NMS environment of more than 24 management servers of heterogeneous OS and types and application are effectively managed and maintained by NMS, so this phase included an implementation of OMU to manage the faults within the NMS servers and to monitor HP software running on the servers. The phase also included an implementation of HP data protector to backup all our systems using HP tape Library.

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