|  |
| --- |
|  |
| Network  Management System |
| CCPL |

|  |
| --- |
| Codescape Consultants PL  [5/3/2011] |

# Product Name: NMS

Feature: NMS Reporting

Requested By: Vivek Bansal

Reviewed By: Prateek Goel

Implemented By: Amit K. Sharma

Verified By: Utkarsh Jain

SW release version in which Feature included:

## Revision history (in case multiple revisions)

|  |  |  |  |
| --- | --- | --- | --- |
| Revision | Date | By | Description |
| 0.01 | 5/3/2011 | Amit K. Sharma | NMS Reporting First Draft |
| 0.02 | 6/3/2011 | Amit K. Sharma | Added: Feature Design Description |
| 0.03 | 5/13/2011 | Peeyush Raj | Added: Hierarchical notification system |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# 

# Feature Description: NMS Reporting

*NMS should provide interface for device and group based performance reporting.*

## Supported System Requirements

* Linux System, preferably Ubuntu/Debian

## System Use Cases

## Save Reports

* Report Scheduler
* Report Formats
* History Data Management
* Reporting Access
* Standard XML/MIB based NBI
* Hierarchical notification system

### Save Reports

NMS should allow saving reports physically on operator machine in standard file formats [.pdf, .xls and .csv]. Critical Reports needs to be saved logically linked to profile of operator [user] to ensure reproduction of reports at later stages.

### Report Scheduler

NMS should support scheduled task to generate reports and sending them via email to concerned authority.

### Report Formats

NMS should support both graphical and tabular report formats and should be configurable depending upon the type of report.

### History Data Management

NMS should perform scheduled task to archive history performance data of network elements on quarterly, half yearly or yearly basis [depending upon configuration of NMS]. NMS should raise an alert before proceeding towards archiving and operators with admin privileges should have rights to postpone same for certain amount of time.

### Reporting Access

NMS should support user roles that are only liable to view/monitor performance reports of network elements.

### Standard XML/MIB/FTP based NBI

NMS should provide standard XML/MIB/FTP based NBI on performance counters of network elements.

### Hierarchical Notification System

A method for determining access privileges for transmitted mass notifications by NMS is disclosed. The method includes storing information regarding user-level access privileges of a group to receive a notification. The user group includes a user that inherits the user-level access privileges of the user group.

# Feature Design Description

## Save Reports

Save Reports should have

* Option to select report file format.
* Filters based upon Device Groups and Time duration.

## Report Scheduler

Report Scheduler should support

* Daily and Weekly schedule of critical reports with specified filters.

## Report Formats

Support for graphical and tabular representation of report using third party open source api.

## History Data Management

NMS will have

* Proprietary Plugin [script] to create dump of performance data tables.
* User with admin privileges will be allowed to schedule downtime for plugin.

## Reporting Access

NMS will have user roles liable to view performance reports.

* Admin user will create Reportadmin.
* Reportadmin will be allowed to create Reportusers .
* Admin and Reportadmin will be allowed to assign devices to Reportusers.

## Standard XML/MIB/FTP based NMI

*<Based Upon Requirement Elaboration >*

## Hierarchical Notification System

NMS notification system would transmit the preconfigured alerts in an intelligent manner, where only the user/user groups assigned to receive the alerts would get notified.

* Admin would assign alerts to user/ user groups
* Admin could configure the events on which alert has to be sent
* Admin could monitor the action taken by assigned user/user group on an event of alert receive
* Admin could configure the scheduling of an alert
* Admin could retransmit the alert.

# Implementation Design Description

*<System Architecture be discussed here>*

# Test Report

*<Describe what “development” / Integration unit test has been done – and what the test results here are>*