

A DEVICE MAINTENANCE MODEL FOR TACTICAL DEFENSE NETWORK

ANUJA

Member Senior Research Staff, Central Research Laboratory,
Bharat Electronics Limited, Ghaziabad, Uttar Pradesh, India

ABSTRACT

This paper describes fault repair philosophy for a Network Management System (NMS) based on IT Service Management (ITSM). ITSM is a concept that looks at the IT process from beginning to end and maps how it should be integrated with business strategy. This paper describes the ITSM integration approach with NMS by introducing the concept of Help Desk at NMS level and integrating flow of Service Desk and OEM Desk with NMS based on service level agreement between user and service provider. NMS gathers MIB-II (Management Information Base - II) variables, compare it with valid range value and on diversion of expected range raises an alarm with unique trouble ticket number and appropriate severity. Problem resolution time and percentage of device availability in respective time range shows the performance of device maintenance model. It is designed for tactical defense network that works in very constraint region.

KEYWORDS: Original Equipment Manufacturer (OEM), Simple Network Management Protocol (SNMP), Configuration Management Database (CMDB) and Element Management System (EMS), Service Level Agreement (SLA), Help Desk, Service Desk, OEM Desk