UHP NMS

Network Management System

UHP Network Management System (NMS) is a sophisticated tool for monitoring and controlling UHP-based networks. NMS substantially simplifies configuration of the Hub and of the remote terminals, collects and stores in its database information about current and historical status of the whole network and its individual elements, and displays that information in graphical and tabular formats. The NMS system supports all UHP configurations and topologies, including TDM/TDMA, SCPC, DAMA and Hubless TDMA.

UHP NMS system is shipped pre-installed in a server running Linux OS. NMS is traditionally collocated with the network Hub however it can also be located at any alternate place. The system provides multiuser, multi-language web interface and supports multiple Virtual Network Operators (VNO) sharing common network.

The user interface focuses the operator's attention on the most important events in the system, provides the operator with an exhaustive information needed for analysis and troubleshooting. By selecting most suitable settings for the display, the operator can display the information in the desired format: logs, graphs and/or tables. All key network characteristics are displayed on a single page, known as the dashboard.

UHP Smart Redundancy facilitates self-healing architecture for a single VSAT Hub and for multiple geographically diverse (redundant) Hubs. Architecture of the Hub with Smart Redundancy is not different from a traditional Hub architecture, but all the controllers are universal and can assume any role.
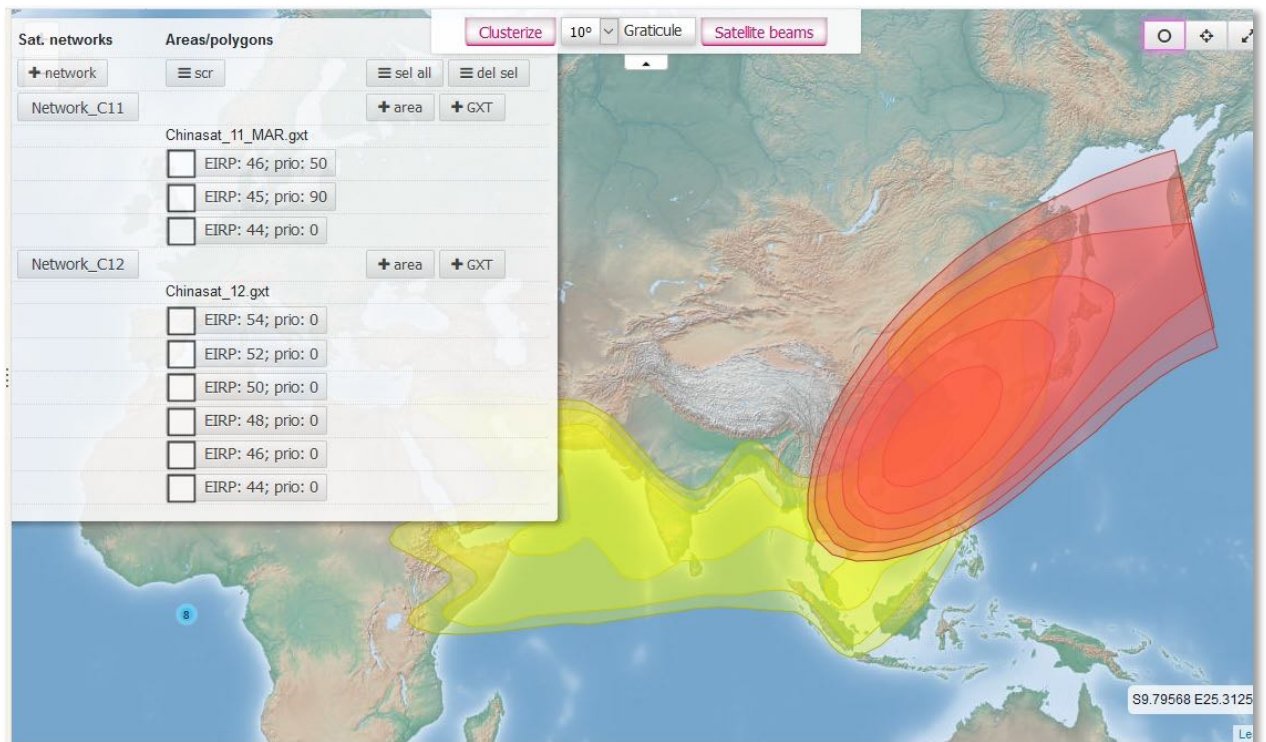

Key Features:

o Enhanced, graphical, web-based, multi-user, multi-role user interface

o 64-bit operating system and x64 architecture

o Main dashboard with complete network overview on one screen and easy navigation

o Events correlator showing historical performance graphs and related events

o Customized reports with statistics exported for further analysis

o Individual/Group software upgrade of remote terminals via multicast

o Support for all UHP modes of operation: TDM/TDMA, SCPC, DAMA, Hubless TDMA, and redundant systems

o Management of multiple networks in a single NMS workspace, including geo-redundant Hubs

o Virtual Network Operator (VNO)– sharing of common network infrastructure between operators

o Ideal for any network size or topology – from a simple link and up to a multi-hub network

o One-way control – allows sending one-way ("blind") commands to non-responding terminals

o API interface for external devices and software applications (OSS/BSS)

o Footprints, roaming and tracking of mobile terminals

o Hot-standby 1:N NMS server redundancy

TECHNICAL SPECIFICATIONS: UHP Network Management System

SERVER	
Hardware	Rack-mountable 1U server, Intel Xeon E3 3.0 GHz, 8GB RAM DDR4, 1TB/SATA, OS Linux
Network interface	Gigabit Ethernet
Network statistics	Gathering interval: from 5 sec.; Disc use: 30 Mbytes/year/terminal
NMS Server Redundancy	Optional 1+N redundancy

MANAGEMENT	
Supported networks	TDM/TDMA, SCPC DAMA, Hubless
Number of networks	Up to 64
Number of terminals	Up to 500 000
Number of VNOs	Up to 25 VNOs per each hierarchy level
Upgrade options	Mobility (roaming, footprints, tracking), HTS, Smart Geo-Redundancy

FEATURES	Remote terminals	Hub controllers	NMS Server
Monitoring	Map view, weather, graphs, logs, real-time monitor, alerts, notifications	Graphs, logs, real-time monitor, alerts, notifications	Networks, user log, disc use
Configuration	Basic settings, IP protocols, routing, notifications, GXT service footprints, roaming	Basic and RF settings, IP protocols, routing, services	Basic settings, networks, users, notifications, API
Maintenance	Profile, Tx level and TLC, password, set SNMP, set DTTS source, blind commands and messages, SW update	HTTP and Telnet access, redundancy management, blind commands	Server redundancy management, log data, SW updates, data backup

UHP NETWORKS