SKYWAN NMS 3.250

SKYWAN Network Management System
SKYWAN NMS 3.250
Configuration Management & Monitoring of SKYWAN VSAT Networks

Managing IT or satellite communication networks means dealing with a variety of vendor products all requiring their specific handling to be considered by the operator. A comprehensive Network Management System (NMS) helps to reduce the complexity and offers a graphical user interface to simplify the interaction.

SKYWAN NMS manages SKYWAN 7000 Series satellite networks over the full life-cycle ranging from:

- inventory management
- centralised planning, validation and implementation of network configurations,
- line-up of new sites,
- monitoring and displaying element status,
- monitoring of user defined thresholds,
- incident notifications by email, windows popup or batch jobs,
- software rollouts,
- event logging

The SKYWAN management bundle is divided into two software parts:

- SKYWAN NMS:
  Main Management bundle for the central operation of the SKYWAN network through the operator.

- Line-Up Manager (LUM):
  Small software tool for the on-site installer. It is used during the commissioning of a site to transfer the configuration generated by the NMS to the local IDU and to do site specific settings such as transmit power.

Reliable communication is key for successful business and any disturbance needs to be processed quickly and reliably. The SKYWAN NMS constantly monitors the network elements and allows the operator to pin down incidents immediately.
to easy setup and management of SKYWAN satellite networks

SKYWAN NMS 3.200
Configuration Management & Monitoring of SKYWAN VSAT Networks

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The ND SatCom SKYWAN NMS manages SKYWAN satellite networks over the full life-cycle ranging from:

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Network Overview

Geographical View
The SKYWAN NMS provides a graphical illustration of the network layout including SKYWAN stations and other network components.

The map view presents the position and illuminates the icons by the summary status. The available zoom levels depend on the map data used. Various map data is available on public or dedicated GeoServers.

List view
SKYWAN NMS shows a list of all network components sorted by selectable parameters such as Summary State.

Component Groups
The network operator is able to create hierarchical structures with status propagation. Components can be grouped into logical bundles for better clarity.
Network Configurator

Interactive planning and administration of SKYWAN 7000 satellite networks.

Features:
- Management of several configuration bundles for example for testing
- Device inventory
- TDMA frame calculation
- Consistency checks
- Bootloader / software management
- Export of configuration data packages

MIB Browser

Allows the request and modification of real-time MIB attribute values for selected components which support SNMPv1 or SNMPv2c. It can be started once or multiple times on the same PC.

Capabilities:
- Graphical SNMP MIB tree navigation
- Browsing of single attributes and MIB subtrees by simple node selection
- Set requests to one/multiple nodes
- Get requests to one/multiple nodes

Grapher

Monitoring live statistics of any network device supporting SNMP.

Features:
- Graph historic and live data of a data collection
- Configurable polling interval (min 1s)
- Graph several MIB attributes of different network components in one window perfectly suited to correlate values
- Free scalable axes for zooming
- User definable line colors and line width
Our Technology

ND SatCom offers the operator a state of the art graphical user interface to manage SKYWAN networks in an easy way thus saving costs on operator training and, what is more important, minimising the network downtimes for increased productivity.

Major Aspects

- Afraid of a network downtime when the NMS is offline? Don’t worry!
  A SKYWAN network operates separately from the NMS. No single point of failure! The NMS has no impact on the network availability. Once the network is configured it runs independently from the availability of the SKYWAN NMS even when the NMS is switched off or disconnected.

- Unsure where to locate the NMS?
  The SKYWAN NMS just requires an IP connection to the SKYWAN network and can be placed wherever it suits you best.

- Performance problems in your network?
  Based on the standard protocol SNMP live statistics are collected and stored in a database for further processing. This way you can analyse exactly what has happened in the last days and you can improve the quality continuously.

- Integration into your infrastructure required?
  The SKYWAN NMS is delivered as a package with a rack mount PC, a desktop version or business laptop for mobile usage. If you choose to install it on an existing hardware, you require the following minimums:
  - PC with at least 2.4 GHz multi-core processor respectively 3.0 GHz single-core processor or above
  - 2 GB of RAM, for performance reasons
  - 4 GB of RAM are highly recommended
  - OpenGL compatible graphics accelerator card with a resolution of 1280 x 1024 pixel and monitor
  - Hard disk with at least 10 GB free space
  - CD-ROM or DVD drive
  - Keyboard and mouse or compatible pointing device
  - Ethernet network interface card with 100 Mbit/s connection to the network
Key Features SKYWAN NMS

- Centralised planning, consistency checks, provisioning and monitoring of SKYWAN satellite networks
- Geographical and Network table view provides cockpit functionality for a quick overview of the network status
- Alarm generation and handling, configurable incident notifications (warning by popup window, email, execution of batch files)
- Configurable component groups to reflect redundant sites or devices collected in a single summary status (hierarchical levels with status propagation)
- Selected interfaces included in summary status monitoring (manage/unmanage interfaces)
- Visualisation of Master capable SKYWAN stations
- Support of SKYWAN remote bootloader and software upgrade
- Wizards for Join/Leave/Replace of a SKYWAN IDU
- Configuration Data Packages combine SKYWAN software and configuration in a single file for processing with Line-Up Manager, the simple Installer Tool
- Component Administrator provides device inventory
- Data Collection Manager captures historic and live statistics
- Grapher displays historic and live statistics of data collections
- TDMA Calculator tool shows frame setup for each channel in use and allows optimisations to tailor efficiency to the application needs

Key Features SKYWAN Line-Up Manager

- Line-Up Manager Expert Mode provides access to advanced SKYWAN settings and all operation and test modes
- Line-Up Manager Wizard guides the user step by step through the commissioning process