



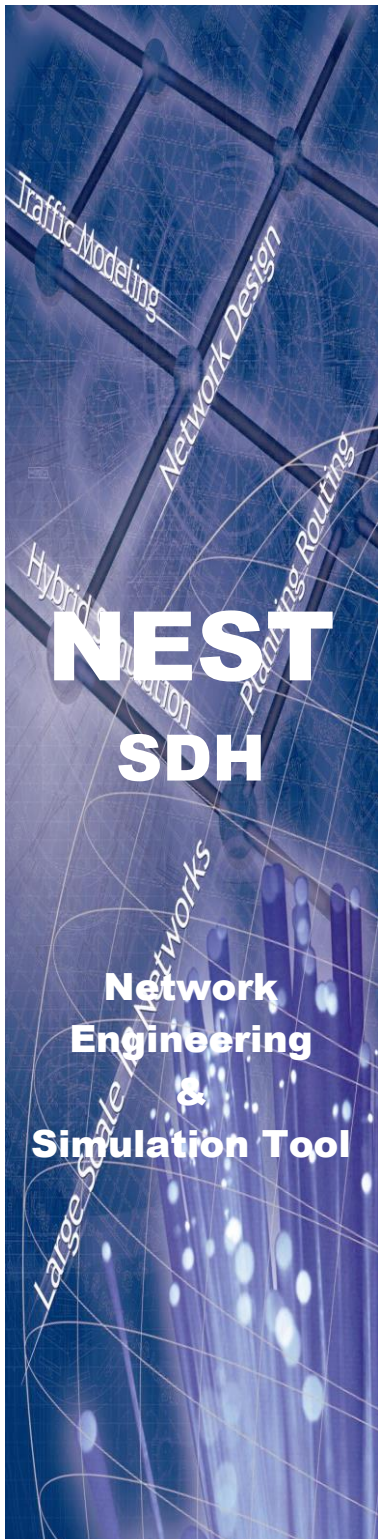
NEST SDH Plugin



NEST SDH

Network Engineering & Simulation Tool

QoS Design's NEST SDH is an extension of the "NEST" software suite. It provides a simulation environment for SDH optical transport Networks. NEST SDH permits users to reproduce a real operator network in its operational state, powered by automated circuit routing algorithms, failure healing processes and cost analysis.

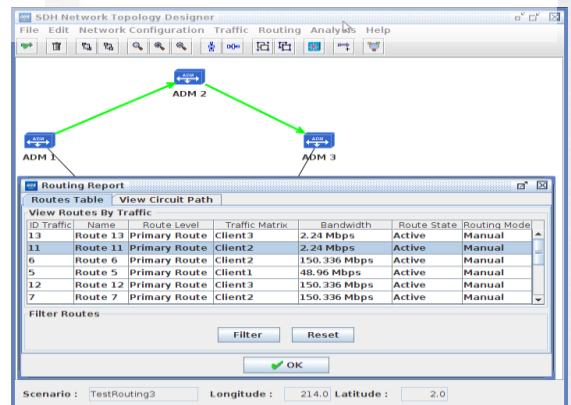
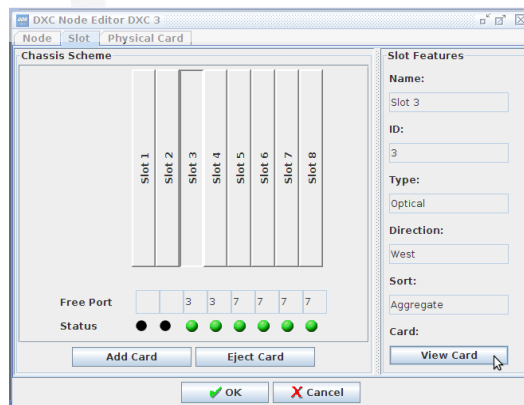


NEST SDH is a powerful software solution designed to simulate operating scenarios in SDH networks. It provides several advanced features to facilitate SDH network management.

- **NEST SDH** allows fast/accurate SDH topology creation/editing (mesh, rings or a mixture of both) using dedicated functionalities (chassis configuration, automatic fiber design, ring designer).
- **NEST SDH** provides a full set of protection schemes for SDH networks including healing processes for managing network resiliency.
- **NEST SDH** provides several SDH network circuits planning algorithms.
- **NEST SDH** provides SDH resource evaluation (transmission and cross-connect resources) and detailed cost analysis.

NEST SDH Key Features

- **Topology editing**
 - Multi-Vendor SDH equipments library (Chassis, Fibers, Modules),
 - Advanced features for designing SDH rings, DRI architectures and mesh portions,
 - Provides a full set of SDH protection mechanisms (SNCP, MS-SPRING (2F/4F), MSP Linear 1+1 and 1+N).
- **Circuit routing**
 - Allows manual routing of SDH circuit demands,
 - Provides an automated routing algorithm which ensures optimal placement of circuit demands based on available network resources and the ability to accommodate future requests,
 - Provides optimal provisioning for forecast traffic demand,
 - Produces detailed reports of routing plans.



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- **Network analysis**
 - Generates global and detailed graphical statistics for network resource evaluation,
 - Produces accurate cost inventory reports,
 - Simulates network resiliency.

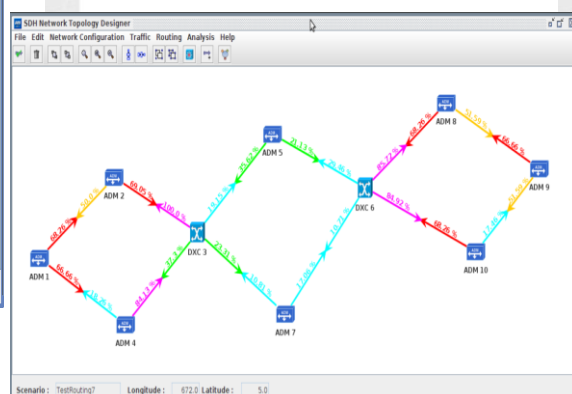
NEST SDH Key Uses

- Reproducing a real SDH operator network in its operational state and evaluating its operations,
- Automating the provisioning process and the planning of SDH circuits over the network,
- Handling failures arising in the network and generating solutions for bypassing the dysfunctions (identification of affected circuits, re-routing circuits, etc.),
- Exploring and managing network resources and topology costs.

NEST SDH Key Benefits

- Simulation of network extension/ modification before real deployment,
- Reducing working times for solving routing problems,
- Automating the provisioning process,
- Allows delaying infrastructure investments since it optimizes existing resource allocation,
- Accurate visibility on cost repartition (can be used during upgrade or maintenance process).

| Network Costing | | | | | | | | | | |
|---------------------|-----------------------|----------------|------------------|--------------|------------|----------|----------------|------------|--------|--|
| All Devices By Node | | | | | | | | | | |
| Type | Model | Quantity | Device Unit Cost | Cards | CardModel | Quantity | Card Unit Cost | Total Cost | % Cost | |
| ADM | HUAWEI OPTIK OSN 7... | 3 | 10.0 | 4 | optix SLD4 | 2 | 5.0 | 155.0 | 63.265 | |
| | | | | | optix SLQ4 | 2 | 5.0 | | | |
| | | | | | optix SL16 | 8 | 5.0 | | | |
| | | | | | optix SF64 | 1 | 5.0 | | | |
| DXC | HUAWEI OPTIK OSN 3... | 5 | 10.0 | 11 | optix SL16 | 2 | 5.0 | 90.0 | 36.735 | |
| | | | | | optix SF64 | 2 | 5.0 | | | |
| | | | | | optix SL16 | 2 | 5.0 | | | |
| | | | | | optix SLQ4 | 2 | 5.0 | | | |
| | HUAWEI OPTIK OSN 9... | 1 | 20.0 | 4 | optix SL16 | 2 | 5.0 | | | |
| | HUAWEI OPTIK OSN 7... | 2 | 10.0 | 6 | optix SLD4 | 3 | 5.0 | | | |
| | | | | | optix SLQ4 | 3 | 5.0 | | | |
| Total | | 11 SDH Devices | 120.0 | 25 SDH Cards | | 125.0 | | 245.0 | 100 % | |



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