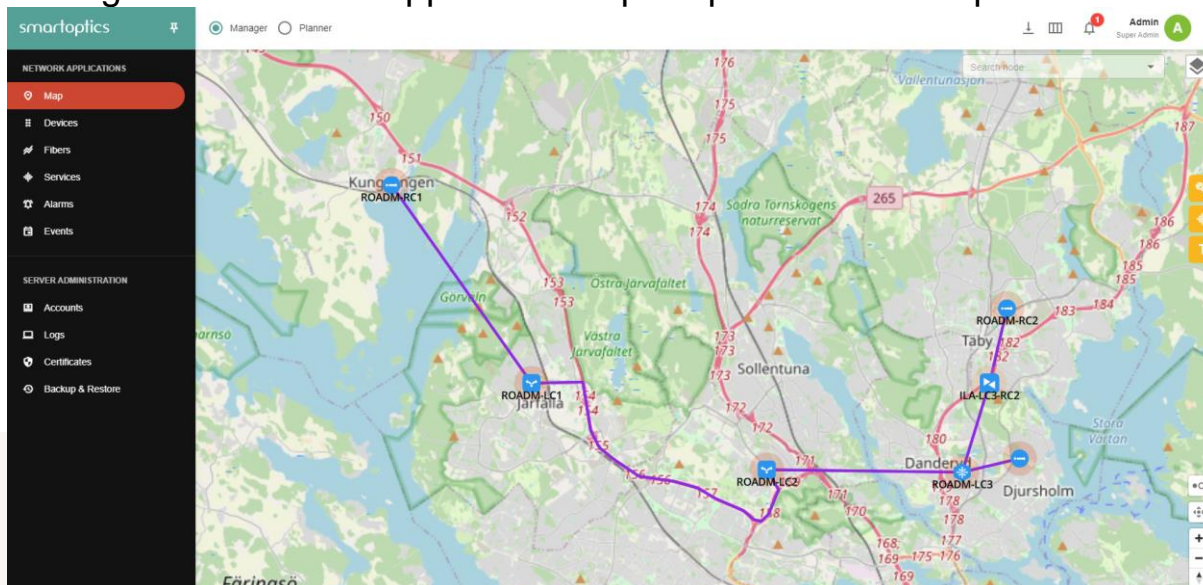


# SOSMART SOFTWARE SUITE

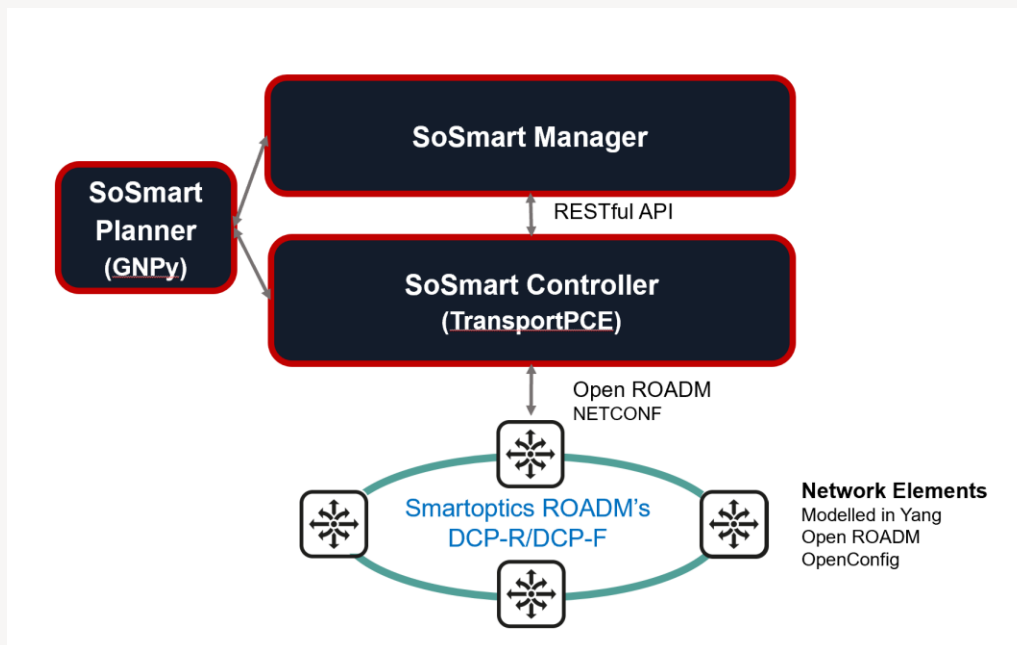
Management suite to support Smartoptics products in an open environment



## A MODERN, OPEN AND FLEXIBLE MANAGEMENT SOLUTION

SoSmart is a modular software suite for SDN-based management of Smartoptics products in an open, multi-layer and multi-vendor optical networking environment. The management suite has a new and modern software architecture with open API:s that enable a high level of management flexibility, modularity, multiple integration possibilities and openness. The Smartoptics SoSmart Software Suite includes the following building blocks:

- The SoSmart Manager – The management application for optical network provisioning, also including fault, configuration, administration, performance, and security (FCAPS) functions, and operated via an advanced graphical user interface (GUI).
- The SoSmart Controller – An open source SDN controller based on TransportPCE.
- The SoSmart Planner – An optical planning and simulation tool with the same GUI as the SoSmart Manager and using the open-source module GNPY for path simulations.

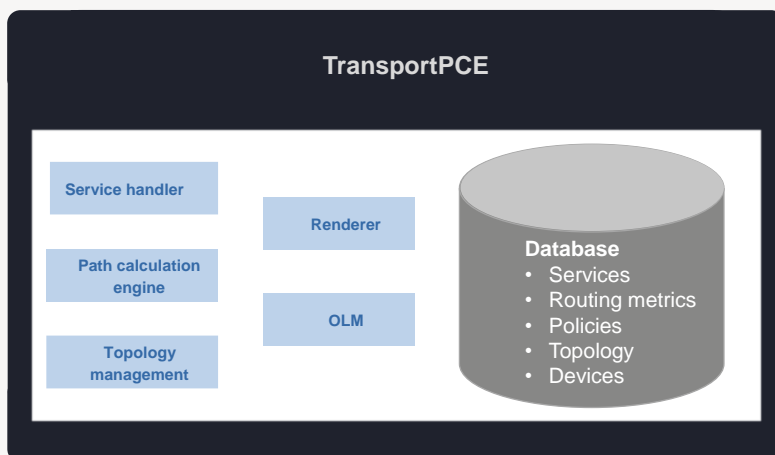


## SOSMART MANGAGER IN SHORT

- Provides an intuitive and easy to use graphical user interface, GUI
- Use Open APIs and is integrated towards Transport PCE
- Graphical network visualization based on geographical locations. KMZ files for fiber routes supported.
- Optical point-and-click provisioning.
- FCAPS (Fault, Configuration, Administration, Performance, Security)
- Supporting DCP-R ROADMs and DCP-F ILAs today, but later also DCP-M, DCP-F and DCP-2

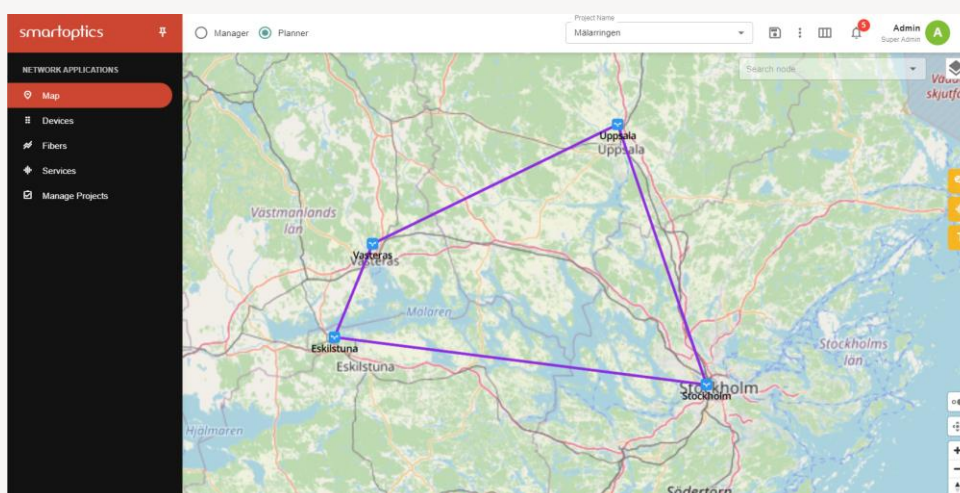
## SOSMART CONTROLLER IN SHORT

- SDN controller based on open-source TransportPCE
- Provides a standardized path calculation engine (PCE), a service handler and topology management
- Communicates with network elements through a standardized NetConf interface that complies to the Open ROADM API
- Communicates with SoSmart Manager via a RESTful API
- Contains a database with services, routing metrics, policies, topology and devices



## SOSMART PLANNER IN SHORT

- SoSmart Planner use same GUI framework as SoSmart Manager
- Advanced OSNR and GSNR simulations are done with the Open Source model GNPY (Gaussian Noise Model in Python)
- Nodes and fibers in map GUI based on Open Street Map
- Project management features, e.g. load, save, export, import real network.



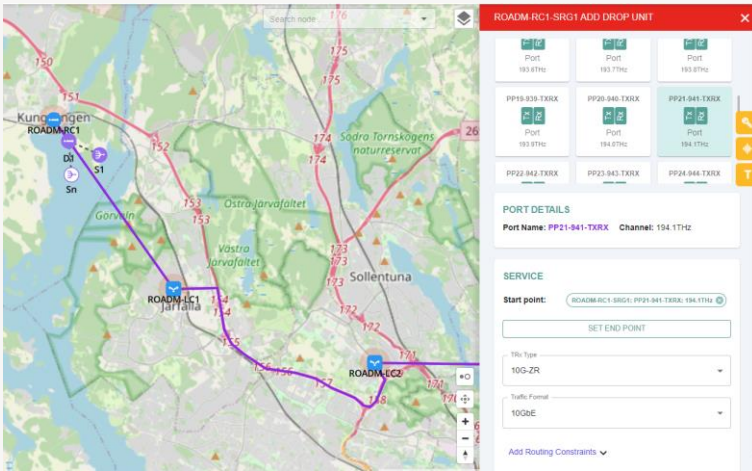
Subject to change without notice.

For more information visit [smartoptics.com](http://smartoptics.com).

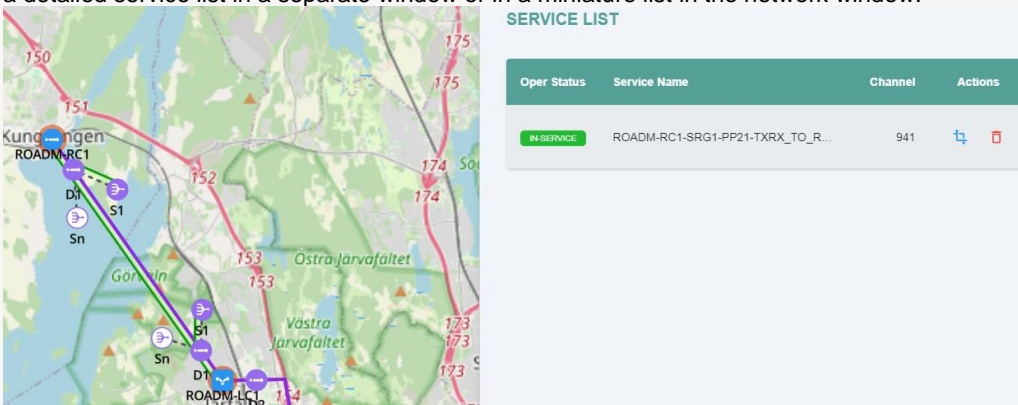
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## OPTICAL POINT AND CLICK PROVISIONING

Smartoptics DCP-R family is a disaggregated multi-degree ROADM platform used for Open Line Systems. This platform has a high level of automation, but it is still important that the SoSmart Manager can provide a good network representation and an easy way to configure network. Optical channels can easily be configured and activated by using the point-and-click provisioning feature in the SoSmart Manager. The SoSmart Manager provides the GUI for provisioning while the SoSmart Controller will conduct the path calculation and communication to the network elements.



After a service is configured the information is stored in the SoSmart Controller database. All provisioned services can be viewed in a detailed service list in a separate window or in a miniature list in the network window.



## ORDERING INFORMATION

SoSmart product codes	
SOSMART-MANAGER	SoSmart Manager Server License, one time entry fee
DCP-R-SML	DCP-R SoSmart Manager License, yearly subscription fee per DCP-R chassis
DCP-2-SML	DCP-2 SoSmart Manager License, yearly subscription fee per DCP-2 chassis
DCP-M-SML	DCP-M SoSmart Manager License, yearly subscription fee per DCP-M chassis

## SERVER SPECIFICATIONS

The SoSmart Software Suite runs on x86 64-bit hardware with Linux as operating system. Installing and hosting the SoSmart Software suite is as easy as operating the network. The SoSmart Manager, Controller and Planner are all installed as docker containers on standard server hardware. A docker container can package an application and its dependencies in a virtual container, isolated from other processes in the system. This is a modern way of running applications which is extremely easy to install and at the same time consumes small processing resources compared to older alternatives. Because of their isolated nature, docker containers are very well suited for running on cloud servers.

Both the SoSmart Controller and the SoSmart Manager can be hosted on Virtual Machines, and server redundancy can be achieved through modern data centre technologies.

The following are the minimum and recommended server requirements for installation of the SoSmart SW suite.

- Ubuntu 18.04.3 LTS (64 bits) or Redhat RHEL 8.6
- 4 Virtual CPUs (Recommended Intel(R) Xeon(R) Gold 6138 CPU @ 2.00GHz)
- 8 GB RAM
- 100 GB disk space
- Google Chrome (recommended browser)

*NOTE. THE INFORMATION IN THIS DOCUMENT IS VALID FROM RELEASE R3.0 FOR SOSMART*