

Framework for DWDM interface Management and Control

draft-ietf-ccamp-dwdm-if-mng-ctrl-fwk-02

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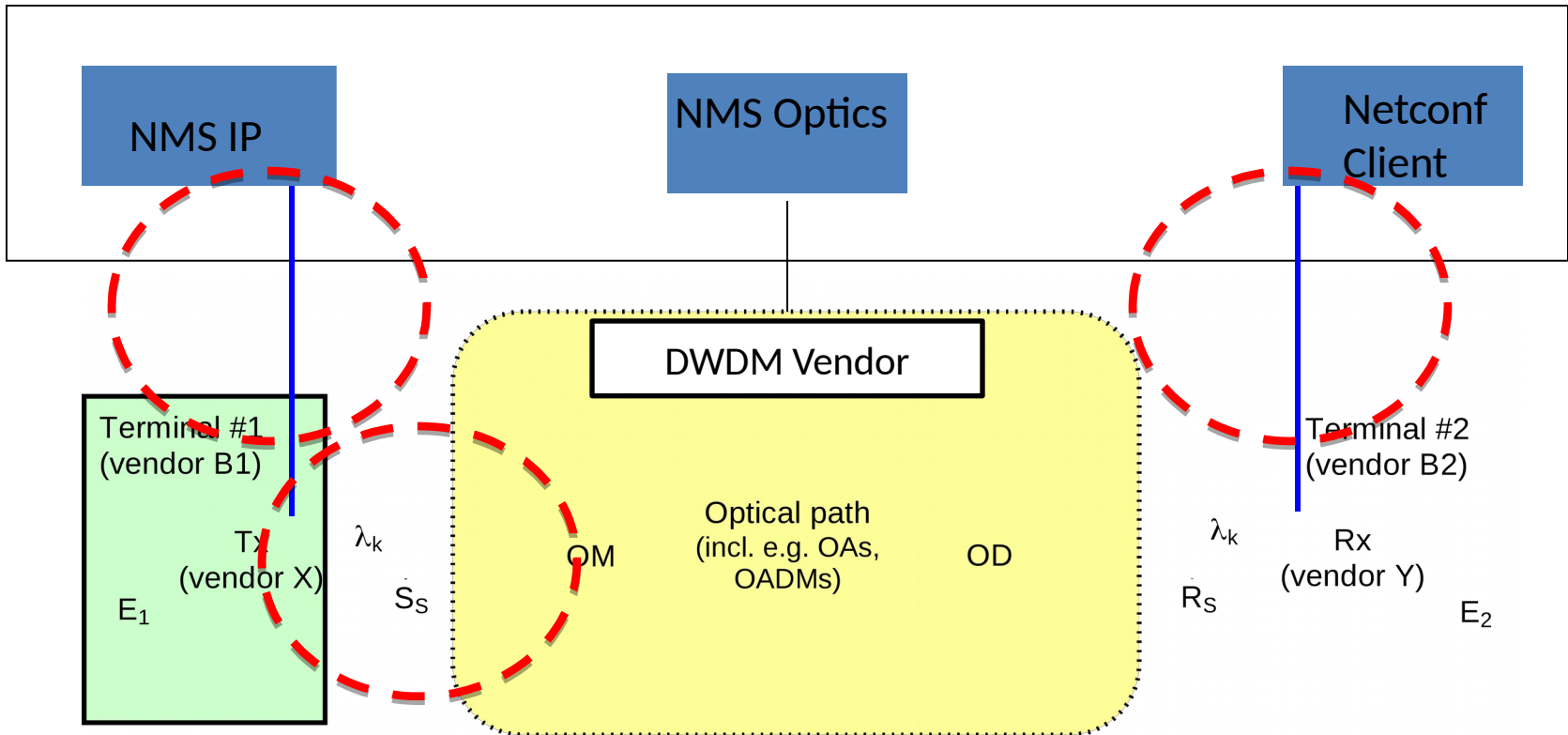
Motivation

- State-of-the-art is to interconnect Routers via standard grey interfaces to proprietary transponder equipment as part of the DWDM network
- The deployment of DWDM interfaces outside the DWDM network leads to the following issues:
 - Transponders and DWDM equipment may be implemented by different vendors, so there is a need for a common parameter set defining the line of the network
 - The network and the terminal equipment need at least to exchange interface characteristics, operational state and verify the inter-layer connectivity quality.
- A multivendor packet-optical network requires a common network model to ensure an efficient operation and management of the network

Document Scope

- The document covers management and control/management plane aspects for single channel DWDM interfaces
- This document describes use cases and **requirements** for the control and management of single channel optical interfaces
- The purpose is to identify the necessary information elements and processes for the given architecture.
- The focus is on automating the network provisioning process irrespective on how it is triggered
- Guidance for the following drafts:
 - draft-dharinigert-ccamp-dwdm-if-imp
 - draft-dharini-netmod-dwdm-if-yang
 - draft-galikunze-ccamp-dwdm-if-snmp-mib

Solution initially in scope.



EMS – Element Management System
NMS – Network Management System

Diffs in version 02

- New version was submitted beginning of July, mentioned the submission on the list
- Further rephrasing and error correction
- Filling the requirements section describing what is needed from an operational point of view
 - substantiates the use case section

Key Requirements

- Even if network architectures becomes more complex the management and operation as well as the provisioning process should have a higher degree of automation or should be fully automated.
- Simplifying and automating the entire management and provisioning process of the network in combination with a higher link utilization and faster restoration times will be the major requirements that has been addressed in this section.
- Data Plane interoperability as defined for example in [ITU.G698.2] is a precondition to ensure plain solutions and allow the usage of standardized APIs between network and control/management plane.

Next steps

- Discussion on the list, requesting feedback from the WG
- Next update will deliver a further clean up and simplification (removing of text that is not needed)
- Discussion with the chairs started on how to proceed with the LMP, YANG and SNMP drafts