Lightpath Lifecycle Management using TransportPCE and OpenROADM

OpenROADM Multi-Source Agreement is the current open-source standard for data-models in open disaggregated optical line systems. These data-models enable optical network operators and software integrators to use open-source SDN controllers to discover, control and configure optical line systems.

One such controller is the openDayLight TransportPCE which provides southbound RESTCONF APIs to configure the emulated/real devices.

The goal of this working student position is to develop and setup a test bed with emulated OpenROADM based simulator devices and connect them to TransportPCE SDN controller. The SDN controller shall be further interfaced with an in-house network planning and orchestration engine to facilitate online configuration of lightpaths.

Prerequisites

The student must have the knowledge of:

1. Optical Networks
2. Software Defined Networking
3. API development using Python
4. Basic knowledge of Java
5. Good communication skills in English
6. Availability to work 20 hours per week.

Contact

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