FSP 3000R7 Maintenance and Troubleshooting

2 days *remote* technical training

The Fiber Service Platform (FSP) is a family of innovative products that provide comprehensive Optical+ Ethernet networking solutions for access, metro core and regional networks. ADVA is focused on the needs of enterprise and service provider customers deploying data, storage, voice and video applications.

Objective and Level

A training course that covers the ADVA FSP 3000R7 system with respect to maintenance and troubleshooting. Troubleshooting Control Plane is not in focus of this training.

Level: Introductory

We will also enroll you to our eLearning module *Smart Hands* (90 min). It provides quick and basic knowledge about WDM technology, the FSP 3000R7 platform, its hardware building blocks and the most important maintenance procedures (live video recordings included).

Please note: the training will be provided using GoToTraining application – we will arrange a short test of the tool upfront the training – you will get invited for both – test and training session.
For the practical exercises the trainer will hand over keyboard and mouse to one student at a time for e.g. a database backup.

Please note: recording of the remote training sessions is not permitted

Benefits

- To maintain and troubleshoot an FSP 3000R7 system.
- Field engineers, NOC and technical back office personnel
- Small group, 8 attendants maximum

Agenda

THEORY	PRACTICE
• ADVA set of technical documentation • Tooling for on-site Maintenance & Troubleshooting • LEDs on the equipment • Reading/understanding alarms in GUI/CLI • Monitoring values: Physical and Data Layer • Power re-balancing – why and how?	• Local and remote Access to the Equipment • System Database Management: Backup and Restore • System Software/Firmware • Firmware Update Handling • Exchanging faulty modules • Fans and Filters • External and Internal Loopbacks • Follow the light/Optical Power Measurement

Pre-requisites

Basic knowledge of DWDM and TCP/IP protocols and applications. Completion of eLearning module *Smart Hands* before the live session with the trainer.

Contact

training@adva.com

DAY 1 (9 am -5 pm)
 	
Topics covered
 	
Breaks included
 	
Lunchbreak: 12am-1pm
	ADVA documentation
	   o In which document do I find the information I need?
	
	Post installation activities
	   o Local access to the FSP 3000R7
	        o Serial cable 9-D-Sub: null modem cable (female/female)
	        o Mini-USB to USB – a driver is required
	        o Terminal Software like *PuTTY*, *TeraTerm*, *MobaXterm*
	   o Remote access sessions
	        o A Web-browser like '*Mozilla'* or '*IE'* on your laptop
	        o Requires setting/changing an IP address on your laptop
	        o An ftp-server for file transfer – e.g. *filezilla server*
	        o SCP (Secure Copy) software– e.g. *WINSCP*
	
	Maintenance Topics
	   o Tooling required for On Site Maintenance/Troubleshooting
	   o LEDs on the equipment
	   o Reading/understanding alarms in ADVA *Network Element Director* (*NED*)/ Command Line Interface (CLI)
	   o Where to find alarms (current and history)?
	   o Monitoring values (Physical Layer, Data Layer)
	   o Show all power levels at once
	   o Store reference values

DAY 2 (9 am -5 pm)
 	
Topics covered
 	
Breaks included
 	
Lunchbreak: 12am-1pm
	What could fail? What to do if?: Exchanging ...
	        o Fans
	        o Management Modules
	        o Optical Amplifiers
	        o Active Channel Cards
	        o Exchanging other modules
	   o Power re-balancing
	        o Why and how?
	   o External and Internal Loopbacks on Active Channel Cards
	        o *Terminal* and *Facility Loops*
	   o DB management, Software upgrades etc.
	        o Configuration Database backup/restore
	        o Upgrading the Software/Firmware
	   o Follow the Light/Optical Power Measurement
	        o Where can I measure?
	        o Online – which modules allow power measurement?
	        o Monitoring on optical amplifiers
	   o Adding additional shelves to a network element
	        o Setting Shelf ID, Fibering