



## Course Description & Level

Getting familiar with the FSP 3000R7 Product and using Ensemble Controller (management) Software. The equipment and Ensemble Controller server will be fully operational when the class begins. Students will learn how to provision modules using WebGUI, pull database backups, perform upgrades add network elements and services to the Ensemble Controller and troubleshoot network as well as service failures. Introduction to ADVA licensing included.

Please note: Control Plane and Ensemble Optical Director are not covered in this class.

**Level: Introductory**

*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 exercise trainer will hand over keyboard and mouse to one student at a time for e.g. a configuration exercise.*

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

## Audience and Benefits

- Potential candidates for this course are network support engineers responsible for monitoring and troubleshooting network problems. NOC team oriented.
- Small courses, 8 attendants maximum
- Certificate of Attendance only, no exam

Agenda	THEORY	PRACTICE
	<ul style="list-style-type: none"> <li>• System &amp; Component overview</li> <li>• ADVA Licensing (short) - if applicable</li> <li>• Optical system architectures</li> <li>• Supported topologies and protection mechanism</li> <li>• Management Concepts, Basic DCN</li> </ul>	<ul style="list-style-type: none"> <li>• Provisioning modules with WebGUI NED (Network Element Director)</li> <li>• Operating Ensemble Controller</li> <li>• Fault Finding with Ensemble Controller</li> </ul>



# FSP 3000R7 and ENSEMBLE CONTROLLER - OPERATION & MONITORING

**4 days *remote* technical training**

## Pre-requisites

Basic knowledge on WDM and TCP/IP. We enroll you upfront the class to eLearning module *Getting Familiar with FSP 3000R7 Hardware (ca. 30min)* and expect you to complete it before the class starts.

For trainings onsite: students need to have Ensemble Controller Client installed on their laptops for practical exercises or are allowed to install the client software on their laptops

## Contact

Training: [training@adva.com](mailto:training@adva.com)

# FSP 3000R7 and ENSEMBLE CONTROLLER - OPERATION & MONITORING

**4 days remote technical training**

<b>Day 1</b> <b>9 am-4 pm</b> Lunchbreak 12am-1pm	<b>Introduction to FSP 3000R7 product &amp; training setup</b> <b>Basic DCN setup</b> <b>Provisioning modules with NED, ADVA Licensing</b>
<b>Lab Exercises</b>	<ul style="list-style-type: none"> <li>• Access to training setup – WebGUI (serial)</li> <li>• Introducing WebGUI NED (Network Element Director)</li> <li>• General settings</li> <li>• Provisioning selected active channel cards</li> <li>• Provisioning selected passive filters</li> </ul>
<b>Day 2</b> <b>9 am-4 pm</b> Lunchbreak 12am-1pm	<b>Proceed: Provisioning modules with NED</b> <b>Maintenance</b>
<b>Lab Exercises</b>	<ul style="list-style-type: none"> <li>• Provisioning selected optical amplifiers</li> <li>• Provisioning selected ROADMs – if required</li> <li>• Provisioning line protection with OPPM – if required</li> <li>• Database Backup/Restore</li> <li>• Software Upgrade</li> <li>• Firmware Upgrade</li> </ul>
<b>Day 3</b> <b>9 am-4 pm</b> Lunchbreak 12am-1pm	<b>Introduction to Ensemble Controller</b> <b>Getting Familiar with Ensemble Controller</b>
<b>Lab Exercises</b>	<ul style="list-style-type: none"> <li>• Connecting remote Ensemble Controller Clients to Server</li> <li>• Discovering Network Elements</li> <li>• Defining and monitoring network services within Ensemble Controller</li> <li>• Embedded WebGUI NED for configuration of Network Elements</li> </ul>
<b>Day 4</b> <b>9 am-4 pm</b> Lunchbreak 12am-1pm	<b>Maintenance &amp; Troubleshooting with Ensemble Controller</b> <b>Fault Finding</b>
<b>Lab Exercises</b>	<ul style="list-style-type: none"> <li>• Performance management and report generation</li> <li>• Centralized Maintenance:             <ul style="list-style-type: none"> <li>NE database backup/restore</li> <li>NE software update</li> </ul> </li> <li>• Alarms &amp; Events</li> <li>• Using Ensemble Controller to troubleshoot network and service failures              Trainer will create several 'faults' on the FSP 3000R7 hardware – students will be guided to resolve them using Ensemble Controller</li> </ul>