



# Installing & Operating FSP 3000 Cloud Connect™ Operate High Density Shelf within FSP 3000 Agile Connect™ **4 days remote technical training** minimum Rel. 3.2.x/20.1.x



Our FSP 3000 CloudConnect™ is the industry's only truly open Data Center Interconnect (DCI) solution.

FSP 3000 Cloud Connect™ Shelves can be subtended as so-called High Density (HD) Shelves to FSP 3000R7 hardware. Advantage: use of WebGUI NED (Network Element Director) as the management system of FSP 3000R7 instead of CLI to operate your FSP 3000 CloudConnect™.

## Objective & Level

A training course on ADVA FSP 3000 Cloud Connect using WebGUI (in focus) but also using selected CLI commands. OpenFabric, QuadFlex and CryptoMux will be covered in detail.

*Please, note: the training will be provided using GoToTraining application or other tool – 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 trainer will hand over keyboard and mouse to one student at a time for e.g. a configuration exercise.*

Goal of the last day is to learn how to add HD shelves to FSP 3000R7 for management only. No further FSP 3000R7 modules like active channel cards etc. will be covered. We expect students to be familiar with FSP 3000R7 management modules like NCU, SCU, etc.

### Level: Introductory

*Please address us for a separate training class on FSP 3000 TeraFlex.*

## Benefits

- The class is aimed for beginners to WDM as well as experienced users who need to get familiar with the ADVA FSP 3000 Cloud Connect™ product
- Learn how to subtend HD shelf to FSP 3000 Agile Connect and to configure HD modules with NED
- ACE exam of stand-alone FSP 3000 Cloud Connect applies
- Small courses, 8 attendants maximum

Agenda	THEORY	PRACTICE
	<ul style="list-style-type: none"> <li>○ System overview</li> <li>○ ADVA Licensing</li> <li>○ DCN Setup</li> <li>○ Introducing shelf types</li> <li>○ Introducing line cards</li> <li>○ Introducing passive filters</li> <li>○ Introducing amplifiers</li> </ul>	<ul style="list-style-type: none"> <li>○ Introducing WebGUI</li> <li>○ Provisioning of Modules</li> <li>○ System Monitoring</li> <li>○ Software upgrade</li> <li>○ Firmware upgrade</li> <li>○ Maintenance &amp; Troubleshooting</li> <li>○ Subtending and Operating HD Shelf</li> </ul>



Installing & Operating  
FSP 3000 Cloud Connect™  
Operate High Density Shelf within  
FSP 3000 Agile Connect™  
**4 days remote technical training**  
minimum Rel. 3.2.x/20.1.x

### Pre-requisites

The attendees should have basic knowledge of WDM, OTN and TCP/IP protocols. We expect students to be familiar with FSP 3000R7 management modules like NCU, SCU, etc.

For students not familiar with FSP 3000R7, please take the ADVA eLearning module *Getting familiar with FSP 3000R7 Hardware*. We will enroll you to this module upfront the class and expect you to finish it before the training with the live trainer starts.

### Contact

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



Installing & Operating  
FSP 3000 Cloud Connect™  
Operate High Density Shelf within  
FSP 3000 Agile Connect™  
**4 days remote technical training**  
minimum Rel. 3.2.x/20.1.x

<b>Day 1</b> 9 am – 4 pm Including breaks; Lunch break: 12 am – 1 pm	<b>FSP 3000 Cloud Connect™ - Introduction, Installation, Commissioning, Provisioning – Active Channel Cards; ADVA Licensing</b>
<b>Lab remote exercises</b>	Working on a running system <ul style="list-style-type: none"><li>○ Management Modules (ECM, CEM, SCM)</li><li>○ DCN Setup</li><li>○ Introduction to ADVA License Server and Usage with WebGUI and CLI</li><li>○ Introducing Active Channel Cards<ul style="list-style-type: none"><li>○ Quadflex (MP-2B4CT)</li><li>○ Configure services with License Server/Node Locked</li><li>○ Quadflex-S (Single Fiber) (<i>Theory on request only</i>)</li></ul></li><li>○ Basic operation with focus on WebGUI and selected CLI commands</li></ul>
<b>Day 2</b> 9 am – 4 pm Including breaks; Lunch break: 12 am – 1 pm	<b>FSP 3000 Cloud Connect™ - Installation, Commissioning, Provisioning – Active Channel Cards, Passive Filter, Amplifiers</b>
<b>Lab remote exercises</b>	Working on a running system <ul style="list-style-type: none"><li>○ Active Channel Cards<ul style="list-style-type: none"><li>○ OpenFabric (MA-2C5LT)</li><li>○ OpenFabric+(MA-B5LT) (<i>Theory only</i>)</li><li>○ CryptoMux+(MA-B2C3LT-A)</li><li>○ CryptoMux (MA-2C2C3LT-A) (<i>Theory only</i>)</li></ul></li><li>○ Passive filter modules</li><li>○ Amplifier modules</li><li>○ Creating Services Manually</li></ul>



Installing & Operating  
FSP 3000 Cloud Connect™  
Operate High Density Shelf within  
FSP 3000 Agile Connect™  
**4 days remote technical training**  
minimum Rel. 3.2.x/20.1.x

<b>Day 3</b> 9 am – 4 pm Including breaks; Lunch break: 12 am – 1 pm	<b>Proceed from Day 2 and FSP 3000 Cloud Connect™ - Maintenance &amp; Troubleshooting</b>
<b>Lab remote exercises</b>	Working on Running system <ul style="list-style-type: none"><li>○ Database Backup/Restore</li><li>○ Software Upgrade</li><li>○ Firmware Upgrade<ul style="list-style-type: none"><li>○ Special procedure for encryption module</li></ul></li><li>○ What to do in case of failures ...?<ul style="list-style-type: none"><li>○ Replacing Modules (<i>Theory Only</i>)<ul style="list-style-type: none"><li>▪ ECM DB Maintenance Mode</li></ul></li></ul></li><li>○ Setting loopbacks</li></ul>
<b>Day 4</b> 9 am – 4 pm Including breaks; Lunch break: 12 am – 1 pm	<b>Operating High Density Shelf within FSP 3000 Agile Connect™ using NED; Maintenance &amp; Troubleshooting</b>
<b>Lab remote exercises</b>	<ul style="list-style-type: none"><li>○ Subtending and Operating High Density (HD) Shelf to FSP 3000 Agile Connect™<ul style="list-style-type: none"><li>○ Basic operations via NED/CRAFT for configuration of HD Shelf</li><li>○ Provisioning Actives Channel Cards in HD Solution</li><li>○ Using ADVA Licenses with WebGui (NED)</li><li>○ Database Backup/Restore</li><li>○ Software Upgrade</li><li>○ Firmware Upgrade<ul style="list-style-type: none"><li>▪ Special procedure for encryption module</li></ul></li></ul></li><li>○ What to do in case of failures ...?<ul style="list-style-type: none"><li>○ Replacing Modules (<i>Theory Only</i>)<ul style="list-style-type: none"><li>▪ ECM DB Maintenance Mode via NED</li></ul></li></ul></li><li>○ Setting loopbacks</li></ul>