Advanced OSA 541X-542X Training

remote, 2 days technical training

The OSA 541X and OSA 542X are a family of IEEE 1588v2 PTP synchronization distribution, testing and assurance devices, with NTP server and GNSS receiver. They have multiple sync fanout options for deployment at the radio access network edge and for deployment in legacy networks

Objective and Level

This training course introduces the OSA 541X and OSA 542X with their features, using GUI and CLI for provisioning. SyncE, PTP and NTP will be presented in more details. SyncJack™, our tool for synchronization signals quality check, will be shown and used during practical exercises.

This class is applicable to different industries (Broadcasting, Power and Enterprise).

Level: Advanced

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. For the handover the student needs to have the GoToTraining Client installed on his computer.

Note: Recording the remote training session is not permitted.

Note: We also recommend our 1 day training on 'Using SyncDirector with Ensemble Controller'. For installation and administration of ENC software, we offer a separate full Ensemble Controller training.

Audience and Benefits

- The class is aimed for synchronization experienced users to achieve advanced knowledge of OSA 541X and OSA 542X
- Certificate of attendance, no exam
- Small courses, 8 attendants maximum

Agenda	THEORY	PRACTICE
	• SyncE, PTP and NTP • System overview and differences between OSA 541X and OSA 542X • Sync Delivery and Sync Assurance applications (PTP, NTP & SyncJack™)	• Working on a setup system and its components • Implementing DCN • Setting up PTP, NTP clock • Using GUI & CLI command line • Database Backup & Restore • Software upgrade • SyncJack™ configuration

Pre-requisites

Engineer or technician having a telecommunication background and synchronization knowledge.

Contact

Training: training@adva.com

Day 1 **9am – 4pm** **Lunch Break** **12am – 1pm**	**Advanced Setup of OSA 541x/2x**

Theory	• The concept of SyncE, PTP and NTP
	• Overview of the OSA 541X and OSA542X family
	  o Hardware overview
	  o Management

Lab Exercises	• Advanced Setup of the OSA 541X and OSA 542X
	  o Using local management port RS232 and DCN Ethernet port
	  o Navigating with WebGUI
	  o DCN Setup (IP settings)
	  ▪ tunnels
	  ▪ management traffic bridging
	  o Routing (Static routes, default gateways)
	  o Name, time and user configuration
	  o Local user and remote authentication
	• Database Backup & Restore
	• Software upgrade

Day 2 **9am – 4pm** **Lunch Break** **12am – 1pm**	**Delivery of Synchronization via Packet Networks**
Theory	• Time & Sync clock configuration (GNSS) • SyncE, PTP, NTP configuration • SyncJack™ (Maintaining and monitoring the performance of synchronization services)

Lab Exercises	• Setup of the time & sync clock
	• SyncE
	  o test with usage of SyncJack™
	• CLK and BITS outputs
	• ToD and PPS outputs
	• PTP & NTP port configuration
	  o Grand Master, different profiles
	  o test with usage of SyncJack™