

Ensemble provides best of breed products and tools to power the telco cloud transformation. With industry leading features for virtual networking, operations and vendor choice, our Ensemble product suite provides an open and pure-play platform that brings virtualized services to life.

Course Objective

- Training is instructor led and is hosted at a Customer or ADVA location to allow for hand on exercises. The session will include a combination of presentation content and reference documentation. The course facilitates an in depth understanding of **monitoring and troubleshooting** with the Ensemble software.
- Practical hands-on training provides an opportunity to practice operating the Ensemble system in a representative real-world environment.
- The training course will define NFV operational best practices and provide an in depth understanding of how to monitor and troubleshoot in the Ensemble environment.
- Configuration and troubleshooting exercises are essential elements of this training course.
- Students will have access to the latest product and support documentation for future reference.

Classroom size limit

- Maximum number of students is 8, unless approved by ADVA training.

Agenda Summary

Day 1

- Technology and Solution brief overview
- Ensemble Solution monitoring
- Troubleshooting

Course Topics

- Solution overview
- Solution maintenance

PRACTICE

- Using the GUI with ADVA software
- Database Backup & Restore, software upgrades
- Solution Monitoring
- Troubleshooting

Pre-requisites

Customer responsibilities:

- Participants to have attended the Ensemble Fundamentals course (or at least a subset) and have a basic understanding of NFV fundamentals (such as the ETSI MANO architecture, basic Linux skills & basic understanding of OpenStack).
- Customer to have representation from all the various teams interacting with the solution, each with specific responsibilities for defining, delivering or managing end-to-end virtualized services.
- Provide access to required VNF QCOW images and associated licenses to support VNF on-boarding and VNF instantiation during the hands-on activities

Lab requirements (for Customer hosted training Customer is responsible for these items):

- Adequate computing infrastructure to host ADVA MANO components as well as 1 uCPE instance per every two (2) students (at a minimum).
- uCPE devices should be provided from the list of pre-qualified hardware platforms.
- Provide early access to their lab networking configuration along with necessary IP addresses to support the MANO and Connector installations.

- Provide necessary meeting space and power to host the number of students, ADVA instructor(s) and associated hardware devices.

Contact

Training: training@adva.com

Day 1 (9 am - 5 pm)

Ensemble Solution Monitoring and Troubleshooting Training

Key content

- Technology and Solution brief overview
- Guided walk-through of the MANO management interfaces and troubleshooting screens
- Verification steps for each Ensemble MANO VM to declare operational readiness
- Verification steps to declare Connector operational readiness
- Verify communication path between MANO and Connector devices
- Verify Authentication process
- Monitoring southbound communication
- Debugging steps (Showtech, syslog, CLI commands, OpenStack dashboard, etc.)
- Common troubleshooting scenarios

Target customer roles

- Admin
- Operator

Additional Exercises throughout the course.

- Using built-in tools & documentation for maintenance and troubleshooting
- Managing alarm profiles and system logs
- Software troubleshooting cases
- Hardware troubleshooting cases (as applicable for ADVA provided hardware)

Target Audience / Customer Typical Roles & Responsibilities

Administrator - owns the solution production deployment and will be responsible for:

- Managing the deployment of Ensemble components
- Managing access to the Ensemble components
- Operating the Ensemble MANO infrastructure
- Configuration of the Ensemble components
- Security of the Ensemble deployment

Background skills:

- Strong IT and / or Operations experience
- Basic knowledge of NFV fundamentals and OpenStack
- Strong Linux background

Operator - responsible for ensuring that Connector (uCPE devices) are successfully deployed

- Post deployment management and monitoring of the uCPE devices and service chains
- Troubleshooting, fault remediation and service restoration

Background skills

- Typical resource will have strong OSS and network management experience
- Strong troubleshooting background (especially via CLI, logs, SNMP, etc.)
- Strong knowledge of NFV fundamentals and OpenStack
- Strong Linux background