

SD-WAN with Contrail Service Orchestration (SD-CSO)

COURSE OVERVIEW

This three-day course is designed to provide students with the knowledge required to work with the Juniper Contrail Service Orchestration solution. Students will gain in-depth knowledge of how to use Contrail Service Orchestration (CSO) and SRX Series devices to instantiate SD-WAN, standalone NGFW, and brownfield NGFW deployments of the Juniper Networks solution.

Through demonstrations and hands-on labs, students will gain experience with features of each of these deployments. This course is updated on a monthly cadence, so that the course reflects the latest CSO release.

COURSE LEVEL

Advanced

AUDIENCE

This course benefits individuals responsible for working with software-defined networking solutions in service provider and enterprise environments, particularly those focused on SD-WAN.

PREREQUISITES

- Basic TCP/IP skills;
- General understanding of software defined networking;
- Basic understanding of the Junos operating system; and
- Attendance of the *Juniper Cloud Fundamentals (JCF)* course prior to attending this class

RELEVANT JUNIPER PRODUCT

- NFX Series
- SRX Series
- VMX/VSRX
- CSO Contrail Services Orchestration

CONTACT INFORMATION

[Contact Juniper Education Services](#)

OBJECTIVES

- Describe a traditional enterprise network.
- Explain the purpose of Contrail Service Orchestration.
- Describe the differences between each CSO use case.
- Describe the basic features of the CSO portals.
- Describe how to add a new tenant to CSO.
- Navigate the CSO customer portal.
- Describe the SD-WAN deployment model.
- Provide an overview of the SD-WAN workflow.
- Implement enterprise intent-based policies.
- Configure SLA profiles and SD-WAN policies.
- Instantiate an SD-WAN topology using CSO and SRX Series devices.
- Describe the NGFW deployment model.
- Describe the workflow for the standalone NGFW deployment.
- Describe the Stage 1 configuration of the SRX Series device created by CSO.
- Describe how to implement intent-based policy using CSO.
- Instantiate a standalone NGFW site using CSO and SRX Series devices.
- Describe the workflow for the brownfield NGFW deployment.
- Describe how to add a brownfield NGFW to CSO.
- Describe the available RBAC features.
- Describe the day one operational features.
- Describe the monitoring features.
- Generate reports.

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COURSE CONTENT

DAY 1

1	Course Introduction
2	Introduction to Contrail Service Orchestration <ul style="list-style-type: none"> SDN/NFV Overview Today's Enterprise Network Juniper's CSO Solution Overview
3	CSO User Interfaces <ul style="list-style-type: none"> Basic Navigation Administrator Portal Walkthrough Adding a Tenant Customer Portal Walkthrough Verifying the State of CSO Lab 1: CSO User Interface
4	SD-WAN <ul style="list-style-type: none"> Contrail SD-WAN Deployment Model SecureOAM Dynamic VPN AppQoE Intent-Based Policies SD-WAN SLA Policies

DAY 2

5	SD-WAN Configuration <ul style="list-style-type: none"> SD-WAN Deployment Workflow Adding OAM Hubs Adding Enterprise Hubs Adding Spoke Sites Adding Licenses and IPD Signatures Configuring Intent-Based Firewall Policies Configuring Application Routing and SLA Profiles Lab 2: Contrail SD-WAN Deployment
6	Standalone NGFW <ul style="list-style-type: none"> NGFW Deployment Model NGFW Deployment Workflows Zone-Based Policies Lab 3: Standalone NGFW Deployment

DAY 3

7	Brownfield NGFW <ul style="list-style-type: none"> Brownfield NGFW Deployment Workflow Adding a Brownfield NGFW
8	Administration and Monitoring <ul style="list-style-type: none"> Role-Based Access Control Monitoring Reporting
A	What's New in Contrail Service Orchestration

SDCSO12082020

Continued on the next column.