

Data Center Automation using Juniper Apstra (APSTRA)

ID APSTRA **Price** US \$ 5,000.—(excl. VAT) **Duration** 5 days

Who should attend

- Networking architects and operators, System Engineers, and DevOps and IT professionals
- People who set up, maintain, and troubleshoot big and small data centers using different vendor products

This course is part of the following Certifications

Juniper Networks Certified Internet Specialist Data Center (JNCIS-DC)

Prerequisites

- Basic knowledge of networking and data center designs
- Understanding of Clos IP fabric
- Overlay and underlay routing designs
- Basic automation design and workflows
- Understanding of network device configuration through the CLI
- Knowledge of BGP
- Completion of the [Introduction to Juniper Data Center Networking \(IJDC\)](#) course

Course Objectives

- Describe what is meant by intent-based networking.
- Describe the Juniper Apstra architecture.
- Navigate the global Apstra UI.
- Describe the basic device abstractions used by Juniper Apstra.
- Create and use system agents to manage devices.
- Describe an IP fabric architecture.
- Explain VXLAN functions and operations.
- Describe Ethernet VPN (EVPN) routing and bridging.
- Describe the Juniper Apstra reference designs.
- Create resources.
- Create tags.
- Configure a rack type.
- Configure templates.
- Build and deploy a blueprint.
- Navigate the blueprint UI.
- Perform basic fabric device operations and troubleshooting.
- Configure role-based access control.
- Configure and apply property sets and configlets.

- Configure connectivity templates.
- Describe the multitenancy capabilities of Juniper Apstra.
- Add a spine and a rack to an existing blueprint.
- Add a generic system and links to an existing blueprint.
- Use the Graph Explorer to traverse the graph datastore.
- Describe the function of an IBA probe.
- Create an IBA probe.
- Describe the purpose of root cause identification.
- Create and manage security policies.
- Create a logical device.
- Create an interface map.
- Configure logging to a remote syslog server.
- Manage the Juniper Apstra Server.
- Describe how Juniper Apstra can enable a Data Center Interconnect (DCI).
- Create a device profile.
- Describe how you can automate the Juniper Apstra server.
- Implement Juniper Apstra Cloud Services.
- Describe Juniper Apstra Cloud Services features.

Course Content

- Intent-Based Networking
- Juniper Apstra—Overview
- Juniper Apstra UI Walkthrough
- Logical Devices, Device Profiles, and Interface Maps
- Device Management
- IP Fabric Architecture
- VXLAN Overview
- EVPN Protocol
- Apstra Reference Designs
- Resources
- Tags
- Design—Racks
- Design—Templates
- Building and Deploying a Blueprint
- Navigating the Blueprint UI
- Basic Blueprint Operations
- Role-Based Access Control
- Property Sets and Configlets
- Connectivity Templates
- Virtual Networks
- Post-Deployment—Adding a Spine and a Rack
- Post-Deployment—Managing Links and Generic Systems
- Graph Explorer
- Intent-Based Analytics—Overview

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- Creating an IBA Probe
- Root Cause Identification
- Security Policies
- Creating Logical Devices
- Creating Interface Maps
- Syslo
- Managing the Apstra Server
- Data Center Interconnect

Self-Study Modules

- Creating Device Profiles
- Introduction to the REST API and Terraform
- Juniper Apstra Cloud Services—Overview
- Implementing Juniper Apstra Cloud Services

Data Center Automation using Juniper Apstra (APSTRA)

Training Centres worldwide



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