

# 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

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## Training Centres worldwide



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