

## Junos Platform Automation and DevOps (JAUT)

ID JAUT Preis US\$ 5'000.— (exkl. MwSt.) Dauer 5 Tage

### Zielgruppe

This course benefits individuals responsible for configuring and monitoring devices running the Junos OS.

### Voraussetzungen

- Intermediate-level networking knowledge.
- Understanding of the Open Systems Interconnection (OSI) model and the TCP/IP protocol suite.
- Attendance of the Introduction to [Introduction to Junos Platform Automation and DevOps \(JAUT\)](#) course prior to attending this class.

### Kursziele

- Describe the benefits of network automation
- Explain basic principles of DevOps and NRE
- Describe different approaches and tools used for Junos Automation
- Discuss how templates are used for Junos automation
- Understand Jinja2 syntax
- Describe various methods Junos PyEZ can use to connect to a Junos device
- Execute Junos RPCs using Junos PyEZ
- Explain the functionality of various Junos PyEZ utilities
- Use Jinja2 templates with Junos PyEZ
- Use Junos PyEZ Tables and Views
- Securely connect to Junos devices using Ansible
- Use advanced Ansible playbook functionality
- Work with Ansible variables
- Manage Junos device configurations using Jinja2 templates and Ansible
- Explain the use of SLAX language with Junos
- Understand basic SLAX syntax
- Describe SLAX templates, variables, and flow control statements
- Understand the Junos function library
- Explain the difference between available SLAX versions
- Explain how to create and run Junos op scripts
- Use SLAX and Python languages to develop op scripts
- Use arguments with op scripts
- Issue RPCs from op scripts
- Change the configuration with op scripts

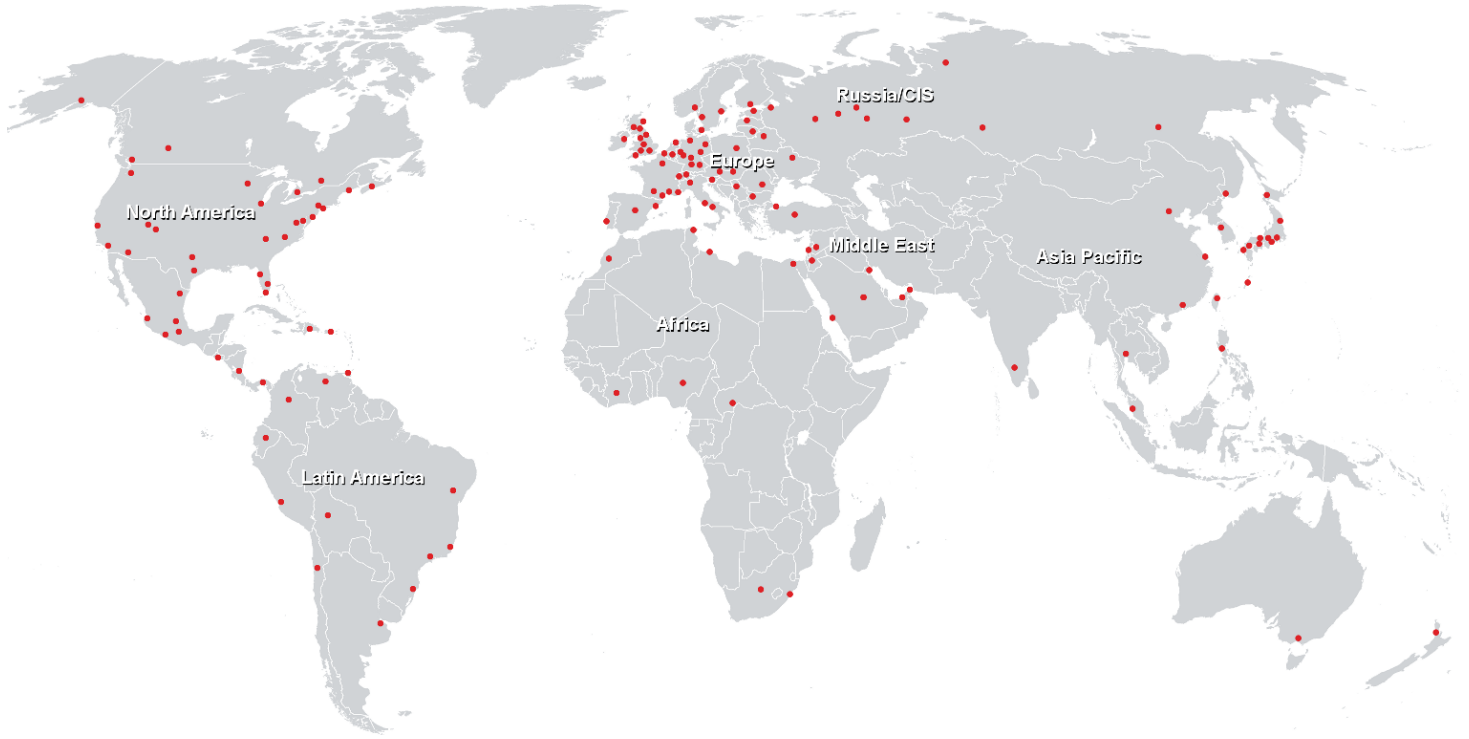
- Describe how commit scripts can be used to make changes to the configuration
- Describe how to use commit scripts to generate custom warnings and errors during a commit
- Explain how to use SLAX and Python languages to develop commit scripts
- Configure and enable commit scripts
- Identify Junos OS events
- Create Junos OS event policies
- Create Junos OS event scripts
- Understand the use of Junos OS SNMP scripts
- Create and configure Junos OS SNMP scripts
- Explain basic Salt architecture
- Understand how Junos devices are managed with Salt
- Use Junos execution and state modules for Salt
- Understand the SLS file format
- Describe how JSNAPy can help automate Junos
- Install and configure JSNAPy
- Use JSNAPy to create snapshots
- Use JSNAPy to perform tests
- Describe the YANG language features
- Understand the syntax of YANG
- Explain how YANG is used in Junos OS
- Describe the advantages of OpenConfig
- Modify the Junos OS configuration using OpenConfig
- Describe using OpenConfig with the Junos Telemetry Interface (JTI)
- Explain what is JET
- Understand the JET Service API
- Understand the JET Notification API
- List protocols and data formats used with JET
- Develop simple JET applications
- Understand the Junos Telemetry Interface
- Provision Junos Telemetry sensors
- Explain the difference between Native and gRPC sensors
- Understand Telemetry message formats
- Explain the advantages of Contrail HealthBot
- Explain the purpose and value of ZTP
- Describe the components and operations of ZTP
- Deploy a QFX5100 Series switch using ZTP
- Setup the JET VM
- Create JET Packages

### Kursinhalt

- Course Introduction

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- Junos Automation Fundamentals
  - Ansible Intermediate
  - SLAX
  - Jinja2
  - Advanced Junos PyEZ
  - Junos Op Scripts
  - Junos Commit Scripts
  - Junos Event Policies and Event Scripts
  - Junos SNMP Scripts
  - JSNAPy
  - YANG
  - Juniper Extension Toolkit
  - Junos Telemetry
  - Salt
  - OpenConfig
  - Appendix: Zero Touch Provisioning
  - Appendix: Using JET Virtual Machine

**Weltweite Trainingscenter**



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