Advanced Junos Platform Automation and DevOps (AJAUT)

ID AJAUT **Prix** US $ 4 000,– (Hors Taxe) **Durée** 4 jours

A qui s'adresse cette formation

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

Pré-requis

Students should have taken theJuniper Platform Automation and NetDevOps (JAUT) course or have equivalent knowledge.

Objectifs

- Understand DevOps and how the DevOps process can improve Junos Automation.
- Create, configure, and manage Docker Containers.
- Use GitLab as a repository for code and configuration data.
- Use Ansible and Jinja2 templates to configure multiple Junos devices.
- Use Ansible to enforce design constraints using templates.
- Use Ansible to build Ansible playbooks that work in multi-vendor environments.
- Install and configure Robot to perform automated tests on Junos devices.
- Use Jenkins to implement continuous code and configuration integration.
- Implement a DevOps automated lab testing solution.

Contenu

Day 1 - Course Introduction

Introduction to DevOps and Event Driven Infrastructure

- DevOps
- Infrastructure as Code
- Event Driven Infrastructure (EDI)

Using Docker for DevOps

- Introduction to Docker Containers
- Installing and Configuring Docker
- Managing Docker Networking
- Managing Applications Running in Docker
- Monitoring and Troubleshooting Docker

- LAB 1: Using Docker Containers

Using GitLab as a Configuration and Code Repository

- Version Control Workflow
- Git and GitLab Explained
- GitLab Install Overview
- Creating GitLab Projects
- Creating Git Repositories
- Staging and Committing Files
- Cloning and Pushing Repository Data
- Branching and Merging
- Resolving Merge Conflicts

- LAB 2: Using GitLab

Day 2

Using Ansible to Manage Networking Devices

- Review of Ansible Basics
- Using Ansible with Jinja2 Templates
- Using Ansible to Enforce Network Design Constraints using Templates
- Using Ansible for (NOOB) deployments while maintaining Idempotency
- Creating Multi-Vendor Playbooks
- Using Ansible to Check Code In and Out of GitLab
- Using GitLab with Ansible for Automated Version Control
- Using Ansible for Auditing
- Using Ansible with Vagrant

- LAB 3: Using Ansible for Network Deployments

Day 3 Robot Framework

- Robot Overview
- Perform Automated Testing using Robot
- The pybot_jrouter Modules
- Automated Testing - Use Case

- LAB 4: Using the Robot Framework for Automated Testing

on Junos Devices

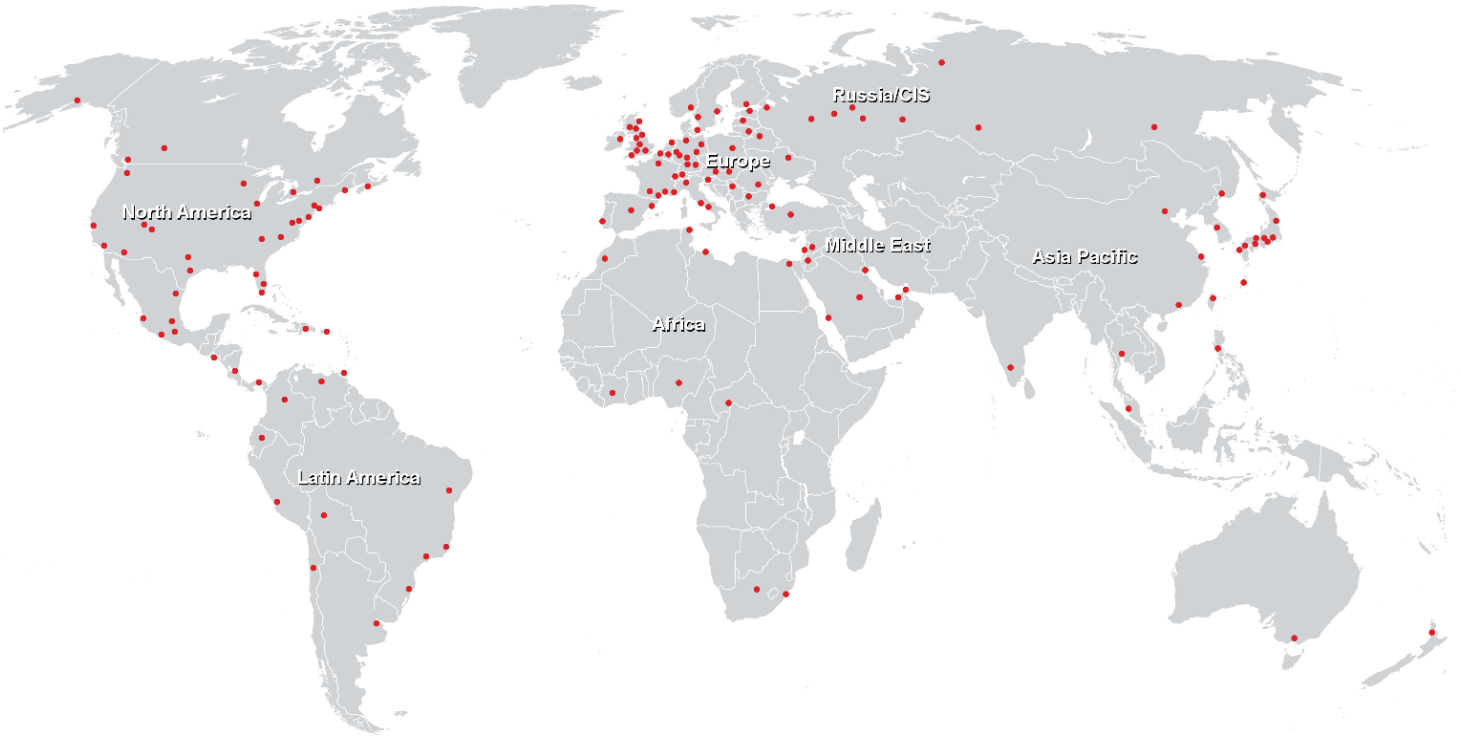
Jenkins

- Jenkins Overview
- Importing Jobs into Jenkins
- Implementing Continuous Integration
- Git Module
- Robot Module
- Ansible Module

- LAB 5: Using Jenkins to Implement Continuous Integration

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Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3
CH-8304 Wallisellen
Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch