

# Junos OS Evolved for Cloud Networking (JECN)

ID JECN Prix sur demande Durée 3 jours

## A qui s'adresse cette formation

This course benefits individuals responsible for working with Junos Evolved.

## Pré-requis

The prerequisites for this course include:

- An intermediate-level understanding of Junos configuration and troubleshooting.

## Objectifs

After successfully completing this course, you should be able to:

- Identify key differences between Junos OS and Junos Evolved
- Explain the high-level architecture of Junos Evolved
- Identify the components of Junos Evolved
- Explain basic Linux functions in the context of Junos Evolved
- Perform configuration tasks in Junos Evolved
- Perform management tasks in Junos Evolved
- Deploy third-party and custom applications in Junos Evolved
- Explain the fundamentals of Docker containers
- Deploy Docker container-based applications on Junos Evolved
- Understand how Junos Evolved manages system state
- Understand the Junos Evolved network stack and host packet path
- Explain logging and tracing in Junos Evolved
- Perform basic troubleshooting tasks in Junos Evolved

## Contenu

### DAY 1

#### Course Introduction

#### 2 Junos Evolved Overview

- Junos OS versus Junos Evolved

- High Level Junos Evolved Architecture

#### 3 Junos Evolved Software Architecture

- Junos Evolved components that manage system state
- Junos Evolved components that form nodes into a coherent system
- Junos Evolved components that manage upgrades

#### 4 Linux Basics for Junos OS Evolved

- Linux Components of Junos Evolved Configuration
- Common Linux Commands

#### 5 Junos OS Evolved Configuration Tasks

- Host VPN
- Management VRF

Lab 1: Configuring Junos Evolved

#### 6 Junos OS Evolved Management Tasks

- Perform root password recovery
- Upgrade or downgrade Junos Evolved software
- Configure the Two-Way Active Measurement Protocol

Lab 2: Managing Junos OS Evolved

### DAY 2

#### 7 Third-Party Applications on Junos Evolved

- Describe third-party application support
- Deploy a custom application
- Daemonize a custom application

Lab 3: Deploying Third-Party Applications on Junos Evolved

#### 8 Docker Basics

- Explain key Docker concepts
- Use Docker commands to create and manage containers

Lab 4: Docker Basics

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## 9 Third Party Applications with Docker

- Explain the requirements for Docker applications on Junos Evolved
- Deploy a Docker collectd container on Junos Evolved
- Deploy a monitoring infrastructure based on Prometheus and Grafana on Junos Evolved

Lab 5: Docker Containers on Junos Evolved

## 10 Case Study: Deploying a Custom Application on Junos Evolved

- Deploy a custom Juniper DDS client which publishes to a Kafka topic

## DAY 3

## 11 Troubleshooting Junos Evolved – System State

- Describe how to query Junos Evolved system state
- Troubleshoot object dependency issues

## 12 Troubleshooting Junos Evolved – Network Stack and Host Packet Path

- Explain the Linux and Junos network stacks

## 13 Troubleshooting Junos Evolved – Logging and Tracing

- Explain the system logging and tracing infrastructure in Junos Evolved
- Explain how to retrieve support information and statistics
- Explain how to inspect Docker container statistics and configuration details

Lab 6: Troubleshooting Junos Evolved

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### Centres de formation dans le monde entier



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