

# Juniper Networks Design Fundamentals (JNDF)

**ID JNDF** **Prix** US \$ 3 000,— (Hors Taxe) **Durée** 3 jours

## A qui s'adresse cette formation

This course is targeted for Juniper Networks system engineers, partner sales engineers (including Champions), and services partners. However, the course is also applicable to a general audience of Juniper customers with a desire to learn more about network design.

## Cette formation prépare à la/aux certifications

Juniper Networks Certified Internet Associate Design (JNCIA-DESIGN)

## Pré-requis

The following are the prerequisites for this course:

- Knowledge of routing and switching architectures and protocols.
- Knowledge of Juniper Networks products and solutions.
- Understanding of infrastructure security principles.
- Basic knowledge of hypervisors and load balancers.

## Objectifs

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

- Provide an overview of network design needs and common business requirements.
- Describe key product groups related to campus, WAN, data center, and security including both Juniper Networks product groups and some key competing solutions.
- Analyze and interpret common RFP requirements.
- Scope a network design by gathering data and working with key stakeholders.
- Organize the data that has been collected from the customer.
- Define boundaries so they can properly structure the design scope.
- Provide an overview of network security and common vulnerabilities.
- List high-level design considerations and best practices for securing the network.
- Formulate Campus design proposals using industry and

organizational best practices.

- Describe design considerations and best practices for design in the campus network.
- Formulate WAN design proposals using industry and organizational best practices.
- Describe design considerations and best practices for WAN design in the network.
- Formulate data center design proposals using industry and organizational best practices.
- Describe design considerations and best practices for design in the data center.
- Define business continuity and its importance in a network.
- Describe high availability design considerations and best practices.
- Provide an overview of high availability solutions.
- Provide an overview of environmental considerations in network design.
- List design considerations and best practices for managing the network.
- Provide an overview of Juniper Networks and third party options for network management.
- List design considerations and best practices for network automation.
- Describe the foundational topics that have been taught throughout the course.
- Create a network design proposal that satisfies customer requirements and business needs.
- Provide an overview of the steps involved in migrating a network.
- Describe best practices used in network migration.

## Contenu

### Day 1

Chapter 1: Course Introduction

Chapter 2: Network Design Fundamentals

- A Need for Design
- Knowledge is King
- A Proposed Design Methodology
- A Reference Network

Chapter 3: Understanding Customer Requirements

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- RFP Requirements
- Scoping the Design Project
- Analyzing the Data
- Understanding Customer Requirements Lab

## Day 2

### Chapter 4: Organizing the Data

- Analyze the Data
- Understanding Boundaries

### Chapter 5: Securing the Network

- Why Secure the Network?
- Where to Secure the Network
- Security Design Considerations

### Chapter 6: Building the Design: Campus

- Following Design Best Practices
- Campus Design
- Building the Design: Campus Lab

### Chapter 7: Building the Design: Wide Area Networks

- Following Design Best Practices
- WAN Design and Applications
- Building the Design: WAN Lab

### Chapter 8: Building the Design: Data Center

- Following Data Center Design Best Practices
- Data Center Design
- Building the Design: Data Center Lab

### Chapter 9: Business Continuity and Network Enhancements

- Business Continuity Planning
- High Availability Design Considerations and Best Practices
- Offerings and Solutions
- CoS and Traffic Engineering Considerations
- Environmental Design

## Day 3

### Chapter 10: Network Management and Automation

- Designing for Network Management
- Designing for Network Automation
- Enhancing the Design Lab

### Chapter 11: Putting it to Practice

- Foundational Elements Review
- Executive Summary
- Capstone Lab: Putting it into Practice

### Appendix A: Network Migration Strategies

- Migration Overview
- Migration Approaches
- Migration Scenarios
- Workflow
- Best Practices

### Appendix B: Job Aids

## Course Level

JNDF is an associate-level course.

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## Centres de formation dans le monde entier



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