OPT201

Cisco NCS 2000 Deploying 96-Channel Flex Spectrum

24 horas | Routing & Switching | Cisco

Cisco Continuing Education Credits

24 CE Credits

INTRODUÇÃO

The Cisco NCS2000 Deploying 96-Channel Flex Spectrum (OPT201) v3.0 course shows you how to plan, configure, and control optical networks using the Cisco® Network Convergence System (NCS) 2000 series Flex Spectrum platform.

The course teaches you how to design Flex Spectrum networks with multi-degree Reconfigurable Optical Add-Drop Multiplexer (ROADM) multi-shelf nodes using the Cisco Transport Planner (CTP) software.

You'll learn how to:

Install the Cisco NCS 2000 series hardware
Configure an optical network and circuits using the Cisco Transport Controller (CTC) software
Learn which components and configurations take advantage of and/or are required for the Flex Spectrum 96-channel feature
Configure optical networks with multidegree ROADM multishelf nodes
Configure optical networks with colorless, contentionless, omnidirectional, and MPO cross-connect advanced features
Describe and configure the NCS 2000 400-Gbps Xponder line card

OBJETIVO DO CURSO

After taking this course, you should be able to:

Describe the hardware and components required and used with the Flex Spectrum feature
Design optical networks in the Cisco Transport Planner software
Install the hardware, including multishelf nodes
Perform node turn-up and create circuits using the Cisco Transport Controller software
Configure optical networks with multidegree ROADM multishelf nodes
Configure optical networks with colorless, contentionless, omnidirectional, and MPO cross-connect advanced features
Describe and configure the NCS 2000 400-Gbps Xponder line card
Add a node to an existing DWDM ring
Describe the NCS 2000 Troubleshooting Guide
Use the features and documentation with Transport Controller to perform maintenance, testing, and basic troubleshooting

PÚBLICO-ALVO

This course is designed for technical professionals who need to know how to deploy a Cisco NCS 2000 Series Dense Wavelength-Division Multiplexing (DWDM) network with Flex Spectrum.

The primary audience for this course includes:

Designers
Systems engineers and implementation staff
Network operations center personnel
Technical support personnel who are involved with the deployment, operations, and maintenance of the Cisco NCS 2000 Series
Channel partners and resellers

PRÉ-REQUISITOS

Prerequisites
To fully benefit from this course, you should first complete the Cisco Fundamentals of Fiber Optics Technology (FFOT) video training course, or have an equivalent level of knowledge and skills.

CONTEÚDO PROGRAMÁTICO

Outline
DWDM and Flex Spectrum Foundation
NCS 2000 Chassis and Cards
Design ROADM Networks with CTP
Hardware Installation and Multishelf
Node Turn-Up and Circuit Creation
Advanced Feature Networks and Circuits
Testing, Maintenance, and Basic Troubleshooting
Spectrum Switched Optical Network

Lab outline
Cisco Transport Controller
Cisco Transport Planner
Adding a Node to Existing DWDM Ring Network
Optical Channel Network Connection (OCHNC) Circuits
Optical Channel Client Connection (OCHCC) Circuits
Colorless Ports and Circuits
Contentionless Circuits
Connection Verification
Performing the Optical Time Domain Reflectometer (OTDR) Test
Maintenance and Performance Monitoring
MSTP Troubleshooting
Configuring the 400XP card