DCNX7K (CONFIGURING CISCO NEXUS 7000 SERIES SWITCHES)

Objetivo

Course Objectives: Identify the features of the Cisco Nexus family of switches, and the Cisco Nexus 7000 Series Switches features and deployment models Identify Cisco Nexus 7000 Series hardware, management tools, and troubleshooting features that are available on the Cisco Nexus 7000 Series Switches. You will also learn how to configure the relevant management tools and be able use the troubleshooting key features on the Cisco Nexus 7000 Series Switches. Identify the networking and storage features that are available on the Cisco Nexus 7000 Series Switch and learn how to configure, manage, optimize, verify and troubleshoot them. Management and understanding of Cisco Nexus 7000 Switch Nexus switch management tools Configuration of Nexus 7000 switch security and Quality of Service features Additional functionality and features including: FCoE, FabricPath, OTV, MPLS and security

Público Alvo

Data Center professionals wanting design, deploy, operation and troubleshoot Cisco Nexus 7000 solutions.

Pré-Requisitos

It is recommended, but not required, to have the following skills and knowledge before attending this course: Good understanding of data center technologies, networking protocols, routing, and switching Recommended CCNA® Data Center Certification Recommended attendance at the Implementing Cisco IP Routing (ROUTE) class Recommended attendance at the Implementing Cisco IP Switched Networks (SWITCH) class

Carga Horária

40 horas (5 dias).

Conteúdo Programático

Cisco Nexus 7000 Series Switches

Describing the Cisco Nexus Product Family
Describing the Cisco Nexus 7000 Series Switch Deployment Models
Cisco Nexus 7000 Series Switch Hardware

Describing the Cisco Nexus 7000 and 7700 Series Switch Chassis
Describing Cisco Nexus 7000 Series Switch Supervisor, I/O, and Fabric Modules
Describing Cisco Nexus 7000 Series Switch Forwarding and Packet Flow
Cisco Nexus 2000 Series Fabric Extender

Describing Cisco Nexus 2000 Series Fabric Extender Hardware
Describing Cisco Nexus 2000 Series Fabric Extender Support on Cisco Nexus 7000 Series Switches
Cisco NX-OS Software

Describing Cisco NX-OS Architecture, Key Features, and Capabilities
Describing the Cisco Nexus 7000 Series Licensing Model
Cisco Nexus 7000 Series Switch Administration, Management, and Troubleshooting

Using Cisco Nexus 7000 Series Switch Management Interfaces and Setup Utilities
Managing Cisco Nexus 7000 Series Switch User Access with Cisco NX-OS
Configuring Cisco Nexus 7000 Series Switch System Management Features
Using Troubleshooting Processes and Tools
Troubleshooting Memory and Packet Flow Issues
Describing the Cisco Nexus 7000 Series NAM-NX1
Virtual Device Contexts on Cisco Nexus 7000 Series Switches

Describing Virtual Device Contexts
Configuring VDCs
Describing Management Settings for VDCs
Layer 2 Switching Features on Cisco Nexus 7000 Series Switches

Describing and Configuring Security Features
Configuring Cisco Nexus 2000 Series Fabric Extenders
Configuring VLANs and Advanced VLAN Features
Configuring STP and STP Extensions
Configuring Q-in-Q
Port Channels and Virtual Port Channels on Cisco Nexus 7000 Series Switches

Describing Port Channels
Describing vPCs
Configuring vPCs
Troubleshooting vPC
Cisco FabricPath on Cisco Nexus 7000 Series Switches

Describing Cisco FabricPath Architecture
Configuring Cisco FabricPath
Troubleshooting Cisco FabricPath
Describing Cisco DFA Architecture
Layer 3 Switching Features on Cisco Nexus 7000 Series Switches

Describing the Cisco NX-OS Forwarding Architecture
Configuring Routing Protocols
Configuring FHRP Protocols
Describing and Configuring BFD
Configuring Multicast
MPLS on Cisco Nexus 7000 Series Switches

Describing MPLS

Configuring MPLS on Cisco Nexus 7000 Switches
Configuring MPLS Layer 3 VPNs
Configuring MPLS Layer 2 VPNs
Configuring MPLS TE
Cisco OTV on Cisco Nexus 7000 Series Switches

Describing Cisco OTV
Configuring Basic Cisco OTV
Configuring Cisco OTV Advanced Features
VXLAN on Cisco Nexus 7000 Series Switches

Describing VXLAN MP-BGP EVPN Technology
Configuring VXLAN ad MP-BGP EVPN on Cisco Nexus 7000 Seres Switches
LISP on Cisco Nexus 7000 Series Switches

Describing LISP
Configuring LISP on Cisco Nexus 7000 Series Switches
FCoE on Cisco Nexus 7000 Series Switches

Describing FCoE
Describing FCoE Support on Cisco Nexus 7000 Series Switches
Configuring FCoE on Cisco Nexus 7000 Series Switches
Security Features on Cisco Nexus 7000 Series Switches

Describing and Configuring Security Features
Describing and Configuring Cisco TrustSec on Cisco Nexus 7000 Series Switches
QoS on Cisco Nexus 7000 Series Switches

Describing QoS in the Data Center
Configuring QoS on the Cisco Nexus 7000 Series Switches
Cisco ITD and RISE on Cisco Nexus 7000 Series Switches

Describing Cisco ITD
Configuring Cisco ITD
Describing Cisco RISE
Cisco NX-API and Python on Cisco Nexus Series Switches

Using Cisco NX-API on Cisco Nexus 7000 Series Switches
Using Python on Cisco Nexus 7000 Series Switches

Labs
Lab 1: Cisco Nexus 7000 Platform Discovery
Lab 2: Configuring User Management
Lab 3: Configuring System Management
Lab 4: Configuring Troubleshooting Features
Lab 5: Configuring Layer 2 Switching
Lab 6: Configuring Virtual Port Channels
Lab 7: Configuring Cisco FabricPath

Lab 8: Troubleshooting vPCs and Cisco FabricPath
Lab 9: Configuring Layer 3 Switching
Lab 10: Configuring FHRP
Lab 11: Configuring MPLS
Lab 12: Configuring Cisco OTV
Lab 13: Implementing VXLAN Bridging on the Cisco Nexus 7000 Series Switch
Lab 14: Configuring LISP
Lab 15: Configuring FCoE
Lab 15: Configuring Security Features
Lab 17: Configuring QoS
Lab 18: using Cisco Nexus 7000 Series Switch NX-API