

Advanced Services' VTS on Configuring the Cisco Nexus Data Center Transport (CCNDC-T) Version 1.0



This Virtual Training Services (VTS) offering "Configuring the Cisco Nexus Data Center Transport (CCNDC-T) Version 1.0" is an educational session that includes lecture by a Cisco subject matter expert and hands-on practice exercises that focus on designing and configuring a data center network to support a virtual computing environment (VCE). Using the Cisco Nexus® family of products, you will construct a highly available and modular network infrastructure that can be used to provide virtualized cloud-based services. You will learn about configuring the Cisco Nexus 2000 Series Fabric Extenders and Cisco Nexus 5000 and 7000 Series Switches into a scalable data center network.

Duration

Virtual classroom offering: two days, six hours a day.

The virtual classroom offering allows you to attend the live instruction, along with getting access to our lab equipment, without leaving your office. For more information about the virtual classroom delivery format, go to www.cisco.com/go/ase.

Target Audience

This session is intended for network or data center professionals who are involved in the design, implementation, or support of virtualized and/or cloud compute data centers..

This VTS supports a maximum of 12 students in a single session.

Session Objectives

Upon completion of this session, you should be able to:

- Describe current data center strategies such as cloud computing, virtualization, and unified fabric
- Configure a modern end-to-end data center infrastructure using the Cisco Nexus 2000, 5000, and 7000 Series products to support a virtual computing environment

Session Prerequisites

Following are the prerequisites for this session:

- CCNA® level networking knowledge and experience configuring Cisco® network routers and switches
- Introductory level understanding of data center architectures and virtualization concepts

To locate Cisco courses that cover the listed prerequisites, go to the Cisco Training & Events webpage at www.cisco.com/web/learning/index.html.

Session Outline

The session outline is as follows:

- Module 1: Determining the Elements of Proper Data Center Design
 - Cloud Computing Defined
 - Designing a Data Center Using Virtualization
 - Technology That Enables Server, Networking, and Storage Virtualization
 - Building a Data Center Unified Fabric with Fibre Channel over Ethernet
- Module 2: Selecting Hardware to Meet the Data Center Design Requirements
 - Building a Data Center with a Hierarchical Network Design
 - Cisco Nexus 7000 Core and Aggregation Layer Hardware Overview
 - Cisco Nexus 5000 Access Layer Hardware Overview
 - Cisco Nexus 2000 Virtual Access Layer Hardware Overview
 - Placing the Physical Equipment in the Data Center Design
- Module 3: Performing Initial Device Setup and Software Configuration
 - Cisco NX-OS Data Center Network Operating System Overview
 - Initializing and Monitoring a Cisco Nexus Device
 - Performing an Upgrade of the Cisco NX-OS Software
 - Creating a Virtual Network Device
- Module 4: Configuring and Verifying the Data Center Transport Infrastructure
 - Layer 2 Data Center Design Using VLANs, Virtual Port Channels, Rapid Spanning Tree, and Fabric Extenders
 - Configuring and Verifying the Layer 2 Data Center Topology
 - Layer 3 Data Center Design Using Routed Interfaces/Subinterfaces/VLANs, Hot Standby Routing Protocol, and Open Shortest Path First
 - Configuring and Verifying the Layer 3 Data Center Topology

Lab Outline

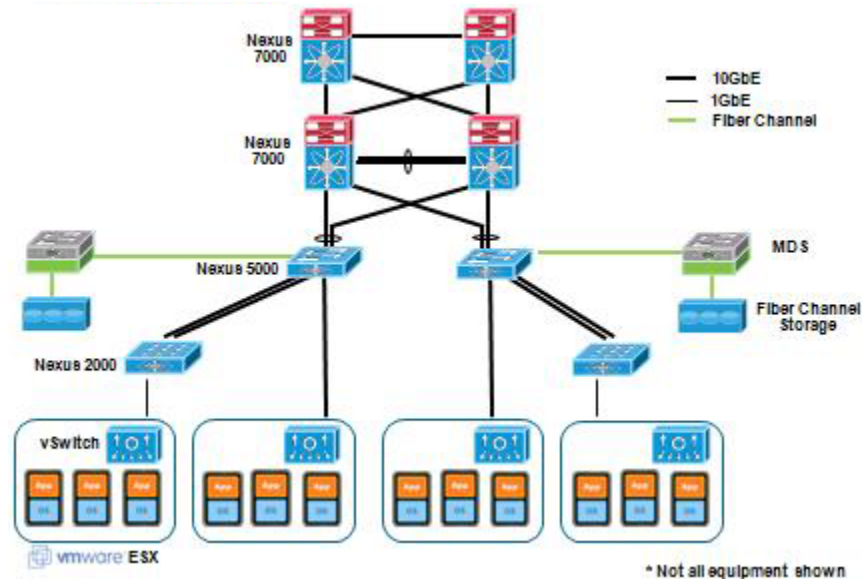
The lab outline is as follows:

- Lab 1: Managing the Cisco Nexus Hardware and Software Platforms
- Lab 2: Configuring and Verifying the Layer 2 Data Center Topology
- Lab 3: Configuring and Verifying the Layer 3 Data Center Topology

Lab Topology

Figure 1 shows the lab topology that is used in this session.

Figure 1. Lab Topology for Configuring the Cisco Nexus Data Center VTS



Registration Information

VTS sessions are offered to customers who have a Cisco master services agreement (MSA). If you are interested in scheduling this session for your facility, make the request through your Cisco services or product account manager. For more information about this offering, send an email to aeskt_registration@cisco.com.

For More Information

For more information about Advanced Services Education course offerings, including custom training options, as well as Advanced Services Curriculum Planning Services and the Advanced Services Technical Knowledge Library (TKL), refer to the Advanced Services Education website at www.cisco.com/go/ase.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV
Amsterdam, The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

CCDE, CCENT, Cisco Eos, Cisco StadiumVision, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn is a service mark; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0803R)