

## **Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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# Citrix NetScaler SD-WAN Hands-on Workshop

CODE: LENGTH: PRICE:

CTX-CNS-200 16 Hours (2 days) \$2,000.00

## **Description**

In this two day NetScaler SD-WAN workshop, you will learn the various SD-WAN implementations and deployment modes available, and how to choose the one that is right for your organization.

Take a tour of the underlying architecture of SDWAN and learn how to differentiate between the various components.

Understand how the different elements of SD-WAN come together to provide a better network experience.

## Topics include:

- -Quality of Service
- -Classes of Service
- -Rules
- -Dynamic Routing,
- -DHCP Services,
- -Zero Touch Deployment and the SD-WAN management tools available.

This workshop is meant to be an open, interactive working session. Hands-on labs to be provided.

## **Prerequisites**

- Understanding of different computer networks such as local area network (LAN) and wide area network (WAN)
- Familiarity with data-carrying techniques, including Multiprotocol Label Switching (MPLS), Metro Ethernet, and VPN tunneling
- Understanding of techniques for increasing data transfer efficiencies / WAN optimization
- General understanding of branch network technologies; Routing, Firewall, DHCP, Internet control, Quality of Service

#### **Programme**

#### Module 1: SD-WAN Overview

- -An introduction to NetScaler SD-WAN and the different product platforms offerings. Learn about various SDWAN features, by edition, and the value they provide.
- -Understand how SD-WAN fits into your environment, and how to utilize the management tools available to managethe NetScaler SD-WAN.

#### **Module 2: SD-WAN Architecture**

- -Take a tour of the SD-WAN's underlying architecture.
- -Topics include the packet processing and services architecture as well as the management architecture.
- -Learn how the NetScaler Management and Analytics System (MAS) and SD-WAN Center can facilitate the management of your NetScaler deployment.

## Module 3: SD-WAN Quality of Service

- -Learn how Quality of Service fits into your NetScaler SD-WAN deployment and the various classes of services available.
- -Gain an understanding of SD-WAN transmit modes including load balance paths, duplication paths, and override service.

## Module 4: SD-WAN Deployment Modes and Configuration

- -An introduction to the deployment modes available for NetScaler SD-WAN.
- -Delve into the various configurations available to fit your networking needs.
- -Topics include interface groups, virtual IP addresses, and WAN links.
- -Gain an understanding of the Change Management feature and how it helps distribute information across your system.

#### Module 5: SD-WAN 9.0 Features

- -Explore the NetScaler SD-WAN 9.0 features. Topics include Metered Links, IPsec, and MPLS QoS Queues.
- -Discover how these feature sets can provide your organization with the right toolset to optimize your networking experience.

## Module 6: SD-WAN 9.1 Features

- -Take a tour of the NetScaler SD-WAN 9.1 features in this module.
- -Gain an understanding of dynamic routing, virtual routing and forwarding, secure internet breakout, DHCP, IPsec VPN termination, and zero touch deployment.

#### Module 7: SD-WAN 9.2 Features

-In this module, you will gain an understanding of the new features SD-WAN 9.2 has to offer.

-These include: application classification, top application reporting, stateful firewall, network address translation, and management and platform enhancements

Exercise 1: Exercise 2: Exercise 3:

-SD-WAN Installation Design -Configuration of the Head-End SD-WAN -Configure the remote office SD-WAN node

Exercise 4: Exercise 5:

-Configure the SD-WAN path relationships -Provision the MCN using the saved configuration

Exercise 6: Exercise 7: Exercise 8:

-Applying the Configuration to the Remote Appliance Troubleshooting the dead path state -SD-WAN Quality of Service

Exercise 9: Exercise 10:

-SD-WAN Center deployment and configuration -Use SD-WAN Center to calculate MOS

Exercise 11: Exercise 12: Exercise 13:

-Prepare the environment with a working configuration -Validating bandwidth aggregation -Customization of the Rules and Classes

Exercise 14: Exercise 15: Exercise 16: Exercise 17: Exercise 18: Exercise 19:

-Metered Links -MPLS Queues -IPsec data encryption -Path state sensitivity control -Dynamic routes -DHCP review

Exercise 20: Exercise 21:

-Virtual routing and forwarding -Zero Touch deployment

#### **Session Dates**

On request. Please Contact Us

## **Additional Information**

This training is also available as onsite training. Please contact us to find out more.