



## Dell Campus Network Design, Advanced Features, and Configuration

In association with : **DELL**EMC



## **Dell Campus Network Design, Advanced Features, and Configuration**

### **Overview**

The focus of this 3-day Campus Networking class will use a combination of lecture, demonstration, and hands-on activities to help students gain the skills needed to install, operate, and maintain Dell Networking OS 6 hardware. Students will also learn the design criteria for a Campus Network, advanced networking principles, network protocols, and tools/techniques used for managing and troubleshooting a Campus Network

### **Course Objectives**

Upon completion of this course, you will be able to:

- Troubleshoot common and unique challenges to a Campus Network design
- Understand the Dell Networking Campus product portfolio and where they fit into a Campus Network
- Describe the features available and configuration approach of the Dell Networking OS 6 supported switches
- Verify, manage, and troubleshoot Dell Networking OS 6 switch configuration issues

### **Audience**

- IT Professionals and Network Administrators who implement and support Dell Networking Campus product portfolio.

### **Course Topics**

Dell Campus Networking Design and Product

## Overview

- Command Line Interface and Interfaces
- VLAN
- Spanning Tree Overview
- RSTP-PV
- M-LAG
- RSPAN
- Policy Based Routing
- Stacking
- Dell Open Manage Network Manager (OMNM)

Dell Campus Network Design, Advanced Features and Configuration	
Delivery method	<ul style="list-style-type: none"> <li>• Instructor-led training</li> <li>• Virtual instructor-led training</li> </ul>
Duration	3 days
Skill Level	Intermediate to Advanced
Prerequisites	<b>Strongly recommended:</b> Dell Campus Networking N-Series <u>Basic Features &amp; Administration</u> or a basic knowledge of Dell Networking OS 6 product and features.
Schedule	Visit <a href="#">LearnDell</a> for upcoming dates and registration information

## Course Outline

### Module 1: Overview of Campus Network Design & Dell Networking Campus Products

- Design Overview
- Campus Requirements
- Product Overview
- N4000
- N3000
- N2000

### Module 2: Command Line Interface and Interfaces

- Overview of CLI
- Console access and initial switch configuration
- Configure out of Band Management interface of the switch
- Configure the switch for remote access (Telnet)
- Navigate the Command Line Interface (CLI)
- Interface types

### Module 3: VLAN

- Overview of VLAN
- Default VLAN and Native VLAN (port mode general)
- Routed VLANs and Sub-interface configuration
- Trunks vs. Access ports
- Private VLANs

### Module 4: Spanning Tree Overview

- Stacking Tree Protocol (STP)
- Rapid Spanning Tree Protocol (RSTP)
- Multiple Spanning Tree Protocol (MSTP)
- Per VLAN Spanning Tree (PVST+)

### Module 5: RSTP-PV

- RSTP-PV Overview
- RSTP-PV Configuration
- RSTP—PV DRC/IRC

## **Module 6: M-LAG**

- M-LAG Overview
- M-LAG Configuration
- M-LAG Caveats

## **Module 7: RSPAN**

- RSPAN Overview
- RSPAN Configuration
- RSPAN Limitations

## **Module 8: Policy Based Routing**

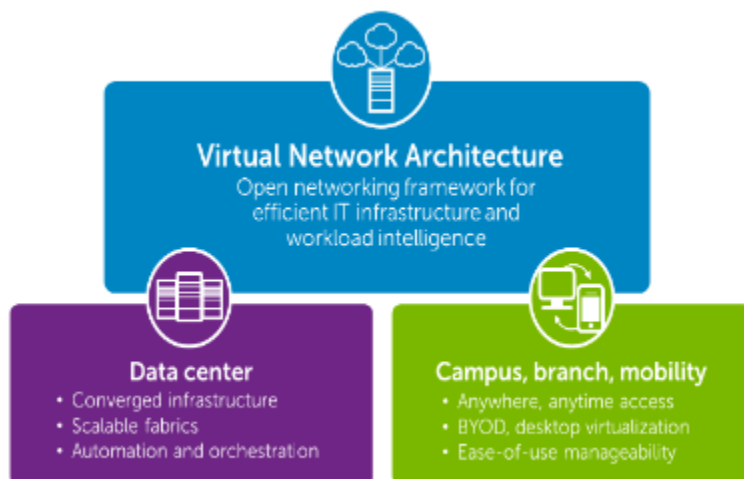
- PBR Overview
- PBR Use Examples
- PBR Caveats

## **Module 9: Stacking**

- Stacking Overview
- Default Stacking Values
- Managing the Stack

## **Module 10: Open Manage Network Manager (OMNM)**

- Install and configure OMNM
- Prepare supported switches for management
- Discover and manage discovered resources
- Troubleshoot installation and usage issues



# Thank You