Rumos valorizamos profissionais!

Implementing Cisco Data Center Virtualization and Automation (DCVAI)

- **Formato do curso:** Presencial
- **Localidade:** Porto
- **Data:** 20 Mai. 2019 a 24 Mai. 2019
- **Preço:** 2720€
- **Horário:** Laboral - das 09h00 às 17h00
- **Duração:** 35 horas

Course focused on the implementation and deployment automation of Cisco Application Centric Infrastructure (ACI) and Cisco Nexus switches. It provides rich, hands-on experience in building a data center solution based on Cisco ACI. Learners are introduced to the automation capabilities offered by Python and RESTful APIs in combination with Cisco ACI and Cisco Nexus switches.

Destinatários

Individuals involved in the deployment of an ACI based data center

Pré-requisitos

Attendees should meet the following prerequisites:

- Good understanding of the VMware environment
- Attended or ave knowledge equivalent to **DCICN**, **DCICT** and **DCAC9K**

Objectivos

After completing this course you should be able to:

- Implement infrastructure virtualization solutions, such as VDC, VRFs, Cisco Nexus 1000v and Cisco AVS
- Identify programmability methods and program Cisco Nexus switches using XML, Python and NXAPI
- Implement a Cisco ACI solution that provides fabric connectivity to bare-metal hosts, virtual machines and external Layer 2 and Layer 3 domains
- Integrate Cisco ACI with virtual machine managers, such as VMware vCenter

- Enforce application policies in intra- and intertenant scenarios
- Deploy Cisco AVS and microsegmentation
- Program Cisco ACI using Python, RESTful APIs and Arya
- Orchestrate Cisco ACI using the Cisco UCS Director
- Insert L4-L7 services into the Cisco ACI fabric
- Monitor Cisco ACI deployment using atomic counters and other monitoring tools

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Programa

Infrastructure Virtualization Implementation

- Configuring Logical Device Separation
- Configuring Virtual Switching Technologies

NX-OS Configuration Automation

- Implementing Configuration Programmability
- Implementing Configuration Profiles
- Using Scripting Tools

Application-Centric Infrastructure

- Describing Cisco ACI Fabric
- Describing Management
- Describing Cisco ACI Fabric Access Policies

ACI Constructs

- Describing Tenant-Based Policies
- Describing VMM Domain Integration
- Describing Contracts Within an Application Profile

Application-Centric Infrastructure Monitoring and Programmability

- Configuring Monitoring
- Configuring Security Domains and Role Mapping
- Describing Cisco ACI Programmability

Cisco ACI Enhanced Features

- Implementing Inter-Tenant Communication
- Describing vPC
- Deploying Cisco AVS

Application-Centric Infrastructure Networking

- Describing Packet Flow Internal to the ACI Fabric
- Describing External Layer 3 Network Integration

- Describing External Layer 2 Network Integration
- Configuring Service Insertion and Redirection

Labs:

- Lab 1: Implement Cisco NX-OS Configuration Automation
- Lab 2: Discover and Initialize the ACI Fabric
- Lab 3: Implement Cisco ACI Fabric Connectivity for Bare-Metal Hosts
- Lab 4: Implement Cisco ACI Fabric Connectivity for VMs
- Lab 5: Implement Application Policies
- Lab 6: Monitor Traffic with Atomic Counters
- Lab 7: Implement Inter-Tenant Connectivity
- Lab 8: Program Cisco APIC Using Python and Arya
- Lab 9: Implement vPC to Hypervisors
- Lab 10: Deploy Cisco AVS and Microsegmentation
- Lab 11: Enable Connectivity to External Layer 3 Networks
- Lab 12: Enable Connectivity to External Layer 2 Networks
- Lab 13: Provision Cisco ACI Using Cisco UCS Director
- Lab 14: Deploy Service Graph ASA NGFW