Digital Network Architecture Implementation Essentials

Duración: 5 Días       Código del Curso: DNAIE       Versión: 1.0

Temario:

Digital Network Architecture Implementation Essentials is designed to provide students with an insight into the Cisco Digital Network Architecture (DNA) and its solution components. The course highlights the need for digitization in networks and the guiding principles of DNA. Implementation of components such as: Automation using Cisco APIC-EM and its built-in applications like Plug and Play, EasyQoS, IWAN and Path Trace; Virtualization in Enterprise Branch Network using Cisco Enterprise Network Function Virtualization (NFV) Solution; Analytics using Cisco Connected Mobile Experiences (CMX) cloud; Security using Cisco StealthWatch, Cisco TrustSec and Cisco Identity Services Engine (ISE); Enterprise Network Fabric Cisco APIC-EM and virtualization using Cisco NFV are incorporated into the labs to demonstrate DNA automation.

This course is worth 40 Credits in the Continuing Education Program

Dirigido a:

Experienced engineers implementing or supporting a Cisco Digital Network Architecture (DNA).

Objetivos:

- After completing this course you should be able to:
- Identify the Digital Network Architecture solution by describing the vision, strategy, general concepts and components of it.
- Implement network virtualization using Cisco Network Function Virtualization in Enterprise branch network.
- Implement network analytics using Cisco Connected Mobile Experience (CMX) cloud.
- Implement network security using Cisco StealthWatch, Cisco TrustSec and Cisco Identity Services Engine (ISE).
- Understand Enterprise Fabric and Implementing DNA Secure Access.
- Implement network virtualization using Cisco Network Function Virtualization in Enterprise branch network.

Prerequisitos:

Attendees should meet the following prerequisites:

- Foundational understanding of network design, routing concepts, QoS, and network security including firewall operations (transparent mode). - IINS Recommended
- Ability to configure OSPF and EIGRP routing protocols along with an understanding of Enterprise WAN and DMVPN technologies. - ROUTE Recommended
- Understanding of Wireless LAN parameters, Wireless LAN Controllers and Access Point capabilities. - WIFUND Recommended
- Basic understanding of Cisco Prime Infrastructure, KVM Virtualization and programming concepts including; Northbound, Southbound and REST APIs.

Exámenes y certificación

Recommended as preparation for the following exams:

- There are currently no exams aligned to this course.
Contenido:

Identifying Role of Digital Network Architecture in Contemporary Network
- Identifying Cisco Digital Network Architecture Vision
- Identifying the Digital Network Architecture Solution Components
- Identifying the Role of Automation and Orchestration Controllers in DNA

Implementing DNA Automation in Core Networks
- Implementing Automation in Enterprise Networks
- Implementing Cisco Plug and Play Solution
- Implementing Cisco Intelligent WAN Solution
- Troubleshooting Using Path Trace Application
- Implementing Cisco Enterprise Network Function Virtualisation
- Implementing Network Programmability in a DNA Architecture

Implementing Network Analytics in Cisco DNA
- What is Network Analytics in Cisco DNA?
- DNA Analytics Architecture
- DNA Analytics Proof Points
- Network Data Platform Architecture
- CMX On Premise
- Context-Aware Services Architecture
- CMX Connect
- Cisco CMX Analytics
- CMX API
- Cisco CMX Configuration

Implementing Security in a DNA Network
- Pervasive Security
- Introduction to NetFlow
- Introduction to Cisco Stealthwatch
- Introduction to Cisco ISE
- Integrating Security Tools

Implementing Enterprise Network Fabric in the DNA Architecture
- Understanding the Enterprise Fabric
- Implementing DNA Secure Access

Labs:
- Lab 1: Introducing Cisco APIC-EM GUI-Network, Device and Topology Discovery Using APIC-EM
- Lab 2: Implementing Network Plug and Play Using Cisco APIC-EM
- Lab 3: Implementing EasyQoS Using Cisco APIC-EM GUI
- Lab 4: Site Provisioning and Monitoring Using Cisco IWAN Application
- Lab 5: Path Trace Application Using Cisco APIC-EM GUI
- Lab 6: Site Provisioning with NFVIS on Cisco UCS C220 M3 Server Using OAM Servers
- Lab 7: Initial Switch and WLC Configuration for Cisco CMX
- Lab 8: Adding Maps to Cisco Prime Infrastructure
- Lab 9: Continuing to Add Maps to Cisco Prime Infrastructure
- Lab 10: Exporting Maps from Cisco Prime Infrastructure
- Lab 11: Performing the Initial Configuration of CMX
- Lab 12: Using the System Settings Menu to Configure Cisco CMX
- Lab 13: Adding Outline Wall to CMX Floor Plan Maps
- Lab 14: Using Detect and Connect
- Lab 15: Continuing to Customise Detect and Locate in CMX
- Lab 16: Working with Analytics in Cisco CMX
- Lab 17: Working with Customised Reports in the Analytics Service
- Lab 18: Continuing to Add Widgets to a Customised Report in CMX
- Lab 19: Visualising flows on SMC
- Lab 20: Segmentation Policy Enforcement
- Lab 21: ISE and SMC Integration for Mitigation

Más información:
Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60
info.cursos@globalknowledge.es
www.globalknowledge.com/es-es/
Global Knowledge Network Spain, C/ Retama 7, 6ª planta, 28045 Madrid