



## DCCOR 350-601

<b>DCCOR 350-601</b>	
<b>Course Name:</b>	Implementing Cisco Data Center Core Technologies (350-601DCCOR)
<b>Course Duration:</b>	8 days (50 hours)
<b>Requirements:</b>	<p>Familiarity with Ethernet and TCP/IP networking</p> <p>Familiarity with SANs</p> <p>Familiarity with Fibre Channel protocol</p> <p>Identify products in the Cisco Data Center Nexus and Cisco MDS families</p> <p>Understanding of Cisco Enterprise Data Center architecture</p> <p>Understanding of server system design and architecture</p> <p>Familiarity with hypervisor technologies (such as VMware)</p> <p>Recommendation:</p> <ul style="list-style-type: none"> <li>● Implementing and Administering Cisco Solutions (CCNA)</li> <li>● Understanding Cisco Data Center Foundations (DCFNDU)</li> </ul>
<b>Who should take this Course:</b>	<p>Network designers</p> <p>Network administrators</p> <p>Network engineers</p> <p>Systems engineers</p> <p>Data center engineers</p> <p>Consulting systems engineers</p> <p>Technical solutions architects</p> <p>Field engineers</p> <p>Cisco integrators and partners</p> <p>Server administrator</p> <p>Network manager</p>

## Syllabus Course

- Implementing Data Center Switching Protocols
- Spanning Tree Protocol
- Port Channels Overview
- Virtual Port Channels Overview
- Implementing First-Hop Redundancy Protocols
- Hot Standby Router Protocol (HSRP) Overview
- Virtual Router Redundancy Protocol (VRRP) Overview
- First Hop Redundancy Protocol (FHRP) for IPv6
- Implementing Routing in Data Center
- Open Shortest Path First (OSPF) v2 and Open Shortest Path Protocol (OSPF) v3
- Border Gateway Protocol
- Implementing Multicast in Data Center
- IP Multicast in Data Center Networks
- Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD)
- Multicast Distribution Trees and Routing Protocols
- IP Multicast on Cisco Nexus Switches
- Implementing Data Center Overlay Protocols
- Cisco Overlay Transport Virtualization
- Virtual Extensible LAN
- Implementing Network Infrastructure Security
- User Accounts and Role Based Access Control (RBAC)
- Authentication, Authorization, and Accounting (AAA) and SSH on Cisco NX-OS
- Keychain Authentication
- First Hop Security
- Media Access Control Security
- Control Plane Policing
- Describing Cisco Application-Centric Infrastructure
- Cisco ACI Overview, Initialization, and Discovery
- Cisco ACI Management
- Cisco ACI Fabric Access Policies
- Describing Cisco ACI Building Blocks and VMM Domain Integration
- Tenant-Based Components
- Cisco ACI Endpoints and Endpoint Groups (EPG)
- Controlling Traffic Flow with Contracts
- Virtual Switches and Cisco ACI VMM Domains
- VMM Domain EPG Association



- Cisco ACI Integration with Hypervisor Solutions
- Describing Packet Flow in Data Center Network
- Data Center Traffic Flows
- Packet Flow in Cisco Nexus Switches
- Packet Flow in Cisco ACI Fabric
- Describing Cisco Cloud Service and Deployment Models
- Cloud Architectures
- Cloud Deployment Models
- Describing Data Center Network Infrastructure Management, Maintenance, and Operations
- Time Synchronization
- Network Configuration Management
- Software Updates
- Network Infrastructure Monitoring
- Explaining Cisco Network Assurance Concepts
- Need for Network Assurance
- Cisco Streaming Telemetry Overview
- Implementing Fibre Channel Fabric
- Fibre Channel Basics
- Virtual Storage Area Network (VSAN) Overview
- SAN Port Channels Overview
- Fibre Channel Domain Configuration Process
- Implementing Storage Infrastructure Services
- Distributed Device Aliases
- Zoning
- N-Port Identifier Virtualization (NPIV) and N-Port Virtualization (NPV)
- Fibre Channel over IP
- Network Access Server (NAS) Concepts
- Storage Area Network (SAN) Design Options
- Implementing FCoE Unified Fabric
- Fibre Channel over Ethernet
- Describing FCoE
- FCoE Topology Options
- FCoE Implementation
- Implementing Storage Infrastructure Security
- User Accounts and RBAC
- Authentication, Authorization, and Accounting
- Fibre Channel Port Security and Fabric Binding
- Describing Data Center Storage Infrastructure Maintenance and Operations
- Time Synchronization



- Software Installation and Upgrade
- Storage Infrastructure Monitoring
- Describing Cisco UCS Server Form Factors
- Cisco UCS B-Series Blade Servers
- Cisco UCS C-Series Rack Servers
- Implementing Cisco Unified Computing Network Connectivity
- Cisco UCS Fabric Interconnect
- Cisco UCS B-Series Connectivity
- Cisco UCS C-Series Integration
- Implementing Cisco Unified Computing Server Abstraction
- Identity Abstraction
- Service Profile Templates
- Implementing Cisco Unified Computing SAN Connectivity
- iSCSI Overview
- Fibre Channel Overview
- Implement FCoE
- Implementing Unified Computing Security
- User Accounts and RBAC
- Options for Authentication
- Key Management
- Introducing Cisco HyperFlex Systems\*
- Hyperconverged and Integrated Systems Overview
- Cisco HyperFlex Solution
- Cisco HyperFlex Scalability and Robustness
- Describing Data Center Unified Computing Management, Maintenance, and Operations
- Compute Configuration Management
- Software Updates
- Infrastructure Monitoring
- Cisco Intersight
- Implementing Cisco Data Center Automation and Scripting Tools
- Cisco NX-OS Programmability
- Scheduler Overview
- Cisco Embedded Event Manager Overview
- Bash Shell and Guest Shell for Cisco NX-OS
- Cisco Nexus API
- Describing Cisco Integration with Automation and Orchestration Software Platforms
- Cisco and Ansible Integration Overview
- Cisco and Puppet Integration Overview
- Python in Cisco NX-OS and Cisco UCS



- Describing Cisco Data Center Automation and Orchestration Technologies
- Power On Auto Provisioning
- Cisco Data Center Network Manager Overview
- Cisco UCS Director Fundamentals
- Cisco UCS PowerTool
- Configure Overlay Transport Visualization (OTV)
- Configure Virtual Extensible LAN (VXLAN)
- Explore the Cisco ACI Fabric
- Implement Cisco ACI Access Policies and Out-of-Band Management
- Implement Cisco ACI Tenant Policies
- Integrate Cisco ACI with VMware
- Configure Fibre Channel
- Configure Device Aliases
- Configure Zoning
- Configure NPV
- Configure FCoE
- Provision Cisco UCS Fabric Interconnect Cluster
- Configure Server and Uplink Ports
- Configure VLANs
- Configure a Cisco UCS Server Profile Using Hardware Identities
- Configure Basic Identity Pools
- Configure a Cisco UCS Service Profile Using Pools
- Configure an Internet Small Computer Systems Interface (iSCSI) Service Profile
- Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
- Program a Cisco Nexus Switch with Python