

<b>Course Name : Designing Cisco Data Center Unified Fabric</b>
<b>Course Time : 24 Hrs.</b>
<b>Course Prerequisites : Routing and Switching Professional</b>
<b>Title :</b>
<p><b>Describe the technologies used within the Cisco Data Center Business Advantage Architecture</b></p> <ul style="list-style-type: none"> <li>• Describe the Cisco Data Center Business Advantage Architecture</li> <li>• Describe switching protocols used in a data center network</li> <li>• Describe routing protocols used in the data center</li> <li>• Describe how various data center protocols impact the design of a data center network</li> <li>• Describe data center server deployment topologies</li> <li>• Describe how traffic flows may impact the design of a data center network</li> <li>• Describe methods for deploying a Green data center</li> <li>• Determine when to use each networking technology within a Cisco Data Center solution</li> </ul>
<p><b>Describe the products used within the Cisco Data Center Business Advantage Architecture</b></p> <ul style="list-style-type: none"> <li>• Describe the Catalyst 6500 data center product set</li> <li>• Describe the Catalyst 49xx</li> <li>• Describe the Nexus 7000 platform</li> <li>• Describe the Nexus 4000 platform</li> <li>• Describe server fabric switches (SFS)</li> <li>• Describe Cisco Data Center Application Services</li> <li>• Describe the data center network management and monitoring products</li> <li>• Describe the Nexus 2000 platform</li> <li>• Describe the Nexus 5000 platform</li> <li>• Describe the Nexus 1000 platform</li> <li>• Describe the MDS platform</li> </ul>
<p><b>Design the core layer of a Cisco Data Center Business Advantage Architecture</b></p> <ul style="list-style-type: none"> <li>• Describe the data center core layer</li> <li>• Select the appropriate platforms and modules for use in the data center core layer</li> <li>• Design a data center core layer to meet customer scalability, availability, performance, and connectivity requirements</li> <li>• Design a data center core layer to meet customer security requirements</li> <li>• Design network managing and monitoring functionality into the data center core layer</li> <li>• Design for traffic flows in the core</li> <li>• Design for a common or collapsed core</li> </ul>

### **Design the access layer of a Cisco Data Center Business Advantage Architecture**

- Describe the data center access layer
- Select appropriate platforms and modules in the data center access layer
- Design an access layer to meet customer scalability, availability, performance, and connectivity requirements
- Design an access layer to meet customer security requirements
- Design network managing and monitoring functionality into the data center access layer
- Design for traffic flows in the access layer
- Design a cabling plan and topology for the access layer in a data center

### **Design application services considerations into a Cisco Data Center Business Advantage Architecture**

- Design data center application high availability and load balancing using ACE
- Design data center virtual server high availability and load balancing using ACE with VMotion and VCenter
- Design data center high availability and load balancing using GSS
- Design data center services availability using OTV
- Design data center application optimization using the WAAS appliance
- Design data center application optimization using virtual WAAS
- Describe Cisco Data Center Application Services

### **Design security considerations into a Cisco Data Center Business Advantage Architecture**

- Design network resource protection into a data center network
- Design secure connectivity into a data center network
- Design secure infrastructure management into a data center network
- Design security for routing protocols into a data center network
- Design access control into a data center network
- Design compliance into a data center network
- Describe the role of common industry and Cisco specific security products in a data center environment

### **Design network management considerations into a Cisco Data Center Business Advantage Architecture**

- Design a network data collection strategy for a data center
- Utilize the network management tools available in a data center network
- Utilize network analysis tools to scope an existing network and manage a new network
- Describe the common industry and Cisco specific data center network management tools

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