CCIE DATA CENTER v3.0

Join us for the best CCIE Data Center v3.0 training

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## Data Center L2/L3 Connectivity

### Layer 2 technologies

#### Link Aggregation
- vPC
- PortChannel

#### Tagging/Trunking

#### Static Path Binding

#### Spanning Tree Protocol
- PVST
- MST

### Routing Protocols and features

#### OSPF (v2 and v3)
- Authentication
- Adjacencies
- Network Types and Area Types
- LSA Types
- Route Aggregation/Summarization
- Route Redistribution

#### ISIS
- Adjacencies
- Single area, single topology
- Network Types, Levels and Router types
- NSAP addressing
- Point-to-point, broadcast

#### BGP
- Path Selection
- External and Internal Peering
- Route reflectors and Route Server
- Peer Templates
- Multi-Hop EBGP
- Route Aggregation/Summarization
- Route Redistribution

#### BFD

#### FHRP

### Multicast protocols

#### PIM
- Sparse Mode
- BiDir
- Static RP, BSR, AutoRP, Phantom RP
IPv4 PIM Anycast
IPv4 Anycast RP using MSDP

**IGMP**
- IGMPv2, IGMPv3
- IGMP Snooping
- IGMP Query

**Data Center Fabric Infrastructure**

**Physical fabric components**
- Fabric discovery
- Controllers/network managers
- Switches

**Fabric policies**
- Access policies
- Multitenancy
- Monitoring policies

**Tenant policies**
- Application profiles and EPGs
- Networking
- Security

**Fabric Monitoring**
- Faults
- Events
- Health indicators
- Audit Logs

**Virtual networking**
- vSphere VDS

**Data Center Fabric Connectivity**

**VRFlite**
**L3Out**

**OSPF**
- Authentication
- Adjacencies
- Network Types and Area Types
- Route Redistribution

**BGP**
- AS manipulation
- External and Internal Peering
- Route reflectors
- Route Redistribution

**Transit Routing**
**Inter Fabric Connectivity**
- Multi-Pod
- Multi-site
- Virtual Pod
- Remote Leaf
<table>
<thead>
<tr>
<th>Data Center Compute</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compute Resources</td>
</tr>
<tr>
<td>UCSM Policies, Profiles and Templates</td>
</tr>
<tr>
<td>Hyperflex</td>
</tr>
<tr>
<td>Compute Connectivity</td>
</tr>
<tr>
<td>SAN/LAN Uplinks</td>
</tr>
<tr>
<td>Rack Server Integration</td>
</tr>
<tr>
<td>Port Modes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Center Storage Protocols and Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC and FCoE</td>
</tr>
<tr>
<td>Zoning</td>
</tr>
<tr>
<td>NPV/NPIV</td>
</tr>
<tr>
<td>Trunking</td>
</tr>
<tr>
<td>Portchannel</td>
</tr>
<tr>
<td>Load Balancing</td>
</tr>
<tr>
<td>iSCSI</td>
</tr>
<tr>
<td>Authentication</td>
</tr>
<tr>
<td>Multipathing</td>
</tr>
<tr>
<td>RoCE v2 over IP Networks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Data Center Security and Network Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security Features</td>
</tr>
<tr>
<td>ACL's</td>
</tr>
<tr>
<td>First Hop Security</td>
</tr>
<tr>
<td>Port Security</td>
</tr>
<tr>
<td>Private VLANs</td>
</tr>
<tr>
<td>Contracts</td>
</tr>
<tr>
<td>RBAC</td>
</tr>
<tr>
<td>Radius</td>
</tr>
<tr>
<td>TACACS+</td>
</tr>
<tr>
<td>LDAP</td>
</tr>
<tr>
<td>AAA</td>
</tr>
<tr>
<td>Network Services Insertion and Redirect</td>
</tr>
<tr>
<td>Policy Based Routing</td>
</tr>
<tr>
<td>Policy Based Redirection</td>
</tr>
<tr>
<td>Inter VRF Communication</td>
</tr>
<tr>
<td>Route Targets</td>
</tr>
<tr>
<td>Prefix Lists</td>
</tr>
<tr>
<td>Services</td>
</tr>
<tr>
<td>Flow/Telemetry Export</td>
</tr>
<tr>
<td>SPAN</td>
</tr>
<tr>
<td>SNMP</td>
</tr>
<tr>
<td>syslog</td>
</tr>
<tr>
<td>DHCP</td>
</tr>
</tbody>
</table>
NTP/PTP
Traffic Management
Queueing
Policing
Classification/Marking
Scheduling
CoPP

Data Center Automation and Orchestration
Data center tasks using scripts (Python and Ansible)
Create, Read, Update, Delete using RESTful APIs
Deploy and modify configurations
Statistics, Data Collection

Data Center Automation and Orchestration using tools
DCNM
UCSD

Tasks
Workflows
Catalog

Intersight
CloudCenter Suite
Applications
Deployments
Action Orchest