
# CISCO 300-610

## Cisco CCNP Data Center Certification Questions & Answers

Exam Summary – Syllabus – Questions

**300-610**

**Designing Cisco Data Center Infrastructure**

**55-65 Questions Exam – Variable (750-850 / 1000 Approx.) Cut Score – Duration of 90 minutes**

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# Know Your 300-610 Certification Well:

The 300-610 is best suitable for candidates who want to gain knowledge in the Cisco Data Center. Before you start your 300-610 preparation you may struggle to get all the crucial CCNP Data Center materials like 300-610 syllabus, sample questions, study guide.

But don't worry the 300-610 PDF is here to help you prepare in a stress free manner.
The PDF is a combination of all your queries like-

- What is in the 300-610 syllabus?
- How many questions are there in the 300-610 exam?
- Which Practice test would help me to pass the 300-610 exam at the first attempt?

Passing the 300-610 exam makes you Designing Cisco Data Center Infrastructure. Having the CCNP Data Center certification opens multiple opportunities for you. You can grab a new job, get a higher salary or simply get recognition within your current organization.

# Cisco 300-610 CCNP Data Center Certification Details:

| | |
|---|---|
| **Exam Name** | Designing Cisco Data Center Infrastructure |
| **Exam Code** | 300-610 |
| **Exam Price** | $300 USD |
| **Duration** | 90 minutes |
| **Number of Questions** | 55-65 |
| **Passing Score** | Variable (750-850 / 1000 Approx.) |
| **Recommended Training** | **Designing Cisco Data Center Infrastructure (DCID)** |
| **Exam Registration** | **PEARSON VUE** |
| **Sample Questions** | **Cisco 300-610 Sample Questions** |
| **Practice Exam** | **Cisco Certified Specialist Data Center Design Practice Test** |

# 300-610 Syllabus:

| Section | Weight | Objectives |
|---|---|---|
| Network Design | 35% | - Evaluate options for Layer 2 connectivity<br>• Endpoint mobility<br>• Redundancy/high availability<br>• Convergence<br>• Services insertion<br>- Evaluate options for Layer 3 connectivity<br>• IP mobility<br>• Redundancy / high availability (graceful restart, NSF)<br>• Convergence<br>• Services insertion (load balancing, security)<br>- Evaluate data center technologies such as vPC/vPC+<br>- Evaluate options for interconnecting data centers such as VXLAN EVPN and OTV<br>- Evaluate options for device and routing virtualization<br>• VDC<br>• VRF (standard, VXLAN EVPN tenant)<br>- Evaluate in-band and out-of-band options for management<br>- Evaluate redundancy options such as active/active and disaster recovery site |
| Compute Design | 25% | - Evaluate options for Ethernet connectivity<br>• Redundancy / high availability<br>• Bandwidth (oversubscription)<br>• Fabric interconnect operation mode (switch mode, end host mode)<br>- Evaluate options for storage connectivity<br>• Bandwidth (port-channels, oversubscription)<br>• Fabric interconnect operation mode (switch mode, end host mode) |

| Section | Weight | Objectives |
|---|---|---|
| | | • Direct-attached storage (appliance, FC storage, and FCoE ports)<br>- Evaluate options for network device virtualization in a data center (Cisco VIC adapters)<br>• Number of interfaces vs. IOM uplinks<br>• vCon placement policies<br>• Ethernet adaptor policies<br>• Fibre Channel adapter policies<br>- Evaluate options for hyperconverged infrastructure<br>• Cluster mode<br>• HX for virtual server<br>• Desktop virtualization |
| Storage Network Design | 20% | - Plan for iSCSI deployment in a data center (Multipathing and addressing schemes)<br>- Evaluate QoS requirements in a data center<br>• Fibre Channel<br>• FCoE<br>• FCIP<br>• iSCSI<br>- Determine FCoE/ Fibre Channel interface<br>• Dedicated and shared mode<br>• Port types<br>• ISL<br>• Oversubscription<br>- Evaluate SAN topology options |
| Automation Design | 20% | - Evaluate options for network orchestration and automation<br>• DCNM<br>• Intersight<br>• NX-API<br>• Model-driven programmability<br>• Ansible<br>• Puppet |

| Section | Weight | Objectives |
|---|---|---|
| | | • Python<br>- Evaluate options for compute orchestration and automation<br>• Service profile templates<br>• vNIC templates<br>• vHBA templates<br>• Global policies vs. local policies |

# Cisco 300-610 Sample Questions:

Question: 1

Which Cisco HyperFlex feature provides virtual machine-level cost scaling for desktop virtualization growth?

a) HyperFlex Edge support
b) encryption offload cards
c) dedicated compute nodes
d) fabric interconnects

**Answer: a**

Question: 2

A client in a commercial building installs a Cisco blade server in the multitenant Cisco UCS blade infrastructure. To cut operating costs, the client's data center is shared with other organizations. The client asks an engineer to prevent third parties from accessing their equipment and from accessing BIOS-related information when booting a server.

Which two policies must be used to meet these requirements? (Choose two.)

a) post error pause
b) CDN control
c) ASPM support
d) front panel lockout
e) quiet boot

**Answer: d, e**

Question: 3

What are two reasons to select OTV as the DCI solution to connect multisite topologies? (Choose two.)

a) It propagates hosts reachability without support of traffic flooding.
b) Layer 3 failures do not propagate beyond the OTV edge device.
c) It extends the spanning tree between data centers.
d) It is an open standard.
e) It constrains HSRP hello messages to each data center.

**Answer: b, c**

Question: 4

A Cisco UCS instance has four interfaces on a UCS VIC. Where on the fabric interconnect does each interface terminate?

a) vPC
b) virtual interface
c) port channel
d) physical port

**Answer: b**

Question: 5

Which technology enables Layer 2 extension between remote data center sites?

a) FCIP
b) GRE
c) DMVPN
d) OTV

**Answer: d**

Question: 6

The management of the Cisco Nexus switches is provided over an isolated put-of-band network. The VDC feature is configured on the Cisco Nexus core switches. How is out-of-band management access provided for each VDC?

a) All the VDC have the same out-of-band IP address.
b) Each VDC has a dedicated out-of-band Ethernet management port.
c) Each VDC has a unique out-of-band IP address from the same IP subnet.
d) Each VDC has a unique out-of-band IP address from different IP subnets among VDCs.

**Answer: c**

## Question: 7

Where does Cisco UCS handle Fibre Channel traffic failover?

a) on a Cisco UCS Fabric Interconnect ASIC in Fibre Channel switching mode
b) on the host, by using multipathing software
c) in the hardware on the Cisco UCS VIC 12xx adapter or later
d) in the hardware on any Cisco UCS VIC adapter

**Answer: b**

## Question: 8

What are two advantages of using Cisco vPC over traditional access layer designs? (Choose two.)

a) supports Layer 3 port channels
b) disables spanning-tree
c) no spanning-tree blocked ports
d) uses all available uplink bandwidth
e) maintains a single control plane

**Answer: c, d**

## Question: 9

Which two features are provided by deploying an OOB management network in a Cisco Nexus data center? (Choose two.)

a) Layer 3 path for monitoring purposes
b) Layer 2 path for server traffic
c) Layer 2 path for a vPC peer link
d) Layer 3 path for vPC keepalive packets
e) Layer 3 path for server traffic

**Answer: b, c**

## Question: 10

When planning to deploy a load-balancing service as a managed node, which ACI configuration must be included?

a) BGP ECMP
b) Layer 4 to Layer 7 device package
c) inline load-balancing device

d) ITD

**Answer: b**

# Study Guide to Crack Cisco CCNP Data Center 300-610 Exam:

- Getting details of the 300-610 syllabus, is the first step of a study plan. This pdf is going to be of ultimate help. Completion of the syllabus is must to pass the 300-610 exam.
- Making a schedule is vital. A structured method of preparation leads to success. A candidate must plan his schedule and follow it rigorously to attain success.
- Joining the Cisco provided training for 300-610 exam could be of much help. If there is specific training for the exam, you can discover it from the link above.
- Read from the 300-610 sample questions to gain your idea about the actual exam questions. In this PDF useful sample questions are provided to make your exam preparation easy.
- Practicing on 300-610 practice tests is must. Continuous practice will make you an expert in all syllabus areas.