

350-601: CCNP Data Center Core (DCCOR)

Implement and operate modern Cisco data centre networks, compute and storage, aligned to the DCCOR 350-601 exam.

DURATION

5 days · 40 hours

LEVEL

Advanced

CURRICULUM

12 modules · 7 labs

DELIVERY

Live online, Onsite,
Corporate

Course overview

Data centre networks have changed from simple three-tier designs to spine-leaf fabrics, overlays, policy-driven controllers and tightly integrated compute and storage. Engineers who run them need breadth across all of these, which is what the DCCOR exam tests as the core of CCNP Data Center. This five-day course builds that breadth with practical labs and clear explanations of how the pieces fit.

Days one and two cover network topics: NX-OS fundamentals, routing protocols in the data centre, vPC and port channels, FHRP, multicast, and overlay technologies including VXLAN EVPN, along with an introduction to application-centric infrastructure and its policy model. Day three focuses on compute: unified computing system architecture, service profiles and templates, firmware management and hyperconverged concepts. Day four covers storage networking, with Fibre Channel, FCoE, zoning, NPV and NPIV, and data centre security topics such as AAA, RBAC, first-hop security and segmentation. Day five introduces automation and orchestration through APIs, Python and configuration management tools, followed by exam preparation.

Labs use emulated NX-OS switches and simulators to configure vPC, build a small VXLAN EVPN fabric, explore controller-based policy, create service profiles, configure zoning and automate changes through APIs.

This course is aligned to the Cisco DCCOR 350-601 exam. Cisco can revise exam topics, so confirm the current version and pricing with Cisco before booking.

Highlights

- 40 hours of live, trainer-led sessions
- Covers all five DCCOR exam topic areas
- NX-OS, VXLAN EVPN and ACI concepts
- Unified compute and storage networking
- Automation with APIs and mock exam

What's included

- Trainer with data centre infrastructure experience
- Plan aligned to the five DCCOR topic areas
- NX-OS, vPC and VXLAN EVPN labs
- Compute and storage networking exercises
- API and Python automation
- Mock exam with review
- Course completion certificate from Ace Skills Consulting

Who this course is for

Who should attend

- Data centre network engineers
- Systems engineers working with unified compute
- Storage and virtualisation engineers
- Network engineers moving into data centre roles

Prerequisites

- CCNA-level networking knowledge
- Basic understanding of servers, virtualisation and storage
- Experience with Cisco switching is helpful

Detailed curriculum — 5 days, 40 hours, 12 modules, 7 hands-on labs

Day 1 Data Centre Networking Foundations

8 hours

1.1 NX-OS fundamentals

- NX-OS architecture and features
- Checkpoints and rollback
- Configuration and verification

1.2 Layer 2 and Layer 3

- Port channels and vPC
- OSPF and BGP on NX-OS
- FHRP in the data centre
- Multicast basics

LAB Configure vPC between two switches · 55 min

1.3 Design

- Spine-leaf architecture
- Network management options
- Traditional vs fabric designs

Day 2 Overlays and Controller-Based Fabrics

8 hours

2.1 VXLAN EVPN

- VXLAN encapsulation
- Anycast gateway
- BGP EVPN control plane
- Multi-site concepts

LAB Build a small VXLAN EVPN fabric · 60 min

2.2 Application-centric infrastructure

- Fabric discovery
- Contracts and policy model
- Tenants, VRFs, bridge domains and EPGs
- Integration with virtualisation platforms

LAB Model an application policy in a controller simulator · 40 min

Day 3 Compute

8 hours

3.1 Unified computing architecture

- Fabric interconnects and chassis
- Network and storage connectivity
- Rack and blade servers

3.2 Service profiles

- Pools and policies
- Boot policies
- Service profile templates

LAB Create service profiles from templates · 45 min

3.3 Operations

- Firmware and upgrades
- Monitoring compute
- Hyperconverged infrastructure concepts

Day 4 Storage Networking and Security

8 hours

4.1 Storage networking

- Fibre Channel fundamentals
- NPV and NPIV
- VSANs and zoning
- FCoE

LAB Configure VSANs and zoning · 45 min

4.2 Security

- AAA and RBAC
- Segmentation and micro-segmentation
- First-hop security
- Port security and storage security

LAB Apply RBAC and AAA on data centre switches · 35 min

Day 5 Automation and Exam Readiness

8 hours

5.1 Automation and orchestration

- APIs on data centre platforms
- Configuration management tools
- Python and data formats
- Infrastructure as code concepts

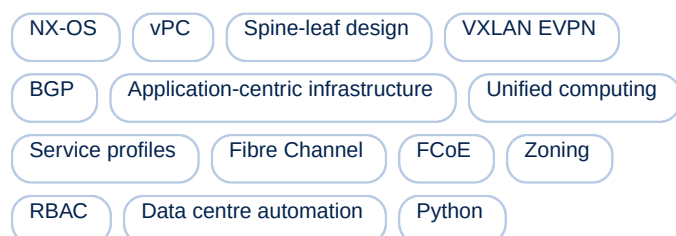
LAB Automate NX-OS changes with APIs and Python · 50 min

5.2 Exam readiness

- Domain review
- Mock exam and review

Skills and tools

Skills you will build



Tools used in class



Certification exam

This course is aligned to the exam below and prepares you for it. The exam itself is booked and taken with the vendor.

Exam	Implementing and Operating Cisco Data Center Core Technologies (DCCOR)
Exam code	350-601
Duration	120 minutes
Delivery	Online proctored, Test centre
Official page	https://www.cisco.com/site/us/en/learn/training-certifications/certifications/data-center/ccnp-data-center

Exam skill areas covered

Storage network

Exam details are pending verification. Confirm the current exam code, format and fee on the official vendor page before booking.

Frequently asked questions

Does DCCOR alone give me CCNP Data Center?

No. CCNP Data Center requires DCCOR plus one concentration exam. Passing DCCOR alone earns a Cisco specialist certification.

Will I configure real data centre hardware?

Labs use emulators and simulators, which cover the configuration and concepts the exam requires.

Is the exam fee included?

Only when the batch shows the "Exam voucher included" badge. Otherwise you book directly with Cisco through Pearson VUE.

Do I need storage experience?

No. Storage networking is explained from fundamentals, though general data centre exposure helps.

Book a batch or talk to an advisor

Course page: aceskillsconsulting.com/course/350-601-ccnp-data-center-core-dccor · Email: info@aceskillsconsulting.com

Chennai office

Guindy, Chennai, Tamil Nadu

Delhi office

B-95, Old Post Office Street, Shakarpur
New Delhi 110092
Office: 98180 12523

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