

CCNP 350-401
Course certification training

Course Agenda

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Module 01: Architecture

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Course Curriculum

Module 01: Architecture

- Explain the different design principles used in an enterprise network
- Analyze design principles of a WLAN deployment
- Differentiate between on-premises and cloud infrastructure deployments
- Explain the working principles of the Cisco SD-WAN solution
- Explain the working principles of the Cisco SD-Access solution
- Describe concepts of wired and wireless QoS
- Differentiate hardware and software switching mechanisms

Module 02: Virtualization

- Describe device virtualization technologies
- Configure and verify data path virtualization technologies
- Describe network virtualization concepts

Module 03: Infrastructure

- Layer 2
- Layer 3
- Wireless
- IP Services

Module 04: Network Assurance

- Diagnose network problems using tools such as debugs, conditional debugs, trace route, ping, SNMP, and syslog
- Configure and verify device monitoring using syslog for logging
- Configure and verify NetFlow and Flexible NetFlow
- Configure and verify SPAN/RSPAN/ERSPAN
- Configure and verify IP SLA
- Describe Cisco DNA Center workflows to apply network configuration, monitoring, and management

- Configure and verify NETCONF and RESTCONF

Module 05: Automation

- Interpret basic Python components and scripts
- Construct valid JSON encoded file
- Describe the high-level principles and benefits of a data modeling language, such as YANG
- Describe APIs for Cisco DNA Center and vManage
- Interpret REST API response codes and results in payload using Cisco DNA Center and RESTCONF
- Construct EEM applet to automate configuration, troubleshooting, or data collection
- Compare agent vs. agentless orchestration tools, such as Chef, Puppet, Ansible, and SaltStack