# CCIE Collaboration v3.0

CCIE Collaboration Certification v3.0 is the highest and most prestigious certification from Cisco. It ranks No. 1 in the 10 Most Difficult IT Certifications list, and is highly-valued worldwide. A CCIE certified individual is an elite title in the field of network engineering, proving their mastery in their domain of Cisco networking. The CCIE Collaboration Certified experts have the knowledge and skills required to create a clear, mappable, easily handled collaboration solution, in a standard environment. The CCIE Collaboration program is designed to include Unified Communication UC, conferencing, client services and collaboration endpoints. The quality of the program, the testing methods, and the relevance of this certification enhances its value. At IP Rulers, the classes are facilitated by CCIE Collaboration certified and experienced instructors, and students will be exposed to the latest equipment. With grouped as well as one-to-one classes and online tutorials that could be scheduled for weekdays or weekends in accordance to the students' choice, IP Rulers is fast becoming a leading name in Dubai,UAE in achieving high-value Cisco Certification with a significant pass rate on the first attempt.

COURSE DETAILS

CCIE Collaboration v3.0 certification is the new avatar of core knowledge and practical skills in the management of the most complex scenarios of the IT Collaboration of a network lifecycle (Designing, Deploying, Operating & Optimizing). IP Rulersprovide CCIE Collaboration v3.0 training just as per the course described by the Cisco Collaboration Certification blueprint.

The new method adapted for CCIE Exam is given below, which have vital parts known as Design, Deploy, Operate & Optimize.
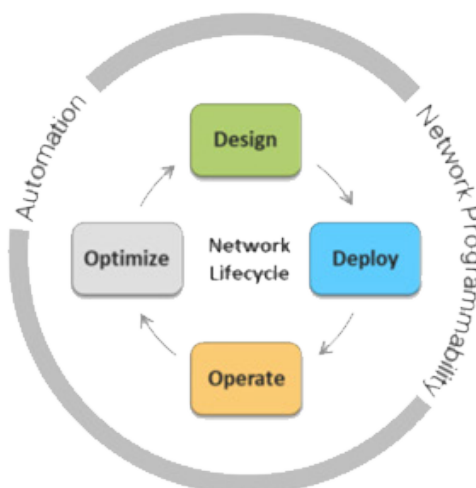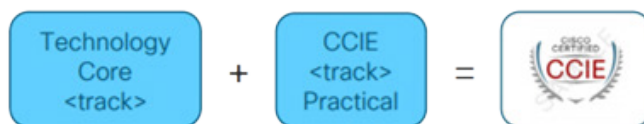
Step 1

350-801 CLCOR: Implementing and Operating Cisco Collaboration Core Technologies
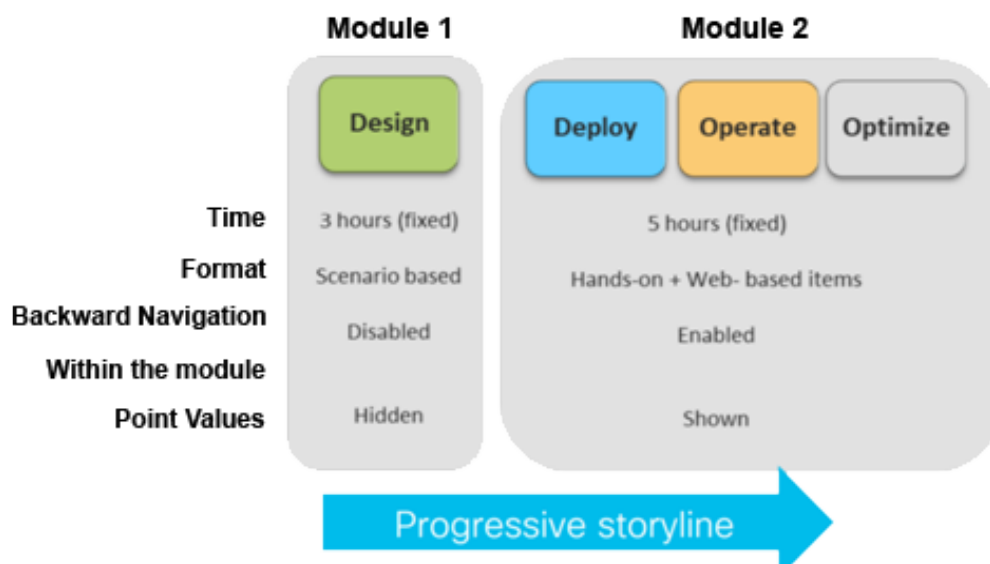
The 120-minute, Implementing and Operating Cisco Collaboration Core Technologies v1.0 (CLCOR 350-801) exam is associated with the CCNP Collaboration, Cisco Certified Specialist (with core subject Collaboration), and CCIE Collaboration Certifications. It tests a candidate's knowledge of implementing and operating core collaboration technologies. Clearing this exam gives a Specialist Certification, so as to recognize all accomplishments of the candidate.

Step 2

CCIE Collaboration v3.0 Lab Exam

The 8-hour Cisco CCIE Collaboration (v3.0) Practical Exam is a hands-on exam that requires a candidate to plan, design, deploy, operate, and optimize network Collaboration solutions according to the given scenarios.

CCIE Lab Exam summary

	Module 1	Module 2		
	Design	Deploy	Operate	Optimize
Time	3 hours (fixed)	5 hours (fixed)		
Format	Scenario based	Hands-on + Web- based items		
Backward Navigation Within the module	Disabled	Enabled		
Point Values	Hidden	Shown		

Progressive storyline

▸ The CCIE Collaboration does not require any particular qualification for attendance of the course. However, comprehensive knowledge of the subjects is necessary for attending the examinations.

▸ Five to seven years' experience in networking field, especially in designing, deploying, operating and optimizing collaboration technologies will be an advantage to attempt the CCIE examination.

COURSE OUTLINE

1.0 PROTOCOLS AND APIS (10%)

- RFC 2833
- Key Pad Markup Language (KPML)
- Unsolicited NOTIFY
- Interworking

- **Messaging protocols**
- **Collaboration APIs**

2.0 INFRASTRUCTURE AND QUALITY OF SERVICES (10%)

- **Network services**
- **Troubleshoot layer 2 and layer 3 network connectivity issues**
- **Quality of Service for Collaboration applications and endpoints on LAN/WAN/WLAN (Cisco IOS-XE and AireOS)**
- **Troubleshoot voice and video quality issues**
- **Call Admission Control**
- **Certificate management**

3.0 CALL CONTROL AND DIAL PLAN (20%)

- **Global dial plans**
- **Fundamental dial plan features on Unified CM**
- **Advanced dial plan features on Unified CM**
- **URI and domain-based routing**
- **Unified CM telephony features**
- **Audio and video codec selection**

- **SIP trunking**
- **Securing SIP trunks on UCM**
- **UDS in a multi-cluster environment**
- **Unified CM database replication**
- **Dial plans on CUBE**
- **SIP-SRST and E-SRST**
- **Dial plans on Expressway Series**

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4.0   ENDPOINTS AND USER MANAGEMENT (10%)

▸ Hardware and software endpoint registration in a multi-cluster environment
▸ Mixed mode and Security By Default (SBD) on Unified CM
▸ Securing endpoints
▸ Collaboration endpoints and infrastructure using IPv6
▸ Endpoint features
▸ User authentication and authorization
▸ Self-provisioning

5.0   EDGE SERVICES (20%)

▸ ISDN PRI gateways
▸ SIP trunks using CUBE
▸ SIP normalization and SDP normalization
▸ Securing SIP trunks on CUBE
▸ Stateful box-to-box redundancy on CUBE (Cisco IOS-XE)
▸ Network and application level security on Cisco IOS-XE
▸ Firewall traversal in a Collaboration solution
▸ Expressway Series traversal communications
▸ Mobile and Remote Access (MRA)
▸ Network and application level security on Expressway Series
▸ Webex Edge and Webex Hybrid Services
▸ Third-party interoperability and federation

6.0 MEDIA RESOURCES AND MEETINGS (15%)

- Media resources
- Rendezvous conferencing
- Ad-hoc conferencing
- Scheduled meetings
- CallBridge and WebBridge on Cisco Meeting Server
- High availability on Cisco Meeting Server
- Secure conferencing on Cisco Meeting Server

7.0 COLLABORATION APPLICATIONS AND SERVICES (15%)

- On premise IM&P servers and clients
- PresenceBusy Lamp Field (BLF) Soft client
- IM&P server integration with external database for Persistent Chat and Group Chat
- Cisco Unity Connection voicemail integration
- Cisco Unity Connection voicemail features
- Cisco Unity Connection voicemail dial plan
- Mobility features
- Extension Mobility Cross Cluster (EMCC)
- Audio and video call recording architectures
- Secure call recording
- Cisco Unified Contact Center Express (UCCX)
- Contact Center agent desktop (Finesse)

LAB INFRASTRUCTURE

IP Rulers has a fully equipped lab, specially designed for the CCIE Collaboration training, with an enhanced lab topology that represent real world network. Students will have the following equipment and software configured for their training; they may also get the chance to see newer hardware and software during this period.

Virtual machines

Core Collaboration Applications

- Cisco Unified Communications Manager 12.5
- Cisco Unified IM & Presence 12.5
- Cisco Unity Connection 12.5
- Cisco Meeting Server 2.5
- Cisco Meeting Management 2.5
- Cisco Unified Contact Center Express 12.0

Collaboration Edge

- Cisco Expressway Series 12.5
- CSR1000v: IOS XE 16.6

Client PCs and Applications

- Active Directory: WindowsServer 2016
- Test PC: Windows 10
- Cisco Jabber for Windows 12.5

TARGET AUDIENCE

- Network engineers attempting the core exam – (CLCOR 350- 801)
- Network engineers who have five to seven years of professional experience in designing, deploying, operating and optimizing collaboration technologies.
- Network designers who design and support complex collaboration technologies and topologies.
- Network engineers who use an expert-level problem-solving process (including options analysis) to support complex network technologies and topologies.
- IT students and professionals seeking strong expertise in the subject and an internationally recognized qualification in the same for prospective jobs.
- Candidates with CCNP Enterprise Certification, moving on to expert levels.
- Aspirants in the following job profiles:

  - Collaboration Architects
  - Unified Communications Architect
  - Voice and Video Network Manager
  - Network DesignerNetwork Administrator
  - Consulting Systems Engineer
  - Technical Solutions Architect
  - Network Manager
  - Cisco Integrators and partners

TRAINER'S PROFILE

▸ IP Rulers is managed by an expert team of trainers with over 10 years' experience in the industry and in hands-on training.

▸ All the trainers have multiple CCIEs in their respective areas of interest.

▸ Individual trainers' profiles can be provided upon request by email, along with demos and LinkedIn profiles.

▸ Online and classroom demos are also available upon request

BENEFITS

▸ Job roles of elite executives in the fast-paced world of network collaboration.

▸ Industry-level knowledge and direct experience in implementation of core Cisco collaboration solutions.

▸ Enhanced job opportunities with sky-high career growth, coupled with respect.

▸ Expertise in all stages of implementing complex collaboration solutions – from deploying, to operation and optimization.

▸ Specialist Certification for clearing the qualifying examAuthority to link the CCIE Certification Badge to all social media profiles.

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