



## CCIE CERTIFICATION—ACCELERATING CAREERS WORLDWIDE

### REACH THE TOP

**Do you maintain a complex internetworking environment? Are you committed to using your expertise to tackle the most difficult technical challenges in your field? By achieving Cisco® CCIE® (Cisco Certified Internetwork Expert) certification, you can validate your skills and experience and advance your career to the next level.**

### CERTIFYING YOUR EXPERT SKILLS

Cisco CCIE certification identifies an individual's networking skills at the expert level. Candidates must pass a rigorous, two-hour written exam at an authorized testing center and an eight-hour hands-on lab examination at a Cisco location. The lab examination is designed to test the candidate's ability to get the network operational within a specified period of time. Those who pass earn the CCIE title, receive an official CCIE ID number, and may use the CCIE logo on business cards and other personal items.

To maintain their expert skills, CCIE recipients are required to recertify their status every two years by passing a CCIE written examination.

CCIE certification is not a training program and there are no specific prerequisites. Hands-on experience with Cisco equipment is the best preparation. You are strongly encouraged to have three to five years of job experience before attempting certification. Preparation resources specific to each track are available on the CCIE Website (<http://www.cisco.com/go/ccie>) and include books, online learning materials, examination blueprints, sample questions, and related training courses.

### An Industry-Leading Certification Program

Cisco CCIE certification is one of the most highly-respected certifications in the IT industry. For more than 10 years, it has used a rigorous, hands-on testing approach to identify professionals with the highest level of networking expertise and skills.

- Individuals that have CCIE certifications are a highly select group. Less than three percent of Cisco certified professionals become CCIE certified.
- The examinations are not easy. Candidates typically spend 18 months or more pursuing certification and attempt the lab examination more than once.

### Are You a CCIE Candidate?

If you have the following qualifications, you should consider pursuing a Cisco CCIE certification:

- At least three to five years of experience implementing, operating, and troubleshooting complex Cisco networks
- The ingenuity to develop innovative network designs and to find creative solutions to problems
- The persistence to work on a difficult design or issue until you have not just an acceptable solution, but the best solution
- A willingness to lead in evaluating and introducing new internetworking technologies and designs that better meet users' needs

## CCIE CERTIFICATION TRACKS

Cisco CCIE certification is awarded in technical specialties referred to as tracks.

**CCIE Routing and Switching:** This core networking discipline indicates expert level knowledge across various LAN and WAN interfaces and a variety of routers and switches. Routing and Switching experts apply technology solutions to increase bandwidth, improve response times, maximize performance, and support global applications.

**CCIE Security:** Certification in this track indicates expert level knowledge across Security and VPN solutions and a solid understanding of various operating systems (Windows, Unix, Linux) and common application services (for example, HTTP, SMTP, FTP, DNS). Individuals with CCIE Security certifications are capable of configuring complex end-to-end secure networks, are experts in troubleshooting integrated environments, and possess strong understanding of common attacks and mitigation techniques. Although core IP routing protocols are not the focus of this certification, candidates must demonstrate in-depth understanding and applicable knowledge in Layer 2 and Layer 3 infrastructures.

**CCIE Service Provider:** This track focuses on the fundamentals of IP technologies, as well as specialized knowledge in at least one of the networking areas specific to service providers, including Dial, DSL, Cable, Optical, WAN Switching, IP Telephony, and Content Networking.

**CCIE Storage Networking:** Certification in this track indicates expert level knowledge in the implementation and troubleshooting of storage area networks using Fibre Channel, iSCSI, FCIP, and FICON protocols to enable resource sharing over LANs, MANs, and WANs. Although core routing and switching protocols are not the focus of this certification, candidates must demonstrate a solid understanding and applicable knowledge in Layer 2 and Layer 3 technologies.

**CCIE Voice:** This track indicates expert level knowledge of Cisco Voice over IP (VoIP) products and solutions. Individuals with CCIE Voice certifications are capable of building and configuring a complex end-to-end IP telephony network, and are experts in troubleshooting and resolving VoIP-related problems. Although IP routing protocols are not the focus of this certification, candidates must demonstrate in-depth understanding and applicable knowledge in Layer 2 and Layer 3 infrastructures for purposes of quality of service.

## INFORMATION AND RESOURCES

Cisco is committed to supporting individuals and organizations as they build their skills and technical expertise.

### About Cisco Career Certifications

Cisco's award-winning certification program brings valuable, measurable rewards to network professionals, their managers, and the organizations that employ them. Cisco offers three levels of certification from Associate to Professional to Expert in various tracks such as network support and design and security.

<http://www.cisco.com/go/certifications>

### About Cisco Learning Partners

For organizations and IT professionals, Cisco Learning Partners and their Sponsored Organizations are providers of Cisco training. To ensure that you are getting the latest Cisco authorized content delivered by Certified Cisco Systems Instructors, look for the Cisco Learning Partner Logo.

<http://www.cisco.com/go/learningpartners>

### For More Information

See the CCIE Website for more information on the CCIE program and scheduling CCIE exams.

<http://www.cisco.com/go/ccie>



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