

Growing Need for Service Provider Network Professionals

As the service provider space continues to evolve, many service providers are looking to transform from providers of basic services to "Experience Providers." An Experience Provider offers fully integrated, personalized voice, video, and data services to anyone, anywhere, anytime using any device, and does this securely, reliably, and seamlessly. A properly installed and maintained IP next-generation network is critical to making this transition.

The Cisco Service Provider certification program was built on the growing demand for professionals who can implement, troubleshoot, and optimize a carrier-grade IP next-generation network. By participating in the Cisco Service Provider certification program, network engineers are trained in the latest core and intelligent edge technologies. In addition, candidates are trained to deliver a scalable carrier-grade infrastructure capable of rapid expansion to support the on-going introduction of new managed services and other customer requirements.

Job Ready Practical Skills

The Cisco Service Provider certification program covers the latest industry and Cisco Service Provider technologies deployed within a service provider infrastructure. This certification program specifically aligns to the actual job tasks of

network engineers who configure, implement, troubleshoot, and optimize IP next-generation service provider networks. By teaching the job ready, practical skills and knowledge to ensure successful implementation and optimization of carriergrade IP next-generation networks, this certification program prepares these networks to offer intelligent and rapidly deployable managed services.

Certification candidates learn these job ready, practical skills by working in lab environments based on Cisco Service Provider carrier-grade core, edge and access hardware along with the latest Cisco IOS XR, Cisco IOS XE, and Cisco IOS Software. This offers a good balance between technology and job role, and prepares network engineers to build modern, scalable, and reliable IP next-generation networks.

Curriculum Overview

Network engineers spend the majority of their time on implementation, and slightly less time on design/strategy, monitoring/support functions, and maintenance activities. Over the next five years, risk and security management, troubleshooting and escalations, and installation / configuration of traditional and advanced devices will be most important to network engineers.

The Cisco Service Provider curriculum covers the breadth of job related skills for



network engineers. It also introduces candidates to the IP Next-Generation Network architecture, and provides network engineers with information and practice activities to implement a real-world service provider network.

Achieving CCNA Service Provider Certification

The CCNA Service Provider curriculum lays the foundation for service provider network engineering job roles. Candidates will learn how to configure, implement, verify, and troubleshoot a service provider IP next-generation network. This includes but not limited to job tasks such as implementing network and service build-outs from engineering design documents.

Requirements

The CCNA Service Provider certification program is a three-year certification program intended to recognize network engineers, field engineers, and operations engineers that work in the service provider environment. There are no prerequisites for the CCNA Service Provider certification exams. However, it is recommended that candidates have at least 1–3 years of experience working in the service provider network environment.

Recommended Skills and Knowledge

The following table contains information related to exams and recommended training associated with CCNA Service Provider certification:

Table 1: CCNA Service Provider Exams and Recommended Training

Exam Numbers	Recommended Training Course Names
640-875	Building Cisco Service Provider Next-Generation Networks, Part 1 (SPNGN1) instructor-led training
640-878	Building Cisco Service Provider Next-Generation Networks, Part 2 (SPNGN2) instructor-led training

CCNA Service Provider Recertification

Cisco CCNA Service Provider is an associate-level certification that is valid for three years and must be recertified before the certification expiration date.

To recertify, certificate holders must pass one of the following before the certification expiration date:

- Pass any current CCNA Concentration exam (wireless, or security, or voice, or SP Ops), or
- Pass any current 642-XXX professionallevel exam, or
- Pass the current CCDA DESGN exam, or Pass any current Cisco Specialist exam (excluding Sales Specialist exams or MeetingPlace Specialist exams, Implementing Cisco TelePresence Installations (ITI) exams, Cisco Leading Virtual Classroom Instruction exams, or any 650 online exams), or
- Pass any current CCIE Written Exam, or
- Pass the current CCDE Written Exam OR current CCDE Practical Exam, or
- Pass the Cisco Certified Architect (CCAr) interview AND the CCAr board review to extend lower certifications.



Achieving CCNP Service Provider Certification

The CCNP Service Provider curriculum lays the foundation for service provider network engineering job roles. The candidates will learn how to configure, verify, troubleshoot, and optimize routing policies, and provide technical leadership to operations support personnel, as well as validation and optimization input to network design engineers.

Requirements

The CCNP Service Provider certification program is a three-year certification program intended to recognize network engineers, field engineers, and operations engineers that work in the service provider environment.

Before attempting to obtain a CCNP Service Provider certification, a candidate must have a valid CCNA Service Provider certification. And it is recommended that a candidate have at least 3–5 years of experience working in the service provider network environment.

Recommended Skills and Knowledge

The following table contains information related to exams and recommended training associated with CCNP Service Provider certification:

Table 2: Exams and Recommended Training

Exam Numbers	Recommended Training Course Names
642-883 642-885	Deploying Cisco Service Provider Network Routing (SPROUTE) instructor led training
642-887	Deploying Cisco Service Provider Advanced Network Routing (SPADVROUTE) instructor led training

642-889	Implementing Cisco Service Provider Next-Generation Core Network Services (SPCORE) instructor led training
	Implementing Cisco Service Provider Next-Generation Edge Network Services (SPEDGE) instructor led training

CCNPService Provider Recertification

Cisco CCNP Service Provider is a professional-level certification that is valid for three years and must be recertified before the certification expiration date.

To recertify, certificate holders must pass one of the following before the certification expiration date:

- Pass any current 642-XXX professionallevel exam, or
- Pass any current CCIE Written Exam, or
- Pass the current CCDE Written Exam OR current CCDE Practical Exam, or
- Pass the Cisco Certified Architect (CCAr) interview AND the CCAr board review to extend lower certifications.

Achieving CCIE Service Provider Certification

The Cisco CCIE Service Provider certification validates expert-level knowledge and skills for building an extensible service provider infrastructure to deliver rich managed services.

Requirements

The Cisco CCIE Service Provider certification is a two-year program intended to recognize the Cisco Service Provider network experts who have the necessary skills to implement, troubleshoot, and

optimize Cisco Service Provider IP Next-Generation networks.

Attaining and maintaining this performancebased, practical certification validates skills that are only achievable by distinct experts in the service provider field. This certification carries prestige that is admired by service provider professionals worldwide.

To obtain a CCIE Service Provider certification, candidates not only must prove their theoretical knowledge of service provider networks and best practices with a written test, but must also demonstrate this knowledge in a lab environment using Cisco carrier-class equipment in real-world scenarios.

There are no formal prerequisites for CCIE Service Provider certification. Candidates are expected to have an in-depth understanding of the exam topics and strongly encouraged to have greater than five years of job experience before attempting certification.

Recommended Skills and Knowledge

The following table contains information related to exams and recommended training associated with CCIE Service Provider certification:

Table 3: CCIE Service Provider Exams

Required Exam	Exam Name
350-029	CCIE Service

	Provider Written Exam v3.0
CCIE Service	CCIE Service
Provider Lab Exam	Provider Lab
v3.0	Exam v3.0

CCIE Service Provider Recertification

Cisco CCIE Service Provider is an expertlevel certification that is valid for two years and must be recertified before the certification expiration date.

To recertify, certificate holders must pass one of the following before the certification expiration date:

- Pass any current CCIE expert-level written exam, or lab exam
- Pass the current CCDE written exam, or current CCDE practical exam or
- Pass the Cisco Certified Architect (CCAr) interview AND the CCAr board review to extend lower certifications.

Learn More

For more information or to register for this program, visit https://learningnetwork.cisco.com



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