

CCNA Routing and Switching Frequently Asked Questions

Last Updated 22 April 2013

The new Cisco Networking Academy® CCNA Routing and Switching curriculum is currently in development. The CCNA® Routing and Switching courses are designed to take advantage of the improved flexibility and course management capabilities in Cisco NetSpace™ to enable you to accommodate different student learning goals and allow instructors to personalize their teaching styles and instructional flows.

Please visit the CCNA Offerings area on NetSpace and the CCNA instructor community for the latest updates and additional information on the CCNA Routing and Switching curriculum.

FAQ Table of Contents

Cisco Redesign of Associate-Level Certification Programs.....	3
Q1. What changes has Cisco made to the associate-level certification programs?	3
Q2. Are the Cisco CCNA Routing and Switching certification exams changing?	3
Q3. Why did Cisco add so many new technical topics to the CCENT and CCNA Routing and Switching exams?...3	3
Q4. When are the current CCNA exams being retired?	3
Q5. Will Cisco extend the current CCNA certification exam end-of-life dates for Cisco Networking Academy students?.....	4
Q6. Will Cisco continue to offer certification exam discount vouchers to NetAcad students completing the CCNA Routing and Switching courses?	4
Q7. Will students have the option to specify if they want to take the old CCNA certification exam(s) or the new CCNA Routing and Switching exam(s)?.....	4
Q8. What is NetAcad's recommendation for students who are qualified to take the old CCENT or CCNA certification exams now?	4
CCNA Routing and Switching Curriculum.....	5
Q9. Does the Cisco Networking Academy CCNA Routing and Switching curriculum align with the Cisco CCENT and CCNA Routing and Switching certification exams?	5
Q10. What are the new topics covered in the NetAcad CCNA Routing and Switching curriculum?.....	5
Q11. How does the NetAcad CCNA Routing and Switching curriculum differ from CCNA Discovery and CCNA Exploration?	5
Q12. What are the end-of-life plans for CCNA Discovery and CCNA Exploration?	6
Q13. Are students advised to complete four CCNA Routing and Switching courses before enrolling in the CCNA Security course?	6
Q14. When will the CCNA Routing and Switching curriculum be available?.....	6
Q15. What percentage of change should academies anticipate with CCNA Routing and Switching?	6
Q16. How do students transition from CCNA Discovery and CCNA Exploration?	7
Equipment.....	7
Q17. What are the CCNA Routing and Switching lab equipment requirements?.....	7
Q18. My academy is using the 1921 ISR, do I need to upgrade?	7
Q19. What are the CCNA Routing and Switching training requirements for current instructors?.....	8
Q20. What are the CCNA Routing and Switching training requirements for new instructors?	8

Additional Information	8
Q21. When will the Cisco Press® books for the CCNA Routing and Switching courses be available?	8
Q22. What are the translation plans for CCNA Routing and Switching courses?	8
Q23. Where can I find more information about CCNA Routing and Switching?	9

Cisco Redesign of Associate-Level Certification Programs

Q1. What changes has Cisco made to the associate-level certification programs?

- A. On March 26, 2013, Cisco [announced](#) the redesign of the Cisco associate-level certification programs, including the Cisco CCENT® and CCNA certifications. Cisco has evolved its associate-level certifications to align with changing industry job roles in routing and switching, and advanced technologies such as security, wireless, and voice. The certification formerly known as CCNA has evolved to a concentration and has been renamed CCNA Routing and Switching.

In addition, CCENT certification now becomes a foundational certification and replaces CCNA as the prerequisite for associate-level advanced technology certifications, including CCNA Security, CCNA Voice, CCNA Wireless, and CCNA SP Operations. For more information on the redesign of the associate-level certification program, and the changes in the CCENT and CCNA Routing and Switching certification exams, please visit the [Cisco Learning Network](#).

Q2. Are the Cisco CCNA Routing and Switching certification exams changing?

- A. Yes. Cisco has introduced new exams for ICND1, ICND2, and CCNA Composite. The updates include comprehensive troubleshooting, IPv6, and the latest Cisco routing and switching technology and software. The exams are changing to reflect the evolution of industry job roles. Exam 640-822 ICND1 is being replaced by 100-101 ICND1; exam 640-816 ICND2 is being replaced by 200-101 ICND2; and exam 640-802 CCNA is being replaced by 200-120 CCNA.

Q3. Why did Cisco add so many new technical topics to the CCENT and CCNA Routing and Switching exams?

- A. Many of Cisco's global customers have repeatedly confirmed that they expect their CCNA-qualified employees to have a higher level of knowledge and skills when initially hired. To address this requirement, Cisco has shifted some of the topics previously featured in the ICND2 certification exam to the ICND1 certification exam. Students passing the ICND1 exam leading to CCENT certification will now have more knowledge and skills than with the previous exam. This also enables students to learn these topics in greater depth as they progress toward ICND2 certification exam.

We recognize that these changes may be challenging for current NetAcad™ students. The benefits of being equipped with the latest relevant skills featured in these exams will help students be better prepared for future employment in today's job market.

Q4. When are the current CCNA exams being retired?

- A. The current exams will end-of-life on 30 September 2013. In order for the current exams to apply towards the CCNA Routing and Switching certification, you must take and pass the current exam(s) on or before 30 September 2013, as shown in Table 1.

Table 1. Current and New CCNA Certification Exams

Current Exam	Current Exam End-of-Life Date	New Exam
640-822 ICND1	30-SEP-2013	100-101 ICND1
640-816 ICND2	30-SEP-2013	200-101 ICND2
640-802 CCNA	30-SEP-2013	200-120 CCNA

Q5. Will Cisco extend the current CCNA certification exam end-of-life dates for Cisco Networking Academy students?

- A. No. In the past, we have been able to negotiate an extension of certification exams for NetAcad students. To conform to American National Standards Institute (ANSI) accreditation requirements, Cisco must now set the same certification end-of-life date for everyone, including Cisco Academies.

Q6. Will Cisco continue to offer certification exam discount vouchers to NetAcad students completing the CCNA Routing and Switching courses?

- A. Yes. Cisco will continue to offer exam vouchers to students completing the CCNA Routing and Switching courses with the same guidelines:

- Score at least 75 percent on first attempt of final exam in a qualifying course (CCNA Discovery 2 or 4, CCNA Exploration 4, or CCNA Security)
- With the introduction of CCNA Routing and Switching courses, starting in June 2013, the additional qualifying courses are: Routing and Switching Essentials and Connecting Networks
- Receive a passing mark in the course grade book
- Click the link to request a voucher on their Cisco NetSpace homepage

Students need to request exam voucher at least 30 days before their planned test date because it may take up to 30 days to process the exam voucher request.

Q7. Will students have the option to specify if they want to take the old CCNA certification exam(s) or the new CCNA Routing and Switching exam(s)?

- A. Yes. Students have the option to take the old CCNA certification exam(s) or the new CCNA Routing and Switching certification exam(s) – keeping in mind the end-of-life and voucher transition dates noted below.

Due to the retirement or end-of-life of the old CCNA certification exams on September 30, 2013, and the approximate 30 days required to process discount exam voucher requests, students will not have the option to request a voucher for the old CCNA certification exams after August 20, 2013.

From now until August 20th, qualified students will have the option to select if they want to take the old CCNA certification exams or the new CCNA Routing and Switching certification exams.

After August 20th, qualified students may only apply their voucher to the new CCNA Routing and Switching certification exams.

We strongly encourage and recommend that students do not wait until the last minute to request any discount exam vouchers they have earned and plan their test dates accordingly.

Q8. What is NetAcad's recommendation for students who are qualified to take the old CCENT or CCNA certification exams now?

- A. For students who are completing CCNA Discovery 2 or 4, or CCNA Exploration 4, NetAcad recommends that they take the old CCENT or CCNA certification exams by September 30th. This will reduce the immediate study requirements for students as Cisco and employers do not differentiate between "old" and "new" CCNA certifications.

Note that as students renew their CCENT or CCNA certifications in three years, they will be required to take the new CCENT or CCNA Routing and Switching certification exams.

For students who cannot take the old CCENT or CCNA certification exams by September 30, 2013,, they will be able to supplement the gaps in their technical knowledge as the new courses are released.

CCNA Routing and Switching Curriculum

Q9. Does the Cisco Networking Academy CCNA Routing and Switching curriculum align with the Cisco CCENT and CCNA Routing and Switching certification exams?

A. Yes, the new CCNA Routing and Switching (CCNA R&S) curriculum will be fully aligned with the new CCENT and CCNA Routing and Switching certification changes just announced by Cisco. These exciting changes mean that NetAcad students now have the ability to accelerate pursuing advanced technology certifications such as those mentioned above, after achieving the CCENT certification. This provides students an earlier path to entry-level specialized job roles and helps fill the global talent gap with appropriate skills.

- Students who complete a set of four CCNA R&S courses will be prepared to take the new CCNA Routing and Switching certification exam.
- Students who complete two CCNA R&S courses – one of the CCNA introductory courses (Introduction to Networking or Networking Basics) and the Routing & Switching Essentials course – will be prepared to take the new CCENT certification exam.

Please note that students who follow the “teaching routing and switching technologies separately” instructional flow will not be prepared to take the CCENT exam.

Q10. What are the new topics covered in the NetAcad CCNA Routing and Switching curriculum?

A. We have added and revised many topics in the CCNA R&S curriculum to align with the new CCNA certification exams and to enable students to acquire career-readiness skills. Major topics include:

- Cisco IOS® Software v15.2 and IPv6
- Hot Standby Router Protocol (HSRP), Gateway Load Balancing Protocol (GLBP), and Network Time Protocol (NTP)
- EtherChannel and Multi-Area OSPF
- Cisco® IOS NetFlow and Generic Routing Encapsulation (GRE) Tunnel
- Troubleshooting OSPF, EIGRP, ACL, NAT, DHCP, EtherChannel, and PPP

We encourage academies to transition to the new curriculum quickly so they can benefit from the many new and updated features.

Q11. How does the NetAcad CCNA Routing and Switching curriculum differ from CCNA Discovery and CCNA Exploration?

A. The CCNA Routing and Switching curriculum consists of seven courses, which provides greater flexibility to accommodate different student learning goals and allow instructors to personalize their teaching styles and instructional flows. Students will be prepared to take the CCENT certification exam after completing a set of two courses or the CCNA Routing and Switching certification exam after completing a set of four courses. The curriculum also helps students develop workforce readiness skills and builds a foundation for success in networking-related careers and degree programs.

Instructors will have the flexibility to adapt the CCNA R&S curriculum by:

- Teaching it differently than they do today to take advantage of the redesigned CCNA certification program,
or

- Teaching it the same way as they do today in a traditional instructional flow.

For the first course, instructors can decide to teach:

- The Introduction to Networking course within an everyday experience context and OSI model bottom up, or
- The Networking Basics course within a business applications context and OSI model top down

For the second and third courses, instructors can decide to teach:

- Routing and switching technologies together for earlier multiple certification opportunities, using the Routing & Switching Essentials and Scaling Networks courses, or
- Routing and switching technologies separately in a traditional instructional flow, using the Routing Protocols and Switched Networks courses

The fourth course, Connecting Networks, is common to both teaching styles and helps to prepare students for the CCNA Routing and Switching certification exam.

The CCNA Routing and Switching curriculum is currently in development and we will provide more detailed information about the differences when the courses become available.

Q12. What are the end-of-life plans for CCNA Discovery and CCNA Exploration?

- A.** No end-of-life dates have been set. We understand academies need early notice and sufficient time to transition properly, so we will communicate end-of-life plans as we make further progress in the release of the new CCNA Routing and Switching curriculum.

We encourage academies to plan to transition to the new curriculum as soon as they are able to, so they can enjoy the many benefits offered, including new technologies such as IOS 15, IPv6, HSRP, and other features and functionality available only in the Cisco NetSpace learning environment, such as:

- Updated content
- Certification alignment
- Instructional flexibility
- Exam validity and security
- Support for mobile devices

Q13. Are students advised to complete four CCNA Routing and Switching courses before enrolling in the CCNA Security course?

- A.** It is not necessary to complete four courses. Students who complete two CCNA R&S courses—one of the CCNA introductory courses (Introduction to Networking or Networking Basics) and the Routing & Switching Essentials course—will be prepared to take the CCNA Security course.

Q14. When will the CCNA Routing and Switching curriculum be available?

- A.** We are targeting phased releases of the new CCNA Routing and Switching courses starting in June 2013, with all courses to be available by December 2013. The Introduction to Networking and Network Basics courses will be available June 2013.

Q15. What percentage of change should academies anticipate with CCNA Routing and Switching?

- A.** When the courses become available, the release notes will provide details regarding the extent of changes in the new courses.

The new CCNA R&S curriculum has been designed to accommodate instructor flexibility in teaching with many new and revised topics. To support this increased flexibility, including the ability to add content, the courses have undergone significant restructuring.

Q16. How do students transition from CCNA Discovery and CCNA Exploration?

- A. NetAcad is committed to supporting our students and instructors to prepare for the new certification exams by providing appropriate guidance. As the new CCNA Routing and Switching courses become available, our plan is to provide delta information with details on the extent of changes to help students who completed CCNA Discovery or CCNA Exploration courses know what additional topics they need to learn. We also plan to provide instructors with recommended content from the new curriculum they can add into CCNA Discovery or CCNA Exploration courses to help prepare students for the new certification exams during this transition.

With more than 700,000 students enrolled in CCNA courses annually, it is a top priority for us to minimize impact during the transition phase. We appreciate your feedback and efforts to help us address the knowledge gap for our students—to not only be prepared for the certification exams but to learn new skills that will help them to be successful in their careers.

Equipment

Q17. What are the CCNA Routing and Switching lab equipment requirements?

- A. Please refer to the requirements specified in the current CCNA Discovery and CCNA Exploration equipment list, which supports Cisco IOS 15 as well as the CCNA Routing and Switching curriculum. We encourage all Cisco Academies to upgrade their equipment as needed to enjoy the full benefits of the new curriculum:
- 3 CISCO1941/K9 Integrated Services Routers Generation 2 (ISR-G2)
 - 3 HWIC-2T Serial WAN Interface Cards
 - 3 WS-C2960-24TT-L Cisco Catalyst switches
 - Cisco SMARTnet 8x5xNBD for Cisco 1941 Router and Catalyst switch
 - 2 Linksys EA Series routers (2700, 3500, 4500) or equivalent

Please note that ISR-G1 routers (1841, 2801, and 2811) can run IOS 15 and can be used for CCNA R&S labs; however they may require a memory upgrade.

To upgrade IOS software versions and activate feature sets required for Cisco Networking Academy courses, academies can sign up for the Networking Academy Maintenance Service, which is available to them at no cost.

For more information, refer to the following resources:

- [Networking Academy Maintenance Service Datasheet](#) for program details and sign-up information
- The NetSpace [Equipment Information](#) site, which can be accessed from the Program menu
- The Academy Connection [Equipment Information](#) site, which can be accessed from the Resources menu on the right

Q18. My academy is using the 1921 ISR, do I need to upgrade?

- A. NetAcad specifies the use of the 1941 ISR to provide greater support for memory or network interface upgrades. However, some academies may decide to use the 1921 ISRs due to factors including lower pricing and a smaller shelf foot print (one rack unit instead of two).

CCNA Routing and Switching requires IOS 15.2, and the 1921 ISR can run IOS 15.2. However, please keep in mind that the 1921 ISRs are not upgradable should the need arise to upgrade the memory to run future IOS software versions.

Instructor Training

Q19. What are the CCNA Routing and Switching training requirements for current instructors?

- A. Current CCNA Discovery and CCNA Exploration instructors will be qualified to teach the equivalent CCNA Routing and Switching courses. However we highly recommend completing CCNA R&S and other applicable training offered through your local Instructor Training Center (ITC), and reviewing instructor [professional development courses](#) offered by the NetAcad Technical Advocacy team.

The mapping of courses qualifications needed to teach CCNA Routing and Switching courses for existing CCNA Discovery and CCNA Exploration instructors is shown in Table 1.

Table 2. Current and New CCNA Certification Exams

CCNA Discovery and CCNA Exploration Courses	CCNA Routing and Switching Courses			
	Introduction to Networks	Routing & Switching Essentials	Scaling Networks	Connecting Networks
	Network Basics	Routing Protocols	Switched Networks	
CCNA D1 or E1	X			
CCNA D2 or E2		X		
CCNA D3 or E3			X	
CCNA D4 or E4				X

Q20. What are the CCNA Routing and Switching training requirements for new instructors?

- A. New instructors will need to follow the current new instructor qualification process, which includes training offered through an ITC.

Additional Information

Q21. When will the Cisco Press® books for the CCNA Routing and Switching courses be available?

The CCNA Routing and Switching course booklets, which contain the exact text from the online courses, are scheduled for release two months after the release of the courses.

The Lab Manuals, a complete collection of all the course lab exercises, are also scheduled for release two months after the release of the courses.

The Companion Guides (text book) are scheduled for release five months after the release of the courses.

We will communicate exact availability dates as we make further progress in developing the CCNA Routing and Switching curriculum. You may also visit the Cisco Press [Networking Academy Resource Center](#) for more details, including the ISBNs and updated availability dates.

Q22. What are the translation plans for CCNA Routing and Switching courses?

- A. The CCNA Routing and Switching courses will be translated into the five UN languages: Arabic, Simplified Chinese, French, Spanish, and Russian. We are targeting to have the translated courses available six to nine months after the English courses are released. We will communicate the roadmap as we make further progress in developing the English curriculum.

We are also piloting a new NetAcad community-supported translation process that will be more efficient and user-friendly. Academies can contact their local NetAcad representatives for more information.

Q23. Where can I find more information about CCNA Routing and Switching?

- A.** Please visit the CCNA Offerings area on NetSpace and the CCNA instructor community for the latest updates and information on the CCNA Routing and Switching curriculum. We will continue to communicate new information as it becomes available.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)