

CCNAv7.02: Introduction to Networks (ITN) Release Notes

Last updated February 2, 2021

Purpose

The Introduction to Networks (ITN) course introduces students to networking architectures, models, protocols, and components. These components facilitate the connection of users, devices, applications and data through the internet and across modern computer networks. By the end of the course, students can perform basic configurations for routers and switches to build simple local area networks (LANs) that integrate IP addressing schemes and foundational network security.

By the end of the course, students will be able to:

- Configure switches and end devices to provide access to local and remote network resources.
- Explain how physical and data link layer protocols support the operation of Ethernet in a switched network.
- Configure routers to enable end-to-end connectivity between remote devices.
- Create IPv4 and IPv6 addressing schemes and verify network connectivity between devices.
- Explain how the upper layers of the OSI model support network applications.
- Use security best practices to configure a small network.
- Troubleshoot connectivity in a small network.

The Cisco Networking Academy Introduction to Networks (ITN) course is the first course in the seventh major release of the CCNA curriculum. These notes provide detailed information about this release, including curriculum content, known issues, and support information.

This 70-hour, instructor-led course includes videos, hands-on labs, Packet Tracer activities, and a wide array of assessment types and tools throughout the curriculum.

Networking Academy CCNA courses can be delivered in person or remotely. Handson experiences with physical equipment continue to remain an essential best practice, and Networking Academy has no plan to remove this requirement. Academies need to continue providing access to physical equipment as soon as circumstances allow it. However, to support distance learning, lab activities now provide the option to practice skills with Packet Tracer Physical Mode (PTPM) or with lab equipment, if available. Packet Tracer 8.0 provides support for students to practice critical skills normally presented in the physical, in-person lab experience. Networking Academy offers this option as a way to address the absence of physical equipment and continue on the path toward student mastery.

Packet Tracer 8.0, 64-bit versions are required for the optimal experience with CCNA 7.02 PTPM activities and scenarios. Due to the extensive set of graphics included in the PTPM scenarios, these activities may experience performance issues or crashes in Packet Tracer 8.0, 32-bit version. All other PTPM activities should perform as normal.

CCNAv7.02: Introduction to Networks (ITN) Release Notes Curriculum Content

Component	Description
E-Learning Content	17 modules
Videos	36 videos
Labs	24 hands-on and paper-based labs. CCNAv7 labs were written using Cisco 4221 routers and 2960 switches. Previous equipment such as the 1941 and 2901 routers can be used, but some modifications for router interface names will be required.
Packet Tracer Activities	31 Packet Tracer activities Simulation and modeling activities designed for skills exploration, acquisition, reinforcement and expansion.
Interactive Activities	12 Interactive activities
Syntax Checkers	10 Syntax Checker activities Small simulations that expose learners to Cisco command line to practice configuration skills.
Check Your Understanding	64 CYUs CYUs are per topic online, self-diagnostic quizzes to help learners gauge content understanding. CYU activities are designed to let students quickly determine if they understand the content and can proceed, or if they need to review. CYU activities <i>do not</i> affect student grades.
ITNv7.02 -Packet Tracer Physical Mode PTPM) Activities	New to this course are Packet Tracer Physical Mode (PTPM) activities which emulate corresponding labs. These can be used instead of the lab when access to physical equipment is not possible.
Module Quizzes	17 Self-assessments that integrate concepts and skills learned throughout the series of topics presented in the module.
Module Group Exams	Instructor Activated Assessments that assesses content from multiple modules. These assessment provide learners the opportunity to apply and validate knowledge learned throughout the course.
Final Exam	1 Dynamic Final Exam with Secured Activation Variables in the design of the exam allows an instructor to administer unique exams to each student and assess each student's learning

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	individually. With Secured Activation, individual assessment item preview and review is disabled to improve validity and security of this summative assessment. Instructors are provided with a visual summary view of how students performed against the competencies outlined for the course.
Packet Tracer Skills	2
Assessment (PTSA)	Two PTSAs are available to assess skills learned in the course: • Packet Tracer Practice Skills Assessment
	Packet Tracer Final Skills Assessment
End-of-Course Feedback	1 end-of-course survey to provide feedback for the course.
Accessibility	New UI complies with WCAG 2.1 Level AA Guidelines. All pages contain accessible text and highly descriptive media transcripts. All PDF files in the curriculum have been created with accessible features. Videos have closed captioning available. UI is screen reader and keyboard accessible.
Certificate of Completion	The successful completion of the end-of-course assessment and end- of-course survey are required for receiving the Certificate of Completion.

Equipment List

The equipment list is contained in the scope and sequence document. The list can also be found on netacad.com. Although the equipment list has been updated, routers and switches used in the previous versions of CCNA can also be used to achieve the same fundamental CCNA skills for this course.

Known Issues and Caveats	Description
English Spelling	American-English spellings are interspersed in the text of the modules.
Closed Captions	Use the external video link if you are having issues with the embedded videos.
Packet Tracer Program	You must use Packet Tracer version 8 to load the Packet Tracer activities within this course and assessments.

Course Outline

Module	Title
1	Networking Today
2	Basic Switch and End Device Configuration
3	Protocols and Models
4	Physical Layer
5	Number Systems
6	Data Link Layer
7	Ethernet Switching
8	Network Layer
9	Address Resolution
10	Basic Router Configuration
11	IPv4 Addressing
12	IPv6 Addressing
13	ICMP
14	Transport Layer
15	Application Layer
16	Network Security Fundamentals
17	Build a Small Network

Updates in CCNAv7.02

The topics and design for each of the three courses within CCNAv7.02 were updated to reflect the new Cisco Certified Network Associate v2.0 (CCNA 200-301) Certification objectives.

In version 7.02, PTPM activities have been added to give distance learners a rich, simulated experience that corresponds to many of the real equipment labs in the course.

Support

For general assistance with curriculum, classroom, or program issues, please contact the Networking Academy™ Support Desk by signing into the netacad.com™ learning environment and clicking the Support question mark (?).