

# uCertify

## Course Outline

### CompTIA Network N10-007 uCertify Labs



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1. Course Objective
2. Expert Instructor-Led Training
3. ADA Compliant & JAWS Compatible Platform
4. State of the Art Educator Tools
5. Award Winning Learning Platform (LMS)
6. Performance Based labs

Lab Tasks

Here's what you get

## 1. Course Objective

Enroll in the CompTIA Network+ N10-007 performance-based labs to get the hands-on expertise in the CompTIA Network+ N10-007 certification exam. Performance-based labs simulate real-world, hardware, software & command line interface environments and can be mapped to any text-book, course & training. The performance-based labs offer complete coverage of N10-007 exam objectives and includes topics such as wireless technologies; network optimization, management, security, and troubleshooting; and many more. The performance-based labs offer hands-on learning and increases student engagement with the help of real-world scenarios.

## 2. Expert Instructor-Led Training

uCertify uses the content from the finest publishers and only the IT industry's finest instructors. They have a minimum of 15 years real-world experience and are subject matter experts in their fields. Unlike a live class, you can study at your own pace. This creates a personal learning experience and gives you all the benefit of hands-on training with the flexibility of doing it around your schedule 24/7.

## 3. ADA Compliant & JAWS Compatible Platform

uCertify course and labs are ADA (Americans with Disability Act) compliant. It is now more accessible to students with features such as:

- Change the font, size, and color of the content of the course
- Text-to-speech, reads the text into spoken words
- Interactive videos, how-tos videos come with transcripts and voice-over
- Interactive transcripts, each word is clickable. Students can clip a specific part of the video by clicking on a word or a portion of the text.

JAWS (Job Access with Speech) is a computer screen reader program for Microsoft Windows that reads the screen either with a text-to-speech output or by a Refreshable Braille display. Student can easily navigate uCertify course using JAWS shortcut keys.

## 4. State of the Art Educator Tools

uCertify knows the importance of instructors and provide tools to help them do their job effectively. Instructors are able to clone and customize course. Do ability grouping. Create sections. Design grade scale and grade formula. Create and schedule assessments. Educators can also move a student from self-paced to mentor-guided to instructor-led mode in three clicks.

## 5. Award Winning Learning Platform (LMS)

uCertify has developed an award winning, highly interactive yet simple to use platform. The SIIA CODiE Awards is the only peer-reviewed program to showcase business and education technology's finest products and services. Since 1986, thousands of products, services and solutions have been recognized for achieving excellence. uCertify has won CODiE awards consecutively for last 7 years:

- **2014**

1. Best Postsecondary Learning Solution

- **2015**

1. Best Education Solution
2. Best Virtual Learning Solution
3. Best Student Assessment Solution
4. Best Postsecondary Learning Solution
5. Best Career and Workforce Readiness Solution
6. Best Instructional Solution in Other Curriculum Areas
7. Best Corporate Learning/Workforce Development Solution

- **2016**

1. Best Virtual Learning Solution
2. Best Education Cloud-based Solution
3. Best College and Career Readiness Solution
4. Best Corporate / Workforce Learning Solution
5. Best Postsecondary Learning Content Solution

6. Best Postsecondary LMS or Learning Platform
7. Best Learning Relationship Management Solution

- **2017**

1. Best Overall Education Solution
2. Best Student Assessment Solution
3. Best Corporate/Workforce Learning Solution
4. Best Higher Education LMS or Learning Platform

- **2018**

1. Best Higher Education LMS or Learning Platform
2. Best Instructional Solution in Other Curriculum Areas
3. Best Learning Relationship Management Solution

- **2019**

1. Best Virtual Learning Solution
2. Best Content Authoring Development or Curation Solution
3. Best Higher Education Learning Management Solution (LMS)

- **2020**

1. Best College and Career Readiness Solution
2. Best Cross-Curricular Solution
3. Best Virtual Learning Solution

## 6. **Performance Based Labs**

uCertify's performance-based labs are simulators that provides virtual environment. Labs deliver hands on experience with minimal risk and thus replace expensive physical labs. uCertify Labs are cloud-based, device-enabled and can be easily integrated with an LMS. Features of uCertify labs:

- Provide hands-on experience in a safe, online environment
- Labs simulate real world, hardware, software & CLI environment
- Flexible and inexpensive alternative to physical Labs

- Comes with well-organized component library for every task
- Highly interactive - learn by doing
- Explanations and remediation available
- Videos on how to perform

## Lab Tasks

- Identifying network components
- Identifying network categories
- Connecting Devices in Bus Topology
- Identifying network topologies
- Understanding wireless topologies
- Connecting Devices in a Peer- To- Peer Architecture
- Identifying Clients and Servers
- Identifying OSI layers
- Identifying abbreviations for various Internet layer protocols
- Identifying TCP/IP protocol layers
- Describing OSI layers
- Identifying TCP/IP layers
- Identifying OSI layer functions
- Connecting a computer system to the network
- Identifying types of cable and connector
- Identifying twisted-pair cable connectors
- Identifying cable configuration types
- Connecting a Router to the Laptop
- Connecting a hub to a switch
- Connecting the hub with different devices using USB cables
- Creating a virtual switch
- Connecting the DHCP server and laptop to the VLAN
- Obtaining IP address information from a DHCP server
- Creating DNS domains
- Installing a NIC
- Connecting to a server using Remote Desktop Connection

- Identifying protocols and devices
- Identifying Fast Ethernet standards
- Connecting patch cables between the patch panel and switch ports
- Understanding STP Port Cost
- Capturing packet using Wireshark
- Converting a Decimal Number to Binary
- Understanding types of addresses
- Connecting a Workstation to the LAN and Configuring IPv4 Properties
- Obtaining Automatic Private IP Addressing
- Configuring Automatic Private IP Addressing
- Configuring IPv4 address
- Adding DNS server
- Using a Subnet Calculator
- Identifying steps for calculating subnets
- Understanding types of IPv6 data flows
- Configuring and testing IPv6 addresses
- Adding and removing an IPv6 address
- Identifying administrative distances
- Identifying routing protocols
- Describing Network Address Translation
- Identifying NAT IP addresses
- Understanding IGMP
- Identifying WAN connection types
- Creating a dial-up connection
- Identifying MPLS network elements
- Connecting Cable Internet Access for your Network
- Adding static routes in RRAS
- Connecting a Wireless Router to a Laptop
- Identifying WLANs
- Troubleshooting AP
- Configuring SSID
- Connecting to a Password Protected Network
- Configuring Windows 10 Wireless Settings
- Understanding network architecture
- Understanding QoS configuration
- Connecting systems to the Internet through a router

- Understanding the arp command
- Understanding ipconfig commands
- Analyzing network paths with tracert
- Using the nbtstat command
- Using the netstat command
- Using the nslookup command
- Checking IP connectivity between two network devices
- Deleting the route
- Adding the route
- Using dig command
- Using host command
- Configuring and verifying interface's IP address configuration
- Using traceroute command
- Using netstat command
- Using ping command
- Adding a static route
- Adding a static ARP entry with the arp command
- Deleting a static ARP entry with the arp command
- Checking the Internet speed
- Identifying Syslog severity levels
- Viewing TCP frame details using Network Monitor
- Viewing the logs
- Filtering entries in Event Viewer
- Identifying sequence of asymmetric encryption
- Identifying the Denial of Service Attack
- Identifying network attacks
- Scanning using nmap
- Running the Nessus vulnerability scan
- Identifying Bluetooth devices attacks
- Identifying types of firewall
- Configuring Windows firewall settings
- Turning on Windows Firewall
- Setting Up a DMZ on a SOHO Router
- Creating a remote access VPN connection
- Understanding IPsec VPN
- Identifying detection methods



- Changing Passwords for the Router
- Troubleshooting a network
- Diagnosing a network problem
- Troubleshooting physical link layer issues
- Identifying physical layer issues
- Troubleshooting data link layer issues
- Understanding data structures
- Diagnosing Networking Issues
- Identifying error in net connection

## Here's what you get

**107**

**PERFORMANCE BASED  
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