

Critical Thinking Assignment 5: Labs Lessons 8

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IT315-2: Introduction to Networks

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This documentation is part of the Critical Thinking 5 Assignment from ITS315: Introduction to Networks at Colorado State University Global.

The Assignment Direction:

Module #5: uCertify Lab Simulations

For this assignment, you will complete multiple lab simulations. Activities include configuring wireless routers and SSID, understanding network architecture, etc. You will take a screenshot upon completion of each lab and include the screenshots in the submitted assignment.

Access uCertify and login, go to Labs, and complete the tasks in the following lab simulations:

8.1.1 Connecting a Wireless Router to a Laptop

8.2.1 Identifying WLANs

8.2.2 Troubleshooting AP

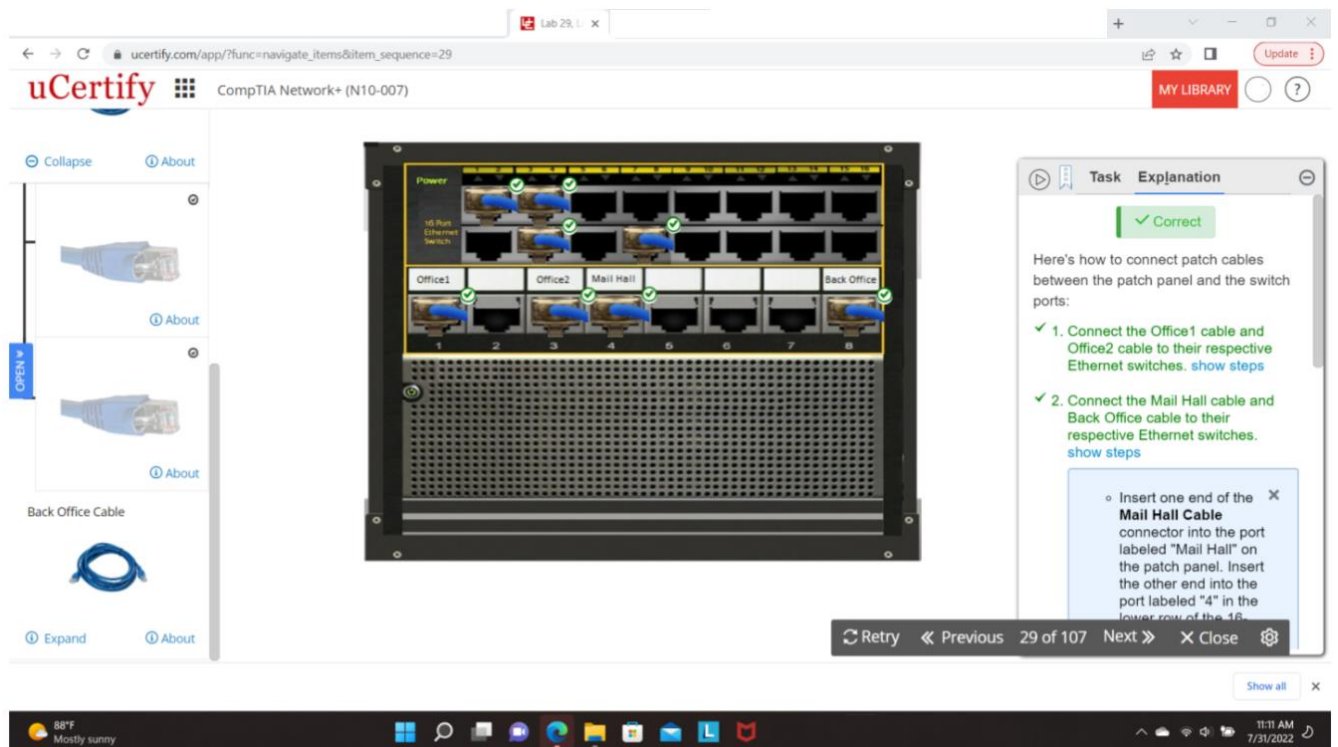
8.3.1 Configuring SSID

8.4.1 Understanding network architecture

After completing the task, click Submit >> Evaluate >> Record my answer to record your answer. Take a screenshot of each of the labs and paste the screenshot into a Word document. The document should have a title page that includes your name, date, school name, section, course name, and instructor name.

Submit the assignment in Canvas.

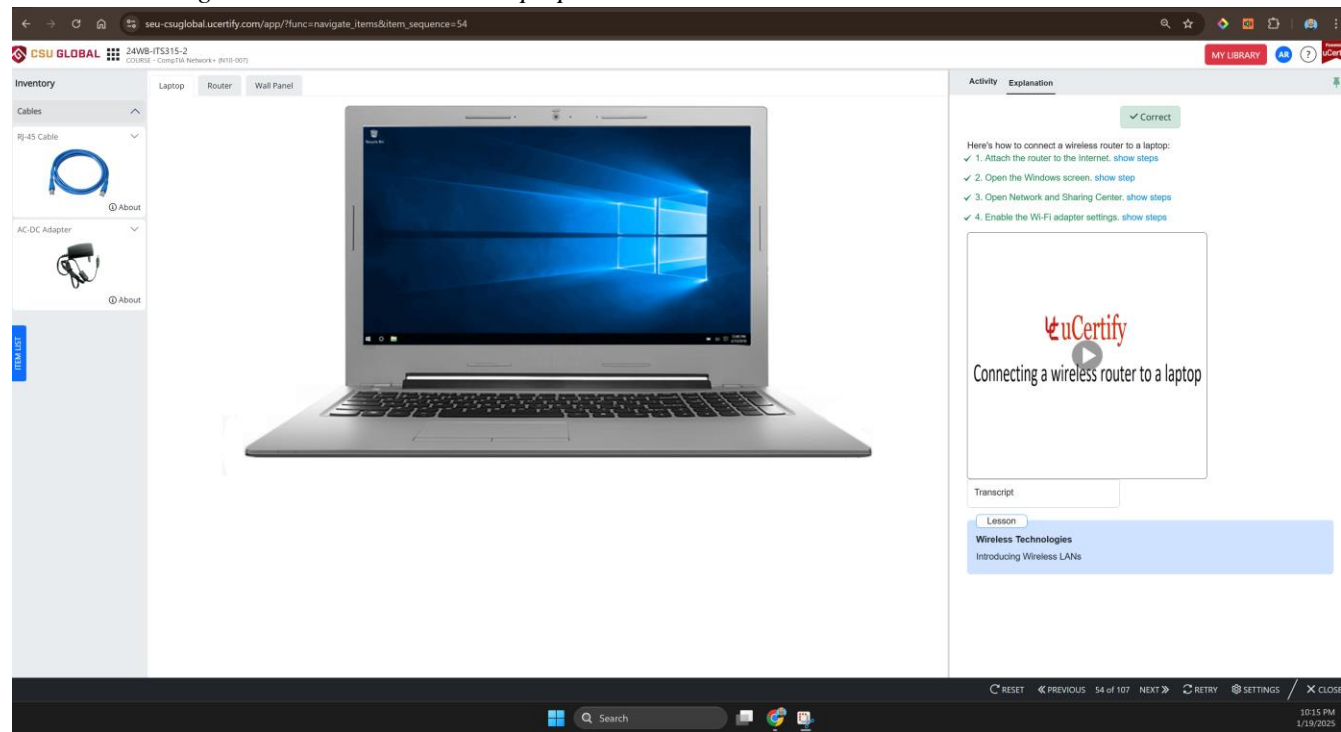
Please ensure your screenshot includes your name, date, and timestamp as shown in the image below.



Screenshots

Figure 1

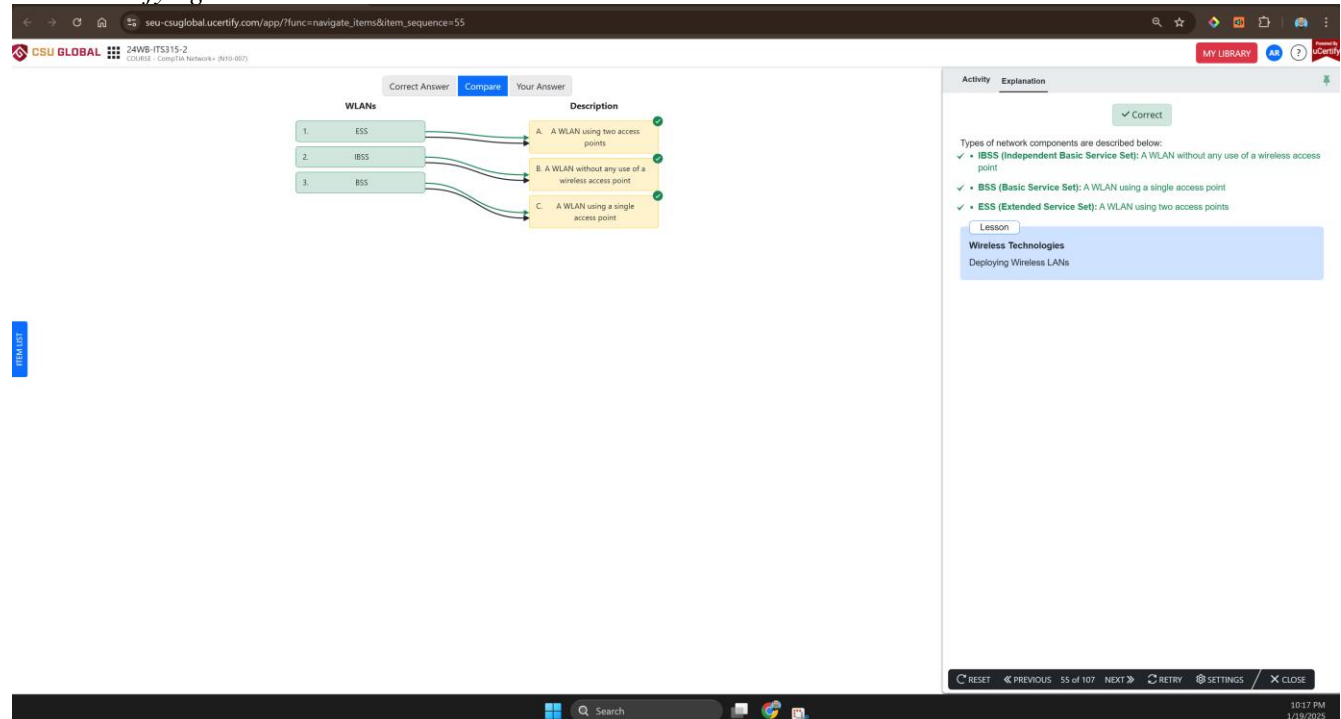
8.1.1 Connecting a Wireless Router to a Laptop



The screenshot shows the uCertify interface for item 54. The main content area displays a laptop with a Windows 10 desktop. To the right of the laptop is a video player titled "Connecting a wireless router to a laptop". The video player shows a play button and the uCertify logo. Below the video player is a transcript section. The left sidebar shows the "Inventory" section with "Cables" and "AC-DC Adapter" items. The top navigation bar includes "Laptop", "Router", and "Wall Panel" tabs. The bottom status bar shows the course name "24WB-ITS315-2" and the date "1/19/2025".

Figure 2

8.2.1 Identifying WLANs



The screenshot shows the uCertify interface for item 55. The main content area displays a matching exercise titled "Identifying WLANs". The exercise consists of two columns: "WLANs" and "Description". The "WLANs" column lists three items: 1. ESS, 2. IBSS, and 3. BSS. The "Description" column lists three items: A. A WLAN using two access points, B. A WLAN without any use of a wireless access point, and C. A WLAN using a single access point. Arrows indicate the correct matches: ESS matches A, IBSS matches B, and BSS matches C. The right sidebar shows the "Explanation" section with a "Correct" status and a list of network components: IBSS (Independent Basic Service Set), BSS (Basic Service Set), and ESS (Extended Service Set). The bottom status bar shows the course name "24WB-ITS315-2" and the date "1/19/2025".

Figure 3
8.2.2 Troubleshooting AP

The screenshot displays a uCertify lesson interface. On the left, a network diagram shows a 'Layer 2 Switch' connected to three 'Access Point' devices labeled AP1, AP2, and AP3. The right side of the interface contains a transcript and a video player. The transcript indicates a 'Correct' status and provides the following explanation:

The intermittent connectivity issue is due to misconfigured channel settings. Since the wireless mode is set to g, there are three non-overlapping channels associated with it, which are 1, 6, and 11. The channels for AP2 and AP3 are set to 2 and 3, respectively, which is the cause of interference and frequent connectivity issues. Here's how to configure the channel settings:

- ✓ 1. Click on AP2 and change the channel to 6. Save the configuration.
- ✓ 2. Click on AP3 and change the channel to 11. Save the configuration.

Below the transcript, a video player shows the title 'Troubleshooting AP' with the uCertify logo. The bottom of the screen shows a Windows taskbar with the search bar and system clock.

Figure 4
8.3.1 Configuring SSID

The screenshot displays a uCertify lesson interface. On the left, a Windows 10 desktop is shown with the Recycle Bin icon and the Windows logo wallpaper. The right side of the interface contains a transcript and a video player. The transcript indicates a 'Correct' status and provides the following explanation:

Here's how to configure SSID:

- ✓ 1. Log in to D-Link. [show steps](#)
- ✓ 2. Manually configure the wireless network setup. [show steps](#)
- ✓ 3. Configure the wireless settings. [show steps](#)
- ✓ 4. Save the settings. [show steps](#)

Below the transcript, a video player shows the title 'Configuring SSID' with the uCertify logo. The bottom of the screen shows a Windows taskbar with the search bar and system clock.

Figure 5
 8.4.1 Understanding network architecture

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CSU GLOBAL 24WB-IT5315-2
 COURSE - CompTIA Network+ (N10-007)

Correct Answer Your Answer

Network Architecture

Building 1

Building 2

Activity Explanation

✓ Correct

The network architecture showing the correct antenna type and security options are given below:

- ✓ For access point AP1:
 - ✓ Antenna type: 5 dBi Directional Right
 - ✓ Security option: Open
- ✓ For access point AP2:
 - ✓ Antenna type: 4 dBi Omnidirection
 - ✓ Security option: Open
- ✓ For access point AP3:
 - ✓ Antenna type: 5 dBi Directional Left
 - ✓ Security option: Open
- ✓ For access point External AP4:
 - ✓ Antenna type: 14 dBi Parabolic Right
 - ✓ Security option: WPA2-CCMP
- ✓ For access point External AP5:
 - ✓ Antenna type: 14 dBi Parabolic Left
 - ✓ Security option: WPA2-CCMP

Figure: Network Architecture

Lesson

RESET PREVIOUS 40 of 107 NEXT RETRY SETTINGS CLOSE

10:20 PM
 1/19/2025

Figures 1 through 5 show that all the lab questions were answered correctly.