

Critical Thinking Assignment 2: Labs Lessons 3 and 4

Alexander Ricciardi

Colorado State University Global

IT315-2: Introduction to Networks

Dr. Sheryl Drake

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Critical Thinking Assignment 2: Labs Lessons 3 and 4

This documentation is part of the Critical Thinking 2 Assignment from ITS315: Introduction to Networks at Colorado State University Global.

The Assignment Direction:

Module #2: uCertify Lab Simulations

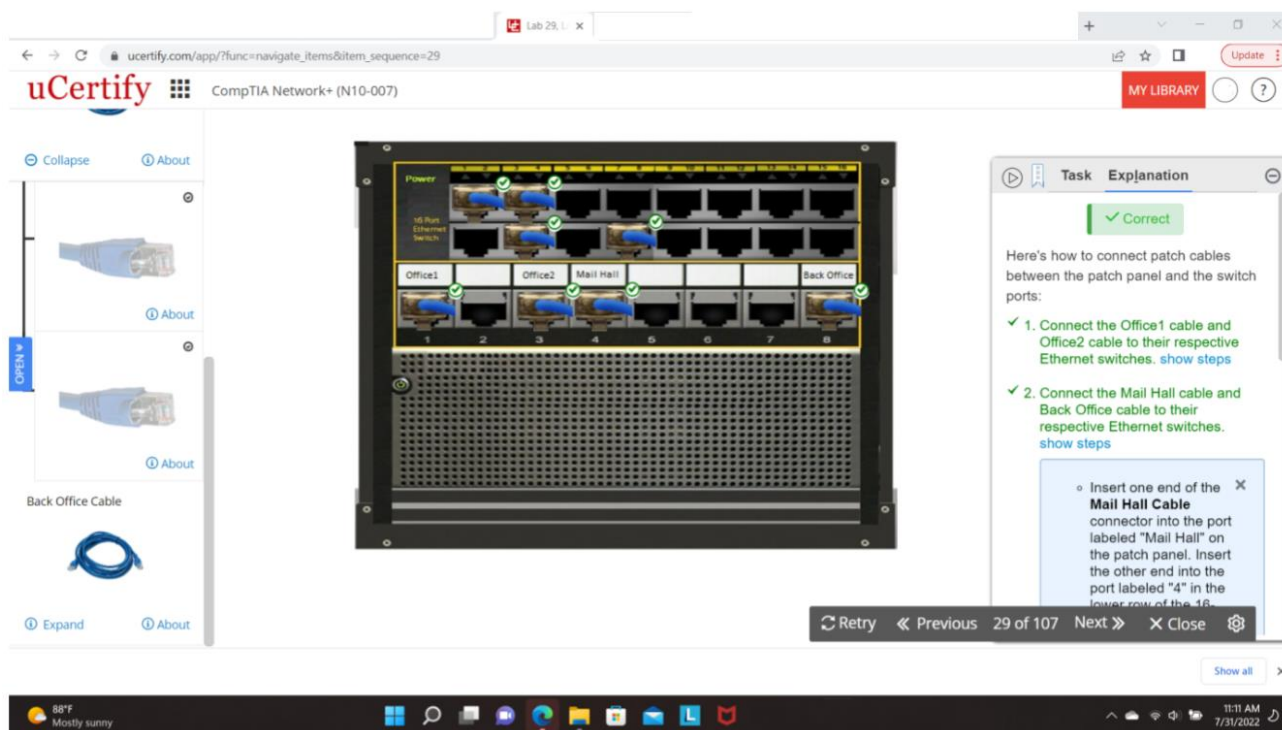
For this assignment, you will complete multiple lab simulations. Activities include identifying cables, protocols, devices, ethernet standards, etc. You will take a screenshot upon completion of each lab and include the screenshots in the submitted assignment.

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

- 3.1.14 Identifying types of cable and connector
- 3.1.16 Identifying cable configuration types
- 3.5.4 Identifying protocols and devices
- 4.1.7 Identifying Fast Ethernet standards
- 4.1.8 Connecting patch cables between the patch panel and switch ports

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
3.1.14 Identifying types of cable and connector

The screenshot displays a quiz interface on the CSU GLOBAL platform. The quiz is titled "3.1.14 Identifying types of cable and connector". It shows four images of cables/connectors and their corresponding names:

- 1. Image of a blue RJ-45 connector connected to a cable.
- 2. Image of a twisted pair cable.
- 3. Image of a coaxial cable.
- 4. Image of a fibre optic cable.

The correct answer is marked as "Correct". The explanation states: "The types of cable and connector are given below:"

- ✓ Coaxial Cable
- ✓ Fibre Optic Cable
- ✓ RJ-45 Connector
- ✓ Twisted Pair Cable

The interface also includes a "Lesson" section titled "Network Components" with a sub-section "Media".

Figure 2
3.1.16 Identifying cable configuration types

The screenshot displays a quiz interface on the CSU GLOBAL platform. The quiz is titled "3.1.16 Identifying cable configuration types". It shows eight cable configurations between various network devices (Switch, Router, PC, Hub) and their corresponding cable types (Straight-through, Crossover):

- Switch to Router: Straight-through
- Switch to PC: Straight-through
- PC to PC: Crossover
- Hub to Hub: Crossover
- Hub to PC: Straight-through
- Hub to Switch: Crossover
- Router to PC: Crossover
- Router to Hub: Crossover

The correct answer is marked as "Correct". The explanation states: "Computers can connect to the network through a hub or switch with a straight-through cable. Computers, switch-to-hub, and router-to-PC also connect directly to one another using a crossover cable."

The interface also includes a "Lesson" section titled "Network Components" with a sub-section "Media".

Figure 3

3.5.4 Identifying protocols and devices

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Correct Answer Compare Your Answer

Protocol/Device

1. Gateway
2. Call agent
3. IP phone
4. RTP

Description

- A. Acts as a translator between two different telephony signaling environments
- B. A telephone with an integrated Ethernet connection
- C. A repository for a VoIP network's dial plan
- D. The Layer 4 protocol that carries voice

ITEM LIST

Activity Explanation

✓ Correct

The protocols and devices in a VoIP (Voice over Internet Protocol) network are:

- ✓ **IP phone:** A telephone with an integrated Ethernet connection
- ✓ **Call agent:** A repository for a VoIP network's dial plan
- ✓ **Gateway:** Acts as a translator between two different telephony signaling environments
- ✓ **Real-time Transport Protocol (RTP):** The Layer 4 protocol that carries voice

Lesson

Network Components

Voice over IP Protocols and Components

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Figure 4

4.1.7 Identifying Fast Ethernet standards

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Correct Answer Compare Your Answer

Standard

1. 100BaseFX
2. 1000BaseLX
3. 1000BaseCX
4. 100BaseTX

Distance

- A. 25 meters
- B. 412 meters for half-duplex
- C. 10 km
- D. 100 meters per network segment

ITEM LIST

Activity Explanation

✓ Correct

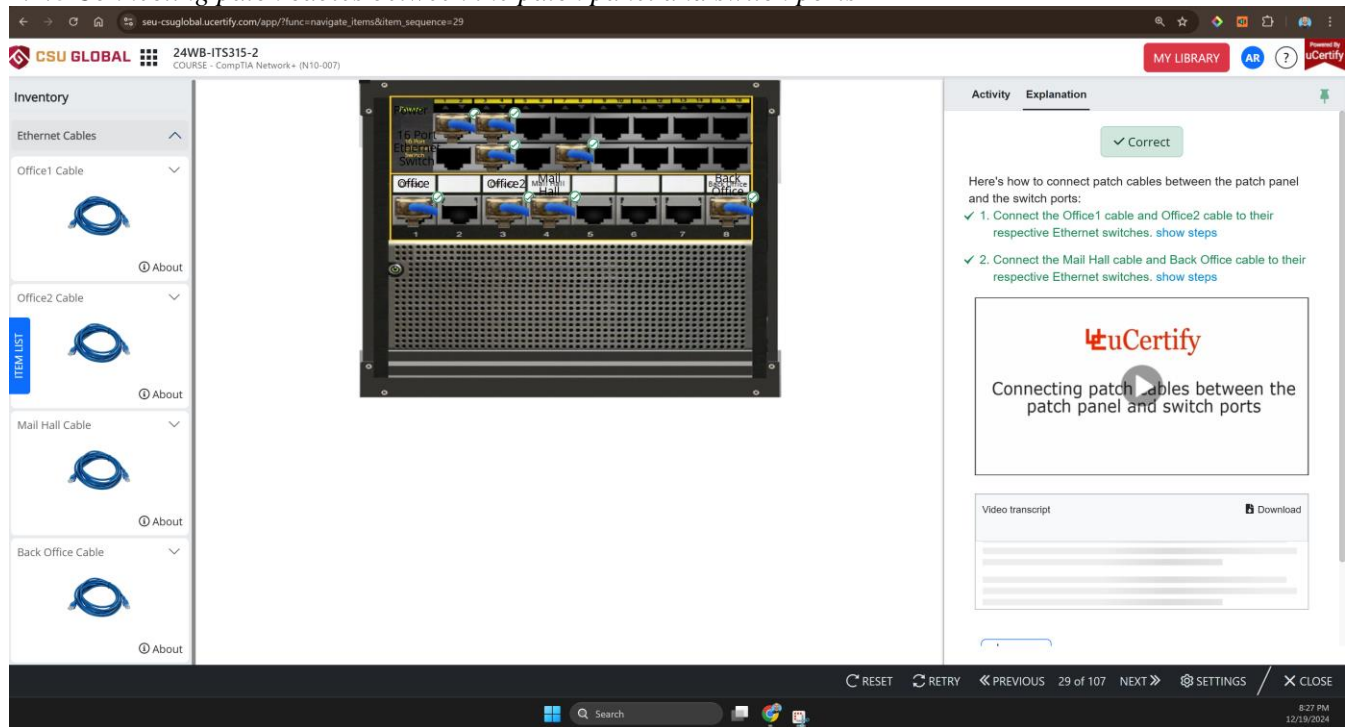
The following table gives the maximum data transmission distances for various Fast Ethernet standards:

Fast Ethernet standard	Distance
100BaseTX	✓ 100 meters per network segment
100BaseFX	✓ 412 meters for half-duplex
1000BaseLX	✓ 10 km
1000BaseCX	✓ 25 meters

Lesson

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Figure 5**4.1.8 Connecting patch cables between the patch panel and switch ports**

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