

Design and Build a Small Business Network (Capstone Project)

Objectives

Explain how a small network of directly connected segments is created, configured, and verified.

In this activity, you will demonstrate that you know how to design, configure, verify, and secure a very small network. Documentation and presentation are also vital parts of this Capstone Project.

Background/Scenario

Note: This activity is best completed in groups of 2-3 students.

Design and build a network from scratch.

- Your design must include a minimum of one router, one switch, and one PC.
- Fully configure the network and use IPv4 or IPv6 (subnetting must be included as a part of your addressing scheme).
- Verify the network using at least five show commands.
- Secure the network using SSH, secure passwords, and console passwords (minimum).

Create a rubric to use for informal peer grading. Alternatively, your instructor may choose to use the rubric provided with this activity.

Present your Capstone Project to the class and be able to answer questions from your peers and Instructor.

Required Resources

- Packet Tracer
- Student/group-created rubric for assessment of the assignment

Reflection

1. What was the most difficult portion of this activity?

2. Why do you think network documentation is so important to this activity and in the real world?