Introduction

11.0.1

Why should I take this module?

Welcome to Network Design!

You are a sought after spaceship designer! You have been asked to design a new spaceship. Your first questions are, "What will this ship be used for? How large is the crew? Will it be a war ship? A cargo ship? A science and exploration vessel?" What if the answer is, "The crew can be as few as 50 people, but it must be able to hold as many as 500. It will be used in a variety of ways."? How do you design a ship like this? You must design the size and configuration of the ship, and the power it requires, wisely.

Designing a network to meet current requirements and to adapt to future requirements is a complex task. But it can be done, thanks to hierarchical and scalable network designs that use the right components. You know you want to learn about this. Even if you have not designed your current network, knowing about network design will increase your value to the organization as a great network administrator! And who doesn't want that?

11.0.2

What will I learn to do in this module?

Module Title: Network Design

Module Objective: Explain the characteristics of scalable network architectures.

Topic Title	Topic Objective
Hierarchical Networks	Explain how data, voice, and video are converged in a switched network.
Scalable Networks	Explain considerations for designing a scalable network.
Switch Hardware	Explain how switch hardware features support network requirements.
Router Hardware	Describe the types of routers available for small to-medium-sized business networks.