

Call me!

Objectives

Explain why routing is necessary for hosts on different subnets to communicate.

In this activity, you will:

- Recognize that data is delivered quicker if group addressing identifiers are used.
- Visualize how communication is facilitated through providing large groups and then splitting those groups into more manageable parts. After reflecting on how your smartphone or landline telephone numbers are divided, you can draw inferences to how networking employs the same practices.

Background/Scenario

In this chapter, you will learn how devices can be grouped into subnets, or smaller network groups, from a large network.

In this modeling activity, you are asked to think about a number you probably use every day, a number such as your telephone number. As you complete the activity, think about how your telephone number compares to strategies that network administrators might use to identify hosts for efficient data communication.

Complete the two sections listed below and record your answers. Save the two sections in either hard- or soft-copy format to use later for class discussion purposes.

- Explain how your smartphone or landline telephone number is divided into identifying groups of numbers. Does your telephone number use an area code? An Internet service provider (ISP) identifier? A city, state, or country code?

- In what ways does separating your telephone number into managed parts assist in contacting or communicating with others?

Required Resources

Recording capabilities (paper, tablet, etc.) for reflective comments to be shared with the class

Reflection

1. Why do you think ISPs need your telephone number when setting up your account parameters?