The Internet of Everything…Naturally!

Objectives

Explain the need for IPv6 network addresses.

This is an application-based activity. You will develop a plan to show how IoE subnets, unicasts, and multicasts could be used in our daily lives to affect data communication.

Background/Scenario

Note: This activity may be completed individually or in small/large groups.

This chapter discussed the ways in which small to medium-sized businesses are connected to networks in groups. The IoE was introduced in the activity at the beginning of this chapter.

Choose one of the following:

- Online banking
- World news
- Weather forecasting/climate
- Traffic conditions

Devise an IPv6 addressing scheme for the area you have chosen. Your addressing scheme should include how you would plan for:

- Subnetting
- Unicasts
- Multicasts

Keep a copy of your scheme to share with the class or learning community. Be prepared to explain:

- How subnetting, unicasts, and multicasts could be incorporated
- Where your addressing scheme could be used
- How small to medium-size businesses would be affected by using your plan

Required Resources

- Paper, pens, pencils, or tablets
- Packet Tracer (if you would like to display how your network would physically look)
- Hard- or soft-copy of the final network topology with IPv6 addressing indicated for sharing with the class.

Reflection

1. What was the hardest part of designing this network model? Explain your answer.