The Internet of Everything…Naturally!

1. 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.

1. 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

1. 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.

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

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