Lab5: Variable Length Subnetting

Course Name and Number:

Student Name:

Instructor Name:

Lab Due Date:

Overview

The goal of this first lab was primarily to introduce you to variable length subnetting and to allow you to apply variable length subnetting to an organizational network

Lab Assessment Questions

Based upon your plan answer the following questions

1. Number of IPs used:
2. IP range used:
3. Number of IPs lost due to Subnetting:
4. Number of unassigned IPs:
5. Starting Address of unassigned IPs:
6. Overall IP utilization:

The organization has plans to expand by adding additional networks and systems to existing networks. Based upon your subnetting plan can they:

1. Create an additional network of 13 systems off Router 4?
2. Create an additional network of 12 systems off Router 5?
3. Create an additional network of 10 systems off Router 9?
4. Add 20 additional systems in Network 5?
5. Add 10 additional systems in Network 4?
6. What can the organization do if they run out of IPs?

**Submit a copy of the tables used in the lab**