**Final Exam Logical Topology**

**Network Requirements**Examine the network requirements (current and future) and answer the questions below.

1. How many subnets are possible? 16-/64 subnets; 8-/63 subnets; or 4-/62 subnets
2. How many subnets are required? We used 4 subnets

**Design an IP Addressing Scheme**

Subnet the network **(provided to you on the exam)** into the appropriate number of subnets.

1. Fill in the following chart with the subnet information

|  |  |  |  |
| --- | --- | --- | --- |
| **Subnet Number** | **Subnet Address** | **1st Usable Host Address** | **Last Usable Host Address** |
| 1 | 2001:ABBA:ABBA:3330::/62 | 2001:ABBA:ABBA:3330::1 | 2001:ABBA:ABBA:3333:FFFF:FFFF:FFFF:FFFF |
| 2 | 2001:ABBA:ABBA:3334::/63 | 2001:ABBA:ABBA:3334::1 | 2001:ABBA:ABBA:3335:FFFF:FFFF:FFFF:FFFF |
| 3 | 2001:ABBA:ABBA:3336::/64 | 2001:ABBA:ABBA:3336::1 | 2001:ABBA:ABBA:3336:FFFF:FFFF:FFFF:FFFF |
| 4 | 2001:ABBA:ABBA:3337::/64 | 2001:ABBA:ABBA:3337::1 | 2001:ABBA:ABBA:3337:FFFF:FFFF:FFFF:FFFF |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

**Device Address Table**

* You only to need to list one 1 PC per subnet. Make sure to name your PC’s accordingly. The PC’s should list the NIC as their interface.
* No need to include the printers in this device table.
* The router will have many IP addresses depending on the number of subnets you have in your topology

|  |  |  |
| --- | --- | --- |
| **Device (Name)** | **IPv6 Address** | **Default Gateway (if applicable)** |
| Sales PC1 | 2001:ABBA:ABBA:3330::1 | 2001:ABBA:ABBA:3330::1 |
| Sales PC2 | 2001:ABBA:ABBA:3330::2 | 2001:ABBA:ABBA:3330::1 |
| Sales PC3 | 2001:ABBA:ABBA:3330::3 | 2001:ABBA:ABBA:3330::1 |
| Sales PC4 | 2001:ABBA:ABBA:3330::4 | 2001:ABBA:ABBA:3330::1 |
| Sales PC5 | 2001:ABBA:ABBA:3330::5 | 2001:ABBA:ABBA:3330::1 |
| Sales PC6 | 2001:ABBA:ABBA:3330::6 | 2001:ABBA:ABBA:3330::1 |
| Sales PC7 | 2001:ABBA:ABBA:3330::7 | 2001:ABBA:ABBA:3330::1 |
| Admin PC1 | 2001:ABBA:ABBA:3334::1 | 2001:ABBA:ABBA:3330::1 |
| Admin PC2 | 2001:ABBA:ABBA:3334::2 | 2001:ABBA:ABBA:3330::1 |
| Admin PC3 | 2001:ABBA:ABBA:3334::3 | 2001:ABBA:ABBA:3330::1 |
| Admin PC4 | 2001:ABBA:ABBA:3334::4 | 2001:ABBA:ABBA:3330::1 |
| Reception PC1 | 2001:ABBA:ABBA:3336::1 | 2001:ABBA:ABBA:3330::1 |
| Reception PC2 | 2001:ABBA:ABBA:3336::2 | 2001:ABBA:ABBA:3330::1 |
| Reception PC3 | 2001:ABBA:ABBA:3336::3 | 2001:ABBA:ABBA:3330::1 |
| Richard PC | 2001:ABBA:ABBA:3337::1 | 2001:ABBA:ABBA:3330::1 |
| Auditor PC | 2001:ABBA:ABBA:3337::2 | 2001:ABBA:ABBA:3330::1 |