VLSM:

|  |  |  |
| --- | --- | --- |
| Units | # of hosts | Network addresses |
| Administrative Unit | 200 | 172.16.8.1 - 172.16.8.254 /24 |
| Game Development Unit | 600 | 172.16.0.1 - 172.16.3.254 /22 |
| Web Development Unit | 600 | 172.16.4.1 - 172.16.7.254 /22 |
| Network Backbone | 20 | 172.16.9.1 – 172.16.9.30 /27 |

|  |  |  |  |
| --- | --- | --- | --- |
| **Groups** | **# of Hosts** | **Major Subnet** | **VLSM** |
| **Sales and Marketing** | 20 | 172.16.8.128 | 172.16.8.129/27 - 172.16.8.158/27 |
| **Human Resource** | 12 | 172.16.8.224 | 172.16.8.225/28 - 172.16.8.238/28 |
| **Purchasing** | 20 | 172.16.8.160 | 172.16.8.161/27 - 172.16.8.190/27 |
| **Admin** | 100 | 172.16.8.0 | 172.16.8.1/25 - 172.16.8.126/25 |
| **IT Services** | 16 | 172.16.8.192 | 172.16.8.193/27 - 172.16.8.222/27 |
| **Servers** | 10 | 172.16.8.240 | 172.16.8.241/28 - 172.16.8.254/28 |
|  | | | |
| **Game Developers** | 150 | 172.16.1.0 | 172.16.1.1/24 - 172.16.1.254/24 |
| **GameDev WiFi** | 250 | 172.16.0.0 | 172.16.0.1/24 - 172.16.0.254/24 |
| **Graphic Artists** | 60 | 172.16.2.0 | 172.16.2.1/26 - 172.16.2.62/26 |
| **Game Designers** | 30 | 172.16.2.64 | 172.16.2.65/27 - 172.16.2.94/27 |
| **Game Testers** | 30 | 172.16.2.96 | 172.16.2.97/27 - 172.16.2.126/27 |
|  | | | |
| **Web Developers** | 150 | 172.16.5.0 | 172.16.5.1/24 - 172.16.5.254/24 |
| **WebDev WiFi** | 250 | 172.16.4.0 | 172.16.4.1/24 - 172.16.4.254/24 |
| **QA Testers** | 60 | 172.16.6.0 | 172.16.6.1/26 - 172.16.6.62/26 |
| **Graphic Artists** | 60 | 172.16.6.64 | 172.16.6.65/26 - 172.16.6.126/26 |

Reserved:  
VLAN 22 IP address: 172.16.0.241/28