**Enterprize Bank Network**

Base Address: 192.168.10.0

Hosts: 25

2h - 2 ≥ required Hosts

2h - 2 ≥ 25

2h = 27

h = 5(host bits)

Subnet mask=255.255.255.224/27

Block size: 25 = 32

Usable/required hosts = 30

|  |  |  |  |
| --- | --- | --- | --- |
| Department | Network Address | Host Range | Broadcast |
| Management(Mgt) | 192.168.10.0 | 192.168.10.1  192.168.10.30 | 192.168.10.31 |
| Research | 192.168.10.32 | 192.168.10.33  192.168.10.62 | 192.168.10.63 |
| HR | 192.168.10.64 | 192.168.10.65  192.168.10.94 | 192.168.10.95 |
| Mkting | 192.168.10.96 | 192.168.10.97  192.168.10.126 | 192.168.10.127 |
| Acc | 192.168.10.128 | 192.168.10.129  192.168.10.158 | 192.168.10.159 |
| Finance | 192.168.10.160 | 192.168.10.161  192.168.10.190 | 192.168.10.191 |
| Logistics | 192.168.10.192 | 192.168.10.193  192.168.10.222 | 192.168.10.223 |
| Customer Care | 192.168.10.224 | 192.168.10.225  192.168.10.254 | 192.168.10.255 |
| Guest House | 192.168.11.0 | 192.168.11.1  192.168.11.30 | 192.168.11.31 |
| Admin | 192.168.11.32 | 192.168.11.33  192.168.11.62 | 192.168.11.63 |
| ICT | 192.168.11.64 | 192.168.11.65  192.168.11.94 | 192.168.11.95 |
| Server | 192.168.11.96 | 192.168.11.97  192.168.11.126 | 192.168.11.127 |

For VoIP phones 2 subnets were added:

|  |  |  |  |
| --- | --- | --- | --- |
| Data | 192.168.11.128 | 192.168.11.129  192.168.11.158 | 192.168.11.159 |
| Voice | 192.168.11.160 | 192.168.11.161  192.168.11.190 | 192.168.11.191 |

MultiLayer switches and Routers

A point to point network is used.

Base Address: 10.10.10.0

Hosts: 2

2h - 2 ≥ required Hosts

2h - 2 ≥ 2

2h = 4

h = 2(host bits)

Subnet mask=255.255.255.252/30

Block size: 22 = 4

Usable/required hosts = 2