

## Enterprize Bank Network

Base Address: 192.168.10.0

Hosts: 25

$2^h - 2 \geq \text{required Hosts}$

$2^h - 2 \geq 25$

$2^h = 27$

$h = 5(\text{host bits})$

Subnet mask=255.255.255.224/27

Block size:  $2^5 = 32$

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

$2^h - 2 \geq \text{required Hosts}$

$2^h - 2 \geq 2$

$2^h = 4$

$h = 2(\text{host bits})$

Subnet mask=255.255.255.252/30

Block size:  $2^2 = 4$

Usable/required hosts = 2