

**Data Network:** 192.168.100.0/24

**Voice Network:** 172.16.100.0/24

**Departments:**

Information and Communications Technology

Finance

Sales

Human Resources

**PC + Printer Addressing**

*ICT, FIN, SALES, HR: 21 devices*

*SRV: 4 devices*

| Department | Network            | Subnet Mask     | Host Range                        |
|------------|--------------------|-----------------|-----------------------------------|
| ICT        | 192.168.100.0/27   | 255.255.255.224 | 192.168.100.1 - 192.168.100.30    |
| FIN        | 192.168.100.32/27  | 255.255.255.224 | 192.168.33 - 192.168.100.62       |
| SALES      | 192.168.100.64/27  | 255.255.255.224 | 192.168.100.65 - 192.168.100.94   |
| HR         | 192.168.100.96/27  | 255.255.255.224 | 192.168.100.97 - 192.168.100.126  |
| SRV        | 192.168.100.128/29 | 255.255.255.248 | 192.168.100.129 - 192.168.100.134 |

**IP Phones Addressing**

*ICT, FIN, SALES, HR: 20 devices*

| Department | Network          | Subnet Mask     | Host Range                     |
|------------|------------------|-----------------|--------------------------------|
| ICT        | 172.16.100.0/27  | 255.255.255.224 | 172.16.100.1 - 172.16.100.30   |
| FIN        | 172.16.100.32/27 | 255.255.255.224 | 172.16.100.33 - 172.16.100.62  |
| SALES      | 172.16.100.64/27 | 255.255.255.224 | 172.16.100.65 - 172.16.100.94  |
| HR         | 172.16.100.96/27 | 255.255.255.224 | 172.16.100.97 - 172.16.100.126 |

**Inter-Router Addressing**

| Routers     | Network Address |
|-------------|-----------------|
| ICT - FIN   | 10.10.10.0/30   |
| FIN - HR    | 10.10.10.4/30   |
| HR - SALES  | 10.10.10.8/30   |
| SALES - ICT | 10.10.10.12/30  |

### Router Addressing

| Device    | Interface     | IP Address         | Subnet Mask     |
|-----------|---------------|--------------------|-----------------|
| ICT-RTR   | Se0/0/0       | 10.10.10.1/30      | 255.255.255.252 |
|           | Se0/0/1       | 10.10.10.14/30     | 255.255.255.252 |
|           | Fa0/0         | 192.168.100.129/29 | 255.255.255.248 |
|           | Fa0/1 (Data)  | 192.168.100.1/27   | 255.255.255.224 |
|           | Fa0/1 (Voice) | 172.16.100.1/27    | 255.255.255.224 |
| FIN-RTR   | Se0/0/0       | 10.10.10.5/30      | 255.255.255.252 |
|           | Se0/0/1       | 10.10.10.2/30      | 255.255.255.252 |
|           | Fa0/0 (Data)  | 192.168.100.33/27  | 255.255.255.224 |
|           | Fa0/0 (Voice) | 172.16.100.33/27   | 255.255.255.224 |
| SALES-RTR | Se0/0/0       | 10.10.10.13/30     | 255.255.255.252 |
|           | Se0/0/1       | 10.10.10.10/30     | 255.255.255.252 |
|           | Fa0/0 (Data)  | 192.168.100.65/27  | 255.255.255.224 |
|           | Fa0/0 (Voice) | 172.16.100.65/27   | 255.255.255.224 |
| HR-RTR    | Se0/0/0       | 10.10.10.9/30      | 255.255.255.252 |
|           | Se0/0/1       | 10.10.10.6/30      | 255.255.255.252 |
|           | Fa0/0 (Data)  | 192.168.100.97/27  | 255.255.255.224 |
|           | Fa0/0 (Voice) | 172.16.100.97/27   | 255.255.255.224 |