

Subnet 172.16.0.0/16

Request:

- 1 subnet of 100 hosts for Sales
- 1 subnet of 28 hosts for HR
- 1 subnet of 10 host for IT
- 1 subnets of 2 host for point to point between 2 routers

So the idea is to divide the big subnet into smaller subnets for specific request, once you have chosen a subnet for that request, proceed with the same process but using the available subnets.

172.16.0.0/16 -> 172.16.0.0/25 -> **for Sales (100 hosts)**
172.16.0.128/25 available

Proceed with next request, taking an available subnet

172.16.0.128/25 -> 172.16.0.128/27 -> **for HR (28 hosts)**
172.16.0.160/27 available
172.16.0.192/27 available
172.16.0.224/27 available

Proceed with next request, taking an available subnet

172.16.0.160/27 -> 172.16.0.160/28 -> **for IT (10 hosts)**
172.16.0.176/28 available
172.16.0.192/28 available
etc etc

Proceed with next request, taking an available subnet

172.16.0.176/28 -> 172.16.0.176/30 **for P2P (2 valid hosts)**
172.16.0.180/30 available
172.16.0.184/30 available
etc etc etc

- Please note that we are not using other subnets of the supernet, the subnets 172.16.1.0, 172.16.2.0 Are still available for new requirements.