

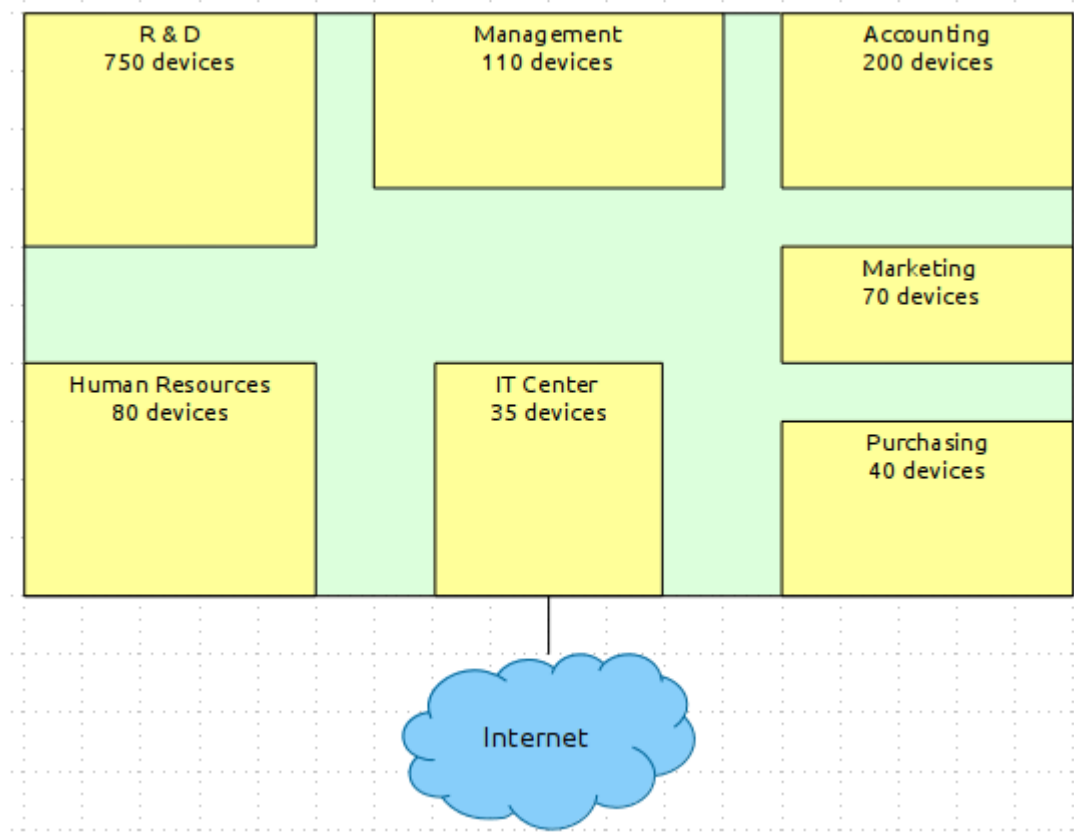
CENG393 Computer Networks Homework

You are the head of IT department of a company named ComNet, which has 1000 employees. ComNet has recently acquired a new office building and the manager has asked you to design the network infrastructure in this new building.

The manager has clearly expressed that each department in the company must have their own networks. The Internet Service Provider has allocated the following pool of IP addresses for your company: 176.18.0.0/255.255.128.0.

ComNet has the following departments with given amount of client devices (PC's, servers, IP phones, network printers, etc). Your tasks are to:

1. Design subnetworks with optimal amounts of IP addresses for each department,
2. Design physical topology of switch and router devices.



Calculate and design network ID's and subnets for each department. Draw switch and router devices where they are necessary and show their connections.