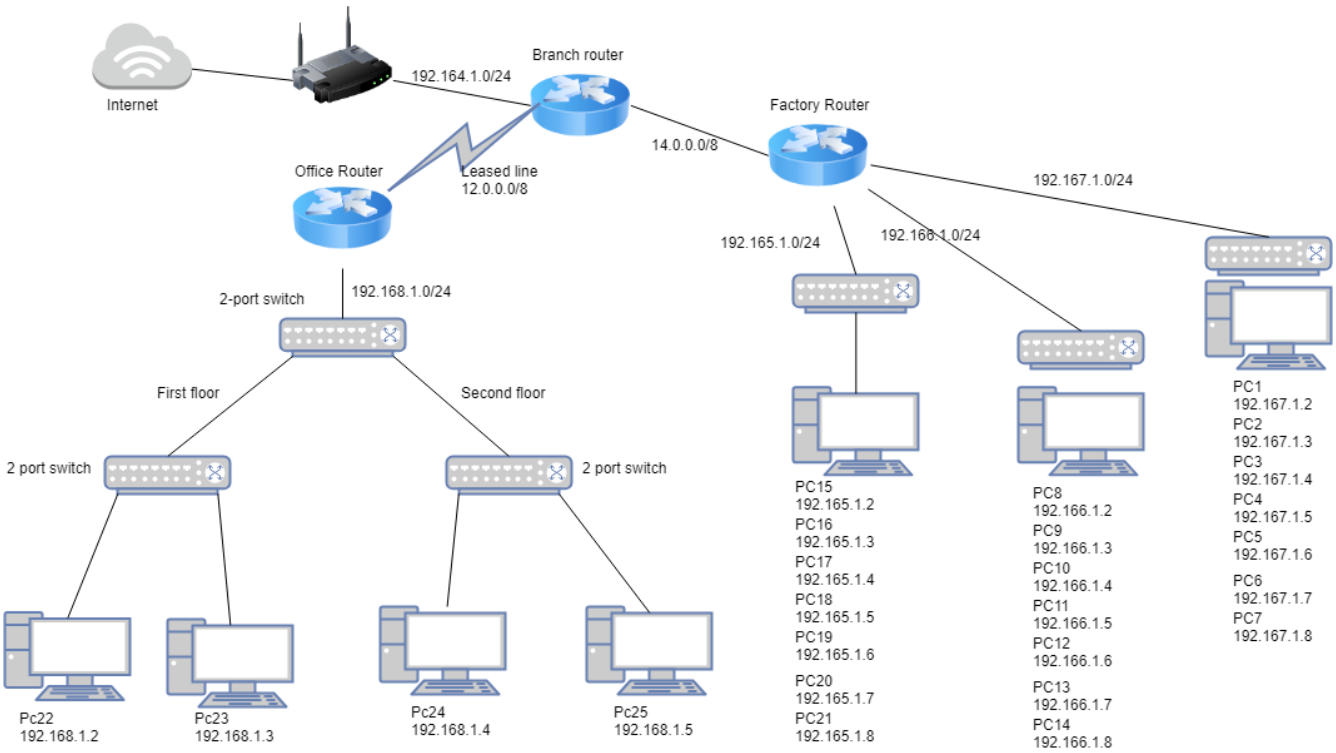
GNS3 Network Design



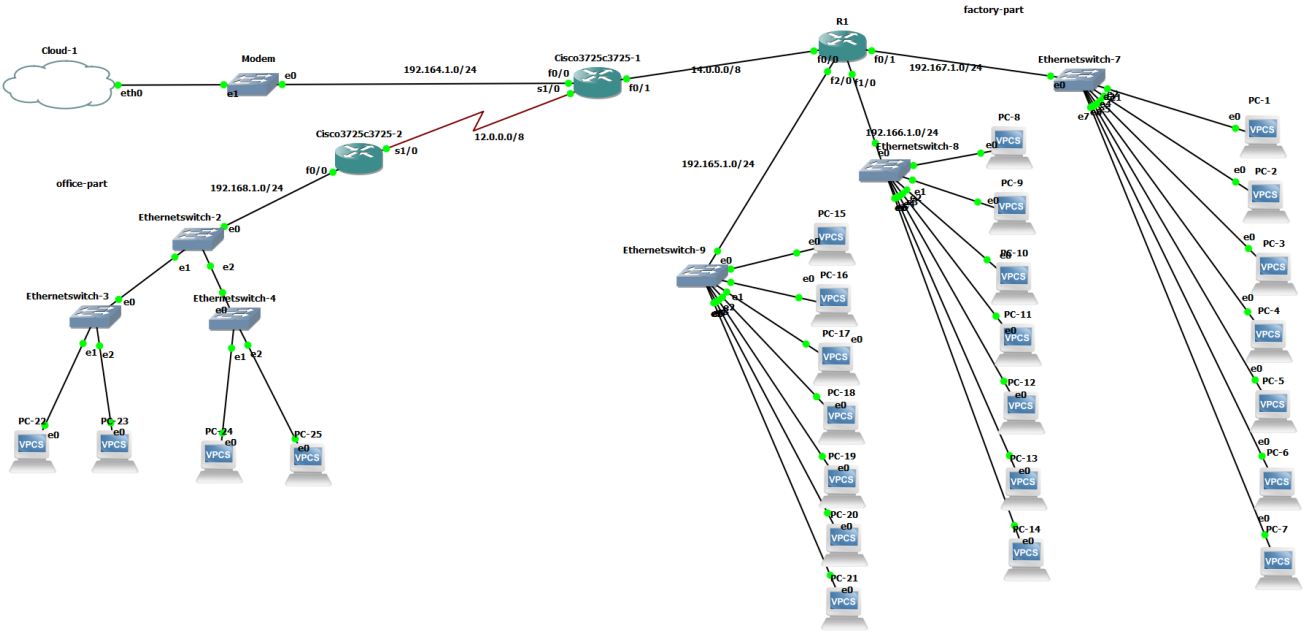
Designing a factory and office network. Entire diagram there is 3 routers, 6 switches, 1 modem and 25 VPCS.

Office building has 1 router that forward data packet to network. That router has connected 2-port switch. First floor has 2-port switch and 2 offices. Same as second floor. These switches' ports connected virtual pc's. And each pcs communicate each other.

Factory building has a router, 3 switches and 21 virtual pcs and 3 floor. Each floor has a switch and these switches are connected pcs. Again these pcs communicate each other.

Also to connect factory building to office building there is brach router. Between branch router and office builging, there is leased line. This 2 building's pcs communicate each other. Office's pc can ping factory or office pcs. And vice versa.

GNS3 Diagram



IP's

Branch router= interface serial 1/0 = 12.0.0.0/8
interface FastEthernet 0/1 = 14.0.0.0/8
interface FastEthernet 0/0 = 192.164.1.0/24

Office router= interface serial 1/0 = 12.0.0.0/8
interface FastEthernet 0/0 = 192.168.1.0/24

Factory router= interface FastEthernet 1/0 = 14.0.0.0/8
interface FastEthernet 0/1 = 192.167.1.0/24
interface FastEthernet 2/0 = 192.166.1.0/24
interface FastEthernet 2/1 = 192.165.1.0/24

PC1 to PC7 = 192.167.1.2 – 192.167.1.8 gateway 192.167.1.1
PC8 to PC14 = 192.166.1.2 – 192.166.1.8 gateway 192.166.1.1
PC15 to PC121 = 192.165.1.2 – 192.165.1.8 gateway 192.165.1.1
PC22 and PC23 = 192.168.1.2 – 192.168.1.2 gateway 192.168.1.1
PC24 and PC25 = 192.168.1.4 – 192.168.1.5 gateway 192.168.1.1

Terminal commands:

for routers: conf t
int se0/0
ip add 12.0.0.1 255.0.0.0
clock rate 64000
no sh

int fa0/0
ip add 192.168.1.1 255.255.255.0
no sh
exit
exit
sh ip int br (check whether assign ip address)
write (to save)

Router rip:

en
conf t
router rip
verion 2
no auto-summary
network (addr how many branch)
..
exit
exit
write

for PC:

ip 192.168.1.2/24 192.168.1.1 (addr and gateway)