FLOOR II

SERVER ROOM

CCTV

SR1

SW1

Internet

Unused area
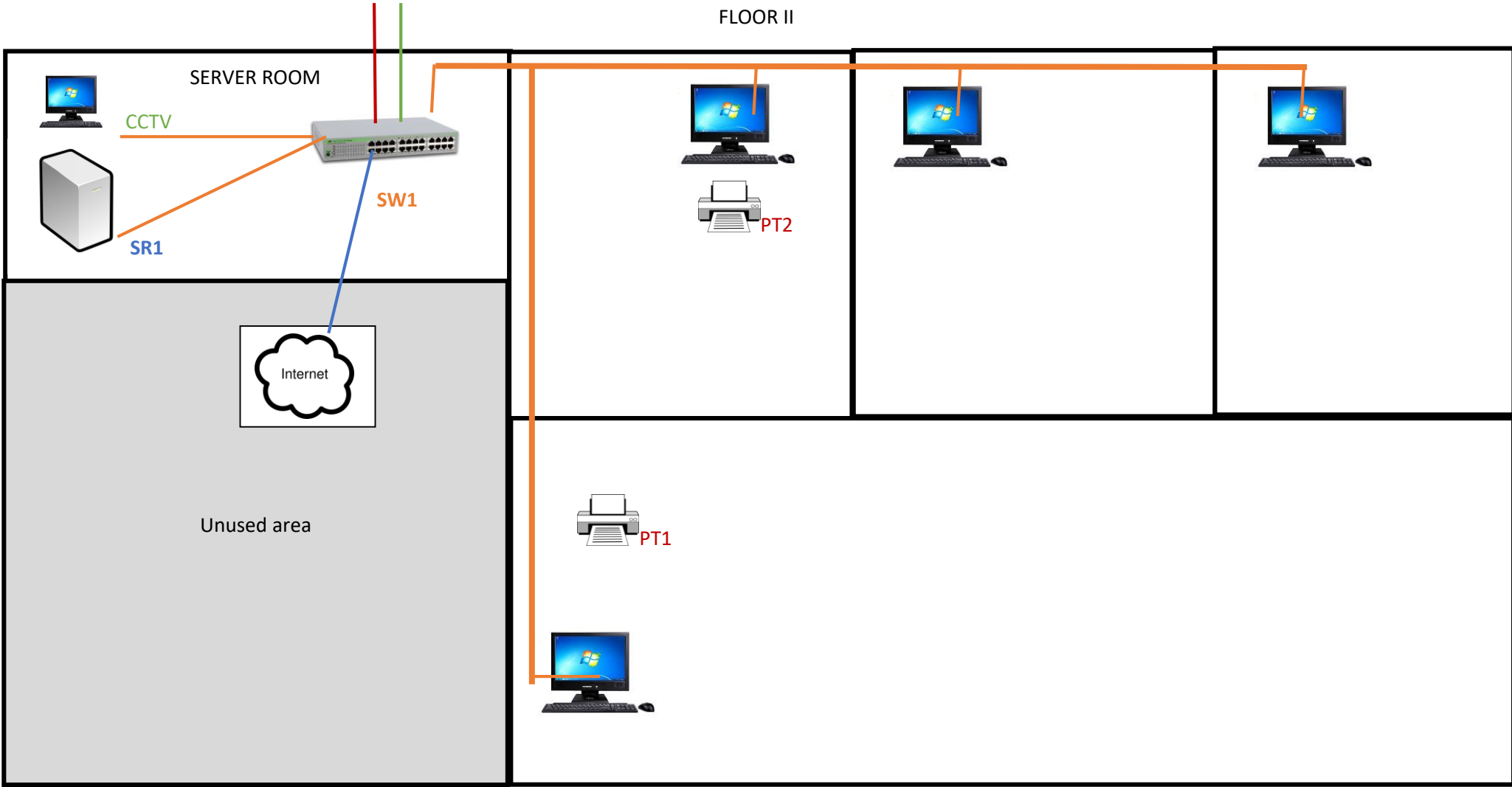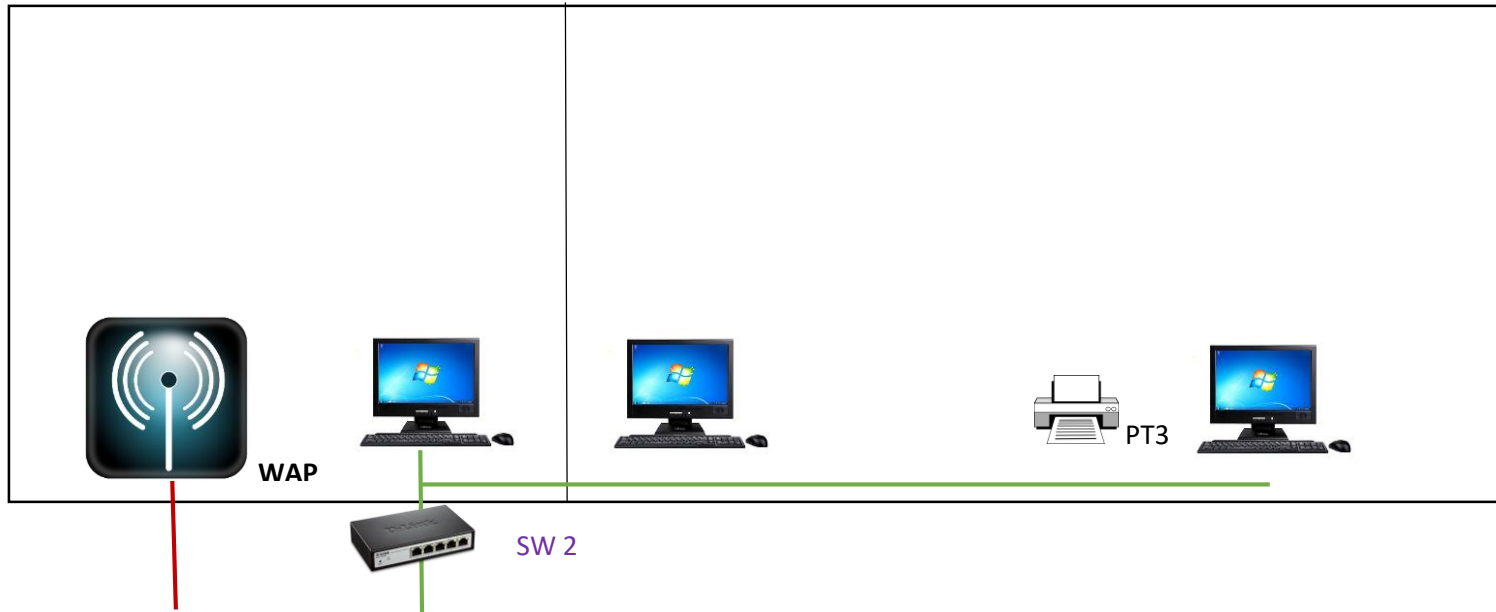
PT2

PT1

FLOOR I

WAP

SW 2

PT3

LEGEND

SW 1 – 24 port smart switch SW 2 – standard normal 5 port switch   PT 1-3 printers,

——————————   II floor Ethernet cable

——————————   I floor Ethernet cable

——————————   Wireless access point Ethernet cable

SR1 – file server

WAP – wireless access point (simple router)

CCTV- security camera system

Every PC on the II floor is connected to the SW 1 (24 port smartswitch), every printer is connected to PC next to them (they don't have Ethernet ability, older printers). Every PC has its own static IP address. All PCs on first floor are connected to switch 2 (5 port) which is connected to switch 1 (24 port) by Ethernet cable trough wall socket. CCTV security camera system needs just internet connection and it can have dynamic ip address.

SR1 file server this is how I imagined. I would use a desktop pc instead of professional server and install freeNAS (http://www.freenas.org/) on it.

 I would use 2 X 1TB HDD that are set up to mirror (1 is backup). In last 5 years we only used about 150-200 GB of HDD since its only word excel pdf etc.

There are 3-5 folders set up on NAS server (SR1) that every pc has access to it and workers can save/share files in those folders.

Every pc is able to print on any of these 3 printers.

The WAP is a normal wifi router which we use for guests to have internet, it is running on a separate Ethernet cable because I plan to put it on a separated VLAN so people don't have access to other PCs/printers/company network. Also it is not connected to the small switch SW2 because as I know I cant make VLAN on normal switches.