

Office B

Static IP Cable
Connection B

Cable Modem A

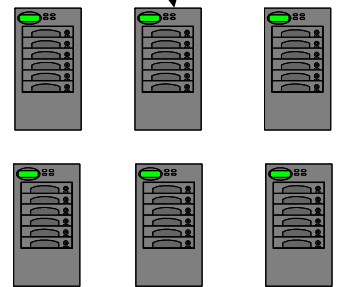


Router A

192.168.15.1



Switch A



Workstation Cluster B

192.168.15.2
192.168.15.X

Static IP Cable
Connection A

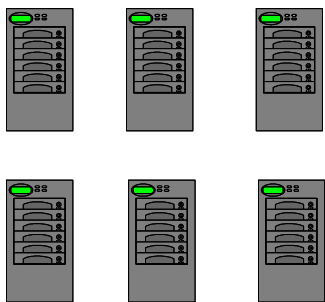
Cable Modem A



Router A
192.168.1.1



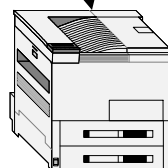
Switch A



Workstation Cluster A

192.168.1.2
192.168.1.X

Server A
192.168.1.15



Printer A
192.168.1.30

1000ft Ethernet Cable

Office A

Networking Challenge

Office A - Current Components

Office A has:

- A Static IP Business Cable Connection (Connection A)
- A router distributing IPs via DHCP
 - Gateway: 192.168.1.1
 - Workstation Cluster A IPs distributed: 192.168.1.2 – 192.168.1.X
 - 2 reserved IPs:
 - Server A: 192.168.1.15
 - Printer A: 192.168.1.30
- All workstations have local access to shared storage on Server A
- All workstations can print locally on Printer A

New Office B has:

- A static IP Business Cable Connection (Connection B)
- A router distributing IPs via DHCP
 - Gateway: 192.168.15.1
 - 64 port switch
 - Workstation Cluster B IPs Distributed: 192.168.15.2 – 192.168.15.X
 - No reserved IPs
- **Challenge: All workstations MUST have local Access to shared storage on Server A**
- **Challenge: All workstations MUST print locally on Printer A**

Additional Considerations:

- We have run a 1000ft Cat 5e line from one office to the other

Questions:

- A. How can we overcome the two challenges and bring local access to Office B computers to the resources in Office A?**
- B. How can we achieve redundancy of Internet connections; that is, if Connection B goes down, how can we switch over to Connection A?**

Equipment is not an object (we will buy anything necessary), but we are looking for as cost-effective a solution as possible.