ACTIONTEC

Wireless Access Point

192.168.1.x subnet
DHCP Enabled

NETWORK A

FIOS connection

COAX (MOCA)

PATCH 2

PATCH 3

Cisco

From Pole

PATCH 1

192.168.16.x subnet
DHCP enabled

Wireless Access Point

192.168.16.x subnet

ONT

RV042

NETWORK B

wireless printer

Connected to
Network A

laptop with wireless card

Connected to
Network B

laptop with wireless card

Connected to
Network A

laptop with wireless card

Connected to
Network A

Simplified bullets of how I see it functions now, I may not be 100% accurate on the mechanics of it, but rest assured, it is functioning now.

1 The primary router is the rv042 which supplies internet connectivity to all PC's and the FIOS TV OnDemand features via the actiontec router back thru the coax connection. In other words when one of the set top boxes requests TV Guide info or OnDemand programing, it sends that request to the ONT which requests the information thru the coax connection via the actiontec. back thru the rv042 out to the internet (via the ONT). Verizon's GUIDE and Demand info can only be pulled if the actiontec is in place with the coax connection, don't ask why, just the way the designed it

2 When a laptop on Network B needs something it is passed thru Patch 1 back thru the ONT to the internet

3 When a laptop on network A needs to get to the internet it passes the request thru the actiontec to the RV042 back thru the ONT and out to the internet

What isn't working

1 I can't print from the laptop connected to Network B over to the Printer on Network A

2 If I connect the laptop on network B to Network A instead, I can't connect to it via the VPN using PCAnywhere for remote support purposes

What I would like to be able to do (END RESULT)

1 Maintain Both networks, (Purpose: secure business traffic on Network B away from residential traffic, i.e. kids with video games, Family PC's with viruses etc on Network A) and join them on a limited basis somehow so I can print from the laptop on network B to the printer on Network A

2 Any suggestions on variations of the END RESULT would be welcome. Who knows, maybe the compromise might spark another idea or be the best solution attainable.