DATE- 6/8/20

1)Settings for both PC to enable ping:

a) Enable telnet and tftp in programs and features

b) Disable Firewall

c)Enable Publi Connection – windows firewall -printer and other devices – file transfer

d)Change IN bound Settings – advanced firewall options

e)Use Static ip and Gateway.

Topology 1

ETH1

ETH2

ETH3

ETH4

PC1

PC2

192.168.1.11

255.255.255.0

192.168.2.21

255.255.255.0

192.168.1.10

192.168.2.10

GW-192.168.1.0

GW- 192.168.2.0

Results and conclusion :

1)Since on one single ....1.1 network PC to PC ping was not working, Board was able to ping both pc and PC1 was able to ping board only.

2) using two differnt networks ....1.1 and ....2.1 with different gateways enable ping from board to pc and pc to board simultaneously but Still PC1 – PC2 ping was showing host unreachable

3)The next topology used with bridging for ip forwading on one network.

Topology 2

ETH1

ETH2

ETH3

ETH4

PC1

PC2

192.168.1.21

255.255.255.0

192.168.1.10

192.168.1.20

GW-192.168.1.0

GW- 192.168.1.0

192.168.1.11

255.255.255.0

192.168.1.100

This is board new-IP now

Using IP forwarding / port forwarzding we can enable connectionn between multiple ports on a same network -https://www.linux.com/news/what-can-you-do-second-ethernet-port/

There are three methods mention Bonding Bridging N Firewall commands(for LAN connection) :

1) ifconfig eth1...........-- for all ports

2)Bridge commands after configuration of ports are :

ifdown eth1 and sudo ifdown eth2 and...........

3)brctl addbr bridge1

4)brctl addif bridge0 eth1

5) brctl addif bridge0 eth2, brctl addif bridge0 eth3, brctl addif bridge0 eth4

6)ifconfig bridge1 192.168.1.100 netmask 255.255.255.0

7)ping -I eth1 ....... from board and also ping from PC to PC