Lab: week 2 Aim: contiguing IP addresses to souter in packet traces to explore following mersages: Ping responses, destination curreachable, request timed out, replying softing to Topology: using Single soutes, 0.201 PG 5 hos of # (fire that per le menter territ 20:8:0:10 ou to 2 at wol 10.0.0.10 gateriay 20.0.00 10 a7 Generic Fa 011 01.0.0.00 powertog potential 10 tested bast extrement 110 posterior # 1P address 200.0.10 2590.0.0 FaO the exit property was 129mpt both tipol reduce Faco indicating that by the PC & nowtes using there souters, two RCS: say Faoto Porter-Progo Proter Pro Suger Pouter Jobs: John and los Router O Router O Router Pt 1 2002: John and los who was the Router O Router O Router o Proter Pto 20 Proter o P · Norbbo Router O Far destination &C to sound on FEI Surjust three souters, two PC's: Procedures

using single souter, two pc/s was add two generic your waterace

i) place a generic router ii) Connect souter & PCS using copper cross over worse
iii) Configure IP add sens of each PC & in the contiguarat
ion to under settings at set gateways for both
PCS to router outer and go to CLI tab. Enter
iv) click on generic souter and go to CLI tab. the following commands to set up connection b/n.

PCD(1) and generic soutes through gateway (0.0.0.10

No eiable was souted in printed in printed on contraction of the souted Vii) 14 explose following massages, Pinga responses district organs # beli # coups to interface tast ethernet 0/0, ben't source, which were all (contra) # interface tast ethernet 10:0.0.10 to 255, 0.0.0 pinks in 10:0.0.10 (Contra) # interface fast ethernel 10.0.0.10 255.0.0.0.0 pich 19 address 10.0.0.10 and 255.0.0.0.0 pich 19 address 10.0.0.10 For dici - 1 b/n PC2 & growter through # 400 shut Now to set up connection gateway 20.0.0.10 # interface bastethernet 1/0 IP address 20.0.0.10 255.0.0.0 Once we enter no shot both times the amber light bon the PC & router turns green indicating that two devices are rarely bor when the selecting the simple PDU by reselecting the simple PDU by reselecting the simple PDU by PCS and click on auto capture from right panel. Real time mode: Select PC your want to send the packet from which is PCO in our case & open its and prompt from delition take consider the packet from which som desktop tab. Specify destination ____ address.

A response is sent from destination &C to source PC. -) using three souters, two PC's: i) Place 3 generic souters and 2 generic PCs in the workspace. ii) Place note for each device [PC & souter] and specify ii) Place note to deliver of the configure tab. Set the v) click on each PC, go to the configure tab. Set the v) Next click on settings in Config tab. Set gateway. on ip address of the next router [eg 10.0.0.10] (b(1) and generic

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3) PC> Ping 20.0.0.10 with 22 bytes of deta
                            Reply from 20.0.0.10: byte = 32 time = 1 ms TTL=255
                       get clear stristics the report (somit som E)
                          Ping statistics 68 20.0.0.10:3 potron point : these
                          packets: sent = 4, seceived = 4, lost = 0 (0% lost)
 4) PC>Ping 30.0.0.10 to softer 25 yrin 1.0.0.00 Enished
               Augin 30.0.0.10 with 32 bytes of data
                             Reply from 30.0.0.10: bytes = 32 time = 1 ms
                        Papy Bow 200:01: bytel=32 (danit alin E)
                            ping statistics by 30.0.0.10:

Pactets: sent = 4, 8 accived = 4, lost = 0 (0.1. lost) of a prient
Soply from 20,0.0.1 bytes=32 thus < 10.0.0.04 pygos (2
                            pinging 40.0.01 with 328 bytes of data was
                            Request timed out

Reply from 40.0.0.1; bytes = 32, time = 10 ms TTL=125
                                                                                                  \frac{11}{11} : \frac{732}{11} = \frac{32}{11} = \frac{1}{11} = \frac{1}{12} = \frac{1}{
                                     "(NO) 100) 8= 180 " = 32, " = 08 vinos
"(NO) 100) 8= 180 " = 32, " = 100 vinos
"(NO) 100) 8= 100 vinos
                                  Ping statistics be 40.0.0.1:
                                   packets: Sent = 4, received = 3, lost = 1 (25% loss)
                               Pinging 40.0.0.1 with 32 bytes of data
 6) PC> Ping 40.0.0.1
                                                                                                                                                                                 time=2ms TFL=125
                               Reply brow 40.0.0.1: bytes=32
                                                                                                                                                                                time = 24 ms TTL = 125
                            Reply Brown 40.0.0.1: bytes=32
                                                                                                                                                                                  time=900 TTL=125
                                Reply from 40.0.0.1: bytes = 32
                                                                                                                                                                                  time = 9ms TTL=125
                                    Reply Brow 40.0.0.1: bytes = 32
                                                                                                                                                                                                 papets: sent = A
                 Ping statistics 68 40.0.0.1:
                                          Packets: Sent = 4, received = 4, lost = 0 (0% loss)
                                                                                                                                                                                                12 most esper
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- 3 souters: Betse training souters, we get newlts as
destination not remreachable. After training routers, we
get clear statistics the result.
Result: using 1 router, two PGS. 8 Statutes END
 Rachets: sent = 4, received = 4, 18t = 9.0.0.02 bying <1:3
      Pinging 20.0.0.1 with 32 bytes of data
      Request stimed out of se still
      Reply from 20.0.0.1: bytes=32 time <1 ms 772=127.
      Reply 80m 20.0.0.1: bytes=32 time 21ms TTL=127.
 Ping statistics by 20.0.0.1.0.0.00 & with those pring
 Pinging 20.0.0.1 with 32 bytes of data took the
 Reply from 20.0.0.1: bytes=32 time <1ms TTL=127
 Reply from 20.0.0.1: bytes = 32 time < Ims TTL = 127
Reply from 20.0.0.1: bytes = 32 time < Ims TTL = 127
Reply from 20.0.0.1: bytes = 32 time < Ims TTL = 127
 Ping statistice to 20.0.0.1:
 Packets: sent = 4, received = 4, list =0 (0% loss)
                            Ping statistics to 40.0.0.1
- using 3 souters, = 2 PCS: borrows += two : during
i) PC> Ping 40.0.0.1
  Pinging 540.0.0.1 with 32 bytes of data of ping 500 ()
                                     nost currea chable
 Reply from 10.0.0.10: destination host currenchant
  1/3 more times] " SE 10.0.0+ mary was
   Ping statistics for 40.0.0.1

Packets: sent = 4, received = 0, lost = 4 (100% loss)
2) Pf > Ping 10.0.0.10 with 32 bytes of data.
   / Reply from 10.0,0.10; bytes=32 time = 0 ms TTL
     }3 more times]
      Ping statistics 68 10.0.0.10
      Packets: sent = 4, Received = 4, lost = 0 (0% loss)
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Teaching souter of the network 30:) to woods I (1) belong to the same votus 81. - 100 For connecting two souters: - enable elick on pouter o. too to cle and enter - contig t - Interface serial 2/0 - 1P soute 30.0.0.0 255.0.0.0 20.0.0.20 - un - enable an -- exit - Couply t - Show if soute - jutestace sonial 210 Teaching Routero of network 0.60 22 01.0.0.00 Northo 91elick per souter 1, open CLI & enter bollowing on - Couting t - Futerface serial 2/0 - 1P route 40.0.0.0 255.0.0.0 20.0.0.20 - Config t - exit - Intestale serial 210 - (P add 8018 20.0.0.20 255.0.0.0 - show ip soute Similarly, repeat for routers 1 & 2. Sinulation mode: Add Simple PDU by setent selecting PC2 l click on auto capture brown right panel Realtime mode: Select PCO & go to its end prompt & Ping router O. Once message has been sent successfully Ping router O. Once message has been soll. Finally, a Refeat this with routers 1 & 29 as well. Finally, a soll of the soll of observation: Learning out comes 1 Pouter: when PCO pings PCI 680 birst time, we get Packet as request timed out. 1.0.0.01 Now, if we ping PCI again from PCO we get all 4 packets without any coss. Now severse Pinging of PCO from PCI will also not load to any loss, all Packets are acknowledged.

Vii) IP address of PC and its gateway address belong to the same network. dict on Pouter O. Go to CLI and enter following Commands 30.0.0.0 255.0.0.0 20.0 0.20 44 - NO 18 soute - enable - couping t -show it conte - interface serial 2/0 - 1P address 20.0.0.10 255.0.0.0 routen to 010thos midest - no shut following commaelick on souter 1, open CLI & enter - no interface serial 210 - enable 18 houte 40.0.0.0 255.0.0.0 20.0.0.20 - Counting t - interbace serial 210 - IP address 20.0.0.20 255.0.0.0 - show if monte Motivare 2 nouter will After this procedure, red lights bln 2 nouter will hat now turn green [router of & souter] marcaing they are now ready to comming souter I'm For connecting two devices [I PC & one i) since IP address of PCO is already Configurated 1 go to souter. ii) open CLI 68 router 0 & enter bollowing commands. observation: - evable Learning outcomes - Gubig t - interface fast ethornet 0/0 % 109 gevig 009 noter : 10 to 91 - interface fastername.
- interface fastername.
- ip address 10.0.0.10 255.0.0.0 Red light born green, which means seedy for comme wot wad to any loss,