Experiment 2:

Single Router and Multi Router

1	Single Router
-	Aim: Demonstrate data transfer between two networks
	using a nouter Configure default noute and static
	Topology:
	10.0-0.10
ip	
	/ > copper cross over cable
	PCO PCI
d	10.0.0.1
	end devices
Erent	The second second second second second
25	Procedure:
2	Place two end devices and a generic nonter on the logical interface.
the >	Connect the end def devices to the growther using copper
9	CROSS OVER WAL.
>	Configure different network ip for the and devices, and
	Bet the galeway accordingly.
->	In order to set the ipaddress for different interfaces in the nouter through CLI, type the following commands:
	> enable
	> config t
	> interface fastethernet o/o
	> ip address 10.0.0.10 255.0.0.0
	> exit > interface fastethernet 0/1
	> ig address 20.0.0.19 255.0.0.0
	reait.

Now ping from from one end device to another through command prompt. Observation: It is observed that the ping message from pad end device connected to network 1d 10 gots transmitted to the other end device connected to notwork id 20 through the nouter. Output: > ping 20.0.0.1 Pinging 20.0.0.1 with 32 tyles of data: Request timed out Peply from 20 0.01 bytes = 32 time= One TTL=127 Reply from 20.0.0.1 bytes = 32 time = 0ms TTL=127 Reply from 20.0.0.1 bytes = 32 time = 0ms TTL-127 Ping statistice for 20.0.0.):

Packeds: Sent = 4, Received = 3, Lost = 1, (25% loss) Approximate nound trip times in milli seconds: Minimum = 10 ms, Maximum = 0 ms, Average = ons

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through	Multi Roster
	Aim: Demonstrate data transfer over multiple networks
se from	through growlers. Configure default route and static
gets	norte to the noulers.
ucted to	The to affine seconds after the terms
	Topology:
	serial wire
	rower 20.00010 30.00010 30.000-20
	110-0.0.19 50.0.0.50
	A Sept to the second second section of the
	spring of order of the start of
7 127	Deal Thomas and the day of the
L=127	PCO PCI
L=127	10.0.0.)
4-	Procedure:
((oss)	-> Place 2 end devices and 3 nouters on the logical
	interface.
	-> Configure a network id of 10 with for PCO and network id
	of 40 for PC1.
	-> Type the following commands to configure noutero:
	, enable
	> config t
	> interface fastethemet 0/0
	7 ip address 10.0.0.10 255.0.0.0
	> exit
	> inteface serial 2/0
	> ip address 20.0.0.10 255.0.0.0
	> exit
	> exit
	> ip noute 30.0.0.0 255.0.0.0 20.0.0.20

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100	> ip noute 40.0.0.0 255.0.0.0 20.0.0.20	
	Type the following commands to configure nonter!	
	> enable	300
	> config t	
	> interface Berial 2/0	
	> ig address 20-0-0-20 255-0-0.0	
	> exit	
	> interface serial 3/0	
4-	> ip address 30-0.0.10 255-0.0.0	
	> exit	
	> exit	
1-	> ip noule 10.0.0.0 255.0.0.0 20.0.0.10	
-	> ip route 40.0.0.0 255.0.0.0 30.0.0.20	
>	Type the following commands to configure nonters	
1	> enable	
	7 config t	
	> interface serial 3/0	
	> ip address 30.0.0.20 255.0.0.0	
	> exit	
3	> interface sessial 2/0 fastethernet 0/0	1
	7 ig address & 40.0.0.10 2550.0.0	
111111111	> exit	1
4	/> exit	
		1
) ip norte 10.0.00 255-0.00 30.0.010	1
-	7 ip novite 20.0.0.0 255.0.0.0 30.0.0.10	100
-		AI
-	Connect the nouters through serial wire	18
->	Configure ip address and gateway on end Levices	13/7
->	Configure ip address and gateway on end devices. ping message from one device to another	1
	and the second second second	
		1
	3115	1

te		note note
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		Ordput (Before static ip monting)
		> ping 40.0.0.1
	1	war beneated hat traver in a article the
		Pinginging with 40.0.0.1 with 32 bytes of data:
,		Privat Englant
		Request timed out
		Request timed out
		Request timed out
		Ping statistics for 40.0.0.1:
		Packets: Sent = 4, Received = 0, Lost = 4 (100/- loss)
		Ordput: (After static ip nouting)
		> ping 40.0.0.1
		Pinging 40.0.0.1 with 32 bytes of data:
		Deply from 40.0.0.1: Gytes=32 time=2ms TT L= 125
		Reply from 40:0:0:1: bytes = 32 time = 2ms TTL = 125
		Reply from 40:0.01: bytes=32 fine=2ms TTL=125
- 4	Pee	Reply from 40.0.011; bytes=32 time = 2ms TTL-125
		Ping statistics for 40.001:
-	100	Packets: Sent = 4, Received = 4, Lost = 0 (0/ loss),
-	Al	Approximate gound thip times in milli seconds:
-	11	Minimum = 2ms, Maximum = 9ms, Average = 3ms.
rices.	13/7/27	at the desired the second
-	-	Phservation: The data packets gets transmitted across
-		various networks through the nonters with the help
1		otatic nouting and direct nouting.
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Topology and output screenshots:



