Press RETURN to get started!

\*Sep 27 20:42:53.067: %IFMGR-7-NO\_IFINDEX\_FILE: Unable to open nvram:/ifIndex-ta ble No such file or directory

\*Sep 27 20:42:53.351: %PLATFORM-3-PACONFIG: Exceeds 600 bandwidth points for slo ts 0, 1, 3 & 5

\*Sep 27 20:43:07.235: %LINEPROTO-5-UPDOWN: Line protocol on Interface VoIP-Null0 , changed state to up

\*Sep 27 20:43:07.243: %LINK-3-UPDOWN: Interface Ethernet0/0, changed state to up

\*Sep 27 20:43:07.251: %LINK-3-UPDOWN: Interface GigabitEthernet0/0, changed stat e to up

\*Sep 27 20:43:07.259: %LINK-3-UPDOWN: Interface GigabitEthernet1/0, changed stat e to up

\*Sep 27 20:43:07.267: %LINK-3-UPDOWN: Interface GigabitEthernet2/0, changed stat e to up

\*Sep 27 20:43:07.275: %LINK-3-UPDOWN: Interface GigabitEthernet3/0, changed stat e to up

\*Sep 27 20:43:08.127: %SYS-5-CONFIG\_I: Configured from memory by console

\*Sep 27 20:43:08.331: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/ 0, changed state to down

\*Sep 27 20:43:08.335: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEth ernet0/0, changed state to down

\*Sep 27 20:43:08.339: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEth ernet1/0, changed state to down

\*Sep 27 20:43:08.339: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEth ernet2/0, changed state to down

\*Sep 27 20:43:08.343: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEth ernet3/0, changed state to down

\*Sep 27 20:43:08.567: %SYS-5-RESTART: System restarted --

Cisco IOS Software, 7200 Software (C7200-ADVENTERPRISEK9-M), Version 15.2(4)M7, RELEASE SOFTWARE (fc2)

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Compiled Thu 25-Sep-14 10:36 by prod\_rel\_team

\*Sep 27 20:43:08.595: %SNMP-5-COLDSTART: SNMP agent on host ISP3 is undergoing a cold start

\*Sep 27 20:43:08.739: %CRYPTO-6-ISAKMP\_ON\_OFF: ISAKMP is OFF

\*Sep 27 20:43:08.739: %CRYPTO-6-GDOI\_ON\_OFF: GDOI is OFF

\*Sep 27 20:43:10.135: %LINK-5-CHANGED: Interface Ethernet0/0, changed state to a dministratively down

\*Sep 27 20:43:10.143: %LINK-5-CHANGED: Interface GigabitEthernet0/0, changed sta te to administratively down

\*Sep 27 20:43:10.155: %LINK-5-CHANGED: Interface GigabitEthernet1/0, changed sta te to administratively down

\*Sep 27 20:43:10.167: %LINK-5-CHANGED: Interface GigabitEthernet2/0, changed sta te to administratively down

\*Sep 27 20:43:10.175: %LINK-5-CHANGED: Interface GigabitEthernet3/0, changed sta te to administratively down

ISP3#

ISP3#

ISP3#

ISP3#

ISP3#

ISP3#CONF T

Enter configuration commands, one per line. End with CNTL/Z.

ISP3(config)#INT g0/0

ISP3(config-if)#IP ADD

% Incomplete command.

ISP3(config-if)#IP ADD 8.1.3.1 255.255.255.252

ISP3(config-if)#no sh

ISP3(config-if)#

\*Sep 27 22:21:05.919: %LINK-3-UPDOWN: Interface GigabitEthernet0/0, changed state to up

\*Sep 27 22:21:06.919: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

ISP3(config-if)#INT g1/0

ISP3(config-if)#IP ADD 8.1.4.2 255.255.255.252

ISP3(config-if)#no sh

ISP3(config-if)#no sh

\*Sep 27 22:21:38.815: %LINK-3-UPDOWN: Interface GigabitEthernet1/0, changed state to up

ISP3(config-if)#no sh

\*Sep 27 22:21:39.815: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0, changed state to up

ISP3(config-if)#INT g2/0

ISP3(config-if)#IP ADD 8.1.5.1 255.255.255.252

ISP3(config-if)#no sh

ISP3(config-if)#

\*Sep 27 22:22:11.547: %LINK-3-UPDOWN: Interface GigabitEthernet2/0, changed state to up

\*Sep 27 22:22:12.547: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet2/0, changed state to up

ISP3(config-if)#INT g3/0

ISP3(config-if)#IP ADD 8.1.6.1 255.255.255.252

ISP3(config-if)#no sh

ISP3(config-if)#

\*Sep 27 22:22:39.267: %LINK-3-UPDOWN: Interface GigabitEthernet3/0, changed state to up

\*Sep 27 22:22:40.267: %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet3/0, changed state to up

ISP3(config-if)#^Z

ISP3#co

\*Sep 27 22:22:41.495: %SYS-5-CONFIG\_I: Configured from console by console

ISP3#conf t

Enter configuration commands, one per line. End with CNTL/Z.

ISP3(config)#int lou

ISP3(config)#int loo

ISP3(config)#int loopback 0

ISP3(config-if)#ip add

\*Sep 27 22:22:52.835: %LINEPROTO-5-UPDOWN: Line protocol on Interface Loopback0, changed state to up

ISP3(config-if)#ip add 8.8.8.3 255.255.255.255

ISP3(config-if)#wr

^

% Invalid input detected at '^' marker.

ISP3(config-if)#^Z

ISP3#wr

Warning: Attempting to overwrite an NVRAM configuration previously written

by a different version of the system image.

Overwrite the previous NVRAM configuration?[confirm]

\*Sep 27 22:23:17.339: %SYS-5-CONFIG\_I: Configured from console by console

[confirm]

Building configuration...

[OK]

ISP3#sh ip int brief

Interface IP-Address OK? Method Status Protocol

Ethernet0/0 unassigned YES unset administratively down down

GigabitEthernet0/0 8.1.3.1 YES manual up up

GigabitEthernet1/0 8.1.4.2 YES manual up up

GigabitEthernet2/0 8.1.5.1 YES manual up up

GigabitEthernet3/0 8.1.6.1 YES manual up up

Loopback0 8.8.8.3 YES manual up up

ISP3#conf t

Enter configuration commands, one per line. End with CNTL/Z.

ISP3(config)#INT g0/0

ISP3(config-if)#ip add 8.1.3.2 255.255.255.252

ISP3(config-if)#wr^Z ^

% Invalid input detected at '^' marker.

ISP3#conf t

\*Sep 27 22:32:05.511: %SYS-5-CONFIG\_I: Configured from console by console

ISP3#sh ip int brief

Interface IP-Address OK? Method Status Protocol

Ethernet0/0 unassigned YES unset administratively down down

GigabitEthernet0/0 8.1.3.2 YES manual up up

GigabitEthernet1/0 8.1.4.2 YES manual up up

GigabitEthernet2/0 8.1.5.1 YES manual up up

GigabitEthernet3/0 8.1.6.1 YES manual up up

Loopback0 8.8.8.3 YES manual up up

ISP3#WR

Building configuration...

[OK]

ISP3#ROUT

ISP3#ROUTER

ISP3#ROUTER OSPF 1

^

% Invalid input detected at '^' marker.

ISP3#CONF T

Enter configuration commands, one per line. End with CNTL/Z.

ISP3(config)#ROU

ISP3(config)#ROUteR OSPF 1

ISP3(config-router)#NETWOR

ISP3(config-router)#NETWORk 0.0.0.0 255.255.255.255 AREA 0

ISP3(config-router)#

\*Sep 27 22:41:25.191: %OSPF-5-ADJCHG: Process 1, Nbr 8.1.3.1 on GigabitEthernet0/0 from LOADING to FULL, Loading Done

ISP3(config-router)#

\*Sep 27 22:41:28.971: %OSPF-5-ADJCHG: Process 1, Nbr 8.8.8.4 on GigabitEthernet1/0 from LOADING to FULL, Loading Done

ISP3(config-router)#SH IP OSP

ISP3(config-router)#SH IP OSP^Z ^

% Invalid input detected at '^' marker.

ISP3#SH

\*Sep 27 22:41:46.719: %SYS-5-CONFIG\_I: Configured from console by console

ISP3#SH IP OSPF NEI

ISP3#SH IP OSPF NEIghbor

Neighbor ID Pri State Dead Time Address Interface

8.8.8.4 1 FULL/DR 00:00:38 8.1.4.1 GigabitEthernet1/0

8.1.3.1 1 FULL/DR 00:00:37 8.1.3.1 GigabitEthernet0/0

ISP3#NEIG

ISP3#CONF T

Enter configuration commands, one per line. End with CNTL/Z.

ISP3(config)#ROUTER BGP 65001

ISP3(config-router)#NEIG

ISP3(config-router)#NEIGhbor 8.8.8.1 REMO

ISP3(config-router)#NEIGhbor 8.8.8.1 REMOT

ISP3(config-router)#NEIGhbor 8.8.8.1 REMOTe-as 65001

ISP3(config-router)#NEIGhbor 8.8.8.2 REMOTe-as 65001

ISP3(config-router)#NEIGhbor 8.8.8.3 REMOTe-as 65001

% Cannot configure the local system as neighbor

ISP3(config-router)#NEIGhbor 8.8.8.4 REMOTe-as 65001

ISP3(config-router)#NEIGhbor 8.8.8.5 REMOTe-as 65001

ISP3(config-router)#NEIGhbor 8.8.8.1 UPD

ISP3(config-router)#NEIGhbor 8.8.8.1 UPDate-source LO

ISP3(config-router)#NEIGhbor 8.8.8.1 UPDate-source LOU

ISP3(config-router)#NEIGhbor 8.8.8.1 UPDate-source LOO

ISP3(config-router)#NEIGhbor 8.8.8.1 UPDate-source LOOpback 0

ISP3(config-router)#NEIGhbor 8.8.8.1 UPDate-source LOOpback 0

\*Sep 27 22:44:48.091: %BGP-5-ADJCHANGE: neighbor 8.8.8.1 Up

ISP3(config-router)#NEIGhbor 8.8.8.2 UPDate-source LOOpback 0

ISP3(config-router)#NEIGhbor 8.8.8.4 UPDate-source LOOpback 0

ISP3(config-router)#NEIGhbor 8.8.8.5 UPDate-source LOOpback 0

ISP3(config-router)#

\*Sep 27 22:45:06.523: %BGP-5-ADJCHANGE: neighbor 8.8.8.4 Up

ISP3(config-router)#NEIGhbor 8.8.8.3 UPDate-source LOOpback 0

% Cannot configure the local system as neighbor

ISP3(config-router)#sh^Z ^

% Invalid input detected at '^' marker.

ISP3#s

\*Sep 27 22:52:22.835: %SYS-5-CONFIG\_I: Configured from console by console

ISP3#sh ip bgp su

ISP3#sh ip bgp summary

BGP router identifier 8.8.8.3, local AS number 65001

BGP table version is 8, main routing table version 8

7 network entries using 1036 bytes of memory

8 path entries using 512 bytes of memory

2/2 BGP path/bestpath attribute entries using 272 bytes of memory

1 BGP AS-PATH entries using 24 bytes of memory

0 BGP route-map cache entries using 0 bytes of memory

0 BGP filter-list cache entries using 0 bytes of memory

BGP using 1844 total bytes of memory

BGP activity 7/0 prefixes, 8/0 paths, scan interval 60 secs

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd

8.8.8.1 4 65001 14 12 8 0 0 00:07:40 4

8.8.8.2 4 65001 0 0 1 0 0 never Idle

8.8.8.4 4 65001 14 14 8 0 0 00:07:21 4

8.8.8.5 4 65001 0 0 1 0 0 never Idle

ISP3#sh run | sec bgp

router bgp 65001

bgp log-neighbor-changes

neighbor 8.8.8.1 remote-as 65001

neighbor 8.8.8.1 update-source Loopback0

neighbor 8.8.8.2 remote-as 65001

neighbor 8.8.8.2 update-source Loopback0

neighbor 8.8.8.4 remote-as 65001

neighbor 8.8.8.4 update-source Loopback0

neighbor 8.8.8.5 remote-as 65001

neighbor 8.8.8.5 update-source Loopback0

ISP3#sh ip bgp summary

BGP router identifier 8.8.8.3, local AS number 65001

BGP table version is 8, main routing table version 8

7 network entries using 1036 bytes of memory

8 path entries using 512 bytes of memory

2/2 BGP path/bestpath attribute entries using 272 bytes of memory

1 BGP AS-PATH entries using 24 bytes of memory

0 BGP route-map cache entries using 0 bytes of memory

0 BGP filter-list cache entries using 0 bytes of memory

BGP using 1844 total bytes of memory

BGP activity 7/0 prefixes, 8/0 paths, scan interval 60 secs

Neighbor V AS MsgRcvd MsgSent TblVer InQ OutQ Up/Down State/PfxRcd

8.8.8.1 4 65001 16 14 8 0 0 00:09:45 4

8.8.8.2 4 65001 0 0 1 0 0 never Idle

8.8.8.4 4 65001 16 16 8 0 0 00:09:27 4

8.8.8.5 4 65001 0 0 1 0 0 never Idle

ISP3#conf t

Enter configuration commands, one per line. End with CNTL/Z.

ISP3(config)#rou

ISP3(config)#router bgp 65001

ISP3(config-router)#NEIGhbor 8.8.8.1 rou

ISP3(config-router)#NEIGhbor 8.8.8.1 route-re

ISP3(config-router)#NEIGhbor 8.8.8.1 route-reflector-client

ISP3(config-router)#

\*Sep 27 23:00:47.979: %BGP-5-ADJCHANGE: neighbor 8.8.8.1 Down RR client config change

\*Sep 27 23:00:47.983: %BGP\_SESSION-5-ADJCHANGE: neighbor 8.8.8.1 IPv4 Unicast topology base removed from session RR client config change

\*Sep 27 23:00:48.203: %BGP-5-ADJCHANGE: neighbor 8.8.8.1 Up

ISP3(config-router)#NEIGhbor 8.8.8.2 route-reflector-client

ISP3(config-router)#NEIGhbor 8.8.8.4 route-reflector-client

ISP3(config-router)#NEIGhbor 8.8.8.4 route-reflector-client

\*Sep 27 23:01:08.947: %BGP-5-ADJCHANGE: neighbor 8.8.8.4 Down RR client config change

\*Sep 27 23:01:08.947: %BGP\_SESSION-5-ADJCHANGE: neighbor 8.8.8.4 IPv4 Unicast topology base removed from session RR client config change

\*Sep 27 23:01:09.719: %BGP-5-ADJCHANGE: neighbor 8.8.8.4 Up

ISP3(config-router)#NEIGhbor 8.8.8.5 route-reflector-client

ISP3(config-router)#re

ISP3(config-router)#redistribute con

ISP3(config-router)#redistribute connected

ISP3(config-router)#sh ip bgp

^

% Invalid input detected at '^' marker.

ISP3(config-router)#^Z

ISP3#sg

\*Sep 27 23:01:53.475: %SYS-5-CONFIG\_I: Configured from console by console

ISP3#sh ip bgp

BGP table version is 27, local router ID is 8.8.8.3

Status codes: s suppressed, d damped, h history, \* valid, > best, i - internal,

r RIB-failure, S Stale, m multipath, b backup-path, f RT-Filter,

x best-external, a additional-path, c RIB-compressed,

Origin codes: i - IGP, e - EGP, ? - incomplete

RPKI validation codes: V valid, I invalid, N Not found

Network Next Hop Metric LocPrf Weight Path

\*>i 8.1.1.0/30 8.8.8.1 0 100 0 i

\*>i 8.1.2.0/30 8.8.8.4 0 100 0 i

\*> 8.1.3.0/30 0.0.0.0 0 32768 ?

\* i 8.8.8.1 0 100 0 i

\*> 8.1.4.0/30 0.0.0.0 0 32768 ?

\* i 8.8.8.4 0 100 0 i

\*> 8.1.5.0/30 0.0.0.0 0 32768 ?

\*> 8.1.6.0/30 0.0.0.0 0 32768 ?

r>i 8.8.8.1/32 8.8.8.1 0 100 0 i

\*> 8.8.8.3/32 0.0.0.0 0 32768 ?

r>i 8.8.8.4/32 8.8.8.4 0 100 0 i

\* i 17.1.1.0/30 8.1.2.1 0 100 0 65000 i

\*>i 8.1.1.1 0 100 0 65000 i

ISP3#wr

Building configuration...

[OK]

ISP3#ping 17.1.1.2

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 17.1.1.2, timeout is 2 seconds:

!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 40/41/44 ms

ISP3#ping 17.1.1.1

Type escape sequence to abort.

Sending 5, 100-byte ICMP Echos to 17.1.1.1, timeout is 2 seconds:

!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 60/63/68 ms

ISP3#