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PART 3: Configure LAN Redundancy and Link Aggregation

#STEP 3: Configure Spanning tree on S3#

config t

spanning-tree mode rapid-pvst

spanning-tree vlan 1 root primary

exit

config t

interface f0/18

spanning-tree portfast

spanning-tree bpduguard enable

exit

#STEP 6: Configure an LACP Etherchannel between S1 and S3#

config t

interface range f0/3-4

channel-group 1 mode passive

exit

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PART 4: Verify Network Connectivity

\*\*\*\*\*\* S3 \*\*\*\*\*\*\*

STEP 1: Initialize and reload the routers and switches

erase startup-config

delete vlan.dat

reload

PART 2: Configure Device Basic Settings

#STEP 4: Configure S3#

interface VLAN 1

ip address 172.27.0.13 255.255.255.0

no shutdown

exit

ip default-gateway 172.27.0.2

exit

interface range f0/1-2

switchport mode trunk

switchport trunk native vlan 1

no shutdown

exit

interface range f0/3-4

switchport mode trunk

switchport trunk native vlan 1

no shutdown

exit

interface f0/5

switchport mode access

switchport access vlan 1

no shutdown

exit

interface f0/18

switchport mode access

switchport access vlan 1

no shutdown

exit

interface range f0/7-24

switchport mode access

shutdown

exit

\*\*\*\*\*\* R3 \*\*\*\*\*\*\*

#STEP 1: Configure R3#

conf t

interface g0/1

Description S3 link to 172.27.0.0 network

ip address 172.27.0.3 255.255.255.0

no shutdown

interface s0/0/1

Description R2 link to 172.27.123.0 network

ip address 172.27.123.6 255.255.255.252

clock rate 64000

bandwidth 64

no shutdown

interface lo4

Description Redundant loopback for 172.27.4.0 network

ip address 172.27.4.1 255.255.255.0

no shutdown

exit

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PART 3: Configure LAN Redundancy and Link Aggregation

#STEP 5: Configure HSRP on R3#

config t

interface g0/1

standby version 2

standby 1 ip 172.27.0.2

exit

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Part 4: Configure OSPFv2 for Dynamic Routing Protocol

#STEP 3: Configure OSPFv2 on R3#

config t

router ospf 1

router-id 3.3.3.3

network 172.27.0.0 0.0.0.255 area 0

network 172.27.123.0 0.0.0.3 area 0

network 172.27.4.0 0.0.0.255 area 3

passive-interface g0/1

auto-cost reference-bandwidth 1000

exit

#STEP 4: Verify Network Connectivity#

show ip OSPF neighbors

show ip OSPF interfaces

show ip protocols

show ip OSPF topology

show ip OSPF route

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Part 5: Verify connectivity and HSRP config

