A screenshot of a computer

Description automatically generated

b.

Router 1:

A:R1-Rae00033>config>router# info

----------------------------------------------

#--------------------------------------------------

echo "IP Configuration"

#--------------------------------------------------

interface "system"

address 10.10.10.1/32

no shutdown

exit

interface "toR2"

address 10.1.2.1/27

port 1/1/2

no shutdown

exit

interface "toR3"

address 10.1.3.1/27

port 1/1/3

no shutdown

exit

interface "toR4"

address 10.1.4.1/27

port 1/1/4

no shutdown

exit

interface "toR5"

address 10.1.5.1/27

port 1/1/1

no shutdown

exit

#--------------------------------------------------

echo "OSPFv2 Configuration"

#--------------------------------------------------

ospf 0

area 0.0.0.0

interface "system"

no shutdown

exit

interface "toR2"

interface-type point-to-point

no shutdown

exit

interface "toR3"

interface-type point-to-point

no shutdown

exit

interface "toR4"

interface-type point-to-point

no shutdown

exit

interface "toR5"

interface-type point-to-point

no shutdown

exit

exit

no shutdown

exit

#--------------------------------------------------

echo "MPLS Configuration"

#--------------------------------------------------

mpls

interface "system"

no shutdown

exit

interface "toR2"

no shutdown

exit

interface "toR3"

no shutdown

exit

interface "toR4"

no shutdown

exit

interface "toR5"

no shutdown

exit

exit

#--------------------------------------------------

echo "RSVP Configuration"

#--------------------------------------------------

rsvp

interface "system"

no shutdown

exit

interface "toR2"

no shutdown

exit

interface "toR3"

no shutdown

exit

interface "toR4"

no shutdown

exit

interface "toR5"

no shutdown

exit

no shutdown

exit

#--------------------------------------------------

echo "MPLS LSP Configuration"

#--------------------------------------------------

mpls

path "loose"

no shutdown

exit

lsp "toR5-1"

to 10.10.10.5

primary "loose"

exit

no shutdown

exit

exit

#--------------------------------------------------

echo "LDP Configuration"

#--------------------------------------------------

ldp

import-pmsi-routes

exit

tcp-session-parameters

exit

interface-parameters

interface "toR2" dual-stack

ipv4

no shutdown

exit

no shutdown

exit

interface "toR3" dual-stack

ipv4

no shutdown

exit

no shutdown

exit

interface "toR4" dual-stack

ipv4

no shutdown

exit

no shutdown

exit

interface "toR5" dual-stack

ipv4

no shutdown

exit

no shutdown

exit

exit

targeted-session

exit

no shutdown

exit

A:R5-Rae00033>config>router# info

----------------------------------------------

#--------------------------------------------------

echo "IP Configuration"

#--------------------------------------------------

interface "system"

address 10.10.10.5/32

no shutdown

exit

interface "toR1"

address 10.1.5.5/27

port 1/1/1

no shutdown

exit

interface "toR9"

address 10.5.9.5/27

port 1/1/2

no shutdown

exit

#--------------------------------------------------

echo "OSPFv2 Configuration"

#--------------------------------------------------

ospf 0

area 0.0.0.0

interface "system"

no shutdown

exit

interface "toR1"

interface-type point-to-point

no shutdown

exit

exit

no shutdown

exit

#--------------------------------------------------

echo "MPLS Configuration"

#--------------------------------------------------

mpls

interface "system"

no shutdown

exit

interface "toR1"

no shutdown

exit

exit

#--------------------------------------------------

echo "RSVP Configuration"

#--------------------------------------------------

rsvp

interface "system"

no shutdown

exit

interface "toR1"

no shutdown

exit

no shutdown

exit

#--------------------------------------------------

echo "MPLS LSP Configuration"

#--------------------------------------------------

mpls

path "loose"

no shutdown

exit

lsp "toR1-1"

to 10.10.10.1

primary "loose"

exit

no shutdown

exit

lsp "toR6-1"

to 10.10.10.6

primary "loose"

exit

no shutdown

exit

no shutdown

exit

#--------------------------------------------------

echo "LDP Configuration"

#--------------------------------------------------

ldp

import-pmsi-routes

exit

tcp-session-parameters

exit

interface-parameters

interface "toR1" dual-stack

ipv4

no shutdown

exit

no shutdown

exit

exit

targeted-session

exit

no shutdown

exit

A:R5-Rae00033# show router mpls lsp "toR6-1" path "loose" detail

===============================================================================

MPLS LSP toR6-1 Path loose (Detail)

===============================================================================

Legend :

@ - Detour Available # - Detour In Use

b - Bandwidth Protected n - Node Protected

s - Soft Preemption

S - Strict L - Loose

A - ABR + - Inherited

===============================================================================

-------------------------------------------------------------------------------

LSP toR6-1

Path loose

-------------------------------------------------------------------------------

LSP Name : toR6-1

From : 10.10.10.5

To : 10.10.10.6

Admin State : Up Oper State : Up

Path Name : loose

Path LSP ID : 2 Path Type : Primary

Path Admin : Up Path Oper : Up

Out Interface : 1/1/1 Out Label : 524277

Path Up Time : 0d 00:08:38 Path Down Time : 0d 00:00:00

Retry Limit : 0 Retry Timer : 30 sec

Retry Attempt : 0 Next Retry In : 0 sec

BFD Configuration and State

Template : None Ping Interval : 60

Enable : False State : notApplicable

WaitForUpTimer : 4 sec OperWaitForUpTimer: N/A

WaitForUpTmLeft : 0 sec

Adspec : Disabled Oper Adspec : Disabled

PathCompMethod : none OperPathCompMethod: none

MetricType : igp Oper MetricType : igp

Least Fill : Disabled Oper LeastFill : Disabled

FRR : Disabled Oper FRR : Disabled

Propagate Adm Grp: Disabled Oper Prop Adm Grp : Disabled

Inter-area : False

PCE Report : Disabled+ Oper PCE Report : Disabled

PCE Control : Disabled Oper PCE Control : Disabled

PCE Update ID : 0

Neg MTU : 8690 Oper MTU : 8690

Bandwidth : No Reservation Oper Bandwidth : 0 Mbps

Hop Limit : 255 Oper HopLimit : 255

Record Route : Record Oper Record Route : Record

Record Label : Record Oper Record Label : Record

Setup Priority : 7 Oper SetupPriority: 7

Hold Priority : 0 Oper HoldPriority : 0

Class Type : 0 Oper CT : 0

Backup CT : None

MainCT Retry : n/a

Rem :

MainCT Retry : 0

Limit :

Include Groups : Oper IncludeGroups:

None None

Exclude Groups : Oper ExcludeGroups:

None None

Adaptive : Enabled Oper Metric : 30

Preference : n/a

Path Trans : 1 CSPF Queries : 0

Degraded : False

Failure Code : noError

Failure Node : n/a

Explicit Hops :

No Hops Specified

Actual Hops :

10.1.5.5(10.10.10.5) Record Label : N/A

-> 10.1.5.1(10.10.10.1) Record Label : 524277

-> 10.1.2.2(10.10.10.2) Record Label : 524277

-> 10.2.6.6(10.10.10.6) Record Label : 524278

Resignal Eligible: False

Last Resignal : n/a CSPF Metric : 0

d. 10.1.5.1 🡪 10.1.2.2 🡪 10.2.6.6

e. 10.1.5.1

f. 10.10.10.6

g. 10.10.10.5