

ERPS SNR

- [ERPS](#)
- [ERPS + CFM](#)

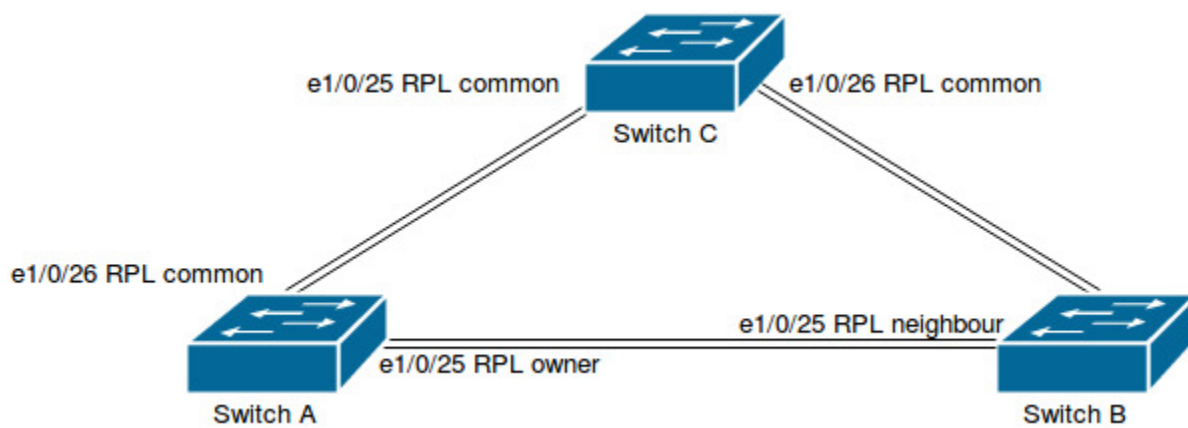
ERPS -, OSI, .

R-APS VLAN, ERPS. VLAN, , MST- Protected VLAN. 1 3 : RPL Owner, RPL Neighbour RPL Common. RPL Owner Neighbour

ERPS , SNR.

ERPS

ERPS , , . , VLAN 2, VLAN 3. VLAN 4, .



Switch A.

C VLAN:

```
!
vlan 1-4
!
```

MST, ERPS:

```
!
spanning-tree mst configuration
instance 0 vlan 5-4094
instance 1 vlan 1-4
exit
!
```

ERPS- test_ring1 ERPS- 1, Protected MST Instance, Control VLAN (RPL port0 Owner, port1 — - Common):

```

!
erps-ring test_ring1
erps-instance 1
  rpl port0 owner
  protected-instance 1
  control-vlan 2
exit
!

```

Trunk ERPS :

```

!
Interface Ethernet1/0/25
  switchport mode trunk
  erps-ring test_ring1 port0
!
Interface Ethernet1/0/26
  switchport mode trunk
  erps-ring test_ring1 port1
!

```

/ ():

```

!
port-scan-mode interrupt
!

```

Switch A .

Switch B Switch A, port0. RPL Owner, port0 RPL Neighbour:

```

!
port-scan-mode interrupt
!
vlan 1-4
!
spanning-tree mst configuration
  instance 0 vlan 5-4094
  instance 1 vlan 1-4
exit
!
erps-ring test_ring1
erps-instance 1
  rpl port0 neighbour
  protected-instance 1
  control-vlan 2
exit
!
Interface Ethernet1/0/25
  switchport mode trunk
  erps-ring test_ring1 port0
!
Interface Ethernet1/0/26
  switchport mode trunk
  erps-ring test_ring1 port1
!

```

Switch C Switch A Switch B, , Switch C port0 port1 ,.. RPL Common:

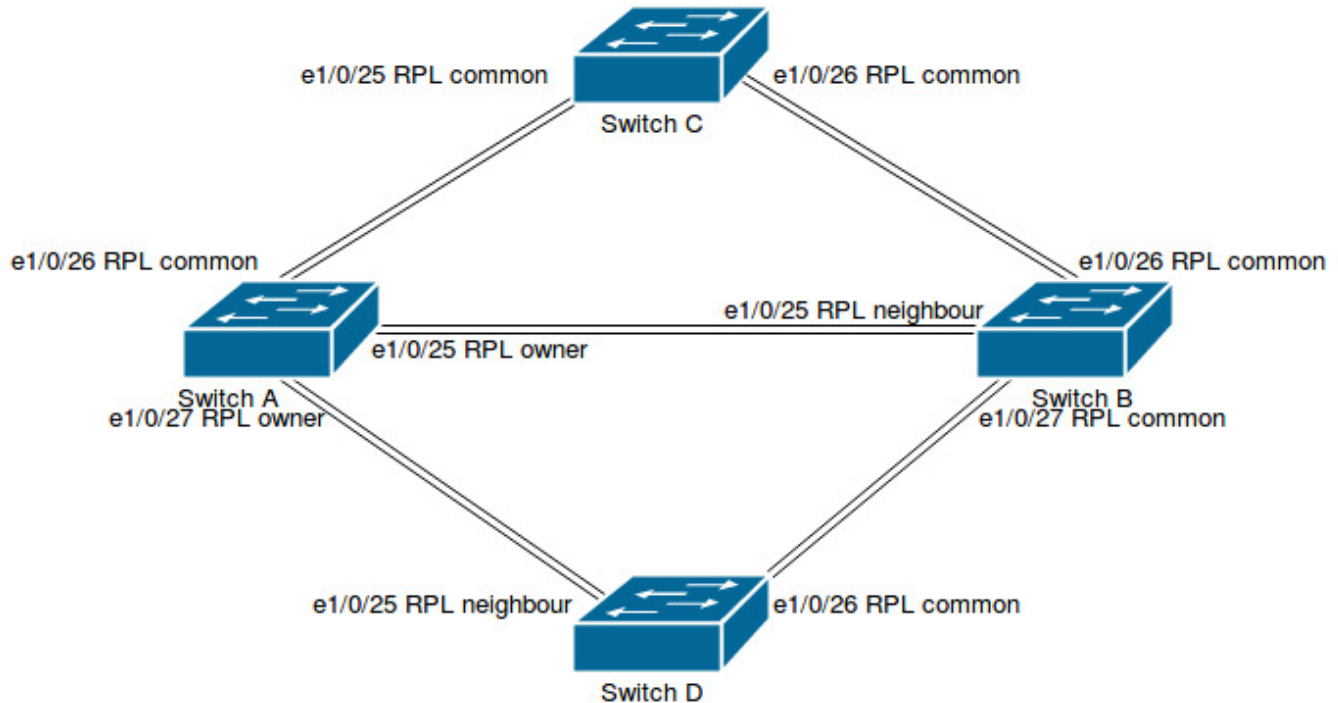
```

!
port-scan-mode interrupt
!
vlan 1-4
!
spanning-tree mst configuration
instance 0 vlan 5-4094
instance 1 vlan 1-4
exit
!
erps-ring test_ring1
erps-instance 1
protected-instance 1
control-vlan 2
exit
!
Interface Ethernet1/0/25
switchport mode trunk
erps-ring test_ring1 port0
!
Interface Ethernet1/0/26
switchport mode trunk
erps-ring test_ring1 port1
!

```

Switch D Switch A Switch B, (major-ring), , Switch A - Switch B - Switch D, Switch A - Switch B Switch A - Switch B - Switch C
ERPS.

(sub-ring), (major-ring). Switch A Switch B , . , VLAN 4.



Switch A.

ERPS- , , open-ring:

```

!
erps-ring test_ring1
  erps-instance 1
    rpl port0 owner
    protected-instance 1
    control-vlan 2
  exit
erps-ring test_ring2
  open-ring
  raps-virtual-channel with
  erps-instance 1
    rpl port0 owner
    protected-instance 1
    control-vlan 4
  exit
!

```

ERPS :

```

!
ethernet tcn-propagation erps to erps
!

```

1/0/27, test_ring2, . 1/0/25-26 :

```

!
Interface Ethernet1/0/27
  switchport mode trunk
  erps-ring test_ring2 port0 port1-none
!

```

Switch B.

Switch B Switch A, , RPL port0 ,.. port0 RPL Common, port1 :

```

!
erps-ring test_ring1
  erps-instance 1
    protected-instance 1
    control-vlan 2
  exit
erps-ring test_ring2
  open-ring
  raps-virtual-channel with
  erps-instance 1
    protected-instance 1
    control-vlan 4
  exit
!
ethernet tcn-propagation erps to erps
!
Interface Ethernet1/0/27
  switchport mode trunk
  erps-ring test_ring2 port0 port1-none
!

```

Switch D:

Switch D Switch C , test_ring2 open-ring, Control VLAN 4:

```

!
port-scan-mode interrupt
!
vlan 1-4
!
spanning-tree mst configuration
instance 0 vlan 5-4094
instance 1 vlan 1-4
exit
!
erps-ring test_ring2
open-ring
erps-instance 1
rpl port0 neighbour
protected-instance 1
control-vlan 4
exit
!
Interface Ethernet1/0/25
switchport mode trunk
erps-ring test_ring2 port0
!
Interface Ethernet1/0/26
switchport mode trunk
erps-ring test_ring2 port1
!

```

ERPS + CFM

. - . . , , , ERPS.

, - CFM (Connectivity Fault Management). ' ' L2 CCM-, . . , CCM- ERPS

.

, CFM ERPS Switch A B (1/0/1). :

Switch A:

```

!
ethernet cfm global
ethernet cfm domain test level 2
service test pvlan 77 direction down
mep mepid 100;200
continuity-check enable
continuity-check receive rmep 200
exit
!
erps-ring test
port1 failure-detect physical-link-or-cc domain test service test mep 100 rmep 200
erps-instance 1
protected-instance 1
control-vlan 77
exit
!
Interface Ethernet1/0/1
ethernet cfm mep 100 domain test service test
switchport mode trunk
erps-ring test port1
!

```

Switch B:

```
!  
ethernet cfm global  
ethernet cfm domain test level 2  
service test pvlan 77 direction down  
mep mepid 100;200  
continuity-check enable  
continuity-check receive rmep 100  
exit  
!  
erps-ring test  
port0 failure-detect physical-link-or-cc domain test service test mep 200 rmep 100  
erps-instance 1  
protected-instance 1  
control-vlan 77  
exit  
!  
Interface Ethernet1/0/1  
ethernet cfm mep 200 domain test service test  
switchport mode trunk  
erps-ring test port0  
!
```