

RG-IS2700G



Contents

- ERPS
- SmartWeb

(ERPS)

- ERPS(Ethernet Ring Protection Switching)

ITU

G.8032

- ERPS EAPS RPR SDH STP

- ERPS

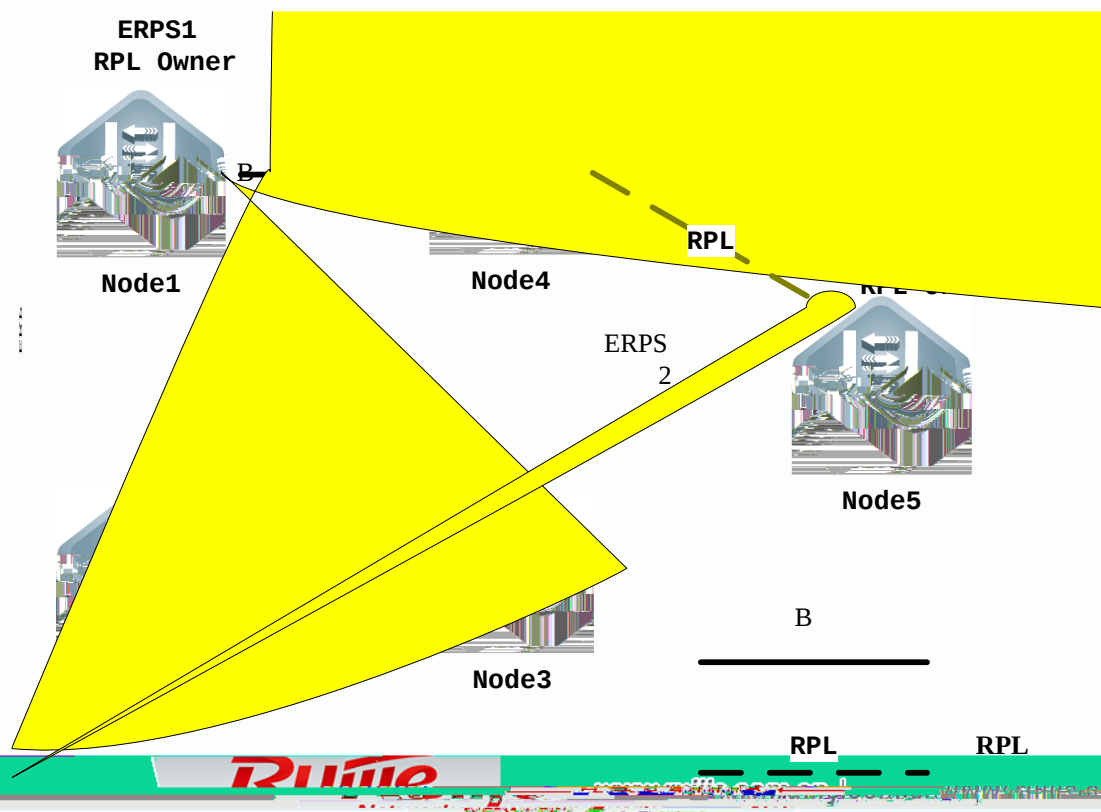
- STP STP ERPS

$\leq 50\text{ms}$

(ERPS)

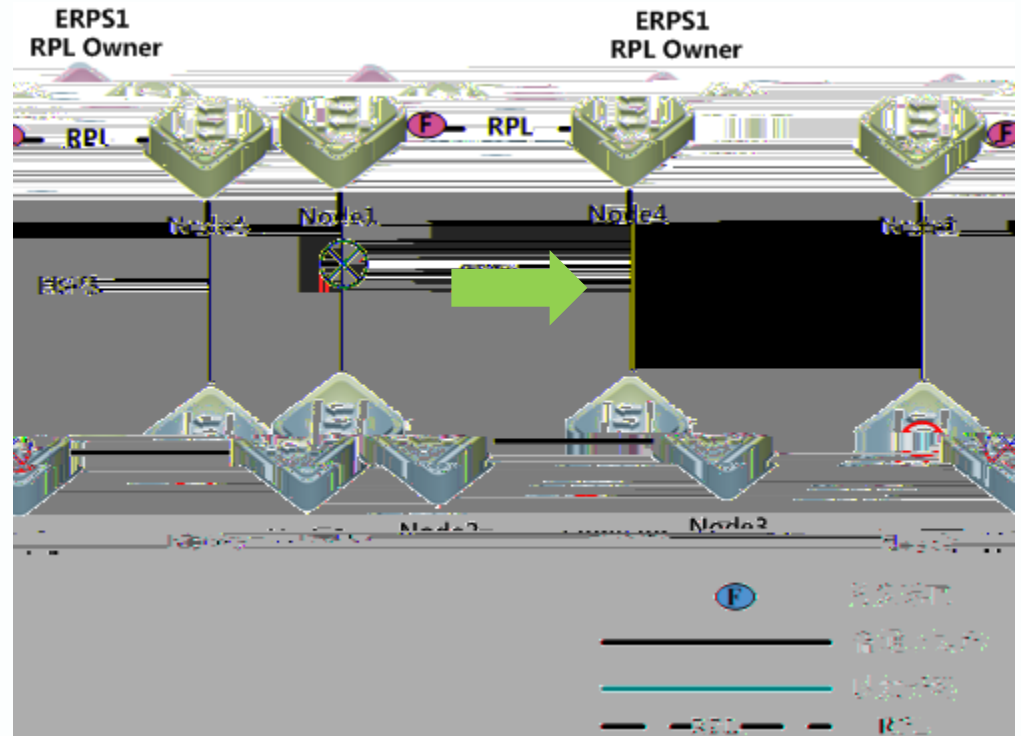
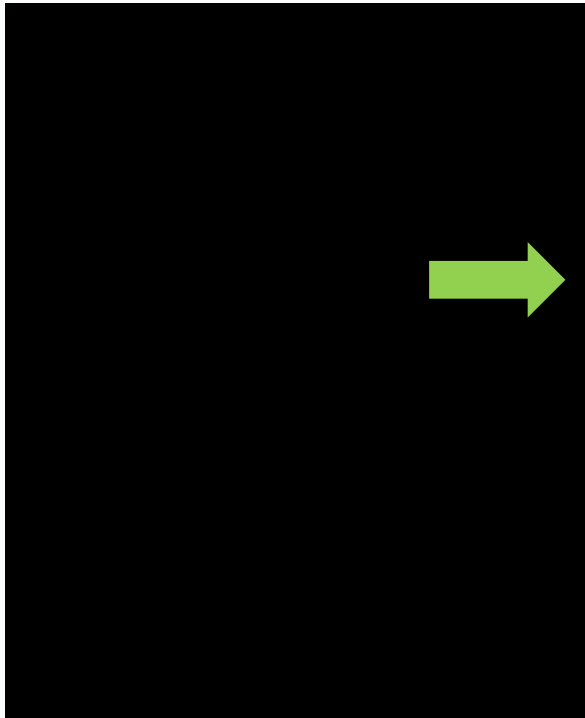
ERPS ring 1

ERPS ring2



(ERPS)

Ø

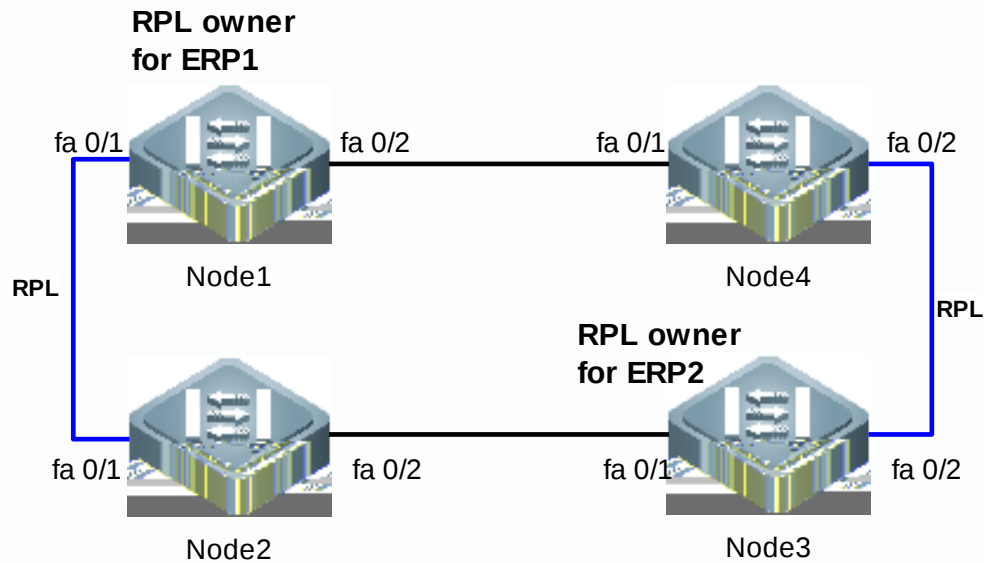


ERPS
TCP



RPL Owner

(ERPS)



VLAN

VLAN

VLAN

(ERPS)

RPL

(Loop)

ARP/ND

RPL Owner

RPL

Protection

MAC

guard
WTR

RPL Owner
RPL Owner

MAC

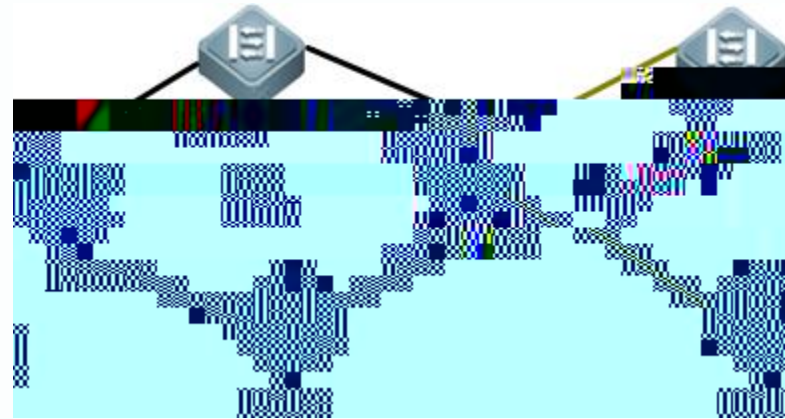
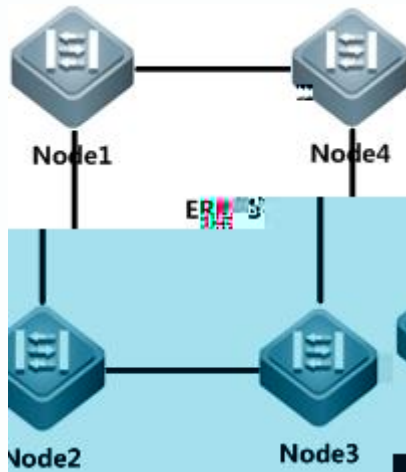
RPL

ARP/ND

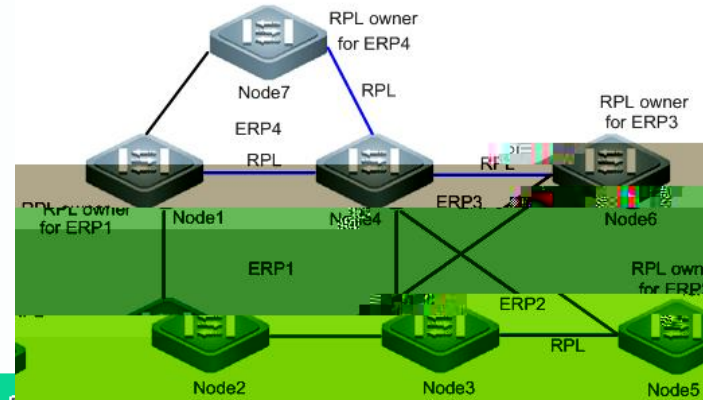
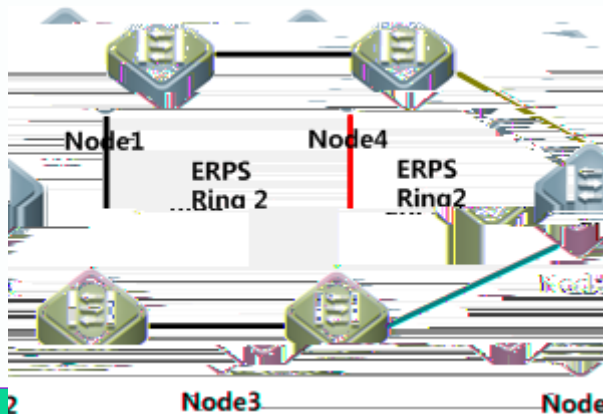
WTR

(ERPS)

ERPS



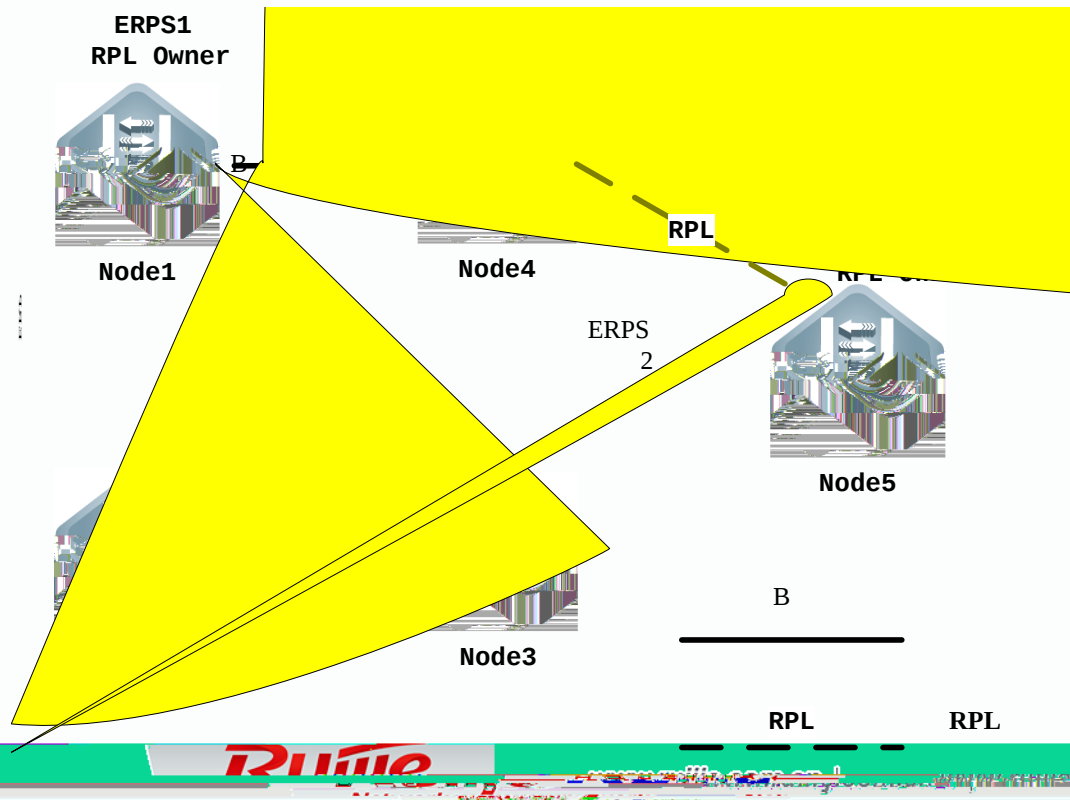
1



(ERPS)

ERPS

- RPL owner RPL RPL ERP
- RPL owner
- RPL owner RPL owner
-
-



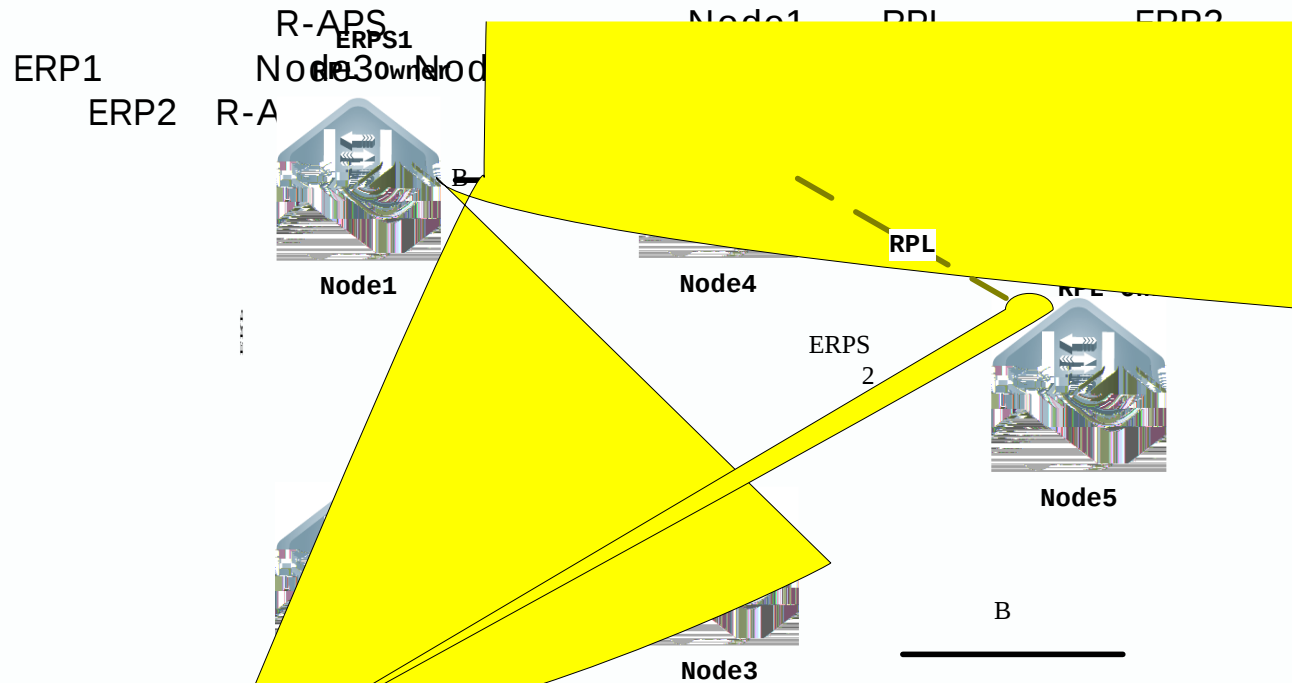
(ERPS)

ERPS

■ RPL() RPL Idle RPL

■ ERP2 Node4 Node5 Node3 Node5 ERP1
ERP1 Node3 Node4 ERP2
ERP2 ERP2 ERP1

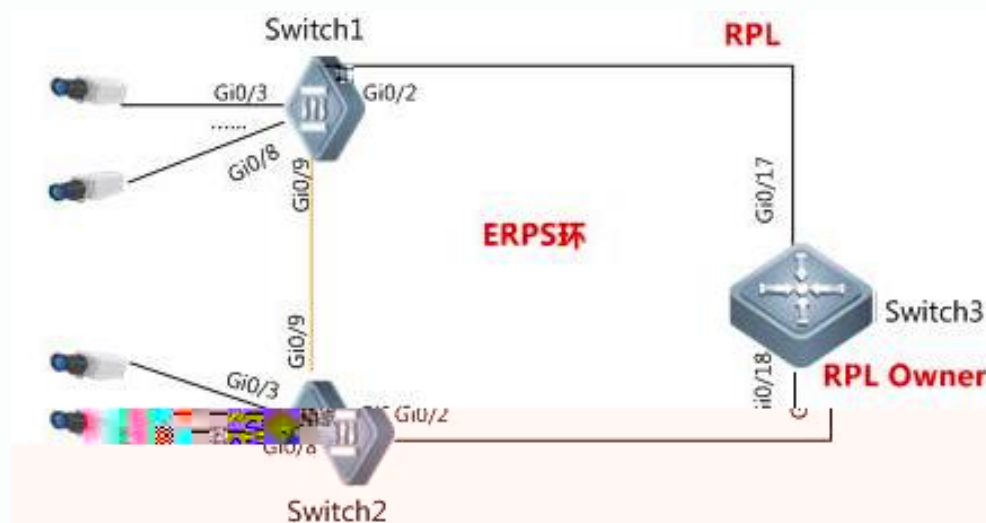
■ R-APS virtual channel



(ERPS)

ERPS

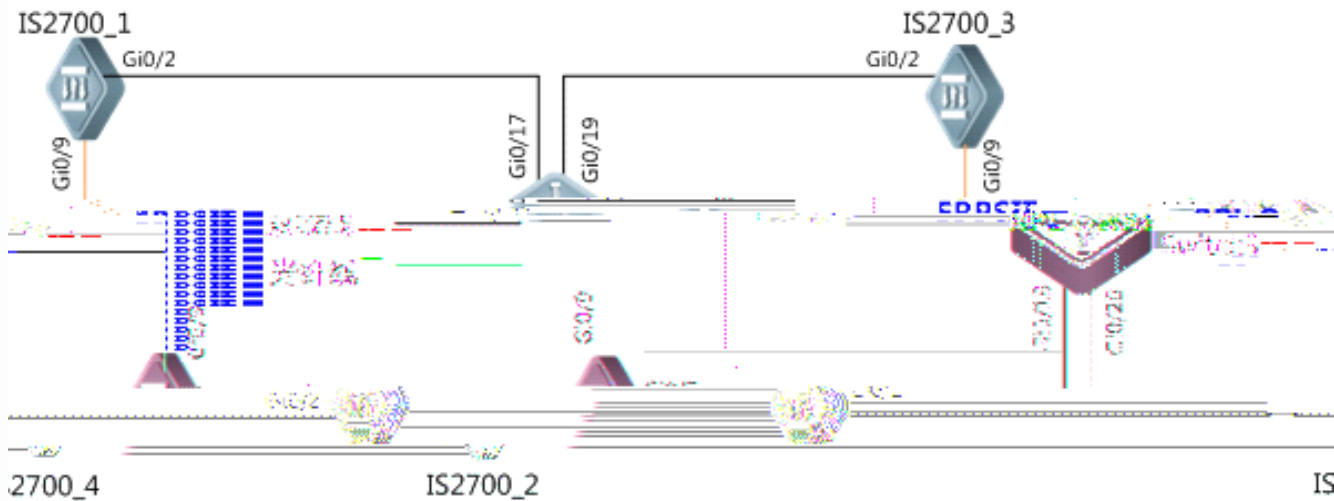
- Switch1 Switch2 Switch3
- R-APS VLAN ID
- RPL owner Switch3 RPL Owner Switch2 Switch3
RPL



(ERPS)

ERPS

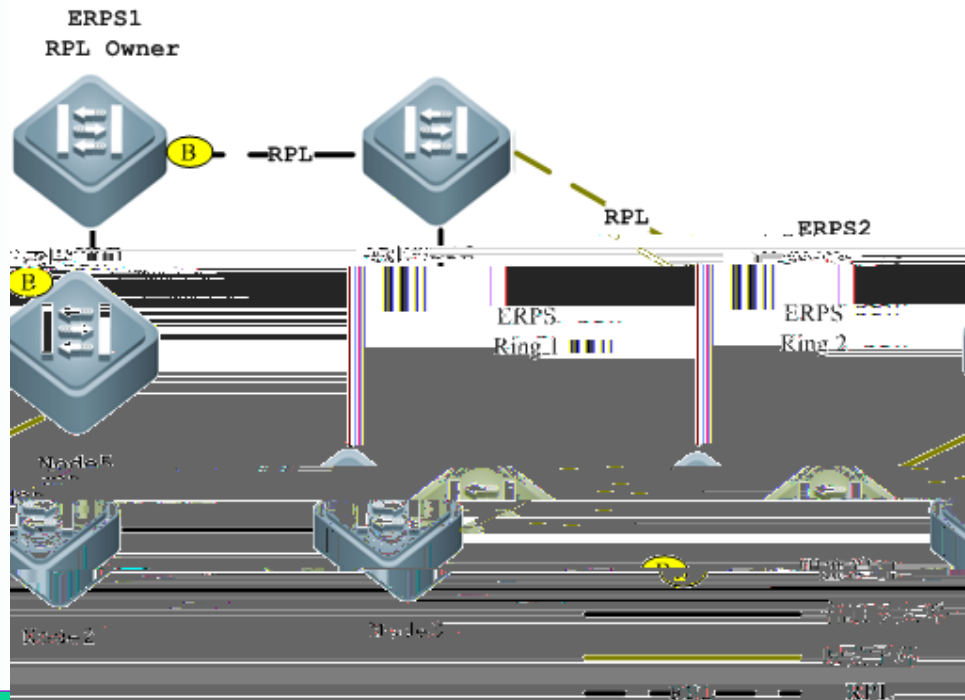
- IS2700_1 IS2700_2 Switch3 ERPS IS2700_3 IS2700_4
Switch3 ERPS
- ERPS ERPS R-APS VLAN R-Aps vlan id
- RPL Owner Switch3 RPL owner Switch3
IS2700_1 ERPS RPL Switch3 IS2700_3 ERPS RPL



(ERPS)

ERPS

- Node1 Node2 Node3 Node4 ERPS 1 Node3 Node4
Node5 ERP2
- R-APS VLAN ERP1 R-APS VLAN 4093 ERP2 R-APS VLAN 100
- RPL Owner Node1 RPL owner Node1 Node4 ERP1
RPL Node5 RPL owner Node4 Node5 ERP2 RPL



(ERPS)

ERPS

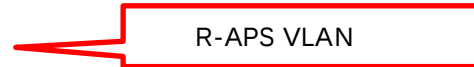
- Switch1



(ERPS)

ERPS

CLI



(ERPS)

ERPS

CLI



RPL Owner Switch3

```
Ruijie# configure terminal
```

```
Ruijie(config)# erps raps-vlan 4001
```

R-APS VLAN VLAN ID 4001

```
Ruijie(config)#int gigabitEthernet 0/17
```

```
Ruijie(config-if-GigabitEthernet 0/17)# switchport mode trunk
```

```
Ruijie(config-if-GigabitEthernet 0/17)#rldp port bidirection-detect shutdown-port
```

```
Ruijie(config)#int gigabitEthernet 0/18
```

```
Ruijie(config-if-GigabitEthernet 0/18)# switchport mode trunk
```

```
Ruijie(config-if-GigabitEthernet 0/18)#rldp port bidirection-detect shutdown-port
```

```
Ruijie# configure terminal
```

```
Ruijie(config)#rldp enable
```

RLDP

```
Ruijie(config)#errdisable recovery interval 30
```

```
Ruijie(config)# erps raps-vlan 4001
```

```
Ruijie(config-erps 4001)#ring-port west gigabitEthernet 0/17 east gigabitEthernet 0/18
```

```
Ruijie(config-erps 4001)#rpl-port east rpl-owner
```

```
Ruijie(config)# erps raps-vlan 4001
```

RPL-Owner

```
Ruijie(config-erps 4001)# state enable
```

```
Ruijie(config)# erps enable
```

ERPS

ERPS

1

■ ■ ■



RPL Owner WEB

以太环配置

Erps ID(2-4094): 4001 *

口)

请选择Erps环端口: (只能选择两个端口)

2 4 6

1 2 3 4 5 6

选端口 选中端口 聚合端口 提示: 同种设备只能选择同种设备端口. 可选端口 不可选端口

一个环网只需配置一个阻塞端口!

注意:

阻塞端口

(ERPS)

ERPS



ERPS

Switch1#show erps
ERPS Information
Global Status
Link monitored by

Switch3#sho erps
ERPS Information
Global Status : Enabled
Link monitored by : Not Oam

R-APS VLAN : 4001
Ring Status : Enabled
West Port : Gi0/17 (Forwarding)
East Port : Gi0/18 (Blocking)
RPL Port : East Port
Protected VLANs : ALL
RPL Owner : Enabled
Holdoff Time : 0 milliseconds
Guard Time : 500 milliseconds
WTR Time : 5 minutes
Current Ring State : idle

erps raps-vlan 4001
ERPS Information
Global Status : Enabled
Link monitored by : Not Oam

R-APS VLAN : 4001
Ring Status : Enabled
West Port : Gi0/2 (Forwarding)
East Port : Gi0/9 (Forwarding)
RPL Port : None
Protected VLANs : ALL
RPL Owner : Disabled
Holdoff Time : 0 milliseconds
Guard Time : 500 milliseconds
WTR Time : 2 minutes
Current Ring State : idle

(ERPS)

ERPS



```
1 shutdown erps
2 erps ERPS trunk
3 ERPS R-APS VLAN R-APS VLAN
4 ERPS RPL Owner Owner ERPS
  protection
5 ERPS ERPS
6 shutdown erps
7 ERPS ERPS RLDP
  RLDP
shutdown
```

Contents

- ERPS
- SmartWeb

| SmartWeb

■ SmartWeb

IS2700G

SmartWeb

CLI



/ VLAN / /

SNMP

SmartWeb

SmartWeb —



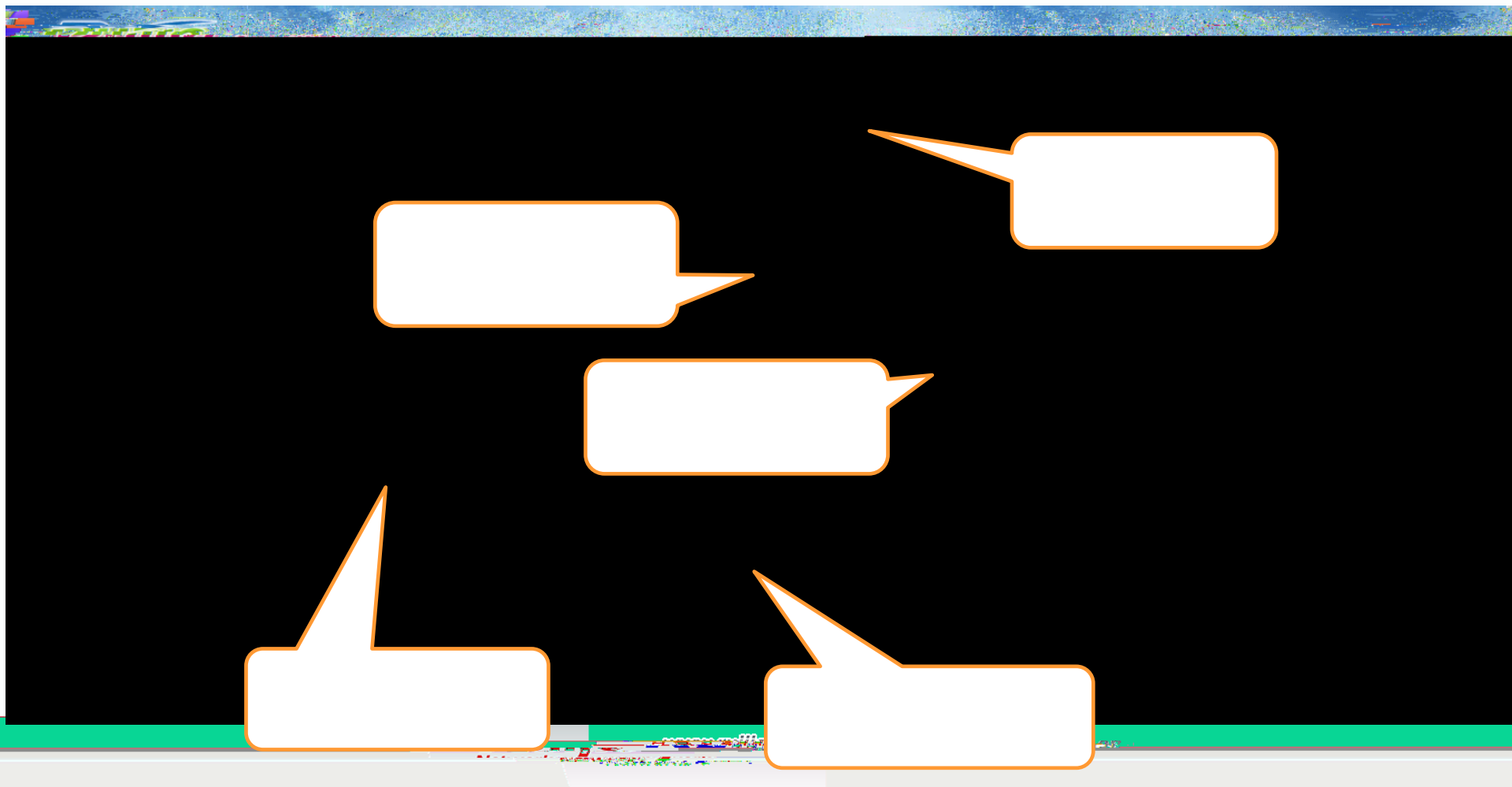
- 1 PC IP 192.168.1.0/24 PC IS2700G
gi0/1
- 2 PC <http://192.168.1.200> SmartWeb
admin/admin
- 3 SmartWeb
- 4



| SmartWeb -----

SmartWeb

CPU/



| SmartWeb ----

admin

guest

- www.ruijie.com.cn
- www.ruijie.com.cn/service.aspx
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