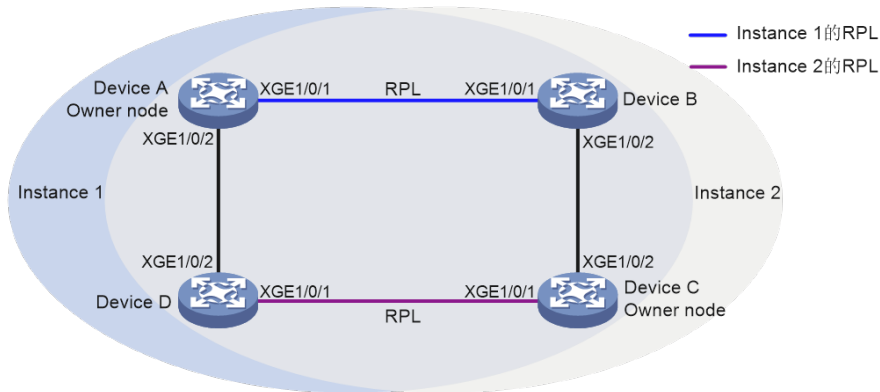


ERPS单环多实例负载分担配置举例

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组网及说明



1. 组网需求 为了更高效得利用网络资源，使环网上不同链路的流量负载比较均匀，可以通过在环网上各节点配置ERPS协议，使得不同的VLAN流量走不同的链路。 Device A、Device B、Device C和Device D构成ERPS环1，在该环上配置两个实例。 Instance 1的Owner节点为Device A，PRL为Device A和Device B之间的链路，控制VLAN为VLAN 100，保护VLAN为VLAN 1~30。 Instance 2的Owner节点为Device C，其PRL为Device C和Device D之间的链路，控制VLAN为VLAN 110，保护VLAN为VLAN 31~60。

配置步骤

一、配置步骤

(1) 配置Device A

创建VLAN 1~60，将VLAN 1~30映射到MSTI 1上，VLAN 31~60映射到MSTI 2上，并激活MST域的配置。

```
<DeviceA> system-view
```

```
[DeviceA] vlan 1 to 60
```

```
[DeviceA] stp region-configuration
```

```
[DeviceA-mst-region] instance 1 vlan 1 to 30
```

```
[DeviceA-mst-region] instance 2 vlan 31 to 60
```

```
[DeviceA-mst-region] active region-configuration
```

```
[DeviceA-mst-region] quit
```

分别在端口Ten-GigabitEthernet1/0/1和Ten-GigabitEthernet1/0/2上配置物理连接状态up/down抑制时间为0秒（即不抑制），关闭生成树协议，并将端口配置为Trunk端口且允许VLAN 1~60通过。

```
[DeviceA] interface ten-gigabitethernet 1/0/1
```

```
[DeviceA-Ten-GigabitEthernet1/0/1] link-delay 0
```

```
[DeviceA-Ten-GigabitEthernet1/0/1] undo stp enable
```

```
[DeviceA-Ten-GigabitEthernet1/0/1] port link-type trunk
```

```
[DeviceA-Ten-GigabitEthernet1/0/1] port trunk permit vlan 1 to 60
```

```
[DeviceA-Ten-GigabitEthernet1/0/1] quit
```

```
[DeviceA] interface ten-gigabitethernet 1/0/2
```

```
[DeviceA-Ten-GigabitEthernet1/0/2] link-delay 0
```

```
[DeviceA-Ten-GigabitEthernet1/0/2] undo stp enable
```

```
[DeviceA-Ten-GigabitEthernet1/0/2] port link-type trunk
```

```
[DeviceA-Ten-GigabitEthernet1/0/2] port trunk permit vlan 1 to 60
```

```
[DeviceA-Ten-GigabitEthernet1/0/2] quit
```

创建ERPS环1。

```
[DeviceA] erps ring 1
```

配置ERPS环成员端口。

```
[DeviceA-erps-ring1] port0 interface ten-gigabitethernet 1/0/1
```

```
[DeviceA-erps-ring1] port1 interface ten-gigabitethernet 1/0/2
```

创建ERPS实例1。

```
[DeviceA-erps-ring1] instance 1
```

配置节点角色。

```
[DeviceA-erps-ring1-inst1] node-role owner rpl port0
```

配置控制VLAN。

```
[DeviceA-erps-ring1-inst1] control-vlan 100
```

配置保护VLAN。

```
[DeviceA-erps-ring1-inst1] protected-vlan reference-instance 1
```

实例1使能ERPS协议。

```
[DeviceA-erps-ring1-inst1] instance enable
```

```
[DeviceA-erps-ring1-inst1] quit
```

```
[DeviceA-erps-ring1] quit
```

创建ERPS实例2。

```
[DeviceA-erps-ring1] instance 2
```

配置控制VLAN。

```
[DeviceA-erps-ring1-inst2] control-vlan 110
```

配置保护VLAN。

```
[DeviceA-erps-ring1-inst2] protected-vlan reference-instance 2
```

实例2使能ERPS协议。

```
[DeviceA-erps-ring1-inst2] instance enable
```

```
[DeviceA-erps-ring1-inst2] quit
```

```
[DeviceA-erps-ring1] quit
```

使能CFD功能，并创建级别为5的MD MD_A。

```
[DeviceA] cfd enable
```

```
[DeviceA] cfd md MD_A level 5
```

在MD_A中创建以VLAN编号为MA名称的服务实例1，该MA服务于VLAN 1。

```
[DeviceA] cfd service-instance 1 ma-id vlan-based md MD_A vlan 1
```

在服务实例1内配置MEP列表，在端口Ten-GigabitEthernet1/0/1上创建服务实例1内的外向MEP 1001，并使其CCM报文发送功能。

```
[DeviceA] cfd meplist 1001 1002 service-instance 1
[DeviceA] interface ten-gigabitethernet 1/0/1
[DeviceA-Ten-GigabitEthernet1/0/1] cfd mep 1001 service-instance 1 outbound
配置关键点
[DeviceA-Ten-GigabitEthernet1/0/1] cfd cc service-instance 1 mep 1001 enable
[DeviceA-Ten-GigabitEthernet1/0/1] quit
# 在MD_A中创建以VLAN编号为MA名称的服务实例2，该MA服务于VLAN 2。
[DeviceA] cfd service-instance 2 ma-id vlan-based md MD_A vlan 2
```