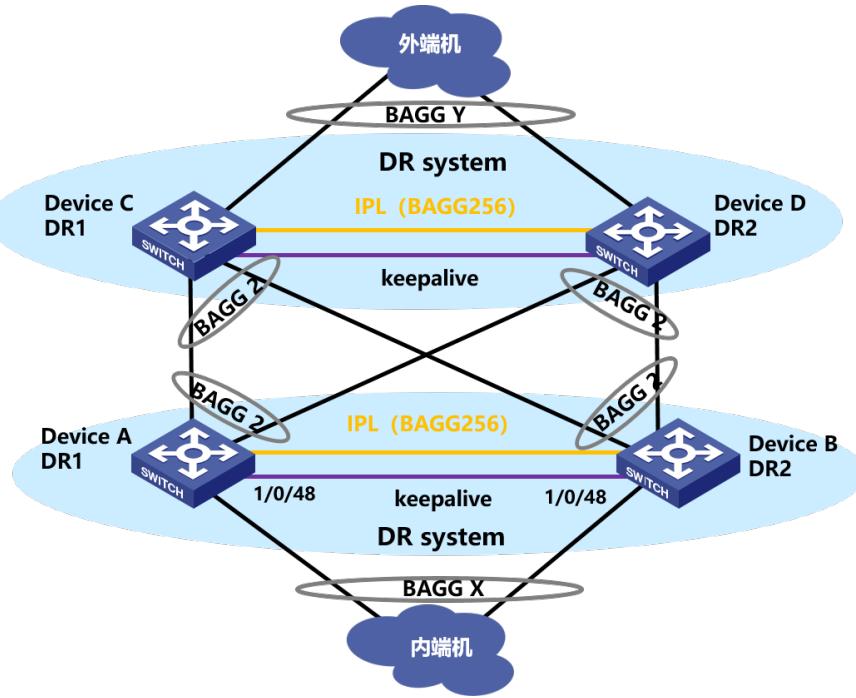


知 某局点多级DRNI (M-LAG) 互联DR接口DOWN

二层链路聚合 曾招维 2022-11-30 发表

组网及说明

现场一对S5560交换机 (version 7.1.070, Release 6530) 与一对S6850 (version 7.1.070, Release 6616) 交换机多级DRNI互联，组网如下：



告警信息

display drni summary显示DR接口本地状态为Aggregate interface down, keepalive链路状态正常。

问题描述

省略内外端机配置，现场配置如下，查看drni状态发现DR接口状态异常。

```
NM134-A08-MG-A-2.ZJY.X5560]dis drni summary
:Tags: A -- Aggregate interface down, B -- No peer DR interface configured
C -- Configuration consistency check failed

:PP: BAGG256
:PP state (cause): UP
keepalive link state (cause): UP

DR interface information
DR interface   DR group   Local state (cause)   Peer state   Remaining down time(s)
IAGG2          2           DOWN (A)            UP           -
NM134-A08-MG-A-2.ZJY.X5560]
NM134-A08-MG-A-2.ZJY.X5560]
NM134-A08-MG-A-2.ZJY.X5560]
NM134-A08-MG-A-2.ZJY.X5560]
```

Device A配置:

```
#  
interface Bridge-Aggregation2  
port link-type trunk  
port trunk permit vlan all  
link-aggregation mode dynamic  
port drni group 2  
  
#  
interface Bridge-Aggregation256  
port link-type trunk  
port trunk permit vlan all  
link-aggregation mode dynamic  
port drni intra-portal-port 1  
  
#  
#  
interface GigabitEthernet1/0/48  
port link-mode route  
ip binding vpn-instance keepalive  
ip address 192.168.0.1 255.255.255.252  
  
#  
#  
interface Ten-GigabitEthernet1/0/49  
port link-mode bridge  
port link-type trunk  
port trunk permit vlan all  
port link-aggregation group 256  
  
#  
interface Ten-GigabitEthernet1/0/50  
port link-mode bridge  
port link-type trunk  
port trunk permit vlan all  
port link-aggregation group 256  
  
#  
interface Ten-GigabitEthernet1/0/51  
port link-mode bridge  
port link-type trunk  
port trunk permit vlan all  
speed 10000  
port link-aggregation group 2  
  
#  
drni system-mac 0001-0001-0001  
drni system-number 1  
drni system-priority 10  
drni keepalive ip destination 192.168.0.2 source 192.168.0.1 vpn-instance keepalive  
drni mad exclude interface GigabitEthernet1/0/48  
  
#
```

Device B配置:

```
#  
interface Bridge-Aggregation2  
port link-type trunk
```

```

port trunk permit vlan all
link-aggregation mode dynamic
过程分析
port drni group 2
单独看每个DRNI系统配置感觉是没有异常的，虽然DR系统中相互配对的DR接口的系统MAC地址必须相同。但是由于有做DRNI级联，若不同DR系统的系统MAC存在冲突则会影响DR接口状态。
建议用户将系统MAC地址配置为其中一台DR设备的桥MAC地址。
port link-type trunk
port trunk permit vlan all
link-aggregation mode dynamic
port drni intra-portal-port 1
#
#
interface GigabitEthernet1/0/48
port link-mode route
ip binding vpn-instance keepalive
ip address 192.168.0.2 255.255.255.252
#
interface Ten-GigabitEthernet1/0/49
port link-mode bridge
port link-type trunk
port trunk permit vlan all
port link-aggregation group 256
#
interface Ten-GigabitEthernet1/0/50
port link-mode bridge
port link-type trunk
port trunk permit vlan all
port link-aggregation group 256
#
interface Ten-GigabitEthernet1/0/51
port link-mode bridge
port link-type trunk
port trunk permit vlan all
speed 10000
port link-aggregation group 2
#
drni system-mac 0001-0001-0001
drni system-number 2
drni system-priority 10
drni keepalive ip destination 192.168.0.1 source 192.168.0.2 vpn-instance keepalive
drni mad exclude interface GigabitEthernet1/0/48
#

```

Device C配置：

```

#
interface Bridge-Aggregation2
port link-type trunk
port trunk permit vlan all
link-aggregation mode dynamic
port drni group 2
#
interface Bridge-Aggregation256
port link-type trunk
port trunk permit vlan all
link-aggregation mode dynamic
port drni intra-portal-port 1
undo mac-address static source-check enable
#
#
interface HundredGigE1/0/25
port link-mode bridge
port link-type trunk
port trunk permit vlan all
port link-aggregation group 256

```

解决方法

interface HundredGigE1/0/26
多级DRNI (M-LAG) 互联注意DR系统MAC不能存在冲突，建议用户将系统MAC地址配置为其中一台
DR设备的桥MAC地址。
port link-mode bridge
port link-type trunk
port trunk permit vlan all
port link-aggregation group 256

interface Twenty-FiveGigE1/0/56
port link-mode route
duplex full
speed 10000
ip binding vpn-instance keepalive
ip address 192.168.0.1 255.255.255.252

interface Twenty-FiveGigE1/0/55
port link-mode bridge
port link-type trunk
port trunk permit vlan all
speed 10000
duplex full
port link-aggregation group 2

drni system-mac 0001-0001-0001
drni system-number 1
drni system-priority 10
drni keepalive ip destination 192.168.0.2 source 192.168.0.1 vpn-instance keepalive
drni mad exclude interface Twenty-FiveGigE1/0/56
#

Device D配置:

```
#  
interface Bridge-Aggregation2  
port link-type trunk  
port trunk permit vlan all  
link-aggregation mode dynamic  
port drni group 2  
#  
interface Bridge-Aggregation256  
port link-type trunk  
port trunk permit vlan all  
link-aggregation mode dynamic  
port drni intra-portal-port 1  
undo mac-address static source-check enable  
#  
#  
interface HundredGigE1/0/25  
port link-mode bridge  
port link-type trunk  
port trunk permit vlan all  
port link-aggregation group 256  
#  
interface HundredGigE1/0/26  
port link-mode bridge  
port link-type trunk  
port trunk permit vlan all  
port link-aggregation group 256  
#  
interface Twenty-FiveGigE1/0/55  
port link-mode bridge  
port link-type trunk  
port trunk permit vlan all
```

speed 10000