DRNI多级组网高级配置介绍

H3C交换机技术专题系列

在这篇以太网Ethernet技术专题中，我们介绍了DRNI(Distributed Ethernet Interconnection)技术的基本概念、适用场景和配置步骤，本篇DRNI专题介绍DRNI多级组网、高级应用配置步骤。

一般设备组成DRNI，但实现组网中多级设备的DRNI，可以实现二层网络多级冗余、多级负载分担。这种组网技术不仅能实现多级设备的DRNI，还能实现DRNI与其他技术的组合应用，例如：一般设备组成DRNI，但实现组网中多级设备的DRNI，可以实现二层网络多级冗余、多级负载分担。这种组网技术不仅能实现多级设备的DRNI，还能实现DRNI与其他技术的组合应用，例如：DRNI与EVB(Edge Virtual Bridging)技术的组合应用，实现网络自动化管理。DRNI与其他技术的组合应用，实现DRNI设备的自动化管理。

接下来我们就一起来了解一下多级DRNI组网的常见应用案例吧~

（文末可获取DRNI三层配置示例）

如图是一个DRNI多级组网实例应用图，我们以这个组网为例，来介绍DRNI多级组网的配置。

在这个DRNI多级组网实例中，LS1、LS2是与服务器直接连接的接入设备，Server 2连接的是三层网络，Server 1连接的是二层网络。Server 1和Server 2的目的地址分别是：Server 1的IP地址为10.1.1.1/24，Server 2的IP地址为10.2.2.2/24。Server 1和Server 2的MAC地址分别是：Server 1的MAC地址为0000-0000-0001，Server 2的MAC地址为0000-0000-0002。

LS1和LS2是通过两条链路进行二层转发，这两条链路分别是：LS1的二层聚合接口Bridge-Aggregation 1和LS2的二层聚合接口Bridge-Aggregation 1。

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接下来我们要问，我们要做下面一些DRNI的配置：

DUT-1、DUT-2的第一部分配置：

```
# 配置DRNI的系统MAC
drni system-mac 0001-0001-0001
# 配置DRNI的系统编号
drni system-priority 32000
drni role priority 20000 -配置作为主设备
# 配置DRNI的keepalive
ip vpn-instance keepalive
#配置VLAN接口，进一步通过该接口来配置keepalive
interface Vlan-interface 1015
port link-mode route
ip binding vpn-instance keepalive
ip address 1.1.1.1/255.255.255.252
# 配置keepalive
ip keepalive -s destination 1.1.1.2 source 1.1.1.1 vpn-instance keepalive
# 配置DRNI的core-link
drni mad exclude interface bundle2keep 10152
# 配置DRNI的core-link
interface Bridge-Aggregation 1
link-aggregation mode dynamic
#
interface Bridge-Aggregation 1054
port link-mode route
ip address 10.1.1.1/24
# 配置DRNI的core-link
interface Bridge-Aggregation 1015
link-aggregation mode dynamic
#
interface Bridge-Aggregation 1025
link-aggregation mode dynamic
#
interface Bridge-Aggregation 1027
link-aggregation mode dynamic
#
interface range ten-gigabitethernet 1/0/1 ten-gigabitethernet 1/0/4
port link-mode bridge
#
interface Bridge-Aggregation 20
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface Bridge-Aggregation 21
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface Bridge-Aggregation 22
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface ten-gigabitethernet 1/0/19
port link-aggregation group 20
#
interface ten-gigabitethernet 1/0/20
port link-aggregation group 21
#
interface ten-gigabitethernet 1/0/21
port link-aggregation group 22
#
interface range ten-gigabitethernet 1/0/1 ten-gigabitethernet 1/0/4
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface Bridge-Aggregation 1025
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface Bridge-Aggregation 1027
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface range ten-gigabitethernet 1/0/1 ten-gigabitethernet 1/0/4
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface Bridge-Aggregation 1054
port link-type trunk
port trunk permit vlan 10
undo port trunk permit vlan 1
#
interface vlan-interface 5
ip address 5.1.1.1/24
#
ospf 1 router-id 2.1.1.1
import-route direct
area 0.0.0.1
network 2.1.1.0 0.0.0.255
network 5.1.1.0 0.0.0.255
#
interface vlan-interface 5
vrrp ipv4 5 track 1
vrrp ipv6 1000 track 1
#
# 配置管理网络
interface Vlan-interface 1
port link-mode route
ip address 172.16.1.1/24
#
# 配置DRNI的core-link
interface Bridge-Aggregation 10152
port link-mode route
ip address 2.2.2.2/24
#
# 配置DRNI的core-link
interface Bridge-Aggregation 10154
port link-mode route
ip address 2.2.2.2/24
#
# 配置DRNI的core-link
interface Bridge-Aggregation 10157
port link-mode route
ip address 2.2.2.2/24
#
# 配置DRNI的core-link
interface Bridge-Aggregation 10158
port link-mode route
ip address 2.2.2.2/24
#
# 配置DRNI的core-link
interface Bridge-Aggregation 10159
port link-mode route
ip address 2.2.2.2/24
#
# 配置DRNI的core-link
interface Bridge-Aggregation
```