Ruije

How to configure VSU

I. Scenario

VSU is a technology that virtualizes multiple devices into one device to manage and use, greatly reducing management complexity and topology logic complexity. Compared with MSTP+VRRP networks, VSU is usually connected to peripheral devices through aggregation ports, effectively utilizing redundant links and improving system forwarding capability.

II. VSU Typical Features

- VSU expands the port numbers
- VSU expands forwarding capacity
- VSU expands Uplink bandwidth
- VSU simplifies the network topology



IV. Network Planning

TenGigabit Ethernet 1/47 and TenGigabit Ethernet 1/48 of each switch are used as VSL links.

2 Configure BFD detections on TenGigabit Ethernet 1/31port of each switch.

V. Configuration Steps

Domain Configuration

N18006-SDNGW-1(config)#switch virtual domain 1 N18006-SDNGW-1(config-vs-domain)#switch 1 priority ?

<1-255> Switch priority, default value is 100 N18006-SDNGW-1(config-vs-domain)#switch 1 priority 200



V. Configuration Steps

18006-SDNGW-2(config)#switch virtual domain 1 18006-SDNGW-2(config-vs-domain)#switch 2 18006-SDNGW-2(config-vs-domain)#switch 2 priority 150 18006-SDNGW-2(config-vs-domain)#exit

VSL links configuration

N18006-SDNGW-1(config)#vsl-port N18006-SDNGW-1(config-vsl-port)#port-member interface tenGigabitEthernet 1/47 N18006-SDNGW-1(config-vsl-port)#port-member interface tenGigabitEthernet 1/48 N18006-SDNGW-1(config-vsl-port)#

18006-SDNGW-2(config-vsl-port)#port-m 18006-SDNGW-2(config-vsl-port)#port-member int te 1/47 18006-SDNGW-2(config-vsl-port)#port-member int te 1/48



N18006-SDNGW-1#write memory

Building configuration...

[OK]

N18006-SDNGW-1#switch convert mo N18006-SDNGW-1#switch convert mode v N18006-SDNGW-1#switch convert mode virtual N18006-SDNGW-1#switch convert mode virtual Convert mode will backup and delete config file, and reload the switch. Are you sure to continue[yes/no]:yes Do you want to recover config file from backup file in virtual mode (press 'ctrl + c' to cancel) [yes/no]:no % It is preparing for restarting device, please wait a moment.

N18006-SDNGW-2#write

Building configuration...

[OK] N18006-SDNGW-2#switc N18006-SDNGW-2#switch convert mo N18006-SDNGW-2#switch convert mode v N18006-SDNGW-2#switch convert mode virtual N18006-SDNGW-2#switch convert mode virtual Convert mode will backup and delete config file, and reload the switch. Are you sure to continue[yes/no]:yes Do you want to recover config file from backup file in virtual mode (press 'ctrl + c' to cancel) [yes/no]:no <u>%</u> It is preparing for restarting device, please wait a moment.

```
4 Common commands
    Check the VSU Configuration
Ruijie(config)#show switch virtual config
switch_id: 1 (mac: 8005.8842.6675)_
switch virtual domain 1
switch 1
switch 1 priority 200
port-member interface TenGigabitEthernet 1/47
port-member interface TenGigabitEthernet 1/48
switch convert mode virtual
switch_id: 2 (mac: 8005.8842.66fd)
switch virtual domain 1
switch 2
switch 2 priority 150
port-member interface TenGigabitEthernet 1/47
port-member interface TenGigabitEthernet 1/48
switch convert mode virtual
```

Check the VSU establishment status

Ruijie(conf Switch_id	ig)#show switch Domain_id	virtual Priority	Position	Status	Role	Description		
1(1) 2(2)	1(1) 1(1) ia)#	200(200) 150(150)	LOCAL REMOTE	OK OK	ACTIVE STANDBY			
Check the VSL information								
Ruijie#show switch virtual link								





V. Configuration Steps

Check the topology information of VSU

Ruijie# Ruijie#show switch virtual topology Introduction: '[num]' means switch num, '(num/num)' means vsl-aggregateport num. Chain topology: [1](1/1)---(2/1)[2] Switch[1]: master, MAC: 8005.8842.6675, Description: Switch[2]: standby, MAC: 8005.8842.66fd, Description:

VI. VSU optimization

Configure BFD detection

Ruijie(config)#interface range tenGigabitEthernet 1/1/31,2/1/31 Ruijie(config-if-range)# Ruijie(config-if-range)#no sw Ruijie(config)=if-range)#no switchport uijie(config)#switch virtual domain 1 Ruijie(config)#switch virtual domain 1 Ruijie(config-vs-domain)#dual-a Ruijie(config-vs-domain)#dual-active de Ruijie(config-vs-domain)#dual-active detection bfd Ruijie(config-vs-domain)#dual-active bfd in Ruijie(config-vs-domain)#dual-active bfd interface te Ruijie(config-vs-domain)#dual-active bfd interface te Ruijie(config-vs-domain)#dual-active bfd interface tenGigabitEthernet 1/1/31 Ruijie(config-vs-domain)#dual-active bfd interface tenGigabitEthernet 2/1/31

2 Test the switch between slave unit and master unit

Using following commands to force switchover master unit to slave unit: Redundancy forceSwitch

Ruijie#redundancy f Ruijie#redundancy forceswitch This operation will reload the master unit and force switchover to the slave unit. Are you

Using following commands to reload the member devices: Redundancy reload shelf switch-id

Ruijie#redundancy reload s Ruijie#redundancy reload shelf 2 This operation will reload the device 2. Are you sure to continue? [N/y]y [13662.276056] %SYS-0-REBOOT: Rebooting by job: dm-cli/26655. [13662.278627] %SYS-0-REBOOT: lmk write msg success. [13662.279158] reboot: Restarting system

Boot 1.3.15-7e39338 (Build time: Jun 24 2020 - 21:21:19)

3 BFD dual-active detection

When VSL is disconnected, the standby chassis will be switched to active chassis. If the former active chassis is still running, then the existing two chassis will both become the active chassis.

Ruijie#snow Ruijie#show Switch_id	switch v switch virtua Domain_id	 Priority	Position	Status	Role	Description
 1(1) Puijio#	1(1)	200(200)	LOCAL	ОК	ACTIVE	
Ruijie#snow Ruijie#show	switch v switch virtual	Daioaitu	Desition	Ctatus		Decemintion





VI. VSU optimization

When the dual-active mode appears, the same configuration will appear on both devices, resulting in configuration conflict. This is because the standby device does not clear its configurations after the VSL link is disconnected. After BFD detection is configured, the switch is performed in dual-master mode.

The switch in recovery sets all interfaces except the VSL link and BFD link to shutdown.

Ruijie#snow s Ruijie#show s Switch_id	witch virtual Domain_id	Priority	Position	Status	Role	Description
 1(1) Ruiiie#	1(1)	200(200)	LOCAL	ОК	ACTIVE	
Ruijie-RECOVE Ruijie-RECOVE Switch_id	ERY-2#show swi ERY-2#show swi Domain_id	tch v tch virtual Priority	Position	Status	Role	Description
2(2) Ruijie-RECOVE	1(1) ERY-2#	150(150)	LOCAL	Recovery	ACTIVE	

Official Website ≫ https://www.ruijienetworks.com
 Community ≫ https://community.ruijienetworks.com
 Facebook ≫ https://www.facebook.com/ruijietac







Official Website

Community



Facebook