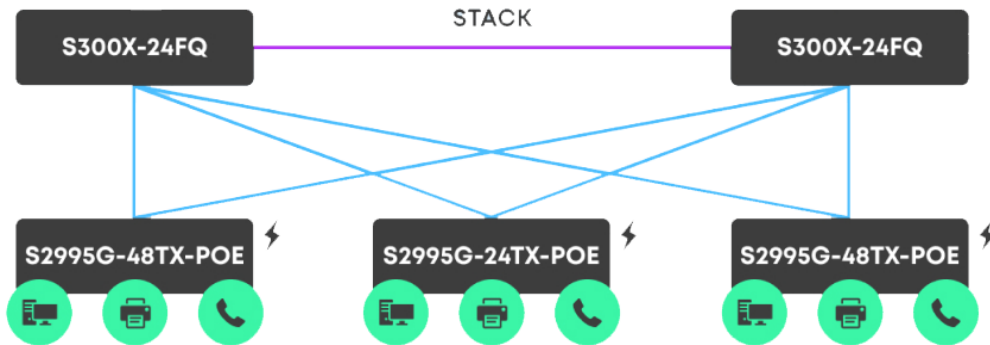


# SNR

- VSF SNR
- 
- (, HA)
- VSF
- Cross-stack LAG
  - LACP MAD
  - BFD MAD

- , , ( Cross-stack LAG). , SFP+, QSFP+ Ethernet-



## VSF SNR

SNR VSF (Virtual Switching Framework).

VSF (Active Master), (Standby Master) (Slave). Active- Standby- . , , , , VSF High Availability (HA) - . VSF HA CPU Active- Standby- , Standby-



HA 'VSF HA backup is finished' .

VSF SNR: S2989G, S2995G, S3850G, S2990, S2990G, S300G, S2990X, S300X, S4550, S4650X, S7550Y, S7550C



VSF- . SNR :

S2989G - (8TX, 24TX, 48TX), VSF HA

S2995G - , VSF HA

S3850G - , VSF HA

S2990G - VSF HA

S300G - , VSF HA

S2990X - , VSF HA

S300X - , VSF HA

S400X - , VSF HA

S4550 - , VSF HA

S4650X - , VSF HA

S7550 - , VSF HA

, :

```
copy tftp://a.b.c.d/nos.img member-1#nos.img
copy tftp://a.b.c.d/nos.img member-2#nos.img
```

"reload" AM (Active Master)



- VSF
- nandflash , "flash:" ( ), , , : member-1#nandflash:nos.img

### (, HA)

, HA- (High Availability, "show ha state" ), .



- , VSF, ReadMe , , \_.
- , Split Brain, AM.
- :
- Changelog, , VSF
- ,

:

:

```
copy tftp://a.b.c.d/nos.img member-1#nos.img
copy tftp://a.b.c.d/nos.img member-2#nos.img
```

AM:

```
force switchover
```

— AM "" SM , SM "" AM .

```
AM SM . AM.
AM, HA "AM_REALT" ( , ) :
```

```
show ha state
```

"AM\_REALT", AM :

```
force switchover
```

— AM "" SM , SM "" AM .  
AM , , .

### VSF

VSF SNR., , .

:

```
vsf member <1-16>
```

VSF- :

```
vsf priority <1-32>
```

Active Master. - .

VSF- :

- S2990, S2995G S3850G - 4 SFP+;
- S2990X S300X - 8 SFP+, 1/0/9 1/0/32, / QSFP+ (1/1/1 - 1/2/1);
- S300G - / QSFP+ ( 20Gbps) 4 QSFP+;
- S4550 - 8 SFP+, / QSFP+.

VSF-, .



VSF STP/ERPS.

port-group :

```
vsf port-group <1-2>  
vsf port-group Interface <port>
```

VSF ( ):

```
switch convert mode vsf
```

VSF ( ).



, VSF-, 3- .

VSF , :

```
vsf auto-merge enable
```

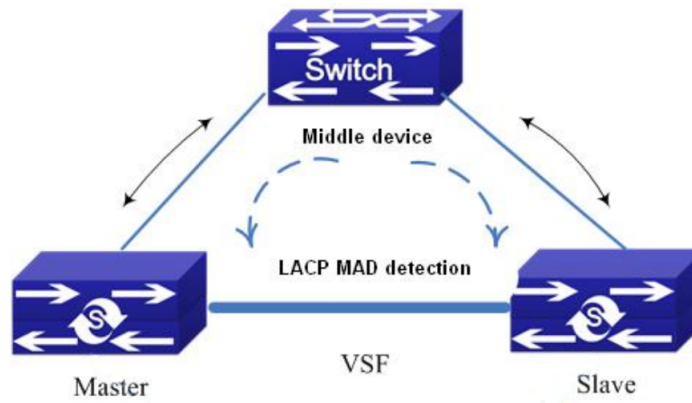
. VSF-.

## Cross-stack LAG

VSF Cross-stack LAG ( ). , - .

, - VSF- Active Master- (Split Brain). VSF VSF- . , LACP MAD BFD MAD.

## LACP MAD



MAD LACP Middle device. Port-channel VSF- MAD LACP:

```
vsf mad lacp enable
```

, VSF- MAD .

### BFD MAD

, Middle device MAD LACP BFD MAD. (MGMT- VSF).

., BFD MAD 1/0/28 Active- Standby- .

VSF- VLAN, 4000:

```
vlan 4000
```

VLAN Access BFD-:

```
Interface Ethernet 1/0/28
 switchport access vlan 4000
Interface Ethernet 2/0/28
 switchport access vlan 4000
```

VLAN:

```
interface vlan 4000
```

BFD-MAD :

```
vsf mad bfd enable
vsf mad ip add 192.168.1.1 255.255.255.0 member 2
vsf mad ip add 192.168.1.2 255.255.255.0 member 1
```