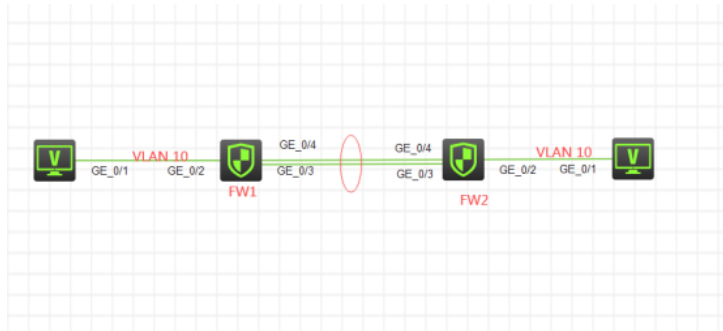


知 F1060二层链路聚合典型组网配置案例

冗余组 备份组 二层转发 H3C模拟器 韦家宁 2020-03-05 发表

组网及说明



组网说明:

本案例采用H3C HCL模拟器的F1060来模拟F1060防火墙二层链路聚合的典型组网配置。FW1与FW2采用双物理链路并使用二层链路聚合实现互联，VLAN10的网关在FW1上。要求两台PC能够相互PING通。

配置步骤

- 1、按照网络拓扑图正确配置IP地址
- 2、FW1与FW2采用二层链路聚合互联

配置关键点

FW2:

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW2
[FW2]acl basic 2001
[FW2-acl-ipv4-basic-2001]rule 0 permit source any
[FW2-acl-ipv4-basic-2001]quit
[FW2]
[FW2]zone-pair security source trust destination untrust
[FW2-zone-pair-security-Trust-Untrust]packet-filter 2001
[FW2-zone-pair-security-Trust-Untrust]quit
[FW2]
[FW2]zone-pair security source untrust destination trust
[FW2-zone-pair-security-Untrust-Trust]packet-filter 2001
[FW2-zone-pair-security-Untrust-Trust]quit
[FW2]
[FW2]zone-pair security source trust destination local
[FW2-zone-pair-security-Trust-Local]packet-filter 2001
[FW2-zone-pair-security-Trust-Local]quit
[FW2]
[FW2]zone-pair security source local destination trust
[FW2-zone-pair-security-Local-Trust]packet-filter 2001
[FW2-zone-pair-security-Local-Trust]quit
[FW2]
[FW2]zone-pair security source untrust destination local
[FW2-zone-pair-security-Untrust-Local]packet-filter 2001
[FW2-zone-pair-security-Untrust-Local]quit
[FW2]
[FW2]zone-pair security source local destination untrust
[FW2-zone-pair-security-Local-Untrust]packet-filter 2001
[FW2-zone-pair-security-Local-Untrust]quit
[FW2]vlan 10
[FW2-vlan10]quit
[FW2]int gi 1/0/2
[FW2-GigabitEthernet1/0/2]port link-mode bridge
[FW2-GigabitEthernet1/0/2]port link-type access
```

```
[FW2-GigabitEthernet1/0/2]port access vlan 10
[FW2-GigabitEthernet1/0/2]quit
[FW2]security-zone name Trust
[FW2-security-zone-Trust]import interface GigabitEthernet 1/0/2 vlan 10
[FW2-security-zone-Trust]quit
```

FW2 二层链路聚合关键配置点:

```
[FW2]int Bridge-Aggregation 1
[FW2-Bridge-Aggregation1]quit
[FW2]int range gi 1/0/3 to gi 1/0/4
[FW2-if-range]port link-mode bridge
[FW2-if-range]port link-aggregation group 1
[FW2-if-range]quit
[FW2]int Bridge-Aggregation 1
[FW2-Bridge-Aggregation1]port link-type trunk
[FW2-Bridge-Aggregation1]undo port trunk permit vlan 1
[FW2-Bridge-Aggregation1]port trunk permit vlan 10
[FW2-Bridge-Aggregation1]quit
[FW2]security-zone name Untrust
[FW2-security-zone-Untrust]import interface GigabitEthernet 1/0/3 vlan 10
[FW2-security-zone-Untrust]import interface GigabitEthernet 1/0/4 vlan 10
[FW2-security-zone-Untrust]import interface Bridge-Aggregation 1 vlan 10
[FW2-security-zone-Untrust]quit
```

FW1 :

```
<H3C>sys
System View: return to User View with Ctrl+Z.
[H3C]sysname FW1
[FW1]vlan 10
[FW1-vlan10]quit
[FW1]int gi 1/0/2
[FW1-GigabitEthernet1/0/2]port link-mode bridge
[FW1-GigabitEthernet1/0/2]port link-type access
[FW1-GigabitEthernet1/0/2]port access vlan 10
[FW1-GigabitEthernet1/0/2]quit
[FW1]int vlan 10
[FW1-Vlan-interface10]ip address 192.168.10.1 24
[FW1-Vlan-interface10]quit
[FW1]acl basic 2001
[FW1-acl-ipv4-basic-2001]rule 0 permit source any
[FW1-acl-ipv4-basic-2001]quit
[FW1]
[FW1]zone-pair security source trust destination untrust
[FW1-zone-pair-security-Trust-Untrust]packet-filter 2001
[FW1-zone-pair-security-Trust-Untrust]quit
[FW1]
[FW1]zone-pair security source untrust destination trust
[FW1-zone-pair-security-Untrust-Trust]packet-filter 2001
[FW1-zone-pair-security-Untrust-Trust]quit
[FW1]
[FW1]zone-pair security source trust destination local
[FW1-zone-pair-security-Trust-Local]packet-filter 2001
[FW1-zone-pair-security-Trust-Local]quit
[FW1]
[FW1]zone-pair security source local destination trust
[FW1-zone-pair-security-Local-Trust]packet-filter 2001
[FW1-zone-pair-security-Local-Trust]quit
[FW1]
[FW1]zone-pair security source untrust destination local
[FW1-zone-pair-security-Untrust-Local]packet-filter 2001
[FW1-zone-pair-security-Untrust-Local]quit
[FW1]
[FW1]zone-pair security source local destination untrust
[FW1-zone-pair-security-Local-Untrust]packet-filter 2001
```

```
[FW1-zone-pair-security-Local-Untrust]quit
[FW1]security-zone name Trust
[FW1-security-zone-Trust]import interface GigabitEthernet 1/0/2 vlan 10
[FW1-security-zone-Trust]quit
```

FW1二层链路聚合关键配置点:

```
[FW1]int Bridge-Aggregation 1
[FW1-Bridge-Aggregation1]quit
[FW1] int range gi 1/0/3 to gi 1/0/4
[FW1-if-range]port link-mode bridge
[FW1-if-range]port link-aggregation group 1
[FW1-if-range]quit
[FW1]int Bridge-Aggregation 1
[FW1-Bridge-Aggregation1]port link-type trunk
[FW1-Bridge-Aggregation1]undo port trunk permit vlan 1
[FW1-Bridge-Aggregation1]port trunk permit vlan 10
[FW1-Bridge-Aggregation1]quit
[FW1]security-zone name Untrust
[FW1-security-zone-Untrust]import interface GigabitEthernet 1/0/3 vlan 10
[FW1-security-zone-Untrust]import interface GigabitEthernet 1/0/4 vlan 10
[FW1-security-zone-Untrust]import interface Bridge-Aggregation 1
[FW1-security-zone-Untrust]import interface Bridge-Aggregation 1 vlan 10
[FW1-security-zone-Untrust]import interface vlan 10
[FW1-security-zone-Untrust]quit
```

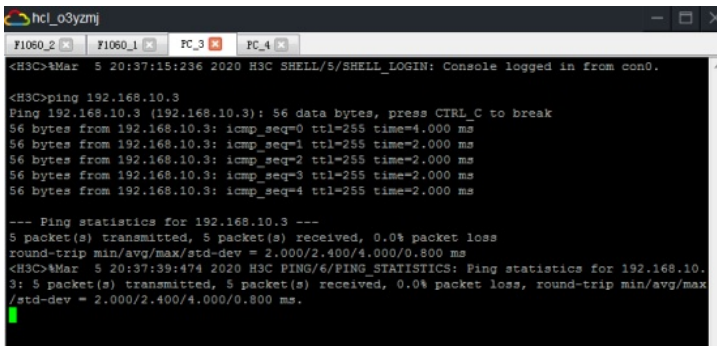
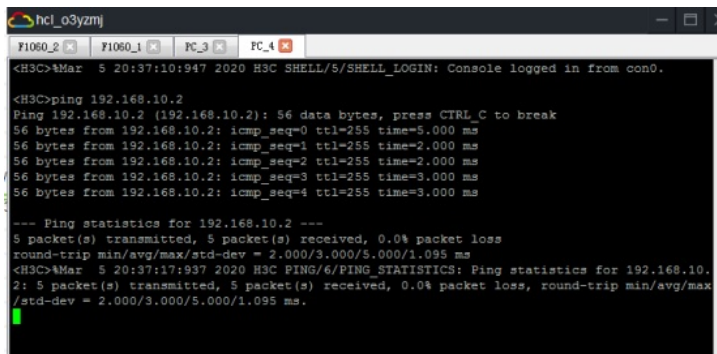
测试:

所有PC都填写IP地址:

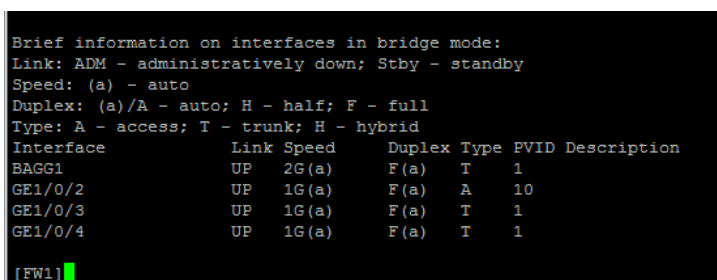
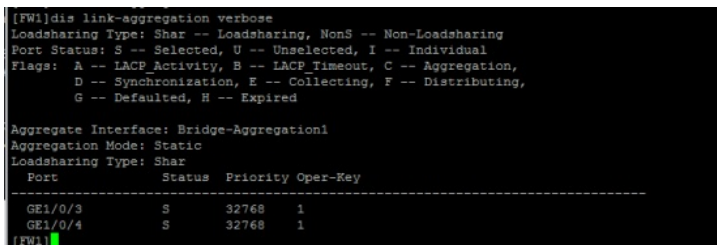




PC之间可以相互PING通:



查看FW1的链路聚合显示信息:



查看FW2的链路聚合显示信息:

```
[FW2]dis link-aggregation verbose
Loadsharing Type: Shar -- Loadsharing, NonS -- Non-Loadsharing
Port Status: S -- Selected, U -- Unselected, I -- Individual
Flags: A -- LACP_Activity, B -- LACP_Timeout, C -- Aggregation,
      D -- Synchronization, E -- Collecting, F -- Distributing,
      G -- Defaulted, H -- Expired

Aggregate Interface: Bridge-Aggregation1
Aggregation Mode: Static
Loadsharing Type: Shar
  Port          Status  Priority Oper-Key
-----
GE1/0/3        S       32768    1
GE1/0/4        S       32768    1
[FW2]
```

```
Brief information on interfaces in bridge mode:
Link: ADM - administratively down; Stby - standby
Speed: (a) - auto
Duplex: (a)/A - auto; H - half; F - full
Type: A - access; T - trunk; H - hybrid
Interface      Link Speed    Duplex Type PVID Description
BAGG1          UP    2G(a)      F(a)  T    1
GE1/0/2        UP    1G(a)      F(a)  A   10
GE1/0/3        UP    1G(a)      F(a)  T    1
GE1/0/4        UP    1G(a)      F(a)  T    1
[FW2]
```

至此，F1060二层链路聚合典型组网配置案例已完成!