

HP (SÉRIE A)

Intro

Commandes de bases HP

Aggrégation de lien

Aggrégation

! Configuration de l'agrégat en mode dynamique
[HP] interface bridge-aggregation 1
[HP-Bridge-Aggregation1] link-aggregation mode dynamic

! Configuration des interfaces. Seulement le groupe d'agrégat ! Rien d'autre!
[HP] interface GigabitEthernet 1/0/1
[HP-GigabitEthernet1/0/1] port link-aggregation group 1
[HP-GigabitEthernet1/0/1] interface GigabitEthernet 1/0/2
[HP-GigabitEthernet1/0/2] port link-aggregation group 1

! Configuration de l'agrégat, cela répercute sur tous les ports du groupe 1
[HP] interface bridge-aggregation 1
[HP-Bridge-Aggregation1] port link-type trunk
[HP-Bridge-Aggregation1] port trunk permit vlan 2 3
[HP-Bridge-Aggregation1] undo port trunk permit vlan 1

! Commandes de visualisation
<HP> display link-aggregation summary
<HP> display link-aggregation verbose bridge-aggregation 1

IRF – Piles de switches

2 points essentiels pour monter une pile IRF :

- Les switches ont le même nom (sysname)
- Les switches ont la même version de Firmware



! Nom de la pile
sysname PILEIRF
! Numéro d'unité
irf member 1 renumber 1
! Ports IRF
irf member 1 irf-port 1 port 1
irf member 1 irf-port 2 port 2
! Priorité (entre 1 et 32 – Le switch avec la plus grande devient Master)
irf member 1 priority 32

IRF - Unité 1

sysname PILEIRF
irf member 1 renumber 2
irf member 2 irf-port 1 port 1
irf member 2 irf-port 2 port 2
irf member 2 priority 30

IRF - Unité 2

sysname PILEIRF
irf member 1 renumber 3
irf member 3 irf-port 1 port 1
irf member 3 irf-port 2 port 2
irf member 3 priority 28

IRF - Unité 3

Vérifications IRF

display irf
display irf topology
display irf configuration

Cartes sup - Changement Master/Slave



! Switcher le slave
[HP]slave switch over

! Vérifications
<HP>display slave
<HP>display device

Gestion Firmware

<HP>tftp 10.10.10.10 get firmware.app

! Quand plusieurs équipements, dupliquer le firmware.
<HP>copy flash:/firmware.app slot2#flash:/

! Définition du bon firmware
<HP>boot-loader file firmware.app slot {0|1} {main|backup}

Gestion Bootloader

<HP>tftp 10.10.10.10 get boot.btm

! Quand plusieurs équipements, dupliquer le bootloader.
<HP>copy flash:/boot.btm slot2#flash:/

! Définition du bon firmware
<HP>bootrom update file boot.btm slot {0|1} {main|backup}

VLANs

! Ajout de VLAN
[HP]vlan 21
[HP-vlan-21]name vlan-21

! Suppression de VLAN
[HP]vlan 22
[HP-vlan-21]undo vlan 22

! Port en mode access
[HP] interface GigabitEthernet 1/0/1
[HP-GigabitEthernet1/0/1] port access vlan 21

! Port en mode trunk
[HP] interface GigabitEthernet 1/0/2
[HP-GigabitEthernet1/0/2] port link-type trunk
[HP-GigabitEthernet1/0/2] port trunk permit vlan 21
[HP-GigabitEthernet1/0/2] undo port trunk permit vlan 1

DHCP Snooping

[HP] dhcp-snooping
[HP] interface GigabitEthernet 1/0/24
[HP-GigabitEthernet1/0/24] dhcp-snooping trust

Relay DHCP

[HP] dhcp enable
[HP] dhcp relay server-group 1 ip 10.10.10.10
[HP] interface vlan 1
[HP-Vlan-interface1] dhcp select relay
[HP-Vlan-interface1] dhcp relay server-select 1

HP (SÉRIE A)

Spanning-tree

! Activer spanning-tree

```
[hostname] stp enable  
[hostname] stp mode {stp | rstp | mstp}
```

! Appliquer le « portfast » sur un lien en accès

```
[hostname-GigabitEthernet1/0/1] stp edged-port enable
```

! Définir le root bridge

```
[hostname] stp instance 1 priority 32768  
[hostname] stp instance 2 priority 16384  
[hostname] stp instance 1 root primary  
[hostname] stp instance 2 root secondary
```

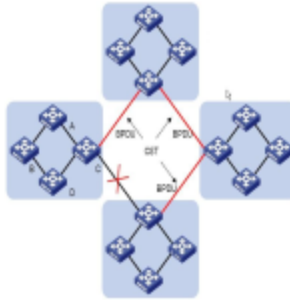
Multiple Spanning-tree

! Regions MSTP de spanning-tree

```
[hostname] stp region-configuration  
[hostname-mst-region] region-name 1
```

! Ajout des VLAN 10, 11, 12 dans l'instance 1

```
[hostname-mst-region] instance 1 vlan 10 11 12  
[hostname-mst-region] instance 2 vlan 13 14 15  
[hostname-mst-region] active region-configuration
```



Telnet

! Activation du serveur Telnet

```
<H3C> telnet server enable
```

SSH

! Génération de la clé RSA (1024 bit)

```
[H3C] public-key local create rsa
```

! Activation du serveur SSH

```
[H3C] ssh server enable  
[H3C] ssh user admin service-type stelnet authentication password
```

Interfaces VTY

! Configuration des interfaces VTY

```
[H3C] user-interface vty 0 4  
[H3C-ui-vty04] authentication mode none | password | scheme  
[H3C-ui-vty04] set authentication password simple | cipher password  
[H3C-ui-vty04] user privilege level 3  
[H3C-ui-vty04] protocol inbound all | ssh | telnet
```

! Création de l'utilisateur pour le mode scheme

```
local-user admin  
password simple h3c  
authorization-attribute level 3  
service-type ssh telnet terminal
```

ACL

Catégorie

ACL Number

Match

Basic

2000 - 2999

Source IP

Advanced

3000 - 3999

Source/Dest. IP + Protocole

Ethernet ACL

4000 - 4999

Source MAC / Dest. MAC

Création d'ACL

```
[H3C] acl number 3000
```

```
[H3C-acl-adv-3000] rule permit tcp source 129.9.0.0 0.0.255.255  
destination 202.38.160.0 0.0.0.255 destination-port eq 80
```

```
[H3C-acl-adv-3000] display acl config 3000
```

Application de l'ACL

```
[H3C] interface Gigabit 1/0/1
```

PORT

```
[H3C-GiE-1/0/1] qos
```

```
[H3C-GiE-1/0/1] packet-filter {inbound | outbound} acl-rule
```

```
[H3C-GiE-1/0/1] display acl running-packet-filter {all | interface}
```

! 1 classifieur qui filtre les règles PERMIT

```
traffic classifier classifier1 operator and  
if-match acl 3000
```

! 1 classifieur qui filtre les règles DENY

```
traffic classifier classifier2 operator and  
if-match acl 3001
```

```
#
```

! 1 behavior qui filtre les règles PERMIT

```
traffic behavior behavior1
```

```
filter permit
```

```
Accounting
```

! 1 behavior qui filtre les règles DENY

```
traffic behavior behavior2
```

```
filter deny
```

```
accounting
```

```
#
```

! 1 QOS Policy !

```
qos policy ACL1
```

```
classifier classifier1 behavior behavior1 //Permit
```

```
classifier classifier2 behavior behavior2 //Deny
```

```
#
```

! Appliquer la règle à l'interface VLAN

```
[H3C] qos vlan-policy 1 vlan 21 inbound
```

! Supprimer la règle

```
[H3C] undo qos vlan-policy vlan 21 inbound
```

NTP

! Mode peering (H3C vers H3C)

```
[H3C] ntp-service unicast-peer 10.10.10.10
```

! Mode server (H3C vers Serveur)

```
[H3C] ntp-service unicast-server 10.10.10.10
```