

TP2

Ex 4

Configure SSH Router

```
enable
configure terminal

hostname r1

ip domain-name example.com

crypto key generate rsa modulus 2048

username admin privilege 15 secret toto

ip ssh version 2

ip ssh time-out 60
ip ssh authentication-retries 3

line vty 0 4
  transport input ssh
  login local
exit

end
write memory
```

Configure SSH Switch

```
enable
configure terminal

interface Vlan1
  ip address 192.168.56.103 255.255.255.0
  no shutdown
exit

interface Ethernet0/0
  switchport mode access
  switchport access vlan 1
  no shutdown
exit

hostname sw1
```

```

ip domain-name example.com

crypto key generate rsa modulus 2048

username admin privilege 15 secret toto

ip ssh version 2

ip ssh time-out 60
ip ssh authentication-retries 3

line vty 0 4
  transport input ssh
  login local
  exit

end
write memory

```

Partie 1

```

(.venv) X toto@LPTC-PC1M4VZ3 □ /mnt/c/Users/blt/Documents/github/R511/TP2/ex4 □
□ main ± □ ansible-playbook -i inventory.yml backup_router.yml

PLAY [AUTOMATIC BACKUP OF RUNNING-CONFIG]
*****
*****

TASK [DISPLAYING THE RUNNING-CONFIG]
*****
*****

ok: [R1]

TASK [ENSURE BACKUPS DIRECTORY EXISTS]
*****
*****

changed: [R1 -> localhost]

TASK [SAVE OUTPUT TO ./backups/]
*****
*****

changed: [R1]

PLAY RECAP
*****
*****

R1                                : ok=3    changed=2    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0

(.venv) toto@LPTC-PC1M4VZ3 □ /mnt/c/Users/blt/Documents/github/R511/TP2/ex4 □ □
main ± □ ll backups

```

```
total 4
drwxrwxrwx 1 toto toto 4096 Oct 11 11:08 .
drwxrwxrwx 1 toto toto 4096 Oct 11 11:08 ..
-rwxrwxrwx 1 toto toto 1102 Oct 11 11:08 show_run_R1.txt
```

```
(.venv) toto@LPTC-PC1M4VZ3 □ /mnt/c/Users/blt/Documents/github/R511/TP2/ex4 □ □
main ± □ cat backups/show_run_R1.txt
Building configuration...
```

```
Current configuration : 1042 bytes
!
! Last configuration change at 12:53:53 EET Fri Oct 11 2024
!
version 15.4
service config
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname r1
!
boot-start-marker
boot-end-marker
!
no aaa new-model
clock timezone EET 2 0
mmi polling-interval 60
no mmi auto-configure
no mmi pvc
mmi snmp-timeout 180
!
ip domain name example.com
ip cef
no ipv6 cef
!
multilink bundle-name authenticated
!
username admin privilege 15 secret 5 $1$hWrR$G9oLQg6r06ZauD4whfzBy.
!
redundancy
!
ip ssh time-out 60
ip ssh version 2
!
interface Ethernet0/0
 ip address dhcp
!
interface Ethernet0/1
 no ip address
 shutdown
!
interface Ethernet0/2
 no ip address
```

```

shutdown
!
interface Ethernet0/3
  no ip address
  shutdown
!
ip forward-protocol nd
!
no ip http server
no ip http secure-server
!
control-plane
!
line con 0
  logging synchronous
line aux 0
line vty 0 4
  login local
  transport input ssh
!
end%

```

Partie 2

```

(.venv) toto@LPTC-PC1M4VZ3 □ /mnt/c/Users/blt/Documents/github/R511/TP2/ex4 □ □
main ± □ ansible-playbook -i inventory.yml router_ipv4_conf.yml

```

```
PLAY [AUTOMATIC BACKUP OF INTERFACE STATUS]
```

```

*****
*****

```

```
TASK [Config_ipv4_interface]
```

```

*****
*****

```

```

[WARNING]: To ensure idempotency and correct diff the input configuration lines
should be similar to how they appear if present in the running configuration
on device
changed: [R1]

```

```
TASK [DISPLAYING IP INTERFACE BRIEF]
```

```

*****
*****

```

```
ok: [R1]
```

```
TASK [ENSURE ios_show DIRECTORY EXISTS]
```

```

*****
*****

```

```
ok: [R1 -> localhost]
```

```
TASK [SAVE INTERFACE STATUS TO ./ios_show/]
```

```

*****
*****

```

```
ok: [R1]

PLAY RECAP
*****
*****

R1                                : ok=4    changed=1    unreachable=0    failed=0
skipped=0    rescued=0    ignored=0


(.venv) toto@LPTC-PC1M4VZ3  /mnt/c/Users/blt/Documents/github/R511/TP2/ex4  ll
main ±  ll ios_show
total 0
drwxrwxrwx 1 toto toto 4096 Oct 11 11:17 .
drwxrwxrwx 1 toto toto 4096 Oct 11 11:15 ..
-rwxrwxrwx 1 toto toto  420 Oct 11 11:17 show_ip_intr_br_R1.txt
(.venv) toto@LPTC-PC1M4VZ3  /mnt/c/Users/blt/Documents/github/R511/TP2/ex4  cat ios_show/show_ip_intr_br_R1.txt
main ±  cat ios_show/show_ip_intr_br_R1.txt
Interface                                IP-Address      OK? Method Status
Protocol
Ethernet0/0                             192.168.56.102  YES DHCP    up
Ethernet0/1                             unassigned      YES unset    administratively down down
Ethernet0/2                             10.10.10.1      YES manual   up
Ethernet0/3                             unassigned      YES unset    administratively down down%
```

Switch

```
(.venv) X toto@LPTC-PC1M4VZ3  /mnt/c/Users/blt/Documents/github/R511/TP2/ex4  ansible-playbook -i inventory.yml switch_conf.yml

PLAY [Configure Switch]
*****
*****

TASK [Change hostname to SW_BLT]
*****
*****

[WARNING]: To ensure idempotency and correct diff the input configuration lines
should be similar to how they appear if present in the running configuration
on device
changed: [sw1]

TASK [Create VLAN 200]
*****
*****

changed: [sw1]

TASK [Configure interface Ethernet0/1 for VLAN 200]
*****
*****

changed: [sw1]

TASK [Configure interface Ethernet0/2 for VLAN 200]
*****
*****
```

changed: [sw1]

TASK [DISPLAYING THE RUNNING-CONFIG]

ok: [sw1]

TASK [ENSURE BACKUPS DIRECTORY EXISTS]

ok: [sw1 -> localhost]

TASK [SAVE OUTPUT TO ./backups/]

changed: [sw1]

PLAY RECAP

sw1 : ok=7 changed=5 unreachable=0 failed=0
skipped=0 rescued=0 ignored=0

(.venv) toto@LPTC-PC1M4VZ3 □ /mnt/c/Users/blt/Documents/github/R511/TP2/ex4 □ □
main ± □ ll backups

total 8

drwxrwxrwx 1 toto toto 4096 Oct 11 11:44 .

drwxrwxrwx 1 toto toto 4096 Oct 11 11:37 ..

-rwxrwxrwx 1 toto toto 1102 Oct 11 11:08 show_run_R1.txt

-rwxrwxrwx 1 toto toto 1225 Oct 11 11:44 show_run_sw1.txt

(.venv) toto@LPTC-PC1M4VZ3 □ /mnt/c/Users/blt/Documents/github/R511/TP2/ex4 □ □
main ± □ cat backups/show_run_sw1.txt

Building configuration...

Current configuration : 1165 bytes

!

! Last configuration change at 13:44:36 EET Fri Oct 11 2024 by admin

!

version 15.2

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

service compress-config

!

hostname SW_BLT

!

boot-start-marker

boot-end-marker

!

username admin privilege 15 secret 5 \$1\$uY/b\$CopQq65Dak5jeM.WOB9Ou0

no aaa new-model

clock timezone EET 2 0

!

```
ip domain-name example.com
ip cef
no ipv6 cef
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface Ethernet0/0
    switchport mode access
!
interface Ethernet0/1
    switchport access vlan 200
    switchport mode access
!
interface Ethernet0/2
    switchport access vlan 200
    switchport mode access
!
interface Ethernet0/3
!
interface Vlan1
    ip address 192.168.56.103 255.255.255.0
!
ip forward-protocol nd
!
ip http server
!
ip ssh time-out 60
ip ssh version 2
ip ssh server algorithm encryption aes128-ctr aes192-ctr aes256-ctr
ip ssh client algorithm encryption aes128-ctr aes192-ctr aes256-ctr
!
control-plane
!
line con 0
    logging synchronous
line aux 0
line vty 0 4
    login local
    transport input ssh
!
end%
```