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DES SCIENCES

Institut Universitaire des Sciences (IUS)

Faculté des sciences et de technologies

Td2 - Réseau 2

Préparé par :

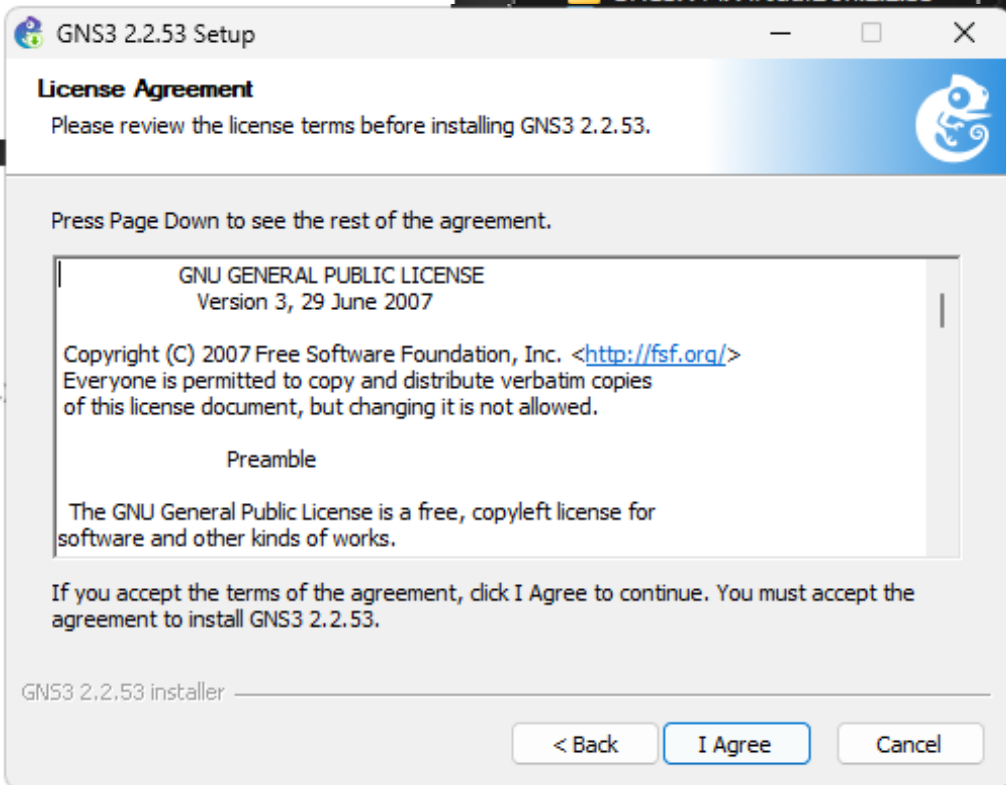
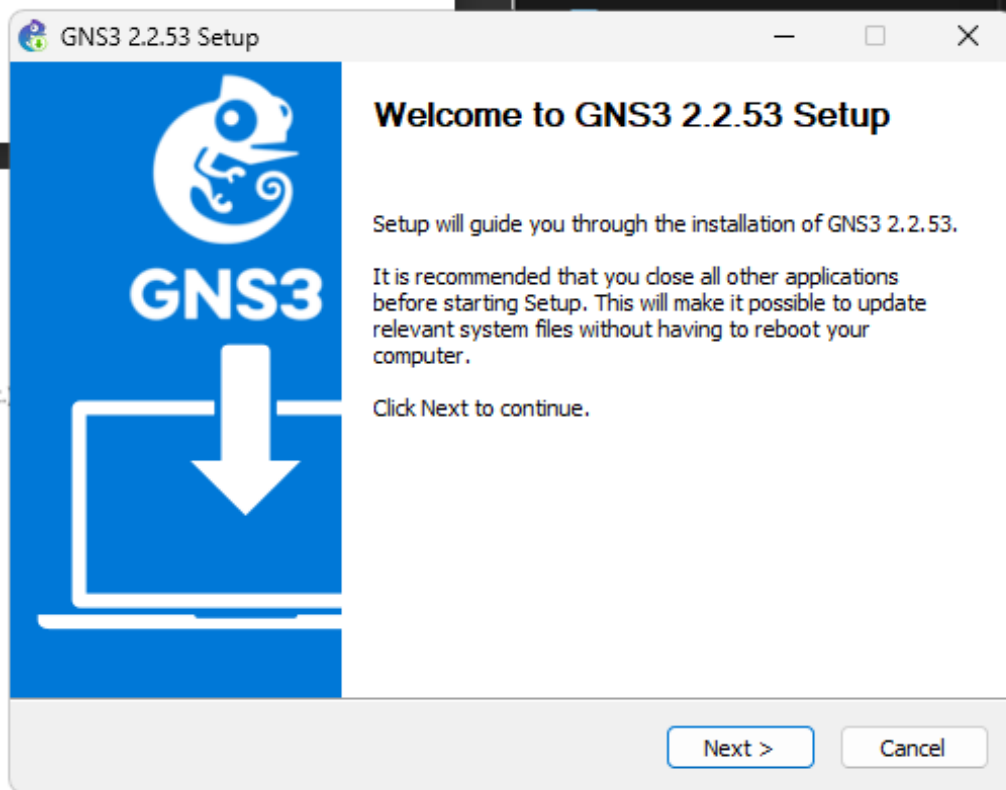
Nom : BYRON

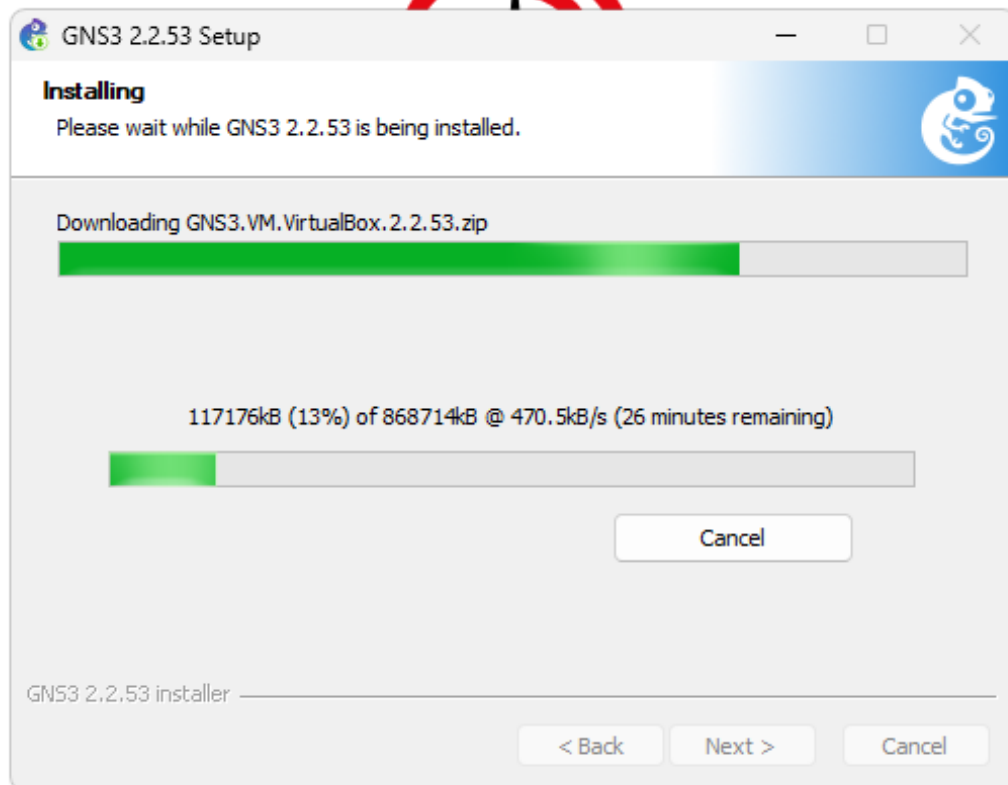
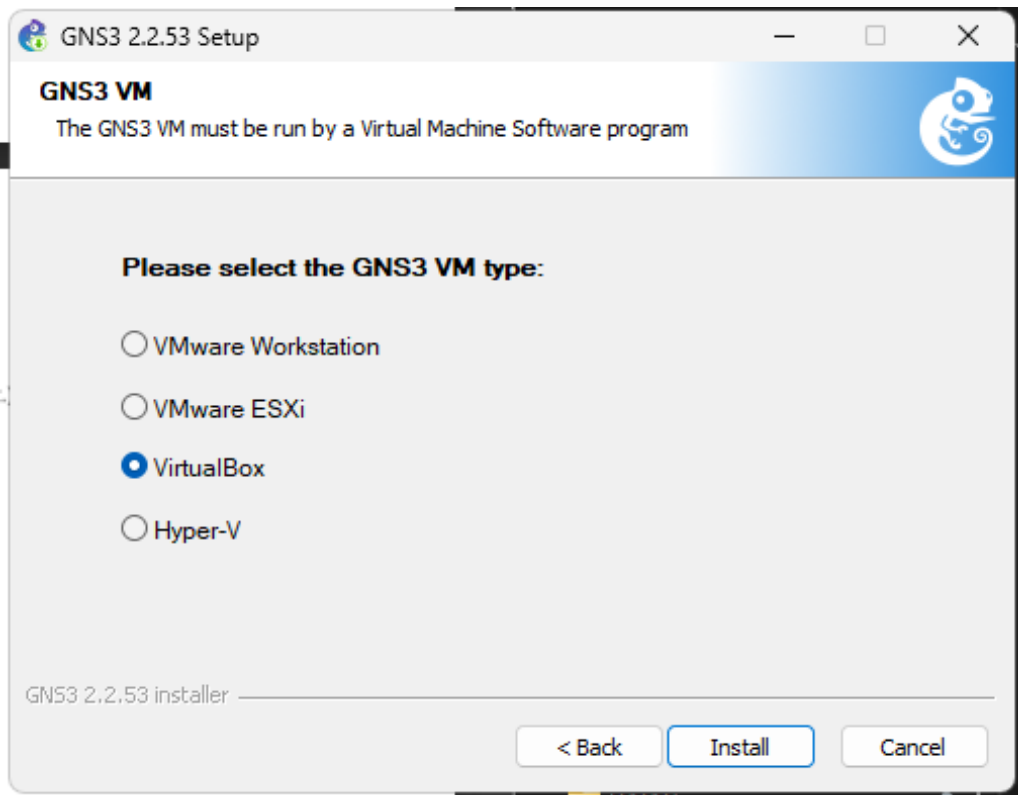
Prenom : Pierre Durell Naguiby

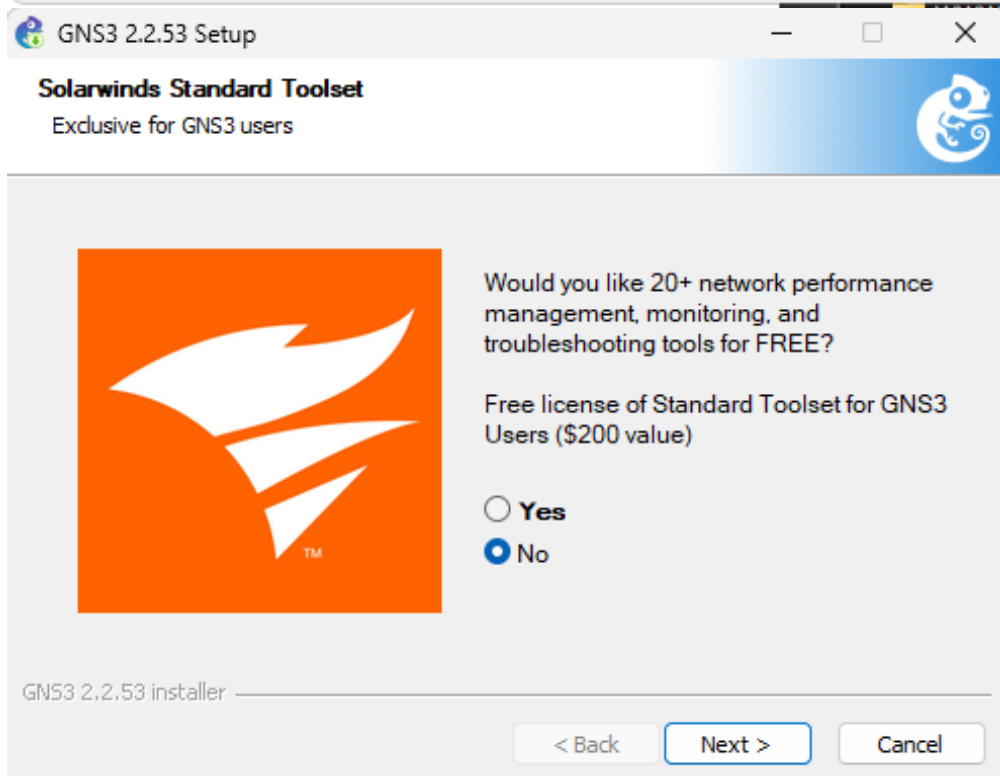
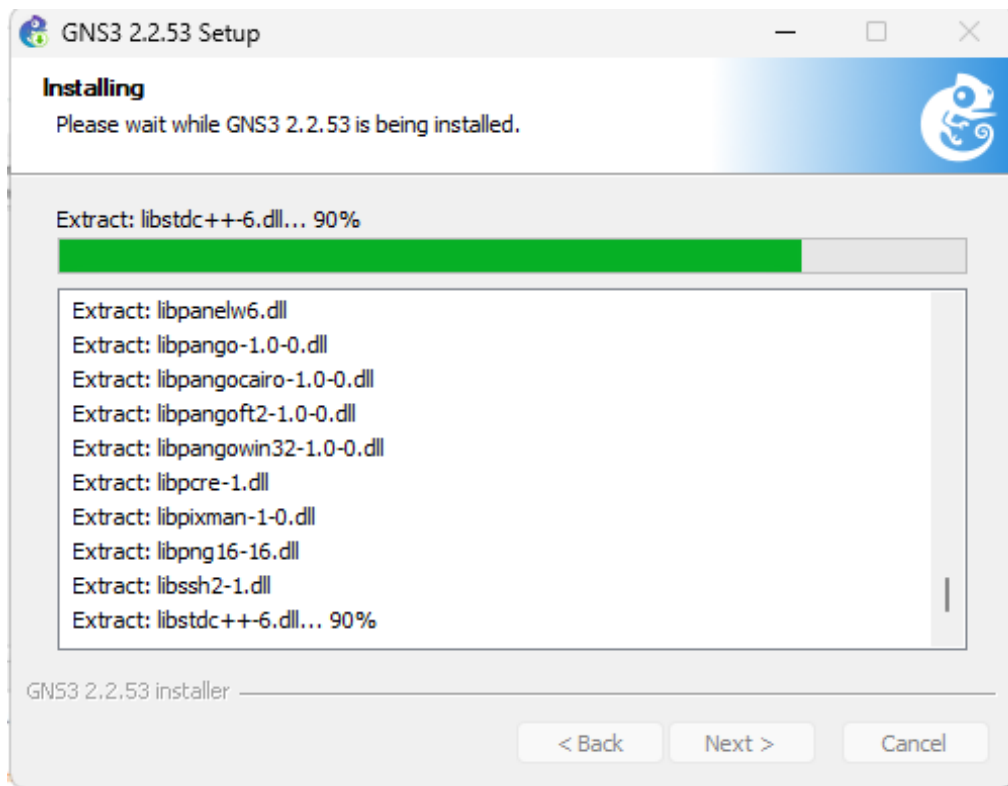
Niveau : L3-Sciences Informatiques

1. Installation et Importation Gns3 dans une machine Virtuelle (VMware Workstation):

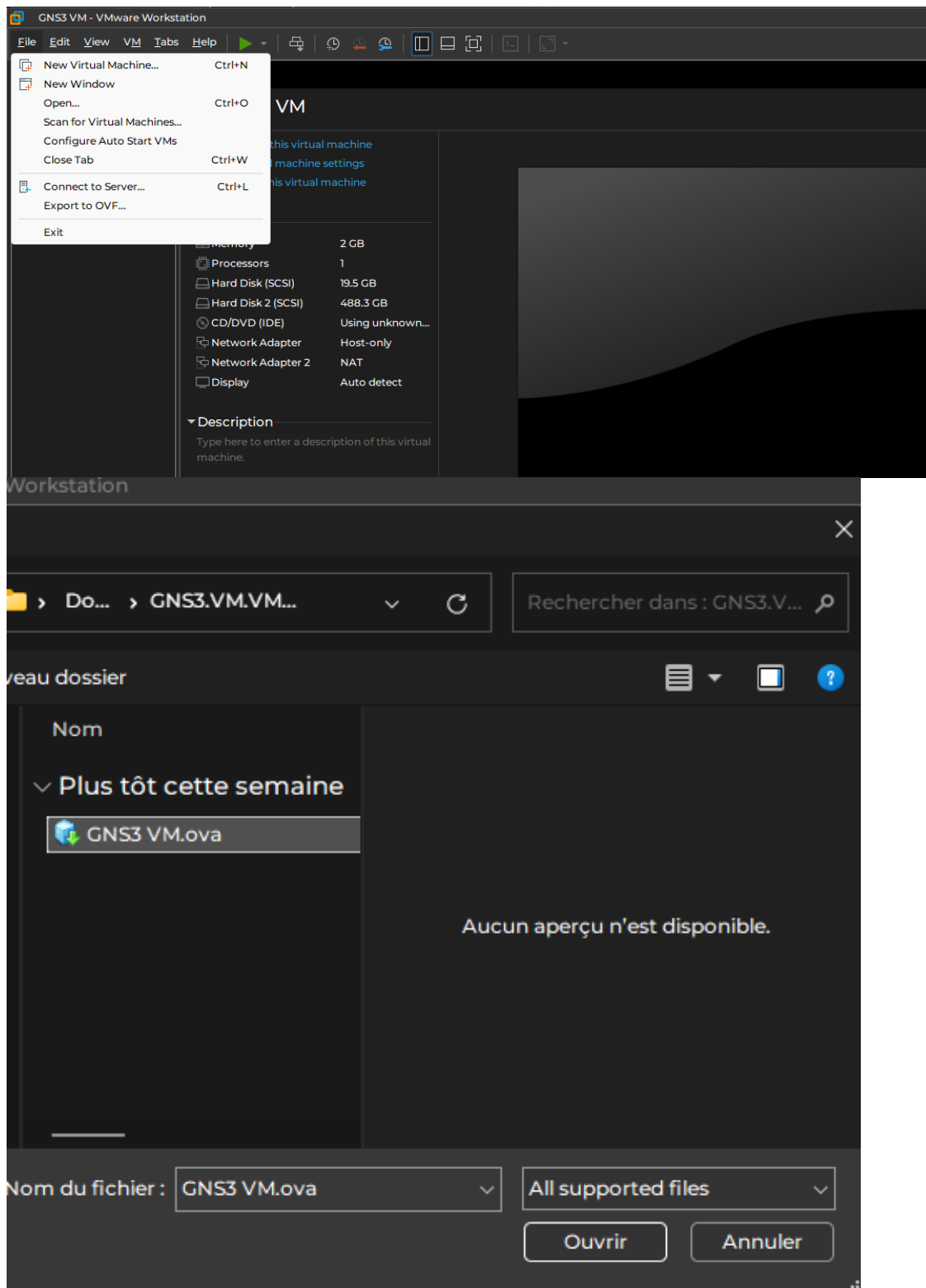
- Installation



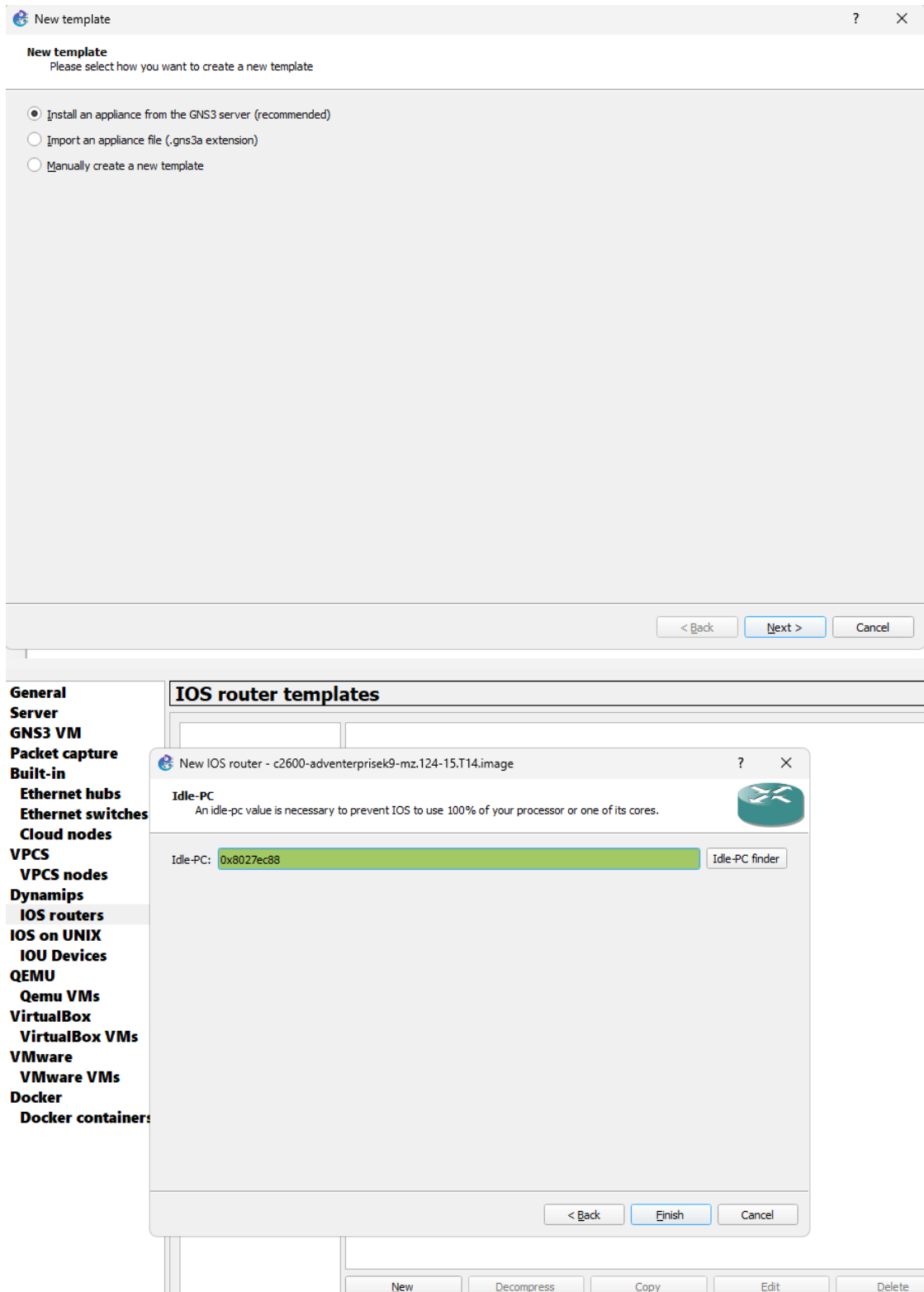


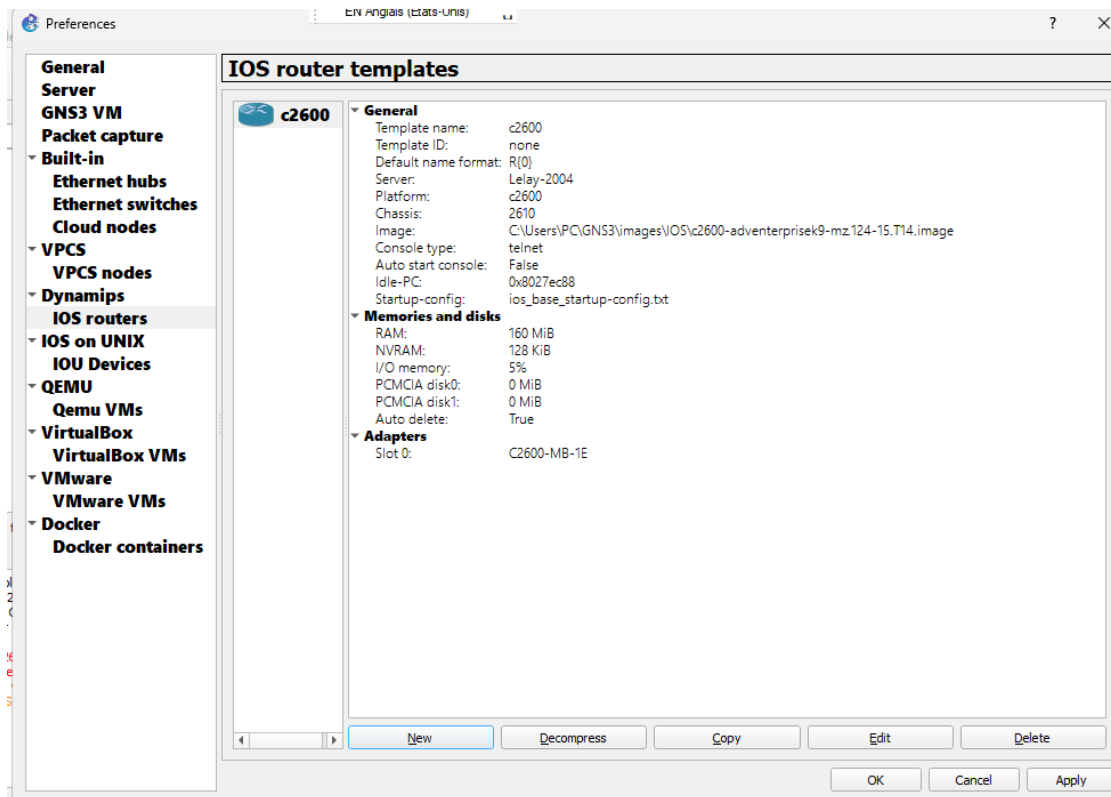


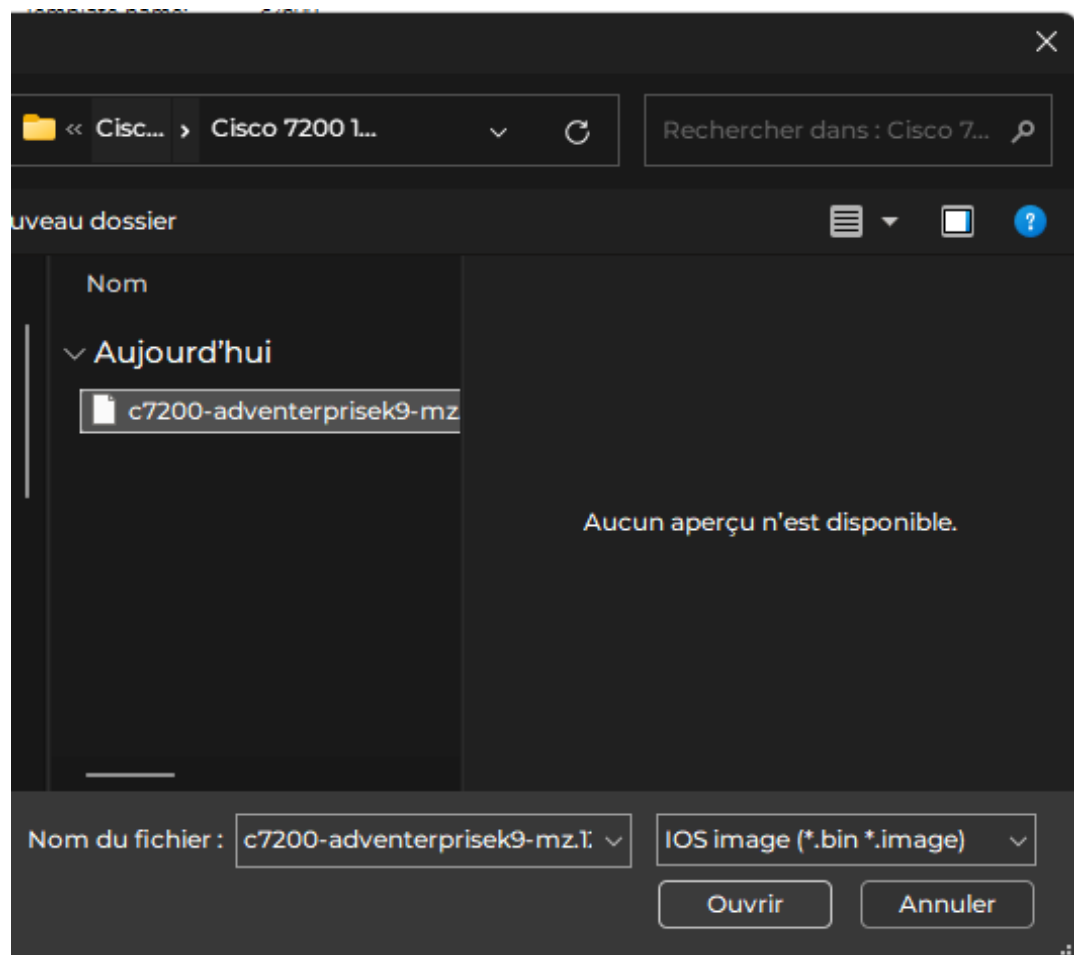
- Importation

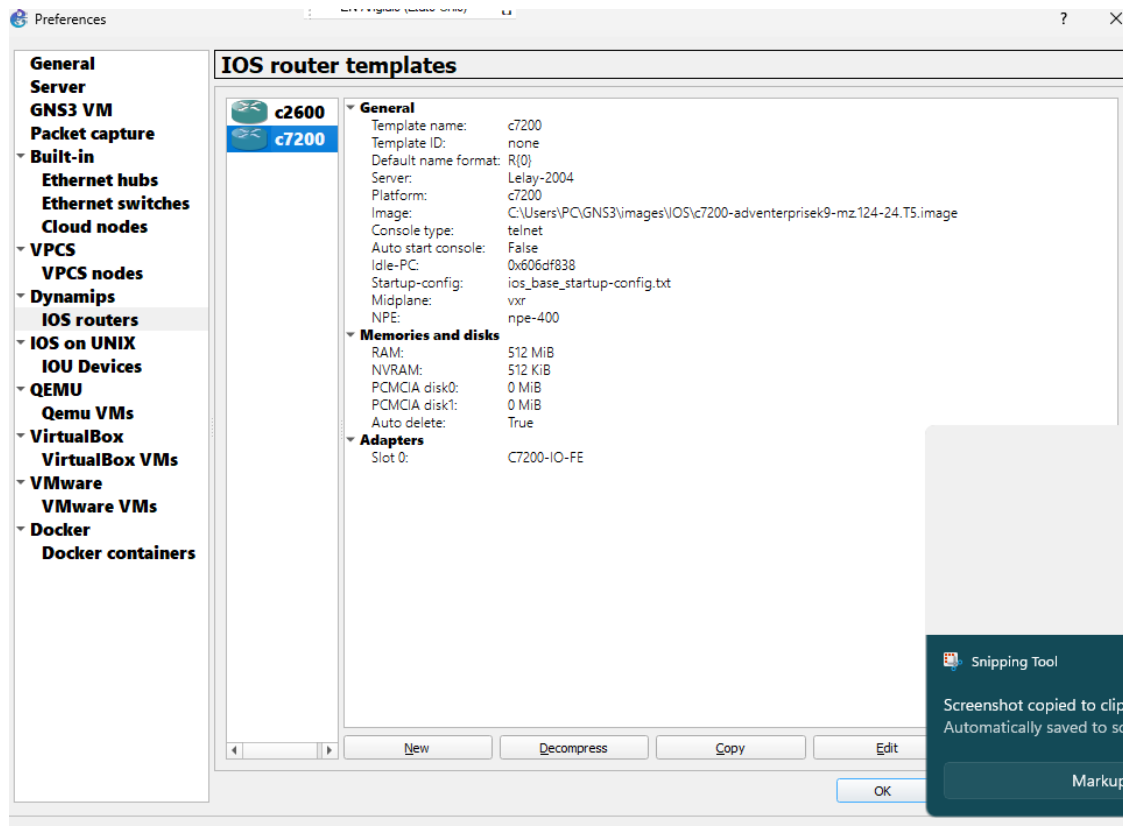


2. Ajouter des images ISO pour les routeurs



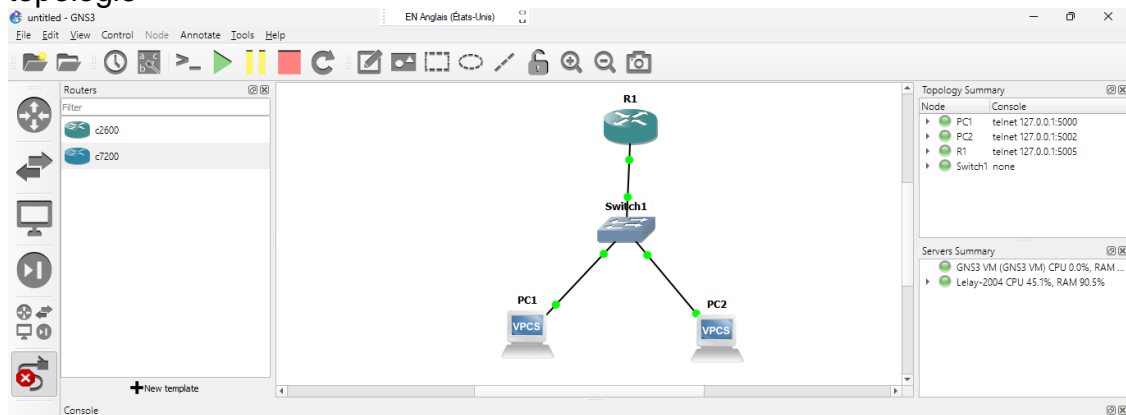






3. Reproduction de la topologie et la configuration du routeur et des PCS

- topologie



- Configuration Routeur

```
R1#
R1#enable
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface f0/0
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shutdown
R1(config-if)#
*Mar 21 11:43:36.083: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Mar 21 11:43:37.083: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R1(config-if)#exit
R1(config)#exit
R1#
*Mar 21 11:44:16.035: %SYS-5-CONFIG_I: Configured from console by console
R1#write memory
Building configuration...
[OK]
R1#show ip interface brief

```

Interface	IP-Address	OK?	Method	Status	Protocol
FastEthernet0/0	192.168.1.1	YES	manual	up	up

```
R1#
```

- configuration des PCS

1. PC1

```
PC1> ip 192.168.1.2 255.255.255.0 192.168.1.1
Checking for duplicate address...
PC1 : 192.168.1.2 255.255.255.0 gateway 192.168.1.1

PC1> show ip

```

NAME	: PC1[1]
IP/MASK	: 192.168.1.2/24
GATEWAY	: 192.168.1.1
DNS	:
MAC	: 00:50:79:66:68:00
LPORT	: 10010
RHOST:PORT	: 127.0.0.1:10011
MTU:	: 1500

```
PC1>
```

2. PC2

```
PC2> ip 192.168.1.3 255.255.255.0 192.168.1.1
Checking for duplicate address...
PC2 : 192.168.1.3 255.255.255.0 gateway 192.168.1.1

PC2> show ip

```

NAME	: PC2[1]
IP/MASK	: 192.168.1.3/24
GATEWAY	: 192.168.1.1
DNS	:
MAC	: 00:50:79:66:68:01
LPORT	: 10008
RHOST:PORT	: 127.0.0.1:10009
MTU:	: 1500

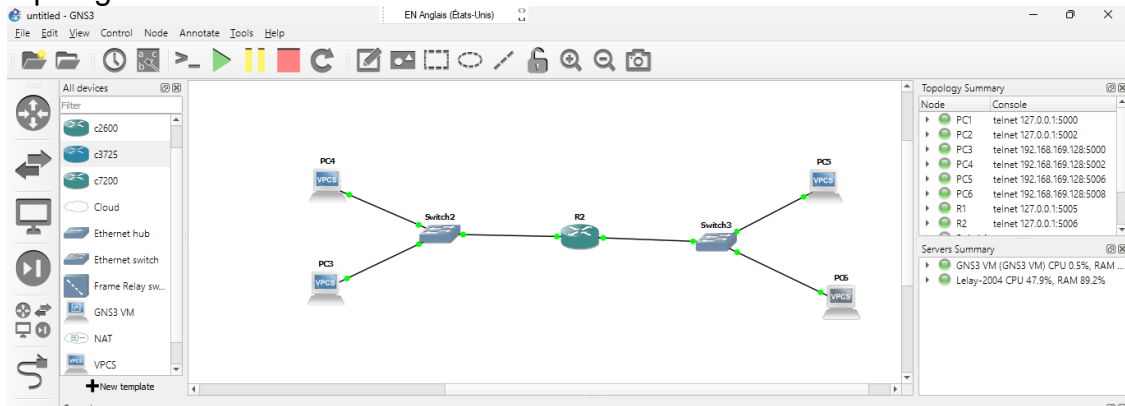
```
PC2>
```

- Test de la connexion

```
PC2> ping 192.168.1.2
84 bytes from 192.168.1.2 icmp_seq=1 ttl=64 time=5.932 ms
84 bytes from 192.168.1.2 icmp_seq=2 ttl=64 time=0.902 ms
84 bytes from 192.168.1.2 icmp_seq=3 ttl=64 time=0.759 ms
84 bytes from 192.168.1.2 icmp_seq=4 ttl=64 time=0.887 ms
84 bytes from 192.168.1.2 icmp_seq=5 ttl=64 time=0.808 ms
```

4. Reproduction de la topologie et la configuration du routeur et des PCS

- topologie



- Configuration Routeur

```
R2#enable
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#interface f0/0
R2(config-if)#ip address 192.168.1.20 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#exit
*Mar 1 00:02:23.067: %LINK-3-UPDOWN: Interface FastEthernet0/0, changed state to up
*Mar 1 00:02:24.067: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
R2(config-if)#exit
R2(config)#interface f0/1
R2(config-if)#ip address 192.168.1.21 255.255.255.0
% 192.168.1.0 overlaps with FastEthernet0/0
R2(config-if)#no shutdown
% 192.168.1.0 overlaps with FastEthernet0/0
FastEthernet0/1: incorrect IP address assignment
R2(config-if)#exit
R2(config)#exit
R2#wr
*Mar 1 00:03:23.363: %SYS-5-CONFIG_I: Configured from console by console
R2#write memory
Building configuration...
[OK]
R2#
```

- configuration des PCS

1. PC3

```
PC3> ip 192.168.1.23 255.255.255.0 192.168.1.20
Checking for duplicate address...
PC3 : 192.168.1.23 255.255.255.0 gateway 192.168.1.20

PC3> show ip

NAME       : PC3[1]
IP/MASK    : 192.168.1.23/24
GATEWAY    : 192.168.1.20
DNS        :
MAC        : 00:50:79:66:68:00
LPORT      : 20010
RHOST:PORT : 127.0.0.1:20011
MTU        : 1500

PC3> █
```

2. PC4

```
PC4> ip 192.168.1.22 255.255.255.0 192.168.1.20
Checking for duplicate address...
PC4 : 192.168.1.22 255.255.255.0 gateway 192.168.1.20

PC4> show ip

NAME       : PC4[1]
IP/MASK    : 192.168.1.22/24
GATEWAY    : 192.168.1.20
DNS        :
MAC        : 00:50:79:66:68:01
LPORT      : 20012
RHOST:PORT : 127.0.0.1:20013
MTU        : 1500

PC4> █
```

3. PC5

```
PC5> ip 192.168.1.24 255.255.255.0 192.168.1.21
Checking for duplicate address...
PC5 : 192.168.1.24 255.255.255.0 gateway 192.168.1.21

PC5> show ip

NAME       : PC5[1]
IP/MASK    : 192.168.1.24/24
GATEWAY    : 192.168.1.21
DNS        :
MAC        : 00:50:79:66:68:02
LPORT      : 20014
RHOST:PORT : 127.0.0.1:20015
MTU        : 1500

PC5> █
```

4. PC6

```
PC6> ip 192.168.1.25 255.255.255.0 192.168.1.21
Checking for duplicate address...
PC6 : 192.168.1.25 255.255.255.0 gateway 192.168.1.21

PC6> show ip

NAME       : PC6[1]
IP/MASK    : 192.168.1.25/24
GATEWAY    : 192.168.1.21
DNS        :
MAC        : 00:50:79:66:68:03
LPORT      : 20016
RHOST:PORT : 127.0.0.1:20017
MTU        : 1500

PC6> █
```

Conclusion :

En conclusion, ce TD me permet d'installer GNS3 et l'importer sur une machine virtuelle (VMware Workstation), il me permet aussi d'ajouter des images de routeurs Cisco, de faire des simulations avec des topologies en configurant des routeurs et des PCS.