XPEnology

- Installation d'XPEnology sur VMware Workstation Pro 16

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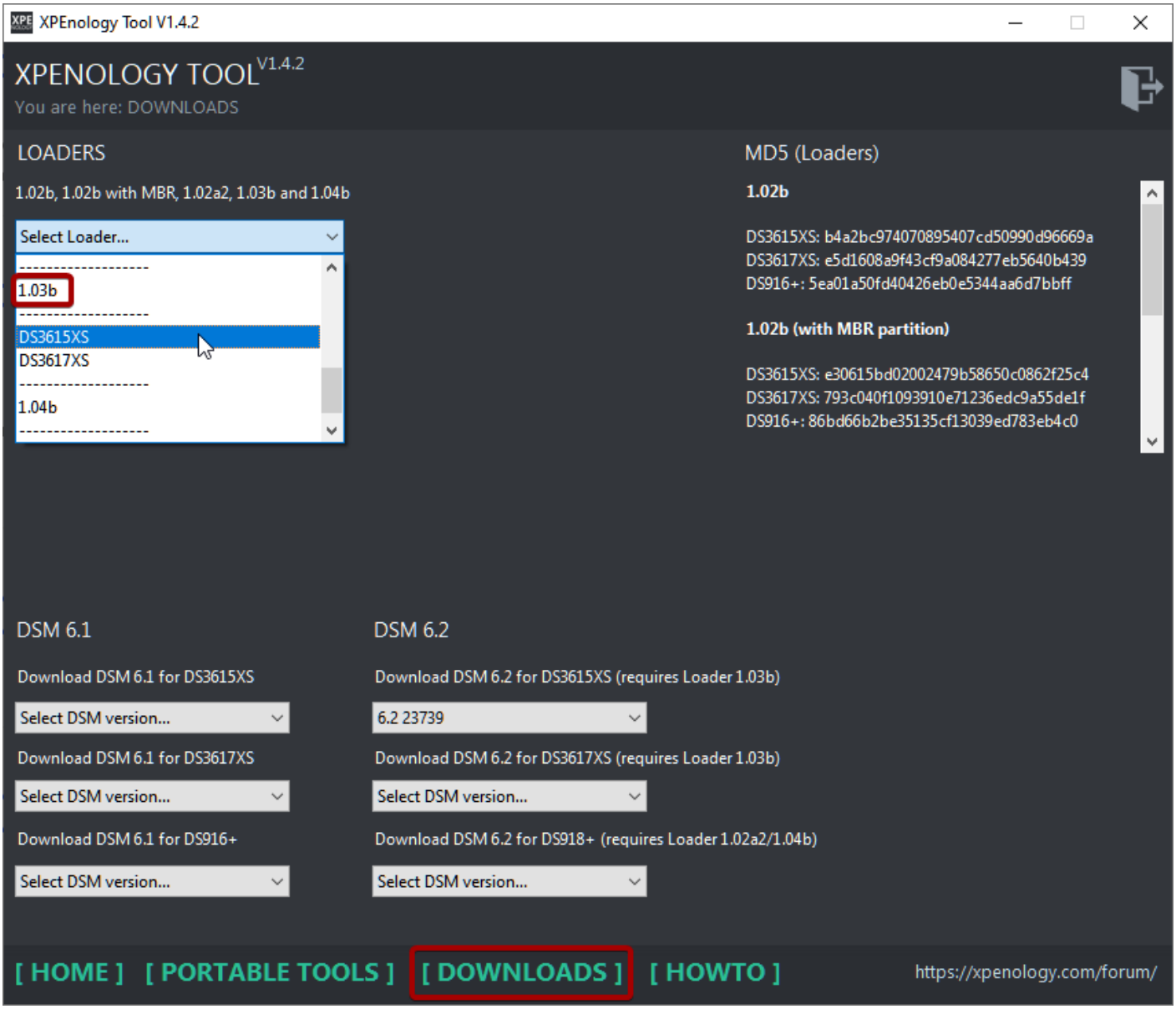
Présentation

Il est possible d’installer l'OS (système d'exploitation) de Synology (DSM) sur une VM sous VMware Workstation Pro 16 grâce au “hack” Xpenology.

Préparation

On commence par télécharger XPEnology Tool.

On le lance, et on se rend dans la section [Downloads] puis on télécharge le loader 1.03b pour DS3615XS.



Une fenêtre s'ouvre pour le télécharger.

On en profite pour télécharger le DSM 6.2 pour DS3615XS (on peut aussi les télécharger sur le site officiel).

On obtient ainsi un fichier "synoboot.img". Il faut le convertir en .vmdk pour l'utiliser dans VMware Workstation.

Pour cela, on télécharge StarWind V2V Converter.

> Malheureusement, on reçoit le lien de téléchargement par mail.

StarWind V2V Converter (9.0.1.243)

Select the location of the image to convert

- ○ **P2V**
  Convert physical machine or disk
- ◉ **Local file**
  File on the local machine
- ○ **Remote VMware ESXi Server**
  Virtual Disk or Virtual Machine on remote ESXi Server (version 5.5 and later versions)
- ○ **Microsoft Hyper-V Server**
  Virtual Disk or Virtual Machine on local or remote Hyper-V hypervisor
- ○ **Azure**
  Microsoft Azure
- ○ **AWS**
  Amazon Web Services

Next > Cancel

StarWind V2V Converter (9.0.1.243)

Source image

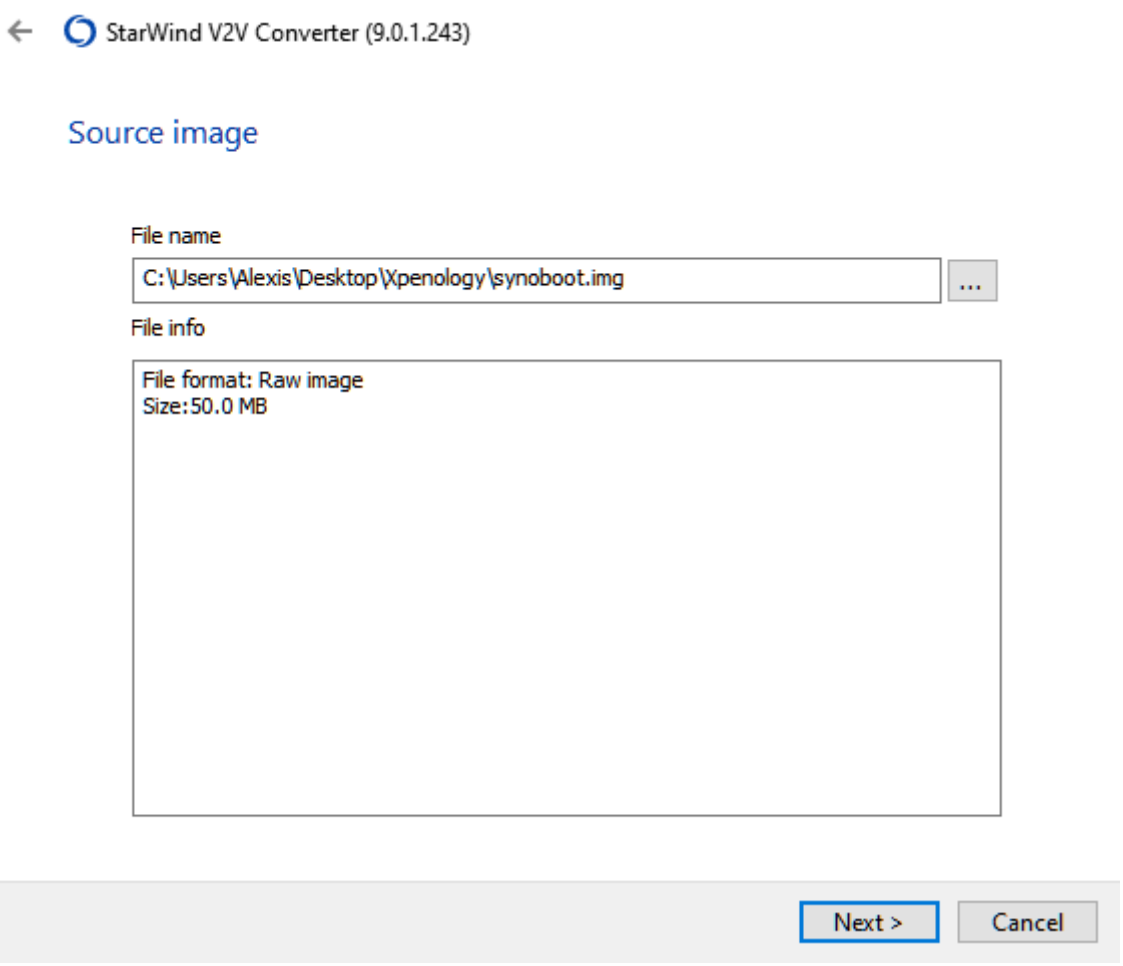
File name

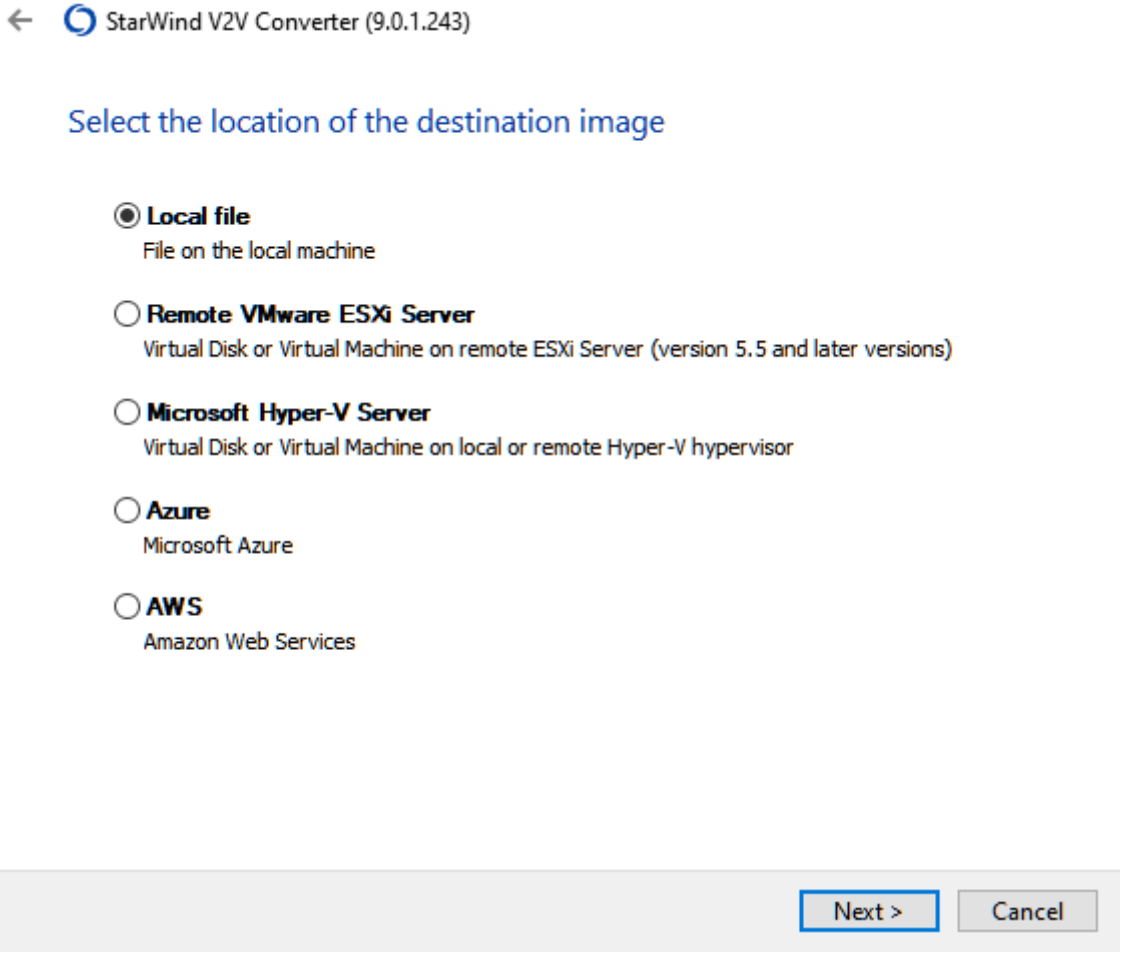
[ ] [...]

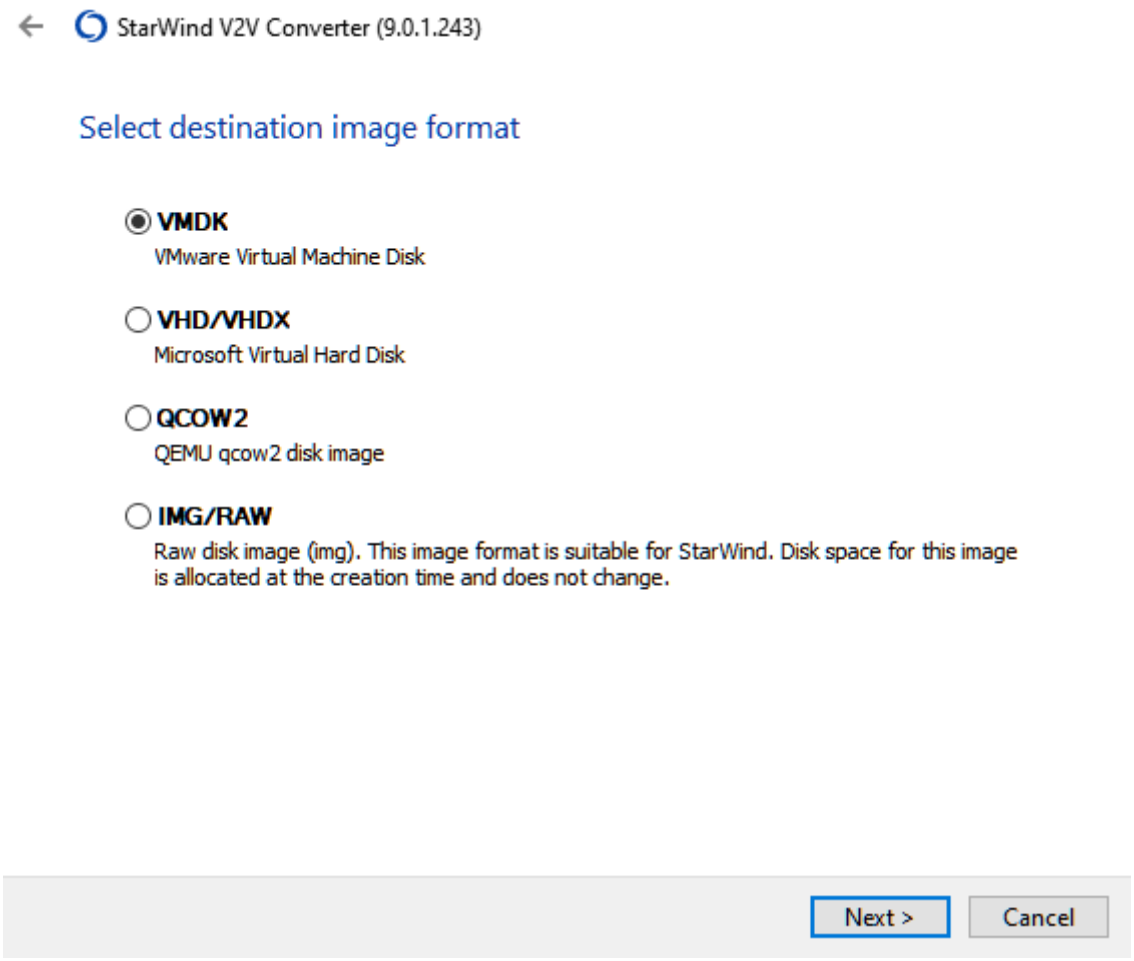
File info

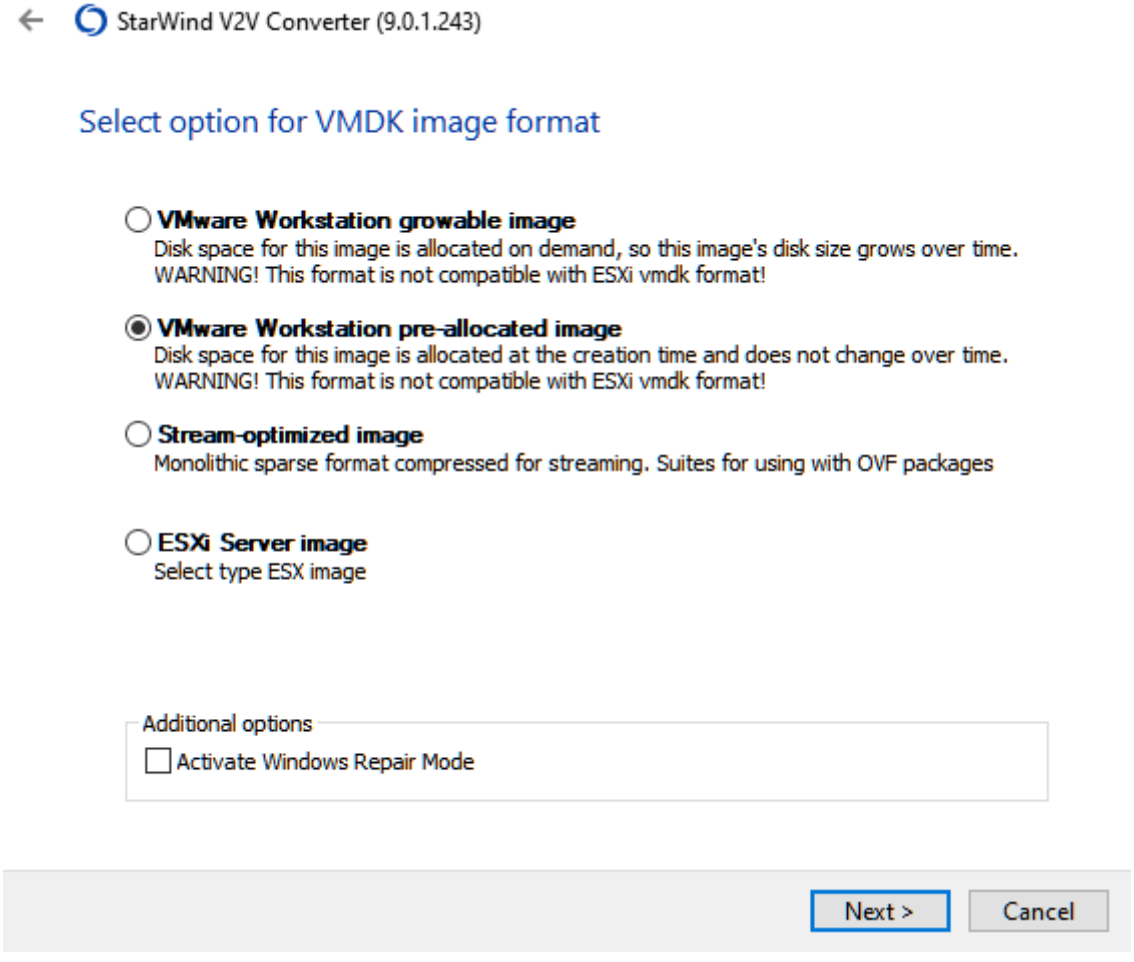
No info

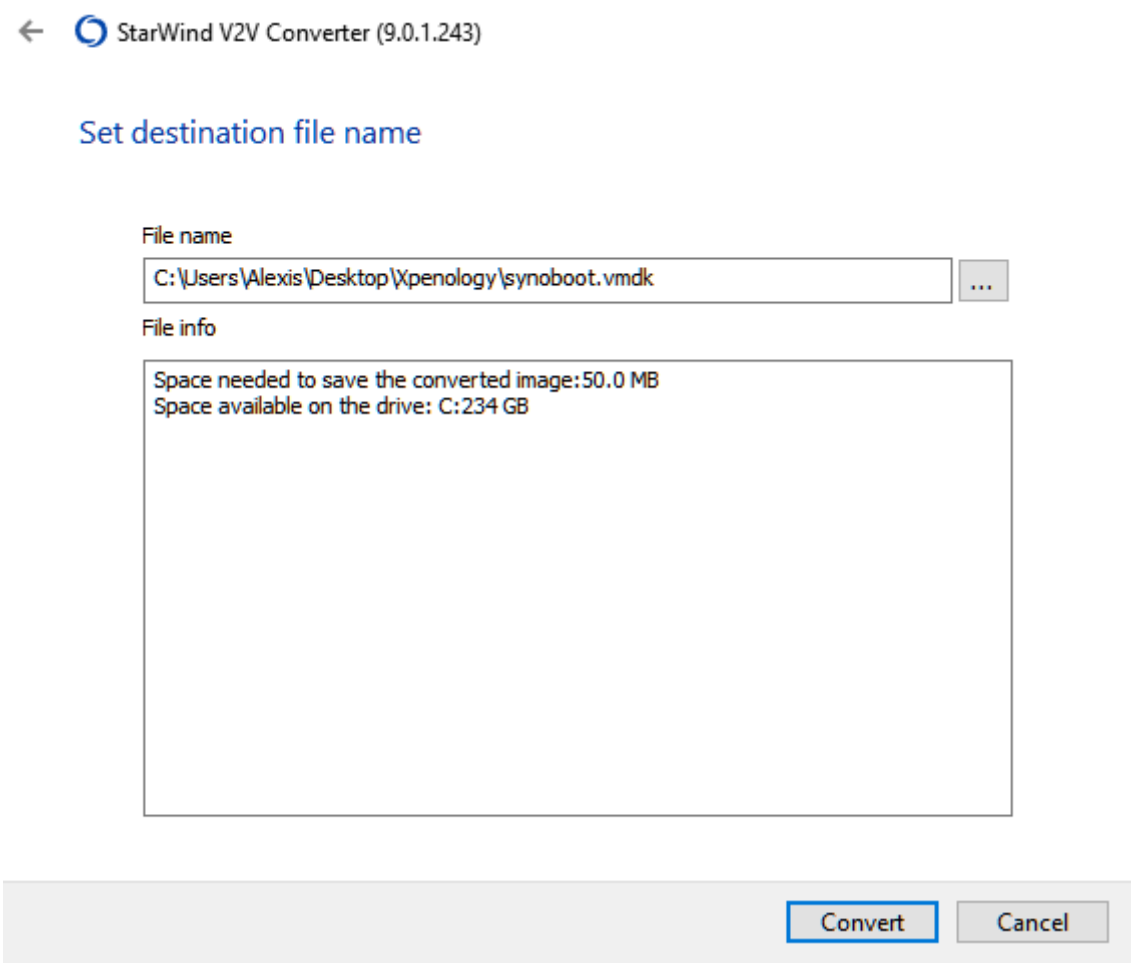
Next > Cancel

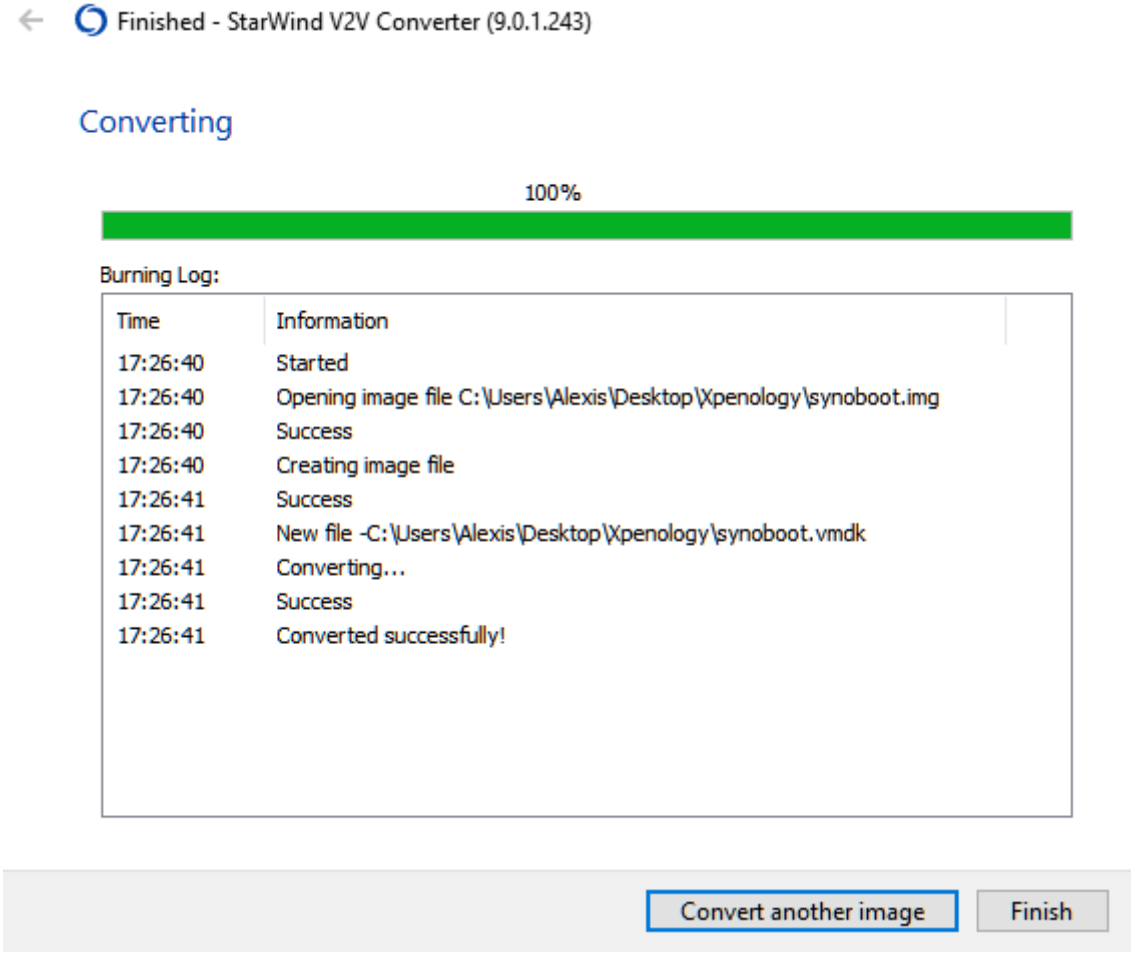

StarWind V2V Converter (9.0.1.243)
Source image
File name
C:\Users\Alexis\Desktop\Xpenology\synoboot.img
...
File info
File format: Raw image
Size: 50.0 MB
Next >
Cancel


StarWind V2V Converter (9.0.1.243)
Select the location of the destination image
Local file
File on the local machine
Remote VMware ESXi Server
Virtual Disk or Virtual Machine on remote ESXi Server (version 5.5 and later versions)
Microsoft Hyper-V Server
Virtual Disk or Virtual Machine on local or remote Hyper-V hypervisor
Azure
Microsoft Azure
AWS
Amazon Web Services
Next >
Cancel


StarWind V2V Converter (9.0.1.243)
Select destination image format
VMDK
VMware Virtual Machine Disk
VHD/VHDX
Microsoft Virtual Hard Disk
QCOW2
QEMU qcow2 disk image
IMG/RAW
Raw disk image (img). This image format is suitable for StarWind. Disk space for this image is allocated at the creation time and does not change.
Next >
Cancel


StarWind V2V Converter (9.0.1.243)
Select option for VMDK image format
VMware Workstation growable image
Disk space for this image is allocated on demand, so this image's disk size grows over time.
WARNING! This format is not compatible with ESXi vmdk format!
VMware Workstation pre-allocated image
Disk space for this image is allocated at the creation time and does not change over time.
WARNING! This format is not compatible with ESXi vmdk format!
Stream-optimized image
Monolithic sparse format compressed for streaming. Suites for using with OVF packages
ESXi Server image
Select type ESX image
Additional options
Activate Windows Repair Mode
Next >
Cancel

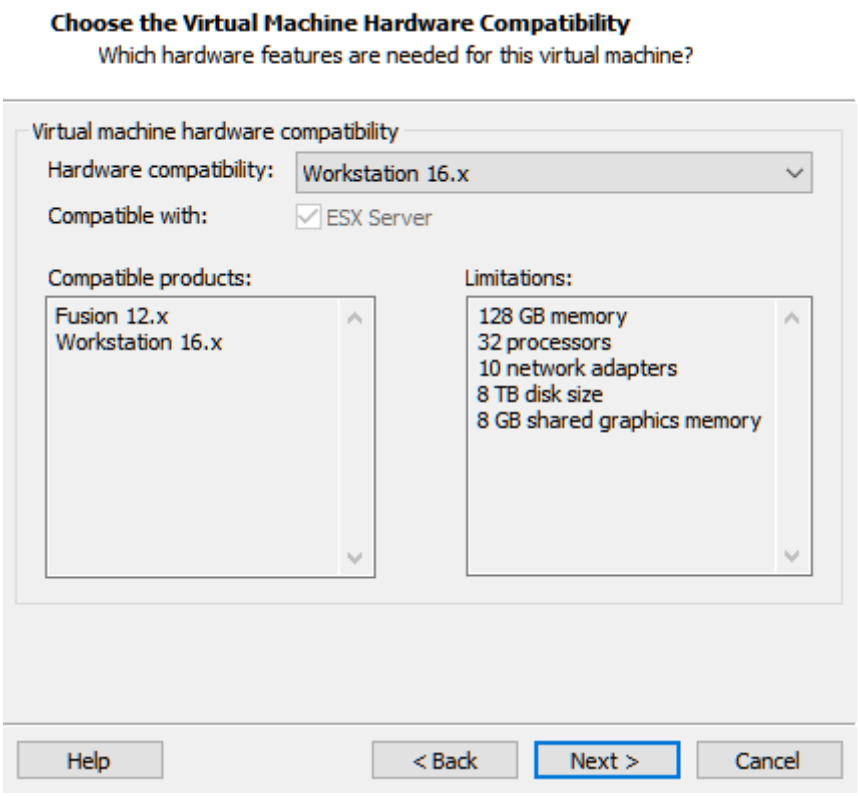

StarWind V2V Converter (9.0.1.243)
Set destination file name
File name
C:\Users\Alexis\Desktop\Xpenology\synoboot.vmdk
...
File info
Space needed to save the converted image: 50.0 MB
Space available on the drive: C: 234 GB
Convert
Cancel


Finished - StarWind V2V Converter (9.0.1.243)
Converting
100%
Burning Log:
Time
Information
17:26:40 Started
17:26:40 Opening image file C:\Users\Alexis\Desktop\Xpenology\synoboot.img
17:26:40 Success
17:26:40 Creating image file
17:26:41 Success
17:26:41 New file -C:\Users\Alexis\Desktop\Xpenology\synoboot.vmdk
17:26:41 Converting...
17:26:41 Success
17:26:41 Converted successfully!
Convert another image
Finish

Dans le dossier où sera stocké la machine virtuelle, on y met les fichiers convertis (synoboot.vmdk et synoboot-flat.vmdk).

On peut commencer à créer la machine virtuelle.





Guest Operating System Installation

A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?

Install from:

- ○ Installer disc:
  - No drives available
- ○ Installer disc image file (iso):
  - H:\Setup_et_ISOs\ISO\Windows\Windows Server 201 — Browse...
- ◉ I will install the operating system later.

  The virtual machine will be created with a blank hard disk.

Help | < Back | Next > | Cancel

Select a Guest Operating System

Which operating system will be installed on this virtual machine?

Guest operating system

- ○ Microsoft Windows
- ◉ Linux
- ○ VMware ESX
- ○ Other

Version

Other Linux 3.x kernel 64-bit

Help | < Back | Next > | Cancel

Name the Virtual Machine

What name would you like to use for this virtual machine?

Virtual machine name:

XPEnology

Location:

S:\Machines virtuelles\ESXI\[AZURE] Xpenology

Browse...

The default location can be changed at Edit > Preferences.

< Back | Next > | Cancel

Processor Configuration

Specify the number of processors for this virtual machine.

Processors

Number of processors: 1

Number of cores per processor: 2

Total processor cores: 2

Help | < Back | Next > | Cancel

Memory for the Virtual Machine

How much memory would you like to use for this virtual machine?

Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.

128 GB
64 GB
32 GB
16 GB
8 GB
4 GB
2 GB
1 GB
512 MB
256 MB
128 MB
64 MB
32 MB
16 MB
8 MB
4 MB

Memory for this virtual machine: 2048 MB

Maximum recommended memory:
28.0 GB

Recommended memory:
768 MB

Guest OS recommended minimum:
32 MB

Help | < Back | Next > | Cancel

Network Type

What type of network do you want to add?

Network connection

- (●) Use bridged networking
  Give the guest operating system direct access to an external Ethernet network. The guest must have its own IP address on the external network.
- ( ) Use network address translation (NAT)
  Give the guest operating system access to the host computer's dial-up or external Ethernet network connection using the host's IP address.
- ( ) Use host-only networking
  Connect the guest operating system to a private virtual network on the host computer.
- ( ) Do not use a network connection

Help | < Back | Next > | Cancel

Select I/O Controller Types

Which SCSI controller type would you like to use for SCSI virtual disks?

I/O controller types

SCSI Controller:

- ○ BusLogic (Not available for 64-bit guests)
- ◉ LSI Logic (Recommended)
- ○ LSI Logic SAS
- ○ Paravirtualized SCSI

Help | < Back | Next > | Cancel

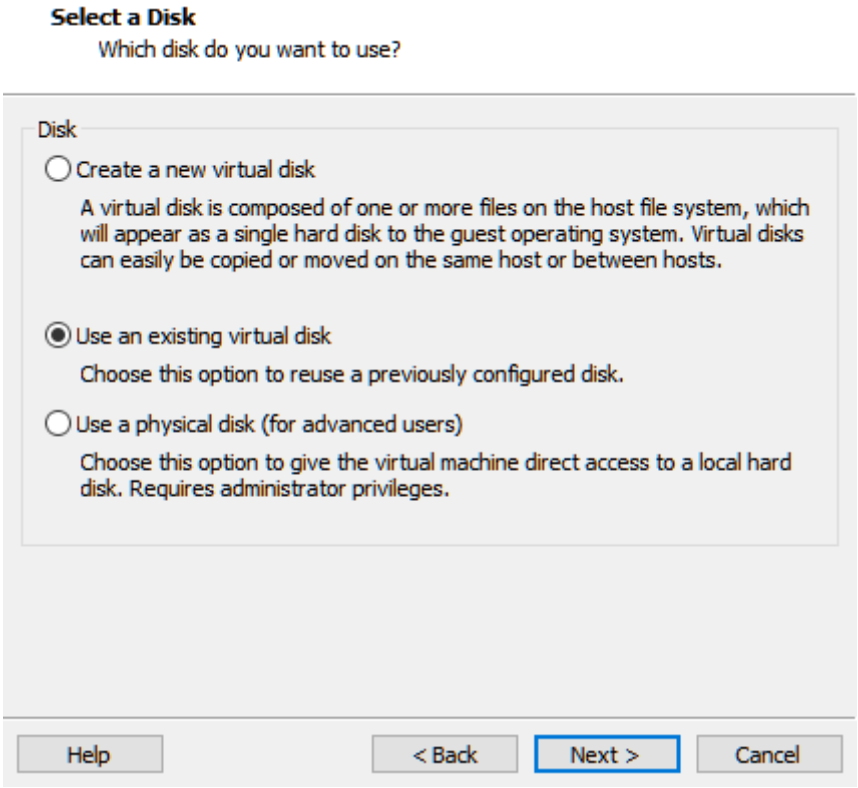
Select a Disk Type

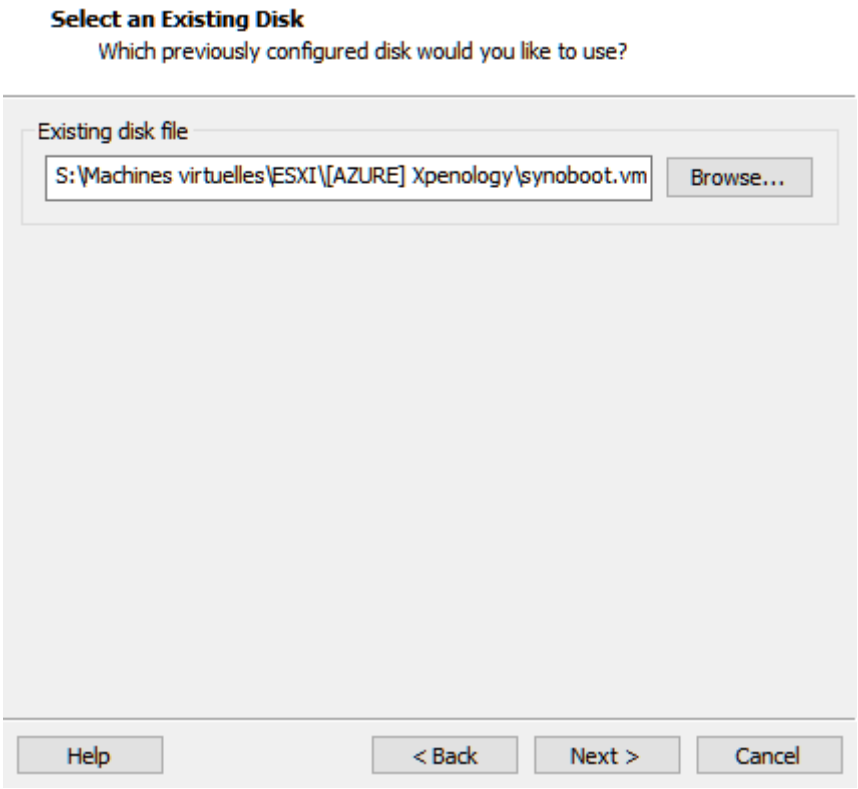
What kind of disk do you want to create?

Virtual disk type

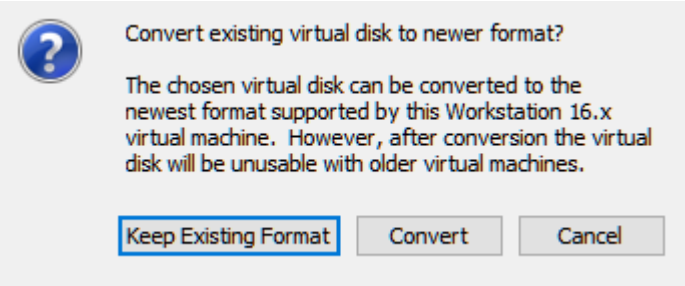
- ○ IDE
- ○ SCSI (Recommended)
- ◉ SATA
- ○ NVMe

Help | < Back | Next > | Cancel

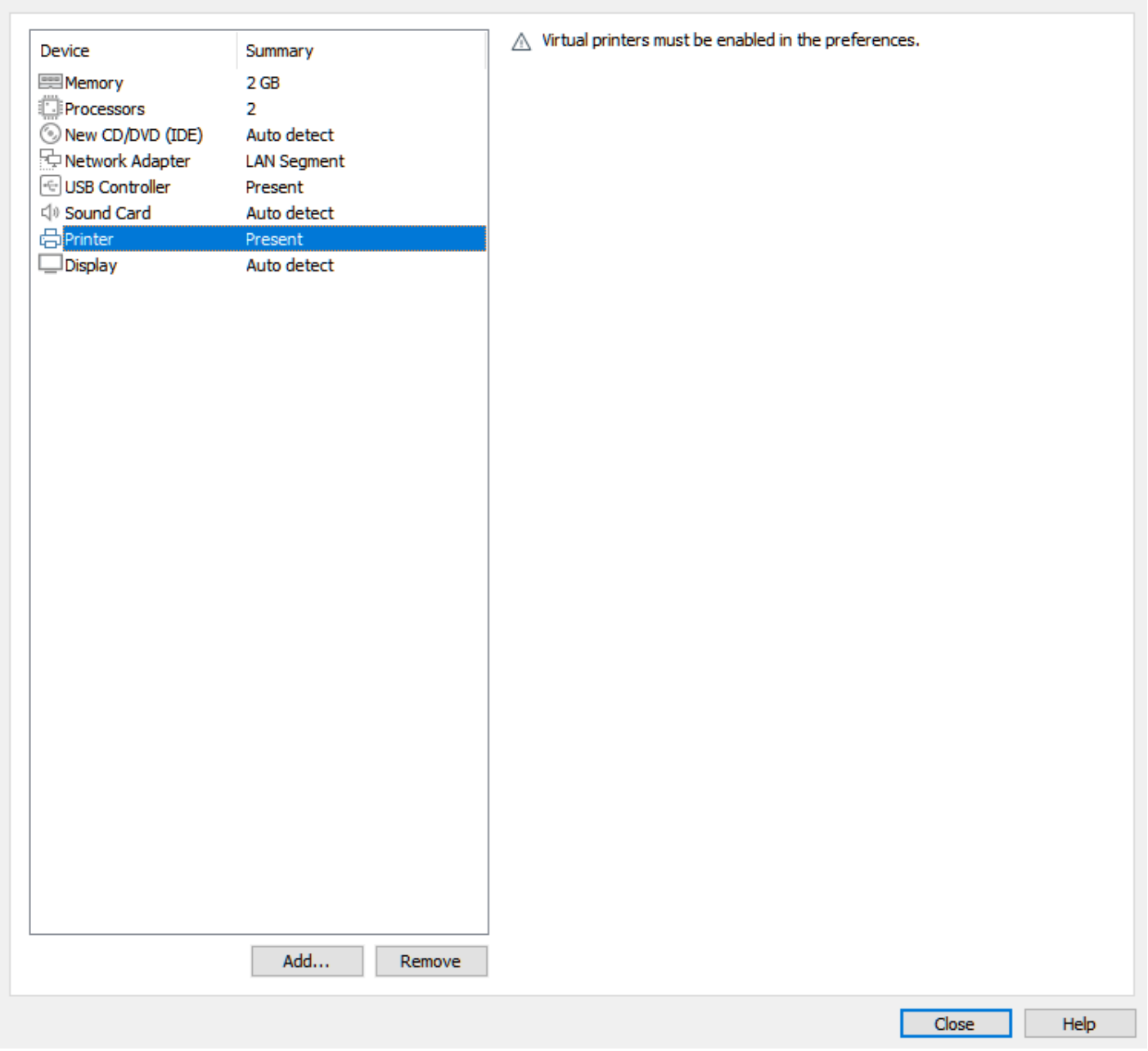




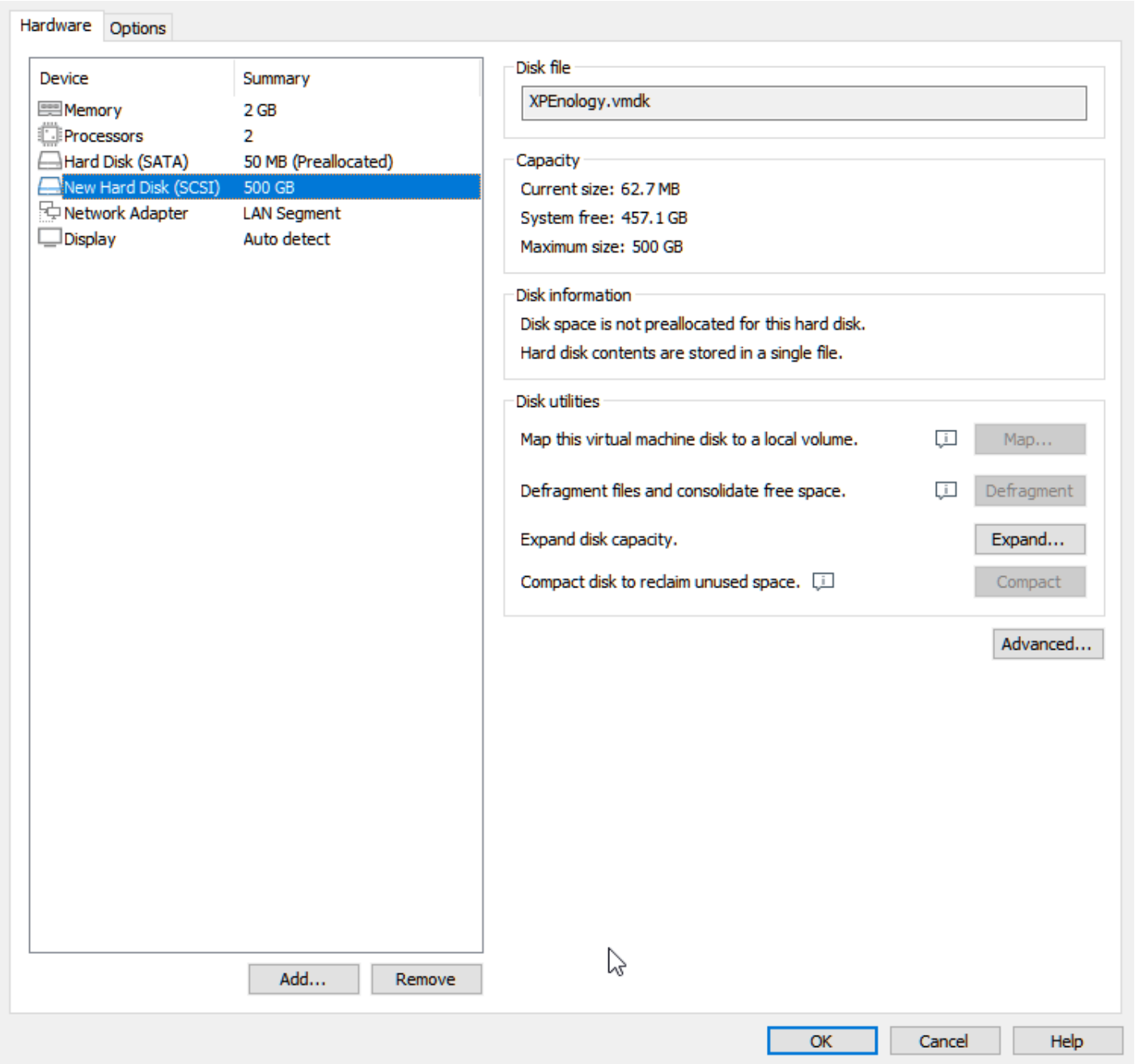
On garde le format.



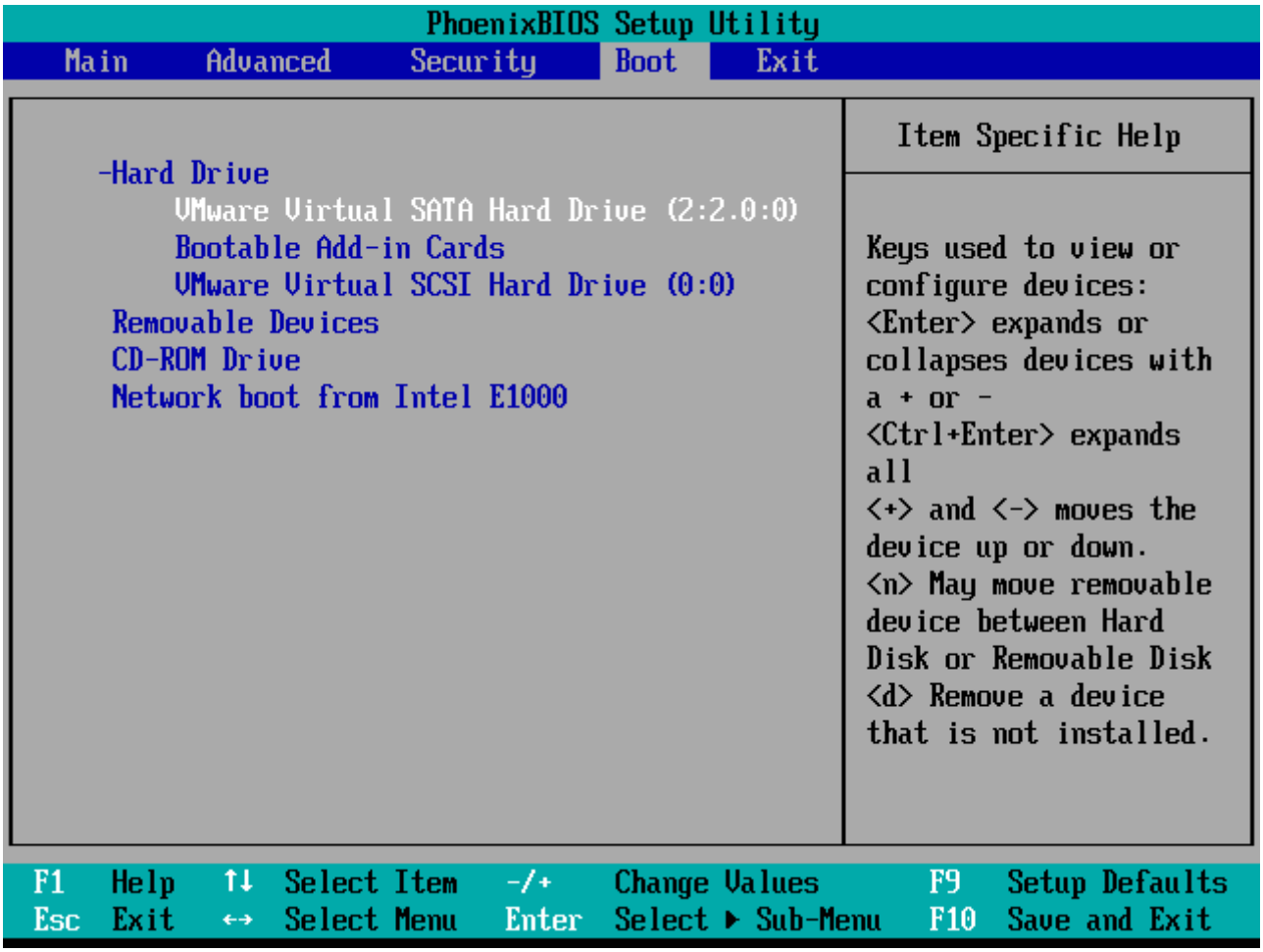
Une fois fini, on supprime USB, Printer, Sound Card et CD/DVD (IDE).



On valide, puis on remodifie la VM. On ajoute des disques pour le stockage en SCSI.

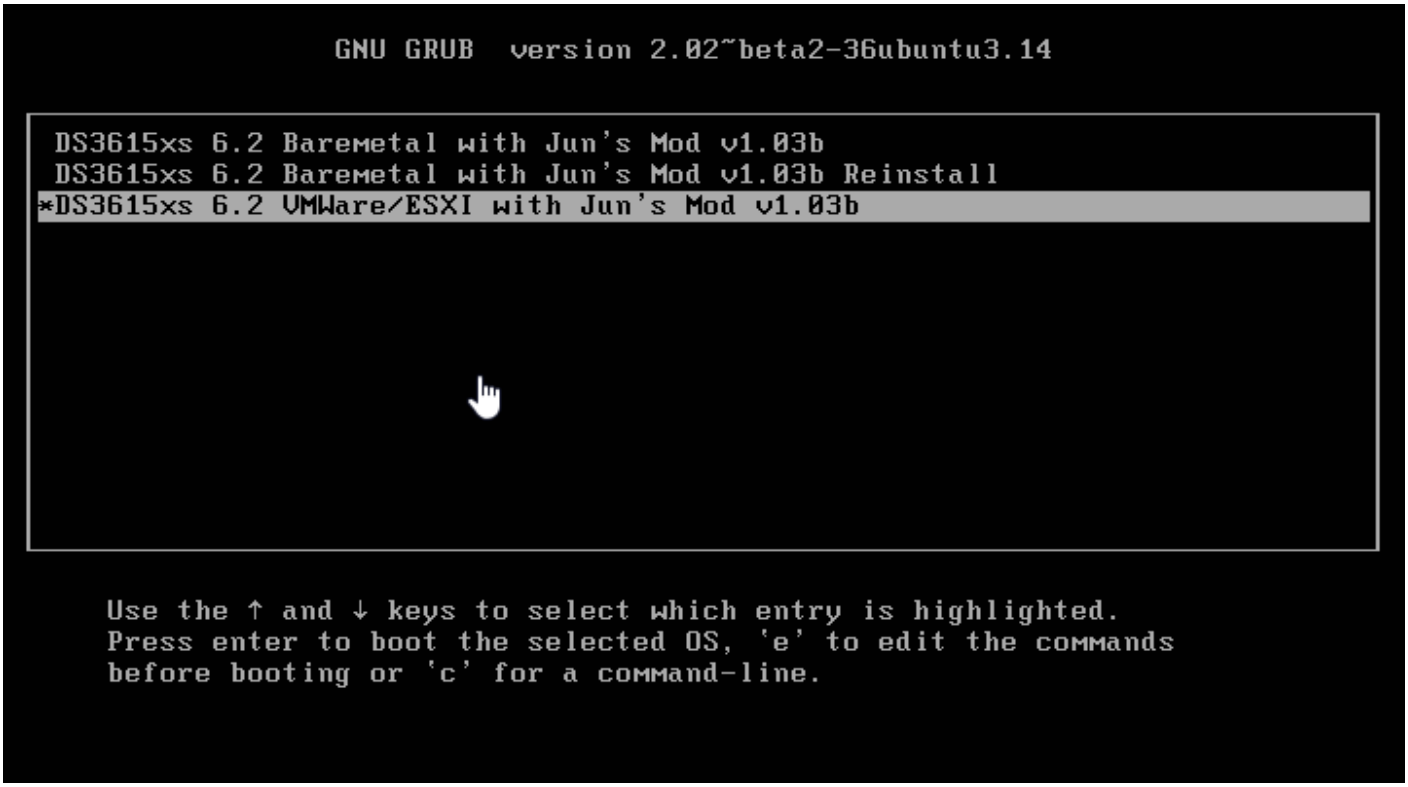


On peut démarrer la VM. Dès le démarrage, on appuie sur F2 pour accéder au bios. On modifiera ici le boot order pour mettre le disque SATA en premier. Attention, il faut être rapide.



On presse F10.

Au démarrage, on choisit la troisième option.



> Pour n'avoir qu'un choix, on peut modifier le fichier synoboot.img avant la conversion, et commenter le fichier grub.cfg au niveau des menu entries. Un tutoriel est disponible ici.

```
Intro:
This mod is brought to you by Jun <haijun.dev@gmail.com>. You can contact me to
discuss technical details, but general installation questions should go through
the xpenology forum or other communities.

Happy hacking.

Screen will stop updating shortly, please open http://find.synology.com to
continue.
```

Sur une machine du réseau, on se rend sur http://find.synology.com/ pour trouver notre XPEnology.

Une fois trouvé, on clique sur "Connecter", on accepte les conditions.

Trouvez votre Synology NAS

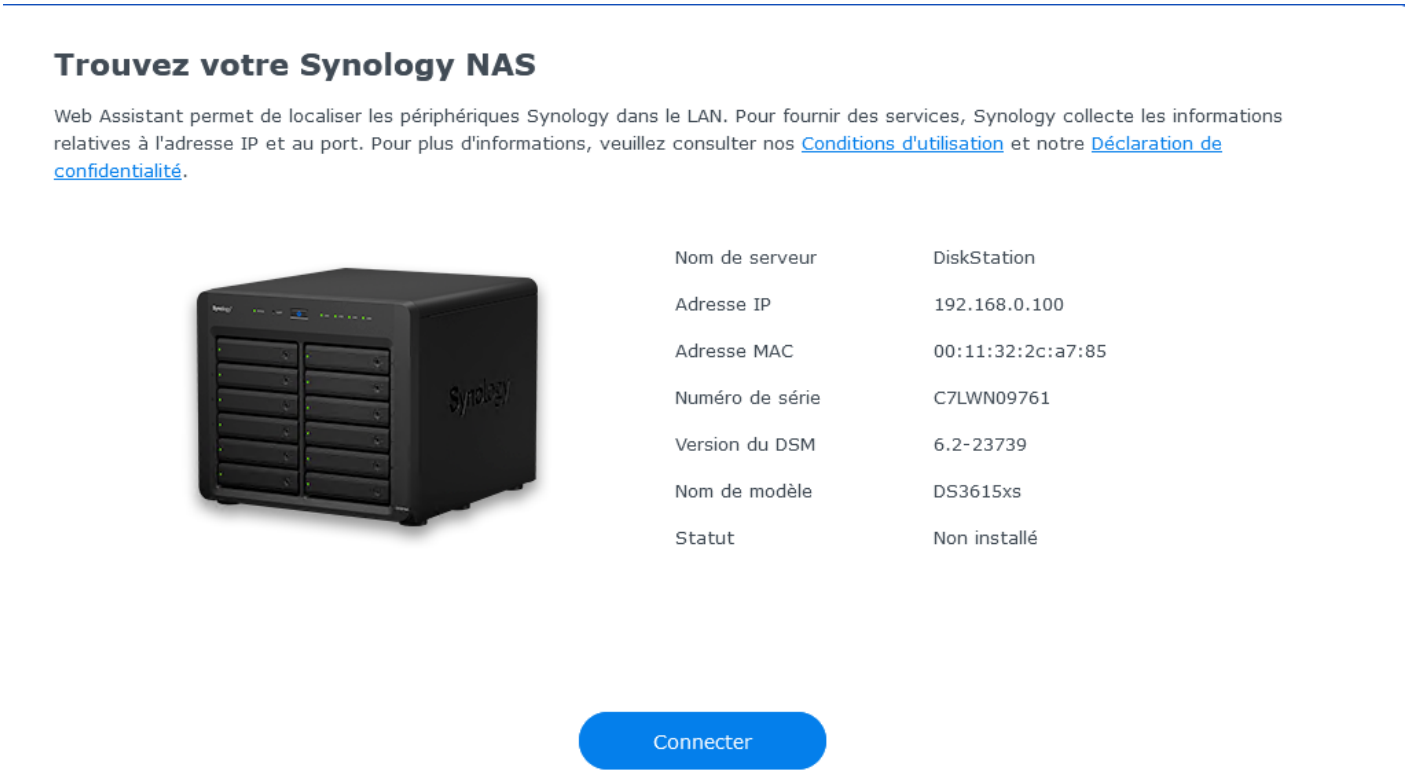
Web Assistant permet de localiser les périphériques Synology dans le LAN. Pour fournir des services, Synology collecte les informations relatives à l'adresse IP et au port. Pour plus d'informations, veuillez consulter nos Conditions d'utilisation et notre Déclaration de confidentialité.



Nom de serveur	DiskStation
Adresse IP	192.168.0.100
Adresse MAC	00:11:32:2c:a7:85
Numéro de série	C7LWN09761
Version du DSM	6.2-23739
Nom de modèle	DS3615xs
Statut	Non installé

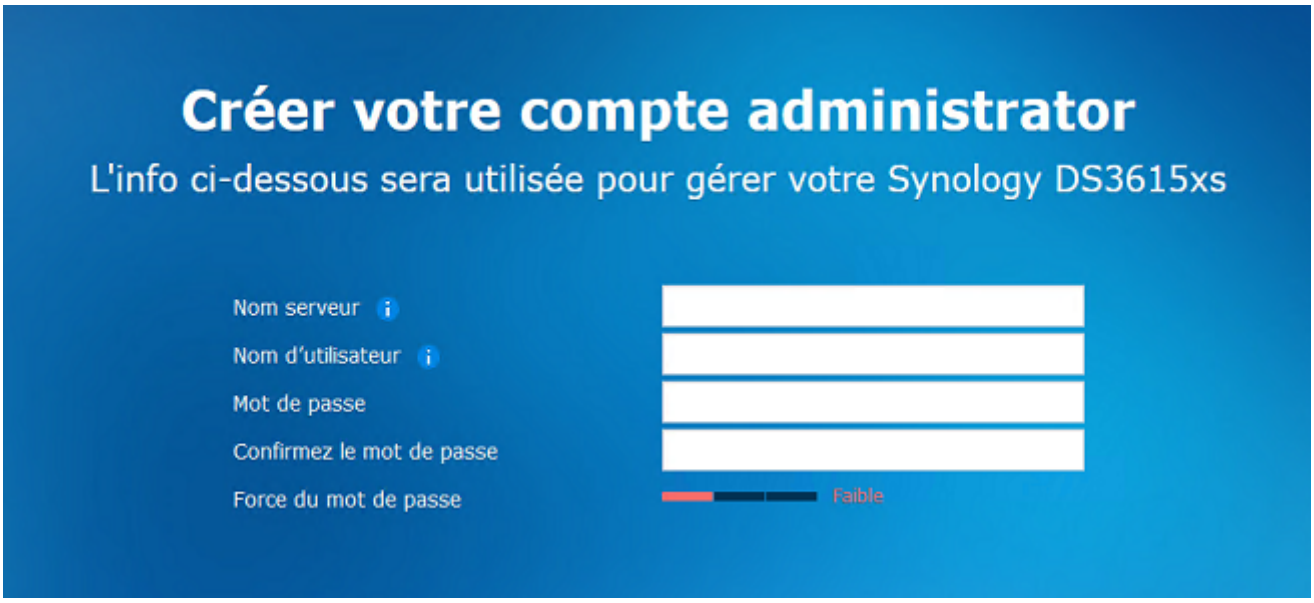
Connecter

On clique ensuite sur "Configurer".



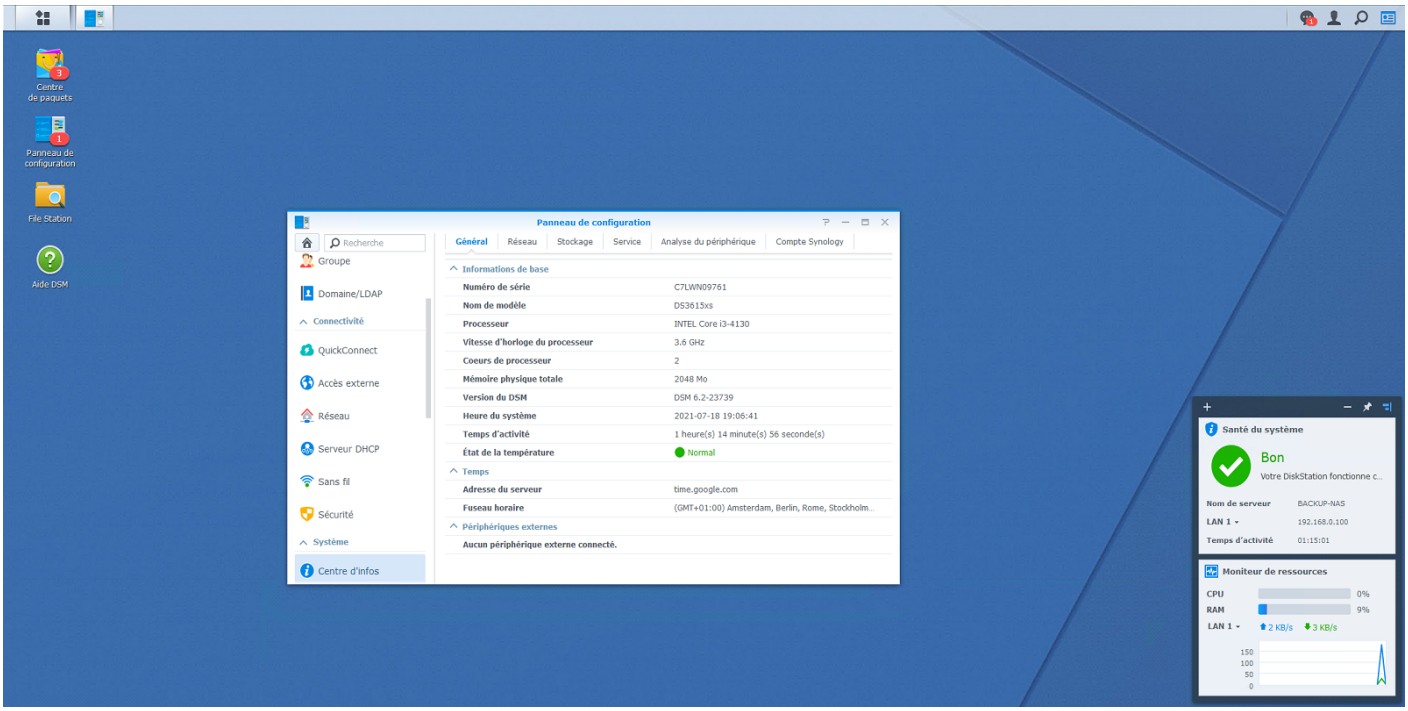
On clique sur "Installation manuelle", on ajoute le fichier DSM (extension de fichier en .PAT) puis on clique sur "Installer". On valide.

Une fois fini, on aura juste à créer le compte admin et à rentrer le nom du serveur.



Sur la prochaine fenêtre, on désactive les mises à jour automatiques (cela peut rendre inutilisable la machine virtuelle). On passe ensuite l'étape Quickconnect.

Voilà !



Conclusion

DSM est désormais installé sur notre machine virtuelle. Cependant, les mises à jours ont souvent un impact négatif sur les performances voir le fonctionnement.

> N'utilisez pas XPEnology en production, uniquement pour des tests.