dudulee.github.io

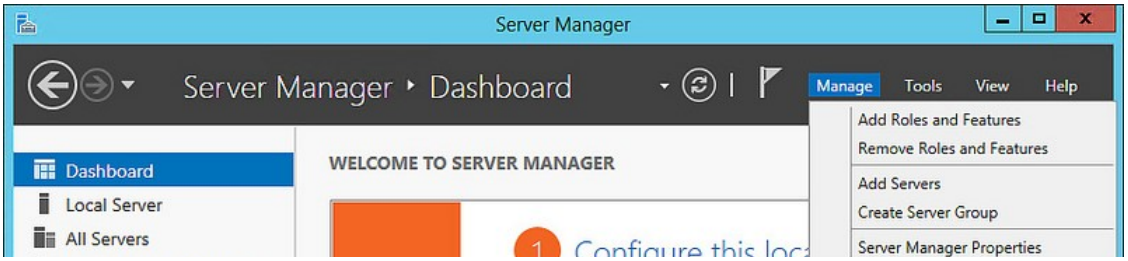
Monter son NAS / SAN “personnel” sous Windows Server 2012 – Partie 5 – la cible iSCSI

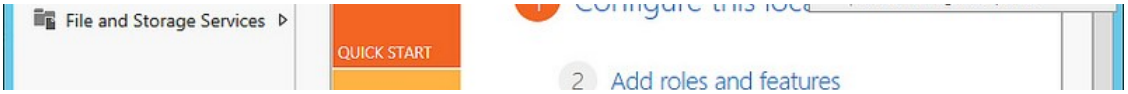
Cet article est le cinquième d’une série consacrée au montage d’un NAS / SAN “personnel” (ou de test) sous Windows Server 2012.

Les 4 premières parties sont ici, ici, ici et ici

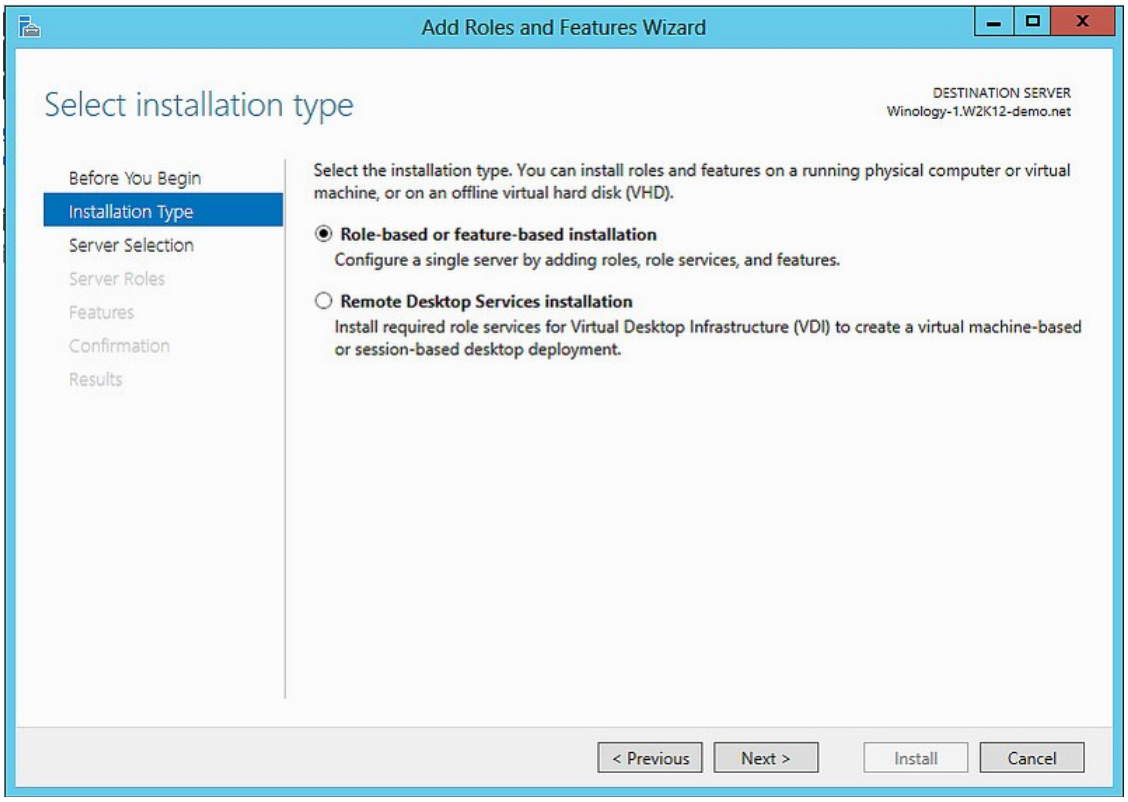
Dans cette partie, nous allons voir **comment créer, configurer une cible iSCSI sur un serveur Windows Server 2012 et comment s’y connecter**

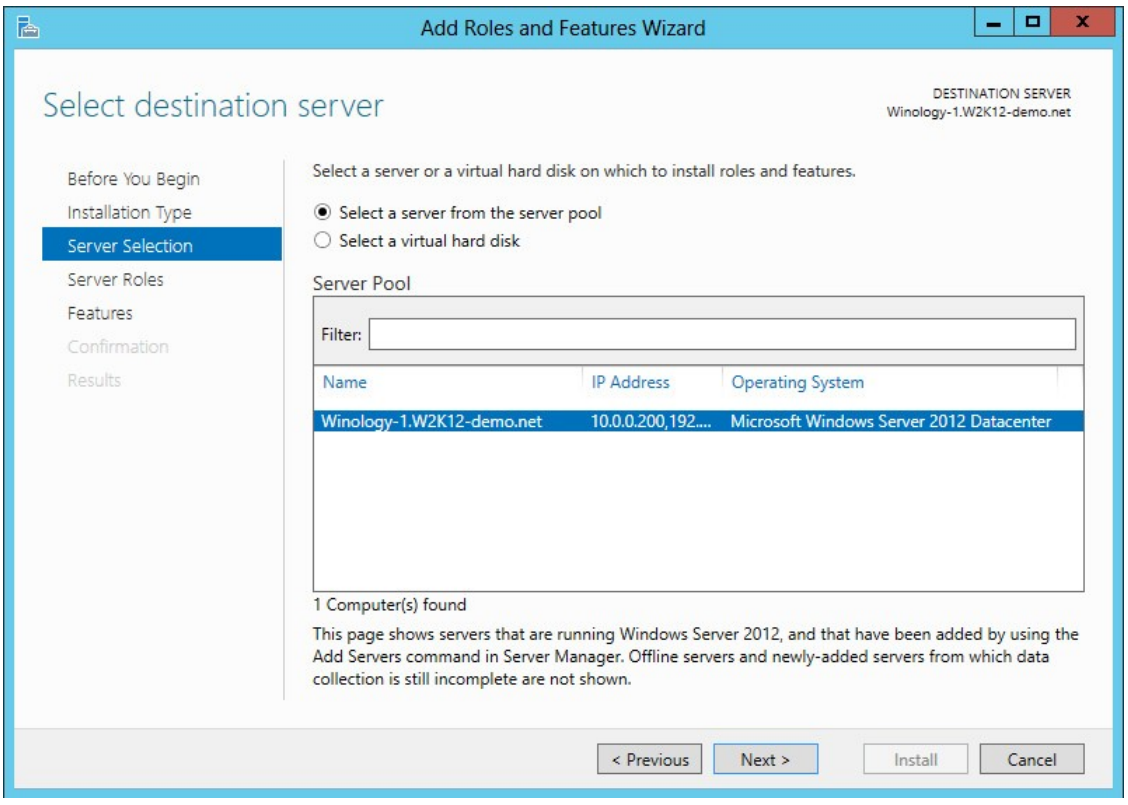
Etape 1 : installation des fonctionnalités de Cible iSCSI sur le serveur



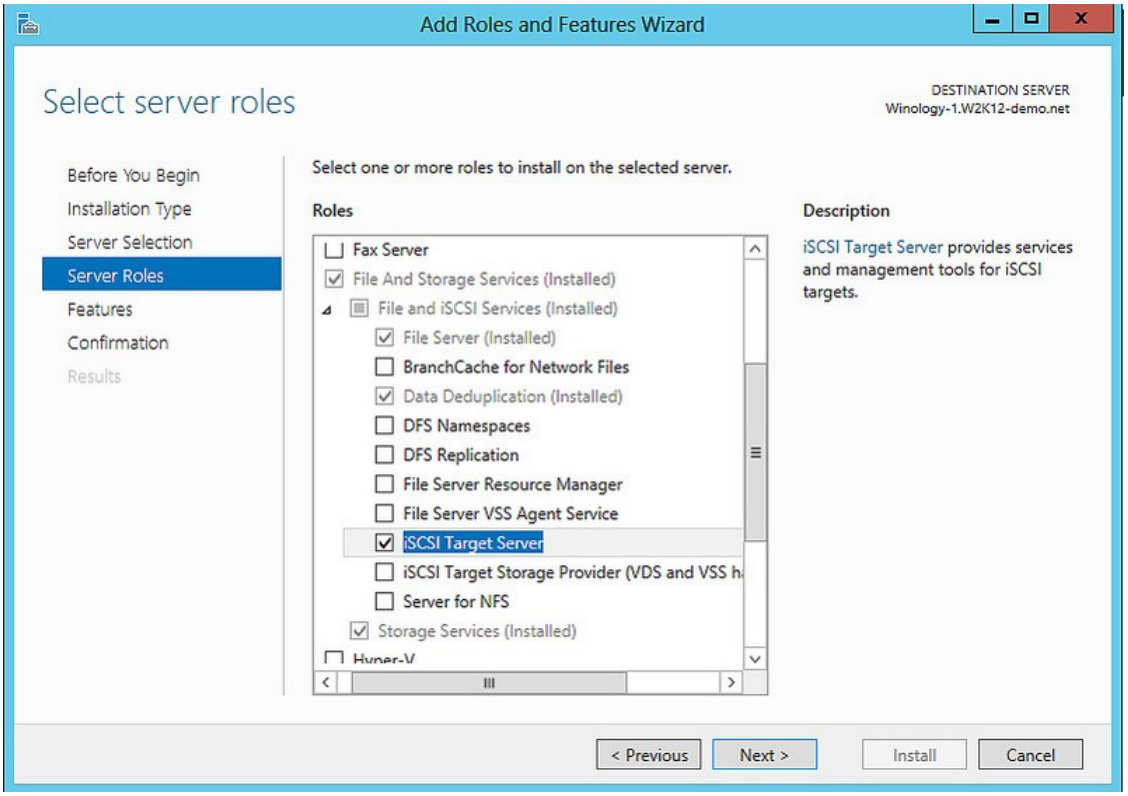


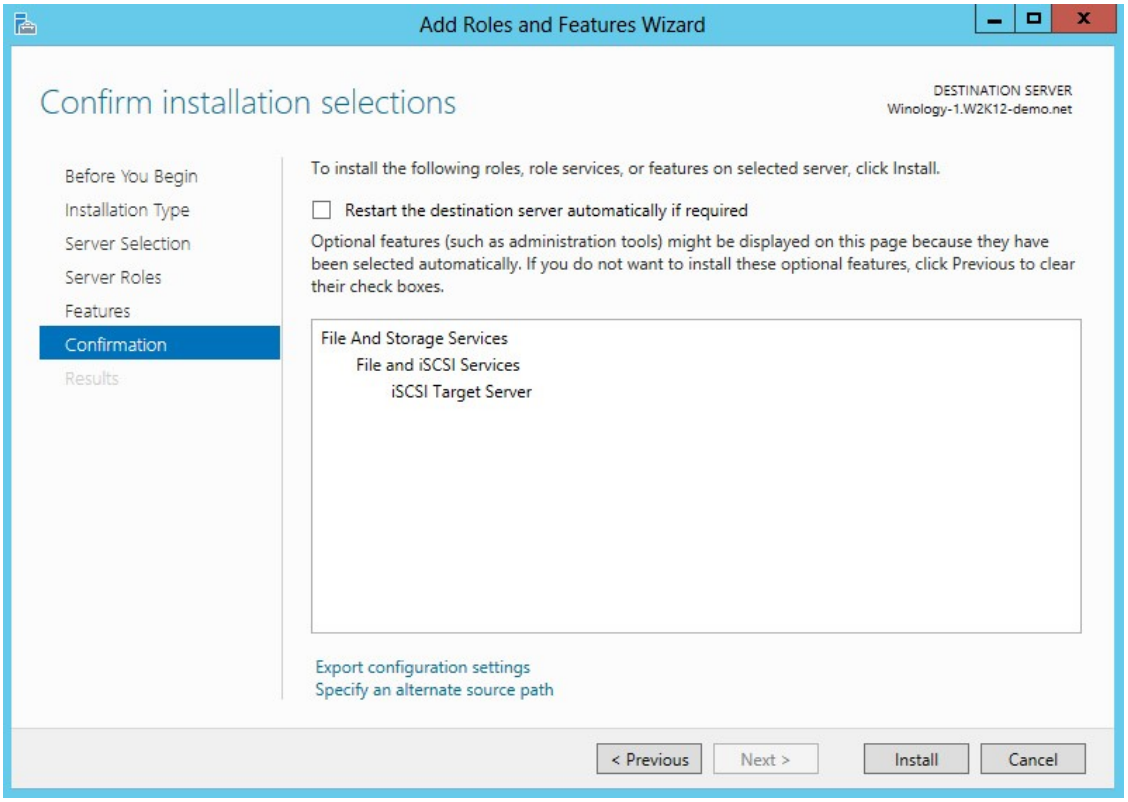
Cliquer sur Add Role and Features

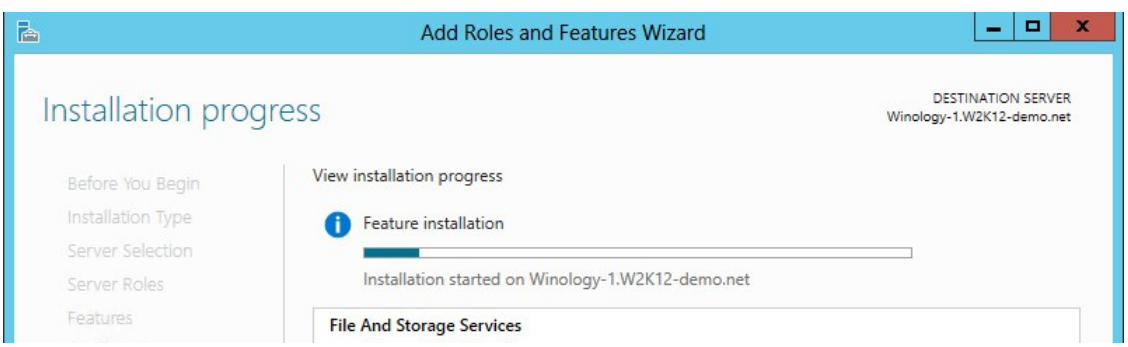


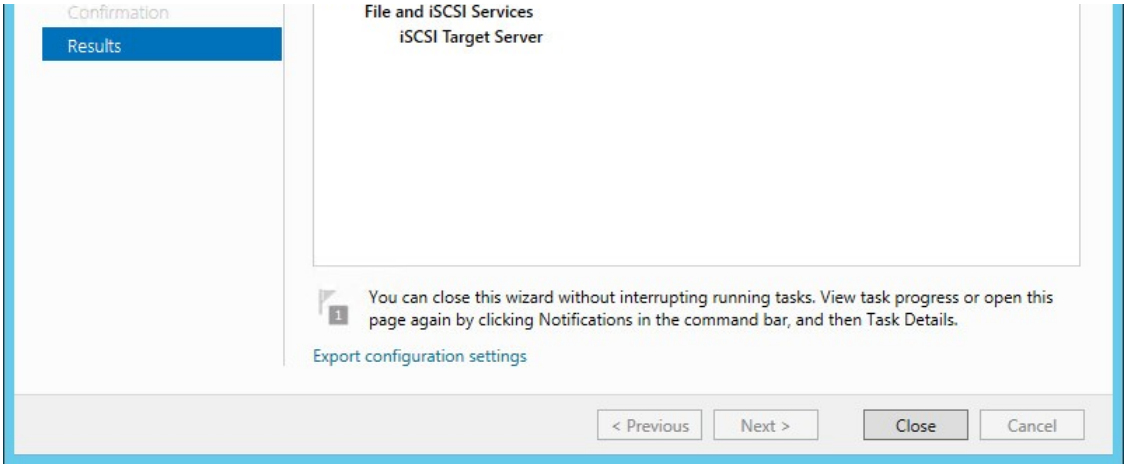


Sélectionner *iSCSI Target Server* dans la branche *File and iSCSI Services*

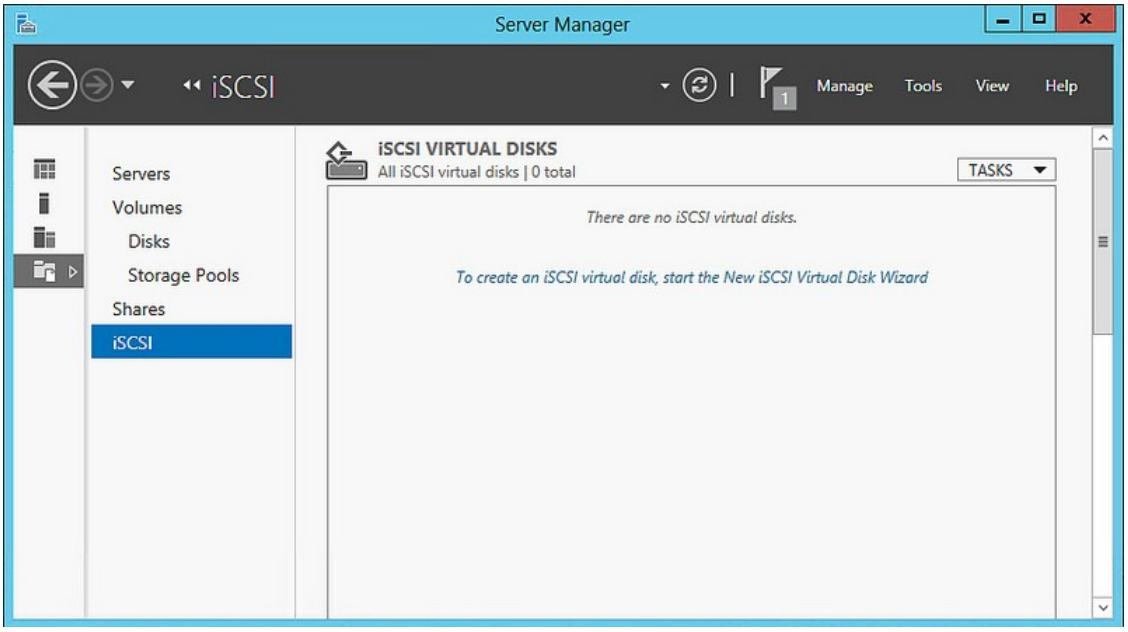

Add Roles and Features Wizard
Select server roles
DESTINATION SERVER
Winology-1.W2K12-demo.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles to install on the selected server.
Roles
Fax Server
File And Storage Services (Installed)
File and iSCSI Services (Installed)
File Server (Installed)
BranchCache for Network Files
Data Deduplication (Installed)
DFS Namespaces
DFS Replication
File Server Resource Manager
File Server VSS Agent Service
iSCSI Target Server
iSCSI Target Storage Provider (VDS and VSS h
Server for NFS
Storage Services (Installed)
Hyper-V
Description
iSCSI Target Server provides services and management tools for iSCSI targets.
< Previous
Next >
Install
Cancel


Add Roles and Features Wizard
Confirm installation selections
DESTINATION SERVER
Winology-1.W2K12-demo.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
To install the following roles, role services, or features on selected server, click Install.
Restart the destination server automatically if required
Optional features (such as administration tools) might be displayed on this page because they have been selected automatically. If you do not want to install these optional features, click Previous to clear their check boxes.
File And Storage Services
File and iSCSI Services
iSCSI Target Server
Export configuration settings
Specify an alternate source path
< Previous
Next >
Install
Cancel

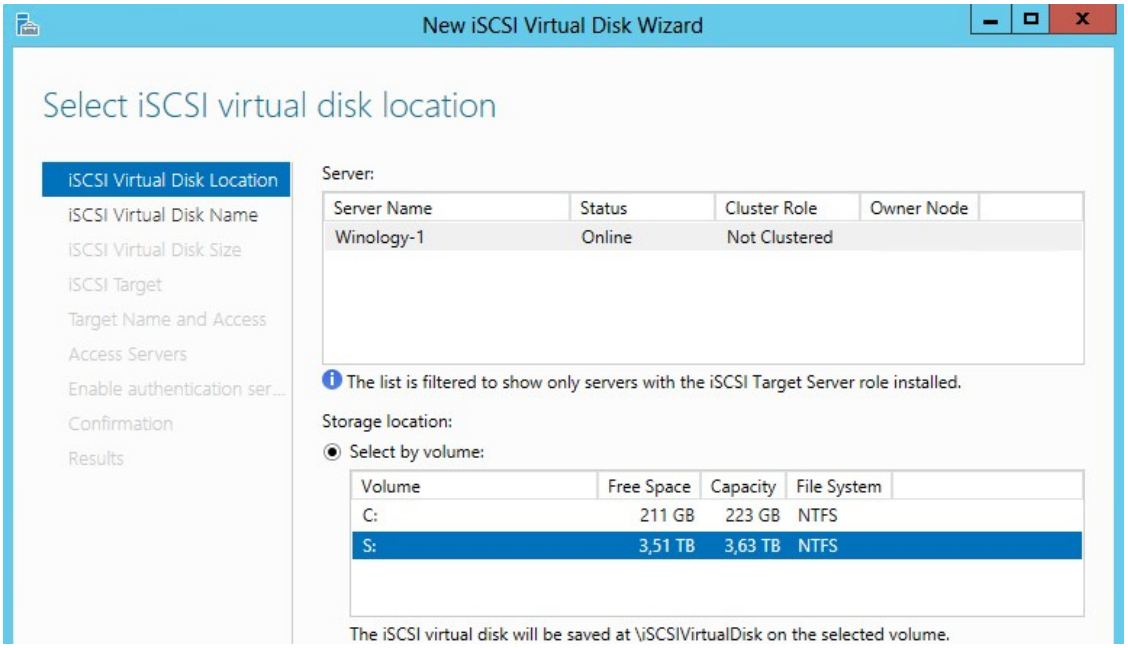

Add Roles and Features Wizard
Installation progress
DESTINATION SERVER
Winology-1.W2K12-demo.net
Before You Begin
Installation Type
Server Selection
Server Roles
Features
View installation progress
Feature installation
Installation started on Winology-1.W2K12-demo.net
File And Storage Services

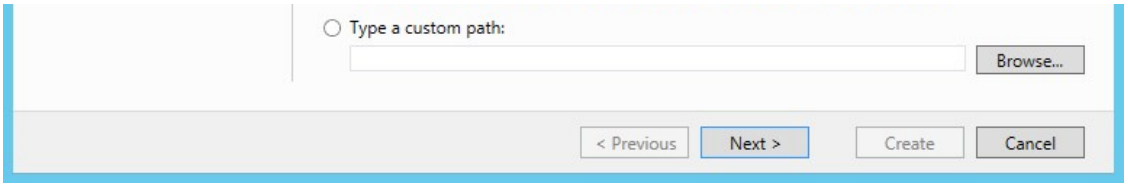


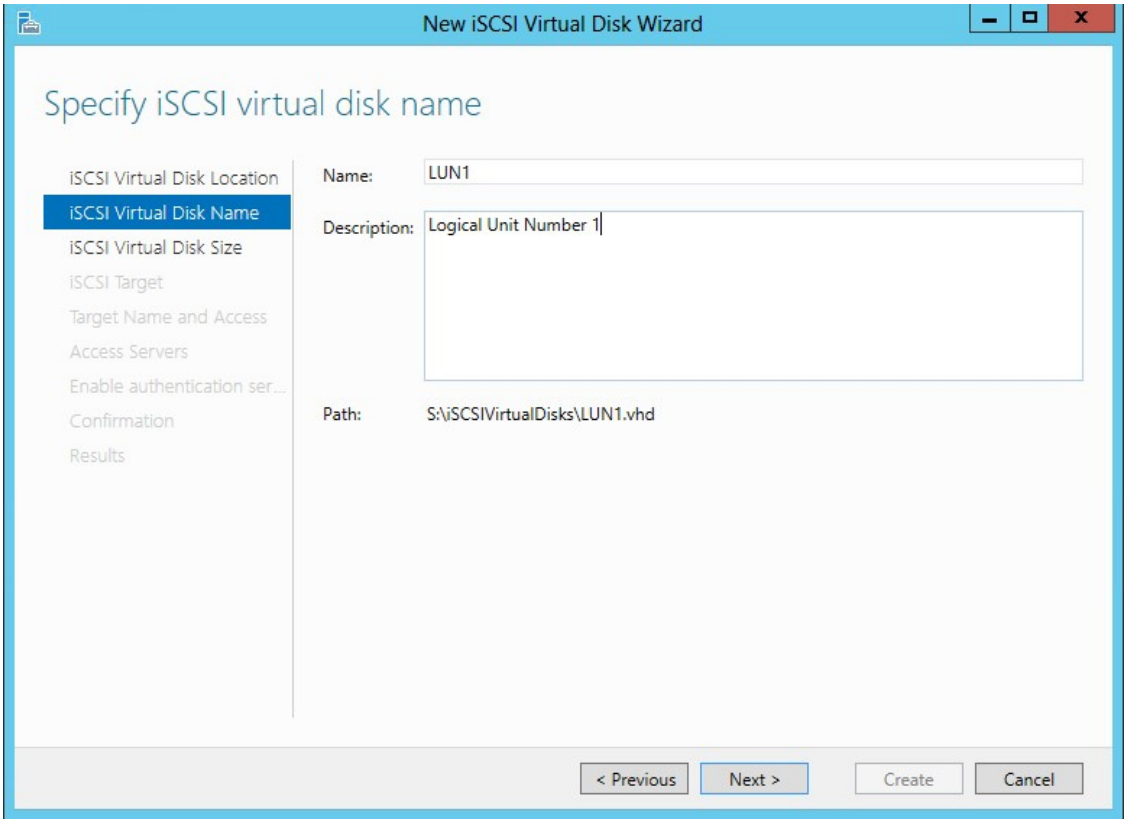
Etape 2 : Création d’un LUN sur le NAS (qui va donc aussi devenir un SAN)



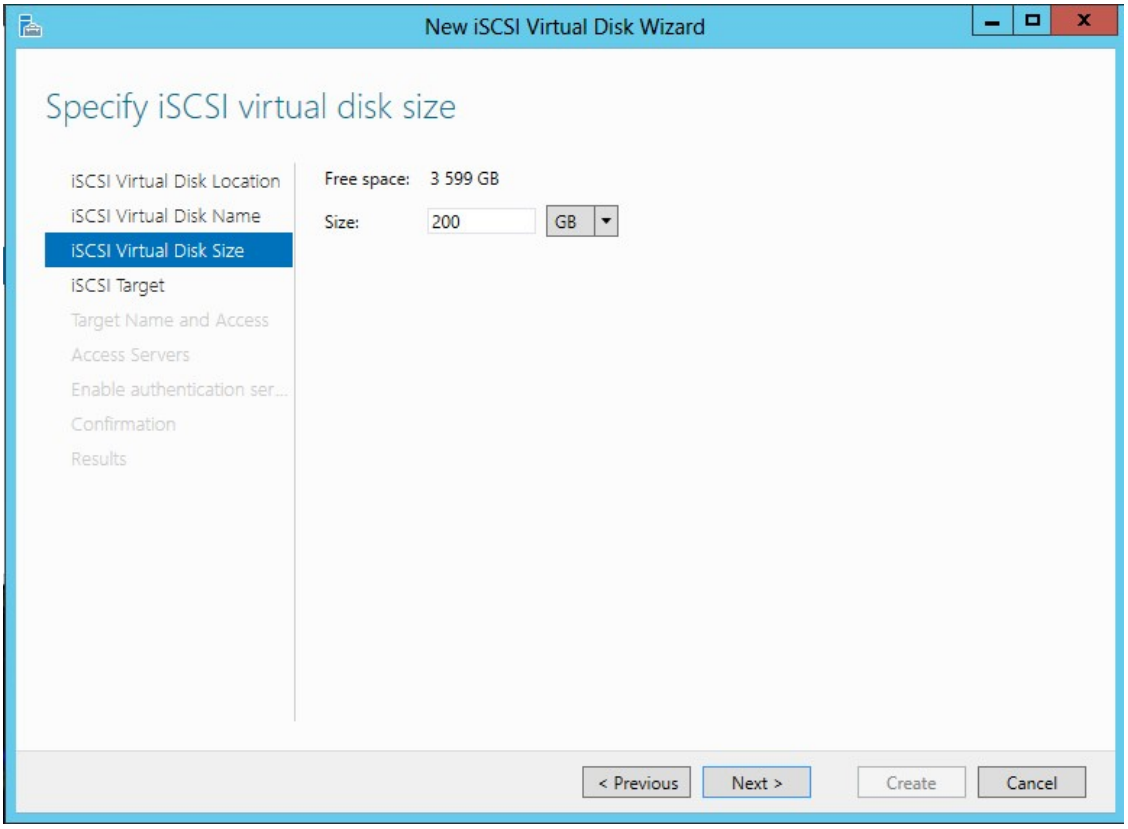
Cliquer sur “*To create an iSCSI virtual disk, start the New iSCSI Virtual Disk Wizard*”

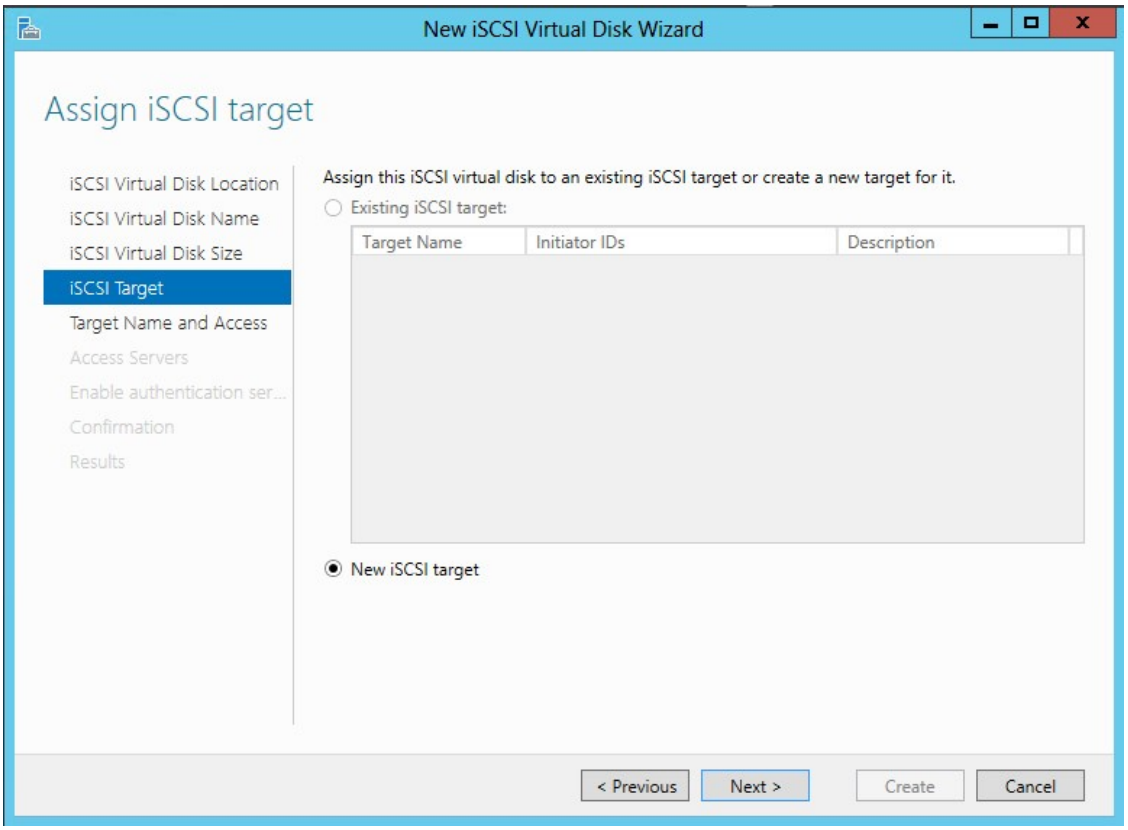




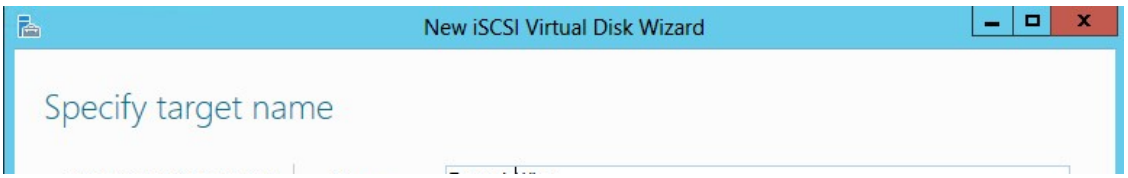


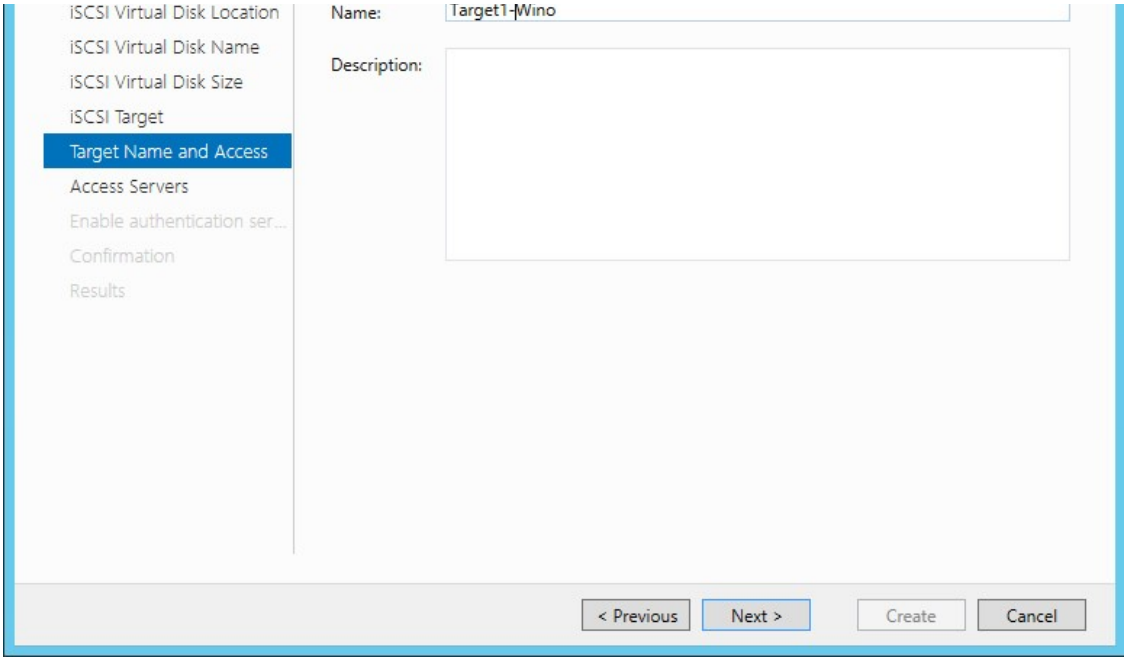
Définir la taille du disque iSCSI



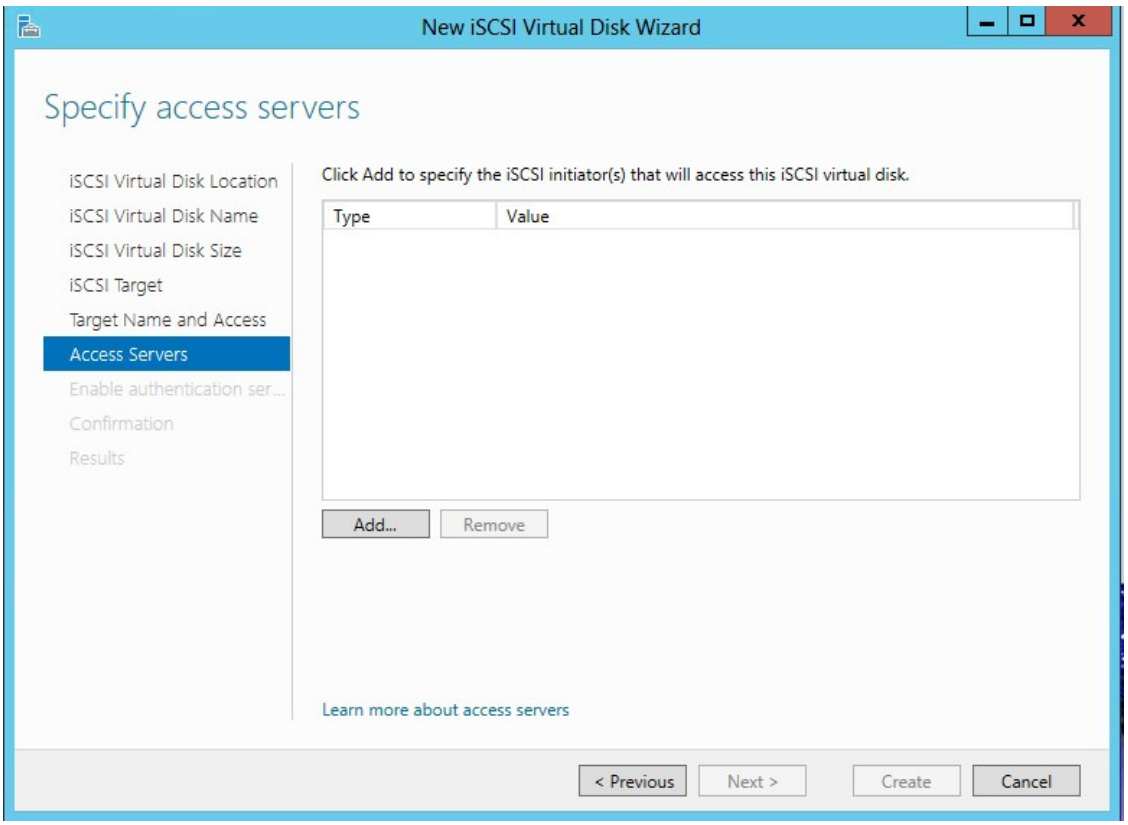


Créer une nouvelle cible iSCSI



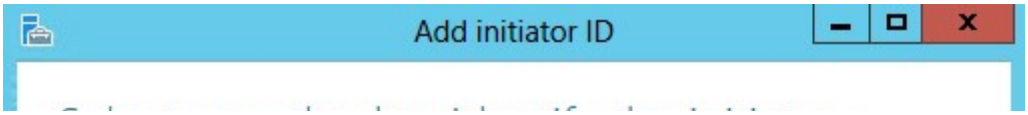


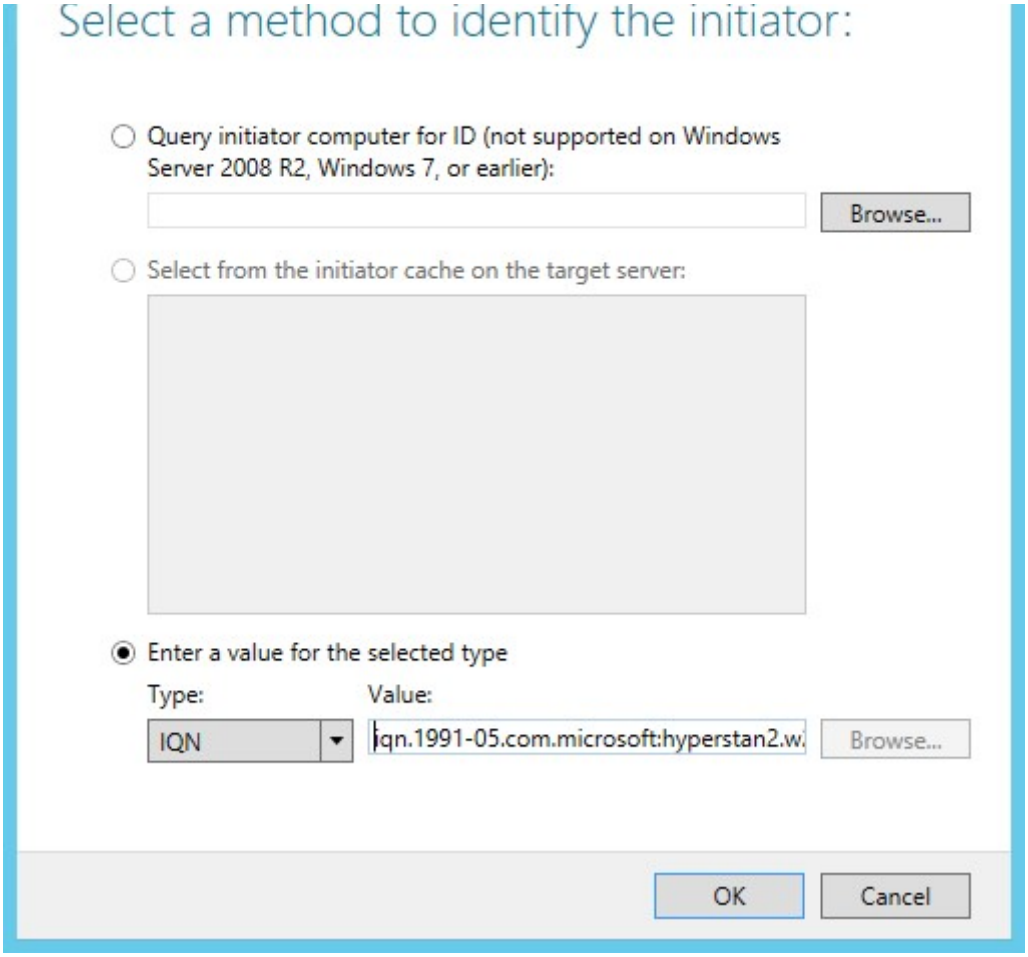
Puis spécifier les initiateurs (clients) à connecter à cette cible (serveur)



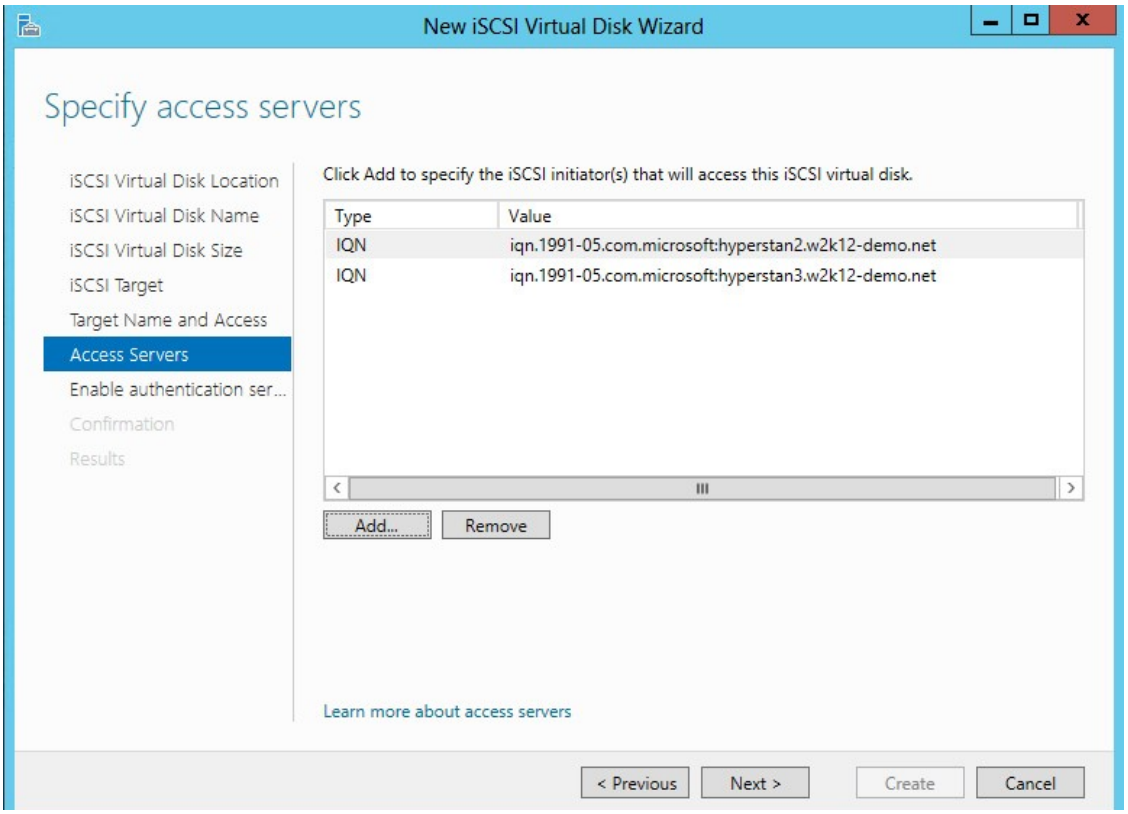
Cliquer sur Add… Sélectionner Enter a value for the selected type

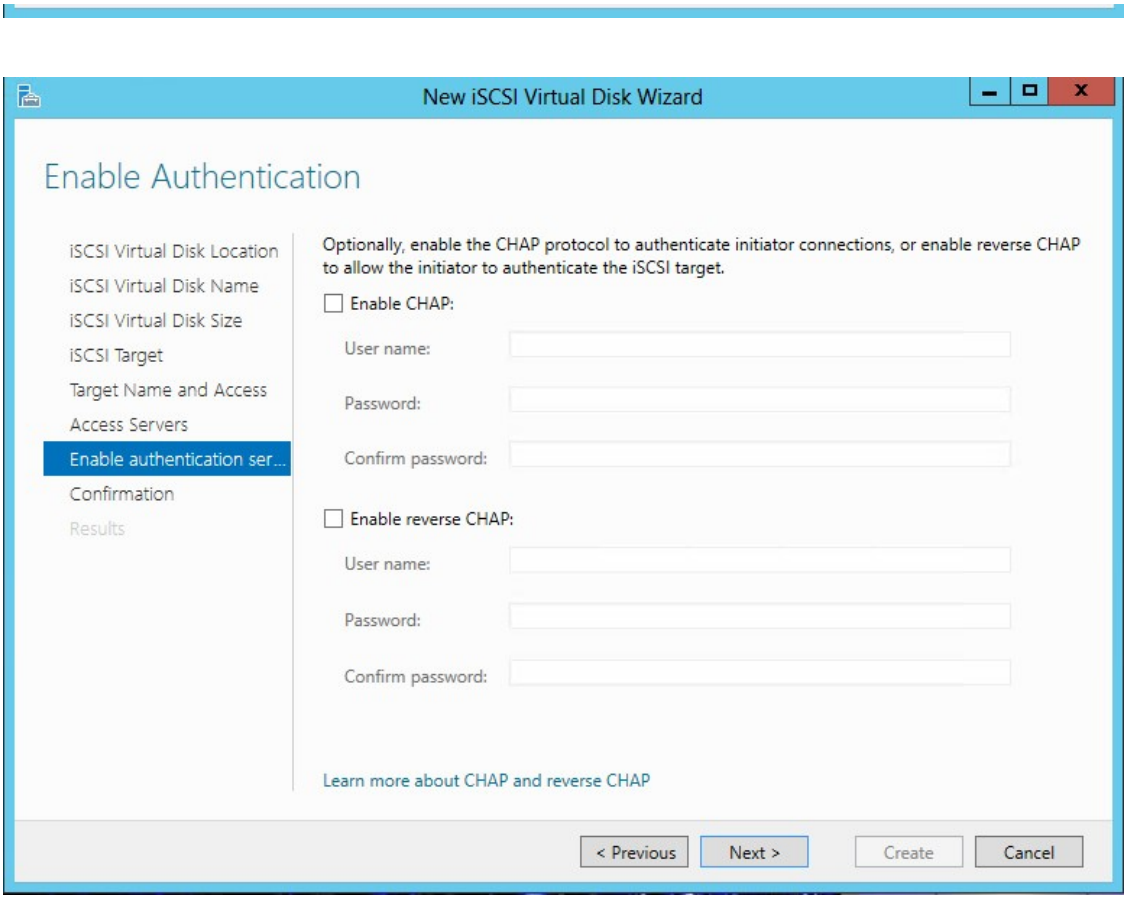
IQN IQN:iqn.1991-05.com.microsoft:hyperstan2.w2k12-demo.net (ici : hyperstan2.w2k12-demo.net est le nom FQDN de la machine avec l’initiateur iSCSI)



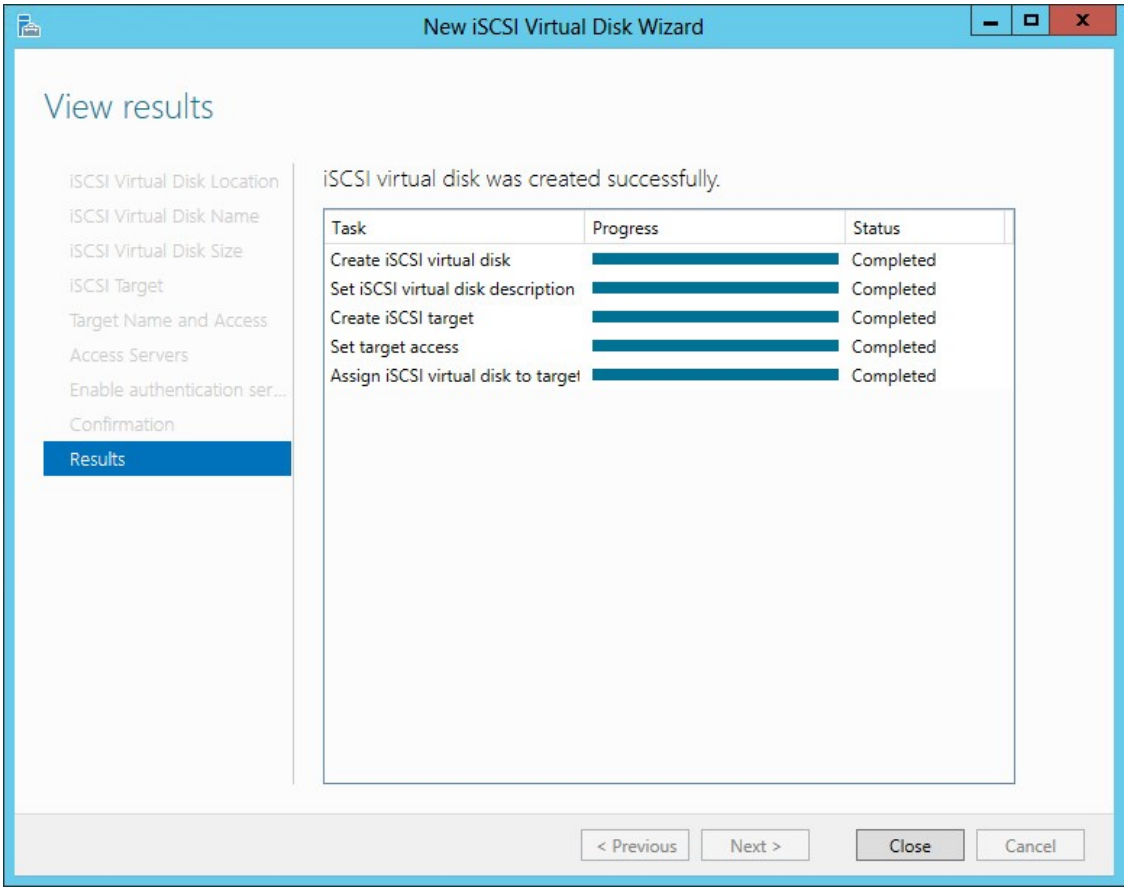


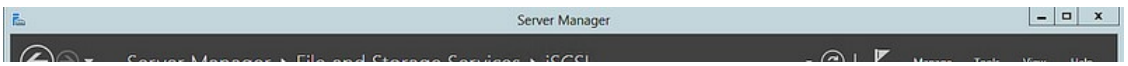
> Note : Comme je vais utiliser cette cible iSCSI dans le cadre d’un cluster Hyper-V, j’ai ajouté les 2 initiateurs. Attention dans ce cas, il faudra installer la fonctionnalité failover cluster sur l’ensemble des nœuds du cluster. cf. Etape 3 plus loin dans cet article.

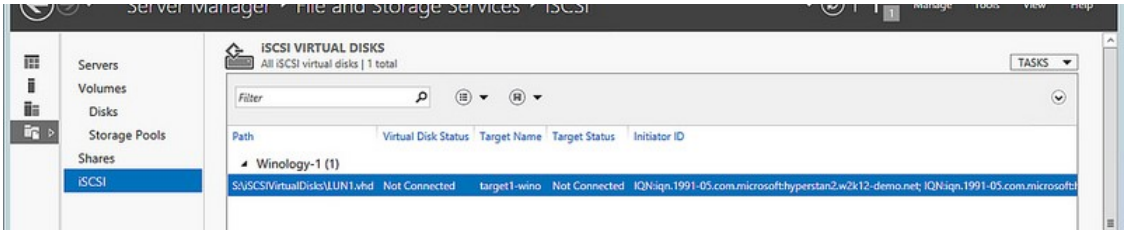




Cliquer sur Next puis Create.

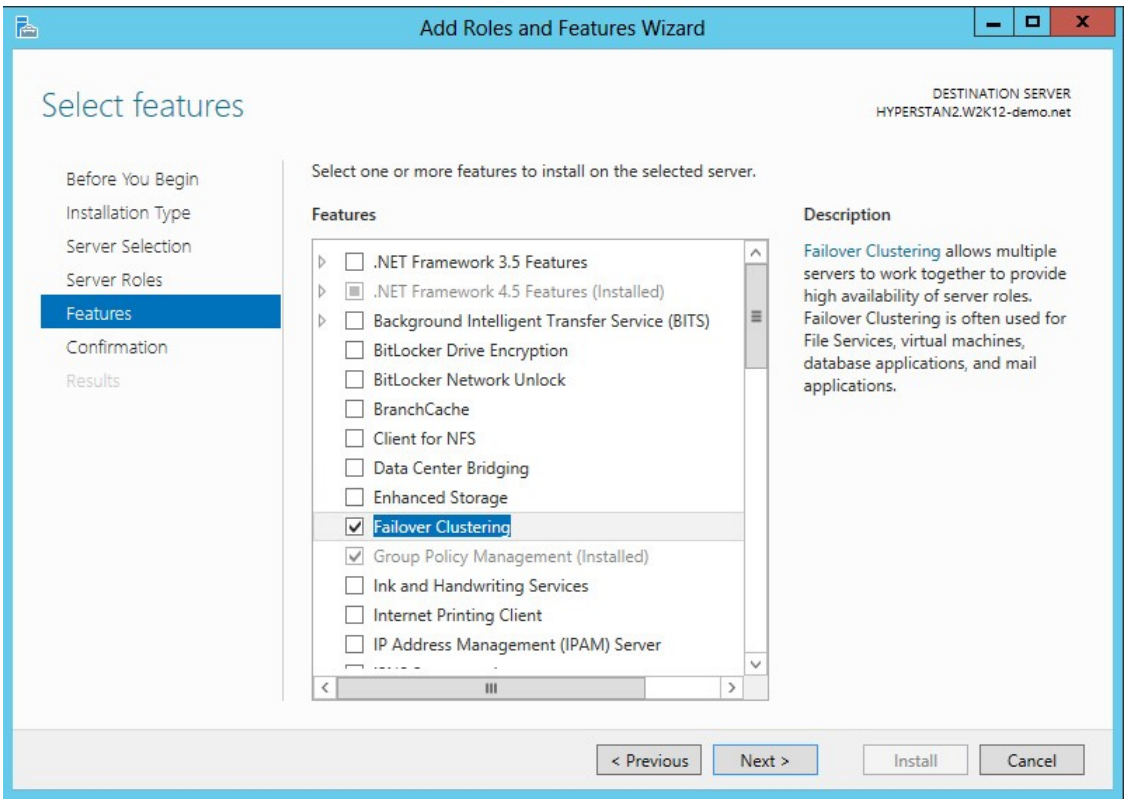






Etape 3 (Optionnelle) : Installation de la fonctionnalité Failover Cluster sur les machines clientes (initiateurs iSCSI) de la cible iSCSI

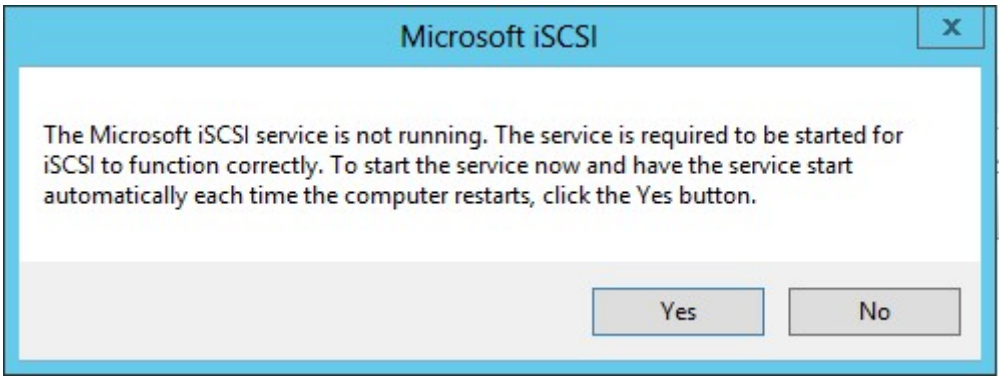
Dans mon cas, cette cible iSCSI va me servir pour un stockage partagé utilisable par plusieurs serveurs Hyper-V en cluster. Il est donc nécessaire d’installer ces composants sur les serveurs Hyper-V

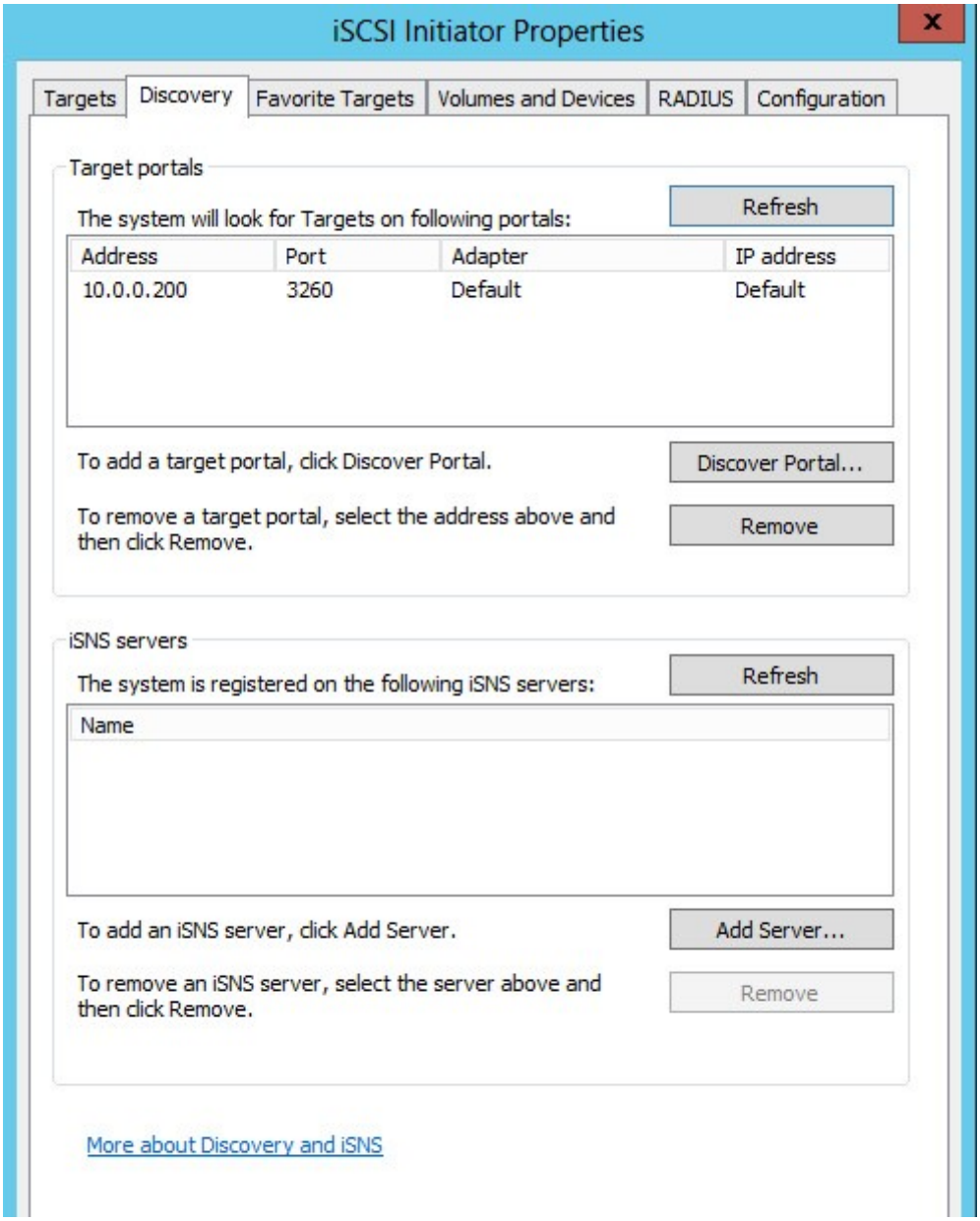


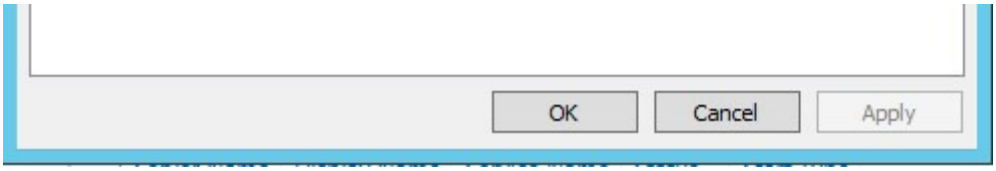
Etape 4 : Configuration de l’initiateur iSCSI sur un ordinateur connecté à la cible iSCSI

Note : dans le cas d’un cluster, faire cette configuration sur l’ensemble des nœuds.

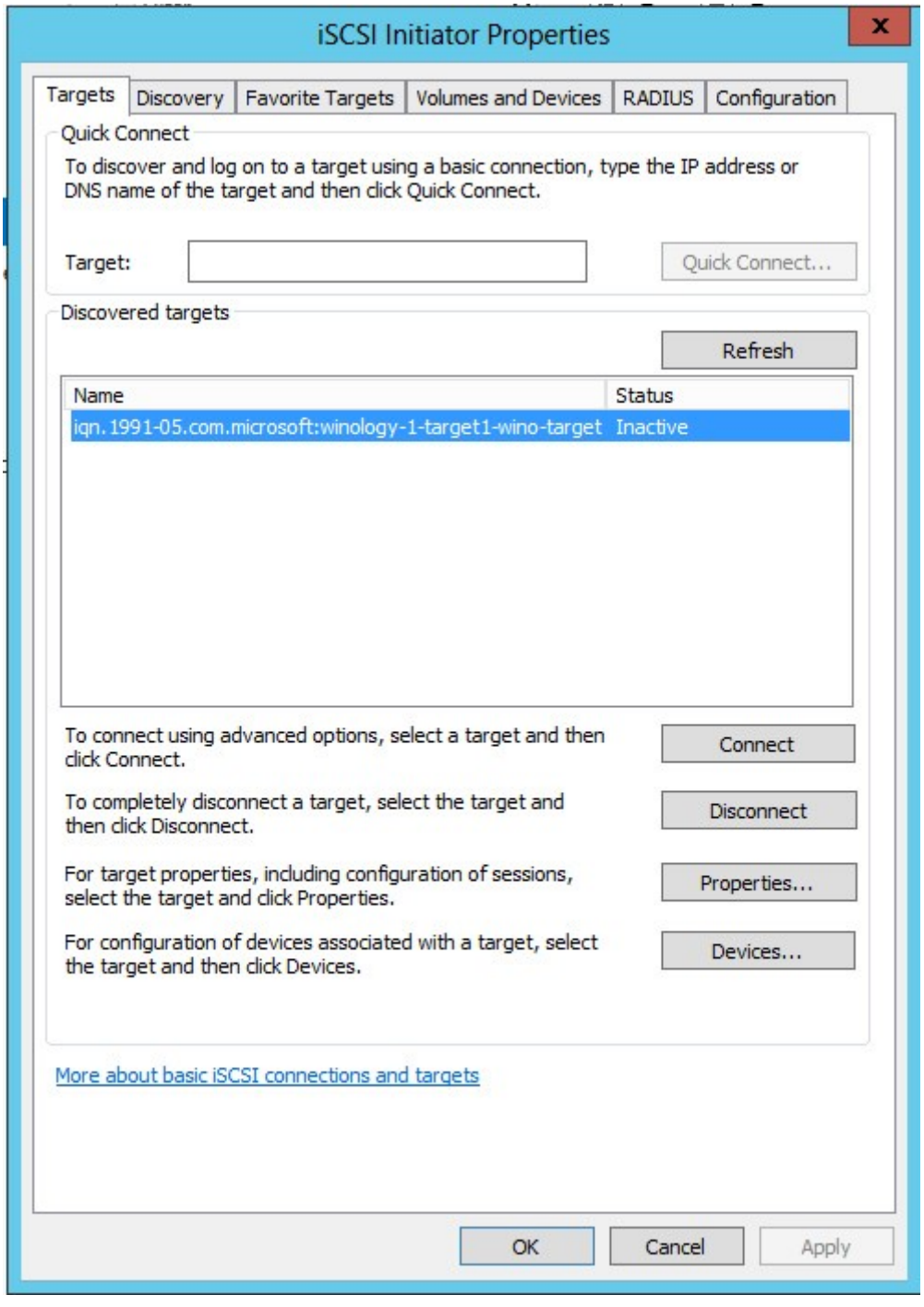

Settings
Results for "iscsi"
iSCSI Initiator
Set up iSCSI initiator
Search
Settings
iscsi
Apps 1
Settings 2
Files 0
Internet Explorer


Microsoft iSCSI
The Microsoft iSCSI service is not running. The service is required to be started for iSCSI to function correctly. To start the service now and have the service start automatically each time the computer restarts, click the Yes button.
Yes
No

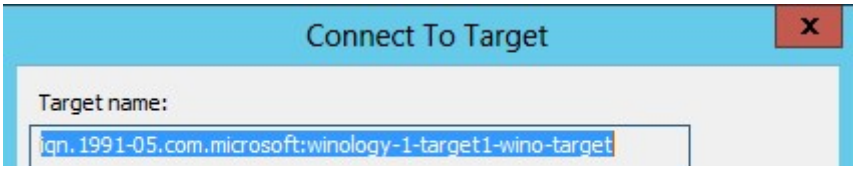

iSCSI Initiator Properties
Targets
Discovery
Favorite Targets
Volumes and Devices
RADIUS
Configuration
Target portals
The system will look for Targets on following portals:
Refresh
Address
Port
Adapter
IP address
10.0.0.200
3260
Default
Default
To add a target portal, click Discover Portal.
Discover Portal...
To remove a target portal, select the address above and then click Remove.
Remove
iSNS servers
The system is registered on the following iSNS servers:
Refresh
Name
To add an iSNS server, click Add Server.
Add Server...
To remove an iSNS server, select the server above and then click Remove.
Remove
More about Discovery and iSNS

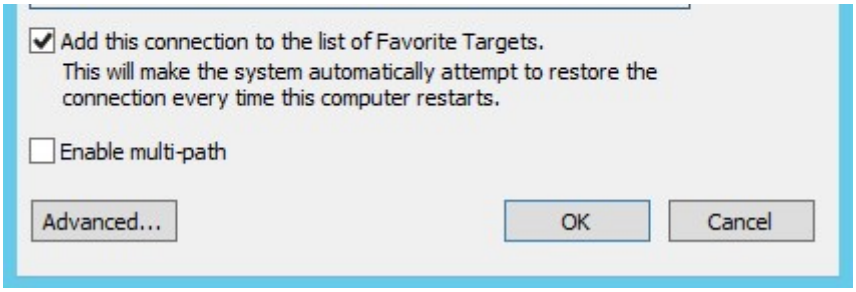


Dans l’onglet Targets, sélectionner la target

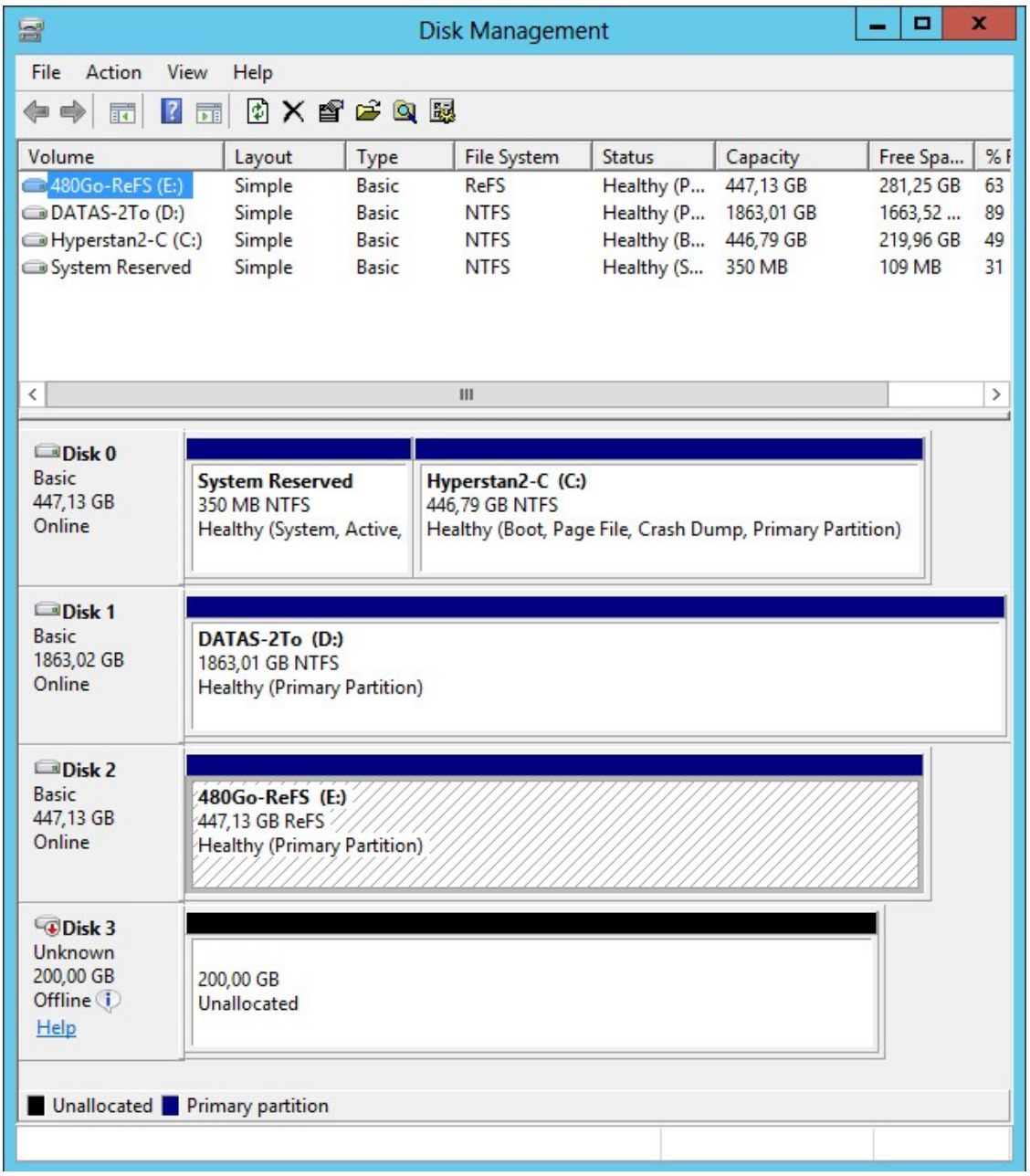


Puis cliquer sur *Connect*, puis *OK*

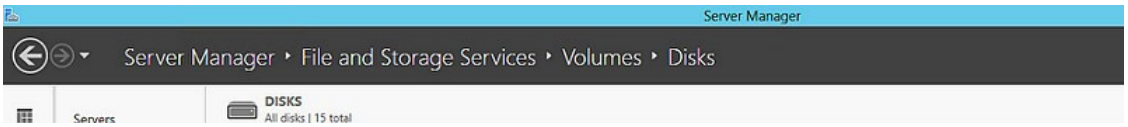


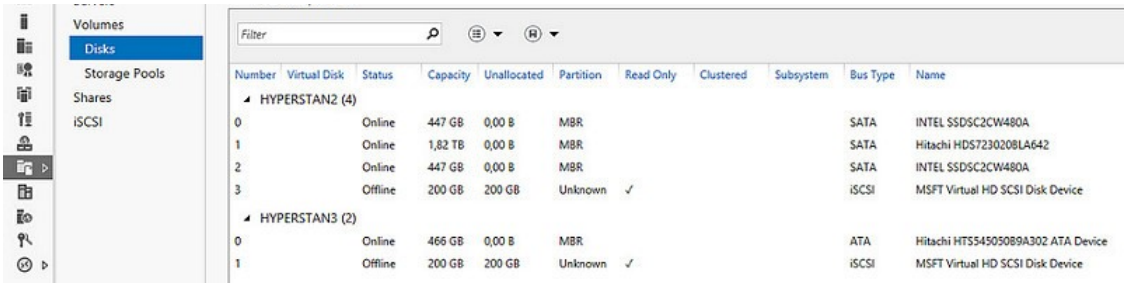


Pour vérifier la bonne connexion en vérifiant la présence de la LUN dans le gestionnaire de disques. La LUN sur la cible iSCSI est visible en bas.

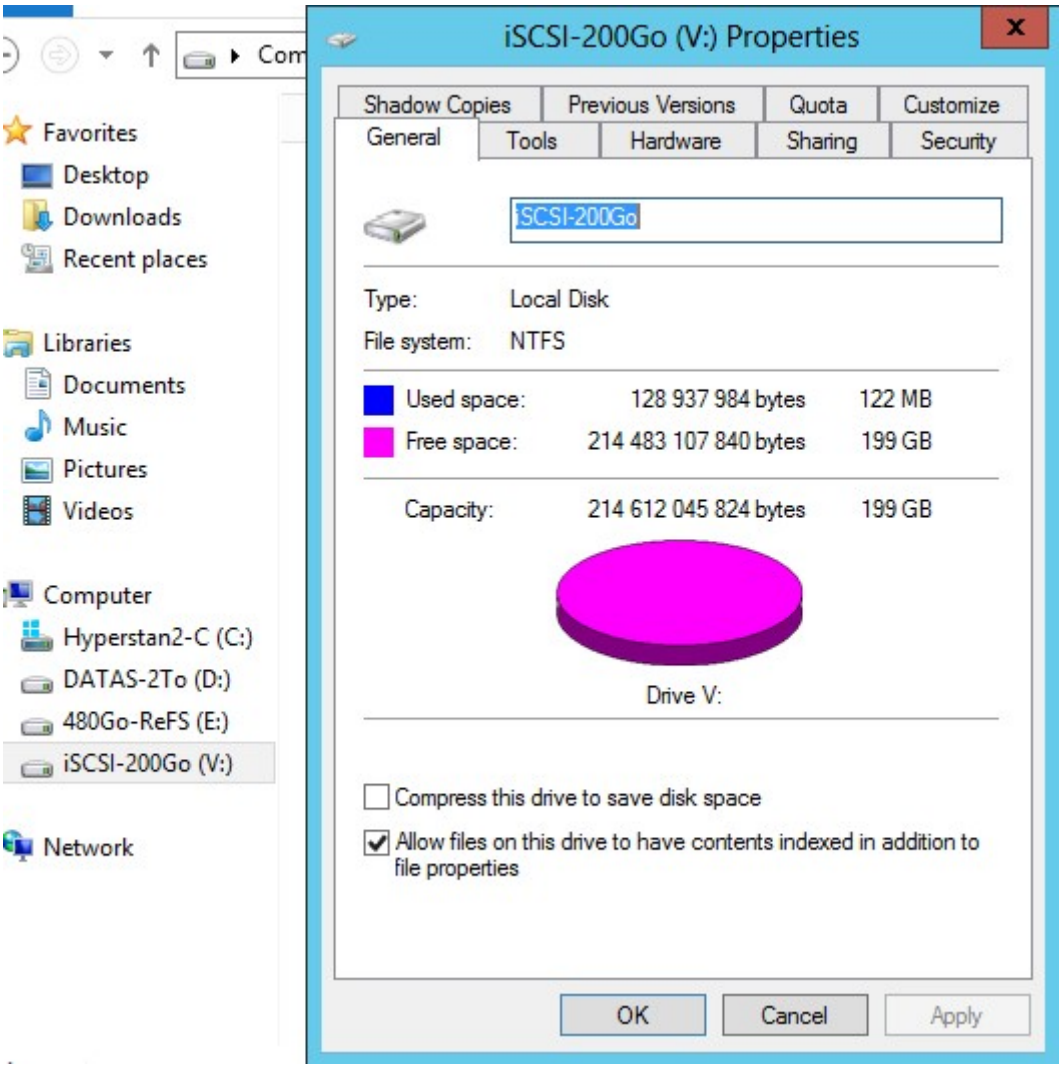


Idem dans le gestionnaire de serveur, partie services de fichiers





Pour une utilisation sans Cluster (donc 1 seul initiateur connecté à cette cible) : il suffit de sélectionner le disque iSCSI, de le mettre en ligne et de créer un volume puis de le formater depuis la machine cliente.



Quelques lectures complémentaires sur le sujet :

> Six Uses for the Microsoft iSCSI Software Target
> http://blogs.technet.com/b/storageserver/archive/2009/12/11/six-uses-for-the-microsoft-iscsi-software-target.aspx
>
> Microsoft iSCSI Boot Step-by-Step Guide

> http://technet.microsoft.com/en-us/library/ee619733(WS.10).aspx
>
> Vue d’ensemble du démarrage de cible iSCSI
> http://technet.microsoft.com/fr-fr/library/hh848273
>
> Introduction of iSCSI Target in Windows Server 2012
> http://blogs.technet.com/b/filecab/archive/2012/05/21/introduction-of-iscsi-target-in-windows-server-2012.aspx
>
> Configuring a Highly Available iSCSI Target
> http://go.microsoft.com/?linkid=9806468
>
> iSCSI Cmdlets in Windows PowerShell
> http://technet.microsoft.com/en-us/library/hh826099.aspx
>
> Introduction to iSCSI Diskless Boot Deployment
> http://go.microsoft.com/?linkid=9813223
>
> Building the next generation file system for Windows: ReFS
> http://blogs.msdn.com/b/b8/archive/2012/01/16/building-the-next-generation-file-system-for-windows-refs.aspx
>
> iSCSI Software Target WMI Provider classes
> http://msdn.microsoft.com/en-us/library/windows/desktop/hh447501(v=vs.85).aspx

Pour tester Windows Server 2012, vous pouvez télécharger gratuitement la version d’évaluation disponible sous la forme :
– d’une image ISO : https://aka.ms/jeveuxwindows2012
– d’un fichier VHD avec un système préinstallé : https://aka.ms/jeveuxwindows2012

– Stanislas Quastana –