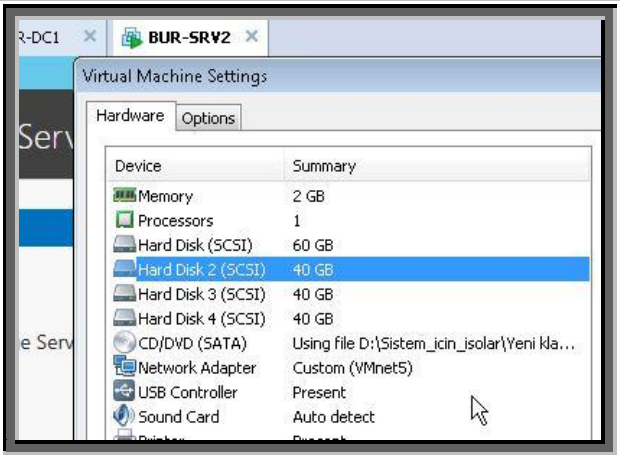
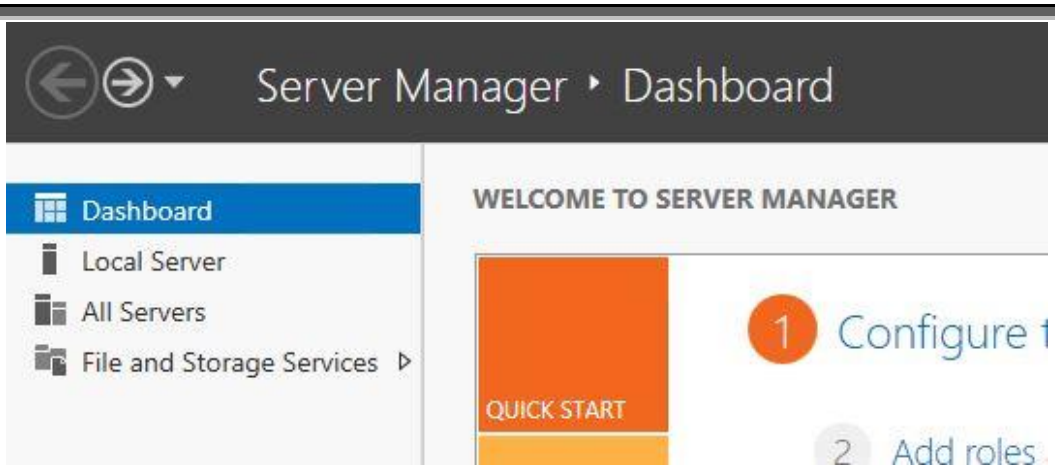
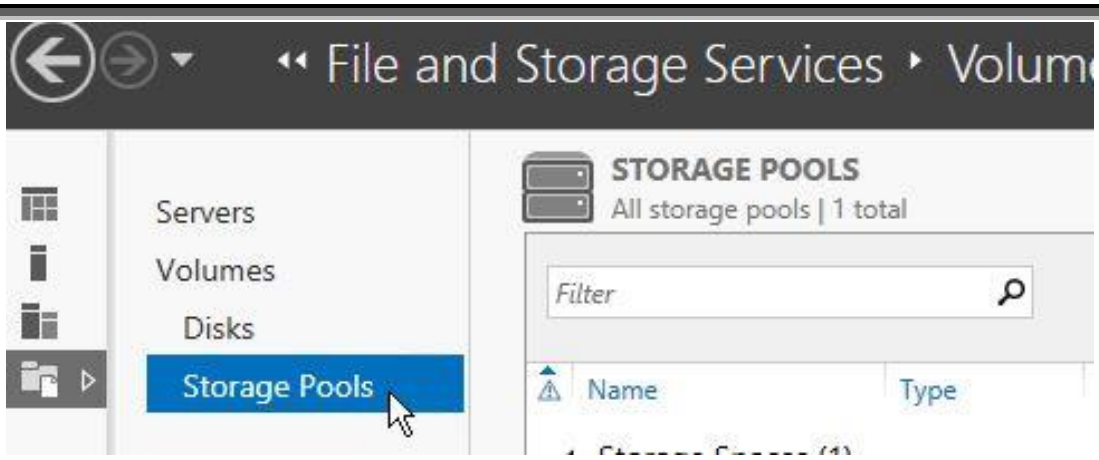
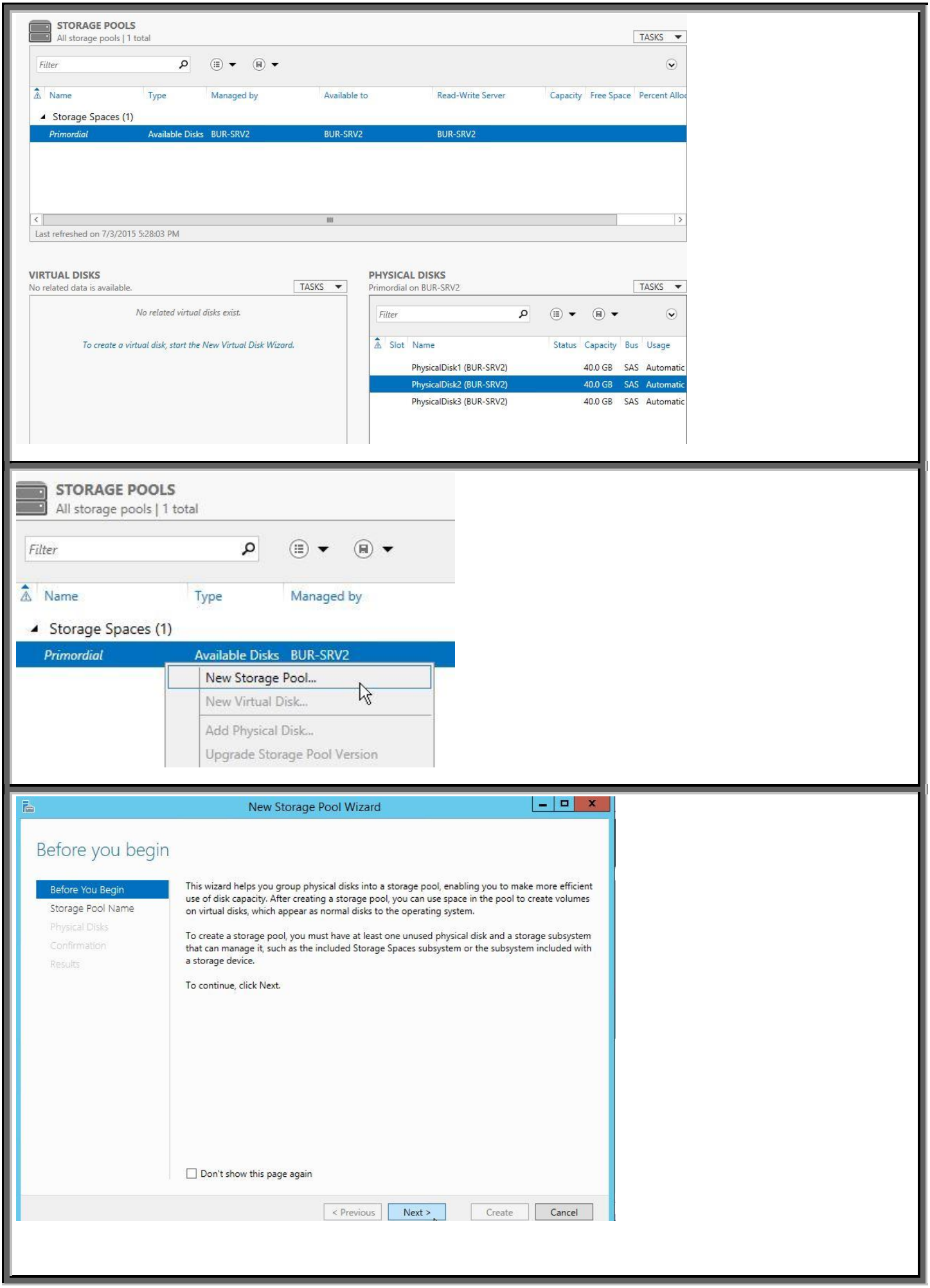
LAB:Disk Pool ve Iscsi

BUR-SRV2 üzerinde 3 adet 40 GB disk ekleyin



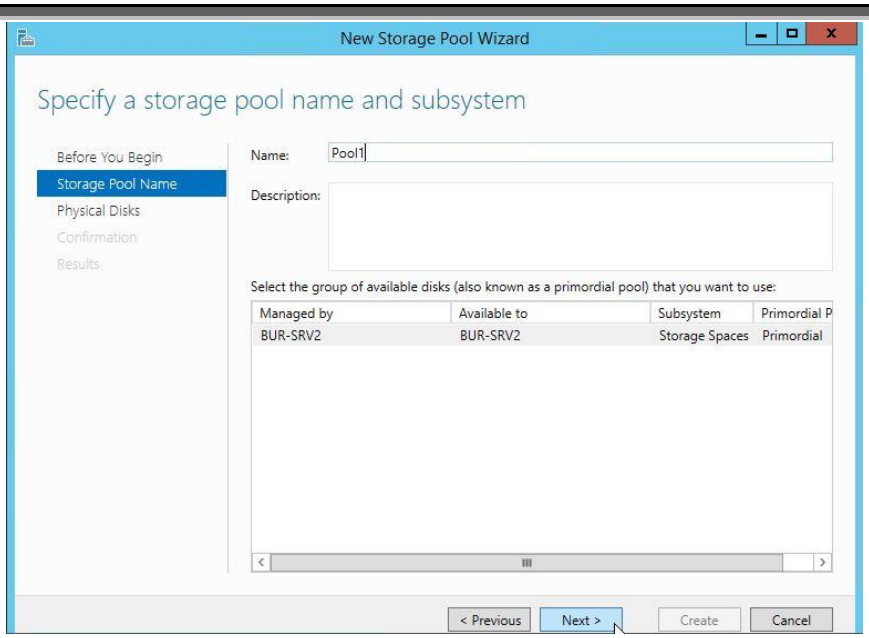


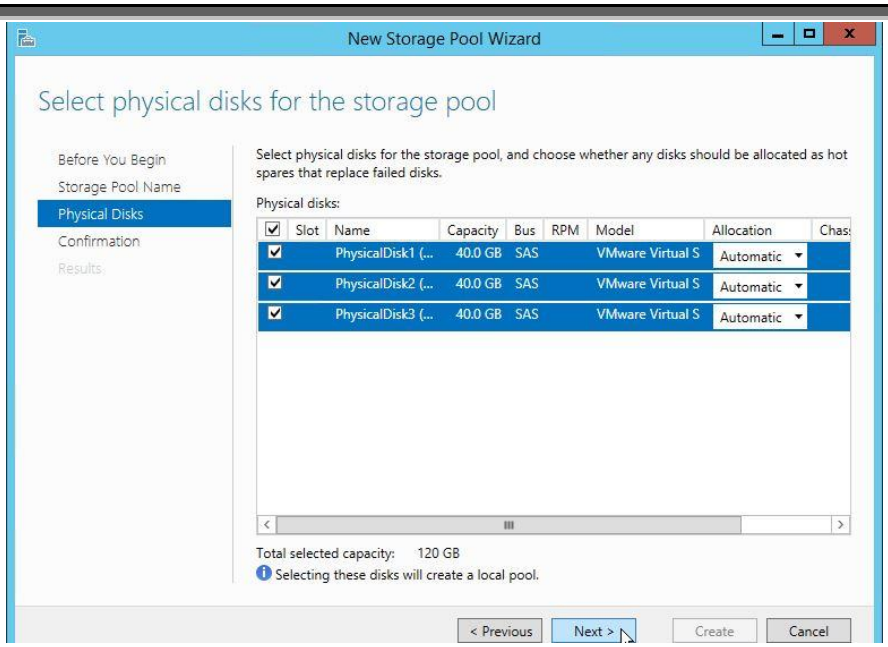


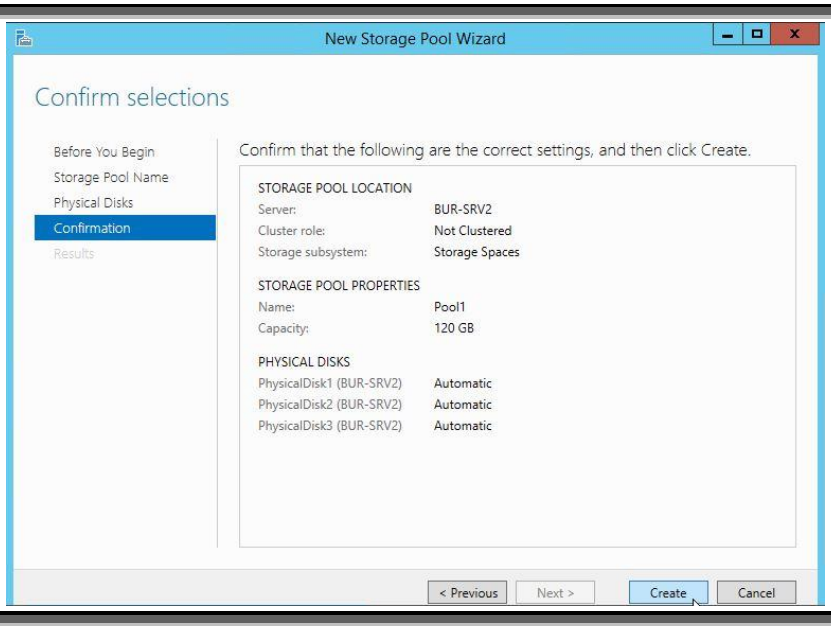

STORAGE POOLS
All storage pools | 1 total
TASKS
Filter
Name
Type
Managed by
Available to
Read-Write Server
Capacity
Free Space
Percent Alloc
Storage Spaces (1)
Primordial
Available Disks
BUR-SRV2
BUR-SRV2
BUR-SRV2
Last refreshed on 7/3/2015 5:28:03 PM
VIRTUAL DISKS
No related data is available.
TASKS
No related virtual disks exist.
To create a virtual disk, start the New Virtual Disk Wizard.
PHYSICAL DISKS
Primordial on BUR-SRV2
TASKS
Filter
Slot
Name
Status
Capacity
Bus
Usage
PhysicalDisk1 (BUR-SRV2)
40.0 GB
SAS
Automatic
PhysicalDisk2 (BUR-SRV2)
40.0 GB
SAS
Automatic
PhysicalDisk3 (BUR-SRV2)
40.0 GB
SAS
Automatic

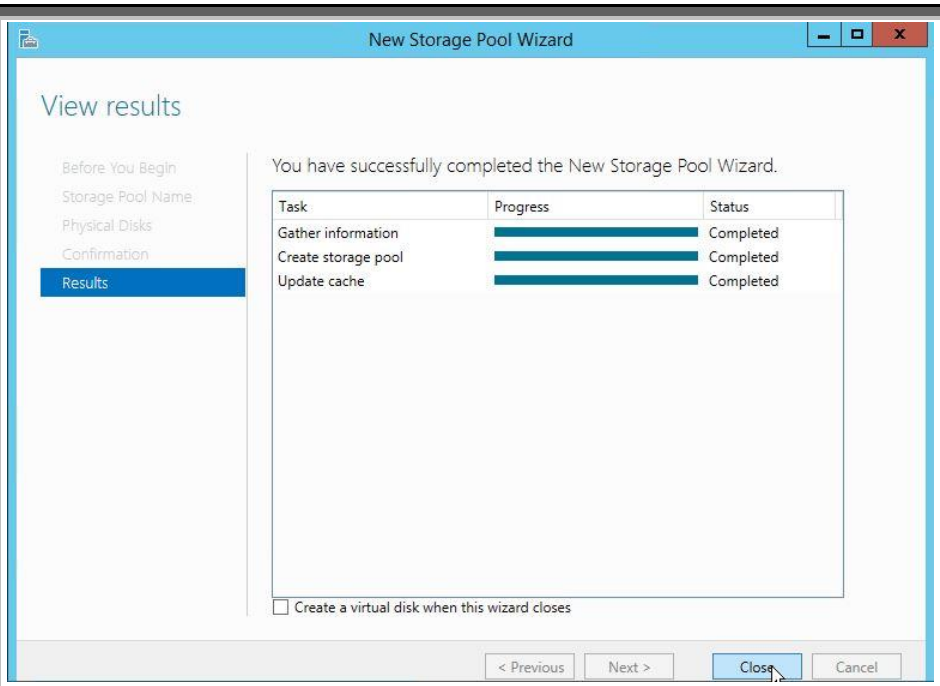
STORAGE POOLS
All storage pools | 1 total
Filter
Name
Type
Managed by
Storage Spaces (1)
Primordial
Available Disks
BUR-SRV2
New Storage Pool...
New Virtual Disk...
Add Physical Disk...
Upgrade Storage Pool Version

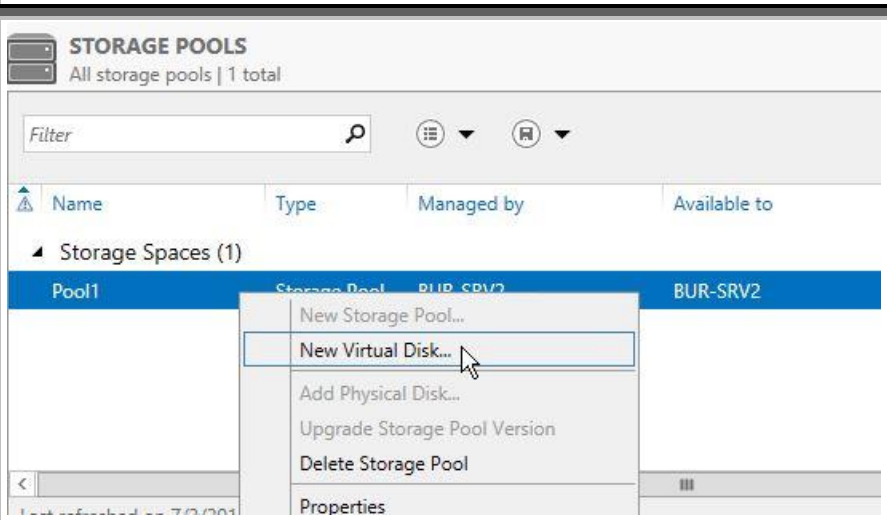
New Storage Pool Wizard
Before you begin
Before You Begin
Storage Pool Name
Physical Disks
Confirmation
Results
This wizard helps you group physical disks into a storage pool, enabling you to make more efficient use of disk capacity. After creating a storage pool, you can use space in the pool to create volumes on virtual disks, which appear as normal disks to the operating system.
To create a storage pool, you must have at least one unused physical disk and a storage subsystem that can manage it, such as the included Storage Spaces subsystem or the subsystem included with a storage device.
To continue, click Next.
Don't show this page again
< Previous
Next >
Create
Cancel

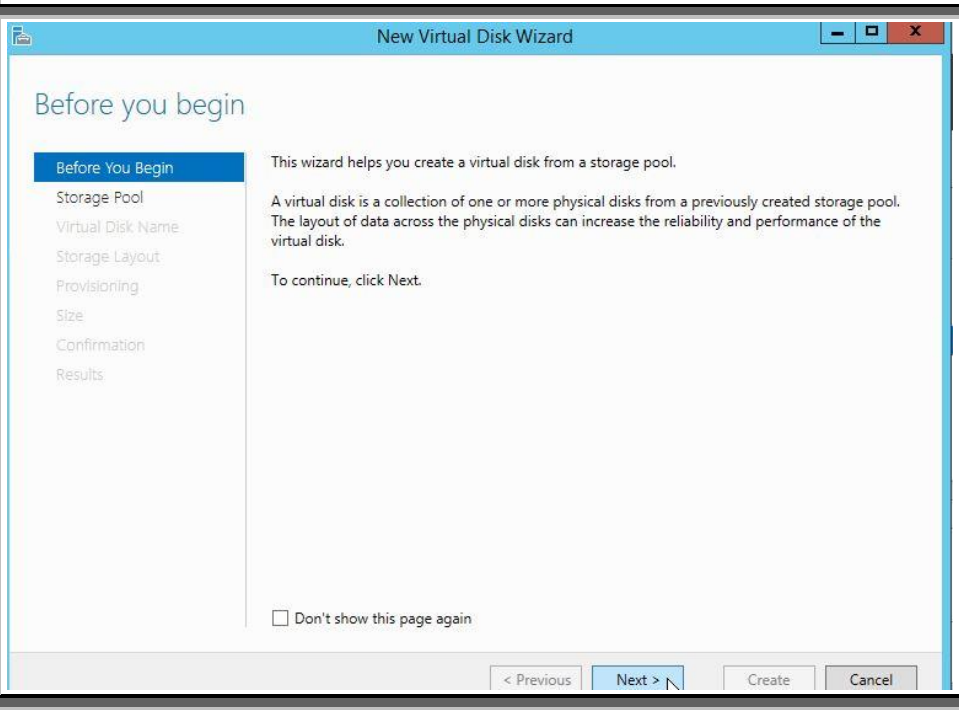

New Storage Pool Wizard
Specify a storage pool name and subsystem
Before You Begin
Storage Pool Name
Physical Disks
Confirmation
Results
Name:
Pool1
Description:
Select the group of available disks (also known as a primordial pool) that you want to use:
Managed by
Available to
Subsystem
Primordial P
BUR-SRV2
BUR-SRV2
Storage Spaces
Primordial
< Previous
Next >
Create
Cancel

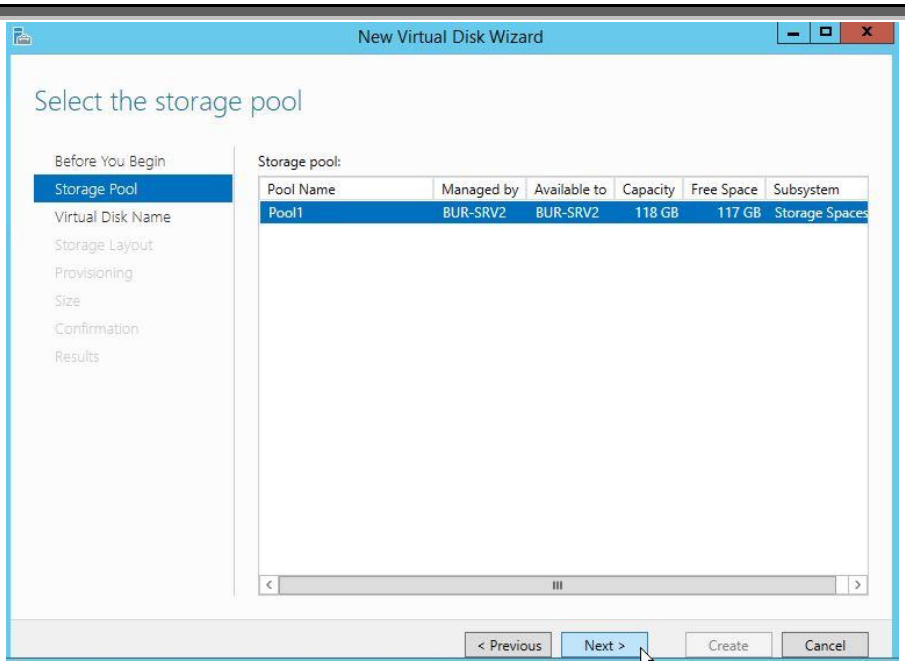

New Storage Pool Wizard
Select physical disks for the storage pool
Before You Begin
Storage Pool Name
Physical Disks
Confirmation
Results
Select physical disks for the storage pool, and choose whether any disks should be allocated as hot spares that replace failed disks.
Physical disks:
Slot
Name
Capacity
Bus
RPM
Model
Allocation
Chas
PhysicalDisk1 (...
40.0 GB
SAS
VMware Virtual S
Automatic
PhysicalDisk2 (...
40.0 GB
SAS
VMware Virtual S
Automatic
PhysicalDisk3 (...
40.0 GB
SAS
VMware Virtual S
Automatic
Total selected capacity: 120 GB
Selecting these disks will create a local pool.
< Previous
Next >
Create
Cancel

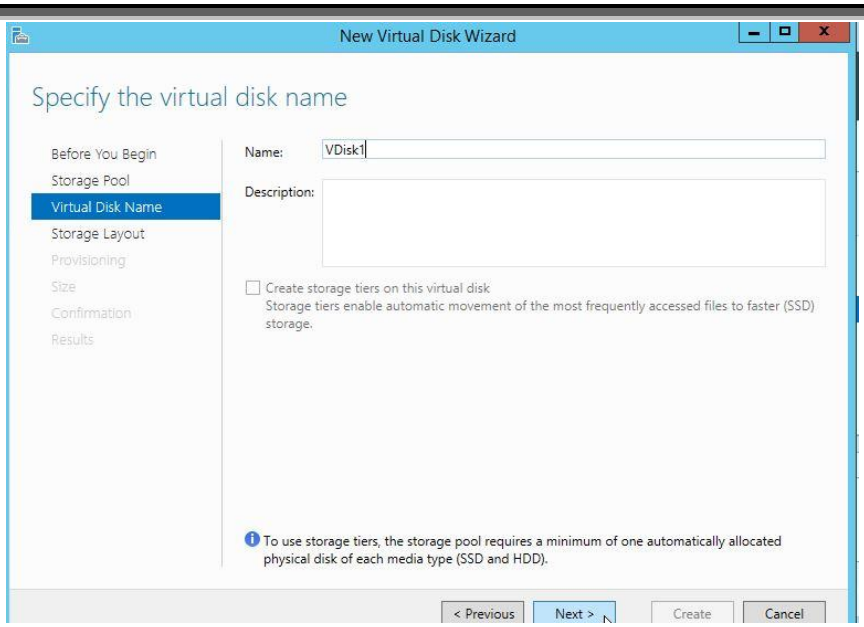

New Storage Pool Wizard
Confirm selections
Before You Begin
Storage Pool Name
Physical Disks
Confirmation
Results
Confirm that the following are the correct settings, and then click Create.
STORAGE POOL LOCATION
Server: BUR-SRV2
Cluster role: Not Clustered
Storage subsystem: Storage Spaces
STORAGE POOL PROPERTIES
Name: Pool1
Capacity: 120 GB
PHYSICAL DISKS
PhysicalDisk1 (BUR-SRV2) Automatic
PhysicalDisk2 (BUR-SRV2) Automatic
PhysicalDisk3 (BUR-SRV2) Automatic
< Previous
Next >
Create
Cancel

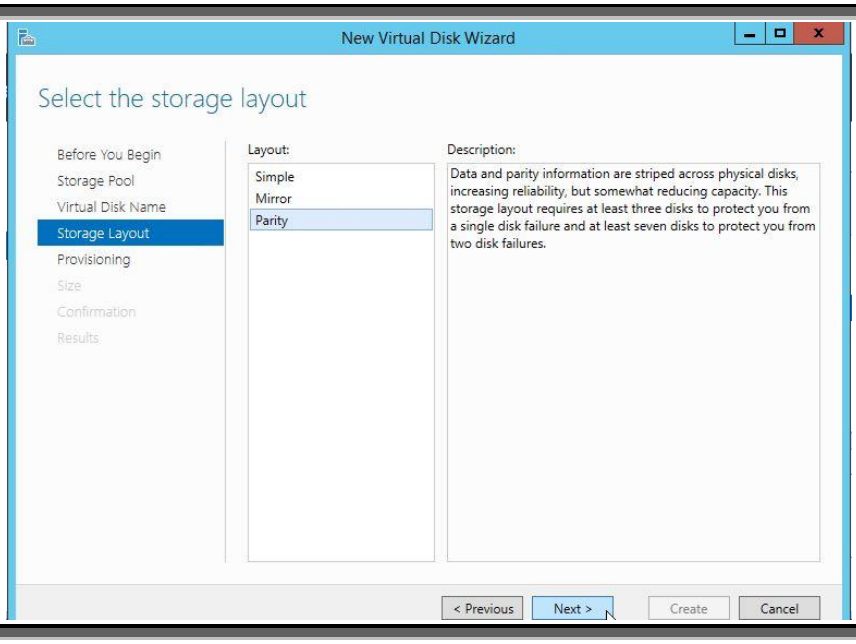

New Storage Pool Wizard
View results
Before You Begin
Storage Pool Name
Physical Disks
Confirmation
Results
You have successfully completed the New Storage Pool Wizard.
Task
Progress
Status
Gather information
Completed
Create storage pool
Completed
Update cache
Completed
Create a virtual disk when this wizard closes
< Previous
Next >
Close
Cancel

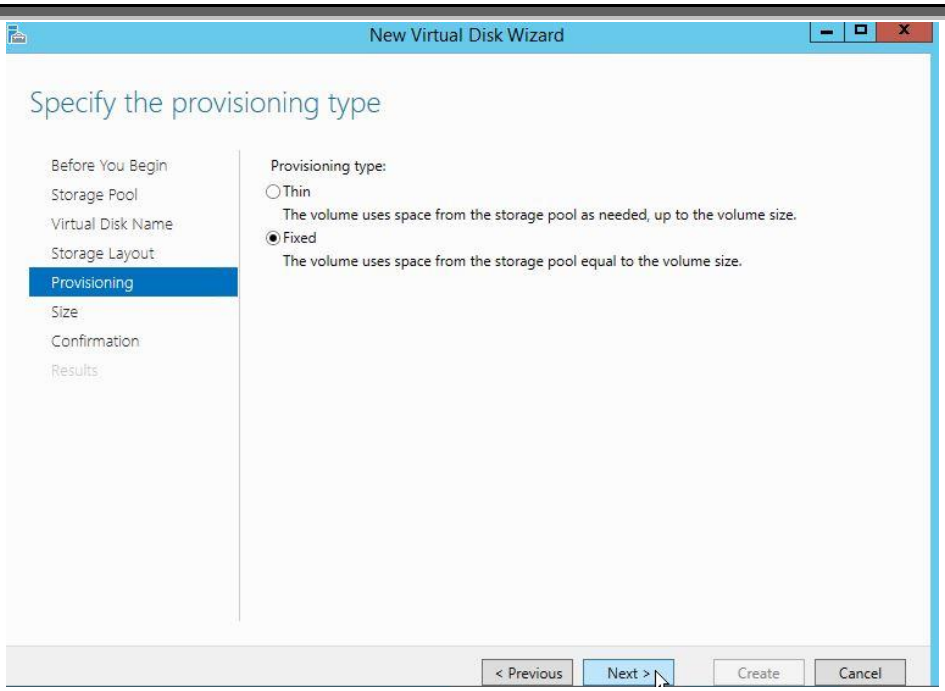

STORAGE POOLS
All storage pools | 1 total
Filter
Name
Type
Managed by
Available to
Storage Spaces (1)
Pool1
BUR-SRV2
New Storage Pool...
New Virtual Disk...
Add Physical Disk...
Upgrade Storage Pool Version
Delete Storage Pool
Properties


New Virtual Disk Wizard
Before you begin
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Results
This wizard helps you create a virtual disk from a storage pool.
A virtual disk is a collection of one or more physical disks from a previously created storage pool. The layout of data across the physical disks can increase the reliability and performance of the virtual disk.
To continue, click Next.
Don't show this page again
< Previous
Next >
Create
Cancel

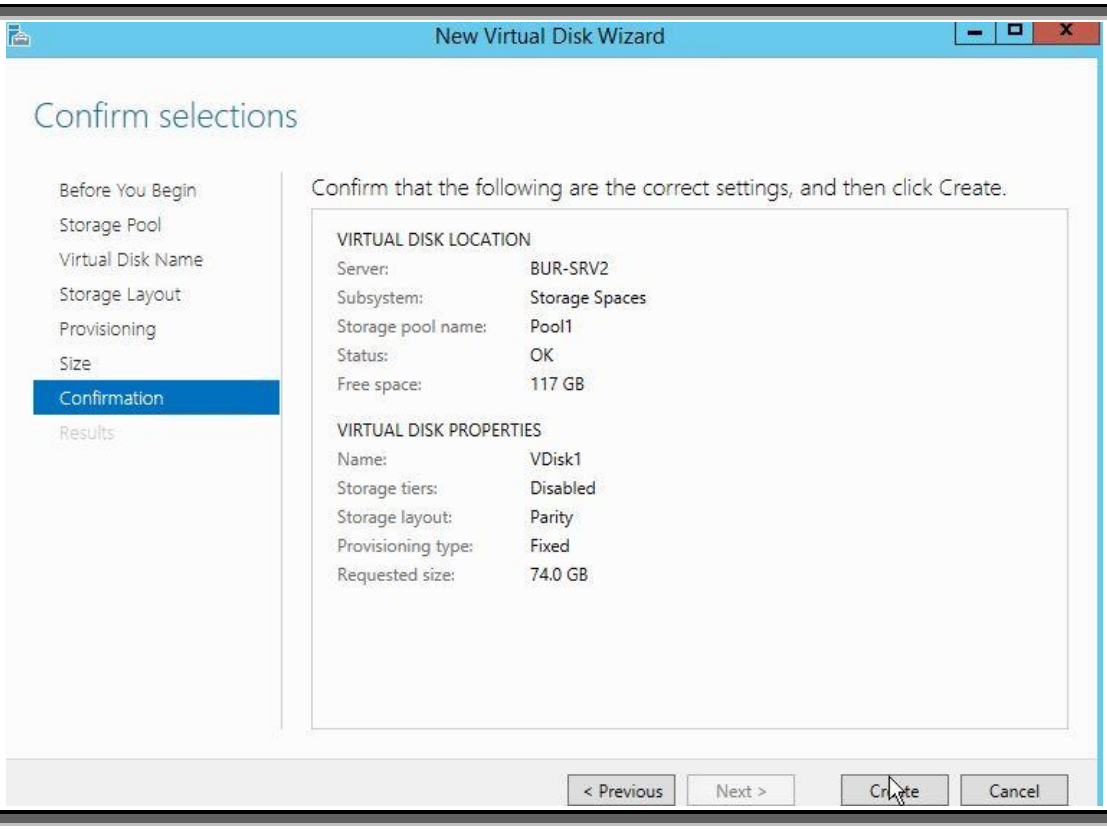

New Virtual Disk Wizard
Select the storage pool
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Results
Storage pool:
Pool Name
Managed by
Available to
Capacity
Free Space
Subsystem
Pool1
BUR-SRV2
BUR-SRV2
118 GB
117 GB
Storage Spaces
< Previous
Next >
Create
Cancel

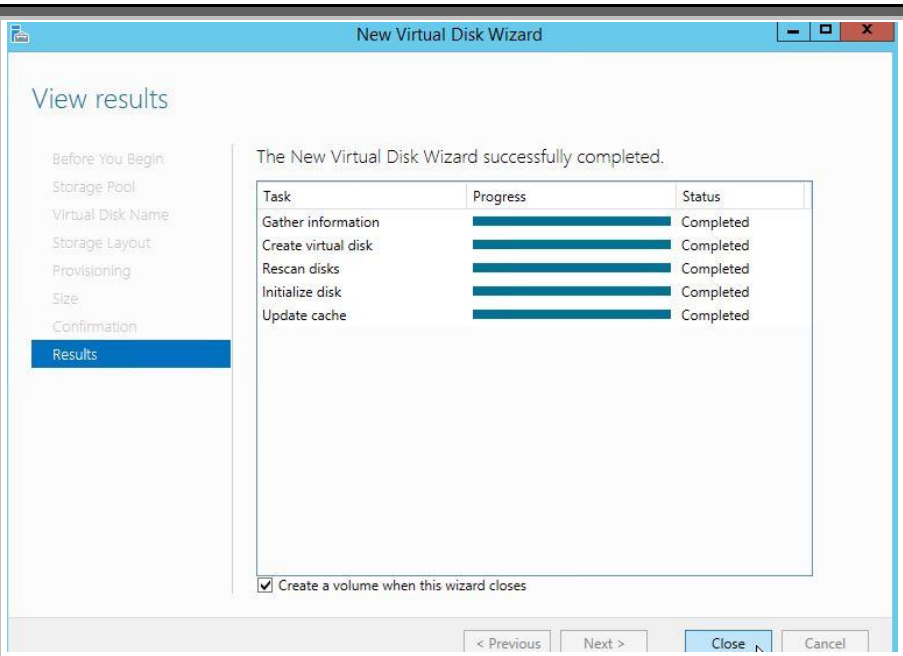

New Virtual Disk Wizard
Specify the virtual disk name
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Results
Name:
VDisk1
Description:
Create storage tiers on this virtual disk
Storage tiers enable automatic movement of the most frequently accessed files to faster (SSD) storage.
To use storage tiers, the storage pool requires a minimum of one automatically allocated physical disk of each media type (SSD and HDD).
< Previous
Next >
Create
Cancel

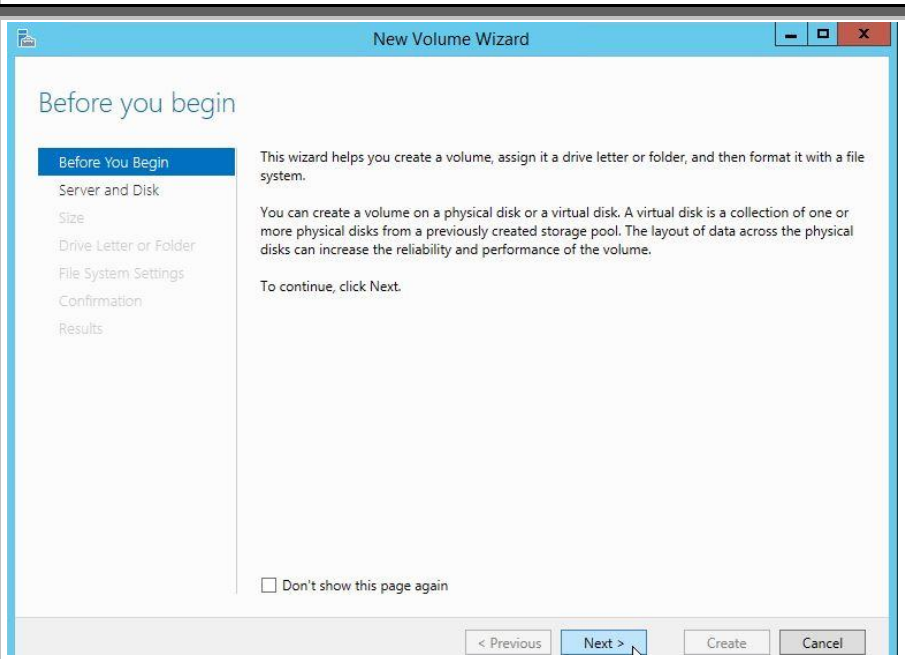

New Virtual Disk Wizard
Select the storage layout
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Results
Layout:
Simple
Mirror
Parity
Description:
Data and parity information are striped across physical disks, increasing reliability, but somewhat reducing capacity. This storage layout requires at least three disks to protect you from a single disk failure and at least seven disks to protect you from two disk failures.
< Previous
Next >
Create
Cancel

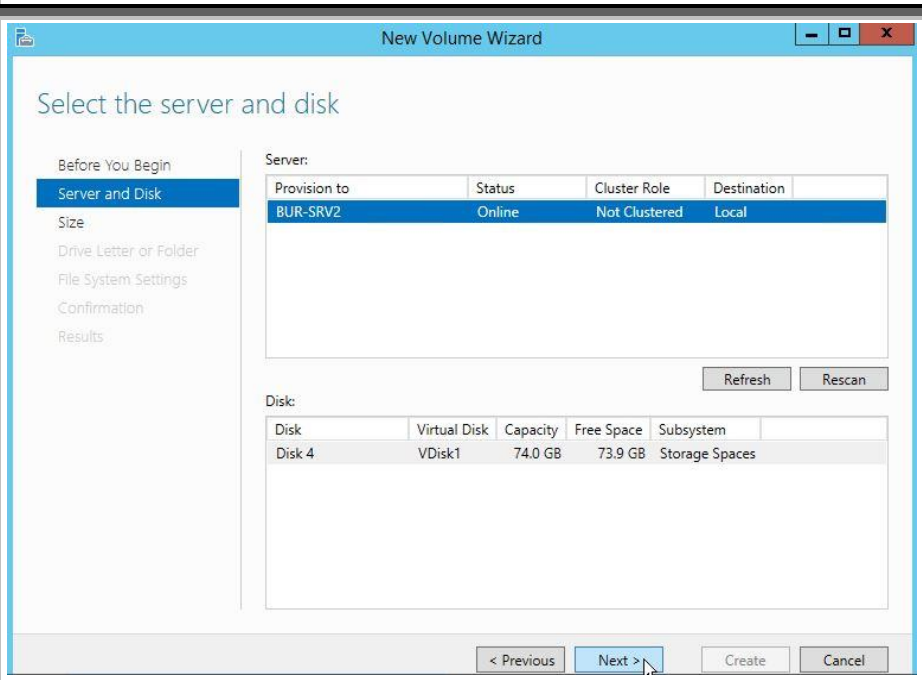

New Virtual Disk Wizard
Specify the provisioning type
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Results
Provisioning type:
Thin
The volume uses space from the storage pool as needed, up to the volume size.
Fixed
The volume uses space from the storage pool equal to the volume size.
< Previous
Next >
Create
Cancel

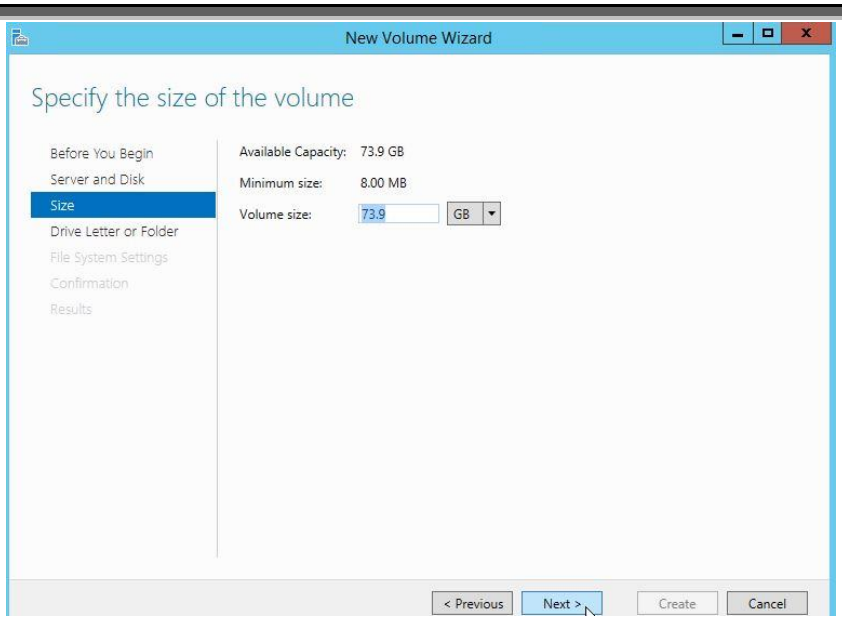
Specify the size of the virtual disk
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Free space in this storage pool: 74.0 GB
Specify size:
74.0
GB
Maximum size

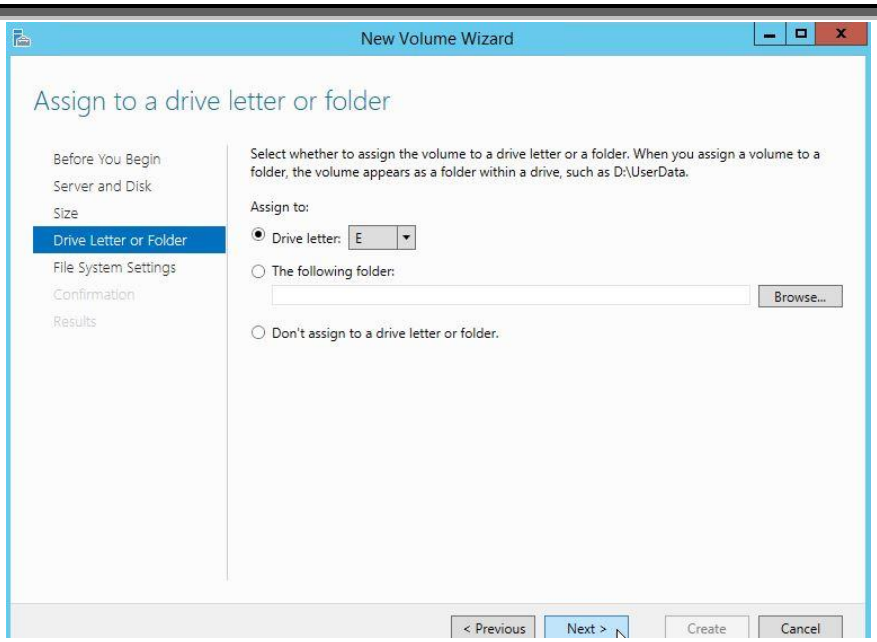

New Virtual Disk Wizard
Confirm selections
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Results
Confirm that the following are the correct settings, and then click Create.
VIRTUAL DISK LOCATION
Server: BUR-SRV2
Subsystem: Storage Spaces
Storage pool name: Pool1
Status: OK
Free space: 117 GB
VIRTUAL DISK PROPERTIES
Name: VDisk1
Storage tiers: Disabled
Storage layout: Parity
Provisioning type: Fixed
Requested size: 74.0 GB
< Previous
Next >
Create
Cancel

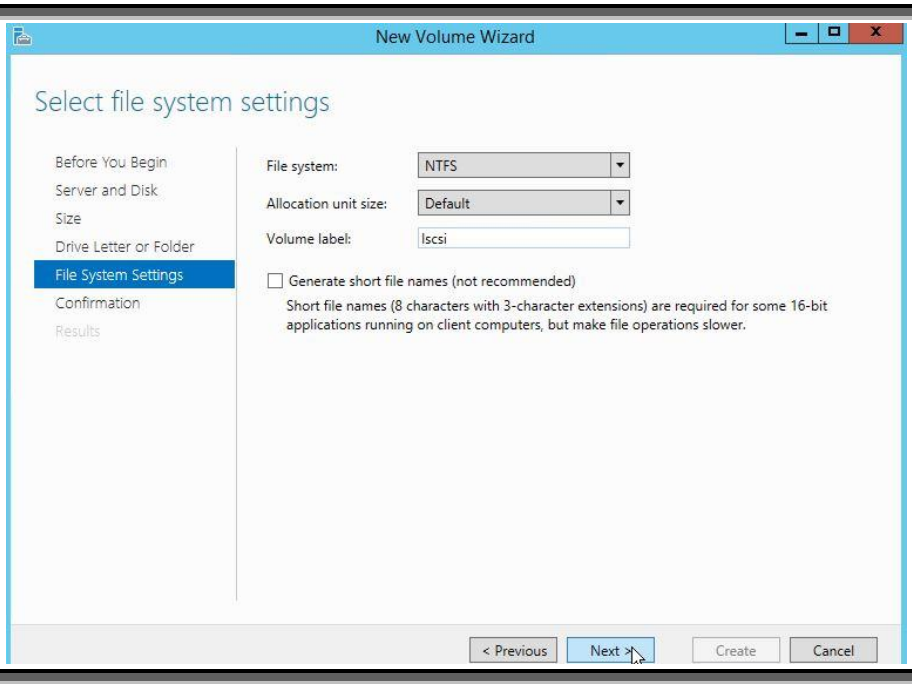

New Virtual Disk Wizard
View results
Before You Begin
Storage Pool
Virtual Disk Name
Storage Layout
Provisioning
Size
Confirmation
Results
The New Virtual Disk Wizard successfully completed.
Task
Progress
Status
Gather information
Completed
Create virtual disk
Completed
Rescan disks
Completed
Initialize disk
Completed
Update cache
Completed
Create a volume when this wizard closes
< Previous
Next >
Close
Cancel

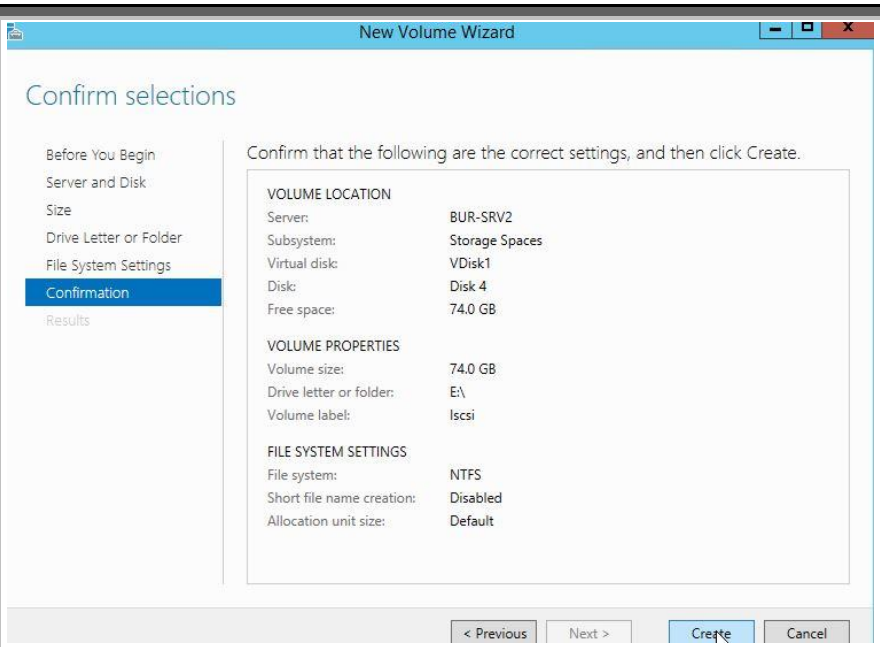

New Volume Wizard
Before you begin
Before You Begin
Server and Disk
Size
Drive Letter or Folder
File System Settings
Confirmation
Results
This wizard helps you create a volume, assign it a drive letter or folder, and then format it with a file system.
You can create a volume on a physical disk or a virtual disk. A virtual disk is a collection of one or more physical disks from a previously created storage pool. The layout of data across the physical disks can increase the reliability and performance of the volume.
To continue, click Next.
Don't show this page again
< Previous
Next >
Create
Cancel

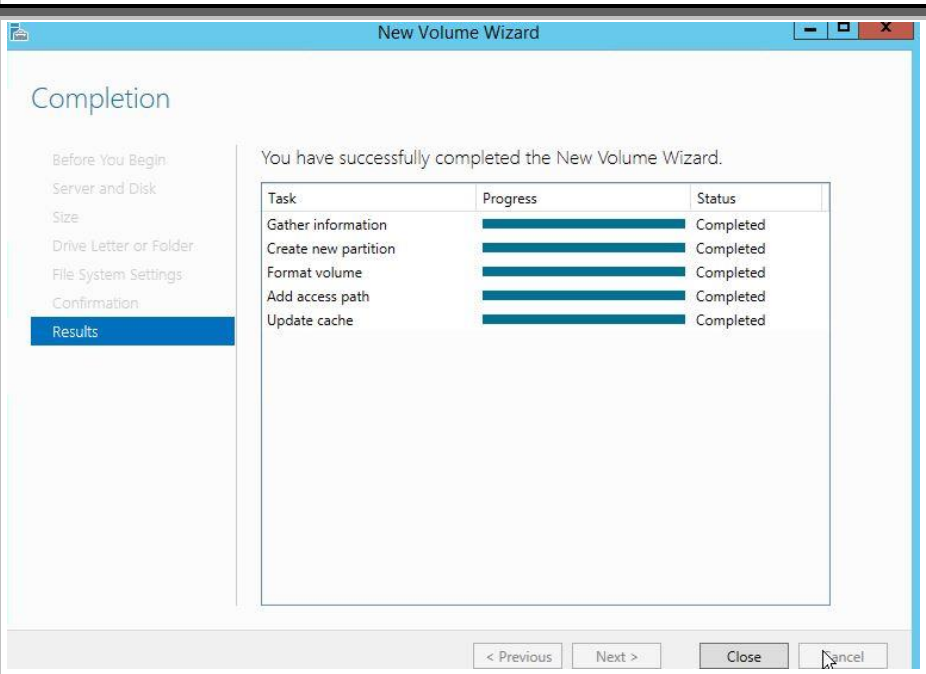

New Volume Wizard
Select the server and disk
Before You Begin
Server and Disk
Size
Drive Letter or Folder
File System Settings
Confirmation
Results
Server:
Provision to
Status
Cluster Role
Destination
BUR-SRV2
Online
Not Clustered
Local
Refresh
Rescan
Disk:
Disk
Virtual Disk
Capacity
Free Space
Subsystem
Disk 4
VDisk1
74.0 GB
73.9 GB
Storage Spaces
< Previous
Next >
Create
Cancel

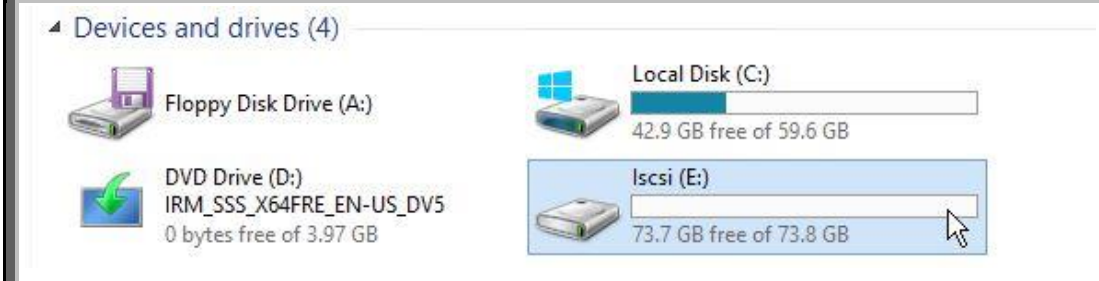

New Volume Wizard
Specify the size of the volume
Before You Begin
Server and Disk
Size
Drive Letter or Folder
File System Settings
Confirmation
Results
Available Capacity: 73.9 GB
Minimum size: 8.00 MB
Volume size: 73.9 GB
< Previous
Next >
Create
Cancel

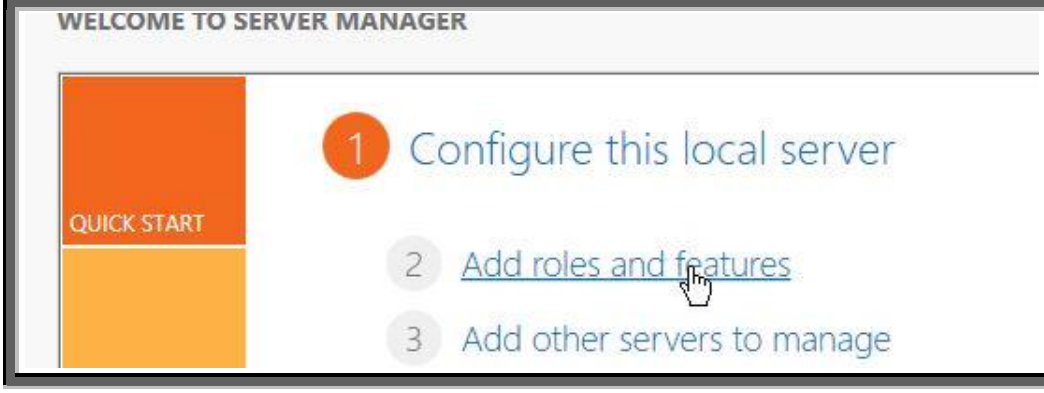

New Volume Wizard
Assign to a drive letter or folder
Before You Begin
Server and Disk
Size
Drive Letter or Folder
File System Settings
Confirmation
Results
Select whether to assign the volume to a drive letter or a folder. When you assign a volume to a folder, the volume appears as a folder within a drive, such as D:\UserData.
Assign to:
Drive letter: E
The following folder:
Browse...
Don't assign to a drive letter or folder.
< Previous
Next >
Create
Cancel

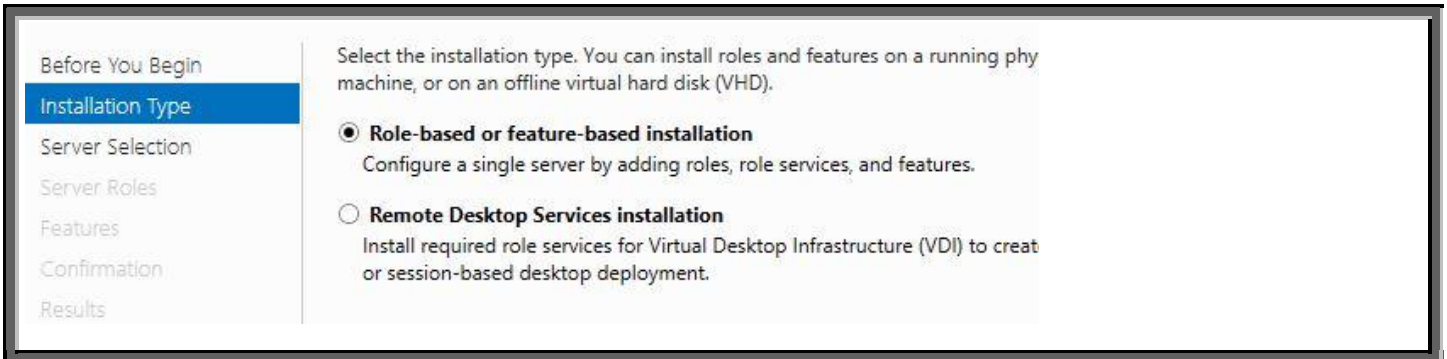

New Volume Wizard
Select file system settings
Before You Begin
Server and Disk
Size
Drive Letter or Folder
File System Settings
Confirmation
Results
File system: NTFS
Allocation unit size: Default
Volume label: Iscsi
Generate short file names (not recommended)
Short file names (8 characters with 3-character extensions) are required for some 16-bit applications running on client computers, but make file operations slower.
< Previous
Next >
Create
Cancel


New Volume Wizard
Confirm selections
Before You Begin
Server and Disk
Size
Drive Letter or Folder
File System Settings
Confirmation
Results
Confirm that the following are the correct settings, and then click Create.
VOLUME LOCATION
Server: BUR-SRV2
Subsystem: Storage Spaces
Virtual disk: VDisk1
Disk: Disk 4
Free space: 74.0 GB
VOLUME PROPERTIES
Volume size: 74.0 GB
Drive letter or folder: E:\
Volume label: Iscsi
FILE SYSTEM SETTINGS
File system: NTFS
Short file name creation: Disabled
Allocation unit size: Default
< Previous
Next >
Create
Cancel

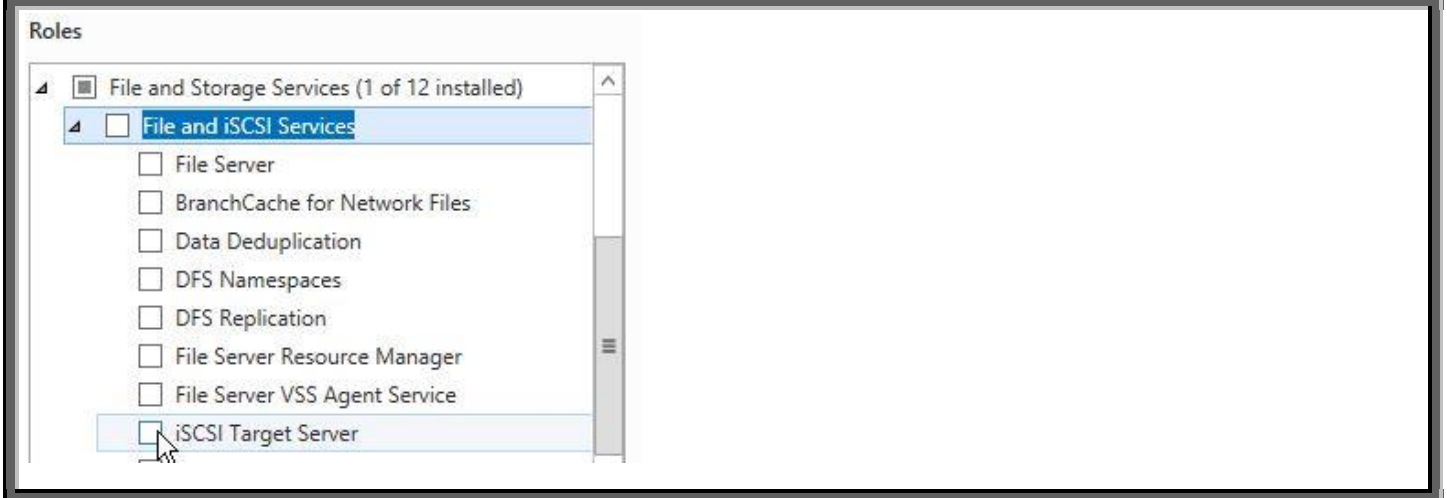

New Volume Wizard
Completion
Before You Begin
Server and Disk
Size
Drive Letter or Folder
File System Settings
Confirmation
Results
You have successfully completed the New Volume Wizard.
Task
Progress
Status
Gather information
Completed
Create new partition
Completed
Format volume
Completed
Add access path
Completed
Update cache
Completed
< Previous
Next >
Close
Cancel

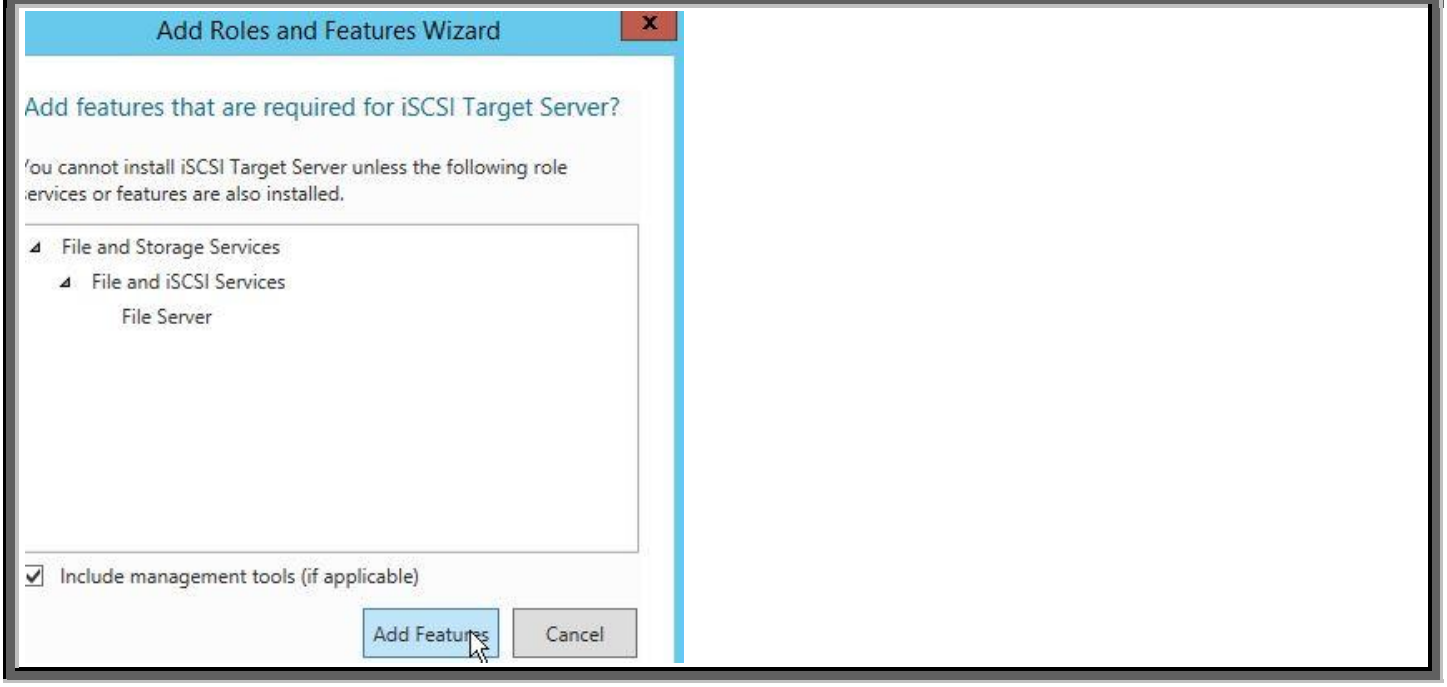

Devices and drives (4)
Floppy Disk Drive (A:)
Local Disk (C:)
42.9 GB free of 59.6 GB
DVD Drive (D:)
IRM_SSS_X64FRE_EN-US_DV5
0 bytes free of 3.97 GB
Iscsi (E:)
73.7 GB free of 73.8 GB

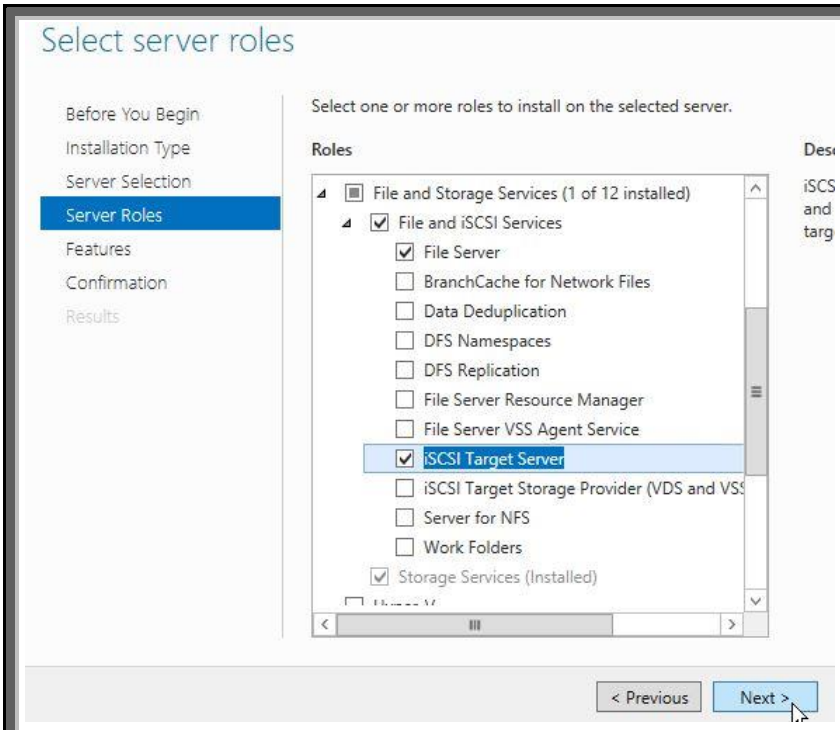

WELCOME TO SERVER MANAGER
QUICK START
1 Configure this local server
2 Add roles and features
3 Add other servers to manage

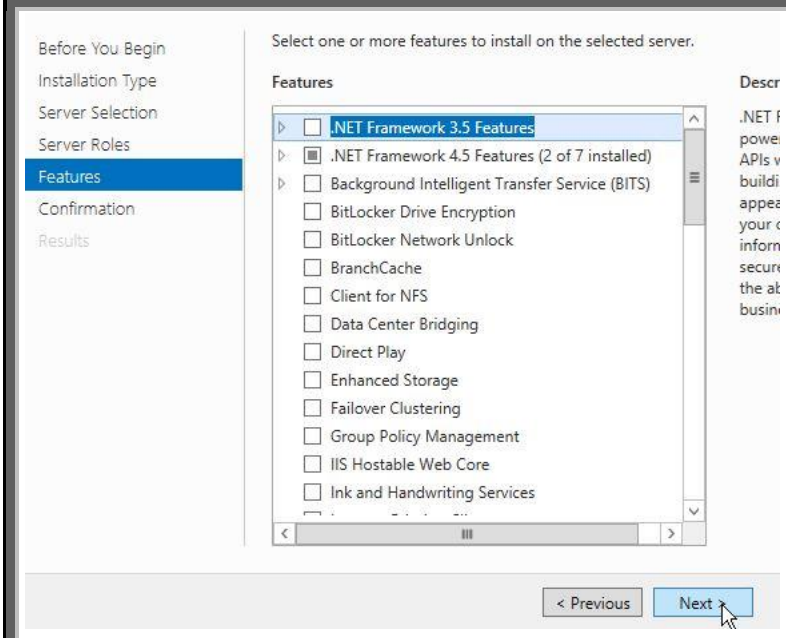

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select the installation type. You can install roles and features on a running phy
machine, or on an offline virtual hard disk (VHD).
Role-based or feature-based installation
Configure a single server by adding roles, role services, and features.
Remote Desktop Services installation
Install required role services for Virtual Desktop Infrastructure (VDI) to creat
or session-based desktop deployment.

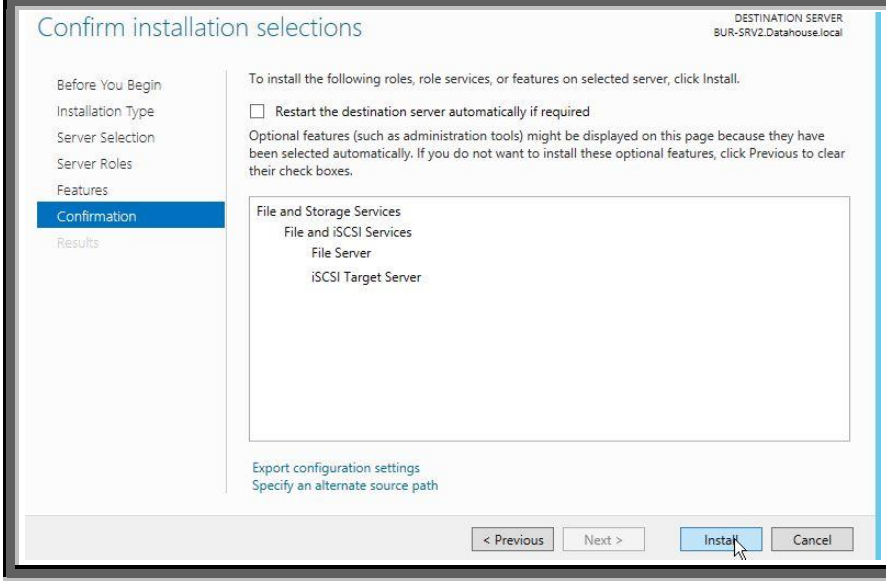
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select a server or a virtual hard disk on which to install roles and features.
Select a server from the server pool
Select a virtual hard disk
Server Pool
Filter:
Name
IP Address
Operating System
BUR-SRV2.Datahouse.lo...
192.168.1.3
Microsoft Windows Server 2012 R2 Datacenter

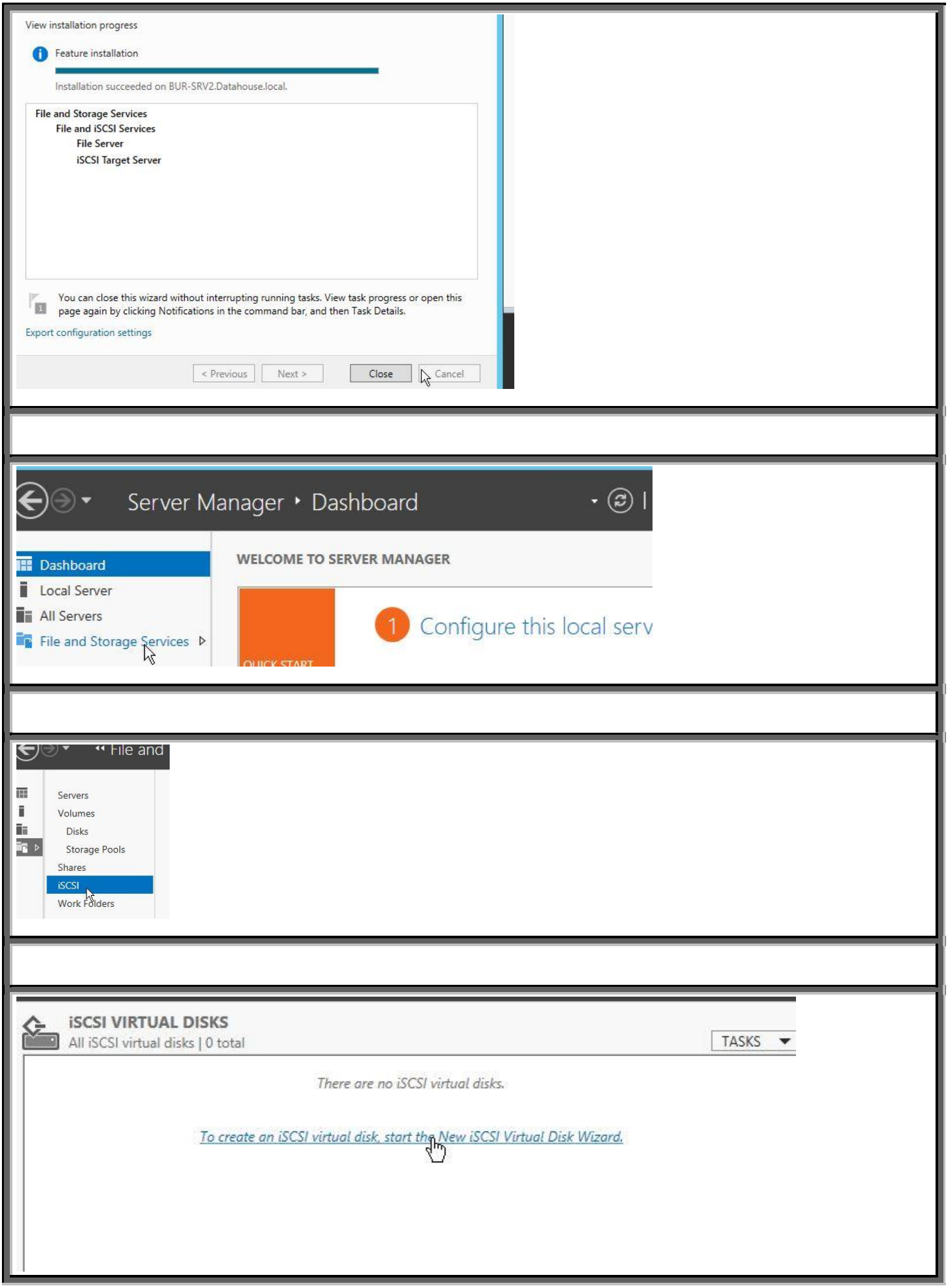

Roles
File and Storage Services (1 of 12 installed)
File and iSCSI Services
File Server
BranchCache for Network Files
Data Deduplication
DFS Namespaces
DFS Replication
File Server Resource Manager
File Server VSS Agent Service
iSCSI Target Server

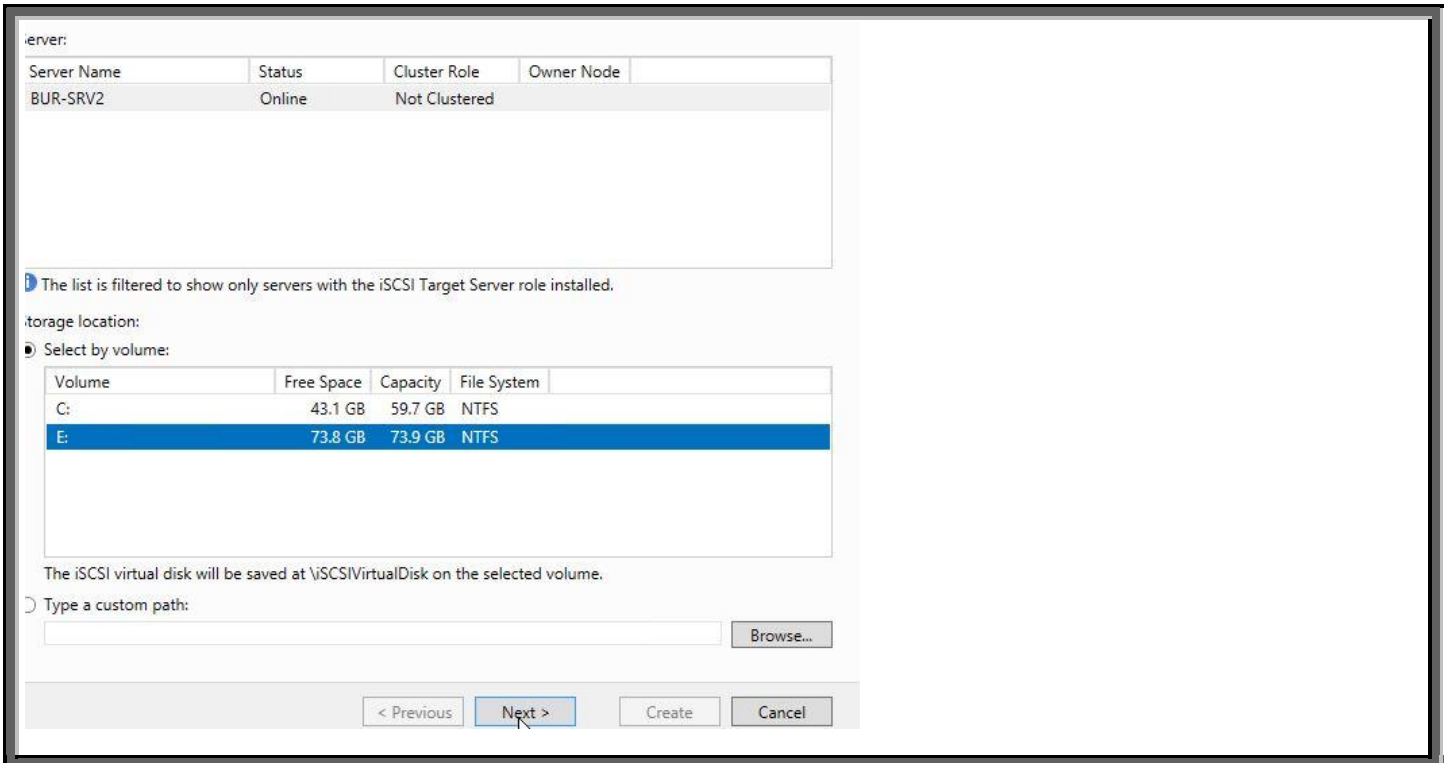

Add Roles and Features Wizard
Add features that are required for iSCSI Target Server?
ou cannot install iSCSI Target Server unless the following role
ervices or features are also installed.
File and Storage Services
File and iSCSI Services
File Server
Include management tools (if applicable)
Add Features
Cancel

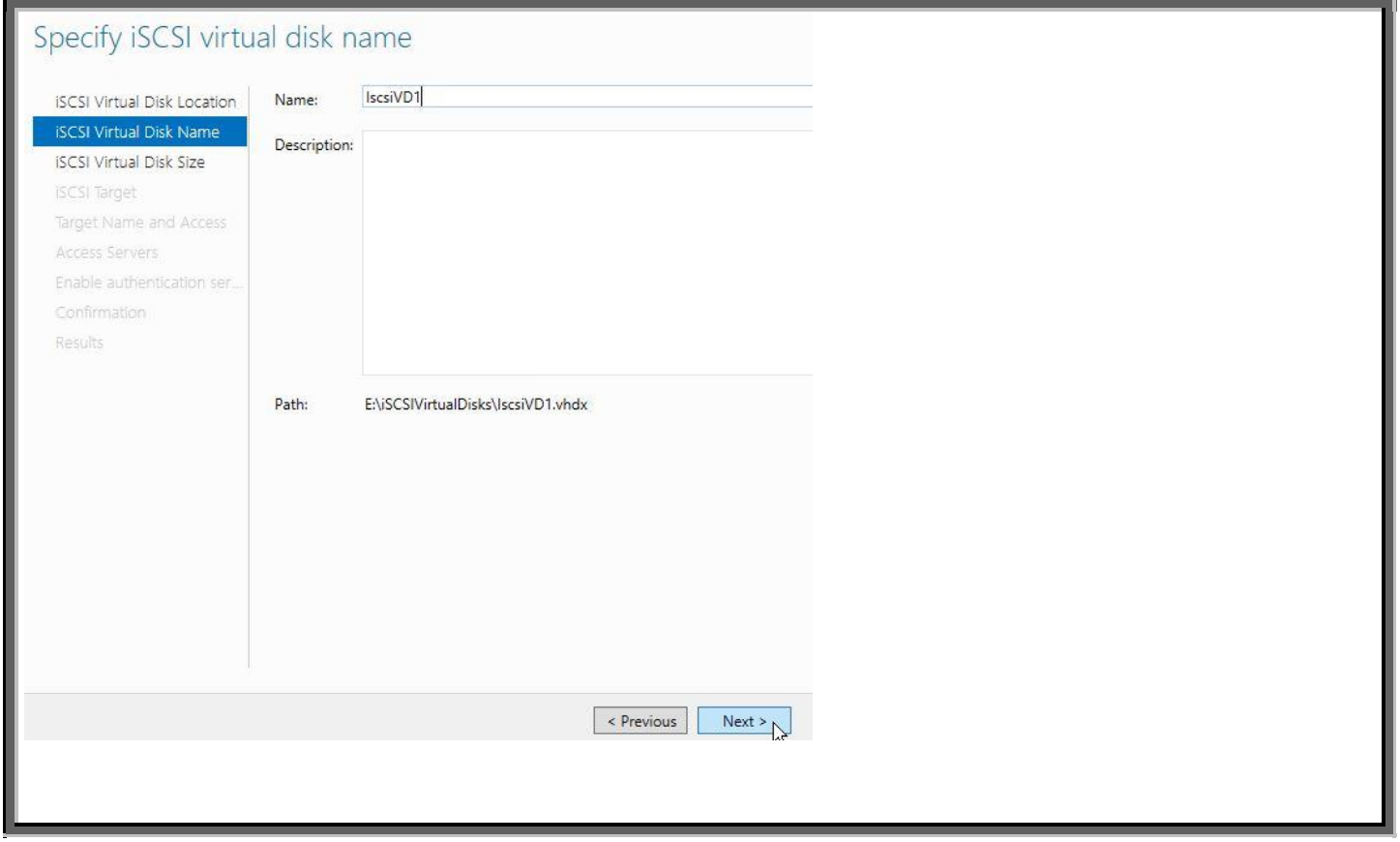

Select server roles
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more roles to install on the selected server.
Roles
File and Storage Services (1 of 12 installed)
File and iSCSI Services
File Server
BranchCache for Network Files
Data Deduplication
DFS Namespaces
DFS Replication
File Server Resource Manager
File Server VSS Agent Service
iSCSI Target Server
iSCSI Target Storage Provider (VDS and VSS
Server for NFS
Work Folders
Storage Services (Installed)
< Previous
Next >

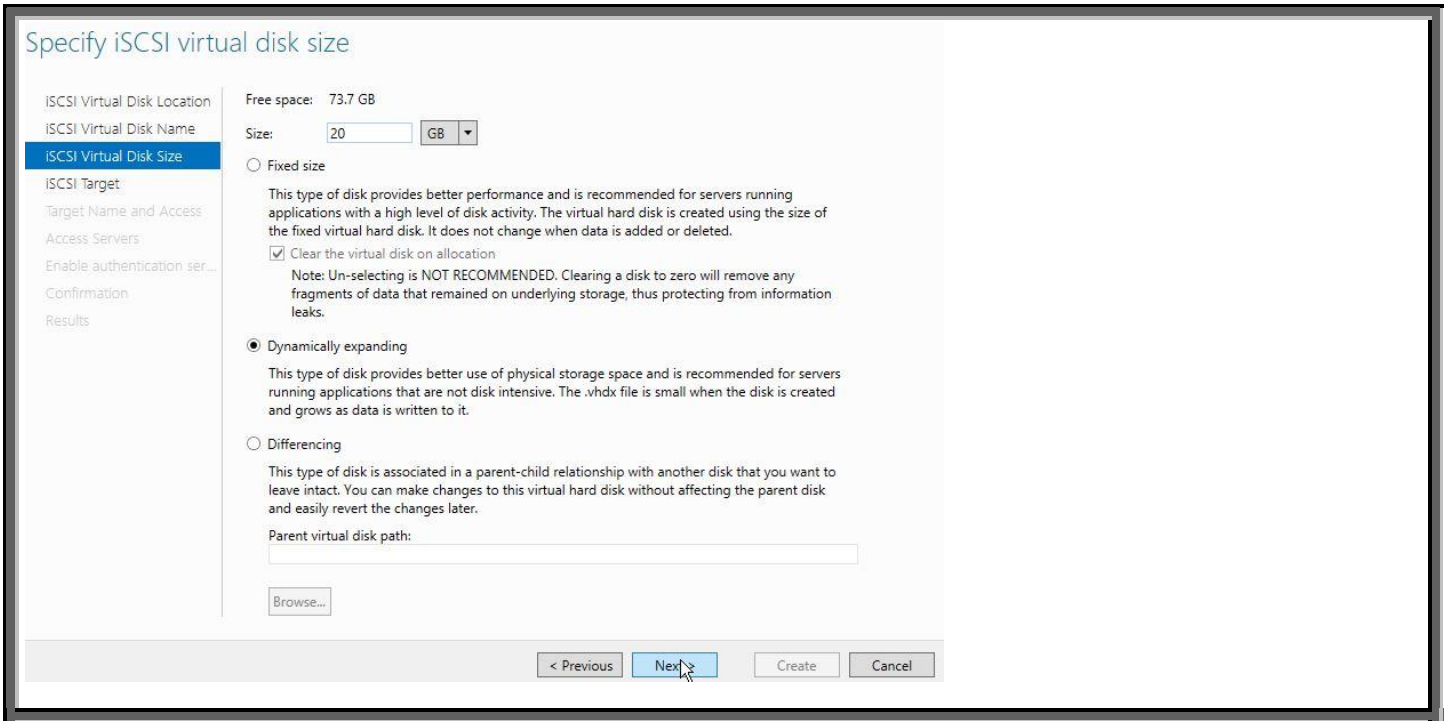

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select one or more features to install on the selected server.
Features
.NET Framework 3.5 Features
.NET Framework 4.5 Features (2 of 7 installed)
Background Intelligent Transfer Service (BITS)
BitLocker Drive Encryption
BitLocker Network Unlock
BranchCache
Client for NFS
Data Center Bridging
Direct Play
Enhanced Storage
Failover Clustering
Group Policy Management
IIS Hostable Web Core
Ink and Handwriting Services
< Previous
Next >

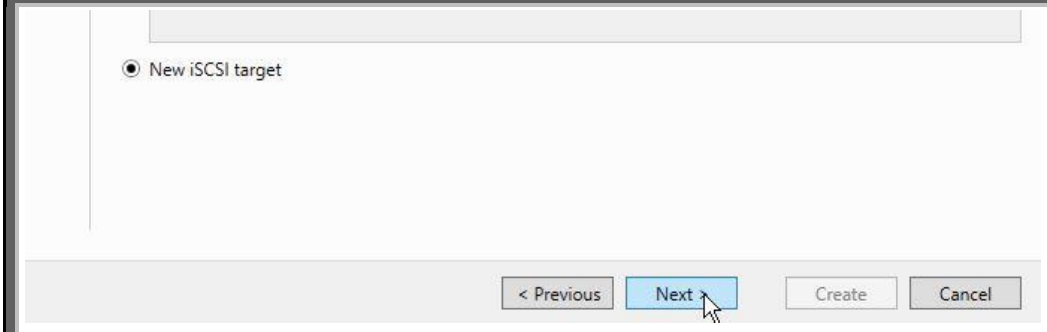

Confirm installation selections
DESTINATION SERVER
BUR-SRV2.Datahouse.local
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
To install the following roles, role services, or features on selected server, click Install.
Restart the destination server automatically 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
File Server
iSCSI Target Server
Export configuration settings
Specify an alternate source path
< Previous
Next >
Install
Cancel

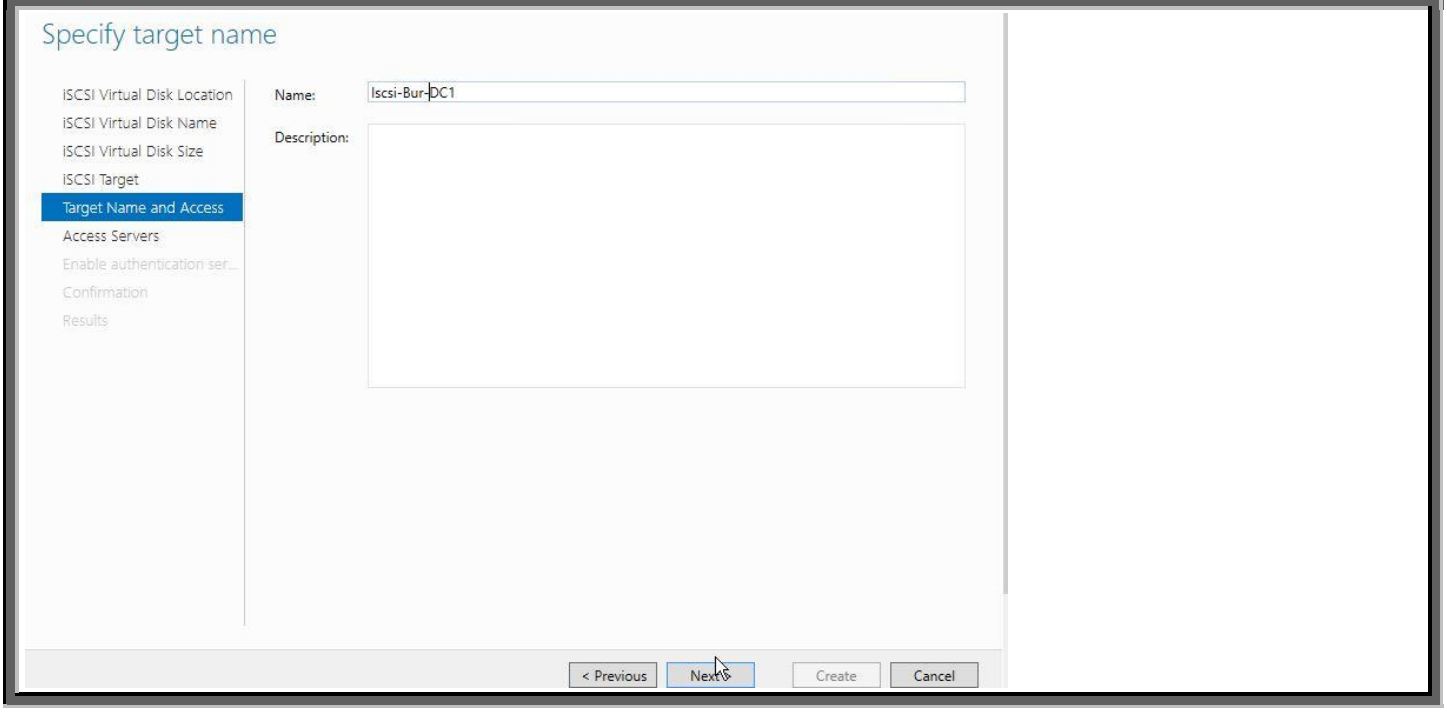

View installation progress
Feature installation
Installation succeeded on BUR-SRV2.Datahouse.local.
File and Storage Services
File and iSCSI Services
File Server
iSCSI Target Server
You can close this wizard without interrupting running tasks. View task progress or open this page again by clicking Notifications in the command bar, and then Task Details.
Export configuration settings
< Previous
Next >
Close
Cancel
Server Manager ‣ Dashboard
Dashboard
Local Server
All Servers
File and Storage Services
WELCOME TO SERVER MANAGER
1 Configure this local serv
QUICK START
File and
Servers
Volumes
Disks
Storage Pools
Shares
iSCSI
Work Folders
iSCSI VIRTUAL DISKS
All iSCSI virtual disks | 0 total
TASKS
There are no iSCSI virtual disks.
To create an iSCSI virtual disk, start the New iSCSI Virtual Disk Wizard.

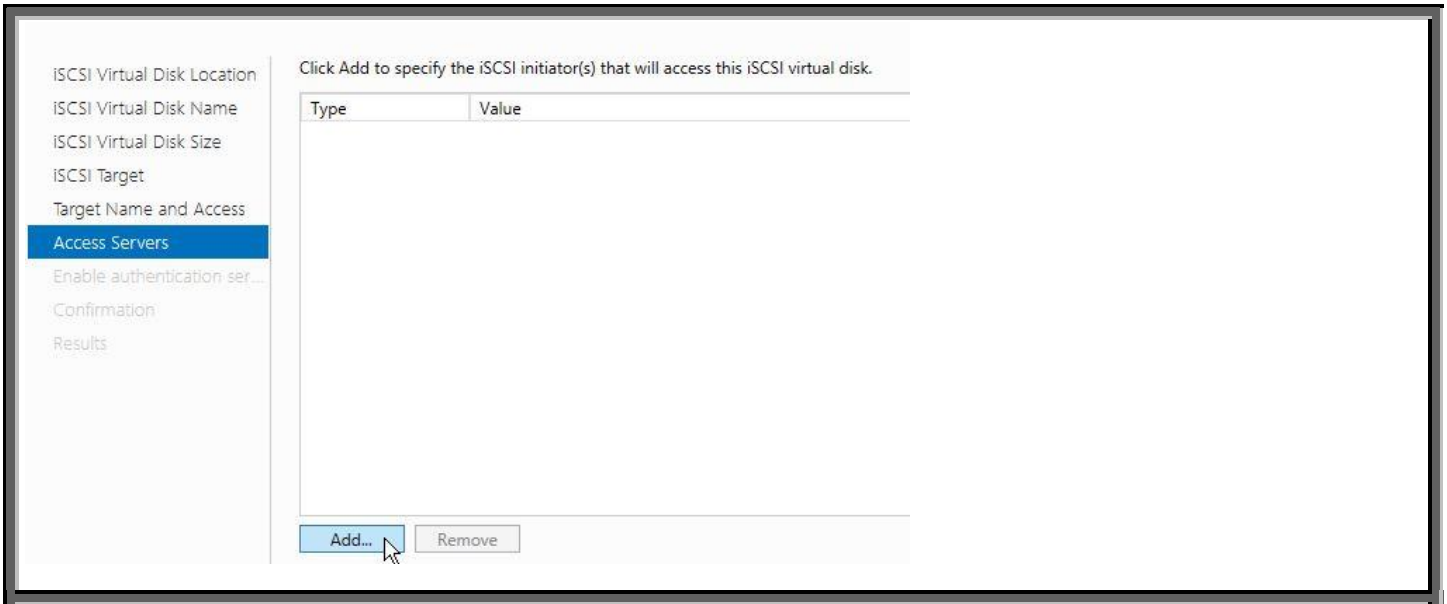

erver:
Server Name
Status
Cluster Role
Owner Node
BUR-SRV2
Online
Not Clustered
The list is filtered to show only servers with the iSCSI Target Server role installed.
torage location:
Select by volume:
Volume
Free Space
Capacity
File System
C:
43.1 GB
59.7 GB
NTFS
E:
73.8 GB
73.9 GB
NTFS
The iSCSI virtual disk will be saved at \iSCSIVirtualDisk on the selected volume.
Type a custom path:
Browse...
< Previous
Next >
Create
Cancel

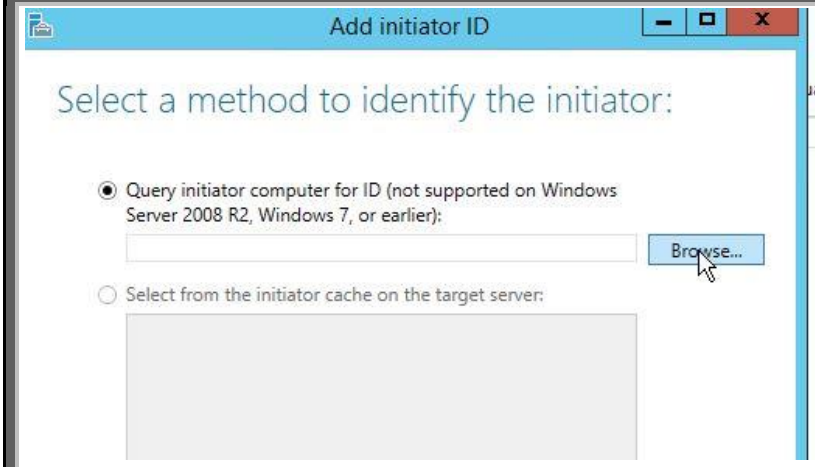

Specify iSCSI virtual disk name
iSCSI Virtual Disk Location
iSCSI Virtual Disk Name
iSCSI Virtual Disk Size
iSCSI Target
Target Name and Access
Access Servers
Enable authentication ser...
Confirmation
Results
Name:
IscsiVD1
Description:
Path:
E:\iSCSIVirtualDisks\IscsiVD1.vhdx
< Previous
Next >

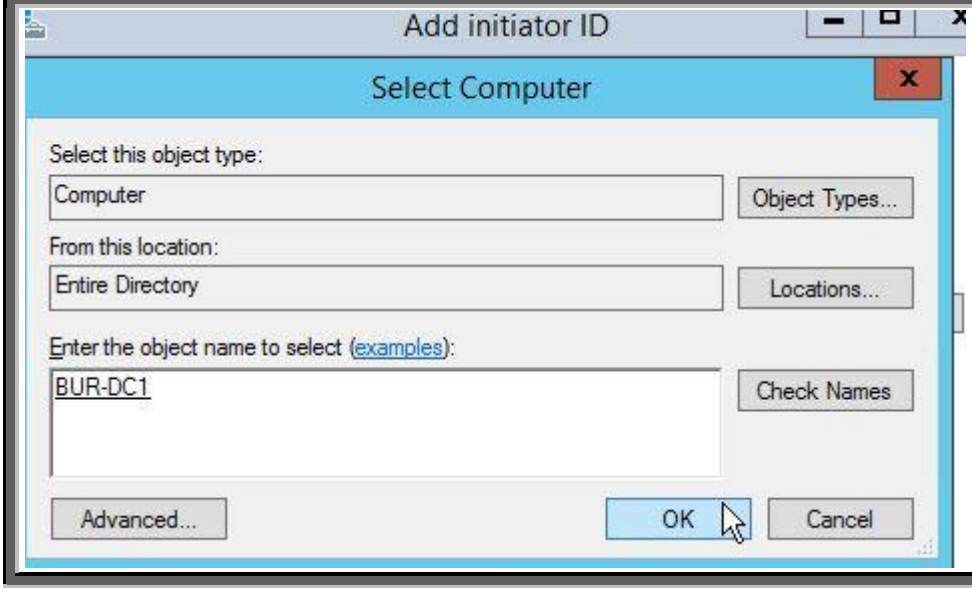

Specify iSCSI virtual disk size
iSCSI Virtual Disk Location
iSCSI Virtual Disk Name
iSCSI Virtual Disk Size
iSCSI Target
Target Name and Access
Access Servers
Enable authentication ser...
Confirmation
Results
Free space: 73.7 GB
Size: 20 GB
Fixed size
This type of disk provides better performance and is recommended for servers running applications with a high level of disk activity. The virtual hard disk is created using the size of the fixed virtual hard disk. It does not change when data is added or deleted.
Clear the virtual disk on allocation
Note: Un-selecting is NOT RECOMMENDED. Clearing a disk to zero will remove any fragments of data that remained on underlying storage, thus protecting from information leaks.
Dynamically expanding
This type of disk provides better use of physical storage space and is recommended for servers running applications that are not disk intensive. The .vhdx file is small when the disk is created and grows as data is written to it.
Differencing
This type of disk is associated in a parent-child relationship with another disk that you want to leave intact. You can make changes to this virtual hard disk without affecting the parent disk and easily revert the changes later.
Parent virtual disk path:
Browse...
< Previous
Next >
Create
Cancel

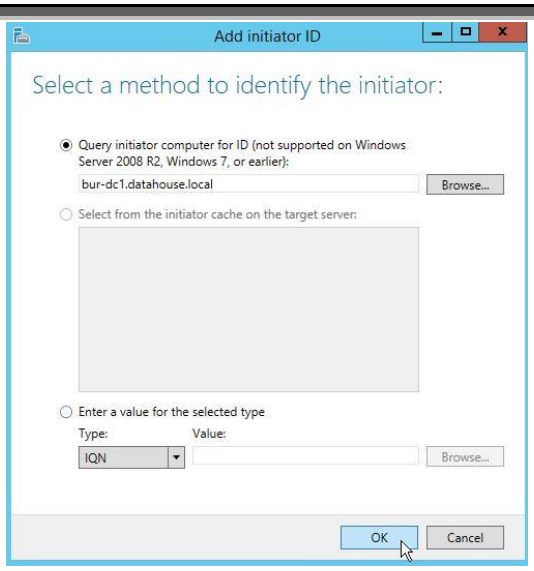

New iSCSI target
< Previous
Next >
Create
Cancel

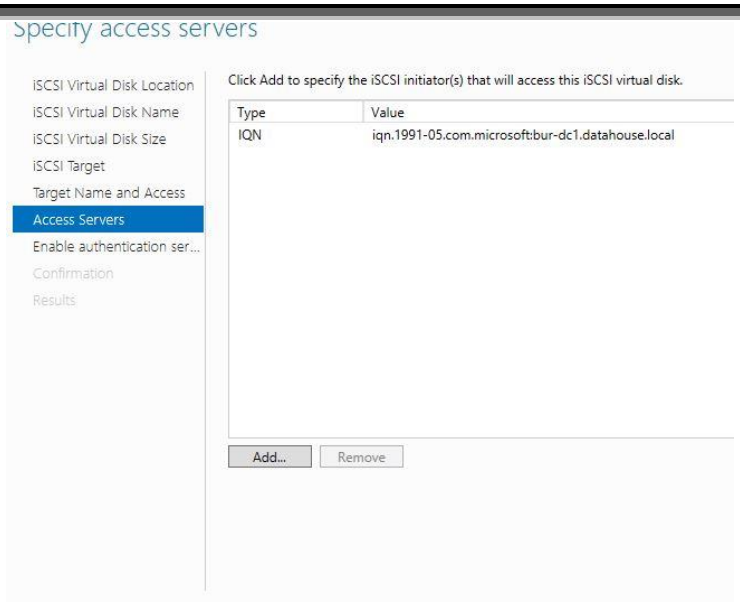

Specify target name
iSCSI Virtual Disk Location
iSCSI Virtual Disk Name
iSCSI Virtual Disk Size
iSCSI Target
Target Name and Access
Access Servers
Enable authentication ser...
Confirmation
Results
Name: Iscsi-Bur-DC1
Description:
< Previous
Next >
Create
Cancel

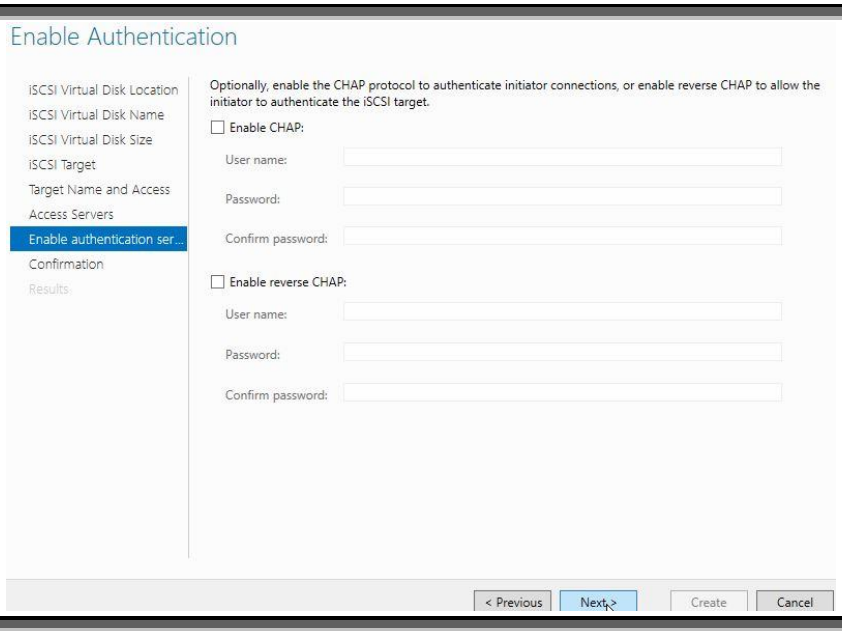

iSCSI Virtual Disk Location
iSCSI Virtual Disk Name
iSCSI Virtual Disk Size
iSCSI Target
Target Name and Access
Access Servers
Enable authentication ser...
Confirmation
Results
Click Add to specify the iSCSI initiator(s) that will access this iSCSI virtual disk.
Type
Value
Add...
Remove

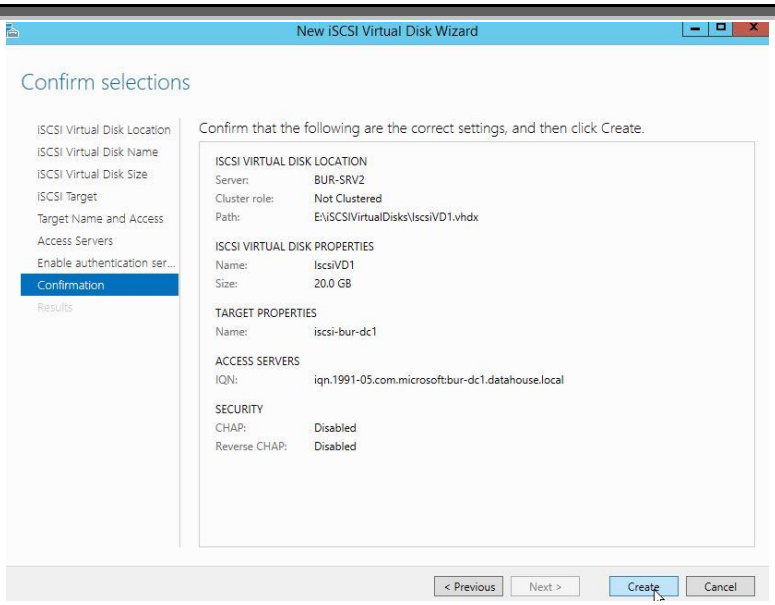

Add initiator ID
Select a method to identify the initiator:
Query initiator computer for ID (not supported on Windows Server 2008 R2, Windows 7, or earlier):
Browse...
Select from the initiator cache on the target server:

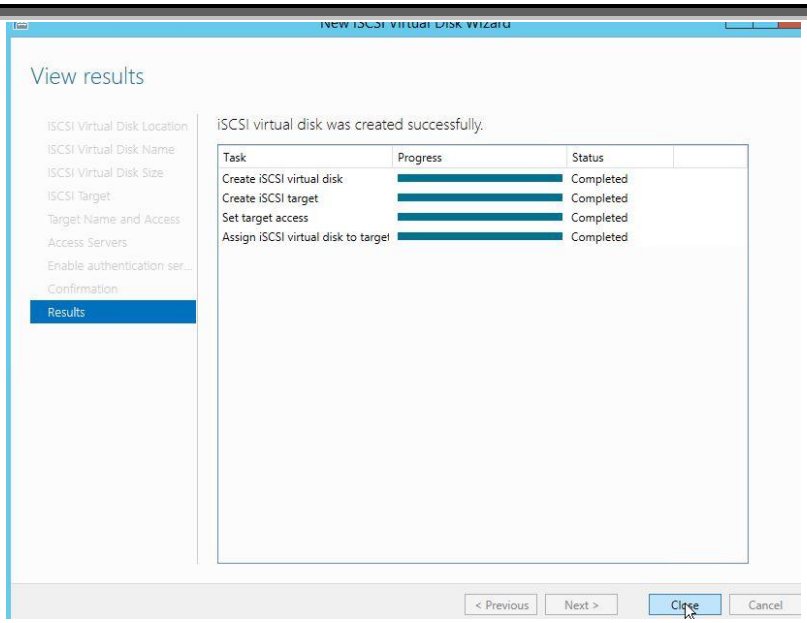

Add initiator ID
Select Computer
Select this object type:
Computer
Object Types...
From this location:
Entire Directory
Locations...
Enter the object name to select (examples):
BUR-DC1
Check Names
Advanced...
OK
Cancel


Add initiator ID
Select a method to identify the initiator:
Query initiator computer for ID (not supported on Windows Server 2008 R2, Windows 7, or earlier):
bur-dc1.datahouse.local
Browse...
Select from the initiator cache on the target server:
Enter a value for the selected type
Type:
Value:
IQN
Browse...
OK
Cancel

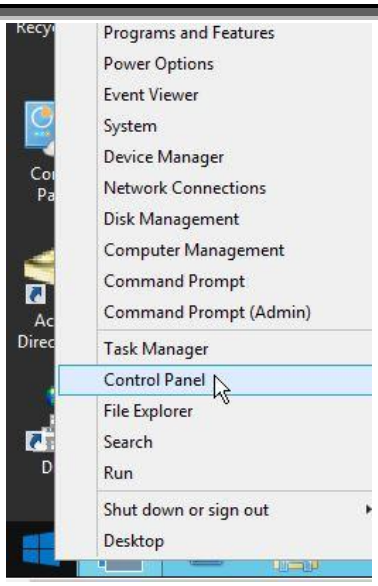

Specify access servers
iSCSI Virtual Disk Location
iSCSI Virtual Disk Name
iSCSI Virtual Disk Size
iSCSI Target
Target Name and Access
Access Servers
Enable authentication ser...
Confirmation
Results
Click Add to specify the iSCSI initiator(s) that will access this iSCSI virtual disk.
Type
Value
IQN
iqn.1991-05.com.microsoft:bur-dc1.datahouse.local
Add...
Remove

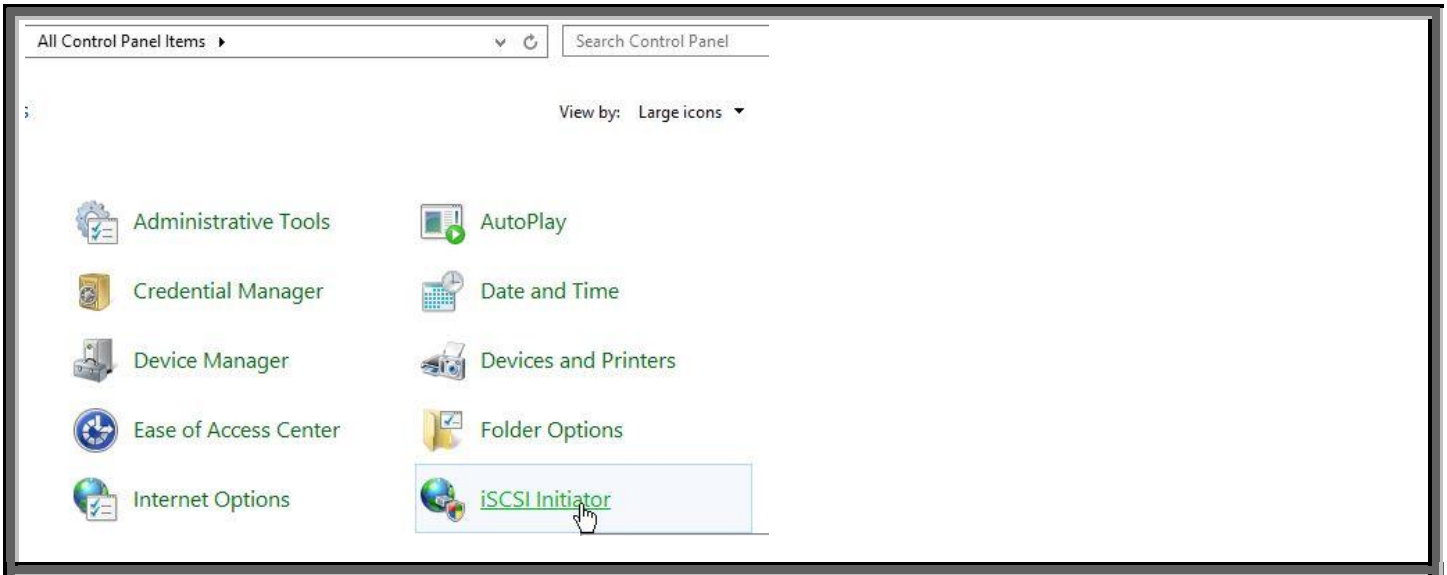

Enable Authentication
iSCSI Virtual Disk Location
iSCSI Virtual Disk Name
iSCSI Virtual Disk Size
iSCSI Target
Target Name and Access
Access Servers
Enable authentication ser...
Confirmation
Results
Optionally, enable the CHAP protocol to authenticate initiator connections, or enable reverse CHAP to allow the initiator to authenticate the iSCSI target.
Enable CHAP:
User name:
Password:
Confirm password:
Enable reverse CHAP:
User name:
Password:
Confirm password:
< Previous
Next >
Create
Cancel

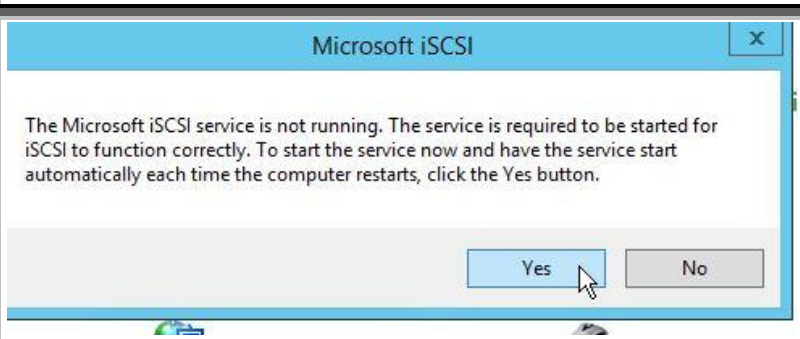


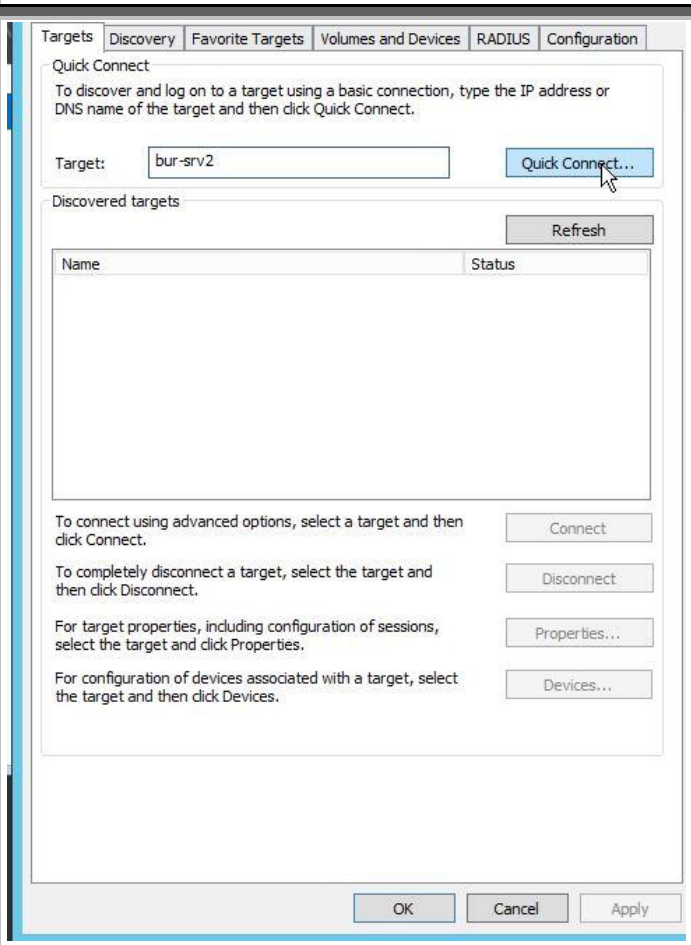


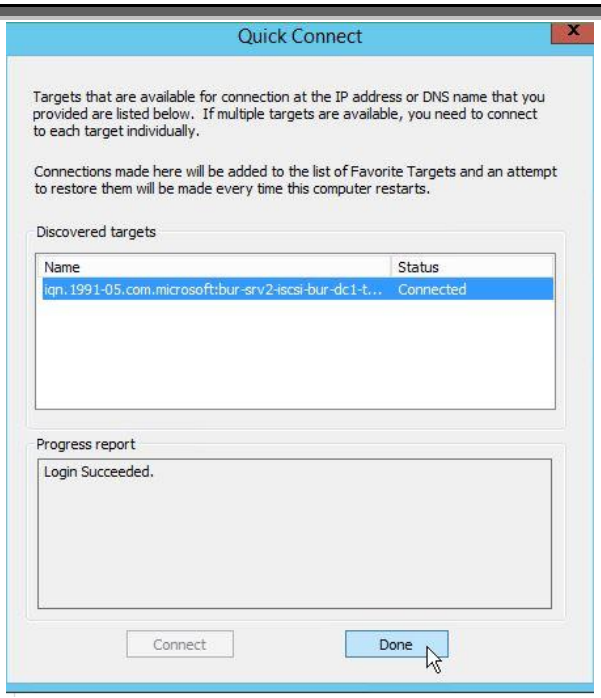
BUR-DC1'E GEÇİN

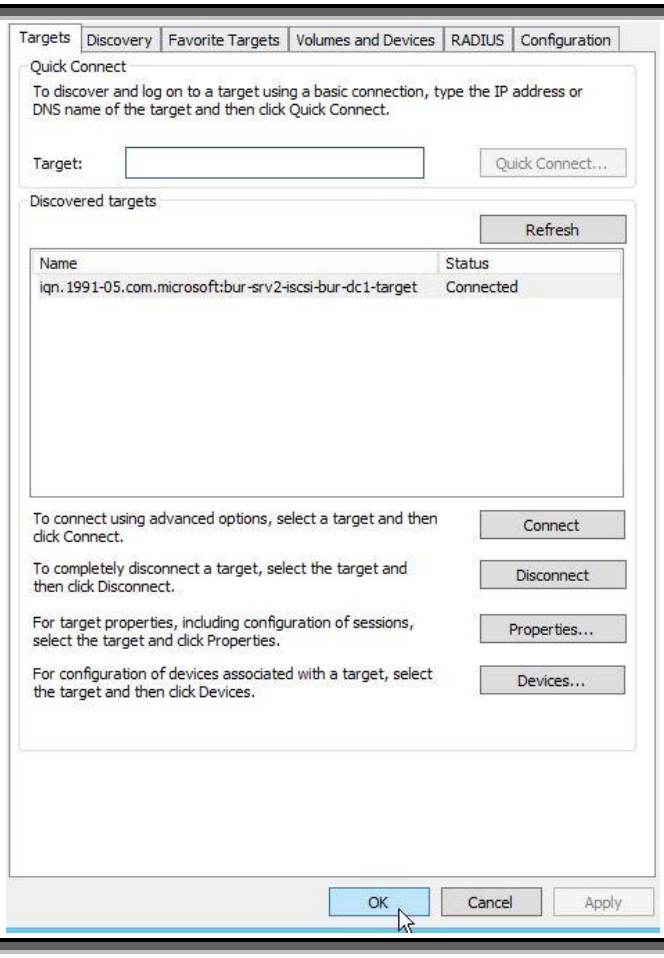


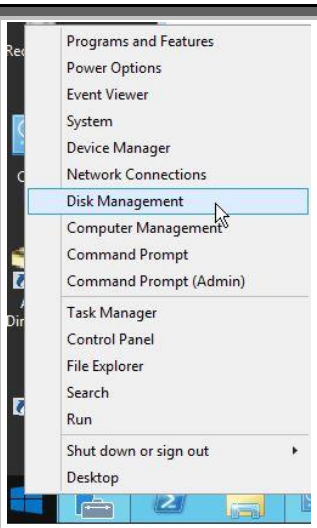

All Control Panel Items
Search Control Panel
View by: Large icons
Administrative Tools
AutoPlay
Credential Manager
Date and Time
Device Manager
Devices and Printers
Ease of Access Center
Folder Options
Internet Options
iSCSI Initiator

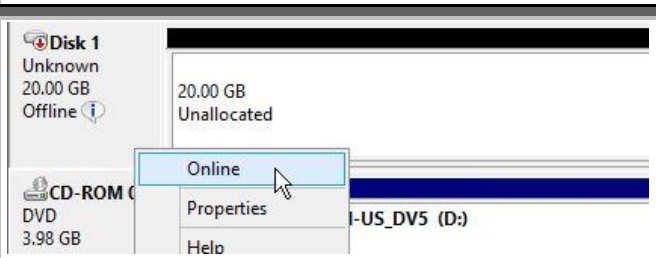

Microsoft iSCSI
The Microsoft iSCSI service is not running. The service is required to be started for iSCSI to function correctly. To start the service now and have the service start automatically each time the computer restarts, click the Yes button.
Yes
No

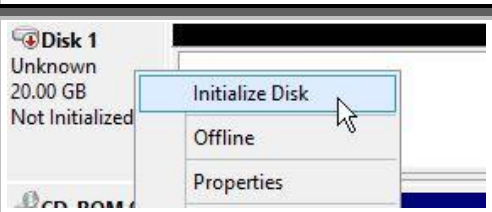

Targets
Discovery
Favorite Targets
Volumes and Devices
RADIUS
Configuration
Quick Connect
To discover and log on to a target using a basic connection, type the IP address or DNS name of the target and then click Quick Connect.
Target:
bur-srv2
Quick Connect...
Discovered targets
Refresh
Name
Status
To connect using advanced options, select a target and then click Connect.
Connect
To completely disconnect a target, select the target and then click Disconnect.
Disconnect
For target properties, including configuration of sessions, select the target and click Properties.
Properties...
For configuration of devices associated with a target, select the target and then click Devices.
Devices...
OK
Cancel
Apply

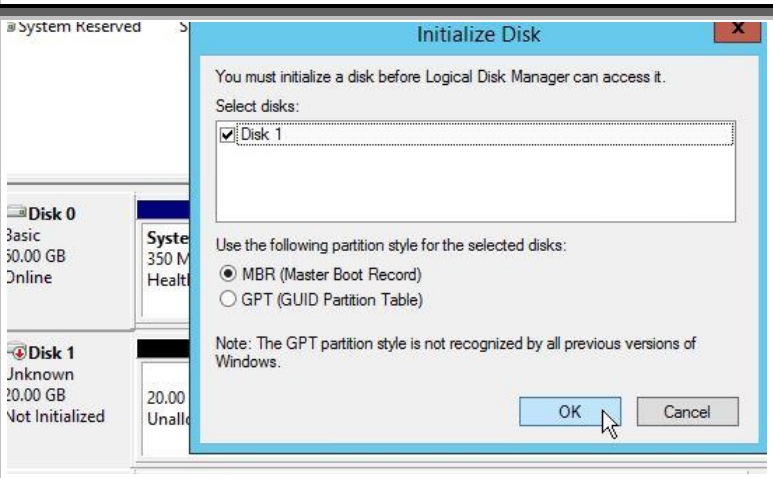

Quick Connect
Targets that are available for connection at the IP address or DNS name that you provided are listed below. If multiple targets are available, you need to connect to each target individually.
Connections made here will be added to the list of Favorite Targets and an attempt to restore them will be made every time this computer restarts.
Discovered targets
Name
Status
iqn.1991-05.com.microsoft:bur-srv2-iscsi-bur-dc1-t...
Connected
Progress report
Login Succeeded.
Connect
Done

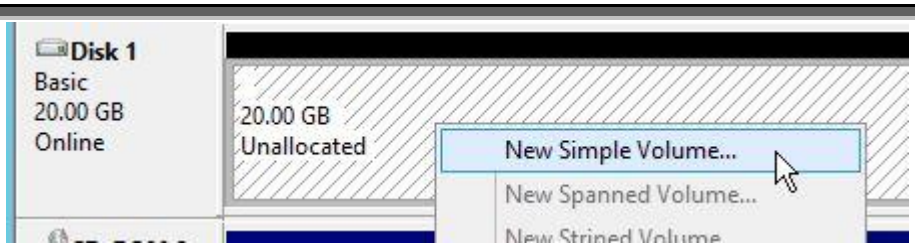

Targets
Discovery
Favorite Targets
Volumes and Devices
RADIUS
Configuration
Quick Connect
To discover and log on to a target using a basic connection, type the IP address or DNS name of the target and then click Quick Connect.
Target:
Quick Connect...
Discovered targets
Refresh
Name
Status
iqn.1991-05.com.microsoft:bur-srv2-iscsi-bur-dc1-target
Connected
To connect using advanced options, select a target and then click Connect.
Connect
To completely disconnect a target, select the target and then click Disconnect.
Disconnect
For target properties, including configuration of sessions, select the target and click Properties.
Properties...
For configuration of devices associated with a target, select the target and then click Devices.
Devices...
OK
Cancel
Apply

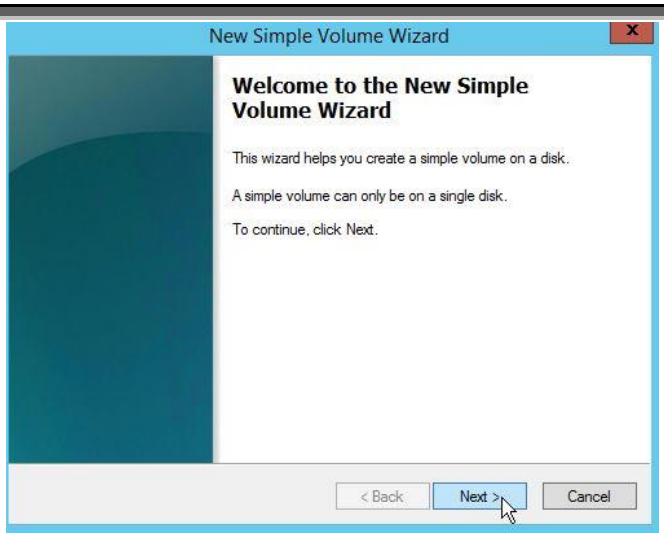

Programs and Features
Power Options
Event Viewer
System
Device Manager
Network Connections
Disk Management
Computer Management
Command Prompt
Command Prompt (Admin)
Task Manager
Control Panel
File Explorer
Search
Run
Shut down or sign out
Desktop

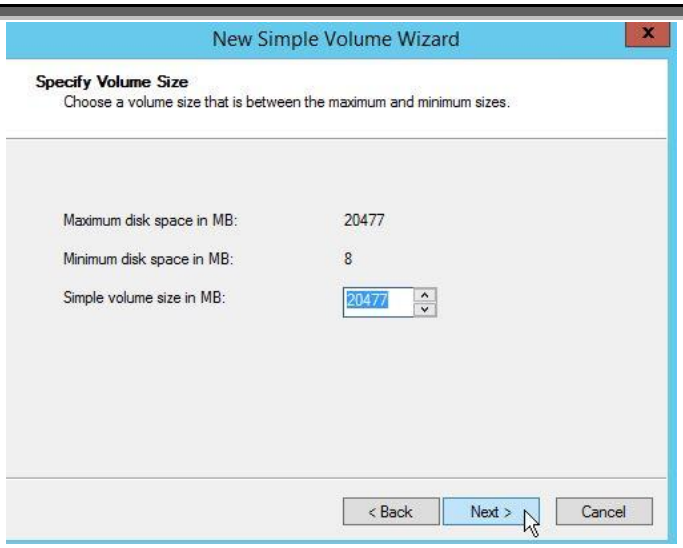

Disk 1
Unknown
20.00 GB
Offline
20.00 GB
Unallocated
Online
CD-ROM
DVD
3.98 GB
Properties
Help

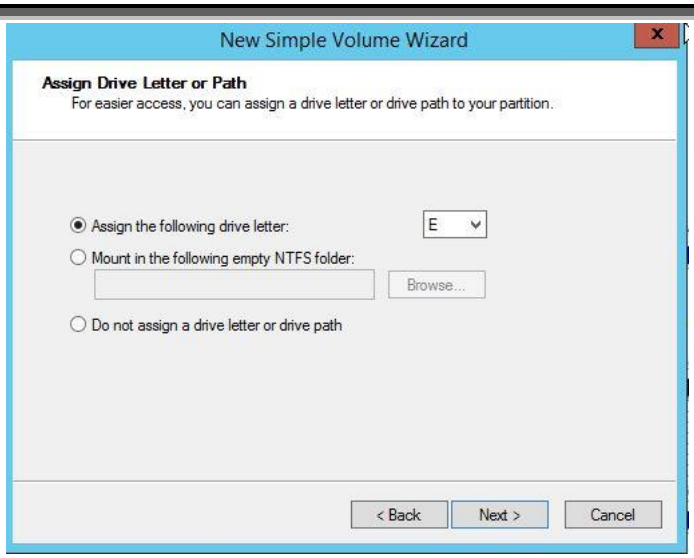

Disk 1
Unknown
20.00 GB
Not Initialized
Initialize Disk
Offline
Properties

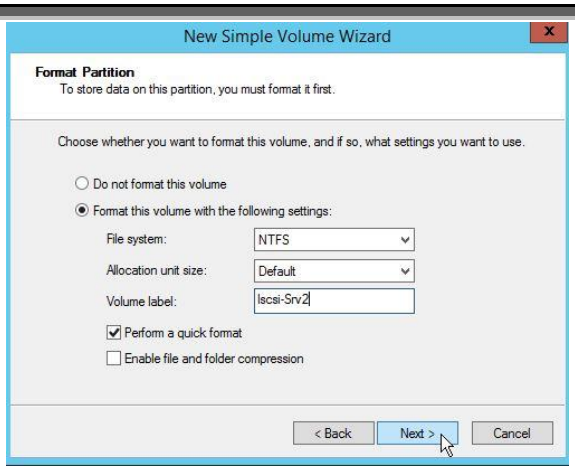

System Reserved
Initialize Disk
You must initialize a disk before Logical Disk Manager can access it.
Select disks:
Disk 1
Use the following partition style for the selected disks:
MBR (Master Boot Record)
GPT (GUID Partition Table)
Note: The GPT partition style is not recognized by all previous versions of Windows.
OK
Cancel
Disk 0
Disk 1
Not Initialized

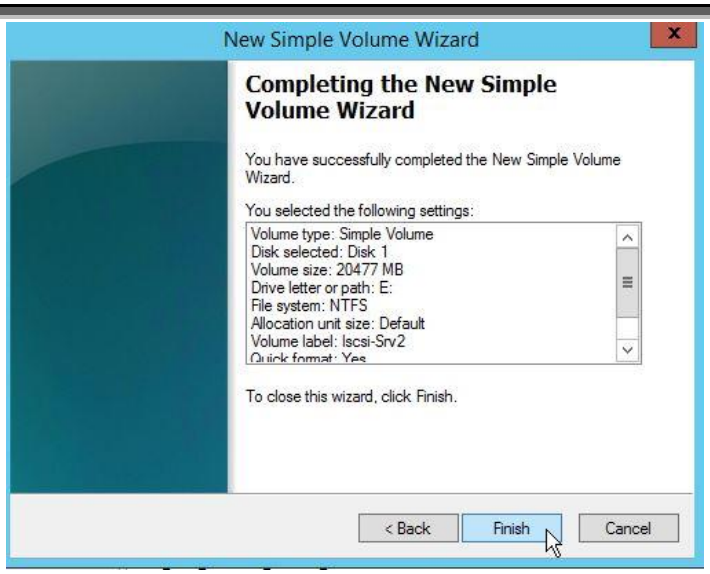

Disk 1
Basic
20.00 GB
Online
20.00 GB
Unallocated
New Simple Volume...
New Spanned Volume...
New Striped Volume

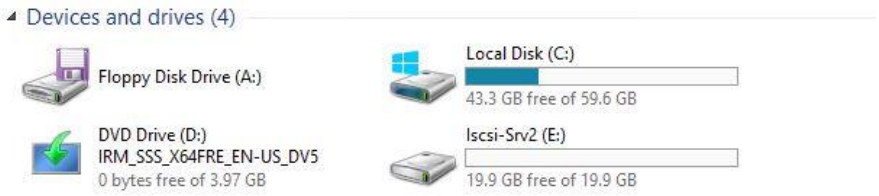

New Simple Volume Wizard
Welcome to the New Simple Volume Wizard
This wizard helps you create a simple volume on a disk.
A simple volume can only be on a single disk.
To continue, click Next.
< Back
Next >
Cancel


New Simple Volume Wizard
Specify Volume Size
Choose a volume size that is between the maximum and minimum sizes.
Maximum disk space in MB:
20477
Minimum disk space in MB:
8
Simple volume size in MB:
20477
< Back
Next >
Cancel


New Simple Volume Wizard
Assign Drive Letter or Path
For easier access, you can assign a drive letter or drive path to your partition.
Assign the following drive letter:
E
Mount in the following empty NTFS folder:
Browse...
Do not assign a drive letter or drive path
< Back
Next >
Cancel


New Simple Volume Wizard
Format Partition
To store data on this partition, you must format it first.
Choose whether you want to format this volume, and if so, what settings you want to use.
Do not format this volume
Format this volume with the following settings:
File system:
NTFS
Allocation unit size:
Default
Volume label:
Iscsi-Srv2
Perform a quick format
Enable file and folder compression
< Back
Next >
Cancel


New Simple Volume Wizard
Completing the New Simple Volume Wizard
You have successfully completed the New Simple Volume Wizard.
You selected the following settings:
Volume type: Simple Volume
Disk selected: Disk 1
Volume size: 20477 MB
Drive letter or path: E:
File system: NTFS
Allocation unit size: Default
Volume label: Iscsi-Srv2
Quick format: Yes
To close this wizard, click Finish.
< Back
Finish
Cancel


Devices and drives (4)
Floppy Disk Drive (A:)
Local Disk (C:)
43.3 GB free of 59.6 GB
DVD Drive (D:)
IRM_SSS_X64FRE_EN-US_DV5
0 bytes free of 3.97 GB
Iscsi-Srv2 (E:)
19.9 GB free of 19.9 GB