

## Storage

User's Guide

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Virtuozzo International GmbH Vordergasse 59 8200 Schaffhausen Switzerland Tel: + 41 52 632 0411 Fax: + 41 52 672 2010 https://virtuozzo.com

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### CHAPTER 1 About Storage

Storage is a software-defined storage optimized for storing large amounts of data. It provides data redundancy (replication and erasure coding), high availability, self-healing, and storage sharing.

### 1.1 Supported Storage Types

Your service provider can configure Storage to keep your data in three storage types:

- S3 object storage for storing an unlimited number of files.
- iSCSI block storage for virtualization, databases, and other needs.
- NFS shares.

The following sections describe the ways to access data in Storage in detail.

#### **CHAPTER 2**

## Accessing Storage S3 Buckets

To access Storage S3, get the following information (credentials) from your system administrator:

- User panel IP address
- DNS name of the S3 endpoint
- Access key ID
- Secret access key

Storage S3 allows you to access your data in several ways:

- Via Storage user panel
- Via a third-party S3 application like Cyberduck, Mountain Duck, Backup Exec, etc

This sections describes how to use the aforementioned applications to access data in S3.

### 2.1 Managing Buckets via Storage User Panel

This section describes how to manage buckets and their contents using Storage user panel.

#### 2.1.1 Logging in to the User Panel

To log in to the Storage user panel, do the following:

 On any computer with access to the web interface, in a web browser visit http://<user\_panel\_IP\_address>:8888/s3/.

	Log in	
ENDPO	INT	
✓ Use	secure transfer (SSL)	
ACCESS	KEY ID	
SECRET	ACCESS KEY	
	LOG IN	

2. On the Storage login screen, enter your credentials in the corresponding fields and click **LOG IN**.

Once you log in to the web interface, you will see the **Buckets** screen with the list of your buckets. From here, you can manage buckets as well as folders and files stored inside the buckets.

To log out, click the user icon in the upper right corner of any screen and click **Log out**.

Bucket	Buckets					
Туре	Name	Creation date	A Log out			
Ŵ	bucket1	<b>Jun 29</b> 14:55	🔀 Delete			
Ē	bucket2	<b>Jun 29</b> 14:55				

#### 2.1.2 Adding, Deleting, and Listing Buckets

On the **Buckets** screen:

• To add a new bucket, click **Add bucket**, specify a name, and click **Add**.

### $\times$ Add bucket

Bucket name		
bucket1		
	Add Canc	el

Use bucket names that comply with DNS naming conventions. For more information on bucket naming, see *Bucket and Key Naming Policies* on page 20.

- To delete a bucket, select it and click **Delete**.
- To list bucket contents, click a bucket name in the list.

#### 2.1.2.1 Listing Bucket Contents in a Web Browser

You can list bucket contents with a web browser. To do this, visit the URL that consists of the external DNS name for the S3 endpoint that you specified when creating the S3 cluster and the bucket name. For example, mys3storage.example.com/mybucket.

**Note:** You can also copy the link to bucket contents by right-clicking it in CyberDuck, and then selecting **Copy URL**.

#### 2.1.3 Creating, Deleting, and Listing Folders

On the bucket contents screen:

• To create a folder, click **New folder**, specify folder name in the **New folder** window, and click **Add**.

×	New	fo	lder	
~ `				

older name		
folder1		

- To delete a folder, select it and click **Delete**.
- To list folder contents, click a folder name.

### 2.1.4 Uploading and Downloading Files

On the bucket or folder contents screen:

• To upload files to S3, click **Upload** and choose files to upload.

#### Buckets > bucket1

Туре	Name	Size	Last modified		New folder			
	folder1/			*	Download file			
	file1.txt	445 bytes	<b>Jun 29</b> 15:03	1	Upload			
				$\Diamond$	Get Certificate			
				$\odot$	Validate			
				×	Delete			
	Uploading file 1 of 1							

db1.db 100 MB

• To download files, select them and click **Download**.

 $(\mathbf{I})$ 

### 2.1.5 Obtaining and Validating File Certificates

Storage offers integration with the Acronis Notary service to leverage blockchain notarization and ensure the immutability of data saved in S3 buckets.

To certify files stored in your buckets, ask your system administrator to enable the Acronis Notary service for the buckets.

On the bucket's or folder's contents screen:

- To get a notarization certificate for a file, select it and click **Get Certificate**.
- To check the validity of a file's certificate, click **Validate**.

	ERTIFIES EXPERIENCE CERTIFIES EXPERIENCE CERTIFICATE
NAME	db1.db
DATE UPLOADED	Jun 29, 2017, 03:33 PM
SIZE	100 MB
SIGNED BY	https://notary.acronis.com
	DONE

### 2.2 Accessing S3 Storage with CyberDuck

To access Storage with CyberDuck, do the following:

- 1. In CyberDuck, click **Open Connection**.
- 2. Specify your credentials:
  - The DNS name of the S3 endpoint.
  - The Access Key ID and, the Password field, the secret access key of an object storage user.

Open Connection	B
Amazon S3	
Server:	s3.dns.name.com Port: 443
URL:	https://a23859c7af2951f1H8YF@s3.dns.name.com
Access Key ID:	a23859c7af2951f1H8YF
Password:	•••••
	Anonymous Login
SSH Private Key:	None  Choose
	Save Password
	Connect Cancel
More Option	15

By default, the connection is established over HTTPS. To use CyberDuck over HTTP, you must install a special S3 profile from https://trac.cyberduck.io/wiki/help/en/howto/s3.

3. Once the connection is established, click **File** > **New Folder** to create a bucket.

🔒 Create new	folder
	Enter the name for the new folder bucket1
	Create Cancel

4. Specify a name for the new bucket, and then click **Create**. Use bucket names that comply with DNS naming conventions. For more information on bucket naming, see *Bucket and Key Naming Policies* on page 20.

The new bucket will appear in CyberDuck. You can manage it and its contents.

#### 2.2.1 Managing Bucket Versions

Versioning is a way of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. For more information about bucket versioning, refer to the Amazon documentation.

Bucket versioning is turned off by default. In CyberDuck, you can turn it on by selecting a checkbox in bucket properties. For example:

Info - folder1	
General Per	missions Metadata Distribution (CDN)
Location	US East (Northern Virginia)
Storage Class	Regular Amazon S3 Storage 🔹
Encryption	Unknown
Transfer	Transfer Acceleration
Logging	Bucket Access Logging
	Write access logs to selected container.
	None
Analytics	Read Access for Qloudstat None Open the URL to setup log analytics with Qloudstat.
Versioning	Bucket Versioning
	You can view all revisions of a file in the browser by choosing View $\rightarrow$ Show Hidden Files.
	Multi-Factor Authentication (MFA) Delete
Lifecycle	Transition to Glacier
	after 1 Days 🗸
	Delete files
	after 1 Days 👻

### 2.3 Mounting S3 Storage with Mountain Duck

Mountain Duck enables you to mount and access an S3 cluster in Storage as a regular disk drive. Do the following:

1. If your service provider has provided you with an SSL certificate, install it.

2. In Mountain Duck, click **New Bookmark**.



- 3. In the properties window, select **Amazon S3** profile from the first drop-down list and specify the following parameters:
  - Nickname of the disk drive,
  - endpoint DNS name in the **Server** field,
  - access key ID in the **Username** field;

and click **Connect**.

🔼 S3 Storage			-		x
칠 Amazon S3					~
Nickname:	S3 Storage				
URL:	https://e5afdeeb012d44d3RRFD@s3.dns.na	me.c	om		
Server:	s3.dns.name.com	Por	rt:	44	3 🗘
Username:	e5afdeeb012d44d3RRFD				
	Anonymous Login				
SSH Private Key:	None	Ŷ		Choos	;e
Client Certificate:	None				~
Path:					
Encoding:	UTF-8				~
Notes:					
Timezone:	UTC				~
Drive Letter:	Auto				~
Mount Options:	Read Only				
	Con	nect		Dele	ete

4. In the login window, specify **Secret Access Key** and click **Login**.

🔼 Login s3.dns.nar	ne.com
a,	Login s3.dns.name.com Login s3.dns.name.com with username and password. No login credentials could be found in the Keychain.
Access Key ID:	e5afdeeb012d44d3RRFD
Secret Access Key:	•••••
SSH Private Key:	Anonymous Login     None     Choose
Save Passwor	d Login Cancel

Mountain Duck will mount the S3 storage as a disk drive. On the disk, you can manage buckets and store files in them.

#### 2.3.1 Creating Buckets on Mounted S3 Storage

Windows and Mac OS X, operating systems supported by MountainDuck, treat buckets as folders in case the S3 storage is mounted as a disk drive. In both operating systems, the default folder name contains spaces. This violates bucket naming conventions (see *Bucket and Key Naming Policies* on page 20), therefore you cannot create a new bucket directly on the mounted S3 storage. To create a bucket on a mounted S3 storage, create a folder with a name complying with DNS naming conventions elsewhere and copy it to the root of the mounted S3 storage.

# 2.4 Configuring Backup Exec to Keep Backups in S3 Storage

To store Backup Exec backups in S3 storage, do the following:

- 1. Create a bucket to store backups either using the Storage user panel or another application.
- 2. Install Backup Exec. During installation, make sure so select all the components of Backup Exec and check all the updates.

- 3. Run CLILauncher located in C:\Program Files\Veritas\Backup Exec.
- 4. In the Backup Exec command-line prompt, run the following command:

<pre># New-BEClou -ServiceHost</pre>	dInstance -Name "cloudinstance" -Provider "cloudian" \ " <s3_dns_name>" -SslMode "Disabled" -UrlStyle "Path"</s3_dns_name>				
G	Windows PowerShell				
Welcome to t	he Backup Exec Management Command Line Interface	^			
To get a lis	t of Backup Exec commands, type:	=			
Get-BECo	ommand	-			
To launch tł	ne Backup Exec Management Command Line Interface Help, type:				
Show-BEH	lelp				
Copyright (C oduct is sub BEMCLI> New- ost "S3.DNS. Name Id Provider ServiceHost SslMode	Copyright (C) 2017 Veritas Technologies LLC. All rights reserved. Use of this pr oduct is subject to license terms. BEMCLI> New-BECloudInstance -Name "cloudinstance" -Provider "cloudian" -ServiceH ost "S3.DNS.name" -SslMode "Disabled" -UrlStyle "Path" Name : cloudinstance Id : 03353052-2567-4c5e-b928-52242763b868 Provider : cloudian ServiceHost : s3.dns.name				
UrlStyle HttpPort HttpsPort Endpoint BEMCLI> _	: Path : 80 : 443 :	~			

5. In Backup Exec, click **Configure Cloud Storage** on the **Storage** tab.

0	Veritas Backup Exec™ 16 (Central Administration Server) – □ ×						_ 🗆 🗙
<u>ر</u> ھ	A Home	Backup and Res	store Job Monitor	Storage	<b>III.</b> Reports	Adm	Central iinistration Server
Compact	Sort and Filter •	Pause Disable Offline Cc	onfigure Storage	Va X Troubleshoot Delete	Share I	Inventory Catalog Inventory and Catalog now	Restore
v	iews	State	Cont	figure		Storage Operations	Media Operations

6. In the **Configure storage...** window, specify a name for Storage S3 and click **Next**.

Că 👘	Configure storage on WIN-1UMMOBTT4JM	_		x
What na device?	ame and description do you want to use for the cloud stora	ge		
Name:	83			
Description:	Storage			
	Next >	Car	ncel	

7. Select the **S3** device and click **Next**.

Configure storage on WIN-1UMMOBTT4JM
Which provider for the cloud storage device do you want to use?
Azure
53 S3
Some cloud storage providers require encryption to be enabled when backup jobs or duplicate jobs are targeted to cloud storage. For details about why you should encrypt backup data when targeting jobs to cloud storage, see the TechNote.TECH231868
The verify option is enabled by default for backups targeted to cloud devices. Cloud providers may charge for reading the data from the cloud during verification. As Backup Exec complies with data integrity mechanisms for cloud transfer, you can disable the verify option and save costs when backing up data to cloud. For more information refer to TECH108140
What do I need to configure to use cloud storage? < Back Next > Cancel

8. Select cloudinstance [cloudian] from the  ${\mbox{Cloud storage}}$  drop-down list.

- 9. Click **Add/Edit** next to the **Logon account** drop-down list.
- 10. In the Logon Account Selection window, click Add.

	Logor	n Account	t Selection		
Select a logon account to use when connecting to this server.					
Please select a <u>l</u> ogon account	from the list:				
Account Name 🔺	User name	Default	Туре	Owner	Add
🔊 System Logon Account	WIN-1UMMOBTT4J	Yes	Common	WIN-1UMMOBTT4	<u>D</u> elete
					Edit
					Set as Default
Help				OK	Cancel

- 11. In the **Account credentials** section, specify your credentials:
  - 11.1. S3 access key ID in the **User name** field.
  - 11.2. S3 secure access key in the **Password** field and confirm it.
  - 11.3. The username of your account in the **Account name** field.

		Add Logon Credentials	x
(	Account credentials		
	User name:	e5afdeeb012d44d3RRFD	
	Password:	•••••	]
	Confirm password:	•••••	
			J
4	Account name:		_
	s3user1@example.co	m	_
N	Notes:		_
			^
			Ŧ
	This is	a restricted logon account.	
	🖤 🔲 This is	my default account.	
C	Help	OK Cancel	

- 12. Uncheck all the checkboxes and click **OK**.
- 13. Back in the **Logon Account Selection** window, make sure the newly added user account is selected and click **OK**.

	Logor	n Account	t Selection		
Select a logon account	t to use when connecting t	to this serve	er.		
Please select a <u>l</u> ogon account fr	om the list:				
Account Name 🔺	User name	Default	Туре	Owner	Add
S3user1@example.com	e5afdeeb012d44d3R		Common	WIN-1UMMOBTT4	<u>D</u> elete
🔊 System Logon Account	WIN-1UMMOBTT4J	Yes	Common	WIN-1UMMOBTT4	<u>E</u> dit
					Set as Default
Help				ОК	Cancel

- 14. Back in the **Configure storage...** window, click **Next**.
- 15. Select a bucket and click **Next** twice.
- 16. On the summary screen, click **Finish**, **OK**, and **Yes**.

Once the Backup Exec services are restarted, the S3 storage will appear in the list on the **Storage** tab. Now you can create backup jobs and specify the S3 storage as destination.

### 2.5 Bucket and Key Naming Policies

It is recommended to use bucket names that comply with DNS naming conventions:

- 3 to 63 characters long.
- Start and end with a lowercase letter or number.
- Contain lowercase letters, numbers, periods (.), hyphens (-), and underscores (\_).

• Can be a series of valid name parts (described previously) separated by periods.

An object key can be a string of any UTF-8 encoded characters up to 1024 bytes long.

#### **CHAPTER 3**

## Accessing Storage iSCSI Targets

This section describes ways to attach Storage iSCSI targets to a number of operating systems and third-party virtualization solutions.

# 3.1 Accessing Storage iSCSI Targets from CentOS 6

- 1. Make sure that the iscsi-initiator-utils package is installed.
- 2. Discover the required target by its IP address. For example:

# iscsiadm --mode discovery --type sendtargets --portal 192.168.10.100

3. Restart the iscsid service to rescan for newly added drives:

# service iscsi restart

To check that the new drive has appeared in the system, use fdisk, parted or similar tools.

For more information, see the Red Hat Enterprise Linux Storage Administration Guide.

### 3.2 Accessing Storage iSCSI Targets from Microsoft Windows Server 2012 R2

1. In the Server Manager Dashboard, click the Tools menu in the toolbar and select iSCSI Initiator.

Dashboard 🛛 🕶 🗇 🖌 Manage	Tools View Help
TO SERVER MANAGER	Component Services Computer Management Defragment and Optimize Drives Event Viewer Hyper-V Manager
Configure this local serv	iSCSI Initiator
2 Add roles and features	Local Security Policy ODBC Data Sources (32-bit) ODBC Data Sources (64-bit)

2. In the **iSCSI Initiator Properties**, switch to the **Discovery** tab and click **Discover Portal...**.

iSCSI Initiator Properties							
Targets Discovery F	Discovery         Favorite Targets         Volumes and Devices         RADIUS         Configuration						
Target portals The system will look for Targets on following portals: Refresh							
Address	Port	Adapter	I	P address			
To add a target portal, dick Discover Portal. Discover Portal							
To remove a target portal, select the address above and then click Remove.							

3. In the **Discover Target Portal** window, enter the portal IP address and click **OK**.

Discover Target Portal				
Enter the IP address or DNS name and port number of the portal you want to add.				
To change the default settings of the discovery of the target portal, click the Advanced button.				
IP address or DNS name:	Port: (Default is 3260.)			
10.30.128.130	3260			
<u>A</u> dvanced	<u>O</u> K <u>C</u> ancel			

The newly added portal will appear in the **Target portals** section.

4. On the **iSCSI Initiator Properties** > **Targets** tab, select the new target in the **Discovered targets** section and click **Connect**.

iSCSI Initiator Prope	rties
Targets         Discovery         Favorite Targets         Volumes and Dev           Quick Connect         To discover and log on to a target using a basic connect           DNS name of the target and then click Quick Connect.	vices RADIUS Configuration
Target: Discovered targets	Quick Connect
Name iqn.2014-04.com.pstorage:pcs3	Status Inactive
To connect using advanced options, select a target and click Connect.	then Co <u>n</u> nect

5. In the **Connect to Target** window, click **OK**.

Connect To Target
Target name: iqn.2014-04.com.pstorage:pcs3
Add this connection to the list of Favorite Targets. This will make the system automatically attempt to restore the connection every time this computer restarts.
Enable multi-path
Advanced OK Cancel

Target's **Inactive** status will change to **Connected**.

iSCSI Initiator Properties					
Targets Quick C To disc DNS na	Discovery onnect over and log me of the ta	Favorite Targets on to a target usin arget and then click	Volumes and Devices g a basic connection, ty Quick Connect.	RADIUS	Configuration address or
<u>T</u> arget	Target:     Quick Connect				
					<u>R</u> efresh
Name iqn.20	14-04.com.p	ostorage:pcs3		Status Connected	d

The newly attached disk will appear in **Server Manager Dashboard** > **Computer Management** > **Storage** > **Disk Management**.

<b>4</b>	Computer Management				
<u>File Action View H</u> elp ← → 2	7 😼				
<ul> <li>Computer Management (Local)</li> <li>System Tools</li> <li>Task Scheduler</li> <li>Task Scheduler</li> <li>Event Viewer</li> <li>Shared Folders</li> <li>Shared Folders</li> <li>Coal Users and Groups</li> <li>Performance</li> <li>Device Manager</li> <li>Storage</li> <li>Windows Server Backup</li> <li>Disk Management</li> <li>Services and Applications</li> </ul>	Volume (C:) System Reserve Volume System Reserve Volume System Reserve Number System Reserve System Reserve	ed System Rese 350 MB NTFS Healthy (Syst	(C:) 63.66 GB N Healthy (E	Type Basic Basic VTFS Boot, Pa	File Syster NTFS NTFS >
	Disk 1 Basic 10.00 GB Offline	10.00 GB Unallocated			

6. Right-click the disk information section and select **Online**.

Disk 1 Basic 10.00 GB Offline	J	10.00 GB	
	Online		
ീവ	Proper	ties	
CD-R	Help		

The disk status will change to **Online**.

7. Right-click the disk information section and select **Initialize Disk**.

Disk 1     Unknown     10.00 GB     Not Initial	zed	10.00 GB	
	Ini	tialize Disk	
ACD-RC	Of	fline	
CD-ROM	Pro	operties	EN-US_DV
4.00 GB Online	He	elp -	tition)

8. In the Initialize Disk window, click **OK**.

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:
OK Cancel

9. Right-click the disk space section, select **New Simple Volume...**, and follow the wizard's instruction to format the new disk to NTFS.

Disk 1     Basic     10.00 GB	10.00 GB	New Simple Volume
Online	Unallocated	New Spanned Volume
		New Striped Volume
CD-ROM 0 CD-ROM (D:)		New Mirrored Volume
		New RAID-5 Volume
No Media		Properties
		Help

The disk state will change to **Healthy**.

<b>*</b>	Computer Management				
<u>F</u> ile <u>A</u> ction <u>V</u> iew <u>H</u> elp					
🗢 🔿 🖄 📰 🛿 🖬 🔮 🖆	8 😼				
🜆 Computer Management (Local)	Volume		Layout	Type	File Syster
⊿ 👔 System Tools	🗀 (C:)		Simple	Basic	NTFS
Task Scheduler	📾 New Volume (E	i:)	Simple	Basic	NTFS
Event Viewer	System Reserve	ed	Simple	Basic	NTFS
Shared Folders					
Local Users and Groups	.ocal Users and Groups < 🎟		>		
Performance					
📇 Device Manager	Disk 0				
⊿ 📇 Storage	rage Basic System Rest (C:)				
Windows Server Backup	Windows Server Backup Online 350 MB NTFS 63.66 GB NTFS		ae File C		
📑 Disk Management	Disk Management			gerne, c	
Services and Applications					
	Disk 1				
	Basic	New Volume	(E:)		
	10.00 GB	10.00 GB NTFS			
	Online	Healthy (Prim	ary Partition)		

The new disk will appear in Windows Explorer.

🗯 i 🔂 🔢 = i	This PC		_ = ×
File Computer	View		~ <b>0</b>
۰ 🔿 🖈 🏝	This PC 🔸	👻 🖒 🛛 Search Thi	s PC 🔎
<ul> <li>★ Favorites</li> <li>■ Desktop</li> <li>▲ Downloads</li> <li>▲ Recent places</li> </ul>	<ul> <li>Folders (6)</li> <li>Devices and drives (4)</li> <li>Floppy Disk Drive (A:)</li> </ul>	Local Disk (	C:)
📲 This PC	EA.	New Volum	ne (E:)
🙀 Network	DVD Drive (D:)	9.91 GB free	e of 9.99 GB
10 items			800 🖬

### 3.3 Accessing Storage iSCSI Targets from VMware ESXi

- 1. In the **vSphere Client**, switch to the **Configuration** tab, and click **Storage Adapters** in the **Hardware** section.
- 2. If no software iSCSI adapters have been added, do so by right-clicking in the **Storage Adapters** section and selecting **Add Software iSCSI Adapter...**.
- 3. Open the software iSCSI adapter's properties, switch to the **Static Discovery** tab and click **Add...**.
- 4. In the **Add Static Target Server** window, enter the target's IP address and name.
- 5. Close the software iSCSI adapter's properties window and rescan the adapter as prompted.
- 6. The newly added iSCSI target will appear in the **Details** section of the software iSCSI adapter you have configured.

For more information, see the VMware vSphere Storage Guide.

### 3.4 Accessing Storage iSCSI Targets from Citrix XenServer 6.2

1. In XenCenter, switch to the **Storage** tab and click **New SR...**.

- 2. In the New Storage Repository window:
  - 2.1. In the Type section, select the Software iSCSI option,
  - 2.2. In the Name section, provide a name or leave the default,
  - 2.3. In the **Location** section, enter target's IP address in the **Target Host** field, click **Discover IQNs** and select the desired target, then click **Discover LUNs** and select the desired LUN.
- 3. Click **Finish** to format the disk.

The new storage repository will appear in XenCenter.

For more information, see XenCenter documentation.

### 3.5 Accessing Storage iSCSI Targets from Microsoft Hyper-V

Note: Names of the targets to be mounted must not contain underscore characters.

- 1. Make sure that Microsoft iSCSI Initiator Service, MSiSCSI, is running.
- 2. Discover a new target portal. For example, for the portal 192.168.10.100, run:

PS C:\Users\Administrator>new-iscsitargetportal \				
-targetportaladdress 192.168.10.100				
Initiator Instance Name				
Initiator Portal Address				
IsDataDigest	: False			
IsHeaderDigest	: False			
TargetPortalAddress	: 192.168.10.100			
TargetPortalPortNumber	: 3260			
PSComputerName				
PSComputerName				

3. Connect to the desired target. For example, for the target iqn.2014-03.com.vstorage:test1

PS C:\Users\Administrat cmdlet Connect-IscsiTar Supply values for the f NodeAddress: iqn.2014-0 AuthenticationType InitiatorInstanceName InitiatorNodeAddress InitiatorPortalAddress InitiatorSideIdentifier IsConnected IsDataDigest IsDiscovered IsHeaderDigest IsPersistent NumberOfConnections SessionIdentifier TargetNodeAddress TargetSideIdentifier PSComputerName	<pre>or&gt; connect-iscsitarget get at command pipeline position 1 ollowing parameters: 4.com.vstorage:test1   : NONE   : ROOT\ISCSIPRT\0000_0   : iqn.1991-05.com.microsoft:win-l2dj7g36n7e   : 0.0.0   : 400001370000   : True   : False   : True   : False   : False   : 1   : ffffe00000b5e020-4000013700000005   : iqn.2014-04.com.vstorage:test1   : 0001</pre>
PSComputerName	

4. To check that the disk has been connected, run

PS C:\Users\Administrator> get-disk			
Number	Friendly Name	OperationalStatus	Total Size
1	IET VIRTUAL-DISK SCSI Disk Device	Offline	100 GB RAW

You can now initialise the newly mounted disk for use in Microsoft Hyper-V.

For more information, see iSCSI Cmdlets in Windows PowerShell.