

如何在 Windows Server 2012 R2 上面使用 ISCSI Target?

Internet 小型電腦系統介面(iSCSI)是一種基於 TCP/IP 的協定,用來建立和管理 IP 存放裝置、主機和客戶機等之間的相互連接,並創建存儲區域網路(SAN)。 SAN 使得 SCSI 協定應用於高速資料傳輸網路成為可能,這種傳輸以資料塊級別 (block-level)在多個資料存儲網路間進行。iSCSI 的主要功能是在 TCP/IP 網路 上的主機系統(啟動器 initiator)和存放裝置(目標器 target)之間進行大量資料 的封裝和可靠傳輸過程。此外, iSCSI 提供了在 IP 網路封裝 SCSI 命令,且運行 在 TCP 上。

ReadyNAS 支持作為 Windows Server 的 iSCSI Target。具體配置過程如下。

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步驟1:首先到控制台,iSCSI Initiator 預設已經安裝在 Windows 2012 伺服器内,請開啟【iSCSI Initiator】。

步驟 2:因為 iSCSI Initiator 服務是沒有啟動,系統詢問我們是否啟動它,請直接 按【Yes】按鈕。

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步驟 3:在「iSCSI Initiator Properties」,請先按上方【Discovery】按鈕,然後按【Discover Portal】按鈕。

	1	iSCSI In	itiator Properties			×
argets	Discovery	Favorite Targets	Volumes and Devices	RADIUS	Configuration	
Targe	t portals				Defrach	
The s	system will loo	ok for Targets on fo	Illowing portals:		D address	1
Audi	655	Fort	Adapter		r address	
To ad	ld a target p	ortal, dick Discover	Portal.	Disco	over Portal	2
To re then	move a targe click Remove	et portal, select the	address above and		Remove	l
The s	system is reg e	istered on the follov	ving iSNS servers:		Refresh	
To ac	ld an iSNS se	rver, dick Add Serv	er.	Ad	d Server	l
To re then	move an iSN click Remove	S server, select the	server above and		Remove]
More	e about Disco	overy and iSNS				
				Canad		

步驟 4:請輸入 Windows 2012 iSCSI Target 網絡地址【172.30.0.3】,預設埠 【3260】,然後按【OK】按鈕。

** 172.30.0.3 是 READYNAS 的 IP 地址

Discover	Target Portal
Enter the IP address or DNS name want to add.	e and port number of the portal you
To change the default settings of the Advanced button.	the discovery of the target portal, dick
IP address or DNS name:	Port: (Default is 3260.)
172.30.0.3 1	3260
Advanced	2 OK Cancel

步驟 5:之後按上方【Targets】按鈕,我們會看見兩個 iSCSI Target IQN 名稱,現時狀態是沒有連線「Inactive」,請先選擇【iqn.1991-05.com.microsoft:iscsitargetdata-target】,然後按【Connect】按鈕。

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		iSCSI In	itiator Properties			
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Name				Status	Refresh	1
ion. 19	91-05.com	nicrosoft:iscsitarge	t-data-target	Inactive	2	
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步驟 6: 檢查 IQN 名稱有沒有錯, 然後按【OK】按鈕。

Conne	ect To Target	x
Target name:		_
ign. 1991-05.com.microsoft:iscsitar	get-data-target 1	
Add this connection to the list of f This will make the system automa connection every time this compu	Favorite Targets. htically attempt to restore the liter restarts.	
Enable multi-path	2	
Advanced	OK Can	cel

步驟 7:返回「Targets」畫面,大家可以看到「iqn.1991-05.com.microsoft:iscsitarget-data-target」狀態是連線「Connected」。

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DNS na	ame of the ta	arget and then click	Quick Connect.	pe die 1	
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Name	991-05 com i	microsoft:iscsitarge	t-data-target	Connecte	d
ian, 19	91-05.com.	microsoft:iscsitarge	t-quorum-target	Inactive	
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步驟 8:請依照步驟 3 至步驟 7 連線「iqn.1991-05.com.microsoft:iscsitarget-quorum-target」。

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Name				Status	
iqn. 19	991-05.com.r	microsoft:iscsitarge	t-data-target	Connecte	d
To con	nect using a	lvanced ontions is	ect a target and the		
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步驟 9: 再次到控制台,我們開始將兩個 iSCSI 新增為磁碟機,請開啟【Computer Management】。

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🖳 Recent places	Component Services	7/25/2012 1:22 PM	Shortcut	2 KB	
	🛃 Computer Management	7/25/2012 1:19 PM	Shortcut	2 KB	
🔚 Libraries	🕞 Defragment and Optimize Drives	7/25/2012 1:18 PM	Shortcut	2 KB	
Documents	🛃 Event Viewer	7/25/2012 1:20 PM	Shortcut	2 KB	
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Pictures	🛃 Hyper-V Manager	7/25/2012 1:19 PM	Shortcut	2 KB	
Videos	🔝 iSCSI Initiator	7/25/2012 1:22 PM	Shortcut	2 KB	=
	🛃 Local Security Policy	7/25/2012 1:19 PM	Shortcut	2 KB	
👰 Computer	🔊 ODBC Data Sources (32-bit)	7/25/2012 1:29 PM	Shortcut	2 KB	
🏭 Local Disk (C:)	🔊 ODBC Data Sources (64-bit)	7/25/2012 1:25 PM	Shortcut	2 KB	
	Performance Monitor	7/25/2012 1:17 PM	Shortcut	2 KB	
👊 Network	Resource Monitor	7/25/2012 1:17 PM	Shortcut	2 KB	
	👼 Security Configuration Wizard	7/25/2012 1:30 PM	Shortcut	2 KB	
	👼 Server Manager	7/25/2012 1:19 PM	Shortcut	2 KB	
	😹 Services	7/25/2012 1:19 PM	Shortcut	2 KB	
	🛃 System Configuration	7/25/2012 1:18 PM	Shortcut	2 KB	
	🔁 System Information	7/25/2012 1:18 PM	Shortcut	2 KB	
	🛞 Task Scheduler	7/25/2012 1:20 PM	Shortcut	2 KB	
	🔗 Windows Firewall with Advanced Security	7/25/2012 1:29 PM	Shortcut	2 KB	~
26 items				8	

步驟 10:在「Computer Management」畫面,請按左方【Disk Management】。

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File Action View Help
Actions Computer Management (Local Volume Layout Type File System Status Actions
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New Event Viewer
▷ 32 Shared Folders
Local Users and Groups
Performance Device Management
Windows Server Backur
🔛 Disk Management
Services and Applications
< III >
Disk 0 Basic
40.00 GB (40.00 GB NTFS
Online (Healthy (System, Boot, Page File, Active, Crash Dump, Primary P)
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Unknown 20.00 GB
Offline Unallocated
Help
Gibick 2
< III > Unallocated Primary partition

步驟 11:我們會看見「Disk 1」及「Disk 2」的狀態是「Offline」,請先在【Disk 1】按 Right Click→【Online】。

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步驟 12: 再在【Disk 1】按 Right Click→【Initialize Disk】。

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Computer Management	_ □ ×
File Action View Help	
A Computer Management (Local Volume Layout Type File System Status	Actions
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A Device Manager	
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20.00 GB Initialize Disk 2	
Offline	
Properties	
Unknown Help	
512 MB	
Help	
< III > Unallocated Primary partition	

步驟13:開始為「Disk1」初始化,請先按【Disk1】,然後按【OK】按鈕。

Initialize Disk	x
You must initialize a disk before Logical Disk Manager can access i Select disks: Disk 1 1	t.
Use the following partition style for the selected disks: MBR (Master Boot Record)	
O GPT (GUID Partition Table) Note: The GPT partition style is not recognized by all previous versi Windows. 2 OK	ons of Cancel



步驟 14:在「Disk 1」的【Unallocated】位置按 Right Click→【New Simple Volume】。

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File Action View Help						
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 Event Viewer Shared Folders Folders Folde				More Actions	•	
	<	III	>			
	Disk 1 Basic 20.00 GB Online	20.00 GB Unallocated	New Simple Volume 1 New Spanned Volume			
	Cisk 2 Unknown 512 MB Offline (1) Help	512 MB Unallocated	New Striped Volume New Mirrored Volume New RAID-5 Volume Properties	_		
<	Unallocated	Primary partition	Help	Ţ		

步驟 15:我們為「Disk 1」開始格式化,請選取【Format this volume with the following settings】,在下方選擇【Perform a quick format】,然後按【Next】按鈕。

New S	imple Volume V	Vizard	
To store data on this partition, yo	u must format it first.		
Choose whether you want to fom	nat this volume, and if	so, what settings you want to use.	
 Do not format this volume Format this volume with the 	e following settings:	i)	
File system:	NTFS	¥	
Allocation unit size:	Default	v	
Volume label:	New Volume		
Perform a quick form	at 2		
Enable file and folde	r compression		
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步驟 16:請依照 Step 10 至 Step 15 為「Disk 2」進行新增,最後在「Computer」就 會多出兩個磁碟機,看先來是本機磁碟機,其實是 iSCSI 磁碟機!