



Mutual CHAP Configuration for iSCSI RAID

Purpose:

iSCSI with mutual CHAP authentication on IP-SAN

Product Affect:

SS-4503E, SS-4503R, SS-6603E, SS-6603R, A12U-IS, A12R-IS, A16U-IS, A16R-IS

Procedure:

[Preparation](#)

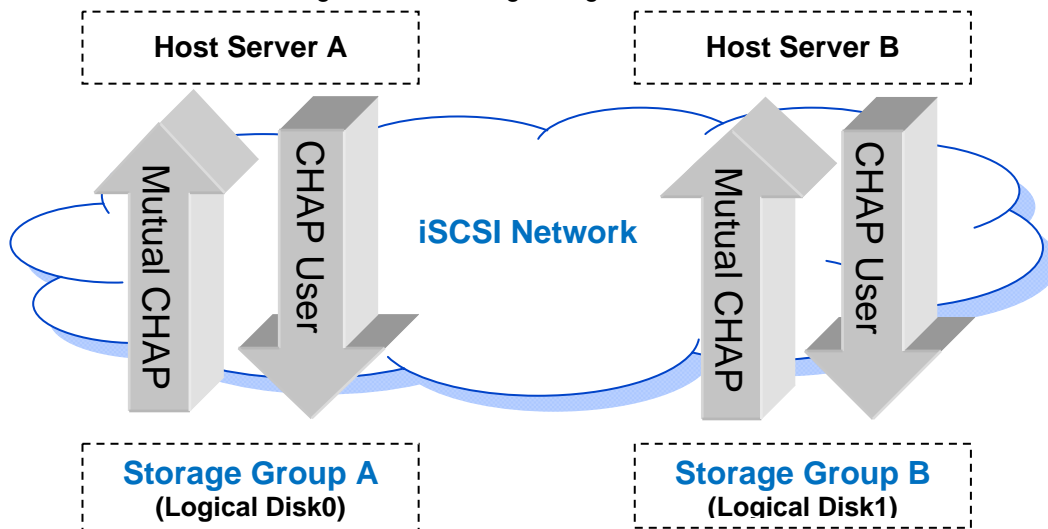
[Create logical disk and iSCSI target](#)

[Mapping LUN to host iSCSI initiator](#)

[Re-login iSCSI target and setup mutual CHAP authentication](#)

Preparation

This document will guide you to configure a particular connection of specified LUNs and hosts on IP-SAN environment. For the best iSCSI authentication, use the secret of **CHAP user & mutual CHAP** for the mutual way authentication method while creating a LUN masking configuration.



Record the CHAP secret in below table. The iSCSI connection might be fail with wrong CHAP secret.

Host Server		RAID system	
Host (iqn name)	Mutual CHAP (12 chs)	CHAP User	CHAP password (12 chs)


Table1. CHAP secret table

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Create logical disk, iSCSI target and CHAP User

- In [RAID management]>[Disk Groups], create an disk group.

Disk Groups								
DG ID	Name	Capacity (GB)	State	Member Disks	Spare Disks	Auto Lock	SED State	More
dg0	dg0	931 X 6 (non-NRAIC)	OPTIMAL	hdd15, hdd16,		Off	NOT SUPP	

Create Delete Modify Unload

- In [RAID management]>[Logical Disks], create an logic disk.

Logical Disks							
LD ID	Name	RAID Level	Capacity (MB)	Stripe Size (KB)	State	CTL Prefer/Owner	More
dg0ld0	dg0ld0	RAID5	4,768,467	128	OPTIMAL	ctla / ctla	

Create Delete Modify Flush S.VOL

- In [Hardware Configurations]>[iSCSI ports], press **Target** to create iSCSI target.
 - Select the **CHAP** in the Auth.Method menu.

Create iSCSI Target Node

IST ID:

Name:

Auth.Method: a

Target Binding Port:

Unbind ISP Port

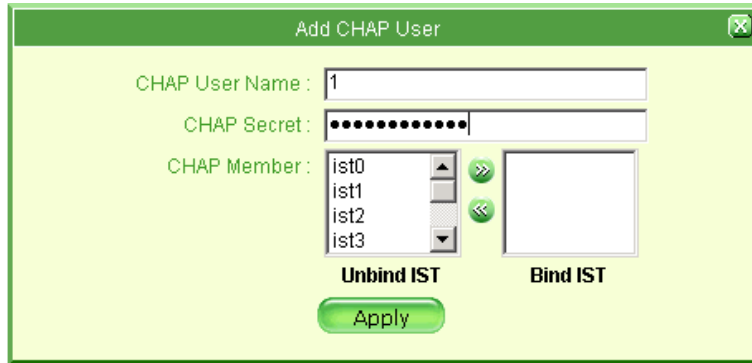
Bind ISP Port

Apply

- Press **CHAP User** to create CHAP User.

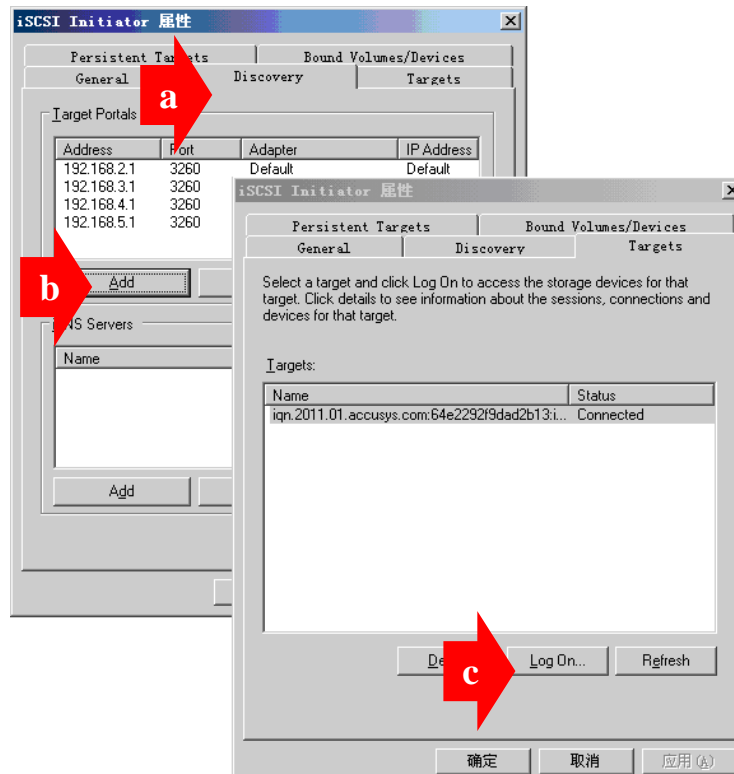
Note 1: refer to **Table1 - CHAP User** for the correct User Name and Secret.

Note 2: the length of CHAP secret cannot less than 12 characters.



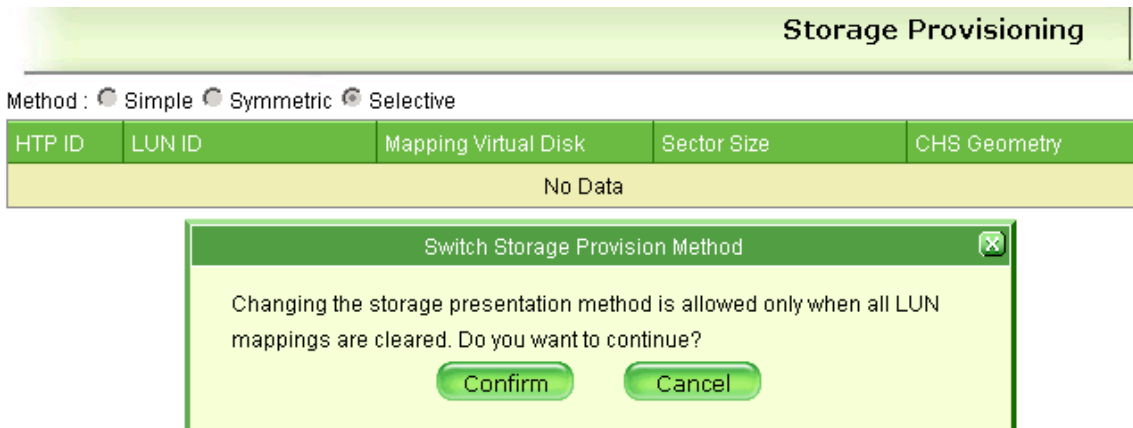
Mapping LUN to particular iSCSI initiator

1. Open the host iSCSI initiator and connect to the target.
 - a. At **Discovery** tab to discovery iSCSI target.
 - b. At **Target Portal** window, press **Add** to add IP address of iSCSI target.
 - c. At **Targets** tab, press **Log On** to logon iSCSI target.





2. In [storage provisioning]>method, click “**Selective**”



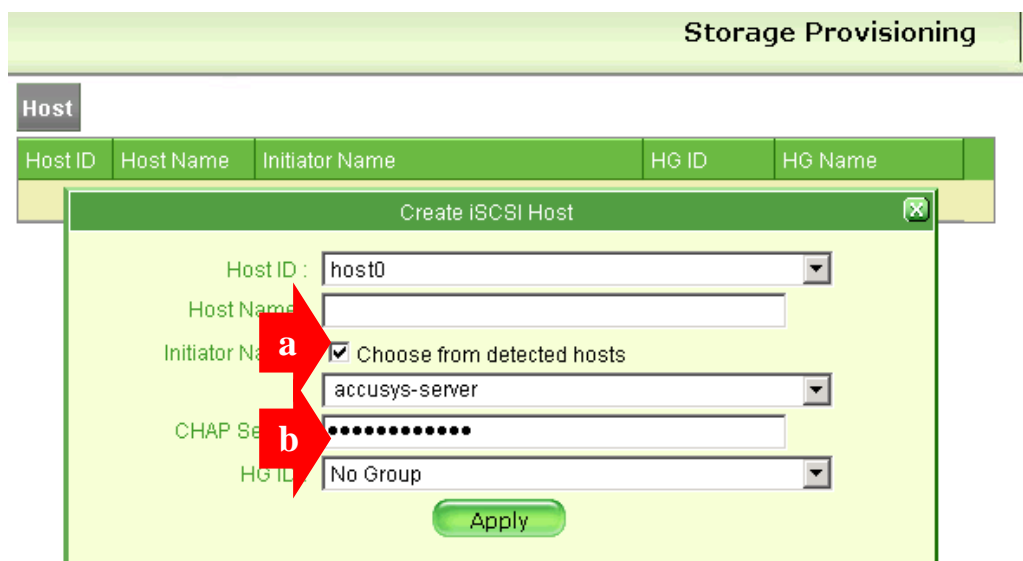
3. In [storage provisioning], press **Host** to create a host.

a. click **Choose from detected hosts** and select the host by drop down menu.

b. setting “**CHAP Secret**”

Note1: refer to **Table1 – Mutual CHAP** for correct Secret.

Note2: the length of CHAP secret cannot less than 12 characters.





4. In [storage provisioning]>SG, create a storage group “SG0” with a logical disk.

Storage Provisioning

Storage Group

SG ID	LUN ID	Mapping Virtual Disk	Access Right	Mask Status	SG Name	More
sg0	lun0	dg0ld0	Read-writable	Unmask	SG 0	ⓘ

5. In [storage provisioning]>Bind, binding the **host0** & **SG0**

Storage Provisioning

Method : Simple Symmetric Selective

HTP ID	Bind State (Host/HG ID)	Host/HG Name	Bind State (SG ID)	SG Name
	<input type="button" value="Host"/>	<input type="button" value="SG"/>	<input type="button" value="Bind"/>	<input type="button" value="Unbind"/>

Bind Host/Host Group ✕

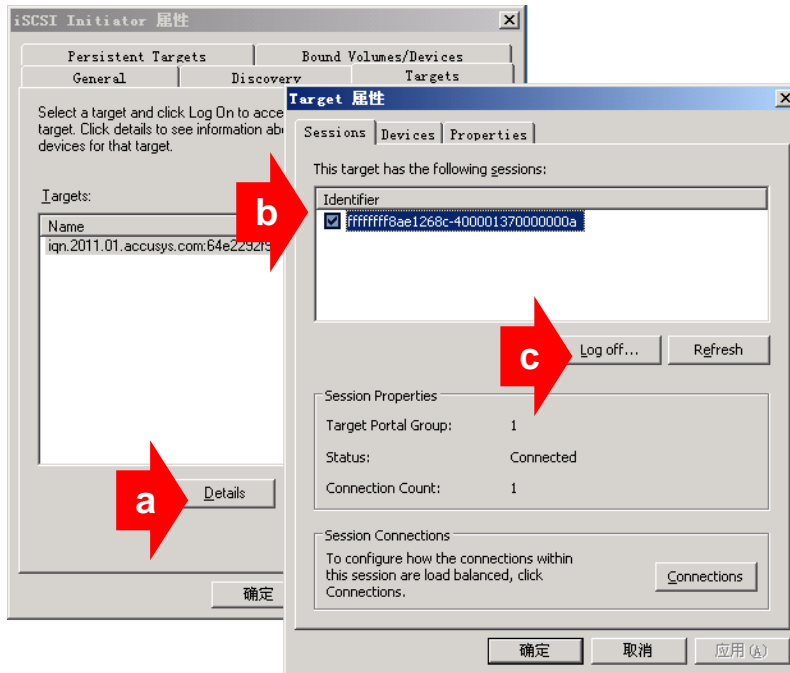
HTP ID :

Host/HG ID :

SG ID :

Re-login iSCSI target and setup mutual CHAP authentication

1. Log off the iSCSI target.
 - a. Press **Detail** button.
 - b. Check the device in **Identifier** window.
 - c. Press **Log off...** to log off the device.

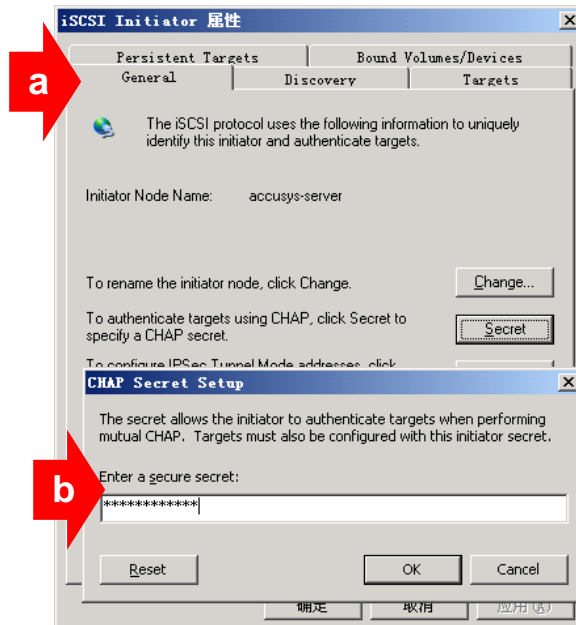


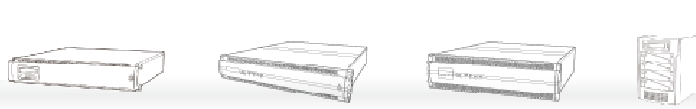
2. Set mutual CHAP secret

- a. At General tab, press Secret
- b. Enter a secure secret.

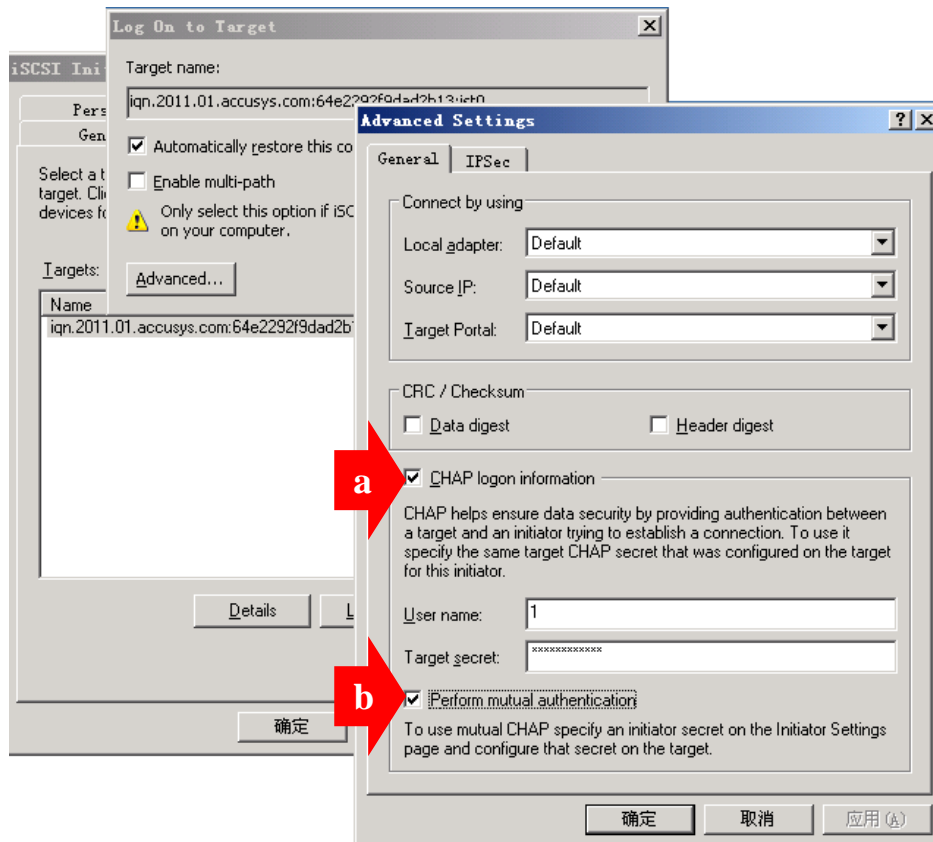
Note1: refer to **Table1 – Mutual CHAP** for correct Secret.

Note2: the length of CHAP secret cannot less than 12 characters.

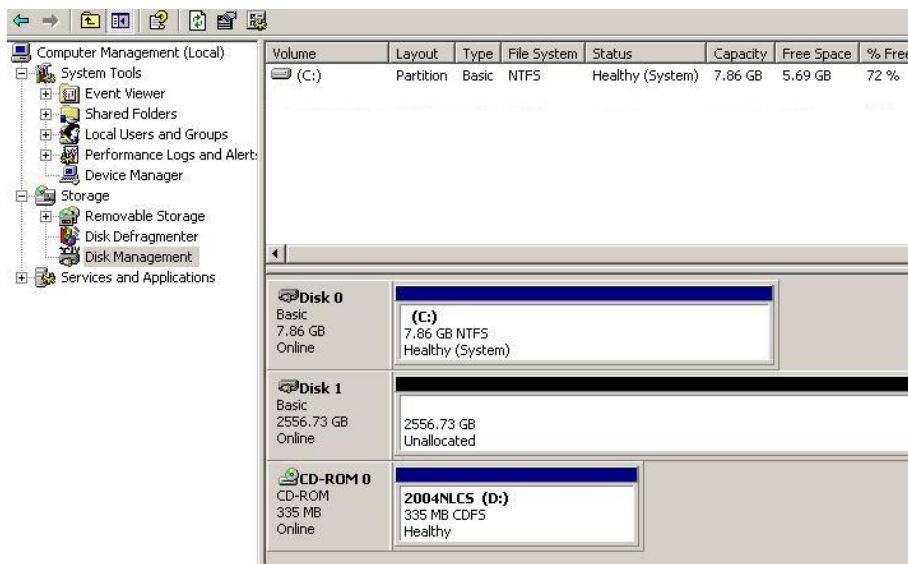




3. Re-log in the iSCSI target with CHAP user and mutual CHAP.
 - a. Check **CHAP login information**. (refer to **Table1 – CHAP User**)
 - b. Check **Perform mutual authentication** to enable mutual CHAP authentication.



4. The iSCSI device appears in the Disk Management.



5. Repeat the complete steps to create another particular connection of specified LUNs and hosts.

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