



Mutiple-ID

Purpose:

Mutiple-ID Setup

Product Affect:

SS-4501R, SS-6601R, SS-8801R

Procedure:

[Preparation](#)

[How MTID works](#)

[Step by step procedure](#)

1. Preparation

1.1 Support firmware version **2.15** and above.

1.2 FC HBA and switch compatible list.

| Firmware | Mac OS | FC HBA | FC Switch |
|----------|--------|--------------|--------------------|
| 2.03A | 10.5.5 | LSI7202XP-LC | Qlogic SANBox 5600 |
| | 10.5.4 | LSI7204XP-LC | Brocade 4100 |
| | | LSI7404XP-LC | |
| | | LSI7402EP-LC | |

Note: ATTO 4G-FC HBA is incompatible.

2. How MTID works

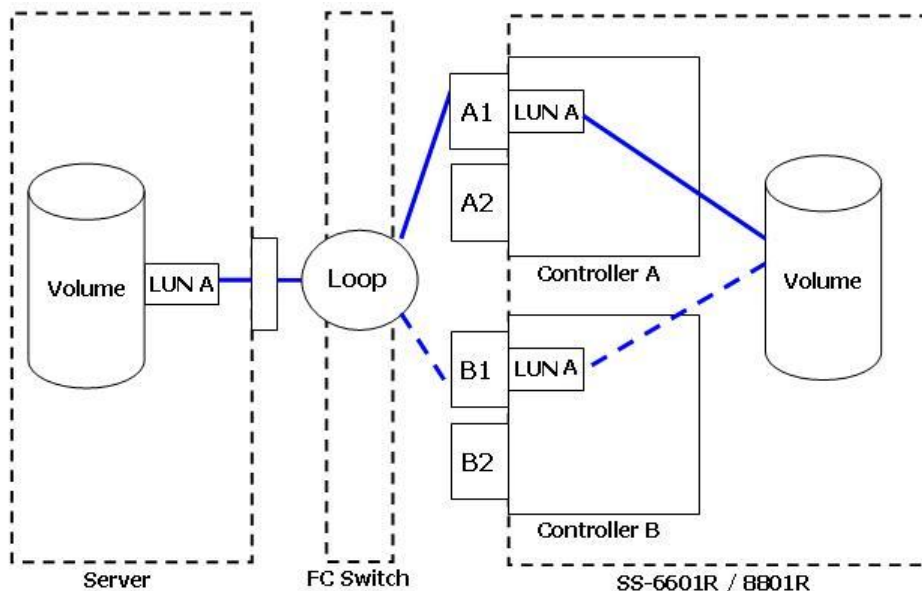
Arena SS-xx01R supports MTID (Multiple-ID) to present LUN (logical unit) with inheritable ID for making every LUN could be fail-over/fail-back successful while either controller failed in the redundant controller storage.

MTID is the solution for that non-MPIO operation system (ex. MacOS) to easily support controller redundancy.

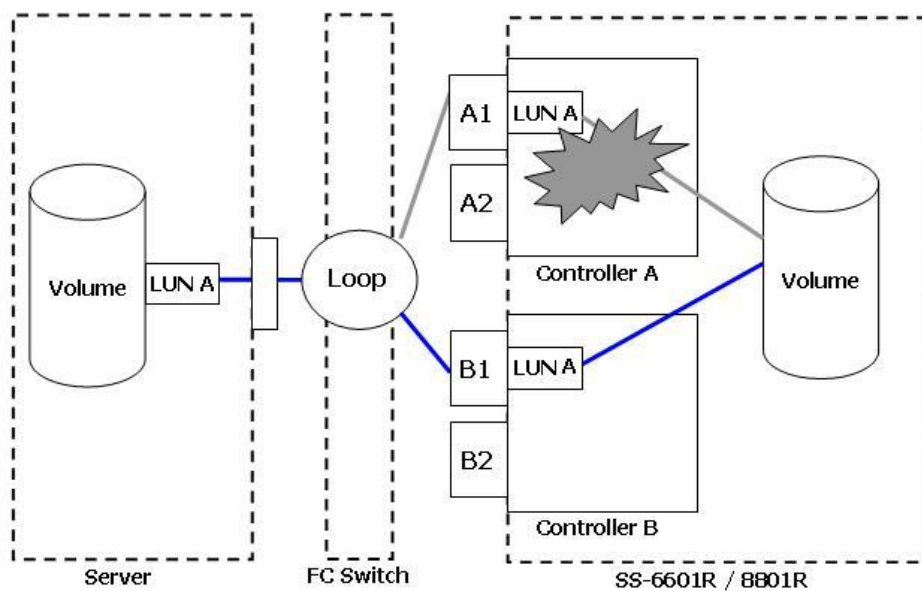


2.1 Controller Fail-over topology – Active / Standby

Normally, Volume is accessed through available LUNA of CtrlA-A1 (solid line), and CtrlB-B1 is in standby mode (dotted line).



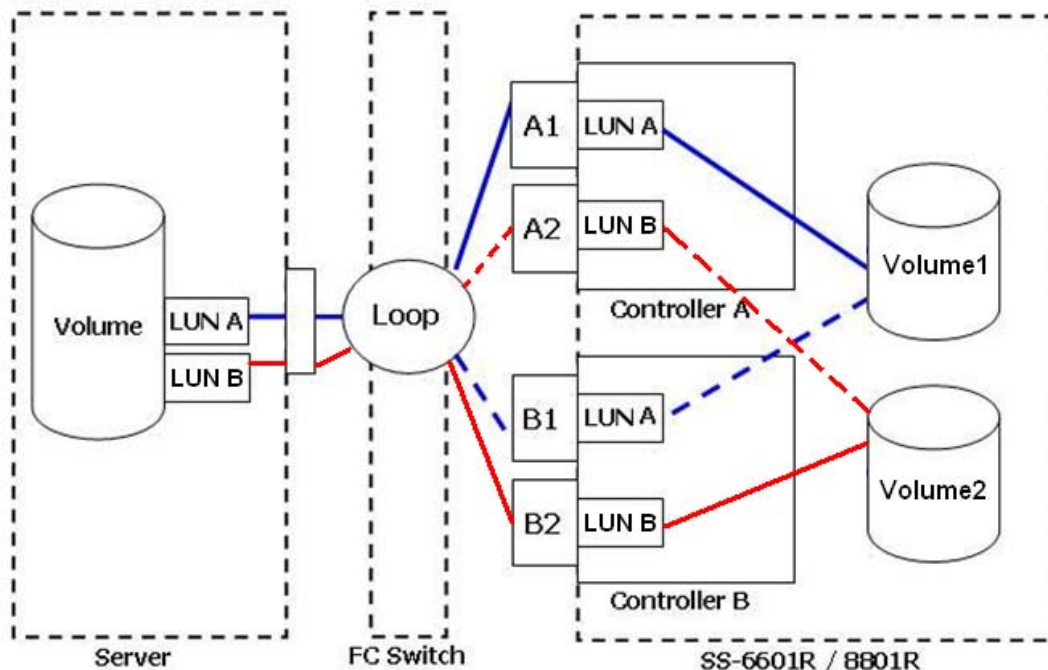
When CtrlA failed, system will perform fail-over, LUNA will be inherited by ControllerB-B1. After CtrlA back to normal, LUNA will fail-back to CtrlA-A1.



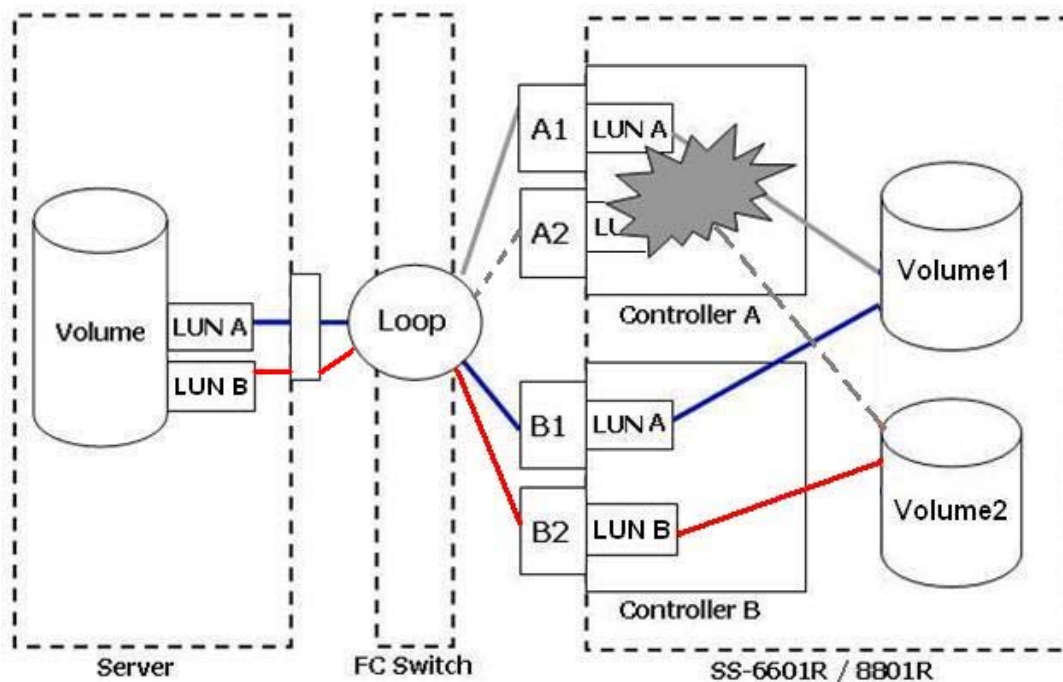


2.2 Controller Fail-over topology – Active / Active

Normally, Volume1/2 are accessed through available LUNA/B of CtrlA-A1/ CtrlB-B1 (solid line), and CtrlA-A2/ CtrlB-B2 are in standby mode (dotted line).



When CtrlA failed, system will perform fail-over, LUNA will be inherited by CtrlB-B1. After CtrlA back to normal, LUNA will fail-back to CtrlA-A1.





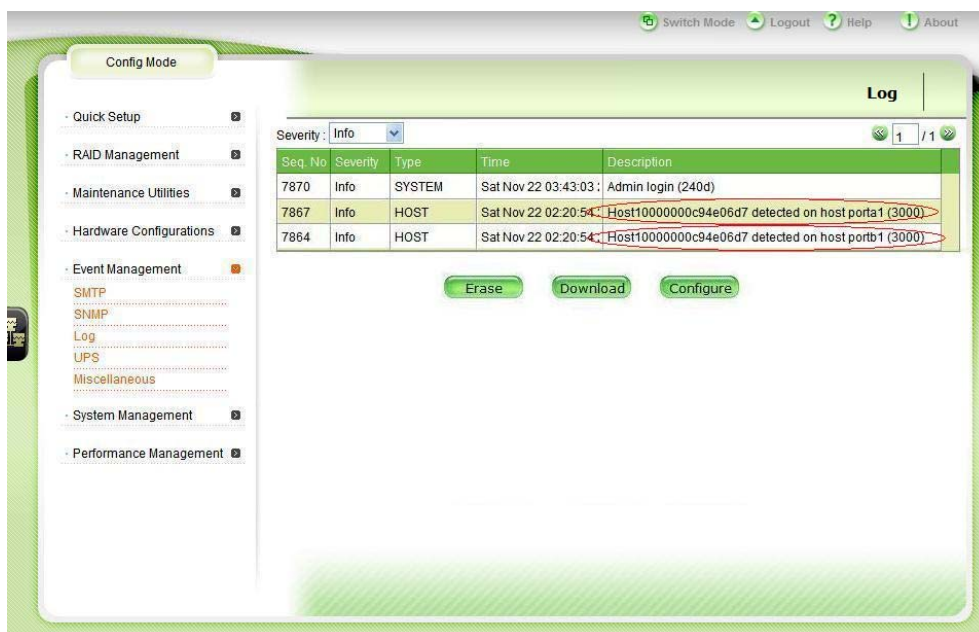
3. Step by step procedure

3.1 Setup hardware environment

To build an Active-Standby environment, please follow the architecture (refer to Chapter 1.1) to connect Server, RAID and FC switch.

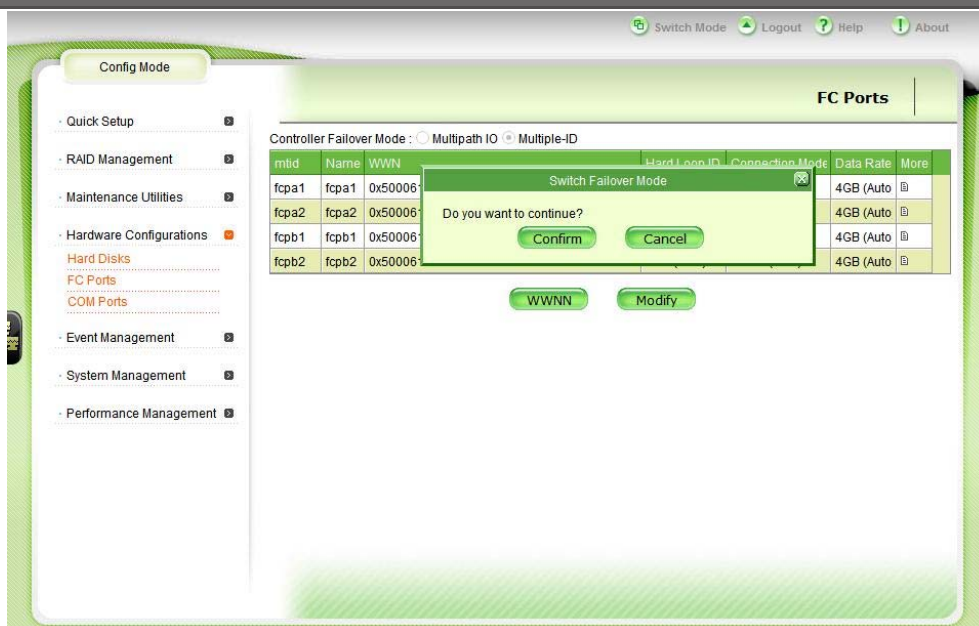
3.2 Make sure connection status

In [Event Management]->[Log], check the WWPN (from Server/HBA) is detected by PortA1 and PortB1. (If there is not WWPN detected, please check FC switch setting, or SFP/Cable is good or not.)



3.3 Set storage in MTID mode

In [Hardware Configurations]->[FC Ports], set Controller Failover Mode to "Multiple-ID", and restart system to make it available.



3.4 Set DG (disk group) and LD (logical disk)

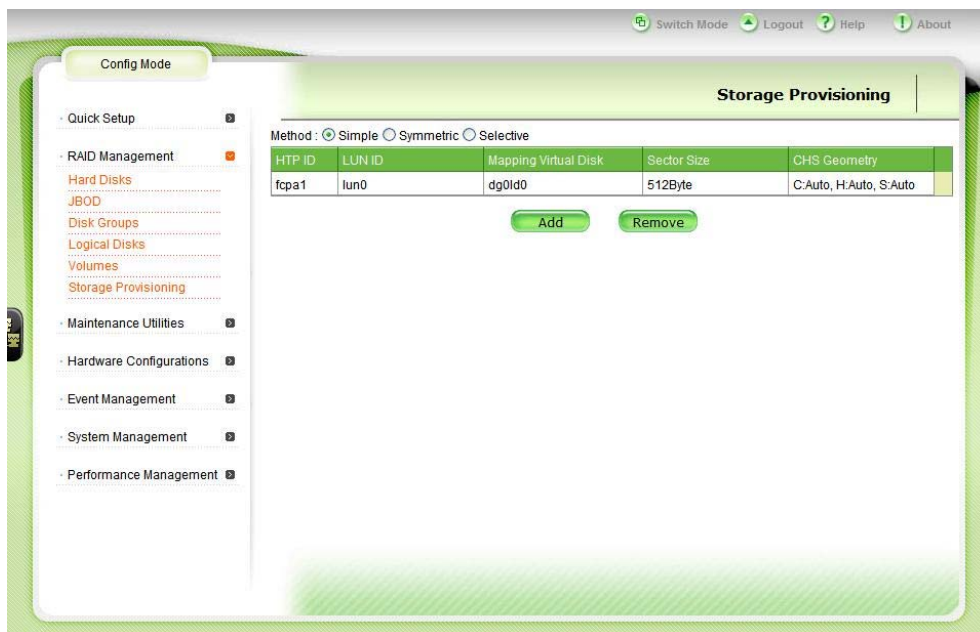
In [RAID Management]->[Disk Group], create a DG0 with all disks.

In [RAID Management]->[Logical Disk], create a LD0 and set "Preferred Controller" to "A".



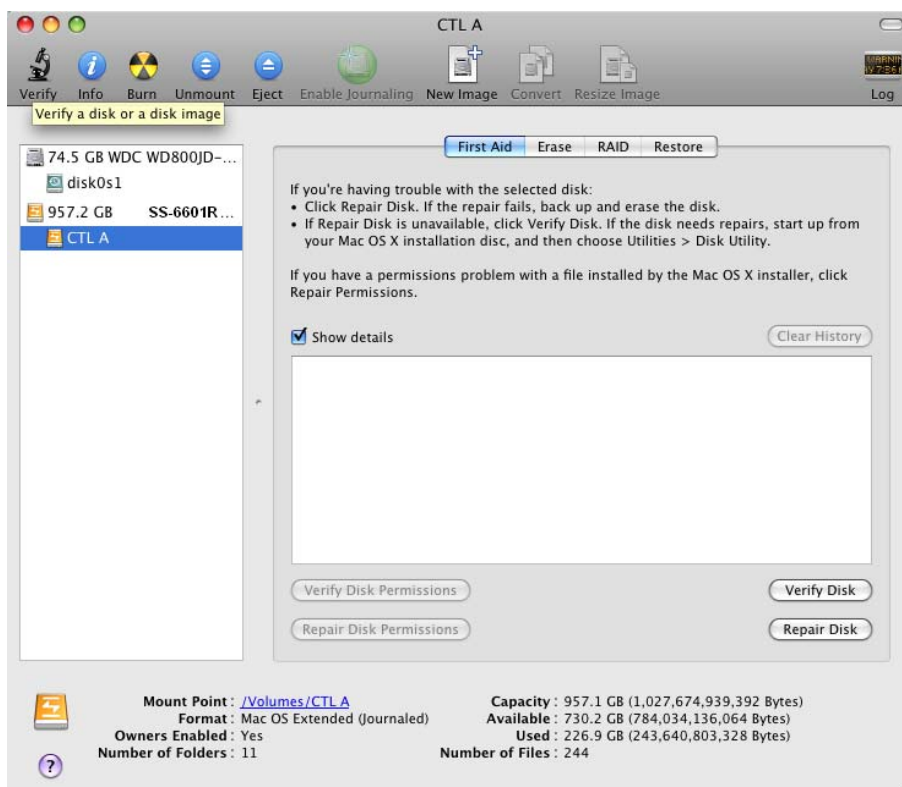
3.5 Set Storage Provisioning

In [RAID Management]->[Storage Provisioning], add DG0LD0 mapping to fcpa1, fcpb1 will be mapped virtually.



3.6 Format partition

In Mac OS, run Disk utility to partition the array. And start to access array.





3.7 Test Fail-over and Fail-back

In [System Management]->[Restart/Halt], select “ctlA” and “restart”, and then press “Apply” and “Confirm”.
Controller A will start to re-booting (fail) and LUN will Fail-over to Controller B. Once Controller A booting done,
LUN will Fail-back from Controller B.

