

Purpose:

Use Array recovery Utility to recovery the RAID

Product Affect:

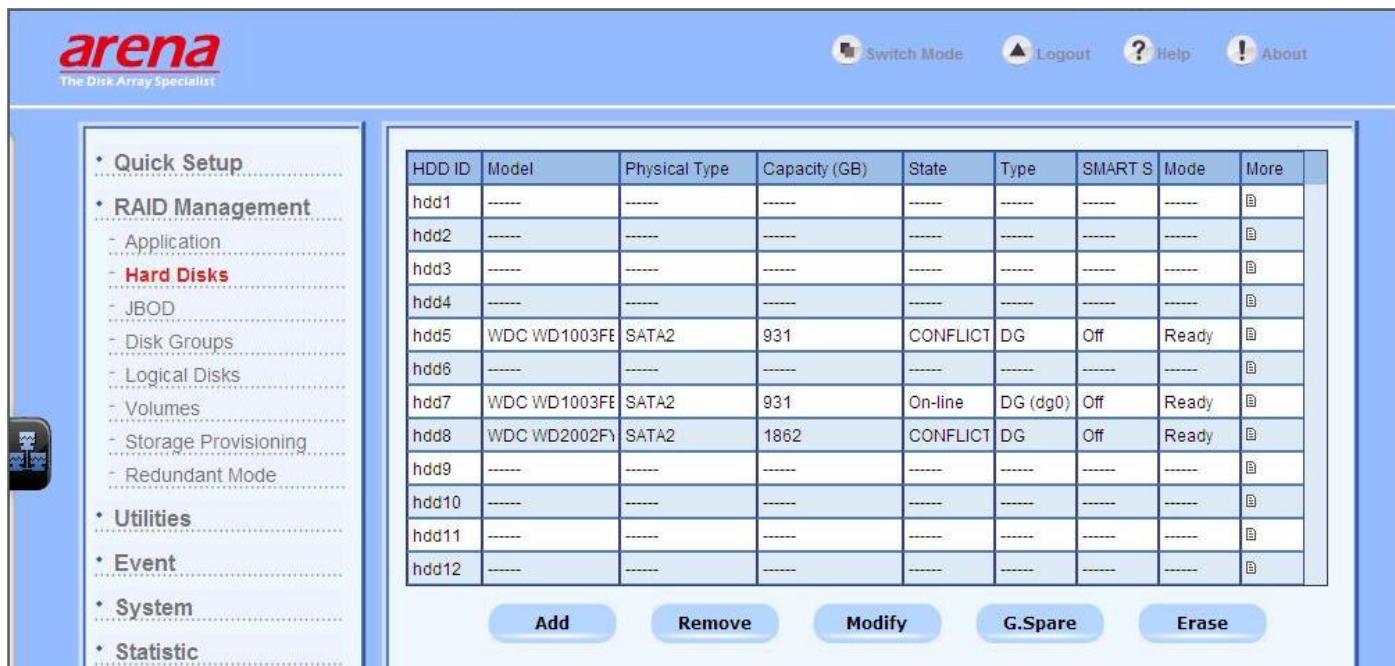
Nova & Maestro series

Procedure:

1. [Check Hard Disk / Disk Group / Logical Disk Status.](#)
2. [Use 'Maintenance Utilities'->'Array Recovery':](#)
3. [Alternative: Force to recover disk](#)

1. Check Hard Disk / Disk Group / Logical Disk Status.

When you encounter multiple disks failed and RAID failed, please plug-in the failed disks and see if it is recognized by the RAID system or not, if it did, then you will have chance to recovery the RAID and you can see the disk state is 'Conflict' and type of disk is 'DG' under 'RAID Management' -> 'Hard Disks':



HDD ID	Model	Physical Type	Capacity (GB)	State	Type	SMART S	Mode	More
hdd1	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd2	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd3	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd4	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd5	WDC WD1003FE	SATA2	931	CONFLICT	DG	Off	Ready	ⓘ
hdd6	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd7	WDC WD1003FE	SATA2	931	On-line	DG (dg0)	Off	Ready	ⓘ
hdd8	WDC WD2002FY	SATA2	1862	CONFLICT	DG	Off	Ready	ⓘ
hdd9	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd10	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd11	-----	-----	-----	-----	-----	-----	-----	ⓘ
hdd12	-----	-----	-----	-----	-----	-----	-----	ⓘ

You will see 'Non-Optimal' under 'RAID Management' -> 'Disk Groups':
And also see 'FAULTY' under 'RAID Management' -> 'Logical Disks':



LD ID	Name	RAID Level	Capacity (MB)	Stripe Size (KB)	State	CTL Prefer/Owner	More
dg0ld0	dg0ld0	RAID5	1907387	128	FAULTY	ctla / ctla	ⓘ

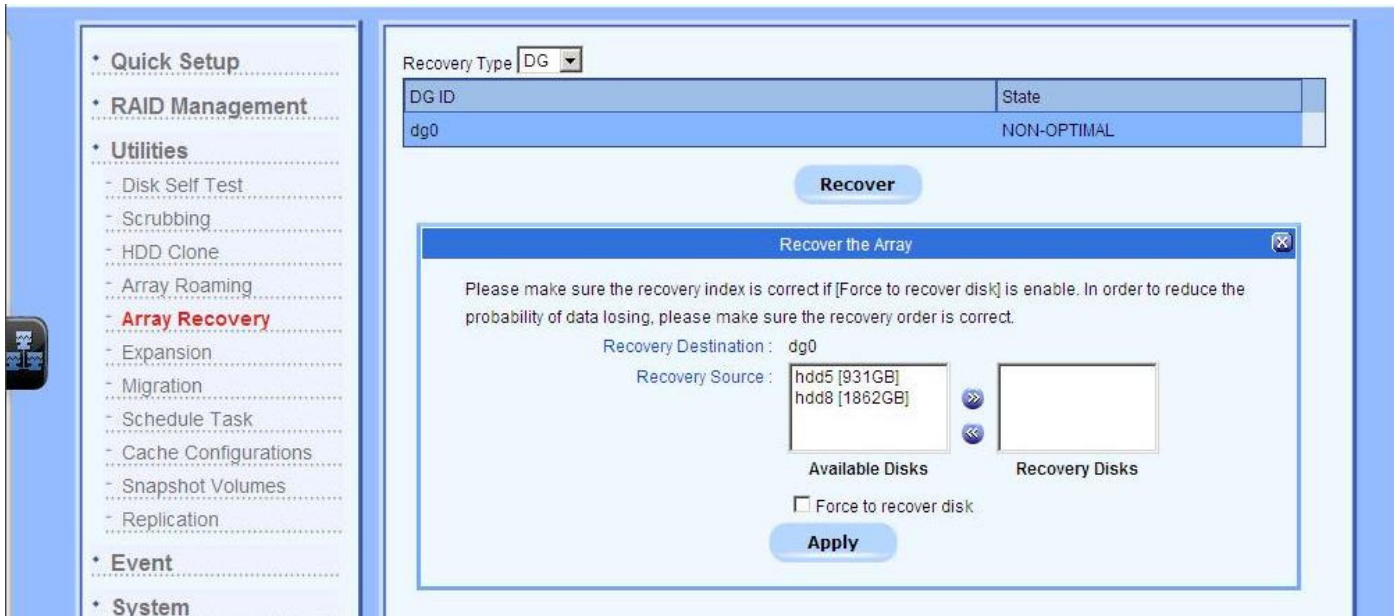
2. Use 'Utilities'->'Array Recovery':

You will find one disk group (dgo) is 'NON-OPTIMAL' and click 'Recover' button to recovery the

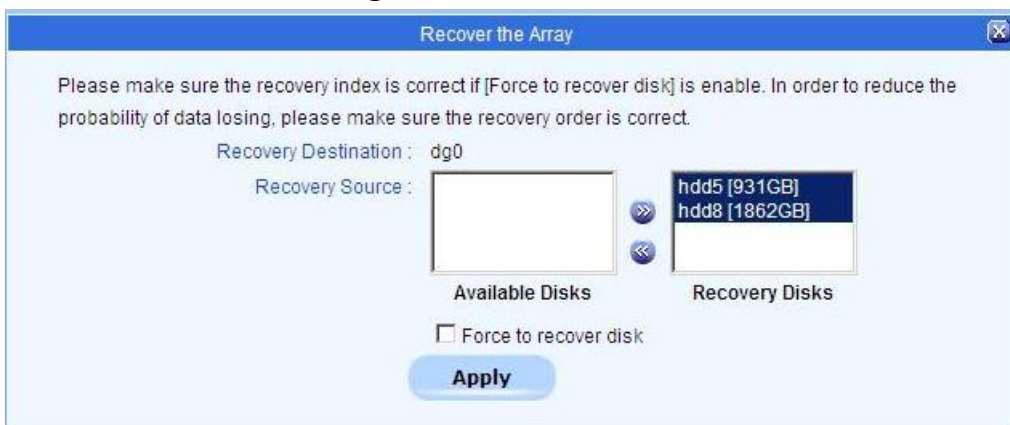
array.




Then you can see the 'Recovery the Array' dialogue, please select the Recovery Source, and select the correct 'Available Disks' to the 'Recovery Disks' and Apply:



Then it will show an dialogue for double check,



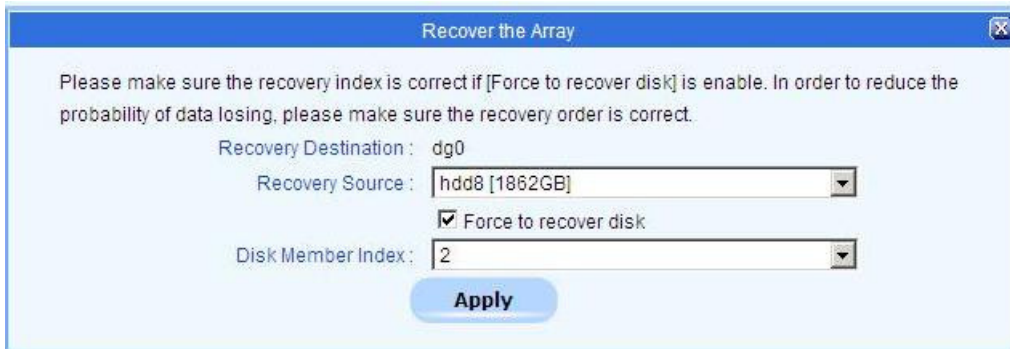
After you then click confirm, then the RAID is starting to rebuild and you could see the partition after rebuilding process done.

LD ID	Name	RAID Level	Capacity (MB)	Stripe Size (KB)	State	CTL Prefer/Owner	More
dg0ld0	dg0ld0	RAID5	1907387	128	REBUILDING (0.	ctla / ctla	

Create Delete Modify

3. Alternative: Force to recover disk

If the Array Recovery Utility did not let you recovery, then please select the Recovery Source, click 'Force to recover disk'. And assign to the Disk Member Index (Please make sure the recovery HD is to the correct Disk Member Index,) and Confirm it.



Recover the Array

Please make sure the recovery index is correct if [Force to recover disk] is enable. In order to reduce the probability of data losing, please make sure the recovery order is correct.

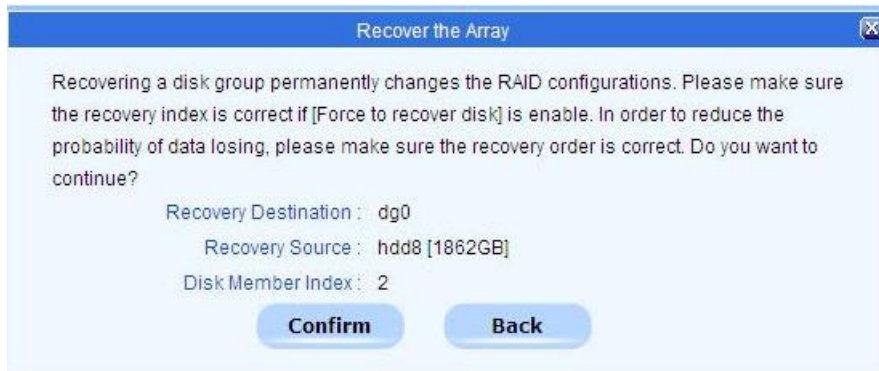
Recovery Destination : dg0

Recovery Source :

Force to recover disk

Disk Member Index :

Apply



Recover the Array

Recovering a disk group permanently changes the RAID configurations. Please make sure the recovery index is correct if [Force to recover disk] is enable. In order to reduce the probability of data losing, please make sure the recovery order is correct. Do you want to continue?

Recovery Destination : dg0

Recovery Source : hdd8 [1862GB]

Disk Member Index : 2

Confirm Back

After you then click confirm with all RAID members, then the RAID is starting to rebuild and you could see the partition after rebuilding process done.

Notice:

1. Due to this is recovery process, there is some chance that the Array is not able to get the correct information or the hard disk is not stable to do it and the recovery is incorrect.
2. There is some chance that file allocation table is corrupted, you need to use software to search the disks and then get the data back.