Configuring Raid Mirror on Adaptec 1430SA RAID Controller

Remove the existing Hard drive if it is too small for the job. Make sure the onboard SATA slot -0 is disabled so that there will be no error message on power up after this Hard drive has been removed.

Install the 1430SA Controller Card in a PCI-e X4 slot on the server or PC and attach 2 identical SATA drives to the controller at say position 00 and 02 respectively, such as installing two 500GB Hitachi SATA2, or two 500GB Seagate SATA2. Make sure to remove from the back pins on the Hard Drives any jumpers that restrict the drives to SATA 150 instead of SATA 300. We want these to run at SATA 300. On the controller, I put my first drive on SATA connector 00 and second drive ended up on SATA connector 02.

Start the Server and during power up self test (POST) press CTRL+A to launch the Adaptec Raid Configuration Utility. Go to Array Configuration Utilities. Go to Create Array. Use INS button to select each hard drive that will go into the new array. Press Enter key to complete the selection.

Under Array Properties, Select Array Type: Raid 1-Mirror and press Enter key. At Array Label type something like ARRAY1 and press Enter key to accept this value. Under Create RAID Via, you have 3 choices: Build, Clear, Quick Init. If the drives are brand new, select Quick Init. Next to DONE, press Enter key. When you select Quick Init, there is a warning which states that in order to make drives consistent, you may need to run verify with/fix later.

Under Manage Arrays, at new ARRAY1 press the key combination of CTRL+B to mark the new Array as bootable.

Use Escape key to back up through menus and go to Exit. At Exit yes/no, select yes. System rebooting...

At this point, the two drives normally appear as a single drive when creating partitions, formatting, installing an operating system, etc.

If you need to create and restore a utility partition before installing your operating system, you should use something like Super F Disk utility CD to create the partition. Here is how. Boot to the Super F Disk CD and create a Primary FAT16 partition on the ARRAY of appropriate size, like 70MB. Also, create a temporary second FAT32 primary partition of about 2024MB with the label of OX, and mark this second partition as Active, so that the first partition then is marked as Hidden partition. Make sure the FAT32 second partition is Active and shows as the C drive, and that the FAT16 utility partition shows as hidden and inactive. Save all changes from within super F disk, and exit super F disk so that the changes will be applied on reboot.

Then, to restore the utility partition from ghost image, just boot to a pre-install environment cd, such as Bart's X-PE Reatogo version, containing Ghost 9 installed. During bootup of the X-PE, make sure you press F6 to Queue the installation of RAID Drivers from a floppy diskette for the 1430SA controller. Otherwise, when you load Ghost 9 from the X-PE after boot-up, it won't detect and show the SATA Array1 in Ghost 9. When you start Ghost 9 from Bart's PE, click restore drive, and restore the utility partition image from your ram thumb drive into the 70MB FAT16 target partition. Start, Shutdown, Restart from X-PE, and remove the CD and insert your Windows or Linux O/S CD or DVD.

With Windows Server or XP installations, make sure you press F6 at the beginning of the Windows

install and insert the Adaptec Controller Driver Floppy diskette when asked.

https://www.installconfig.com/ - Install Config Wiki

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