

IDE/RAID: RAID 1 Data Corruption Using Auto-Configure

This is an application note for customers who want to configure a Raid 1 mirror using any Silicon Image storage product (SiI0680, SiI3112, SiI3512 and SiI3114) on a system with an *existing OS and file system installed on their machine*.

The "auto configuration" utility provided in our software is intended for users who are going to format the drive or *do a fresh installation*. When using this auto-configuration, the BIOS will only mark both drives as Raid 1 and identical *without copying the data*. As a result, the Raid 1 set will not have the same data when formed and the data on the original drive will be lost.

SOLUTION:

To avoid this problem, *"manual configuration" must be used*. Use the following steps to configure a RAID 1 mirror set on a system with an existing OS installation:

- 1) Select the original OS drive as "source drive" or "1st drive" and choose the new drive as "target drive" or "2nd drive".
- 2) *Select "yes" for disk copy option*. If you select "no", it will have the similar result as "auto configuration".
- 3) You can choose either "online copy" (the copy will be done on the background when the system is up) or "offline copy" (the copy operation will be performed immediately under BIOS) to duplicate the data from the original drive into the new drive.

Future revisions of the BIOS will make this more clear and hopefully avoid problems in the future.