



Do I still need to do backups if I have RAID hardware?

Yes, there is nothing that will replace a good backup strategy where data integrity is important. RAID hardware provides a good level of fault tolerant resilience but not even RAID 5 gives total protection against corruption or indeed total loss.

RAID hardware provides the ability to hot swap a single failed disk and still maintain the data integrity. Once a disk has failed the likelihood is that another disk will go in a fairly short time. This means that unless the failed disk is noticed and replaced quickly a second disk failure is highly likely resulting in the total loss of data.

Disks in a RAID array were probably all made in the same manufacturing batch so the mean time between failures (MTBF) will also be similar and therefore a failure of 2 or more disks in quick succession is well known by those that work for RAID companies.

Corruptions can also be populated throughout the RAID set which again means that the RAID hardware will not protect you against such an eventuality.

There are a number of articles on the web on RAID hardware such as the following:

http://labs.google.com/papers/disk_failures.pdf

Regular backups are essential and we would recommend that backups be stored off site if at all possible in a fireproof safe for extra security if this is required.

You should ensure that the verify option is set when the backup process is performed and at least 2 sets of tapes should be used to allow for a possible corruption on one set.

All four of the Exaquantum Databases (FrameworkSchema, QConfig, QHistorianAdmin and QHistorianData) should be backed up at the same time in the same job.

It is possible to use remote backup server software to backup the databases.

You should also note that in Exaquantum Backup is not the same as Archiving.

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