

Misc

Side topics related to server hardware or hardware in general.

- [ECC Memory](#)
- [Redundancy != Backup](#)

ECC Memory

Yes, this is such a contentious topic I made an entire section just to say it's a waste of money.

Does it help reduce errors? [Absolutely](#).

Unless you're running some truly mission critical services, it's just not worth the cost. You're more likely to suffer data loss/corruption to failed hardware or data rot or cosmic bit flipping than to a memory error. Yes, I realize ECC RAM can mitigate cosmic bit flipping to an extent. Again, it's just not worth the cost for most people. Of course, if you're determined to burn some money, there are worse things you could spend it on.

Ultimately, as long as you are doing proper backups, you're already doing what you reasonably can to prevent data loss. No matter what you do, there's no 100% guaranteed way to prevent data loss. The best you can do is mitigate it and the [3-2-1 backup rule](#) is the most reasonable solution most of us will get. Of course, now I see people [saying it sucks](#). Well, you do what you can afford, I guess.

Redundancy != Backup

RAID is redundancy. Clusters are redundancy. It's about keeping services available, not preventing data loss.

Backups are about preventing data loss.

For a long time, the [3-2-1 backup rule](#) has been considered the most reasonable solution most of us will get. Of course, now I see people [saying it sucks](#). Well, you do what you can afford, I guess.

It's worth noting that you can self host an off site backup, if you have a second physical location you can use. It can be a relatives house or you can even rent a space on an existing server farm. The main point is that it's not in the same building as the original copy.