

Assignment: Interfaces

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There are quite a few kinds of HDD interfaces, some of which are proprietary modifications of existing standards. I'd like to examine the more popular interfaces that are standardized. The first that comes to mind is SCSI, "Small Computer System Interface" which popped up in the 1980s and was heavily endorsed by ANSI, also known for the ANSI keyboard layout. It's commonly seen within tape drives, as well as traditional hard drives. SCSI drives sported 50 or 68 pin connectors, depending on if the drive was 8-bit or 16-bit. Superseding SCSI was SAS or "Serial Attached SCSI" which debuted in 2004. SAS drives are still around and typically seen in enterprise servers. Nearly all Cyber Warfare Range servers run off SAS drives, and the standard offers up to 22 Gbps.

Next up is ATA, or PATA. ANSI endorsed this standard heavily in the 1980s, giving it a temporary boost in popularity. For most of the 1980s and a good chunk of the 1990s, ATA was the go-to for consumers and enterprise alike. Following up (P)ATA, SATA is what most consumers are using today.

If I were building a personal computer, I would select SATA drives; most consumer motherboards support SATA and I don't really see a great need for purchasing more-expensive SAS drives when SATA drives are more readily available. For a server, SATA or SAS would be my go-to, probably SAS since it's just considered a standard by server manufacturers. Looking at the servers in the Cave, we only have two servers with SATA drives and the rest are SAS.