

NAS Storage Servers for Student CAD Archives

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Network & Infrastructure



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A NAS (network attached storage) server stores and shares files across the lab network, centralising student CAD archives, project files and backups with RAID protection and access control. It is the warehouse for years of student work.

Key Features

- 2-8 drive bays with RAID
- Gigabit or 2.5 G network
- User accounts and quotas
- Snapshot and backup features
- Web and app access

Typical Uses in the Workshop

- Archive student CAD and project files
- Share resources across the lab
- Auto-backup workstations
- Version and snapshot protection

Safe Operation

1. Set up the RAID array and shares
2. Create user folders and quotas
3. Schedule backups and snapshots
4. Monitor the disk health daily
5. Test restores periodically

SAFETY NOTES

- Keep the NAS in a ventilated space
- Fit new drives matched to the RAID
- Back up the NAS itself offsite
- Control access and password policy
- Watch the disk health alerts

Maintenance & Consumables

- Check the SMART health weekly
- Replace failing drives promptly
- Update the NAS firmware
- Clean the fans and filters
- Audit the user quotas

Specification & Buying Notes

A 4-bay NAS with RAID 5 and 2.5 G network suits a school lab archive. Quality units protect data; consumer drives fail earlier. Budget for a backup drive as well.