

NTRLS IT: Real Stories  
**Some things to consider for backing up your important Data**

**Issue / Problem:**

Backups, what to use to make sure your data is safe

**Background Information you should know about:**

What are tape drives? Tape drives are devices that use a media to store backup data on tape. What is an external Hard Disk Drive? Typically it is a hard drive that has been installed in an external case of its own outside of your computer and typically gets hooked up via USB, Firewire or from a network interface connection into your network. What is a Flash Drive? A Flash Drive, also known by several other names such as Thumb Drive or Jump Drive, is a device that is usually small enough to fit on your keychain and usually hooks up via a USB connection.

**Resolution / How we solved the problem:**

Having a healthy operating system is great, but you can never be sure what is lurking around the corner when it comes to data safety. That is why you should have a backup solution in mind for data that you consider Important. There are several devices on the market you can purchase to help you backup your data. Here are a few:

1. Tape Drives and media. Tape drives have been around for quite some time and have been a proven backup solution. However, the cost of maintenance time and replacing the media that goes with the drive can be a pain for smaller staff in your library. Tape drives need to be cleaned periodically with a cleaning tape to keep the drive clean and the media tapes tend to not be reliable after about a year and it is recommended that you replace them. This adds to the cost, not to mention the fact that you also need to replace the tapes daily or weekly depending on your backup routine. Depending on your storage size needs, another thing to consider when using a tape backup solution is that the media tape for the drive is usually limited to around 40-60 gigs storage.
2. External Hard Disk Drives. These are great because they do not require media to be changed in and out daily and do not require a cleaning tape. They are much cheaper to purchase because you only purchase one device instead of a drive and media as in the tape drive above. They will work on most computers and servers by hooking up in one of the two direct connections -- USB or Firewire. If you can't hook up the device directly to your PC or server then you can use one that hooks up via network connections. Sizes range up into the Terabyte range (1TB is equal to 1024 Gigabytes). If you need to take the backup off site you can unplug and remove the device, however it's not as convenient as the Flash Drive. Most backup software will support the setup of either a tape drive or one of these external hard disk drives to store your data. You may want to have a couple of these drives on site so you can swap them out periodically for your offsite data backup.

3. Flash Drives. These wonderful little devices are a godsend when it comes to quick portable storage. The sizes of these drives have grown over the years and I have seen up to 8 gigs per device at a relatively cheap price. They plug into USB ports and work with just about every operating system. They are small enough to fit in your pocket and have made the Floppy disk and Zip Disk obsolete. They also usually have no moving parts unless you consider the cover or case a moving part. I would imagine that in the future these things will only get bigger and better for storage and backup solutions. If you need to transfer files - or in this case, back up your data - then the only drawback is the amount of storage that they allow at the present time.

If you have any questions or comments, please contact me at [abeatty@ntrls.org](mailto:abeatty@ntrls.org).