

Computer Data Storage Options

“There are two types of computer users in the world; those who have lost data, and those that will.”

This is a quote common in computer “techie” circles because we find that once someone lost data, they take the precautions not to have it happen again. We don’t want you to be in the second group either! So learn from the mistakes of others, save your data on a reliable source, and you will not suffer through having to recreate a file, grade book, etc.

We recommend that you store files on 1) the SAN Network storage, 2) a USB drive, or 3) CDs or DVDs. Below is further information on each type of data storage device/media available.

“Floppies” are a very common means of storage, but are being phased out since floppies do not hold much data and are unreliable. Floppies were very popular for a long time since they were inexpensive and portable. Many new computers do not come with a floppy drive without an added cost. Floppies may lose or corrupt your data due to old age, dust, improper storage, or storage near magnetic objects. We strongly suggest you transfer your files to one of the recommended media.



Zip disks are another older form of data storage and cost about \$15 dollars a disk. Zip disks only work in a Zip drive. Zip drives are installed on many of the computer at Ferris, but are not installed on many computers off campus. They also are subject to corruption like a floppy disk. Considering price and technology, we also suggest copying files from these to a different media. USB drives cost about the same as a zip drive depending on the size and are usually hold more, are more reliable, and can be used on almost all machines.



CDs-Come in two forms: CD-R, and CD-RW. Most recently purchased computers come with a CDRW device. With a CD-R disk, you can only write to it one time, and cannot change the files once they are written. CD-RW disk allows you to add *and* rewrite files to it . Most hold 700MB of data, and are inexpensive. Some older computers have a CD drive that can only read a CD, and some can only create files on a CD-R, but all can read info off any data CD.



DVD-R and DVD-RWs are the used like CD-R and CD-RWs, except they hold 4GBs of data. A DVD “burner” (aka DVD-RW drive) is needed to write on the storage media.

USB Sticks or Thumb Drives are the newest forms of data storage, and will work on practically any computer with a USB port. They have no moving parts so they are nearly incorruptible. USB sticks typically range in size from 32MB to 4GB. They are usually small in size, typically fitting on a key chain or lanyard.



Hard Drives are mostly designated as the “C:drive.” They are the most popular form of data storage. Most PC based programs by default save files to your computer’s hard drive. Hard drives can fail at any time, therefore; that is why it is good to always back up your data on another form of media for safe keeping.



Computer Data Storage Options



Storage Area Network (SAN) drives are the best way to save data (often known as the J: drive, or H: drive). At Ferris you are given a set amount of space to save your data, but you can get more if needed. This data is saved to the SAN on the Network. A SAN is a system that has many hard drives set up in a way that if one fails, the data is still safe. In addition, the information is backed up on tape and stored off-site for years. This is the way we encourage and prefer that use for all of your important data storage. We also encourage you to keep at least 2 back ups of your important data.

Below is a summary of the advantages and disadvantages to the typical storage devices. In addition to this, you will find a graph showing the reliability of each device type.

Types of Storage	Advantages	Disadvantages	Price	Price/MB
Floppy	Cheap, easily stored for mobility, easy to use	Unreliable, goes bad over time, only 1.4MB, vulnerable to magnetism	\$0.50	\$0.33
Zip 100/250	250MB, easily stored for mobility	Not as common, vulnerable to magnetism	\$10.00	\$0.04
CD-R/RW	cheap, easily stored for mobility, 700MB	Prone to scratching/data lose, must have burner to save, time consuming	\$0.40	\$0.005
DVD-R/RW	4GB, easily stored for mobility	Prone to scratching/data lose, must have burner to save, time consuming	\$0.60	\$0.00015
USB	Limited data corruption, multiple sizes, USB ports	Easy to lose	N/A	\$1.00
Hard Drive (internal)	Multiple sizes, easy to use	Not Mobile, possible data corruption	N/A	\$1.00
SAN	Multiple backups	Needs network connection to access	\$0.00	\$1.00

Computer Data Storage Options

Reliability of Data Storage

