

# Computer Hardware Suggestions

We have been asked numerous times to recommend computer hardware that "will run our programs". In reality, our programs put very little stress on today's computers. Many commonly used Windows programs require more processing power than our programs. In fact, you may have heard us say that "you can't buy a new Windows computer today that won't run our programs". The following are suggestions when purchasing new hardware to run our programs.

## Single Computers or Network Workstations

**Operating System:** Windows 10, Windows 8 and Windows 7 (Business, Enterprise or Ultimate editions). Do not purchase any of the "Home" operating systems, since they are not supported by eCotton. Also Linux and Apple operating systems are not supported.

**Processor:** The standard entry level processor that's available on a new PC. If you can afford it, spend more money for a faster processor.

**Memory:** The standard entry level memory that's available on a new PC. More memory can increase the performance of the Windows operating system.

**Drives:** The standard entry level hard drive that's available on a new PC. Upgrade the hard drive capacity if you feel the need for additional storage space. Every computer should also have a CD-ROM or DVD drive for installing Windows programs.

**Video Adapter:** The video adapter needs to support at least a 1024 x 768 screen resolution. Our programs require at least this resolution to operate correctly.

**Internet Connection:** At least one computer should have an Internet Connection for e-mail messages, access to websites that contain eCotton program updates and advanced features in some of our programs. A Full Time High Speed internet connection is strongly recommended. For networks, the internet connection should be shared among all of the network workstations. Some examples of High Speed internet include Cable Modem (cable company), DSL or T1 (phone company) or a Satellite Connection.

**Printer:** Any Laser or Inkjet printer compatible with the above operating systems should work. Our programs generally print black only, but there are a few reports that print color graphs. We suggest having at least one printer. More than one printer may be necessary, depending on the number of users and the amount of printing being done.

**Battery Backup Unit:** We strongly suggest that every computer have its own Battery Backup Unit to protect your data against power brownouts / blackouts that are common in many areas. These are also called a UPS (Uninterruptible Power Supply) and are generally inexpensive compared to the cost of data loss.

**Data Backup Device:** A large capacity, removable drive should be installed for backing up data files. We recommend USB drives or “sticks”. Note that while eCotton’s WinBack backup utility will not recognize tape drives, since they usually require additional software to run properly. The data that is backed up should be taken off-site in case of theft or fire. Also consider subscribing to eCotton's SafeBak service for automated off-site backups.

## Network File Servers

For network file servers (which provide data to multiple workstations on a network), the following are some additional suggestions. Note that we do not recommend using the file server as a workstation. The file server should be a "Dedicated Server" and left alone to serve the workstation users connected to it.

**Operating System:** The latest server operating system that's available for a server class machine.

**Processor:** The standard server level processor that's available on a server class machine.

**Memory:** The standard server level memory that's available on a server class machine.

**Hard Drive:** The hard drive size is generally not a concern, since the smallest hard drive will easily hold our programs and data files. But for a file server, you may consider adding a second hard drive to Mirror (real time data duplication) your first hard drive, in case one hard drive fails. Mirroring hard drives is also called RAID 1. There are higher RAID levels that offer even better data protection. Adding RAID is generally inexpensive compared to the cost of data loss. Without it, you are solely relying on your data backup device in case of a hard drive failure.

**Battery Backup Unit:** As mentioned above, we strongly suggest that every computer have its own Battery Backup Unit. But for a file server, you may consider a larger capacity battery backup unit, since file servers tend to be larger in size and are usually the first one on and the last one shut down. For some people, it is common practice to never shut down the file server. In that scenario, we recommend using a battery backup unit that communicates with the file server. This communication tells the file server when the power is out, so it can automatically shut itself down safely. Also be sure to have all network devices, such as network switches, routers and firewalls on battery backup units.