

PowerSoftMD Performance Improvements Table Check List

	Action	Recommendation
1	Keep PowerSoftMD up-to-date	Update Monthly
2	Re-schedule any backups that run during the day for more than 10 minutes to run overnight	Multiple Types of Backups
3	Run FULL Virus Scan on all computers, making sure your Anti-Virus is up to date first	AVG Internet Security
4	Norton Antivirus Products are not recommended	AVG Internet Security
5	Keep Microsoft Windows up-to-date	Microsoft Windows 7
6	Anti-Virus set to Ignore \EZ\ folders on all Computers, including the Main Server	Use AVG Internet Security
7	Run Disk Defragment on (all hard drives for all computers)	Auslogics Disk Defrag
8	Re-install Windows on computers older than 2 years. This can clear up a lot of problems!	Windows XP or Newer
9	All wireless connections running a level "N" speed and enough access points for high reliability	100 Mbps or Higher
10	Make sure workstations have at least 1GB of RAM (preferably more...)	2 GB or more
11	Server must have 4 GB of RAM or more	4 GB or more
12	Workstation Hard Disk must have 160 GB hard drive	Good for extra backups
13	Server must have a 500 GB hard drive or larger	RAID configuration
14	Mega-Bit Network Connections on all Desktop computers and the Main, Server Computer	1000 Mbps or Higher
15	True Windows Server configuration; NOT a Peer-to-Peer Network	Microsoft Windows 2011 Server or Newer

The following pages give a further explanation including more detail.

- 1) PowerSoftMD is constantly being improved. You can learn the latest enhancements by using the “Light Bulb” Icon on the Primary Menu then selecting “View Available Internet Updates”. Next, you can get instructions on how to perform an Internet update at: www.powersoftmd.com/technote/InternetUpdates.pdf
- 2) PowerSoftMD can be set to run cross-network backups the first time you login to PowerSoftMD on specific days of the week. If these backup are running fast (Ex: less than 10 minutes) please let them continue. If they are taking a long time to run, then you may disable them. You can control these backups from the Primary Menu, select the “Options” button, then refer to the “Auto Cross Network Backup” area.
- 3) It is best to have your computers set to run full virus scans overnight and/or over the weekends. If you are experiencing performance problems, you might want to run the scans for a specific computer during the day while you monitor the results, taking the necessary actions.
- 4) Our clients have reported multiple bad experiences with Norton AntiVirus products causing performance problems and even having it delete programs. We highly recommend that if a computer has Norton on it and you are having performance problems have Norton surgically removed and another product installed. We recommend AVG Internet Security. If your hardware technicians can change the Norton Settings to leave the PowerSoftMD **\EZW** and **\EZWCLAIM** folders and/or you are using Norton and not having any performance problems, then leave it alone.
- 5) Make sure you have your computer set to install the Microsoft Windows updates that are listed as required or critical by Microsoft.
- 6) All the PowerSoftMD data and programs are stored in sub-folders of **\EZW** and **\EZWCLAIM**. You must set your AntiVirus to ignore these folders on all computers.
- 7) One of the best tools to improve performance is to run a **Windows System Defrag** on the **Server** and **workstations** at least once per month. This process reorganizes the thousands of computer files in a way to let the system access them much, much faster. We recommend that you have your hardware technical staff set this up to run automatically over the weekend at least once a month! Another program we highly recommend using for this is “Auslogics Disk Defrag”.
- 8) If your computers seem to run slower over time, you may have spyware, malware, etc., running that could be cleaned off by your hardware technician. In fact, **re-installing Windows** on your workstation can do wonders. If your computer is older than 5 years, then we recommend recycling it and get a new one.

9) If you are running wireless connections for laptops, tablet PC's, or even desktops, we recommend using "N" level wireless speed, running at 100 Mbps or higher. This can make a tremendous difference. You also must make sure that the wireless connections are reliable and secure.

10) Workstation computers should have a least 1 GB of RAM minimum or 2 GB of RAM (recommended) for newer versions of Windows. This let you open multiple windows and run programs much faster. Typically, it's one of the cheapest hardware upgrades you can do for improved performance.

11) The Main Computer or "Server" should have 4 GB of RAM or more, depending on the version of Windows Installed.

12) Workstation computers need some working hard disk space and can also be used to backup your main computer's files. We recommend a minimum 160 GB Hard Drive on your workstation. As always, the faster the Hard Drive the better.

13) The Server or Main Computer's hard drive is the heart of your system. Everyone is trying to update and read data from it constantly. You should have an ultra high speed reliable drive in a RAID configuration for recover purposes. Disk space is becoming extremely inexpensive so don't skimp here! We do recommend a minimum of 500 GB drives on the server.

14) Communications links across the network link can be a big bottleneck. If at all possible, we recommend CAT 5E or CAT 6 wired cabling and 1000 Mbps transfer rates. This means the hubs, switches, NIC cards, and cabling must all be up to the task.

15) Peer-to-Peer networks are not designed to support a large number of work stations. Even if you are using a stand-a-lone computer, it's not the same as a true Client Server configuration. We recommend Windows 2011 server or newer configurations.