



The Facts about Cleaning a Hard Drive

Ensuring the Security of Your Personal Data

Ontario Electronic Stewardship (OES) has a new program called the Waste Electrical and Electronics (WEEE) program.

Launched on April 1, 2009, the WEEE program encourages Ontarians to recycle their unwanted electronics including computers or to donate them for reuse. Recycling or donating computers means that there are privacy and personal identity issues involved in passing on a computer for which consumers must take responsibility.

This fact sheet will help consumers make decisions on how to clean hard drives to permanently delete sensitive or personal information.

Things to consider

When “deleting” a file on a computer it is not really deleted, it still exists but is hidden. Similarly, emptying your computer’s “recycle bin,” deleting your Internet browser’s cache, deleting your emails, contacts and documents are also inadequate to erase data on your computer. Even reformatting your hard drive may be inadequate. In all such instances, someone may be able to recover the data from your computer.

The information remains until it is overwritten, which only happens when the hard drive becomes full and the computer requires more space. If the computer is not used to store large files like graphics, music or video, chances are the hard drive will never fill up and the computer won’t need to overwrite the files that have been deleted.

Consider these questions

Is the computer being given to a trusted friend or family member? When they are finished with it, how will they dispose of it?

Even if the computer is going to a friend or family member, chances are they will pass it along to someone else or to a charitable or other organization. And, when they do the computer will still contain personal information.

What to do: clean, erase, wipe or shred

There are many different words for cleaning a hard drive. Whatever it is called, the result is that the information is overwritten.

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Overwriting files

When deleting files in Mac computers, depending on the version of the operating system running on the computer, you may be able select "Secure Erase Trash" from the File menu in the finder. This will ensure all data is overwritten.

For other computers, special software to overwrite deleted files is needed.

Many types of software exist for erasing information on hard drives (the cost of which vary), including Eraser, KillDisk and Multiple File Wiper. They cost approximately \$25 to \$30.

These programs work by overwriting deleted files several times with meaningless data to ensure information is completely erased.

Even then it is possible though difficult to retrieve the original data, although it is very unlikely that anyone would bother to do this.

Other options

It also is possible to wipe hard drives clean by reformatting and re-installing your operating system. This is a technical operation and should be attempted only by someone confident in performing this task. Again, while this method does not fully guarantee a clean hard drive since it is possible, albeit difficult, for someone with specialized software to reclaim files after reformatting, it is very unlikely that anyone would bother to do this.

For more information:

<http://www.hard-drive-help.com/clean-hard-drive.html>

http://www.bbc.co.uk/webwise/askbruce/articles/security/cleandrive_1.shtml

<http://www.microsoft.com/smallbusiness/resources/technology/security/clean-the-hard-drive-before-dumping-your-pc.aspx#CleantheharddrivebeforedumpingyourPC>

Ensuring the Security of Private Information; Disclaimer

When consumers choose to recycle "end of life" electronics they will not be reused. WHILE OES WILL MAKE EVERY REASONABLE EFFORT TO ENSURE THE PRIVACY AND SECURITY OF ANY PERSONAL INFORMATION LEFT ON A COMPUTER, OES CANNOT ACCEPT LIABILITY FOR ANY DATA THAT REMAINS ON THE COMPUTER. IT IS THE RESPONSIBILITY OF CONSUMERS TO ENSURE THAT PERSONAL DATA IS REMOVED FROM COMPUTER SYSTEMS. OES ADVISES CONSUMERS TO TAKE STEPS TO CLEAR HARD DRIVES OF PERSONAL INFORMATION BEFORE SUBMITTING THEM FOR REUSE OR RECYCLING.