

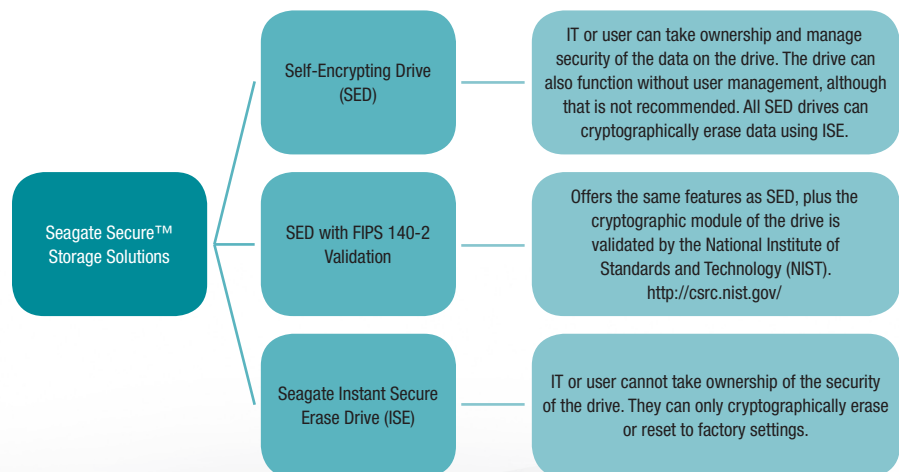
How to ISE Your Drive

Technology Paper

With Seagate Instant Secure Erase (ISE)

Seagate Instant Secure Erase is designed to protect data on hard disk drives by instantly resetting the drive back to factory settings and changing the encryption key so that any data remaining on the drive is *cryptographically erased*. This means all data on the drive is permanently and instantly unreadable, as needed.

To perform the ISE function, you must have either a Self-Encrypting Drive (SED) with or without FIPS validation, or a Seagate ISE drive. ISE-only drives provide you the ability to securely reset to factory settings. SEDs enable you to take ownership and management of your storage security through passwords, fingerprints or other means, as well as to instantly, cryptographically erase drives with ISE functionality. ISE drives provide you the ability to securely reset drives to factory settings, which will also cryptographically erase and render all data on the drive irretrievable.



What You Need to ISE Your Drive

- A Seagate Self-Encrypting Drive with or without FIPS Validation, or a Seagate ISE drive.
- A computer running Windows XP, Vista or Windows 7
- A copy of SeaTools™ for Windows (version 1.2.0.6 or greater), found here: <http://www.seagate.com/support/downloads/seatools>
 1. Click on the Downloads tab.
 2. Under Utilities, click the Select an OS in the SeaTools for Windows box and select your OS from the drop-down menu.
 3. Click the Download button.
- A SATA-to-USB cable for laptops, or an internal SATA-to-SATA connector if you choose to connect to your motherboard in a desktop environment.

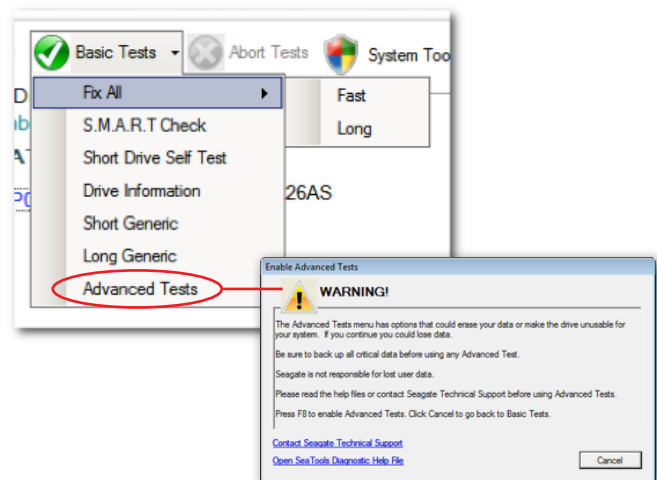
Performing an ISE

1. Unplug the drive you want to erase from your system and attach it to a computer using a SATA-to-USB cable. Note: SeaTools will not allow you to execute an ISE on your boot drive.
2. Install the *SeaTools for Windows* application by double-clicking the installer. Follow the prompts. You may be asked to install Microsoft .NET 4.0 if not already installed on your system. This download is available on the Microsoft website. The SeaTools installer will continue to guide you through the installation process.

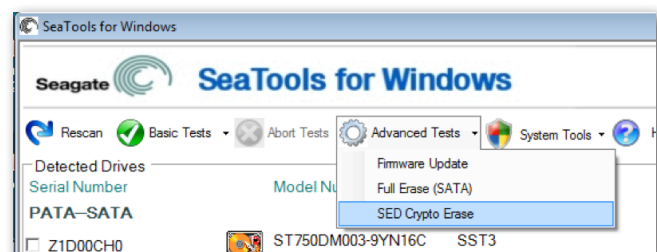
Select the SeaTools application listed in the Applications menu. As it is loading, accept the ability to make changes to your computer and accept the license agreement.

There is more information on the SeaTools application and prerequisites on the SeaTools site (<http://www.seagate.com/support/downloads/seatools/>) and under the Downloads tab.

3. Select the SED or ISE drive by serial number. **WARNING:** You are making completely unreadable all data on the drive, so make sure you select the correct drive. By default, SeaTools will not allow you to erase your primary or boot drive.
4. Select the *Basic Tests* tab and scroll down to *Advanced Tests*. This will bring up a warning box asking you to confirm your request by pressing the F8 key. **WARNING:** Advanced Tests are functions that could delete all the data on your disk drive. **Seagate Technology LLC is not responsible for lost user data. If you are certain you have selected the correct drive, press the F8 key.**



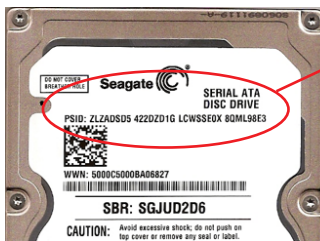
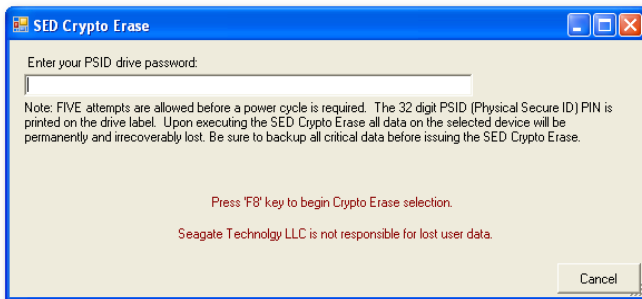
5. Select the *Advanced Tests* menu, then select *SED Crypto Erase* for both SED and ISE drives. If you do not see this option, verify that you have an SED. Note: If you do not have an SED or ISE drive, you may choose *Full Erase (SATA)*, and SeaTools will perform a write of zeros across the entire drive to eliminate data. This process can take several hours depending on the drive size.



How to ISE Your Drive



6. The *SED Crypto Erase* dialog box will be displayed. Enter the 32-character PSID number found at the top of the drive label. You can type in the number or enter it using a 2D scanner with a proper keyboard shim.



The PSID label and matching 2D barcode is located at the top of the disk drive label.

Tip: If you don't have a barcode reader, you may be able to download a smartphone barcode app.

7. Press F8 to begin the Crypto Erase. The dialog box will disappear.

If the number has been incorrectly entered, you will get a FAIL status.



Otherwise, within about one minute the drive status listing will change to *SED Crypto Erase – Pass*.

The drive has now been reset to factory settings and any existing data rendered permanently unreadable. The drive may be safely retired, reused or returned for warranty repair or lease expiration.



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