

Access Recovery Tool

User Guide

Software Version 1.0.0



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Document Revision History

Date	Revision	Description
March 2017	001	Initial Documentation Release.
April 2017	002	Added Section "Downloading the Access Recovery Tool to a USB Flash Drive"

Glossary

Terms and Acronyms

Term	Description
ATA	Advanced Technology Attachment
ISO	International Organization for Standardization
ISO image	An archive file or disk image of an optical disk that uses the ISO format. Typically, the file has an .ISO extension; however, Apple Mac OS* ISO images often use a .CDR extension.
OS	Operating System
SATA	Serial ATA
SSD	Solid State Drive



1.0 Overview

This document describes how to use the Access Recovery Tool to load a recovery firmware to impacted Intel® SSD 540s and Pro 5400s Series products.

NOTE: The Access Recovery Tool recognizes all Intel SATA SSDs, but if there is no updated firmware available for a specific model, the tool does not provide any functionality.

1.1 System Requirements

To use the Access Recovery Tool, you need the following items:

- Supported Intel SSD
- Host system with an available USB port (Windows* and Linux* only) or a Read/Writable (R/W) CD-ROM drive
- ISO image burning software usually provided with the R/W CD-ROM drive, or freely available online
- Blank USB Flash Drive (Windows* and Linux* only) or blank CD (CD-R or CD-RW)
- A charged battery, if the update occurs on a mobile system



2.0 Preparing the System

2.1 Plug in the Power

For mobile PCs, ensure the computer battery is fully charged during the access recovery. For desktop PCs, ensure the system is plugged into AC power during the access recovery. Do not remove power at any time during the access recovery process as this could produce incomplete results and may render your Intel SSD unusable.

2.2 Turn Off Drive Password Protection

Prior to running the Access Recovery Tool, verify that you have turned off the drive password protection.

- Power on the system
- Enter the BIOS and disable your Drive Password
- Shut down the system

Although it varies from system to system, you can usually find the Drive Password Protection feature located in the BIOS. Consult your system documentation for the BIOS settings and passwords.

For help disabling the drive password protection feature, contact Intel Customer Support: <http://www.intel.com/go/ssdsupport>.

2.3 Checking the Boot Order

This procedure requires booting from a USB flash or CD-ROM drive before the system drive. To determine the boot order for your system, reboot and enter BIOS Setup. Depending on the BIOS vendor, look for a parameter named **Boot Device Priority** or **Boot Load Order**. Ensure that the system boots the USB flash, or CD-ROM drive before the drive that contains the operating system (OS).

For more information on how to set the CD-ROM drive boot order, consult the system documentation for your PC.

For additional assistance checking the boot order, contact Intel Customer Support: <http://www.intel.com/go/ssdsupport>.

2.4 Ensuring Legacy Mode

This procedure requires booting in legacy mode. Ensure that your BIOS is configured accordingly.

For help configuring your BIOS to legacy mode, contact Intel Customer Support: <http://www.intel.com/go/ssdsupport>.



3.0 Downloading the Access Recovery Tool to a USB Flash Drive

The Access Recovery Tool is packaged as an ISO image. Similar to an archive file or a disk image, an ISO image is specifically designed for optical disks like CDs in a format specified by the International Organization for Standardization (ISO).

This means that you cannot simply copy an ISO image to a blank USB Flash Drive. It will appear as a data file and will not work correctly. The ISO image must be decoded with software and installed onto a blank USB Flash Drive to make it bootable with the Access Recovery Tool.

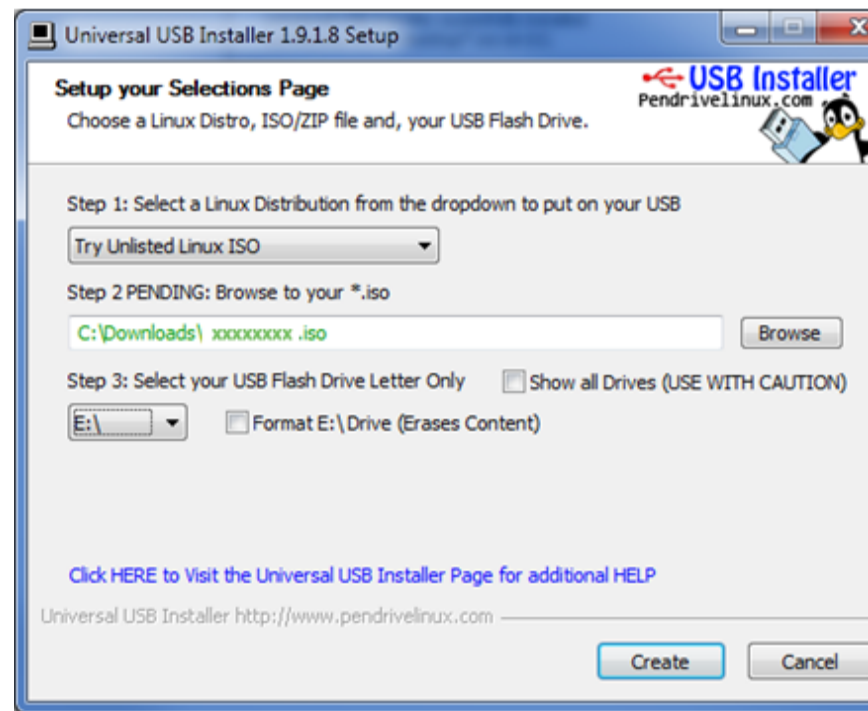
For the purpose of illustration, we are using Universal USB installer software from pendrivelinux.com, but you may use any installer that you prefer.

1. Go to the [Intel download website](http://www.intel.com/go/ssdfirmware) located at <http://www.intel.com/go/ssdfirmware>.
2. Click **Download** to display the terms of the license agreement (the *Read Me.txt* file also includes the license agreement information).
3. After reading the agreement, click **ACCEPT** to start the download.

The browser prompts you to select **Open**, **Save** or **Cancel**. See Figure 1 in the previous section to view a sample screen.

4. Go to <http://www.pendrivelinux.com/universal-usb-installer-easy-as-1-2-3/> and download the freeware Universal USB Installer.
5. Install and run the Universal USB Installer (see Figure 2).
6. Select the Try Unlisted Linux ISO.
7. Browse to the location of the FUT ISO and select it.
8. Select the drive letter that corresponds to your blank USB Flash Drive.
9. Click **Create**.

Figure 1. Universal USB Installer



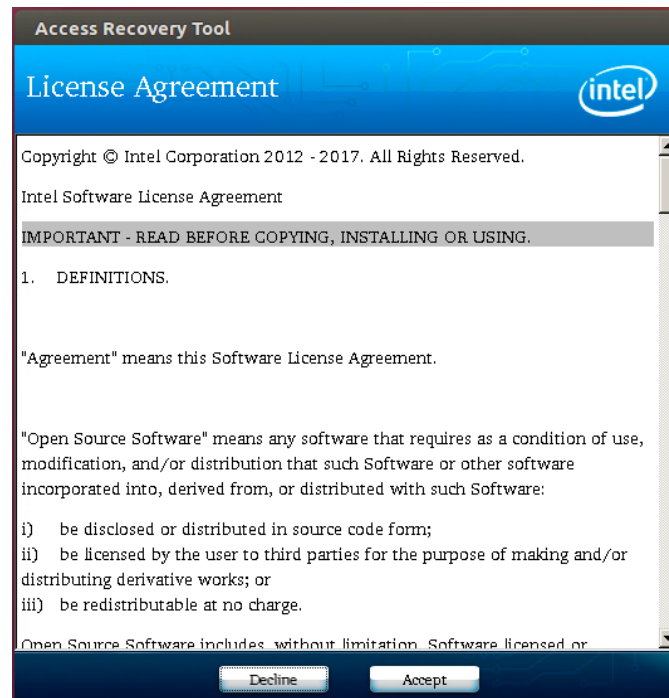
NOTE: Your screen will display the name of the current firmware update image file (xxxxxxx.iso).

4.0 Running the Access Recovery Tool

After burning the `issdart_1.0.0.iso` image to a USB flash drive or a CD/DVD, continue with the following steps.

1. Insert the USB Flash drive into the USB port or the CD/DVD into the CD/DVD reader.
2. Power on the system.

The Access Recovery Tool will start automatically and display the license agreement screen.



3. Click **Accept** to accept the license agreement and continue.

If Decline is selected, the system will start a countdown to the system shutdown and include a prompt to *Shutdown Now* or *Cancel*.

The Access Recovery Tool scans the system for all Intel SSDs. If your system contains more than one Intel SSD, the tool displays each one it detects in a separate tab.



If there are one or more drives attached to the system that are eligible for the recovery firmware, the tool will display them with an orange badge with an Exclamation Point.

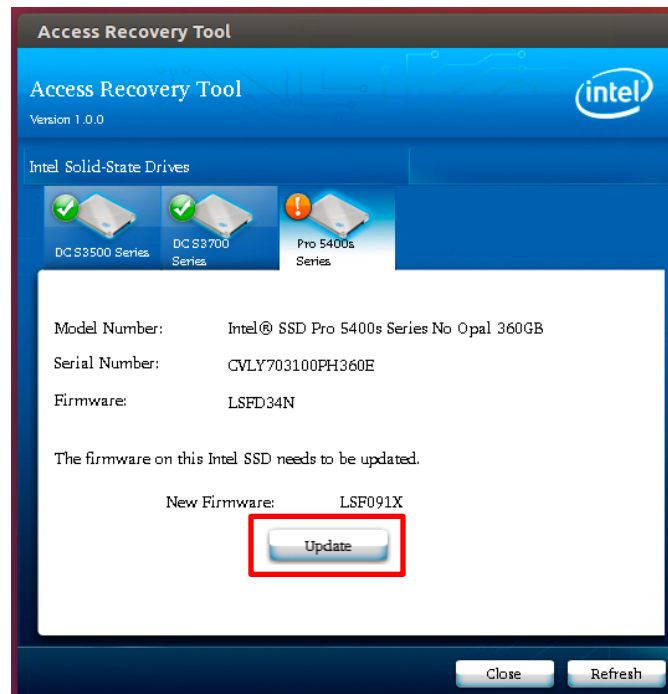


If there are one or more drives attached to the system that are not eligible for the recovery firmware, the tool will display them with a green badge with a check mark.



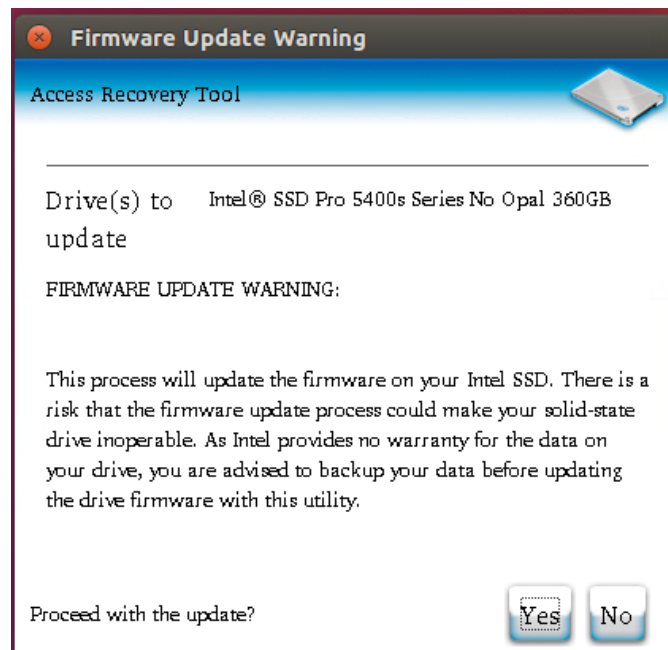
A red badge with an X indicates an issue will or has prevented the update. You will see a message on the drive's tab describing the failure condition. If the SSD is security locked, please unlock the drive before attempting to update its firmware. For all other failures, please contact Intel Customer Support at <http://www.intel.com/go/ssdsupport> for further assistance.

4. Click on a tab with an orange badge and then click **Update**.



If more than one drive on the system is eligible for the recovery firmware, an *Update All* button will appear near the upper right side of the tool. It can be used to load the recovery firmware to all eligible drives at once.

After clicking the *Update* or *Update All*, the Warning Screen will appear.

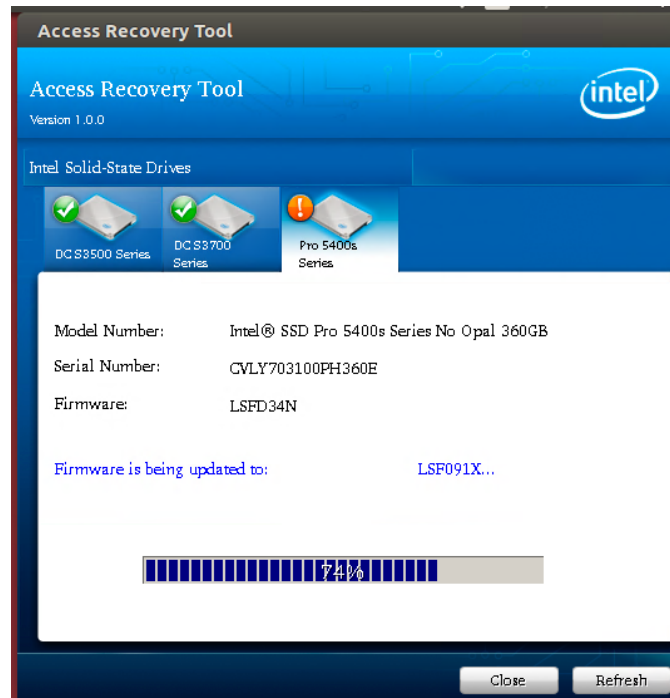


5. Click **Yes** to proceed.

Clicking **No** to cancel and exit without loading the recovery firmware.

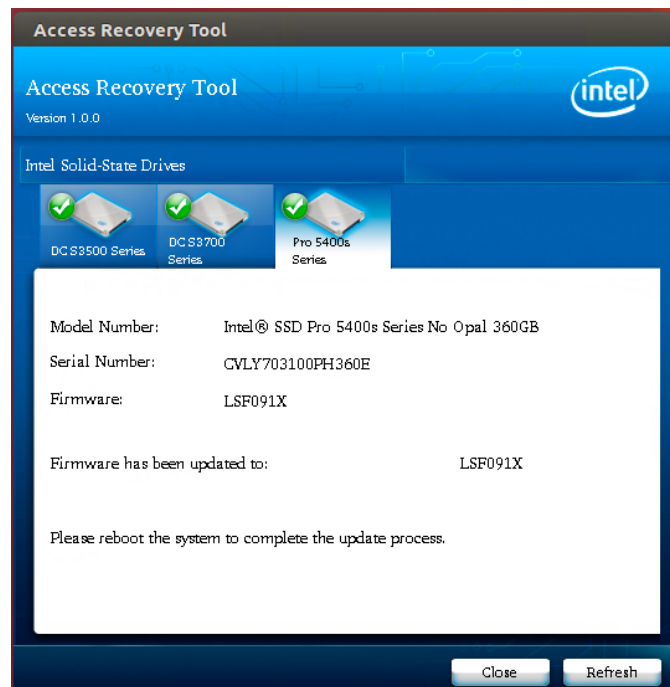


It will take from 30 seconds up to 2 minutes to load the recovery firmware on each SSD. The tool does display a progress bar.



WARNING! Until the firmware update has completed, it is critical that you do not remove power or reboot your system. Doing so will produce unpredictable results and may render your SSD inoperable.

Once the update is complete, the tool will display a green badge and display what firmware the drive has been updated to.





If the firmware update fails for a drive, the badge will turn to the red **X** and an error will be displayed along with steps that should be taken before attempting the update again.

If you are still unable to update the firmware after taking these steps, please contact Intel Customer Support at <http://www.intel.com/go/ssdsupport> for further assistance.

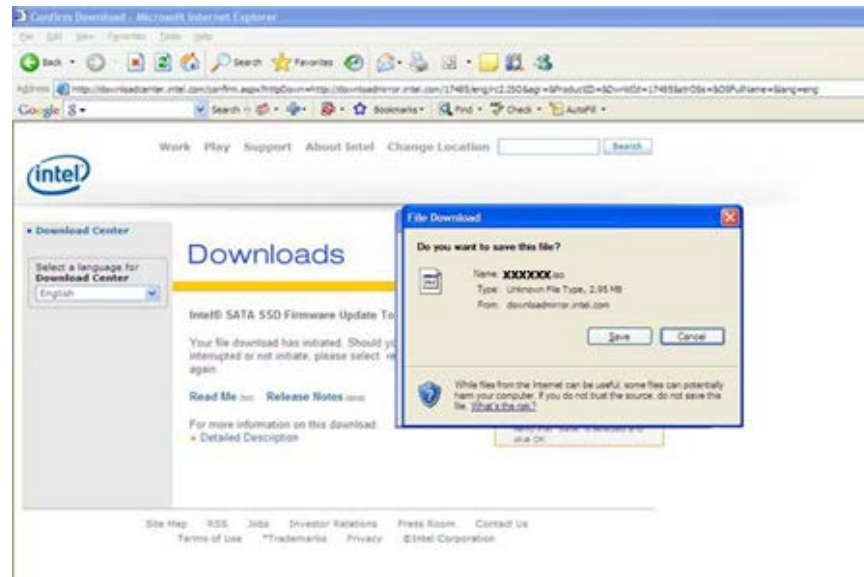
6. After a successful update and the green badge appears, click **Close** to exit the Access Recovery Tool.

The system will start a countdown to the system shutdown and include a prompt to *Shutdown Now* or *Cancel*.

5.0 Troubleshooting

5.1 Computer Does Not Recognize ISO Images

If your CD-ROM software does not recognize ISO images (in Windows XP, Windows Vista, or Linux operating system), you may see an “unknown file type” message when downloading the Access Recovery Tool similar to the following figure:



NOTE: Your screens will display the current name of the firmware update image file (xxxxxxxx.iso).

1. Click **Save** to download the ISO image to your computer.
2. Locate a software application on the Internet that burns ISO images and install the application.
3. Double-click the ISO image on your drive to decode the image and burn the Recovery and Update Tool onto a blank CD (CD-R or CD-RW).