



WD SSD Dashboard™

SSD Dashboard

User Manual



WD® SSD Dashboard



Accessing Online Support

Visit our product support website at <http://support.wdc.com> and choose from these topics:

- **Downloads** — Download software and updates for your WD product
- **Registration** — Register your WD product to get the latest updates and special offers at <http://register.wdc.com>
- **Warranty & RMA Services** — Get warranty, product replacement (RMA), RMA status, and data recovery information
- **Knowledge Base** — Search by keyword, phrase, or Answer ID
- **Installation** — Get online installation help for your WD product or software
- **WD Community** — Share your thoughts and connect with other WD users at <http://community.wdc.com>

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1

Introduction

[Minimum System Requirements](#)

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Minimum System Requirements

The WD SSD Dashboard is a Microsoft Windows application. Administrative rights are required for installation and execution of the application.

Supported Operating Systems

- Windows 7 (32/64 bit)
- Windows 8.1 (32/64 bit)
- Windows 10 (32/64 bit)

Supported Languages

Seventeen languages are supported:

- Czech
- Danish
- Dutch
- English
- French
- German
- Italian
- Japanese
- Korean
- Polish
- Portuguese
- Russian
- Simplified Chinese
- Spanish
- Swedish
- Traditional Chinese
- Turkish

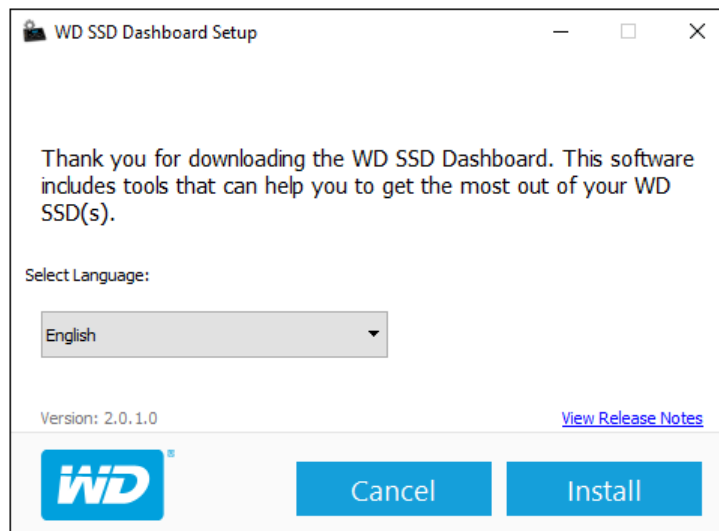
Installation

You can download the current version of the WD SSD Dashboard software from <http://support.wdc.com>.

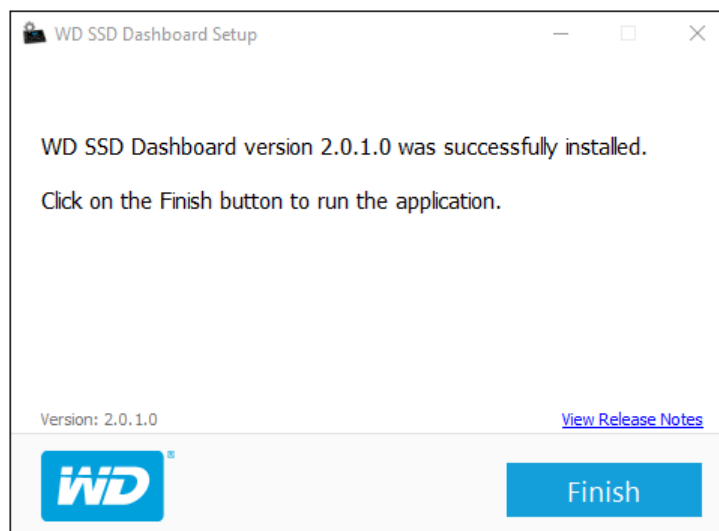
After the file has been downloaded, follow these steps to install the application.

1. Double-click on the **WDSSDDashboardSetup.exe** file icon to launch the installation.

Note: To cancel the installation, click on the **X** in the upper-right corner of the dialog box.



2. When the installation is complete, click **Finish**. The WD SSD Dashboard launches and populates the Status section.



When the installation has completed successfully, click on the **Finish** button. This will automatically launch the WD SSD Dashboard and load the Status section.

Note: To perform a firmware update, see [Firmware Update](#).

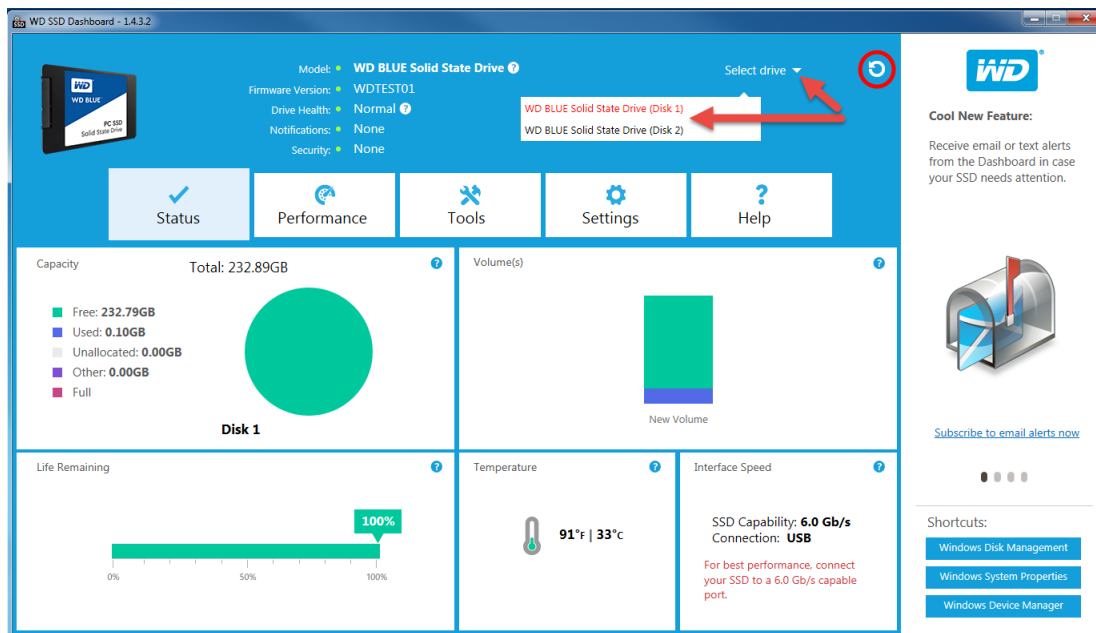
Usage

The WD SSD Dashboard automatically scans for WD SSDs after it launches.



If a WD SSD was not connected to the system when the application was installed, or if a specific SSD does not appear in the Dashboard, reconnect the drive, and then click the **Refresh** icon to the right of the Select drive drop-down menu to rescan the system for WD SSDs.

When all SSD drives have been detected, you can select a specific drive by clicking on the **Select drive** drop-down menu.



2

Status

Status Section

Capacity

Volumes

Life Remaining

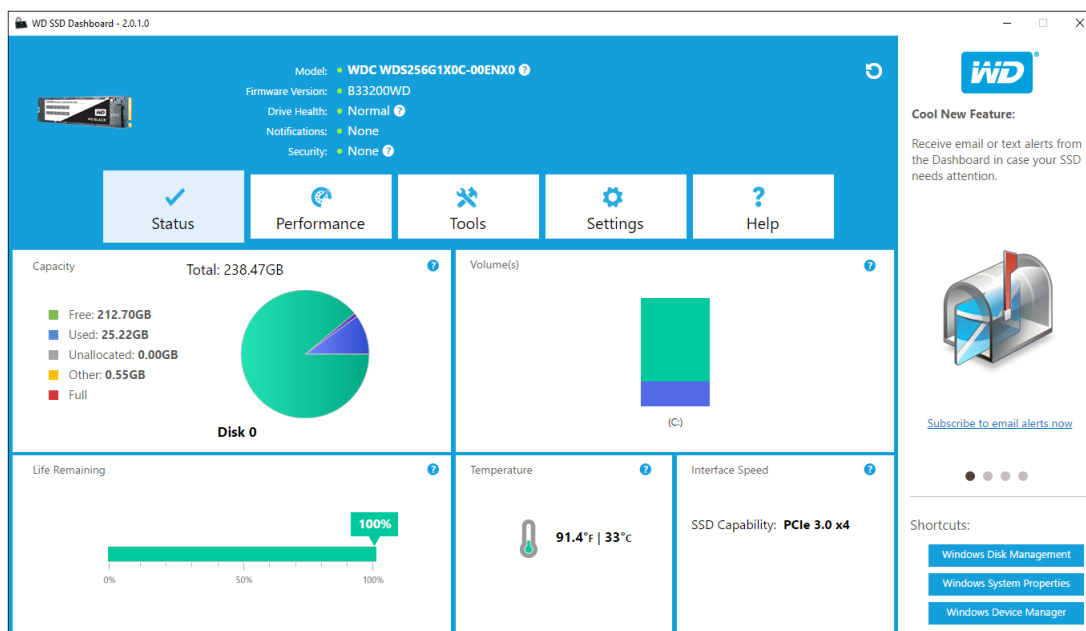
Temperature

Interface Speed

Status Section

The Status section displays the overall state and health of the selected drive.

Note: To select an SSD drive, click the **Select drive** drop-down menu.



The following information is listed at the top of the Status screen:

- **Model** - The product model name of the selected WD SSD.
- **Firmware Version** - The version number of the firmware installed on the selected WD SSD.
- **Drive Health** - Drive Health summarizes the current condition of the selected SSD based on Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.) attributes.
 - Normal: The drive is in good condition.
 - Poor: The number of spare blocks has reached the minimum threshold or the drive is overheating. In the case of low spare-block count, replace this drive with a new WD SSD.

- **Notifications** - Notifications, such as software or firmware updates available or S.M.A.R.T. attribute warnings, will be displayed in this area.
- **Security** - If the selected drive supports security, this area will be visible.
 - "Not Activated" displays if the security protocol is not active.
 - If the security protocol is active, the name of the active security protocol displays, for example, "TCG Opal 2.0."

Capacity

As used for storage capacity on our packaging and device label, one gigabyte (GB) = one billion bytes and one terabyte (TB) = one trillion bytes. On the WD SSD Dashboard and within Windows folders, total accessible capacity varies depending on operating environment and the capacity displayed is based on the Windows operating system's calculation method for total-reported capacity.

- Green - Free space
- Blue - Used space
- Gray - Unallocated space
- Yellow - Other
- Red - Full

Volumes

The chart displays any drive volumes recognized by Windows.

- Green - Free space
- Blue - Used space
- Red - No free space

Life Remaining

The Life Remaining percentage represents the remaining writes the selected drive can perform in its lifetime.

Note: If this feature is not supported by the drive, a "Not Supported" message will be displayed.

Temperature

The temperature reported by the SSD. The thermometer graphic displays one of two colors, as follows.

- Green - Normal operation
- Yellow - The SSD is currently overheating

Interface Speed

- SSD Capability - The fastest speed supported by the drive.
- Connection - The port connecting the SSD to the system.

Note: For SATA SSD, the connection speed is the actual speed negotiated with the system. If the connection speed is lower than the SSD Capability speed, the following message appears in red: For best performance, connect your SSD to a 6.0 Gb/s-capable port.

3

Performance

Performance Chart

Transfer Speed MB/s

Transfer IOPS

TRIM

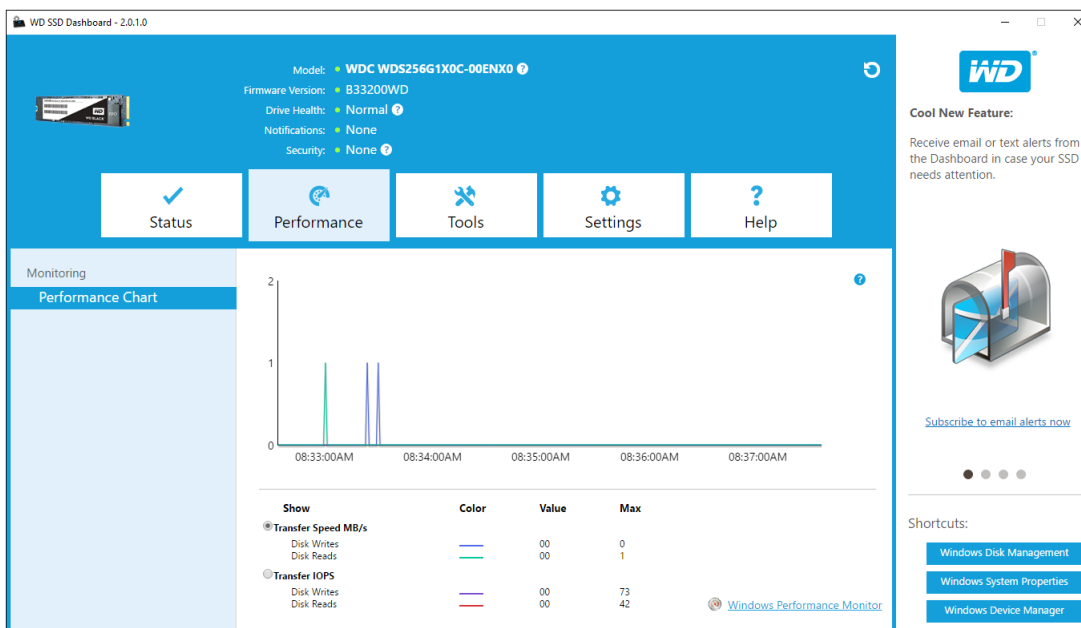
Performance Chart

The Performance chart provides two different real time performance metrics: transfer speed MB/s (megabytes per second) and transfer IOPS (I/O operation count per second).

The chart scrolls from right to left and shows moving, 5-minute time line increments on the horizontal axis. The vertical axis of the chart will show either Transfer Speed MB/s or Transfer IOPS.

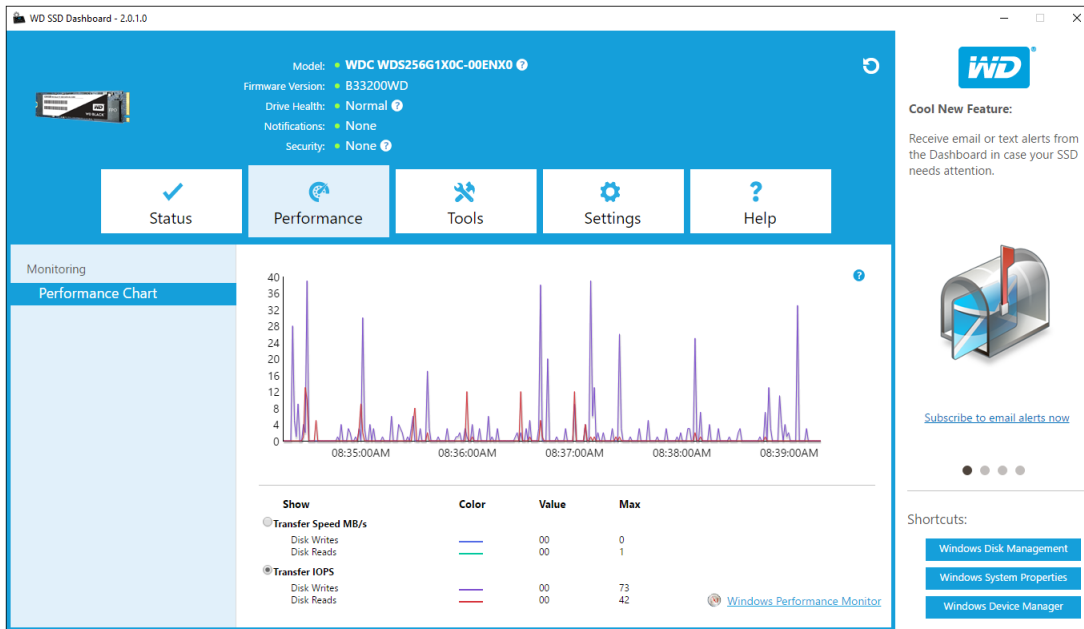
Transfer Speed MB/s

The SSD MB/s write and read speeds are shown in the chart with blue and green indicators, respectively.



Transfer IOPS

The SSD I/O write and read speeds are shown in the chart with purple and red indicators, respectively.

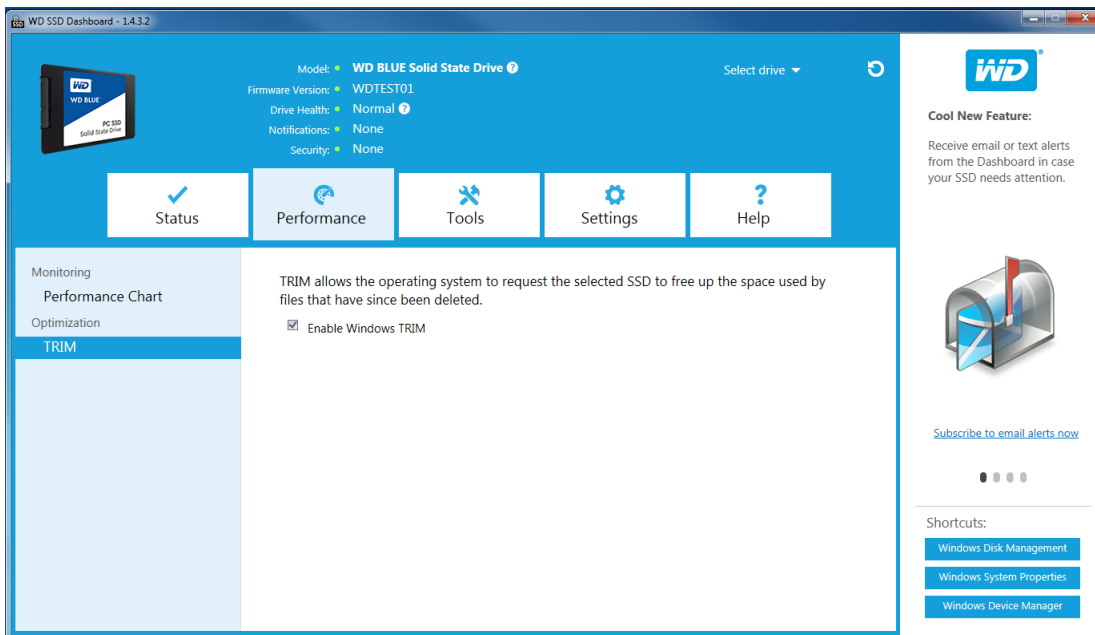


TRIM

(This feature will be displayed if the operating system supports it.) The TRIM function frees up space on the SSD that was used by files that have been deleted.

Note: WD recommends that TRIM be run on a weekly basis.

- Click the **Enable Windows TRIM** checkbox to automatically run TRIM.
- Select **Weekly**, for the frequency, if available.
- Click **Run TRIM Now** to manually run TRIM.



4

Tools

[Firmware Update](#)

[Check for Updates](#)

[Update Using Bootable USB Drive](#)

[Update Using File on My Computer](#)

[Erase Drive—Secure Erase](#)

[Delete User Data with Secure Erase](#)

[Create a Bootable USB Drive for Secure Erase](#)

[Sanitize](#)

[Delete User Data with Sanitize](#)

[Create a Bootable USB Drive with Sanitize](#)

[PSID Revert](#)

[S.M.A.R.T.](#)

[Diagnostic Short Test](#)

[Diagnostic Extended Test](#)

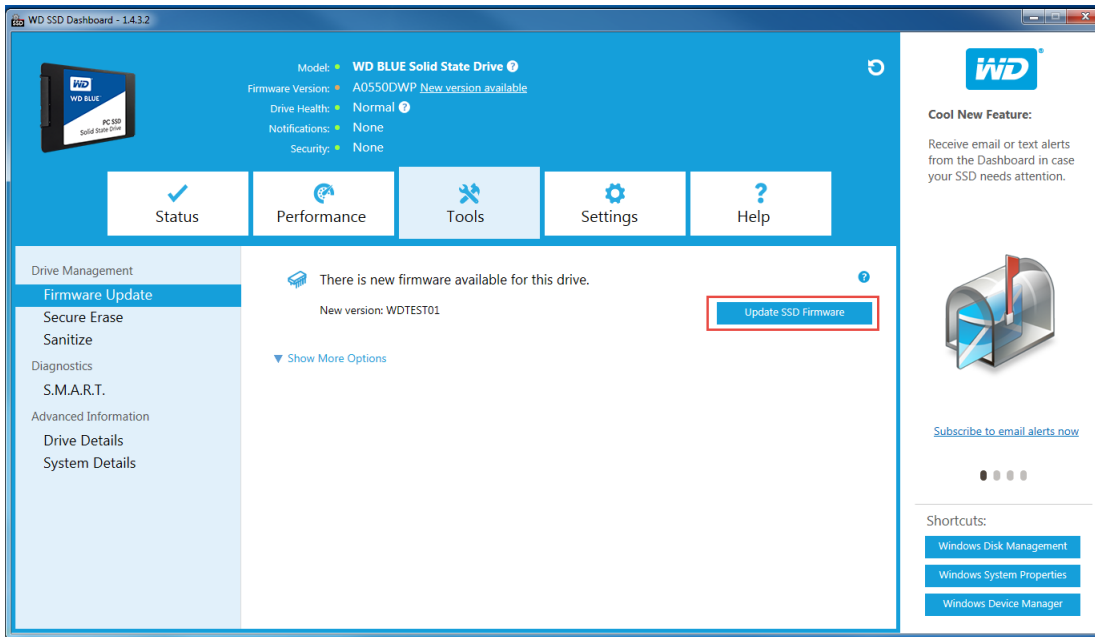
[Drive Details](#)

[System Details](#)

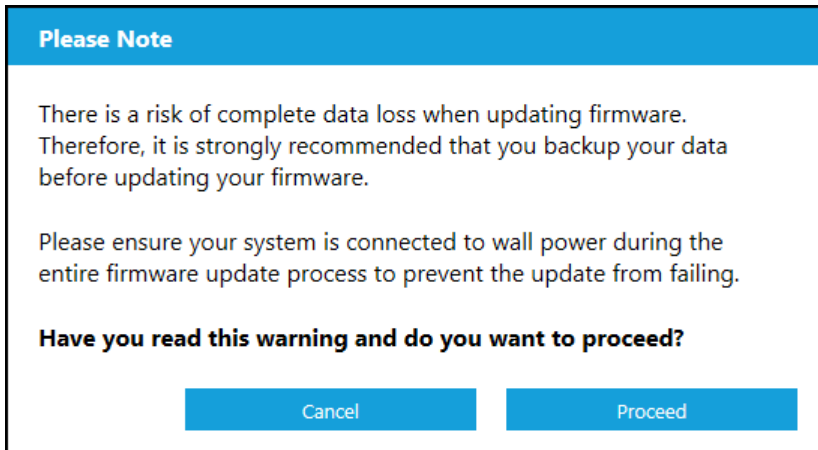
Firmware Update

Note: To avoid data loss, it is strongly recommended that you backup your data before updating the firmware.

Click **Update SSD Firmware** to initiate a firmware update, or click on the **Show More Options** drop-down menu to choose from additional firmware update methods.



When you click the **Update SSD Firmware** button, a confirmation dialog box appears.



After the firmware has been downloaded to the SSD, a full-system shutdown is required to complete the firmware update process for SATA SSDs. This is typically done by shutting the computer down, and then turning it back on.

A dialog box appears that provides the option to shut the computer down now, or later.

Please Note

The firmware has successfully been downloaded to the drive. The new firmware will take effect once the power to the drive has been turned off and then turned on again. A simple way to do this is to do a Windows System Shutdown and then turn it back on.

Important: The Firmware update will not take effect on a system restart. A full system shutdown is required.

Shutdown Later Shutdown Now

Check for Updates

Click **Check for Updates** to manually check if a firmware update is available for the selected drive.

WD SSD Dashboard - 2.0.1.0

Model: WDC WDS256G1X0C-00ENX0
 Firmware Version: B33200WD
 Drive Health: Normal
 Notifications: None
 Security: None

WD

Cool New Feature:
 Receive email or text alerts from the Dashboard in case your SSD needs attention.

Subscribe to email alerts now

Shortcuts:
 Windows Disk Management
 Windows System Properties
 Windows Device Manager

Drive Management

Firmware Update

The firmware is up-to-date.

Check for Updates

▼ Show More Options

Diagnostics

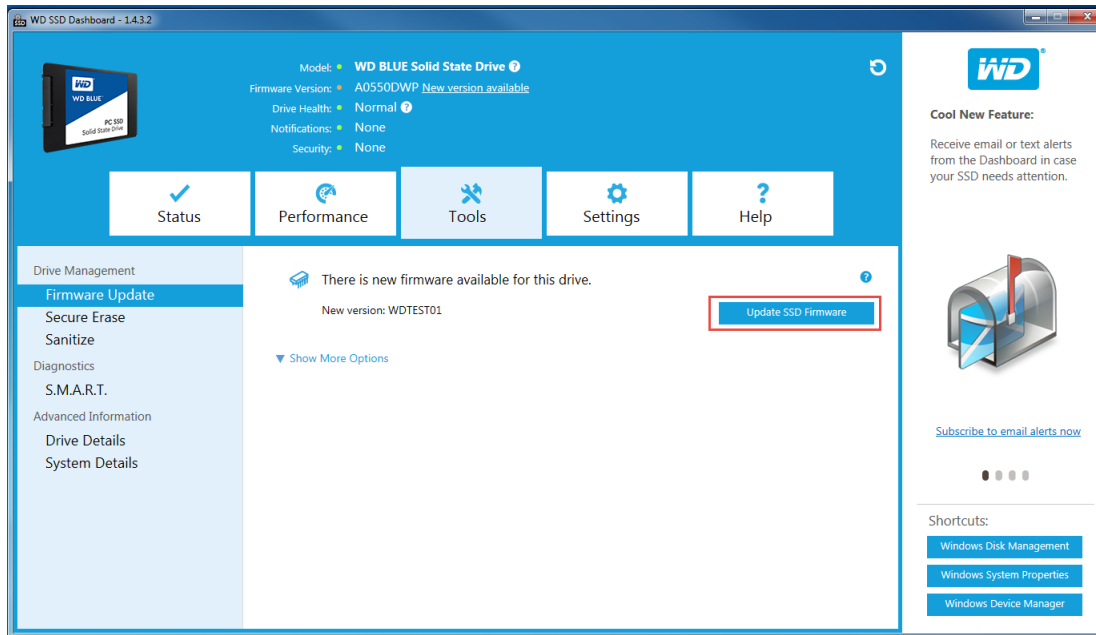
S.M.A.R.T

Advanced Information

Drive Details

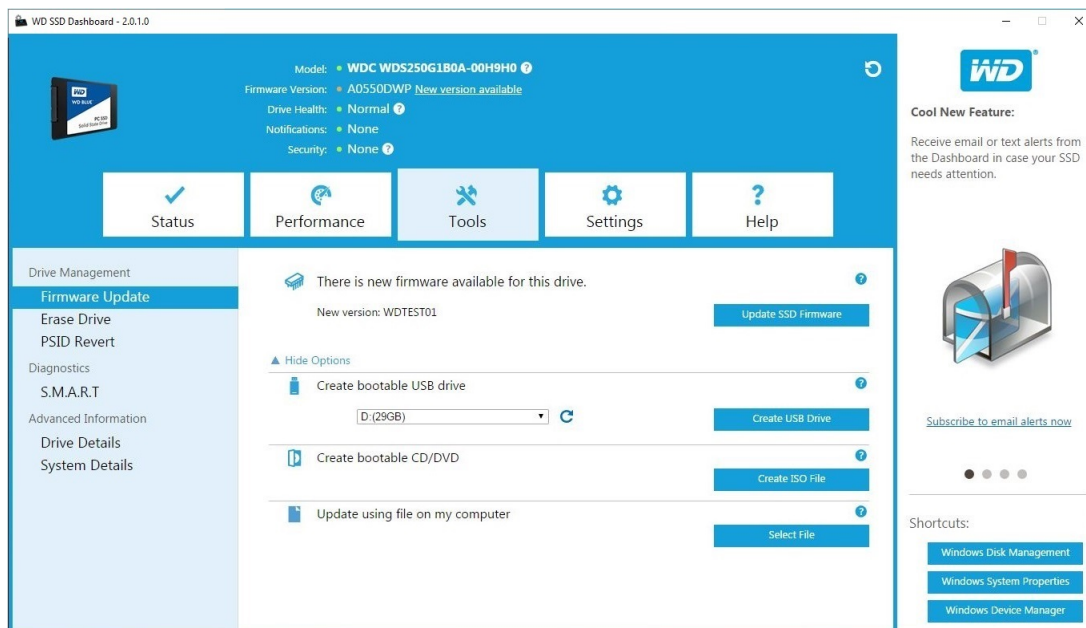
System Details

If a firmware update is found, the status message will change to "There is new firmware available for this drive," and the update options will be displayed.



Update Using Bootable USB Drive

Note: The USB drive must be formatted as a FAT or FAT32 file system.



1. Insert a formatted USB drive.
2. Before proceeding, backup any existing data on the USB drive.
3. Click the drop-down list to select the USB drive.

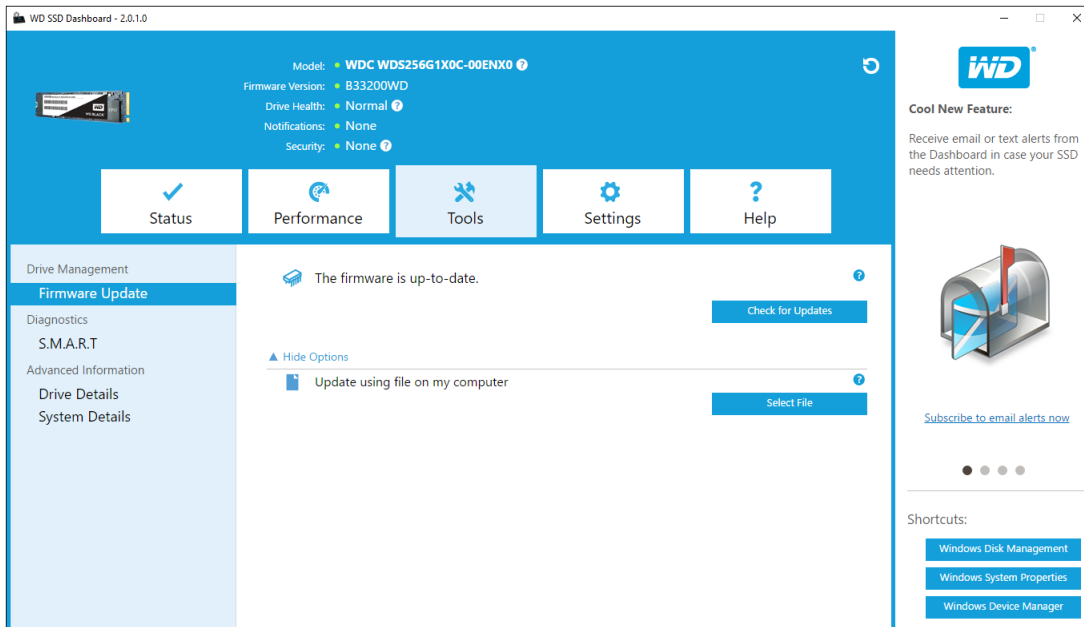
Note: If the USB drive is not listed, click the Refresh icon next to the drop-down list to scan for the USB drive.

4. Click **Create USB Drive**.

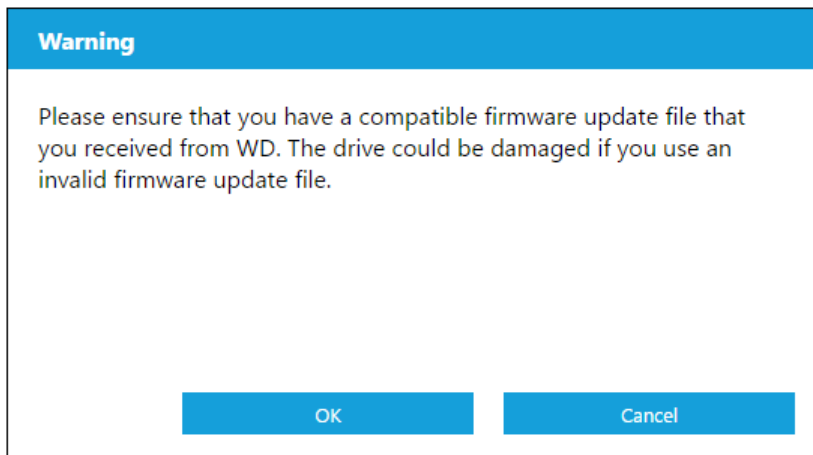
Update Using File on My Computer

Note: Only use compatible firmware update files for this process.

If you have already downloaded the specific firmware file that should be used for the update, click **Select File**.



A confirmation dialog box appears.



Erase Drive—Secure Erase

Secure Erase permanently destroys all user data on the selected SSD.

Note: Secure Erase deletes the mapping table on the selected SSD, but it does not erase all blocks that have been written to. This makes Secure Erase a faster "erase" option than the Sanitize function (also see [Sanitize](#)).

Secure Erase can only be performed on an SSD that is not the boot drive. However, if the SSD is the boot drive, the Secure Erase function can be performed from a formatted USB. See [Create a Bootable USB Drive for Secure Erase](#).

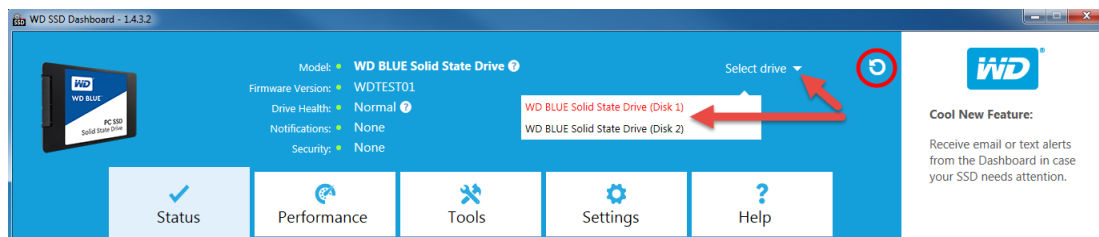
Delete User Data with Secure Erase

Note: Ensure that the correct SSD is selected on a system with more than one SSD. The Secure Erase function permanently destroys all user data on the selected SSD.

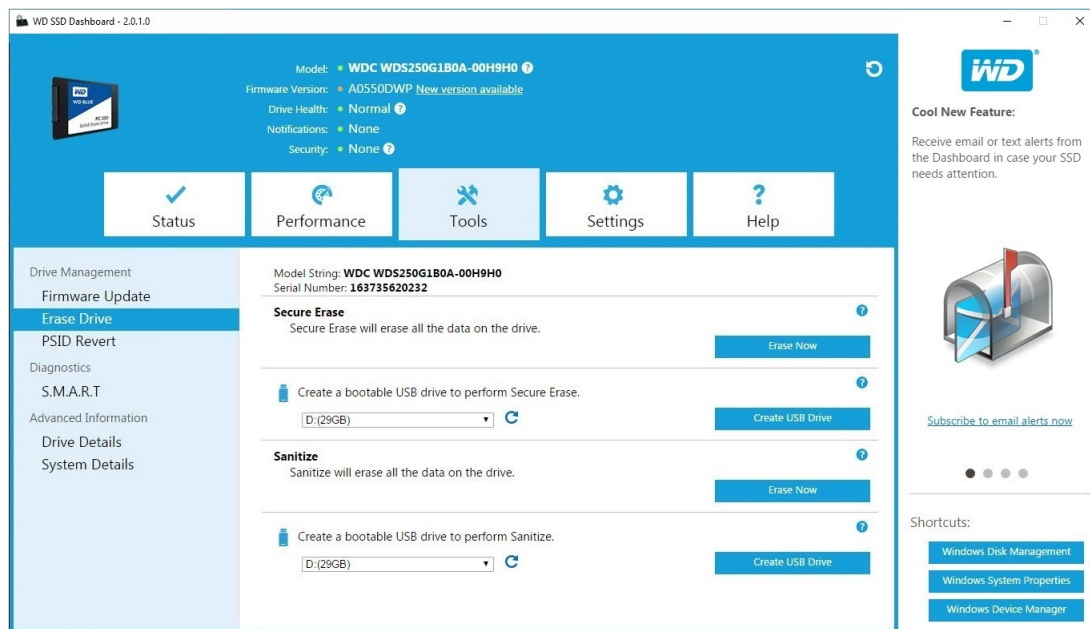
1. In the blue section at the top of the Dashboard, click the **Select drive** drop-down menu to select the SSD on which all user data will be permanently deleted.

Note: If the SSD to be deleted is not listed, click the **Refresh** icon next to the Select drive drop-down menu to scan for the SSD.

The name of the selected SSD appears next to **Model**.



2. Select **Secure Erase** in the left pane.



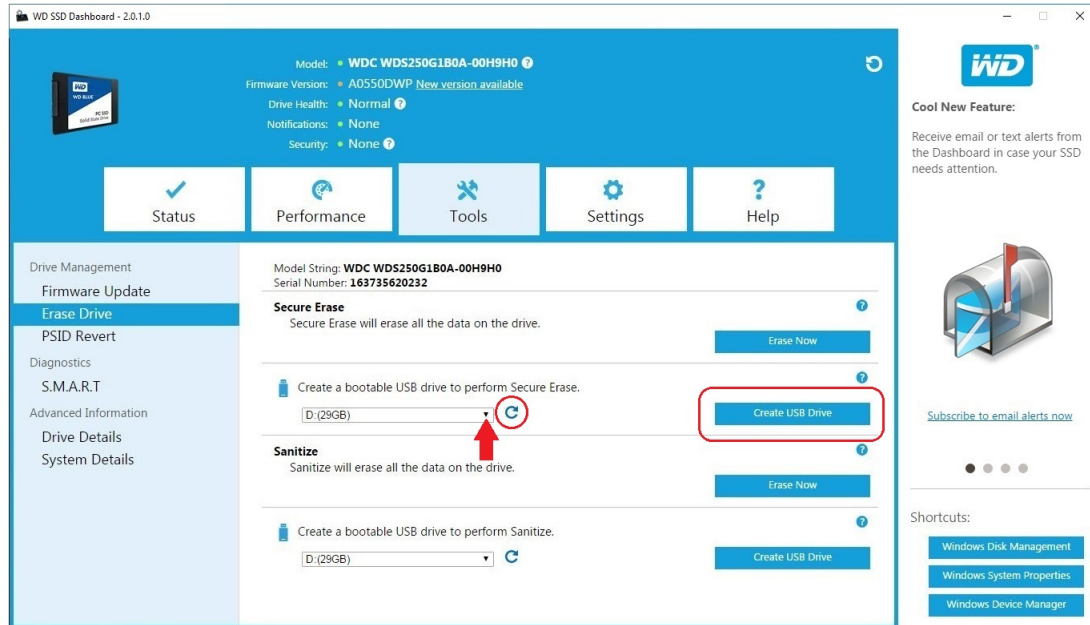
3. Click **Erase Now** to delete all user data and leave the drive in an unformatted state.

Create a Bootable USB Drive for Secure Erase

Note: The USB drive must be formatted as a FAT or FAT32 file system.

1. Insert a formatted USB drive.
2. Before proceeding, backup any existing data on the USB drive.
3. Click the **drop-down** list to select the USB drive.

Note: If the USB drive is not listed, click the **Refresh** icon next to the drop-down list to scan for the USB drive.



4. Click **Create USB Drive**.

Sanitize

Sanitize permanently destroys all user data on the SSD.

Note: Sanitize deletes the mapping table and erases all blocks that have been written to on the selected SSD. This makes Sanitize a slower "erase" option than the Secure Erase function (also see [Secure Erase](#)).

Sanitize can only be performed on an SSD that is not the boot drive. However, if the SSD is the boot drive, the Sanitize function can be performed from a formatted USB. See [Create a Bootable USB Drive with Sanitize](#).

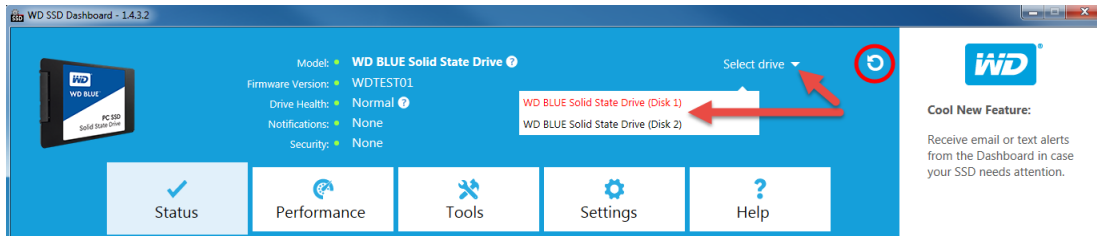
Delete User Data with Sanitize

Note: Ensure that the correct SSD is selected on a system with more than one SSD. The Sanitize function permanently destroys all user data on the selected SSD.

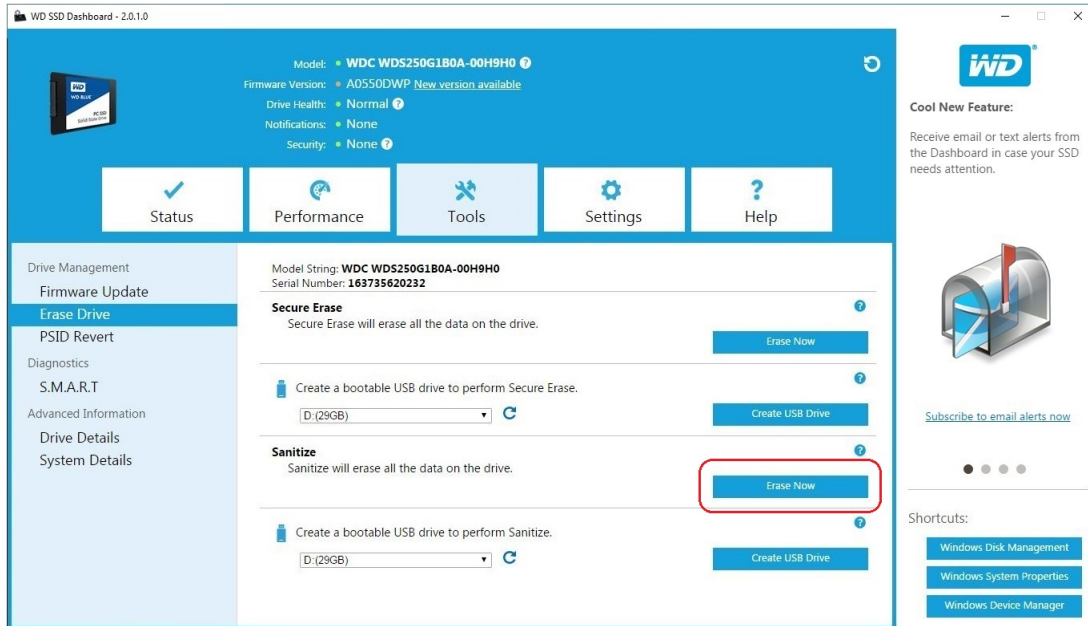
1. In the blue section at the top of the Dashboard, click the **Select drive** drop-down menu to select the SSD on which all user data will be permanently deleted.

Note: If the SSD to be deleted is not listed, click the **Refresh** icon next to the Select drive drop-down menu to scan for the SSD.

The name of the selected SSD appears next to **Model**.



2. Click **Sanitize** in the left pane.



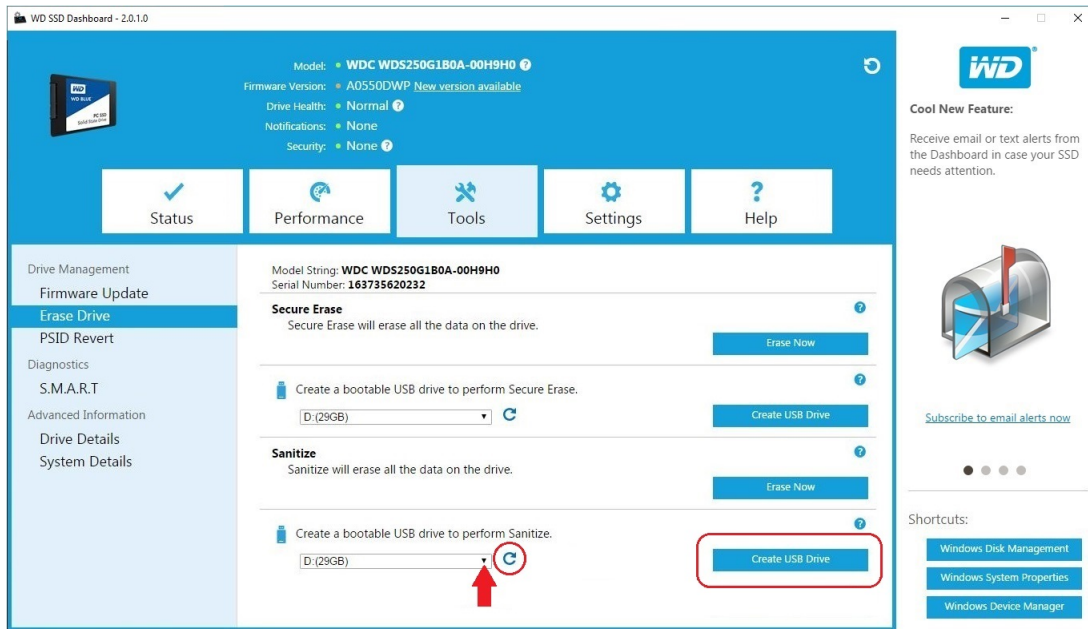
3. Click **Erase Now** to delete all user data and leave the drive in an unformatted state.

Create a Bootable USB Drive with Sanitize

Note: The USB drive must be formatted as a FAT or FAT32 file system.

1. Insert a formatted USB drive.
2. Before proceeding, backup any existing data on the USB drive.
3. Click the **drop-down** list to select the USB drive.

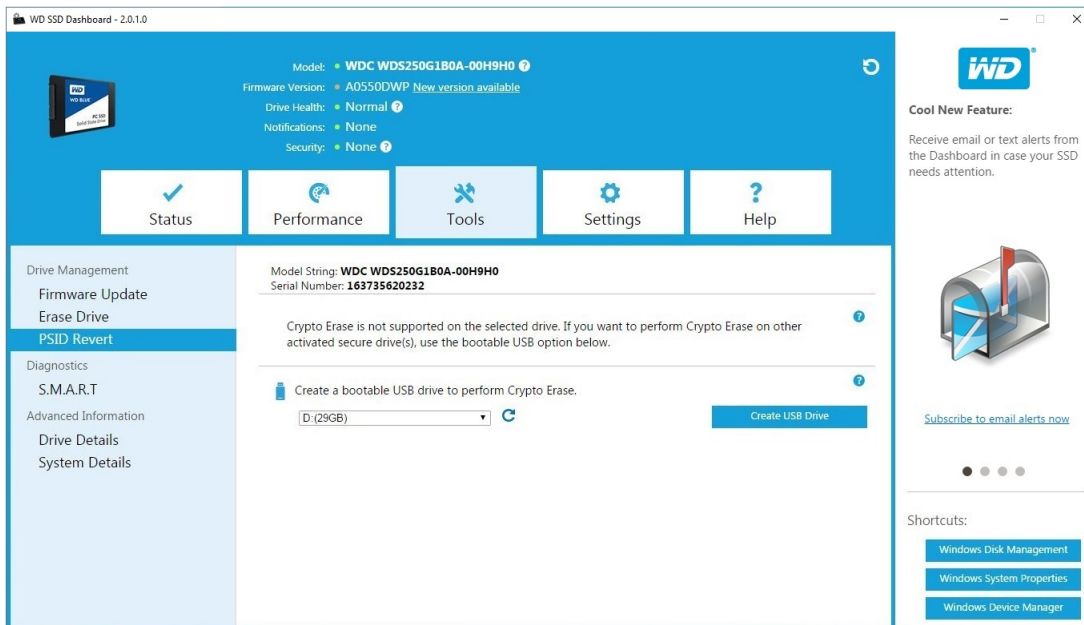
Note: If the USB drive is not listed, click the **Refresh** icon next to the drop-down list to scan for the USB drive.



4. Click **Create USB Drive**.

PSID Revert

This feature is only applicable to OPAL activated SSDs; current generation of WD Green SSD, WD Blue SSD and WD Black PCIe SSD does not support OPAL.



S.M.A.R.T.

S.M.A.R.T. (Self-Monitoring, Analysis and Reporting Technology) is an industry-standard drive monitoring system.

WD SSD Dashboard - 2.0.1.0

Model: **WDC WDS256G1X0C-00ENX0**
 Firmware Version: **B33200WD**
 Drive Health: **Normal**
 Notifications: **None**
 Security: **None**

Navigation: Status, Performance, Tools, Settings, Help

Drive Management: Firmware Update, Diagnostics, S.M.A.R.T., Advanced Information, Drive Details, System Details

Diagnostic Messages:

- The S.M.A.R.T. Diagnostic Short Test may take 5 minutes or less to complete. [Run Short Test](#) (Last run: None)
- The S.M.A.R.T. Diagnostic Extended Test may take 10 minutes or longer to complete. [Run Extended Test](#) (Last run: None)

Hide Advanced Details

Name	Value
Available Spare Space Below Threshold	No
Temperature is above over temperature threshold or below under temperature threshold	No
NVM subsystem reliability degraded	No
Media in Read only Mode	No
Volatile Memory Backup Device Failed	No
Composite Temperature	305 kelvin
Available Spare	100%
Available Spare Threshold	4%
Percentage Used	0%

Shortcuts: Windows Disk Management, Windows System Properties, Windows Device Manager

Diagnostic Short Test

The S.M.A.R.T. Diagnostic Short Test runs automatically every time the WD SSD Dashboard application is launched. It is a quick, drive health test as defined by the S.M.A.R.T. specification.

Note: For WD Black PCIe SSD in systems running iRST drivers, this diagnostic short/extended test is not supported due to driver limitations.

Diagnostic Extended Test

The S.M.A.R.T. Diagnostic Extended Test is an extended drive health test as defined by the S.M.A.R.T. specification. The WD SSD Dashboard cannot be used while the test is running. However, you can cancel the test at any time.

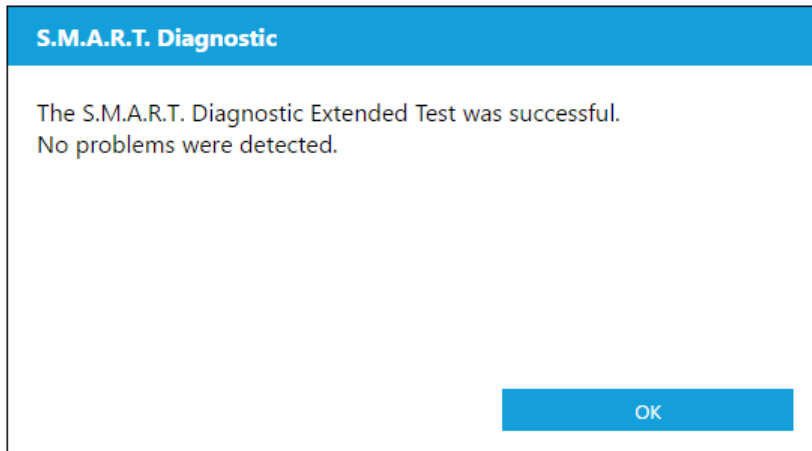
S.M.A.R.T. Diagnostic

Running S.M.A.R.T. Extended Test.

58%

Cancel

If the test is successful, the progress status changes to a green, test complete message.



If the test is unsuccessful, click the provided link to go to the test details.

Drive Details

Drive Details displays the following information for the selected drive:

- Model Name
- Model String
- NVMe Revision / SATA Revision
- NVMe Link Speed / SATA Link Speed
- Serial Number
- Maximum LBA
- World Wide Name (a unique identifier used for storage technologies)
- 4K Alignment

For additional information, click **Show Advanced Details**.

WD SSD Dashboard - 2.0.1.0

Model: **WDC WDS256G1X0C-00ENX0**
 Firmware Version: **B33200WD**
 Drive Health: **Normal**
 Notifications: **None**
 Security: **None**

Navigation: Status, Performance, Tools, Settings, Help

Drive Management: Firmware Update, Diagnostics, S.M.A.R.T, Advanced Information

System Details

Drive Summary

- Model Name: **WD BLACK Solid State Drive**
- Model String: **WDC WDS256G1X0C-00ENX0**
- NVMe Revision: **N/A**
- NVMe Link Speed: **N/A**
- Serial Number: **XXXXXXXXXXXX**
- Maximum LBA: **500118192**
- World Wide Name: **164221620073**
- 4k Alignment: **Yes**

Hide Advanced Details

Bytes	Description	Value
NVMe Identify Controller Data		
[01:00]	PCI Vendor ID (VID)	5559
[23:04]	Serial No	164221620073
[63:24]	Model No	WDC WDS256G1X0C-00ENX0
[71:64]	Firmware Revision	B33200WDD
72	Recommendation Arbitration Burst	2
[75:73]	IEEE OUI Identifier	6980
76	Single PCI Express Port Supported	Yes
76	Single Controller Supported	Yes
76	PCI Function	Supported

Cool New Feature: Receive email or text alerts from the Dashboard in case your SSD needs attention.

Subscribe to email alerts now

Shortcuts: Windows Disk Management, Windows System Properties, Windows Device Manager

System Details

System Details displays information about the operating system, computer hardware, and ATA controller(s) used in the system on which WD SSD Dashboard is installed.

WD SSD Dashboard - 2.0.1.0

Model: **WDC WDS256G1X0C-00ENX0**
 Firmware Version: **B33200WD**
 Drive Health: **Normal**
 Notifications: **None**
 Security: **None**

Navigation: Status, Performance, Tools, Settings, Help

Drive Management: Firmware Update, Diagnostics, S.M.A.R.T, Advanced Information

System Details

Computer

- Manufacturer:
- Model:
- Processor: **Intel(R) Core(TM) i3-5010U CPU @ 2.10GHz**
- Secure Boot: **N/A**

Operating System

- Name: **Windows 10**
- Version: **10.0.14393**
- Service Pack: **N/A**
- System Type: **64-bit Operating System**

ATA Controller

Name	Version
Standard NVMe Express Controller	10.0.14393.206
Microsoft Storage Spaces Controller	10.0.14393.351

Cool New Feature: Receive email or text alerts from the Dashboard in case your SSD needs attention.

Subscribe to email alerts now

Shortcuts: Windows Disk Management, Windows System Properties, Windows Device Manager

5

Settings

Starting WD SSD Dashboard with Windows Startup

Select Language

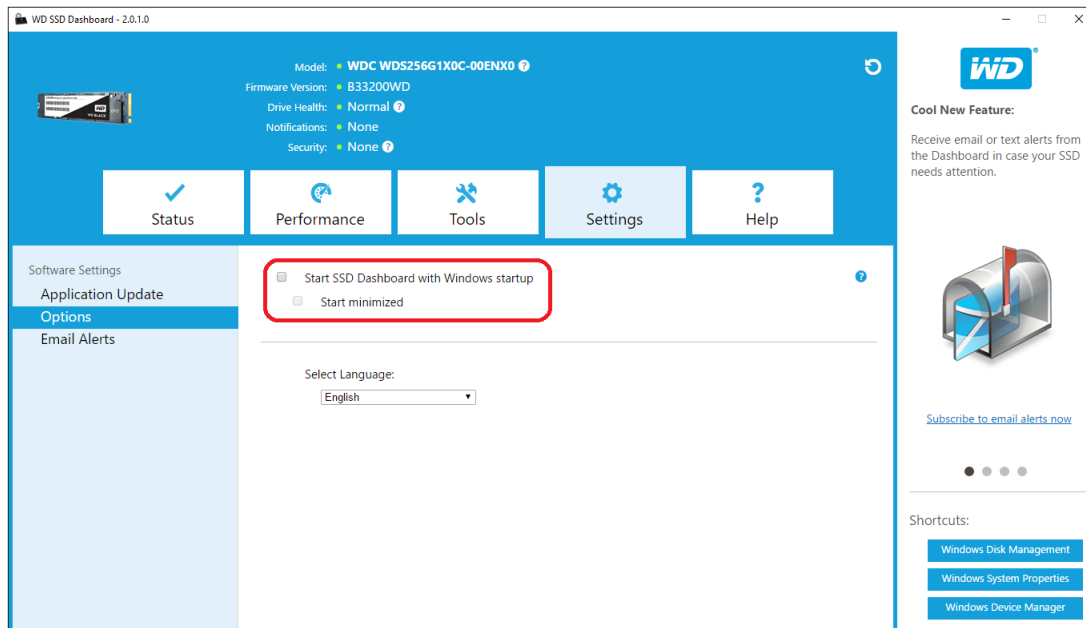
Email and Text Alerts

Configure WD SSD Dashboard Notification Alerts

Starting WD SSD Dashboard with Windows Startup

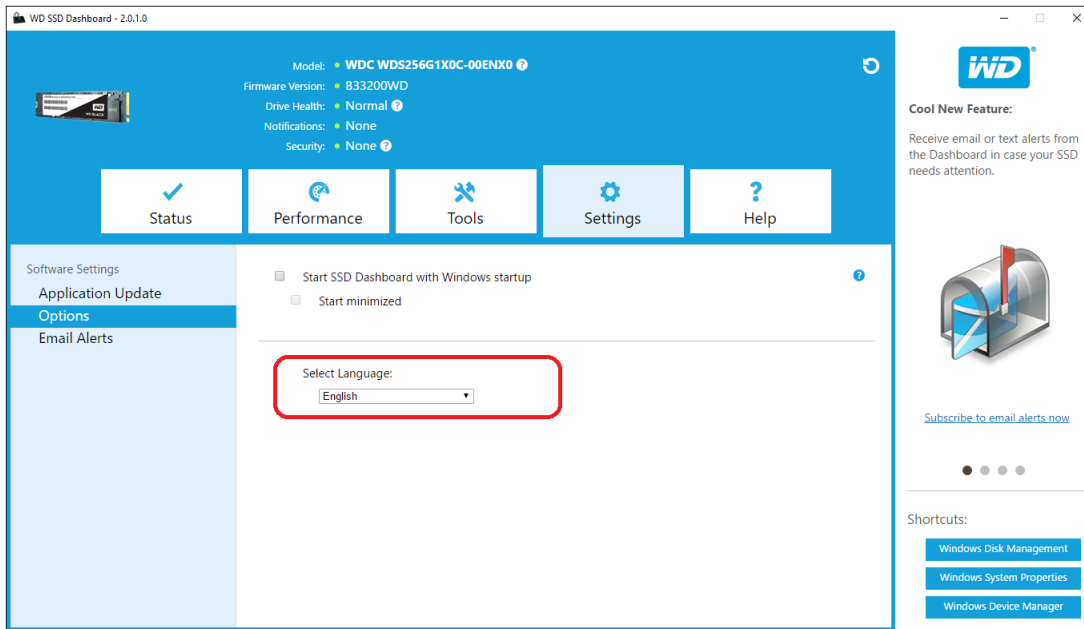
To launch the WD SSD Dashboard at Windows startup, check **Start SSD Dashboard with Windows startup**.

To open the WD SSD Dashboard in Windows' system tray on the taskbar, check **Start minimized**.



Select Language

Click the **Select Language** drop-down menu to select the display language of the WD SSD Dashboard.



Email and Text Alerts

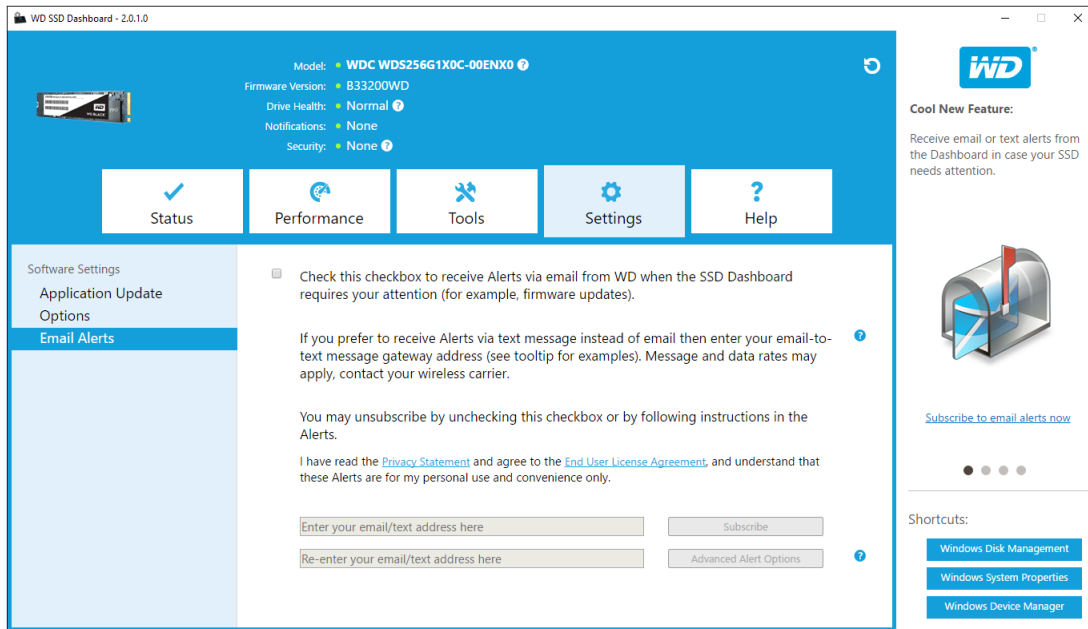
The WD SSD Dashboard can be configured to send notifications via email or SMS text message.

Note: This feature will only work with WD Green SSD and WD Blue SSD.

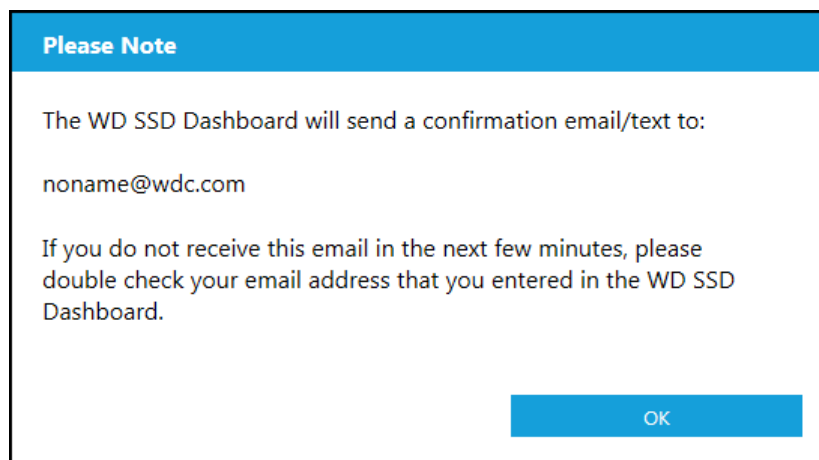
Configure WD SSD Dashboard Notification Alerts

1. In the Software Settings pane on the left, click **Email Alerts**.

Note: You can also sign up for alerts by clicking the **Subscribe to email alerts now** link in the right pane.



2. Click on the **Privacy Statement** link and the **End User License Agreement** link to review.
3. Click the **checkbox** to receive WD SSD Dashboard alerts.
4. You can receive alerts in email or SMS text format:
 - a. Complete step 5 to receive email alerts.
 - b. Complete step 6 to receive SMS text alerts.
5. To receive email alerts:
 - a. Enter your email address.
 - b. Re-enter your email address.
 - c. Click **Subscribe**. An alert subscription dialog box appears.

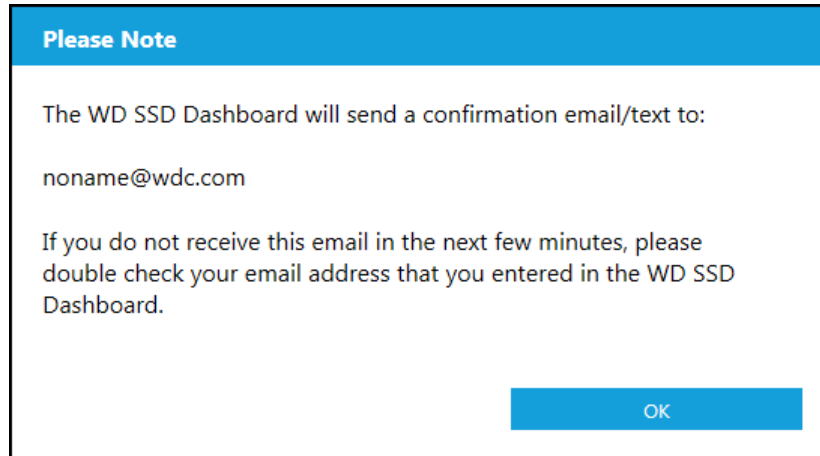


- d. An alert subscription confirmation will be sent to the email address you entered above.
6. To receive SMS text alerts:
 - a. Enter your ten-digit phone number (with no dashes or spaces) followed by your mobile phone carriers' gateway address. The example that follows shows the mobile phone number 510-555-1234 paired with AT&T, Verizon, T-Mobile, and Sprint gateway addresses.

Note: Contact your mobile carrier for more information on your phone's gateway address.

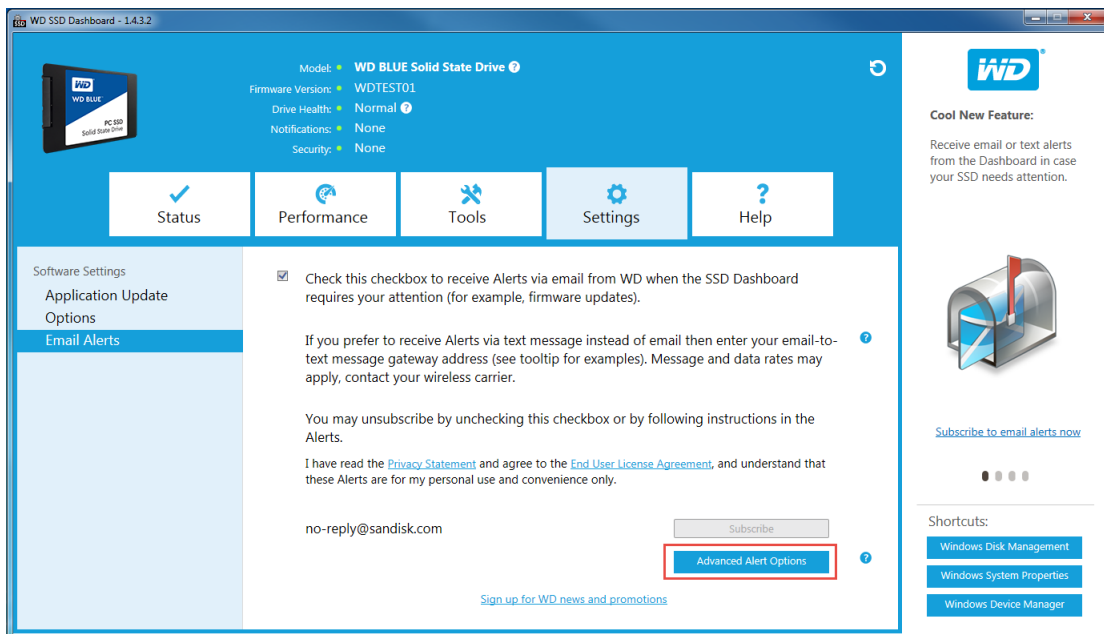
AT&T: 5105551234@mms.att.net
 Verizon: 5105551234@vzwpx.com
 T-Mobile: 5105551234@tmomail.net
 Sprint: 5105551234@messaging.sprintpcs.com

b. Click **Subscribe**. An alert subscription dialog box appears.



c. An alert subscription confirmation will be sent to the SMS text address you entered above.

7. After you have completed the alert subscription process, you can modify subscription options. Click **Advanced Alert Options**.



8. In the dialog box that opens, use the checkboxes to turn on/off the following options:

- Application Updates
- Firmware Updates
- SSD capacity near full

- SSD temperature above normal
 - SSD S.M.A.R.T. attributes alerts
9. Click the **checkbox** next to the options in the Advanced Alert Options dialog box to turn them on or off.

Advanced Alert Options

Check which alerts you would like to be notified by email or text message.

- Application Updates
- Firmware Updates
- SSD capacity near full
- SSD temperature above normal
- SSD S.M.A.R.T attributes alerts

OK

Help

[Online Support](#)

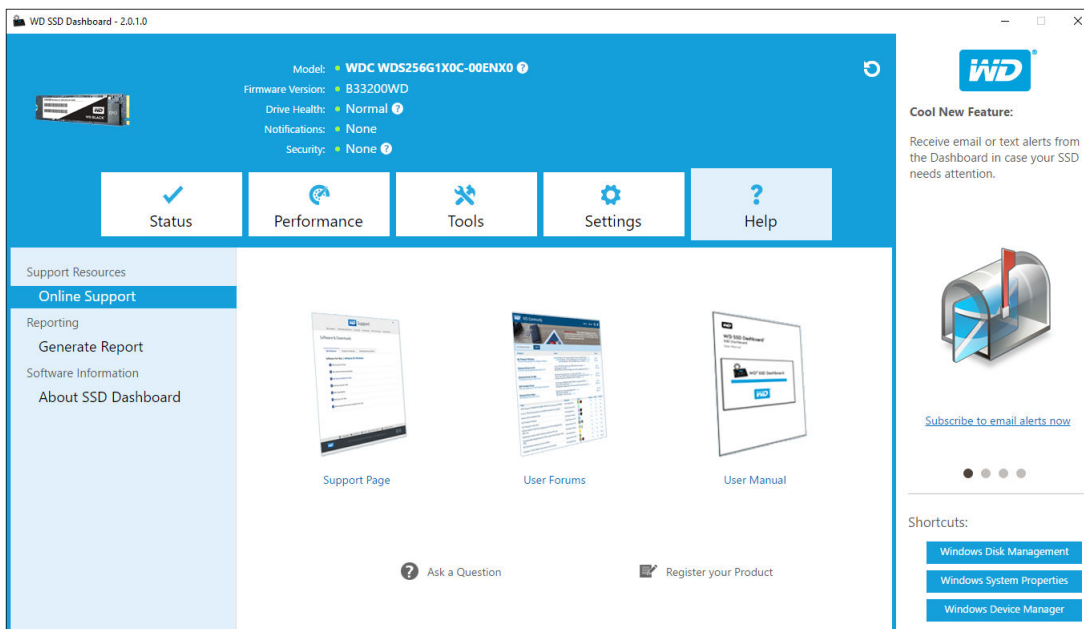
[Generate Report](#)

[About WD SSD Dashboard](#)

Online Support

The Online Support section contains links to the WD Support website, where you'll find product-specific information and user guides, a searchable Knowledge Base, and the WD Community forum.

The Software & Downloads link takes you to the latest product and application software and firmware versions, and when specialized support is required, use the Get Help - Create a Support Case form.



Generate Report

Click **Generate Report** to create and save a full system report that provides the detailed information required for certain support cases.

The Generate Report function generates two files:

- SSD_Dashboard_Report.csv
- SSD_Dashboard_Report_msinfo.txt.

About WD SSD Dashboard

The About SSD Dashboard section contains the current version number of the WD SSD Dashboard software, as well as links to the End User License Agreement (EULA), Third Party Notices, and the WD Privacy Statement.

The screenshot displays the WD SSD Dashboard interface. At the top, the title bar reads "WD SSD Dashboard - 2.0.1.0". The main header area is blue and contains the following information:

- Model: **WDC WDS256G1X0C-00ENX0**
- Firmware Version: **B33200WD**
- Drive Health: **Normal**
- Notifications: **None**
- Security: **None**

Below the header is a navigation bar with five buttons: Status, Performance, Tools, Settings, and Help. The "About SSD Dashboard" section is highlighted in the left sidebar. The main content area displays the following information:

- Version:** 2.0.1.0
- Legal Disclaimers:** © 2016 Western Digital Corporation or its affiliates. To read the End User License Agreement (EULA), please [click here](#).
- Third Party Notices:** To access the source code repository and third party notices associated with this product, please [click here](#).
- Privacy Statement:** To read the Privacy Statement, please [click here](#).

On the right side of the dashboard, there is a "Cool New Feature" section with the WD logo and a message: "Receive email or text alerts from the Dashboard in case your SSD needs attention." Below this is a "Subscribe to email alerts now" link and a "Shortcuts" section with three buttons: Windows Disk Management, Windows System Properties, and Windows Device Manager.

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