



AMD StoreMI User Guide

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Revision History

Date	Revision	Description
June	1.1	Made some general edits.
March 2021	1.0	Initial release.

Chapter 1 Introduction

AMD StoreMI technology is a powerful tool for the PC enthusiasts who want to improve load time, boot time, file management, or system responsiveness. It has the following features:

- Accepts HDD and SSD pairings of any capacity
- Automatically pairs your most-used files with an SSD cache for peak performance
- The StoreMI caching algorithm prioritizes and caches more frequently accessed files when the cache is full

AMD StoreMI technology has a new algorithm that makes it simple to use. The StoreMI configuration replicates your most-used files to an SSD of your choice, leaving the original copy intact. The software seamlessly redirects Windows and your applications to use the faster mirrored copy. Even if the SSD cache is removed or disabled, all your files remain intact on the hard drive.

Chapter 2 System Configuration Requirements

2.1 Product Support

For more information, refer to the Product Support section of the official StoreMI website (<https://www.amd.com/en/technologies/store-mi>).

2.2 Operating System

Windows 10 x64 May 2019 Update (build 18362) or later

2.3 Storage Devices

- At least one rotational HDD of any capacity. The HDD must be connected to a SATA port provided in the AMD processor or chipset.
- At least one unformatted, uninitialized, unallocated SATA or NVMe SSD for storage acceleration. If using a brand new, unused SSD, simply plug the SSD into the system. Most new SSDs will offer a default name to identify it in the AMD StoreMI Cache device menu. A used SSD can be re-used as an AMD StoreMI cache device. However, all the vital data must be backed up by the user and any existing partitions/volumes must be deleted before proceeding.
- The former AMD StoreMI tiering software must not be installed.
- The system should not be configured for RAID storage.
- The maximum drive count is 16.
- A few systems will require additional NVMe[®] to be connected to the system. The SATA SSD on the board will not be able to fulfil the minimum 2 storage controller criteria for StoreMI to install and function.
- The storage devices connected to the third-party SATA AHCI controller ports are not supported by StoreMI. You must connect the storage devices to AMD specific SATA AHCI controller ports for StoreMI to support it.

Chapter 3 Installing StoreMI

Note: Depending on your system, the prerequisites such as device drivers and other software packages might be installed. So, do not click Cancel/No in any of those dialog boxes or close the windows that appear. Otherwise, the installation process will cease prematurely.

Complete the following steps to install StoreMI on your PC:

1. Download the .exe file from the official StoreMI website (<https://www.amd.com/en/technologies/store-mi>).
2. Locate the *AMD_StoreMI.exe* on your PC and double-click it.
The initialization is done to ensure that your system meets all the prerequisites (processor and motherboard), which is likely to consume some time. The *StoreMI installer* is displayed after the initialization is complete.
3. Click the **Install** button to use the default **Install Location** or to install StoreMI in a specific location your choice, complete the following steps:
 - a. Click **Additional Options**. The default **Install Location** is displayed.
 - b. Click the **Browse** button and select the location on your PC to which, StoreMI should be installed.

Note: The *Create Desktop Shortcut* checkbox is selected by default. You can clear the checkbox if you do not prefer a desktop shortcut for StoreMI.

The following figure shows the *StoreMI Installer*:



Figure 1. StoreMI Installer

4. You can do one of the following:

- Click the **Restart** button to restart your PC, it is recommended that you use this option for a proper install.

Note: Without a restart, StoreMI might not work as expected.

- Click the **Close** button to exit the StoreMI Installer.

The following figure shows the final *StoreMI Installer* screen:



Figure 2. Final StoreMI Installer Screen

You have installed StoreMI on your PC.

3.1 Uploading Logs

If the StoreMI installation fails, complete the following steps:

1. Access the logs in `C:\AMD\StoreMI\Logs`.
2. Upload them to the AMD community (<https://community.amd.com/>) with all the essential details.

Chapter 4 User Interface Overview

The StoreMI User Interface (UI) consists of the following panes:

- *Source Devices*
- *Cache Devices*
- *StoreMI Devices*
- *Actions*

4.1 Source Devices

This pane displays all the physical HDDs that are available in your system. Using StoreMI, you can pair them to the available SSDs to help optimize the performance.

The following figure shows the *SOURCE DEVICES* pane:

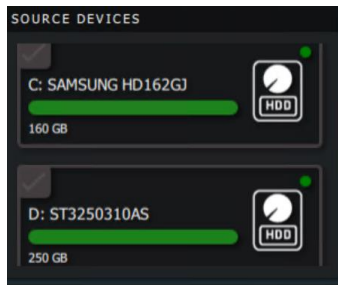


Figure 3. Source Devices Pane

4.2 Cache Devices

This pane displays all the available physical SSDs and the SSD partitions that are created. These devices can be used to store the most frequently used processes/applications on the paired HDD for faster retrieval and better performance.

The following figure shows the *CACHE DEVICES* pane:

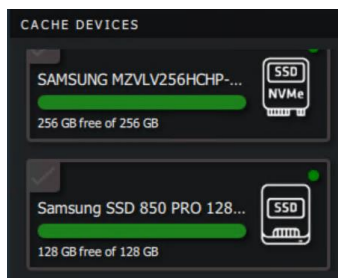


Figure 4. Cache Devices Pane

4.3 StoreMI Devices

This pane displays all the virtual/StoreMI device(s) that have been created by pairing the available HDD and SSDs.

The following figure shows the *STOREMI DEVICES* pane initially:

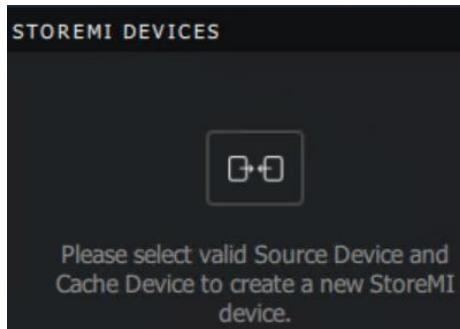


Figure 5. Initial StoreMI Devices Pane

The following figure shows the *STOREMI DEVICES* pane after a StoreMI device has been created:

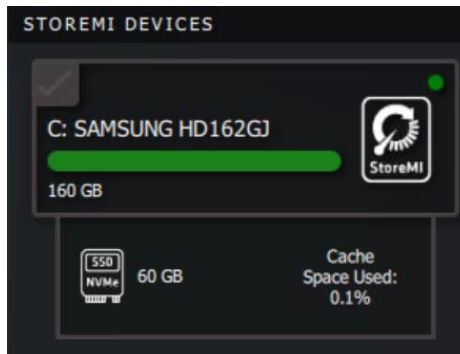


Figure 6. StoreMI Devices Pane 1

In the figure, the data displayed represent the following:

- **160 GB:** StoreMI size of the HDD
- **60 GB:** Size of the cache device
- **Cache Space Used:** Percentage of SSD used to accelerate the I/O of the HDD

4.4 Actions

The following figure shows the *ACTIONS* pane initially:



Figure 7. Initial Actions Pane

The actions that you can perform on the devices will be displayed only in the following scenarios:

- When you select one device in each of the *SOURCE DEVICES* and *CACHE DEVICES* panes as shown in the following figure:

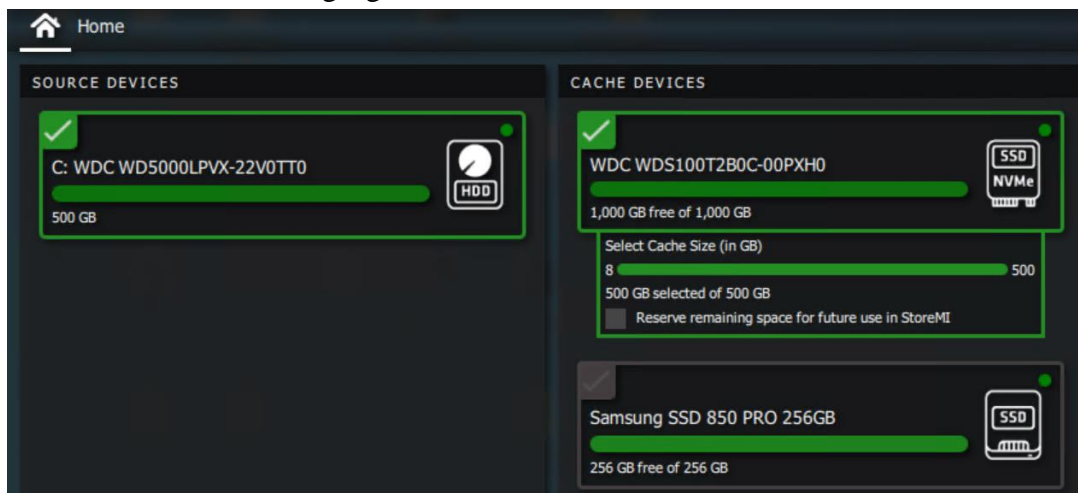


Figure 8. Actions Pane 1

- When you select a device in *STOREMI DEVICES* pane as shown in the following figure:

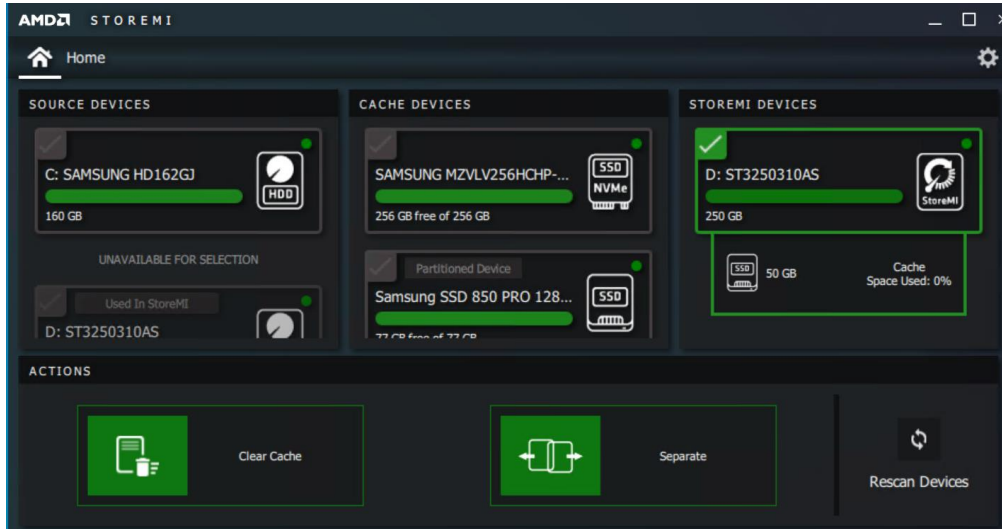


Figure 9. Actions Pane 2

4.5 Viewing Device Details

You can hover your mouse cursor over any of the devices to view the corresponding details as follows:

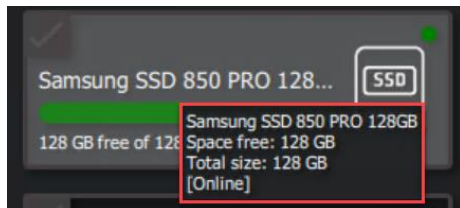


Figure 10. View Device Details

4.6 Status Indicator

The status of all the devices (physical, virtual, and partitions) is displayed on the top-right corner as follows:

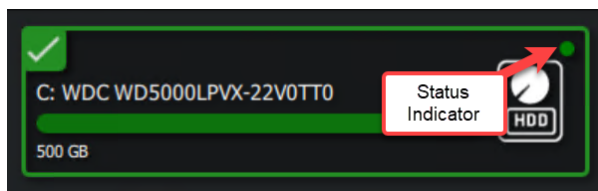


Figure 11. Status Indicator

Green color indicates that the device is online, whereas red indicates that it is offline.

Chapter 5 Working with StoreMI

This chapter comprises of the following sections:

- [Creating a StoreMI Device](#)
- [Separating a StoreMI Device](#)
- [Clearing the StoreMI Device Cache](#)
- [Deleting a Partitioned Device](#)

5.1 Creating a StoreMI Device

For your hard disk, you can create a StoreMI device. Your hard disk can be paired to an available SSD to help enhance the speed and performance. The mostly frequently used files on the hard disk will be stored in the SSD for retrieval when required.

You can create a StoreMI device using one of the following options:

- **The whole SSD:** If you use this option, the entire space (except some space for the essential programs) will be used for the StoreMI device creation.
- **By partitioning an SSD:** If you use this option, only the selected space will be used for the StoreMI device creation. The remaining space will be available in the *CACHE DEVICES* pane. If that remaining space is unformatted, you can do one of the following:
 - Delete it to make it available for the StoreMI device creation.
 - Use that space for storing data by initializing it from the Windows Disk Management.

Note: You can create a maximum of 4 StoreMI devices.

If a source or cache device cannot be used for creating a StoreMI device, it is added to UNAVAILABLE FOR SELECTION section as follows:

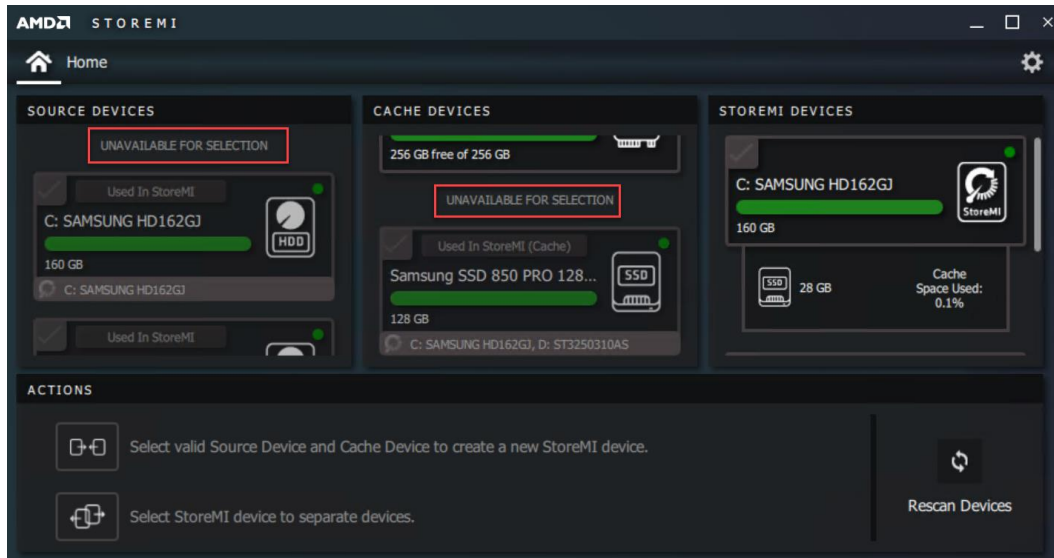


Figure 12. Unavailable for Selection

The devices (source or cache) utilized by StoreMI are highlighted as follows:



Figure 13. Used in StoreMI

The name of the StoreMI device for which a device (source or cache) is used is displayed beneath the respective device as follows:



Figure 14. StoreMI Device Name

Complete the following steps to create a StoreMI device:

1. Double-click the StoreMI icon on your desktop.

Note: Alternatively, you can also access StoreMI using the search box.

The initialization takes place to ensure that all the prerequisites and other dependencies are met. The following screen is displayed till that process is complete:



Figure 15. Splash Screen

After the initialization is complete, the StoreMI home page is displayed.

The following figure shows the StoreMI home page:

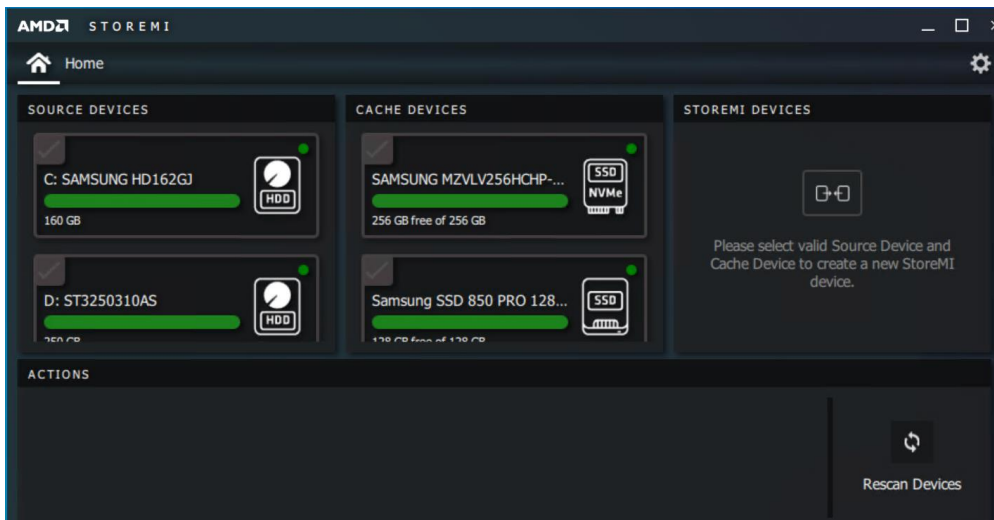


Figure 16. StoreMI Home Page

- In the *SOURCE DEVICES* pane, select the hard disk, to which you want to pair one of the available SSDs.

Note: The HDD must have a valid Windows 10 partition with a drive letter present on it in order to be available for selection.

- In the *CACHE DEVICES* pane, select the SSD of your choice. The *Select Cache Size (in GB)* pane is displayed right below the selected SSD.

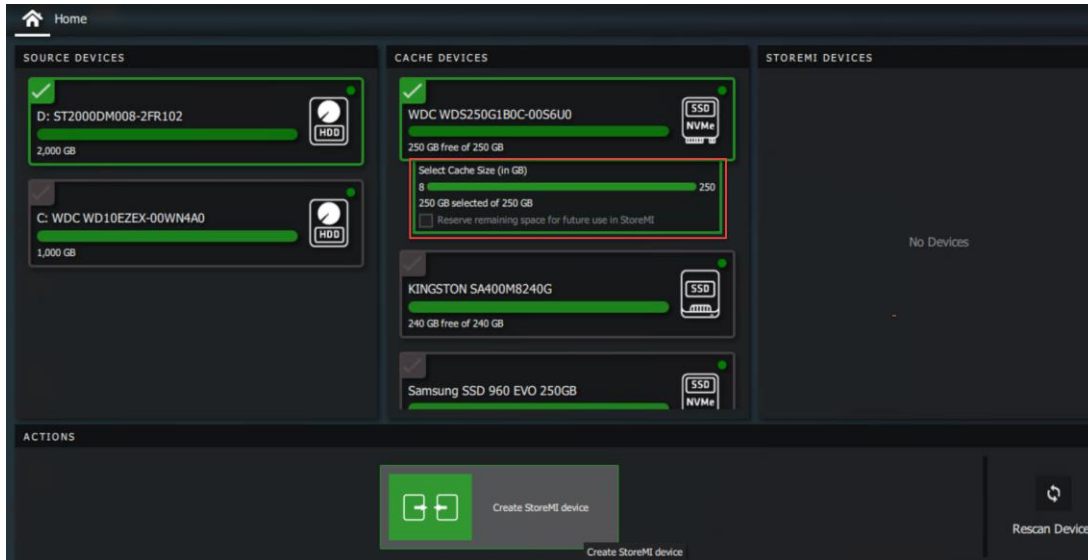


Figure 17. Select Cache Size Pane

- In *Select Cache Size (in GB)* pane, select the **Reserve remaining space for future use in StoreMI** checkbox if you want to format the space remaining after the selected cache size. If you select this option, the remaining space will be readily available for creating a StoreMI device.

Note: The space selected will not be available for use on Windows.

- Use your mouse cursor or right/left arrow keys on the keyboard to adjust the slider to the size that you want to use as cache. The minimum cache size is 8 GB.

Note: By default, the entire SSD is allotted.

- In the *Action* pane, click on the **Create StoreMI device** button. The virtual/StoreMI device is displayed in the *STOREMI DEVICES* pane as follows:

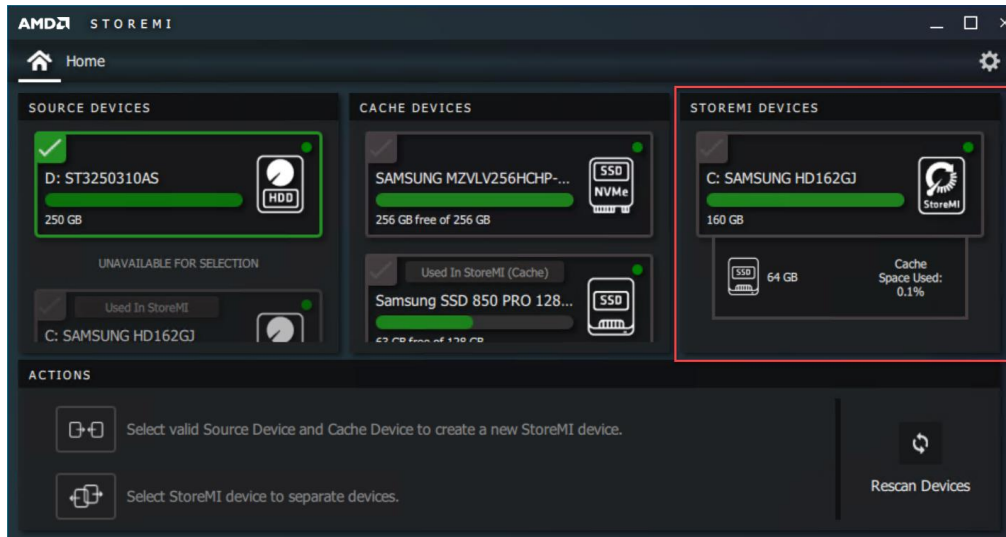


Figure 18. StoreMI Devices Pane 2

You have created a StoreMI device.

5.2 Separating a StoreMI Device

A StoreMI device is created after a successful pairing between a hard disk and SSD. Complete the following steps to separate a StoreMI device:

1. Double-click the StoreMI icon on your desktop. The StoreMI home page is displayed.
Note: Alternatively, you can also access StoreMI using the search box.
2. In the *STOREMI DEVICES* pane, select the required StoreMI device.
3. In the *ACTIONS* pane, click on the **Separate** button. The virtual/StoreMI device is separated. The cache used in the StoreMI device is deleted and the SSD is formatted to be used for one of the following purposes:
 - A different StoreMI SSD and HDD pairing
 - Standard use as a storage device if available in Windows Disk Manager

The following figure shows the **Separate** button:

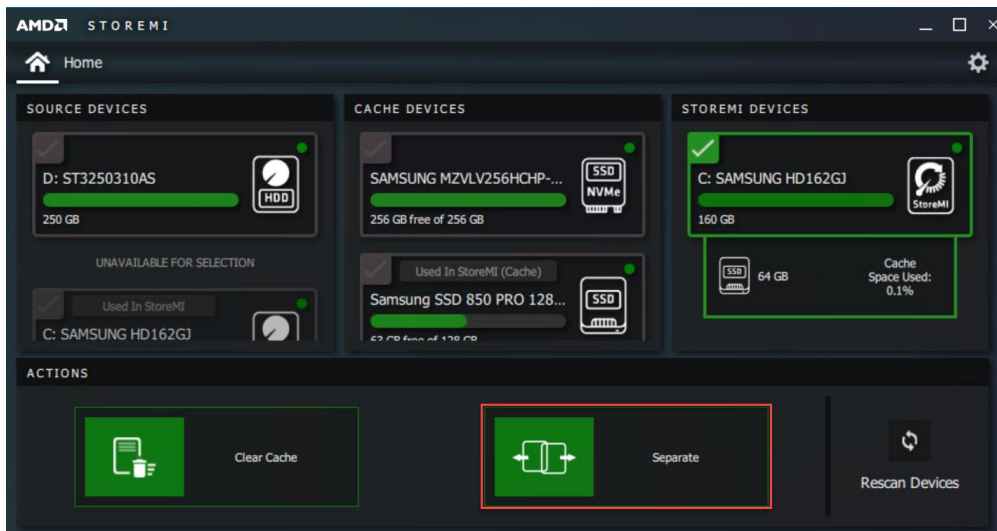


Figure 19. Separate StoreMI Device

You have separated a StoreMI device.

5.3 Clearing the StoreMI Device Cache

After a StoreMI device is created, some frequently used processes/programs might consume some of the cache.

If desired, complete the following steps to clear the StoreMI device cache:

1. Double-click the StoreMI icon on your desktop. The StoreMI home page is displayed.
Note: Alternatively, you can also access StoreMI using the search box.
2. In the *STOREMI DEVICES* pane, select the required StoreMI device.
3. In the *ACTIONS* pane, click the **Clear Cache** button. The StoreMI device cache is cleared.

You can view the StoreMI device cache utilization in the **Cache Space Used** section of the *STOREMI DEVICES* pane as follows:

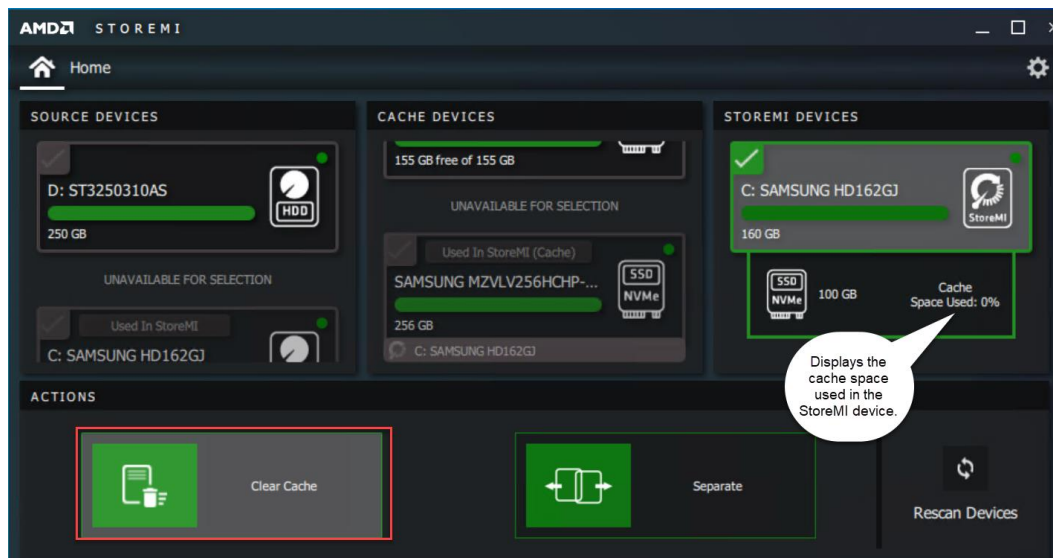


Figure 20. Clear Cache

You have cleared the StoreMI device cache.

5.4 Deleting a Partitioned Device

During the creation step, if you split SSD space to be used partially for StoreMI cache and partially to create a partition, you will need to remove the partition to utilize the full capacity of the SSD for StoreMI. However, whatever space was used for the cache (in creating a StoreMI device) is available to use without deleting the partition.

Complete the following steps to delete a partitioned device:

1. Double-click the StoreMI icon on your desktop. The StoreMI home page is displayed.
Note: Alternatively, you can also access StoreMI using the search box.
2. In the *STOREMI DEVICES* pane, select the required StoreMI device. The separated device is displayed in the *CACHE DEVICES* pane as a *Partitioned Device*.
3. Select the required *Partitioned Device*. The *Format Partition* pane is displayed.

- Click the **Delete** button. A confirmation message is displayed.

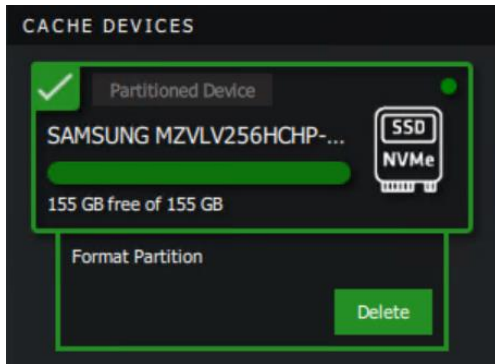


Figure 21. Delete a Partitioned Device

- Click the **Yes** button. The SSD corresponding to the partitioned device is displayed in the *CACHE DEVICES* pane.

You have deleted a partitioned device.

5.5 Freeing Allocated Space to Unallocated Space

For any StoreMI device, complete the following steps to free the previously allocated space back to unallocated space in order to use the full capacity of the SSD:

- Double-click the StoreMI icon on your desktop. The StoreMI home page is displayed.
Note: Alternatively, you can also access StoreMI using the search box.
- In the *STOREMI DEVICES* pane, select the StoreMI device, whose cache must be merged with the partitioned SSD.
- In the *ACTIONS* pane, click the **Separate** button.

The SSD device corresponding to the cache space is displayed as a **Partitioned Device** in the *CACHE DEVICES* pane as shown in the following figure:



Figure 22. Partitioned Device

- Follow step 3 to 5 in the section *Deleting a Partitioned Device*.

The previously allocated space is freed back to an unallocated space and the full capacity of the SSD can be utilized.



Chapter 6 Additional Features

This chapter comprises of the following sections:

- [Configuring Applications](#)
- [Configuring Updates](#)
- [Rescanning Devices](#)

6.1 Configuring Applications



Complete the following steps to configure the **Applications** section:

1. Double-click the StoreMI icon on your desktop. The StoreMI home page is displayed.
Note: Alternatively, you can also access StoreMI using the Windows search box.
2. On the top-right corner, click  (**Settings**).
*Note: You can click  (**Home**) to go back to the StoreMI home page.*
3. In the **Applications** section, you can do the following:
 - From the **Animations** drop-down, select **ON** to view the transitions (between screens) in the StoreMI user interface.
 - From the **Logging** drop-down, select **ON** to maintain a record of the user actions performed on StoreMI.

You have configured the **Applications** section.

6.2 Configuring Updates

Complete the following steps to configure the **Updates** section:

1. Double-click the StoreMI icon on your desktop. The StoreMI home page is displayed.
Note: Alternatively, you can also access StoreMI using the Windows search box.
2. On the top-right corner, click  (**Settings**).
*Note: You can click  (**Home**) to go back to the StoreMI home page.*
3. In the **Updates** section, you can do one of the following:
 - From the **Auto-Update Interval** drop-down, select the frequency at which StoreMI must be automatically updated.
Note: The minimum and maximum values for this interval are 1 and 365 day(s) respectively.

- Click the **Check for Updates** button to update StoreMI manually.

You have configured the **Updates** section.

6.3 Rescanning Devices

The **Rescan** button in the *ACTIONS* pane performs the following actions:

- It triggers a process in the driver that scans the SATA channels to identify new, legacy, or removed disks.
- It reads the configuration information from each disk. When a disk is offline, it might be brought online by using a rescan. A rescan also stops and then automatically resumes all the tasks.

The following figure shows the **Rescan Devices** button at the bottom-right corner:

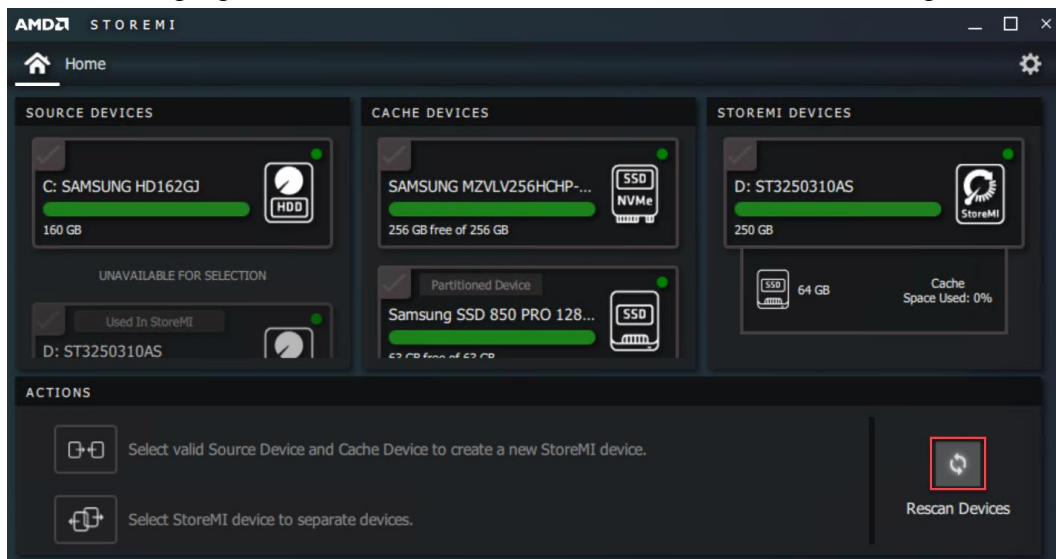


Figure 23. Rescan Devices

You can use this option if a device is missing from StoreMI and you suspect it should be present or a device was removed, but it is still being displayed.

Chapter 7 Uninstalling StoreMI

Complete the following steps to uninstall AMD StoreMI:

1. Before uninstalling, use the **Separate** button to disable any AMD StoreMI and then, back up your data. After backing up your data, delete any partitions that were created.
Note: The data will be erased from the partition when deleted.
2. Use the Windows **Apps and Features** to select and initiate the uninstall.
During this process, if you have an active AMD StoreMI device or partitions, you will be asked to confirm if you want to remove them and proceed. That will return the hard drive and SSD to the state prior to enabling AMD StoreMI. Back up your data before proceeding to delete any partitions that were created, as all the data will be erased during the process.

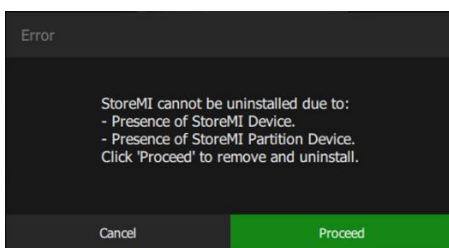


Figure 24. Uninstallation Confirmation

3. Click the **Uninstall** button.
The uninstallation process is complete.
4. (Optional) You can do one of the following:
 - Click **View Uninstalling Log** to see the corresponding details.
 - Click **Share** to provide your feedback in StoreMI.

The following figure shows the final uninstallation screen:



Figure 25. Final Uninstallation Screen

5. You can do one of the following:

- Click the **Restart** button to clear AMD StoreMI. It is recommended that you use this option for a clean uninstall.
- Click the **Finish** button to complete the uninstallation without a system restart.

You have uninstalled AMD StoreMI.