

QUICK START GUIDE

July 2019



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Quick Start Flowchart:



Steps 8 and 11 Continued on Next Page





Quick Start Guide

AMD StoreMI[™] is a tiered storage acceleration solution designed to run on AMD Socket sTR4 X399 or Socket AM4 500/400-series motherboards and Windows 10 64-bit systems. It utilizes up to 256GB of any solid state drive (SSD) as a fast tier, and combines it with a large-capacity mechanical hard disk drive (or second SSD) into a single drive letter as seen by Windows 10 operating system.

AMD StoreMI is not a caching solution; it utilizes advanced *Machine Intelligence*, virtualization and automated MicroTiering[™] to analyze the data blocks that are most often accessed and actually moves those blocks to the fastest storage tier. StoreMI operates consistently at the same performance levels as SSDs, continuously adapting to changing storage usage patterns in real time.

As a result, the user experiences the performance of the fastest tier SSD drive, combined with the large capacity and low-price advantages of the mechanical hard disk (or second SSD) in a single, large, and easy-to-manage drive.



Pre-Install Checklist

IMPORTANT: Backup the boot drive and important data, and follow the instructions below carefully! When upgrading to a StoreMI, the system boot and/or data drives will be converted to a virtual disk to fully accelerate or expand the storage in the system. Backing up protects from potential hardware storage device errors or failures that may occur during the conversion process.

If converting an SSD or NVMe boot drive that is larger than 256GB, additional steps are required. See the section *Expand the Capacity of an existing SSD Boot Drive* for additional information.

Check the following prior to upgrading your system to StoreMI:

- Your system meets the minimum configuration: AMD Ryzen, 4xx series motherboard with a minimum of 4G RAM (6G RAM to support RAM cache).
- Secure Boot is NOT enabled. Consult your system documentation for further details.
- There are no other SSD caching or AMD software RAID solutions installed.
- The BIOS SATA disk settings are set to AHCI, not RAID and there is no software RAID installed on the system.
- Microsoft's *chkdisk* or other third-party disk scan tools run error free on the boot drive
- A new unused SSD or HDD is available
- If wishing to use bootable tiers > 2TB in size, the system must be configured to boot in UEFI mode with a UEFI bootable Windows OS installation as Windows 10 does not support > 2TB boot drives in Legacy MBR boot mode.

Software Installation

Step 1: Download the AMD StoreMI installer to a temporary directory and double click the installer application.

Step 2: Follow the installer instructions to accept the license and install the AMD StoreMI software, drivers and JAVA (if not already installed) using the Express option. Ensure the system is connected to the Internet for this step if JAVA is not already installed.

NOTE: Prior to starting the Express install, you may optionally view the current disk configuration using the AMD Drive Controller information option to verify the drive setup.

Step 3: Reboot the system to complete the installation.

Entering License Key

AMD StoreMI does not require a license key, as it checks for an AMD Socket AM4 motherboard with a X399, 4xx and 5xx-series chipset when the system boots.



Create Bootable StoreMI Tiered Drive

If starting with a fresh Windows install, the OS can be installed on either the HDD or SSD. If the SSD is larger than the 256GB limit of StoreMI, it will be carved into two sections. The first section is used for tiering in the StoreMI and will be the size of the licensed capacity, and the second piece is presented as an additional virtual SSD device made up of the remaining unused capacity.

While installing the OS on the HDD initially simplifies the process, it is important to note that your initial performance will occur at HDD speeds. Once StoreMI's Machine Intelligence learns how you use your system, you will quickly start seeing the performance of the SSD.

Loading the OS on the SSD initially provides immediate SSD performance, and as the system learns your usage patterns, it will move your infrequently used applications to the HDD.

Adding SSD to Existing HDD Boot Drives

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI scans your system and only display those options that are available to you based on your system's configuration.

Case A: Tier created without enabling RAM Cache

Step 1: Select "Create Tier", and confirm by selecting "Yes".

Step 2: Choose the drives to create a StoreMI TierDrive.

All of the drives that are available in the system will be displayed. The boot drive is noted as such in the "Status". The "Type" of drive, HDD or SSD, is also listed. In the example above, the Operating System is on the HDD, and it is being combined with a blank SSD. Choose the HDD as the slow drive and the SSD as the fast drive. Note, if you make a mistake, and chose the wrong drives as the slow and fast drives, an error message will provide a warning.

Note, if a drive is grayed out, it is usually because it is in use as a data drive or has partitions on it. You will need to wipe the drive clean first using Windows Disk Manager or Diskpart command line tool, making sure to back up any important data on the drives beforehand.

Step 3: Transform the Boot Drive and Reboot. Once the appropriate drive has been selected, click **Create** to start the conversion process.

Reboot the system when prompted.

If the system is in UEFI mode, the following should display on reboot indicating that the boot drive has been successfully transformed into a StoreMI drive.





Step 4: Once Windows boots, open Disk Manager to verify the system has correctly booted from the StoreMI and to access the volume expand capability of Windows.

STEP 5: If not automatically completed, manually expand the boot volume to use the new capacity added by the SSD by right clicking on the C: partition in Disk Manager and selecting **Extend Volume**

In the extend dialog box, leave the defaults as-is if using all the capacity and click next.

The C: on the StoreMI is now expanded to use the SSD capacity and ready for use.

Case B: Tier created with RAM Cache Enabled

You also have the option at create time to enable 2GB of RAM Cache. This option will dedicate 2GB of your system memory as a Read Cache. Note that the option to enable or disable RAM Cache can also be changed anytime after the creation of the Tiered Drive using the system utilities. (This will be detailed in a later section)

The remainder of the install process is the same as Case A: Tier created without enabling RAM Cache

IMPORTANT: StoreMI may need to optimize the hibernate file to ensure it is stored on a SATA device attached to the primary SATA controller. Ensure these are complete BEFORE rebooting to ensure hibernate and shutdown operates properly. This process may take up to 30 minutes or more depending on system RAM size and the HDD speed. This typically occurs when converting NVMe SSD boot drives or non-primary SATA controller SSD boot drives e.g. M.2 SATA boot devices. Float the mouse pointer over the StoreMI icon in the system tray to verify of the process is complete.

Utilizing the Additional Capacity Over the SSD License Limit

The software supports up to 256GB fast tier capacity. An SSD without an operating system over 256GBwill be carved into two sections. The first section is used for tiering in the StoreMI and will be the size of the licensed capacity, and the second piece is presented as an additional virtual SSD device made up of the remaining unused capacity.

This will result in a new device appearing in the Disk Manager that may be formatted and used as



temporary storage.

IMPORTANT: A carve out SSD drive created using excess capacity over the license limit will be deleted whenever a Remove StoreMI operation is completed and the SSD removed. For this reason, ensure that any important data stored on this temporary drive is backed up before performing the transition.

Expand the Capacity of an existing SSD Boot Drive

If the boot drive is an SSD, the software provides the ability to expand the capacity of the boot drive by adding a large capacity HDD or SSD and increasing the overall size of the boot volume.

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI scans your system and only display those options that are available to you based on your system's configuration.

Step 1: Select "Create Tier". Select an available blank SSD or HDD from the options presented.

	IMPORTANT:	For	the	case	wh	ere	you	see	the.	fol	lowing	mes:	sage:	
--	------------	-----	-----	------	----	-----	-----	-----	------	-----	--------	------	-------	--



The SSD will be carved into two sections. The first section is used for tiering in the StoreMI TieredDisk and will the the size of the licensed capacity, and the second piece is presented as and additional virtual SSD.

Step 2: Choose the drive with which to create a StoreMI TierDrive.

Note, if a drive is grayed out, it is usually because it is in use as a data drive or has partitions on it. You will need to wipe the drive clean first using Windows Disk Manager or Diskpart command line tool.

Step 3: Transform the Bootdrive and Reboot. Once the appropriate drive has been selected, click **Transform** to start the conversion process.

Reboot the system when prompted.



Step 4: If not automatically completed by the software, you may manually extend the size of your new StoreMI with additional capacity added by the SSD or HDD using Windows Disk Manager as described in the earlier section for accelerating a HDD in steps 4 and 5.

Create a New Non-bootable StoreMI TierDrive (two new drives with no existing data)

To accelerate a data (non-boot) drive, Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI will scan your system and only display those options that are available to you based on your system's configuration.

STEP 1: Select the "Create Tier" option and then "No".

STEP 2: Select your Data drive (Status will say "data") and drive you would like to combine it with. Drives containing data can easily be identified in the Status column. Choose the "Create" button.

Your second drive should be blank. Pay special attention to which drives have an existing partition on them and which are available as unused/blank drives. If you select a drive with a partition, (Information in the **Status Column)**, the software will warn that all data will be deleted on the drive, are you sure? Only say YES if you intend to delete the data and you have any important data backed up safely. If you select an option that has no partitions, a new StoreMI with no file partition will appear in your Disk Manager.

STEP 3: The screen will identify how the new StoreMI drive will appear. If satisfied, click the "Next" button. The existing drive will temporarily go offline while it is converted to a StoreMI. Once complete, the data drive will reappear as a StoreMI. Appendix A, example A5, shows the Disk Manager configuration after converting a D: DATA drive to a StoreMI.

Enable the RAM cache Feature

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI will scan your system and only display those options that are available to you based on your system's configuration.

Select the Enable RAM Cache Setting. The drop down menu gives you the option or RAM Cache Off or 2G Cache. Select 2G Cache and hit the Create button.

Checking StoreMI Status

A system tray utility is provided for quick access to the StoreMI software status. In the lower right-hand corner of the desktop, either float over the AMD icon to see basic information about the StoreMI or right click to gain access to several high level control functions to start and stop the StoreMI activity.





The systray application may also be used as a shortcut for several other configuration or status functions, as well as turning the promotion/tiering functions off while running backups for example.

Troubleshooting

Software will not install - Not licensed for this hardware message

Check your system meets the minimum requirements outlined in the Pre-Install Checklist. This version of the software will only run on AMD Socket AM4 motherboards with a 4xx series chipset.

AMD RAID is installed on the system and StoreMI will not convert the boot drive

Bootable RAID systems are not supported by the StoreMI software.

My system no longer hibernates

If your system supports multiple storage controllers (use Microsoft Device Manager or the AMD installer utility to determine how many there are), hibernate may not be possible in all combinations. When using all SATA devices, ensure that all StoreMI disk devices are attached to the same SATA controller on the motherboard whenever possible. For Windows 7, attach the devices to ports 0 and 1.

Cannot transform my boot drive or remove due to recovery partition

Open Microsoft Disk Manager and check if there is a reserved partition on the boot drive after the primary C: boot volume.

Disk 0			
978.07 GB Online	100 MB Healthy (EFI Sy	(C:) 929.64 GB NTFS Healthy (Boot, Page File, Crash Dump, Primary Par	1.76 GB Healthy (Recovery Partitic

If a reserved partition exists, then use a third-party tool to reduce the size of the C: partition by 3 or 4GB, and move the Recovery Partition to fill the 3-4GB capacity gap created between the C: and the reserved partition, then repeat the StoreMI utility operation. You may also do the opposite when expanding the boot drive.

My issue is not addressed here ...

See <u>www.AMD.com/support</u> for additional information, an online FAQ and knowledge base which may contain more up to date information.





Intelligent Tiered Storage Acceleration Software for Windows 10

USER GUIDE

June 2019



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User Guide

AMD StoreMI[™] is a tiered storage acceleration solution designed to run on AMD Socket sTR4 X399 or Socket AM4 500/400-series motherboards and Windows 10 64-bit systems. It utilizes up to 256GB of any solid state drive (SSD) as a fast tier, and combines it with a large-capacity mechanical hard disk drive (or second SSD) into a single drive letter as seen by Windows 10 operating system.

AMD StoreMI is not a caching solution; it utilizes advanced **Machine Intelligence**, virtualization and automated MicroTiering[™] to analyze the data blocks that are most often accessed and actually moves those blocks to the fastest storage tier. StoreMI operates consistently at the same performance levels as SSDs, continuously adapting to changing storage usage patterns in real time.

As a result, the user experiences the performance of the fastest tier SSD drive, combined with the large capacity and low-price advantages of the mechanical hard disk (or second SSD) in a single, large, and easy-to-manage drive.

Pre-Install Checklist

IMPORTANT: Backup the boot drive and important data, and follow the instructions below carefully! When upgrading to a StoreMI, the system boot and/or data drives will be converted to a virtual disk to fully accelerate or expand the storage in the system. Backing up protects from potential hardware storage device errors or failures that may occur during the conversion process.

If converting an SSD or NVMe boot drive that is larger than 256GB, additional steps are required. See the section *Expand the Capacity of an existing SSD Boot Drive* for additional information.

Check the following prior to upgrading your system to StoreMI:

- Your system meets the minimum configuration: AMD RyZen X399, 4xx or 5xx series motherboard with a minimum of 4G RAM (6G RAM to support RAM cache).
- Secure Boot is NOT enabled. Consult your system documentation for further details.
- There are no other SSD caching or AMD software RAID solutions installed.
- The BIOS SATA disk settings are set to AHCI, not RAID and there is no software RAID installed on the system.
- Microsoft's chkdisk or other third-party disk scan tools run error free on the boot drive
- A new unused SSD or HDD is available
- If wishing to use bootable tiers > 2TB in size, the system must be configured to boot in UEFI mode with a UEFI bootable Windows OS installation as Windows 10 does not support > 2TB boot drives in Legacy MBR boot mode. When installing, be sure to boot your Windows install media with the UEFI option.



Software Installation

Step 1: Download the AMD StoreMI installer to a temporary directory and double click the installer application.

I I I I I I I I		Application Tools	Downloads	
File Home Share	View	Manage		
← → ~ ↑ 🕹 > Thi	s PC > Dov	wnloads		
🔹 Ouick access	Name	^		Date modified
Deskten d	MD AMD	_StoreMI_install_Win	64_1.3.1.16945	2/22/2018 8:28 PM
Downloads Documents				
📰 Pictures 🛛 🖈				
Music				
Videos				
i OneDrive				
💻 This PC				
👝 New Volume (D:)				
A Network				



Step 2: Follow the installer instructions to install the AMD StoreMI software.

NOTE: Prior to starting the Express install, you may optionally view the current disk configuration using the AMD Drive Controller information option to verify the drive setup.

Step 3: Reboot the system to complete the installation.

Configuring StoreMI

Run the StoreMI wizard installed under the Windows Start, AMD program folder to setup the desired configuration. For Windows 10, click the Windows icon in the lower left corner or press the Windows key on the keyboard and type "StoreMI" to find and run the StoreMI configuration utility. The utility will first scan the system for all visible SSD and hard drives.

StoreMI will scan your system and only display those options that are available to you based on your system's configuration. The primary consideration determined by either the absence or presence of a StoreMI TierDrive.





Entering License Key

AMD StoreMI does not require a license key, as it checks for an AMD Socket AM4 motherboard with an X399, 4xx or 5xx-series chipset when the system boots.

StoreMI Top Level Menu Options

Depending on the current system configuration, you will be presented with one of two menus after your run the StoreMI wizard.

The first option comes up if no StoreMI TierDrives are present and gives you the option of creating a StoreMI TierDrive by tiering your fast and capacity storage devices. In addition, if you choose,



you can enable RAM Cache at the same time the tier is created.

The second option comes up if a StoreMI TierDrive is already present. It will allow you to change your existing tier settings. You can change the RAM Cache settings as well, either enabling or disabling it, depending on your current configuration.

AMD StoreMI 1.5.0.21400RC	- 🗆 X	MD StoreMI 1.5.0.21400RC	- 🗆 X
Tier Status: No TierDrive Tiers	Create Tier	Tier Status: 1 TierDrive (1 bootable)	Change Tier Settings
RAM Cache Status: Off	Create Tier and Enable RAM Cache	RAM Cache Status: Off	Enable RAM Cache
License	<u>Quick Help</u>	License	Quick Help

StoreMI TierDrive Does Not Exist					
Top Level	Secondary	Description	Requirements		
Menu	Menu				
	Bootable Tier	Add a blank drive to an existing	1. Windows OS installed on a HDD		
	(Select "YES")	Windows OS boot drive	or SSD ¹		
Create Tier			2. Blank Drive		
(Optionally			3. No existing StoreMI TierDrive		
Enable Cache	Non Bootable	Add a blank drive to another	1. At most one non-boot drive with		
During	Tier	blank drive or to a non-boot	data in a Windows file system		
Creation)	(Select "NO")	drive with data	2. At least one blank drive		
			3. No existing StoreMI TierDrive		

	StoreMI TierDrive Exists						
Top Level	Secondary	Description	Requirements				
Menu	Menu						
	Move All Data to Slow Media	Migrate all data to the slow drive in a tier, and release the fast drive from the FuzeDrive. This action does not remove the software.	A 2-disk StoreMI TierDrive exists				
Change Tier Settings	Delete Data Tier	Deletes all of the data on a non- boot tier. Data should be backed up prior to this action as all data on tier will be lost.	An existing non-boot tier exists. This function is not allowed on a boot tier.				
	Tier Media Reported to OS	Change how disk is reported to operating system between SSD or HDD	A StoreMI TierDrive exists				
Enable RAM Cache	Change RAM Cache Settings	Enables or disables 2GB/4GB of RAM Cache	A StoreMI TierDrive exists				

¹ Up to the licensed SSD Capacity size: 256GB



Create Bootable StoreMI TierDrive

If starting with a fresh Windows install, the OS can be installed on either the HDD or SSD. An SSD that exceeds this limit will be carved into two sections. The first section is used for tiering in the StoreMI and will be the size of the licensed capacity, and the second piece is presented as an additional virtual SSD device made up of the remaining unused capacity.

While installing the OS on the HDD initially simplifies the process, it is important to note that your initial performance will occur at HDD speeds. Once StoreMI's Machine Intelligence learns how you use your system, you will quickly start seeing the performance of the SSD.

Loading the OS on the SSD initially provides immediate SSD performance, and as the system learns your usage patterns, it will move your infrequently used applications to the HDD.

If the existing boot drive is an HDD and a new blank SSD or NVMe drive is available, this option will enable the user to convert the existing boot drive to a StoreMI. Alternatively, if the boot drive is already an SSD or NVMe drive, it will allow an existing boot drive's capacity to be expanded by adding a larger HDD or SSD. If the fast tier SSD is larger than the licensed capacity of 256GB, then any capacity greater than 256GB will be carved out into a separate volume.

If this option is grayed out, then the minimum requirements to convert the boot drive have not been met. For example, there are no blank unused SSDs or HDDs available

Boot Drive	Blank	What is Created
	Drive	
HDD	SATA SSD or NVMe SSD	A StoreMI TierDrive is created with a capacity approximately equal to the HDD plus the licensed SSD capacity limit ² or size of the SSD, whichever is less. The performance will increase to the native SSD rates for frequently accessed data and programs.
SATA SSD or NVMe SSD	HDD	If less than or equal to the 256GB SSD capacity limit, a StoreMI TierDrive is created with a capacity approximately equal to the HDD plus the licensed SSD capacity limit or size of the SSD, whichever is less. Performance will continue at SSD rates for frequently accessed data and programs.
SATA SSD	NVMe SSD	A StoreMI TierDrive is created with a capacity approximately equal to the SATA SSD plus the licensed SSD capacity limit or size of the NVMe SSD, whichever is less. The performance will increase to the native NVMe SSD rates for frequently accessed data and programs.
NVMe SSD	SATA SSD	StoreMI TierDrive that is the approximate sum of the NVMe SSD and SATA SSD capacity. The capacity of the boot volume will increase to the size of the NVMe and SSD combined. Performance will continue at NVMe rates for frequently accessed data and programs.

The software will support the following conversions:

Appendix A illustrates both pre and post StoreMI conversion scenarios and what to expect to see in standard applications such as Windows Disk Manager.

² Licensed SSD Capacity is 256GB



In the remainder of the document, NVMe SSD and SATA SSDs are referred to as simply an SSD.

Adding SSD to Existing HDD Boot Drives

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI scans your system and only display those options that are available to you based on your system's configuration.

Case A: Tier created without enabling RAM Cache

Step 1: Select "Create Tier", and confirm by selecting "Yes".

MD StoreMI 1.5.0.21400RC	– 🗆 X	AMD StoreMI 1.5.0.21400RC	- 🗆 X
Tier Status: No TierDrive Tiers	Create Tier	Tier Status: No Tie AMD StoreMI 1.5.0.21400RC X	
RAM Cache Status: Off	Create Tier and Enable RAM Cache	RAM Cache Statu	AM Cache
License	<u>Quick Help</u>	License Quick Help	Quick Help

Step 2: Choose the drives to create a StoreMI TierDrive.

Ø Create	Bootabl	e TierDriv	2						×		
This opera drive in th Select the USB drive	This operation will transform the existing boot drive in the system into a tiered TierDrive device. Select the Boot drive and the drive to transform with the Boot drive. USB drives are not supported.										
Fast	Slow	Drive	Туре	Capacity	Name			Status			
	~	1	HDD	9314 GiB	WDCWD10 0EFAX-68LHPN0		BootDrive	C:			
V		0	SSD	476 GiB	NVMe PM961NVMeSAMSUN	G512GB					
		2	HDD	14 GiB	SanDisk. CruzerBlade		Data D: r	non-SATA	USE		
	E	Back			Create			Quick He	lp		

All of the drives that are available in the system will be displayed. The boot drive is noted as such in the "Status" column. The "Type" of drive, HDD or SSD, is also listed. In the example above, the Operating System is on the HDD, and it is being combined with a blank SSD. Choose the HDD as the slow drive and the SSD as the fast drive. Note, if you make a mistake, and chose the wrong drives as the slow and fast drives, an error message will provide a warning.

Note, if a drive is grayed out, it is usually because it is in use as a data drive or has partitions on



it. You will need to wipe the drive clean first using Windows Disk Manager or Diskpart command line tool, making sure to back up any important data on the drives beforehand.

Volume	Layout	Туре	File System	Status	Capacity	Free Spa	% Free	_
- (C:)	Simple	Basic	NTFS	Healthy (B	465.13 GB	441.39 GB	95 %	
= (D:)	Simple	Basic	FAT32	Healthy (P	14.90 GB	14.88 GB	100 %	
 Disk 1 partition 2 	2) Simple	Basic		Healthy (E	99 MB	99 MB	100 %	
New Volume (E:)	Simple	Basic	NTFS	Healthy (P	476.92 GB	476.81 GB	100 %	
- Recovery	Simple	Basic	NIFS	Healthy (529 MB	138 MB	26 %	
- Disk 0 Basic 476.92 GB Online	New Volume (E: 476.92 GB NTFS Healthy (Primary	:) Partition)			Open			
Disk 0 Basic 476.92 GB Online	New Volume (E 476.92 GB NTFS Healthy (Primary	:) Partition)			Open Explore			
Disk 0 Basic 476.92 GB Online Disk 1 Basic 9313.98 GB Online	New Volume (E 476.92 GB NTF5 / Healthy (Primary Recovery 529 MB NTFS Healthy (OEM P	a) Partition) 99 MB Healthy (Ef	(C:) 455.13 GB NT Healthy (Boo	FS t, Page File, Cra	Open Explore Mark P Chang sh Format	artition as Act e Drive Letter a 	ive and Paths	
Disk 0 Basic 476.92 GB Online Disk 1 Basic 9313.98 GB Online	New Volume (E 476.92 GB NTF5 Healthy (Primary 529 MB NTF5 Healthy (OEM P	e) Partition) 99 MB Healthy (Ef	(C:) 465.13 GB NT Healthy (Boot	FS t, Page File, Cra	Open Explore Mark P Chang sh Format Extend	artition as Act e Drive Letter a Volume	ive and Paths	
Disk 0 Basic A76.92 GB Online Disk 1 Basic 9313.98 GB Online Disk 2	New Volume (E 476.92 GB NTFS Healthy (Primary 529 MB NTFS Healthy (OEM P	2) Partition) 99 MB Healthy (Ef	(C) 465.13 GB NT Healthy (Bool	FS t, Page File, Cra	Open Explore Mark P Chang sh Format Extend Shink	artition as Act E Drive Letter a Volume	ive and Paths	
Disk 0 Basic 75.92 GB Online Disk 1 Basic 9313.98 GB Online Disk 2 Removable	New Volume (E 476.92 GB NTF5 Healthy (Primary 29 MB NTF5 Healthy (OEM P	99 MB Healthy (Ef	(C:) 465.13 GB NT Healthy (Bool	FS t, Page File, Cra	Open Explore Mark P Chang sh Format Extend	arition as Act 2 Drive Letter a Volume	ive and Paths	
Disk 0 Basic 476.92 GB Online Disk 1 Basic 9313.98 GB Online Disk 2 Removable 14.97 GB	New Volume (E 476;92 GB NTF5 Healthy (Primary 529 MB NTF5 Healthy (OEM P (D;) 14,91 GB FAT32	99 MB Healthy (Ef	(C:) 455.13 GB NT Healthy (Boot	FS t, Page File, Cra	Open Explore Mark P Chang sh Format Extend Shrink Add M	artition as Act E Drive Letter a Volume Volume	ive and Paths	
Disk 0 Basic 476.92 GB Online Disk 1 Basic 9313.99 GB Online Disk 2 Removabile 14.91 GB Online	New Volume (E 476.92 GB NTFS Healthy (Primary 529 MB NTFS Healthy (OEM P (D:) 14.91 GB FAT32 Healthy (Primary	a) Partition) 99 MB Healthy (El Partition)	(C:) 465.13 GB NT Healthy (Bool	FS t, Page File, Cra	Open Explore Mark P Chang Extend Shrink Add M Delete	artition as Act Drive Letter a Volume Volume Volume	ive and Paths	
Disk 0 Basic 476.92 GB Online Disk 1 Basic 9313.98 GB Online Disk 2 Removable 1.4.91 GB Online	New Volume (E 476.92 GB NITFS Healthy (Primary 529 MB NITFS Healthy (OEM P (D.) 14.91 GB FAT32 Healthy (Primary	a) Partition) 99 MB Healthy (El Partition)	(C.) 465.13 GB NTI Healthy (Bool	FS t, Page File, Cra	Open Explore Mark P Chang Sh Extend Shrink Add M Delete Proper	artition as Act Drive Letter a Volume Volume Volume ies	ive and Paths	

Step 3: Transform the Boot Drive and Reboot. Once the appropriate drive has been selected, click **Create** to start the conversion process.

MD StoreMI 1.5.0.21400	RC		-		×
Tier Status: No TierDrive T	iers	Cre ×	ate Tier		
RAM Cache Status: Off	Transform Boot Drive and R	eboot	Enable R <i>I</i>	AM Cache	
<u>License</u>				<u>Quick H</u>	

Reboot the system when prompted.

If the system is in UEFI mode, the following should display on reboot before the operating system boots indicating that the boot drive has been successfully transformed into a StoreMI drive.





NOTE: if this display is not visible, ensure that the BIOS is set to boot from the EFI partition on either of the two disks used as part of the StoreMI. Windows Boot Manager will not be visible in the BIOS boot order.

Step 4: Once Windows boots, open Disk Manager to verify the system has correctly booted from the StoreMI and to access the volume expand capability of Windows. The example shown below is for a 120GB SSD being added to an existing 1TB hard disk boot drive.

— Disk 0 Basic 1039.27 GB Online	499 MB Healthy (Recovery F		100 MB Healthy (EFI S _.	(C:) 1038.68 GB NTFS Healthy (Boot, Page File, Crash Dump, Primary P
Disk 1 Basic 111.79 GB Online	3 N Hez	111.79 GB RAW Healthy (OEM	/ Partition)	
Disk 2 Basic 931.51 GB Online	3 M Hez	931.51 GB RAV Healthy (OEM	/ Partition)	

STEP 5: If not automatically completed, manually expand the boot volume to use the new capacity added by the SSD by right clicking on the C: partition in Disk Manager and selecting **Extend Volume**



									 -
lume	Layout	Туре	File System	Status	Capacity	Free Spa	% Free		
	Simple	Basic		Healthy (R	450 MB	450 MB	100 %		
	Simple	Basic		Healthy (E	100 MB	100 MB	100 %		
	Simple	Basic		Healthy (3 MB	3 MB	100 %		
	Simple	Basic		Healthy (2794.52 GB	2794.52	100 %		
	Simple	Basic	RAW	Healthy (2/94.52 GB	2/94.52	100 %		
	Simple	Basic		Healthy (3 MB	3 MB	100 %		
	Simple	Dasic	P A1A/	Healthy (119.24 GB	119.24 GB	100 %		
(6)	Simple	Dasic	NITES	Healthy (119.24 GB	2722.50	00.9/		
• Disk 0 sic 09.73 GB 1line	450 MB Healthy (Re	covery Partition	100 MB Healthy (EFI S	ysterr Healthy (IB NTFS Boot, Page File,	Crish Dump, P	rimary Partition)	Open Explore	
Disk 0 sic 09.73 GB line Disk 1 sic 94.52 GB	450 MB Healthy (Re	covery Partition 2794.52 GB RAW	100 MB Healthy (EFI S	(C:) (2793.96 G Healthy (I	iB NTFS Boot, Page File,	Cych Dump, P	rimary Partition)	Open Explore Mark Partition as Active Change Drive Letter and Paths	
Disk 0 sic 09.73 GB oline Disk 1 sic 94.52 GB oline	450 MB Healthy (Re 3 MB Healthy (covery Partition 2794.52 GB RAW Healthy (OEM P	100 MB Healthy (EFI Sy / 'artition)	2793.96 G Healthy (I	B NTFS Boot, Page File,	Cosh Dump, P	rimary Partition)	Open Explore Mark Partition as Active Change Drive Letter and Paths Extend Volume	
Disk 0 usic 09,73 GB nline Disk 1 usic 94,52 GB nline	450 MB Healthy (Re 3 MB Healthy (covery Partition 2794.52 GB RAW Healthy (OEM P	100 MB Healthy (EFI Sy V 'artition)	ysten Healthy (f	B NTFS Boot, Page File,	Coch Dump, P	rimary Partition)	Open Explore Mark Partition as Active Change Drive Letter and Paths Extend Volume Strend Volume	
Disk 0 Disk 0 Disk 1 Disk 1 Disk 1 Disk 2 Disk 2 Disk 2 Disk 2	450 MB Healthy (Re 3 MB Healthy (covery Partition 2794.52 GB RAW Healthy (OEM P	100 MB Healthy (EFI Sy V Partition)	(C.) (2793.96 G Healthy (I	iB NTFS Boot, Page File	Ceth Dump, P	rimary Partition)	Open Explore Mark Partition as Active Change Drive Letter and Paths Extend Volume Strich M. Jonre Add Mirror	
* Disk 0 sic 09.73 GB line * Disk 1 sic 94.52 GB nline * Disk 2 sic 9.24 GB	450 MB Healthy (Re 3 MB Healthy (covery Partition 2794.52 GB RAW Healthy (OEM P 119.24 GB RAW	100 MB Healthy (EFI Sy V Partition)	(C) (2793.96 G Healthy (I	iB NTFS Boot, Page File,	Cosh Dump, P	rimary Partition)	Open Explore Mark Partition as Active Change Drive Letter and Paths Forcest Extend Volume Showly V. Jonne Add Mirror Delete Volume	
Disk 0 Isic 09.73 GB Inline Isic Disk 1 Isic 94.52 GB Inline Disk 2 Isic 9.24 GB Inline	450 MB Healthy (Re 3 MB Healthy (3 MB Healthy (covery Partition 2794.52 GB RAW Healthy (OEM P 119.24 GB RAW Healthy (OEM P	100 MB Healthy (EFI Sy v Partition)	ysten (C.) (2793.96 G Healthy (iB NTFS Boot, Page File,	Con Dump, P	rimary Partition)	Open Explore Mark Parition as Active Change Drive Letter and Paths Extend Volume Smith V. Jonne Add Mirror Delete Volume Desetise	
* Disk 0 502.73 GB 101.00 * Disk 1 502.94.52 GB 101.00 * Disk 2 51.00 5	450 MB Healthy (Re 3 MB Healthy (3 MB Healthy (covery Partitios 2794.52 GB RAW Healthy (OEM P 119.24 GB RAW Healthy (OEM P	100 MB Healthy (EFI Sy V Partition)	ysten Healthy (f	iB NTFS Boot, Page File,	Cosh Dump, P	himary Partition)	Open Explore Mark Partition as Active Change Drive Letter and Paths Extend Volume Add Mirror Delete Volume Properties	

In the extend dialog box, leave the defaults as-is if using all the capacity and click next.

👼 Disk Manag	ement	- B X		Disk Manager	nent							- 0	×
File Action	View Help			Eile Action Vi	ew Help								
	🖬 🖬 🗩 🖻 📑 🎵 🖽			(+ -) 🖬 📓		2 🔒 🏂 🖾							
Volume	Layout Type	File System Status Capacity Free Spa., % Free		Volume	Layo	out Type	File System	Status Capa	acity Free Spa	% Free			
-	Simple Basic	Health G. 100 MB 100 MB 100 S		= (C:)	Simp	ple Basic	NTFS	Healthy (B 2909	.19 GB 2835.58	97%			
-	Simple Basic	Extend Volume Wined		= (Disk 0 partition	n 1) Simp	ple Basic		Healthy (R., 450 h	MB 450 MB	100 %			
-	Simple Basic			- (Disk U partition	12) Simp	ple Basic		Healthy (E., 100 P	MB TOUMB	100 %			
-	Simple Basic	Select Daks		- (Disk 1 partition	n1) Simp	ple Basic		Healthy (3 Mb	5 5 MB	100 %			
-	Simple Basic	You can use space on one or more disks to extend the volume.		- (Disk I partition	12) Simp	ple Dasic	DATA	Healthy (2794	52 00 2794.32 52 00 2794.52	100 %			
-	Simple Basic			- (Dick 2 partition	12) Simp	ple Dasic	NAME:	Healthy (2194	2 2 194.32	100 %			
-	Simple Basic	Very service and the set of the service data and the service data and the service and the		(Disk 2 partition	2) Sim	ole Basic		Healthy (110.2	A GR 119.24 GR	100 %			
= (C)	Simple Basic	reu can only early the value to the values space stratem back decase you tak cannot be converted to dynamic or the values being extended is a bod or system values. Available:		- (Disk 2 partition	n 2) Simp	ple Basic	RAW	Healthy (119.2	24 GB 119.24 GB	100 %			
- Disk 0 Basic 2909.73 GB Online	450 MB Healthy (Recovery Partition	Adi > >34.6 1725180 < Renore		Disk 0 Basic 2909.73 GB	450 MB Healthy	(Recovery Partition) 100 P	MB thy (EFI System Partit	(C:) 2909.19 GB NTFS Healthy (Boot, Page File	, Crash Dump, Prima	ry Partition)		-
		Total volume size in megabytes (MB): 29/79011		Disk 1									
= Disk 1		Maximum evallable space in MB. 117991		Basic 2704 52 GP	2.440	2704 53 50 044							
2794.52 GB	3 MR 2794 52 GR PAW	Salert the answert of example INP 117991		Online	Healthy	Healthy (OFM P	Indition						
Online	Healthy (Healthy (OEM Par												
			_	- Disk 2									
Disk 2 Basic 119,24 GB Online	3 MB 119.24 GB RAW Healthy (Healthy (OEM Part	Son)		Basic 119.24 GB Online	3 MB Healthy	119.24 GB RAW Healthy (OEM P	ntition)						
Unallocated	Primary partition			Unallocated	Primary p	artition							

The C: on the StoreMI is now expanded to use the SSD capacity and ready for use.

Case B: Tier created with RAM Cache Enabled

You also have the option at create time to enable 2GB of RAM Cache. This option will dedicate 2GB of your system memory as a Read Cache. Note that the option to enable or disable RAM Cache can also be changed anytime after the creation of the Tiered Drive using the system utilities. (This will be detailed in a later section)



MD StoreMI 1.5.0.21400RC	- 🗆 X
Tier Status: No TierDrive Tiers	C reate Tier
RAM Cache Status: Off	Create Tier and Enable RAM Cache
<u>License</u>	Quick Help

IMPORTANT: StoreMI may need to optimize the hibernate file to ensure it is stored on a SATA device attached to the primary SATA controller. Ensure these are complete BEFORE rebooting to ensure hibernate and shutdown operates properly. This process may take up to 30 minutes or more depending on system RAM size and the HDD speed. This typically occurs when converting NVMe SSD boot drives or non-primary SATA controller SSD boot drives e.g. M.2 SATA boot devices. Float the mouse pointer over the StoreMI icon in the system tray to verify of the process is complete.

The remainder of the install process is the same as Case A: Tier created without enabling RAM Cache

Utilizing the Additional Capacity Over the 256GB SSD Limit

The StoreMI software supports up to 256GB fast tier capacity. A device that exceeds this limit will be carved into two sections. The first section is used for tiering in the StoreMI and will be the size of the licensed capacity, and the second piece is presented as an additional virtual SSD device made up of the remaining unused capacity.

This will result in a new device appearing in the Disk Manager that may be formatted and used as temporary storage.

IMPORTANT: A carve out SSD drive created using excess capacity over the license limit will be deleted whenever a Move All Data to Slow Tier operation is completed and the SSD removed. For this reason, ensure that any important data stored on this temporary drive is backed up before performing the transition.

Example: a 512GB blank NVMe drive is added to a 1TB HDD.



The result is a bootable 1.25TB StoreMI and a ~256GB virtual SSD device that may be formatted as a new data Disk 3 as illustrated in the following screen capture.

				1				1	
Volume	Layout	Type	File S	ystem Status	Capacity	Free Sp	% Free		
- (C:)	Simple	Basic	NTFS	Healthy (B	930.96 GB	875.67 GB	94 %		
 (Disk 0 partition 1) 	Simple	Basic		Healthy (3 MB	3 MB	100 %		
 (Disk 0 partition 2) 	Simple	Basic		Healthy (931.51 GB	931.51 GB	100 %		
 (Disk 0 partition 2) 	Simple	Basic	RAW	Healthy (931.51 GB	931.51 GB	100 %		
(Disk 1 partition 1)	Simple	Basic		Healthy (R	450 MB	450 MB	100 %		
(Disk 1 partition 2)	Simple	Basic		Healthy (E	100 MB	100 MB	100 %		
(Disk 2 partition 1)	Simple	Basic		Healthy (3 MB	3 MB	100 %		
(Disk 2 partition 2)	Simple	Basic	PA14/	Healthy (232.00 GB	232.00 GB	100 %		
			Г	Initialize Disk				×	
-				You must initialize a disk	before Logical Dis	sk Manager can a	ccess it.		
- Disk 0	_			Salart disks	in angular bit	and a start of			
931 51 GB		021 E1 CR DA		CelDi-L 2				_	
Online	Healthy (Healthy (OEM	Partition	Clisk 3					
Disk 1 Basic 1057.48 GB Online	450 MB Healthy (R	ecovery Partiti	100 Mi Health	Use the following partitio MBR (Master Boot R GPT (GUID Partition * Note: The GPT partition =	n style for the sele ecord) Table) style is not recogni	cted disks: zed by all previou	s versions of	125.98 GB Unallocated	
- Disk 2				Windows.	,				
Basic						OK	Cancel		
232.89 GB	3 MB	232.88 GB RA	N						
Online	Healthy (Healthy (OEM	Partition)						
*O Disk 3 Inknown 102.88 GB Not Initialized	102.88 GB Unallocate	d							-1
CD-ROM 0									

Adding an SSD with Capacity Greater than 256GB to an Existing HDD Boot Drive

The procedure for adding an SSD larger than 256GB to an existing HDD boot drive is similar to adding a 256GB or smaller SSD. The difference being in how the StoreMI creates the drive.

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI will scan your system and only display those options that are available to you based on your system's configuration.

Step 1: Select "Create Tier", and confirm by selecting "Yes".



MD StoreMI 1.5.0.21400RC	– 🗆 X	AMD StoreMI 1.5.0.21400RC —	· 🗆 🗙
Tier Status: No TierDrive Tiers	C reate Tier	Tier Status: No Tie AMD StoreMI 1.5.0.21400RC ×	
RAM Cache Status: Off	Create Tier and Enable RAM Cache	RAM Cache Statu	AM Cache
License	Quick Help	Back Quick Help	Quick Help

Step 2: Choose the drives that you would like to use in your tier.

his operation will transform the existing boot rive in the system into a tiered TierDrive device. elect the Boot drive and the drive to transform with the Boot drive. ISB drives are not supported.										
Fast	Slow	Drive	Type	Capacity	Name	Status				
	~	1	HDD	9314 GiB	WDCWD10 0EFAX-68LHPN0	BootDrive C:				
~		0	SSD	476 GiB	NVMe PM961NVMeSAMSUNG512GB					
		2	HDD	14 GiB	SanDisk. CruzerBlade	Data D: non-SATA US				

Note in the graphic above that the SSD, Drive 0, is larger than the 256GB Fast Tier limit. The following message will be displayed notifying you that the fast drive capacity limit has been exceeded and the a carved VDRIVE will be created. This drive can be seen by the Disk Manager and can be used as a normal drive

Create	carved VDRIVE ×
?	The fast drive, Drive0, has a capacity, 476GiB greater than the fast license capacity 256GiB. Because of this, a VDRIVE will be created with the remainder of Drive0. This drive can be seen in Disk Manager and Device Manager and can be used as a normal drive Create the carved VDRIVE?
	<u>Y</u> es <u>N</u> o



Step 3: Select YES. The system will display what your new drive configuration will look like.

🙍 AMD	StoreMI	1.5.0.2140	ORC					×			
lf you pre Confirm o	If you press Next, you will create a TierDrive with the capacity shown in the line below. Confirm drive selections are correct and select Next to create the TierDrive.										
Fast	Slow	Drive	Туре	Capacity	Name		Status				
			Tier	9568 GiB	AMD T00StoreMI		BootDrive C:				
×		⊢ 0	SSD	256 GiB	NVMe PM961NVMeSAMSUNG51	2GB	StoreMI T00 Fast				
	~	└─1	HDD	9314 GiB	WDCWD10 0EFAX-68LHPN0		StoreMI T00 Slow				
			VDRIVE	218 GiB	AMD VDRIVE						
×		L 0	SSD	218 GiB	NVMe PM961NVMeSAMSUNG512	2GB	StoreMI T00 Fast				
	E	Back			Next		<u>Quick H</u>	elp			

In this example, the new StoreMI Tiered Drive (Boot Drive C:) is made from a 934BG HDD plus 256GB of the SSD. The total capacity of the StoreMI drive is 9568GB. The new VDRIVE is 218GB.

Step 4: Select Next and the new TierDrive will be created. You will see the message below.

MD StoreMI 1.5.0.21400	RC		_		×
Tier Status: No TierDrive 1	iers Ø Progress	Cre	ate Tier		
RAM Cache Status: Off	Transform Bo	oot Drive and Reboot	Enable RAN	I Cache	
<u>License</u>				<u>Quick He</u>	<u>elp</u>

Expand the Capacity of an Existing SSD Boot Drive

If the boot drive is an SSD, the software provides the ability to expand the capacity of the boot drive by adding a large capacity HDD or SSD and increasing the overall size of the boot volume.

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI will scan your system and only display those options that are available to you based on your system's configuration.

Step 1: Select "Create Tier". Select an available blank SSD or HDD from the options presented.



AMD StoreMI 1.5.0.21400RC	– 🗆 X
Tier Status: No TierDrive Tiers	Create Tier
RAM Cache Status: Off	Create Tier and Enable RAM Cache
<u>License</u>	<u>Quick Help</u>

Step 2: Choose the drive to create a StoreMI TierDrive with.

E drive Fast	Slow	Drive	Type	Canacity	Name	Status
-	V	1	HDD	9314 GiB	WDCWD10 0EFAX-68LHPN0	otatao
~		0	SSD	476 GiB	NVMe PM961NVMeSAMSUNG512GB	BootDrive C:
		2	HDD	14 GiB	SanDisk. CruzerBlade	

If the SSD is larger than 256GB, the following message will be displayed notifying you that the fast drive capacity limit has been exceeded and the a carved VDRIVE will be created. This drive can be seen by the Disk Manager and can be used as a normal drive

Create	carved VDRIVE ×
?	The fast drive, Drive0, has a capacity, 476GiB greater than the fast license capacity 256GiB. Because of this, a VDRIVE will be created with the remainder of Drive0. This drive can be seen in Disk Manager and Device Manager and can be used as a normal drive Create the carved VDRIVE?
	<u>Y</u> es <u>N</u> o

Note, if a drive is grayed out, it is usually because it is in use as a data drive or has partitions on it. You will need to wipe the drive clean first using Windows Disk Manager or Diskpart command line tool.

Step 3: Transform the Bootdrive and Reboot. Once the appropriate drive has been selected, click **Transform** to start the conversion process.



AMD StoreMI 1.5.0.21400	RC		-		×
Tier Status: No TierDrive T	iers	Create ×	lier -		
RAM Cache Status: Off	Transform Boot Dr	ive and Reboot	ble RAN	A Cache	
<u>License</u>				Quick He	

Reboot the system when prompted.

Step 4: If not automatically completed by the software, you may manually extend the size of your new StoreMI with additional capacity added by the SSD or HDD using Windows Disk Manager as described in the earlier section for accelerating a HDD in steps 4 and 5.

Example: Adding a 3	FB HDD to an existing 120GB SATA SSD boot drive.
---------------------	--

🖅 Disk Manag	agement - C	🗧 📅 Disk Management – 🗆 🗙
File Action	i View Help	Elle Action View Help
(+ +) 🖂		
Volume	Leyout Type File System Status Capacity Free Spa % Free	Volume Lanut Tune DeStatem States Conscisu Energies Stree
(C:)	Simple Basic NTFS Healthy (B., 118.69 GB 45.17 GB 38 %	CO Simula Basic NTFS Healthy (R. 2009 16 B 2015 16 - 77 %
- (Disk 0 partiti	tition 1) Simple Basic Healthy (R., 450 MB 450 MB 100 %	- (Disk 0 partition 1) Simple Basic Healthy (R. 450 MB 450 MB 100 %
- (Disk 0 partite	thin 2) Simple Basic Healthy (E., 100 MB 100 MB 100 %	= (Disk 0 partition 2) Simple Basic Healthy (E., 100 MB 100 MB 100 %
(Disk 1 partiti	unum () simple balk Produty (= 5 Mb 5 Mb 10 // //	— (Disk 1 partition 1) Simple Basic Healthy (3 MB 3 MB 100 %
= (Disk 1 partiti	thin 2) Simple Basic BAW Healthy (270452 GB 270452	(Disk 1 partition 2) Simple Basic Healthy (2794.52 GB 2794.52 100 %
- (Disk 2 partiti	tition 1) Simple Basic Healthy (— (Disk 1 partition 2) Simple Basic RAW Healthy (2794.52 GB 2794.52 100 %
= (Disk 2 partiti	tition 2) Simple Basic Healthy (119.24 GB 119.24 GB 100 %	
🛲 (Disk 2 partiti	tition 2) Simple Basic RAW Healthy (119.24 GB 119.24 GB 100 %	— (Use 2 particles 2) Simple Basic PAW Meeting (1) 24 CP 11924 05 100 %
Disk 1 Basic 2794,52 GB Online	450.VB Healthy (Recovery Part) Healthy (RESym) 11445 (RESym) 1	Back Colline Colline Coll MB Instativy (Flactivery Petition) Wo MB Instativy (Eff System Parts Partsby (Eff System Parts Partsby (Eff System Parts Partsby (Eff System Partsby Partsby (Eff System Partsby Partsby Partsby (Eff System Partsby P
- Disk 2		# Dide 2
Basic 119.24 GB Online	3 M8 11524 GB RAW Healthy Healthy (IDEN Partition)	Basic 1102-36 66 J MB 1132-24 06 KAW Online Heatity (OEM Persion)
Unallocated	nt 📱 Primary partition	Undecited Primary partition

Accelerate or Expand a Non-boot Drive

To accelerate a non-boot drive with an existing partition on it, or combine two blank drives, run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI will scan your system and only display those options that are available to you based on your system's configuration.

STEP 1: Select the "Create Tier" option and then "No" on the following screen.

AMD StoreMI 1.5.0.21400RC	– 🗆 X	AMD StoreMI 1.5.0.21400RC -	- 🗆 X
Tier Status: No TierDrive Tiers	Create Tier	Tier Status: No Tie AMD StoreMI 1.5.0.21400RC	
RAM Cache Status: Off	Create Tier and Enable RAM Cache	RAM Cache Statu Create tier using Boot Drive? No	AMCache
License	Quick Help	Back Quick Help	Quick Help



STEP 2: Select your drives. Unavailable drives, such as the Boot drive or USB drives will be grayed out and will not be able to be selected. Drives with partitions will say "Data" and the drive letter. Only one of the two drives may have data on it. Click the "Create" button.



STEP 3: The screen will identify how the new StoreMI TierDrive will appear. If satisfied, click the "Next" button. Any existing drives will temporarily go offline while they are converted to a StoreMI TierDrive. Appendix A, example A5, shows the Disk Manager configuration after converting a Data D: drive to a TierDrive. If both drives had no partitions, a new StoreMI TierDrive with no allocated partitions will appear in the Disk Management tool.

🙍 AMD	StoreMI	1.5.0.2152	ORC					X
If you pres	ss Next, y	ou will cr	reate a Tie	erDrive with th	e capacity shown in the line be	low.		
Confirm d Fast	lrive sele Slow	ctions are Drive	e correct a Type	nd select Nex Capacity	t to create the TierDrive. Name		Status	
		⊢1	Tier SSD	1159 GiB 232 GiB	AMD T00StoreMI NVMe SamsungSSD960EVC	250GB	Data F: StoreMI T00 Fast	
	V	L-3	HDD	931 GiB	ST310005 24AS		StoreMI T00 Slow	
	E	Back			Next		Quick He	lp

STEP 4: Use the Windows Disk Management tool to format and use the new StoreMI virtual disk that is created.

Convert StoreMI Tiered Drive To Single

The StoreMI utility may be used to remove all acceleration using the "Move all data to slow media" option and return the system to utilize just the single HDD (or slow tier device) as a single disk drive.

This will free up any existing SSD to be used for other purposes and also support replacing the SSD with a different one if necessary. This action will also remove the RAM cache.

Note: this does not uninstall the software. It simply detaches the fast tier so a new fast tier device may be attached.



Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI scans your system and only display those options that are available to you based on your system's configuration.

Step 1: Select "Change Tier Settings"



Step 2: Select the Tiered Drive which you want to move all the data to the slow tier. Select the Move all data to slow tier option.

Select tie	e or Modi er to delet	fy Tier e or modif	fy.		
Drives th Salact	at are par Drive	t of Store	MI may not be Canacity	selected.	Status
	3	TDD	9567 GiB	AMD T00StoreMI	BootDrive C: G: H: I: 2GE
$\mathbf{\nabla}$	⊢0	SSD	476 GiB	NVMe PM961NVMeSAMSUNG512GB	T00StoreMI Fast
	L-1	HDD	9314 GiB	WDCWD10 0EFAX-68LHPN0	T00StoreMI Slow
	2	HDD	218 GiB	AMD VDRIVE02	Data D: E: F: Carved Driv
	L 0	SSD	476 GiB	NVMe PM961NVMeSAMSUNG512GB	InVdrive
Select O	peration			Move all data to slow me	edia
				No change to tier config	uration
				Move all data to slow me	dia
lier med	lia type r	eported to	00\$	Virtual SSD	

Step 3: Select the "Modify" button. The following message will appear.





By hovering the cursor over the StoreMI icon in the Systray, you can easily monitor the progress of the migration.

IMPORTANT: The system will reboot, so save any important work. Also, any carve out SSD drive created using excess capacity over the license limit will be deleted whenever a StoreMI is removed. For this reason, ensure that any important data stored on the temporary drive is backed up before performing the above operation.

When the "Move All Data to Slow Media" operation is selected, all data on the StoreMI Drive is moved to the slower media. The Enmotus configuration utility will attempt the shrink the last partition on the StoreMI Drive. If the shrink operation is not successful, user interaction may be needed to migrate data to a different drive in the system. 2GB of Meta data for the StoreMI Drive is also retained during this operation. If manually shrinking or moving partitions before running "Move All Data to Slow Media", please shrink partitions and move partitions so that the fast media capacity plus 2GB is unallocated. When the manual shrink is completed, Windows Disk Management Tool will show the right section of the StoreMI Drive as "unallocated ". The Move All Data to Slow Media operation works for configurations where there are multiple partitions on a StoreMI Drive. When the capacity of the fast media plus 2GB is free the "Move All Data to Slow Media" operation works.

Delete Tier

The Delete Tier feature can be used to delete a StoreMI Data drive. All data on the drive will be destroyed so it is important to Backup your data before completing this operation. This feature DOES NOT work on a Boot Drive.

Step1: Select "Change Tier Settings".



D AMD StoreMI 1.5.0.21400RC	– 🗆 X
Tier Status: 1 TierDrive (1 bootable)	Change Tier Settings
RAM Cache Status: Off	Enable RAM Cache
<u>License</u>	Quick Help

Step 2: Choose the Data Tier you wish to delete. The Tier will be marked as "Data" in the status column. Choose "Delete Tier" option in the Select Operation drop down menu

-					
Delet	e or Modi	fy Tier			
Select tie	er to delet	e or modif	fv		
Drives th	at are pai	t of Storel	MI may not be	e selected.	
Select	Drive	Туре	Capacity	Name	Status
~	7	TDD	1160 GiE	AMD T00StoreMI	Data F:
	⊢1	SSD	232 GiE	NVMe SamsungSSD960EVO250GB	T00StoreMI Fast
	∟3	HDD	931 GiE	3 ST310005 24AS	T00StoreMI Slow
elect O	peration			Delete Tier	
elect O	peration			Delete Tier No change to tier coni	iguration
elect O	peration			Delete Tier No change to tier con Move all data to slowi	figuration media
elect O	peration			Delete Tier No change to tier con Move all data to slow Delete Tier	figuration media
ielect O ier med	peration lia type re	eported to	o OS	Delete Tier No change to tier con Move all data to slow Delete Tier	figuration media

After choosing Modify, you will be presented with a confirmation screen. Choose yes if you wish to continue

AMD StoreMI	1.5.0.21520RC			×
Tier Status: 1 Ti	erDrive Delete a Tier	Change Tier Setting	IS	
RAM Cache Sta	You are about to delete	TierDrive Drive7. Are you sure?	9	
<u>License</u>			Quick H	



Step 3: The next screen shows you how much data will be deleted from the Data Drive. Make sure your data is backed up if you wish to keep the data.

NOTE: This is irrecoverable and ALL DATA ON THE DRIVE WILL BE DELETED.

MD StoreMI 1.5.0.21520RC	- 🗆 X		
Tier Status: 1 TierDrive	Change Tier Settings		
Delete a Partition	×		
Prive7 contains 906 GiB of data. Delete the drive and data? (This is IRRECOVERABLE) Yes No			
Yes	No		

The final screen shows you the drives in your system after the Delete Data operation.

Drive	Туре	Capacity	Name	Status
3	HDD	931 GiB	ST310005 24AS	
4	HDD	931 GiB	WDCWD10 03FZEX-00MK2A0	Data D:
5	HDD	3726 GiB	WDCWD40 EZRZ-00GXCB0	BootDrive C:
6	HDD	3726 GiB	ST4000DM 000-1F2168	Partition non-SATA U
D	SSD	465 GiB	NVMe WDS500G2X0C-00L350	
1	SSD	232 GiB	NVMe SamsungSSD960EVO250GB	
2	SSD	232 GiB	NVMe SamsungSSD960EVO250GB	
			ок	

Configuration of StoreMI Tiered Drive when Starting Remove Operation





Configuration of StoreMI Tiered Drive after Remove Operation is Completed



Some situations may require the use of a partition movement tool. Enmotus can recommend MiniTool's Partition Wizard, a free Home-use tool for these types of operations.

Change Settings

Use the change settings option in the StoreMI utility to change the following modes:

- RAM cache on/off
- VirtualSSD or VirtualHDD setting

Change RAM Cache Settings

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI's **Machine Intelligence** will scan your system and only display those options that are available to you based on your system's configuration.

MD StoreMI 1.5.0.21400RC	- 🗆 X
Tier Status: 1 TierDrive (1 bootable)	Change Tier Settings
RAM Cache Status: Off	Enable RAM Cache
<u>License</u>	<u>Quick Help</u>

Select the Enable RAM Cache Setting. The drop down menu gives you the option or RAM Cache Off or 2G Cache. Select 2G Cache and hit the Create button.



AMD StoreMI 1.5.0.21400RC				
Select changes for Cache Configuration for TierDrive Drive3				
Cache Selection	RAM Cache off 🛛 👻			
Cancel C	re 2G Cache			

Change Declared Disk Type Settings

Run the StoreMI Wizard as detailed in the "Configure StoreMI" section above. StoreMI's *Machine Intelligence* will scan your system and only display those options that are available to you based on your system's configuration.

MD StoreMI 1.5.0.21400RC	– 🗆 🗙
Tier Status: 1 TierDrive (1 bootable)	Change Tier Settings
RAM Cache Status: Off	Enable RAM Cache
<u>License</u>	<u>Quick Help</u>

Select	Drive	Туре	Capacity	Name	Status
	3	TDD	9567 GiB	AMD T00StoreMI	BootDrive C:
	⊢0	SSD	476 GiB	NVMe PM961NVMeSAMSUNG512GB	T00StoreMI Fast
	<u>-1</u>	HDD	9314 GiB	WDCWD10 0EFAX-68LHPN0	T00StoreMI Slow
	2	HDD	218 GiB	AMD VDRIVE02	Carved Drive
	└─ 0	SSD	476 GiB	NVMe PM961NVMeSAMSUNG512GB	InVdrive
				No change to tier configu	Iration
elect O	peration				

Change StoreMI Declared Disk Type

A StoreMI may be optionally declared to the operating system as either a virtual SSD or a virtual HDD.

In the case of the virtual SSD, this will support features such as TRIM commands when supported by the operating system. In this mode, StoreMI boot and data drives will be managed the same way as SSDs by Windows i.e. they will not be subject to defragmentation during the Windows background optimization processes. This is the default and preferred mode.

If the type is changed to VirtualHDD, then the StoreMI will be managed by the Windows OS as the same way hard drives are and will be subject to background defragmentation operations automatically performed by the OS.

Checking StoreMI Status

A system tray utility is provided for quick access to the StoreMI software status. In the lower right-hand corner of the desktop, either float over the StoreMI icon to see basic information about the StoreMI or right click to gain access to several high level control functions to start and stop the StoreMI activity.



When floating the cursor over the the StoreMI icon, you can see how much data has been promoted since the creation of the tier, and you can also see how much data is in the queue to be promoted to the fast tier.

Configuring StoreMI Using Systray Utility

The systray application may also be used as a shortcut for several other configuration or status functions, as well as turning the promotion/tiering functions off while running backups.

Right Click on the StoreMI icon in the sytray to display all of the configuration options.



	StoreMI Systray Configu	ration Options	
Configure TierDrive	Launches the StoreMI Utility		
T00 Tier Drive	Allows you to change StoreMI	configuration settings	
	Tiering Rate	The tiering rate setting specifies how	
		often data is moved and at what activ-	
		ity thresholds	
		Agressive	
		Normal	
		• Slow	
		• Off	
	Tiering Priority	Priority determines the CPU priority being	
		used for application vs tiering operation	
		• High	
		Medium	
		• Low	
		• Off	
	RAM Cache	Enables or disables RAM Cache feature	
		• 2G	
		• Off	
Errors	Adjust error reporting		
	Disable Errors and Warnings		
	Clear Error Flags		
Drive Controller	Provides details on the drive controller		
Information			
Check for Updates	Checks to see if there is an up	dated version of StoreMI available	
Help	Provides additional help scree	n and documentation	
About StoreMI	Provides information about th	e latest version of StoreMI	
	Allows you to send dignostic i	nformation about your system for	
	additional support		



Installing a New Operating System

When installing a new OS and reinstalling the StoreMI software, it will be necessary to properly clean the disk drives before they can be seen by the Windows setup procedure.

If installing Windows via the standard USB or DVD setup disk method, on reaching the point where Windows prompts to select the disk to install the OS to, the disks may not be visible or may show partitions showing the AMD "EnTier_ESP" partitions. It's important to note that using the Windows setup **Delete** option is insufficient to clean the disks properly.

Follow the instructions in **Appendix B** or consult the AMD online knowledge base at AMD.com/support to ensure the disks are fully cleaned.

Uninstalling StoreMI Software

A StoreMI system reformats the Windows raw disks in order to function properly. Once formatted, there is no supported way to revert back to the original boot drive as the data is spread across multiple drives.

Completely uninstalling the software is therefore not possible for bootable StoreMI TierDrives without utilizing a third party OS migration tool.

StoreMI may be uninstalled using standard Windows uninstall options via the setup or control panel. However, special steps are required if the StoreMI is a boot drive.

IMPORTANT: Backup all important data or the entire operating system BEFORE attempting to uninstall StoreMI entirely from the system as the following operations will result in the data on the StoreMI being deleted.

Step 1a: Backup or migrate any important data currently stored on the StoreMI drive to a separate disk drive using a commercially available data migration tool. Another blank hard disk or SSD attached to the system SATA controller is highly recommended for this step NOT a USB drive as we will need to be able to boot from this drive in later steps (unless the USB drive is transferable to the motherboard SATA ports).

OR

Step 1b: If using a 2-drive StoreMI configuration, convert the system to a single disk using the StoreMI **Remove StoreMI** option. This will free up the SSD which may be used to clone the StoreMI contents to. Note, check there is enough room for the OS to fit on the SSD before performing this operation.



Step 2: Boot the system from the migrated disk created in step 1a or 1b. Check the boot drive is operating as expected and the StoreMI is no longer the boot drive.

Step 3: Click on the Windows icon, type "StoreMI" to search for the AMD StoreMI utility and run the utility

IMPORTANT: The following step will erase all data from the StoreMI:

Step 4: Select "Change Settings" then "Delete" to remove the StoreMI, free the original drive(s) and make them usable by Windows.

Step 5: Uninstall the AMD StoreMI software from the cloned boot drive.

The system will no longer contain any StoreMI TierDrives.

Troubleshooting

Software will not install - Not licensed for this hardware message

Check your system meets the minimum requirements outlined in the Pre-Install Checklist. This version of the software will only run on AMD Socket AM4 motherboards with a X399,4xx/5xx series chipset.

AMD RAID is installed on the system and StoreMI will not convert the boot drive

Bootable RAID systems are not supported by the StoreMI software.

My system no longer hibernates

If your system supports multiple storage controllers (use Microsoft Device Manager or the AMD installer utility to determine how many there are), hibernate may not be possible in all combinations. When using all SATA devices, ensure that all StoreMI disk devices are attached to the same SATA controller on the motherboard whenever possible.

StoreMI utility reports reserved partition and cannot transform my boot drive

Open Microsoft Disk Manager and check if there is a reserved partition on the boot drive after the primary C: boot volume.

Disk 0 Basic		(C:)	
978.07 GB	100 MB	929.64 GB NTFS	1.76 GB
Online	Healthy (EFI Sy	Healthy (Boot, Page File, Crash Dump, Primary Par	Healthy (Recovery Partitic

If a reserved partition exists, then use a third-party tool to reduce the size of the C: partition by 3 or 4GB, and move the Recovery Partition to fill the 3-4GB capacity gap created between the C: and the reserved partition, then repeat the StoreMI utility operation.

See <u>www.AMD.com/support</u> knowledge base for additional information.

My issue is not addressed here ...

See <u>www.AMD.com/support</u> for additional information in the online FAQ and knowledge base which may contain more up to date information.





Appendix A: Example Drive Configurations and StoreMI Options

Pre-Convert Example Configurations

AMD StoreMI	Disk Manager Drive Configuration
A1.	📅 Disk Management – 🗆 🗙
AMD StoreMI 1.5.0.21400RC - X	File Action View Help
Tier Status: No TierDrive Tiers	Volume Layout Type File System Status Capacity Free Col Simple Basic NTFS Healthy (8 227.44 G8 200.83 G8 84 % System Reserved Simple Basic NTFS Healthy (S 549 M8 163 M8 30 %
RAM Cache Status: Off Create Tier and Enable RAM Cache	Dick 0 Estic 2847.06 Stytem Reserved Sty Mo NTS Healthy Gystem, Active, Primi Healthy (Boct, Page File, Crash Dump, Primary Partition) Otick 1
License Quick Help	Unknown 37262/0 1 Net Inflatized Unallocated
SSD Boot Drive (C:)	O Dick 2 Ubiotov 11129/GB Not initialized Unallocated
Blank SSD - available for slow tier for C:	Op Disk 3 Unknown 3756.02 GB 3726.02 GB Hot Initialized Unallocated
2x Blank HDDs – both available for slow	
tier for boot drive or new non-bootable	Unallocated Primary partition
StoreMI	
A2.	37 Disk Management - □ × FRe Action Yew Help - Φ ⇒ψ Im I ⊆ Im J= D Im
	Volume Layout Type File System Status Capacity Free Spa., % Free
Tier Status: No TierDrive Tiers	(C) (C) Simple Basic NTFS Healthy (G, 2)/34/66 2002; 60 64 % (C) (C) Simple Basic NTFS Healthy (C, 27253 (C) (00 %) (C) (C) (C) (C) (C) (C) (C) (C) (C)
RAM Cache Status: Off Create Tier and Enable RAM Cache	Disk 0 Easi: Seystem Reserved Set NB NTS 2327/4 GB View Constraints Set NB NTS
License Quick Help	O Diak 1 Unknoon 3726.02 GB 1726.02 GB Hot Initialized Unallocated
 SSD Boot Drive (C:) HDD DATA Drive (D:) Blank HDD - available for slow tier Blank SSD - available for fast tier for D: or slow tier for C: 	O Dick 2 Unknown 1117/9 GB 111.79 GB 1117/9 GB 111.79 GB Interinstated Unallocated Point 3 1725 90 GB NTFS Online DATA (D) 1725 90 GB NTFS Healthy (Pirmary Partition) Unallocated Pirmary partition



A3.	🖻 Disk Management – 🗆 🗙
MD StoreMI 1.5.0.21400RC - X	
	Volume Layout Type File System Status Capacity Free Spa., % Free
Tier Status: No TierDrive Tiers	= (C1) Simple Baic NTFS Healthy (B., 22744 GB 200.82 GB 44 % = DATA (D0) Simple Baic NTFS Healthy (P., 3725.90 GB 3725.61 , 100 % = DATA(2(c)) Simple Baic NTFS Healthy (P., 3725.90 GB 111.80 GB 100 % = DATA(2(c)) Simple Baic NTFS Healthy (P., 111.79 GB 111.80 GB 100 % = System Reserved Simple Baic NTFS Healthy (S., 549 MB 163 MB 30 %
RAM Cache Status: Off Create Tier and Enable RAM Cache	Olsk 0 System Reserved Buic System Reserved 238,47 GB S49 MB NTFS 237,54 GB NTFS 237,54 GB NTFS Online Healthy (System, Active, Prime Healthy (Boot, Page File, Crish Dump, Primary Partition)
License Quick Help	**O Daka, 1 720 Daka, 1 727.02.02 GB 727.02.02 GB Unallocated
 SSD Boot Drive (C:) HDD DATA Drive (D:) 	Dick 2 Basic T11.75 GB T11.75 GB T11.75 GB T11.79 GB X175 Healthy (Primary Partition)
 SSD DATA2 Drive (E:) Blank HDD (available for slow tier) 	Dk 3 Baic 3725.50 GB Online Healthy (Pirmary Partition)
	Unallocated Primary partition
A4.	ge Disk Management − □ × File Action View Help
A4. AMD StoreMI 1.5.0.21400RC - ×	2010k Management - - × File Action View Help - - ×
A4. AMD StoreMI 1.5.0.21400RC - X Tier Status: No TierDrive Tiers	Image: Class Management - - × File Action View Help - × Image: Class of the system Status Capacity Free Spa % Free - × Image: Class of the system Status Capacity Free Spa % Free - - × Image: Class of the system Status Capacity Free Spa % Free - - - × Image: Class of the system Status Capacity Free Spa % Free - - - - - - × Image: Class of the system Status Capacity Free Spa % Free - - - <td< th=""></td<>
A4. AMD StoreMI 1.5.0.21400RC - X Tier Status: No TierDrive Tiers Create Tier RAM Cache Status: Off Create Tier and Enable RAM Cache	Str. Disk Management - - × File & dction View Help - - × Volume Layout Type File System Status Capacity Free Spa % Free Outine Layout Type File System Status Capacity Free Spa % Free System Reserved Simple Basic NTFS Healthy (P
A4. AMD StoreMI 1.5.0.21400RC - X Tier Status: No TierDrive Tiers RAM Cache Status: Off Create Tier and Enable RAM Cache License Quick Help	Image: Second
A4. AMD StoreMI 1.5.0.21400RC - X Tier Status: No TierDrive Tiers RAM Cache Status: Off License Quick Help SSD Boot Drive (C:) HDD DATA Drive (D:)	Image: Second
A4. ▲ AMD StoreMI 1.5.0.21400RC Tier Status: No TierDrive Tiers Create Tier RAM Cache Status: Off License Ouick Help SSD Boot Drive (C:) HDD DATA Drive (D:) HDD DATA Drive (E:) Blank SSD (available for fast tier for D: or	Stat Management - × File & dction View Help - - × Volume Ligvout Type File System Status Capacity Free - - × Volume Ligvout Type File System Status Capacity FreeSpa. % Free OtATA (D) Simple Basic NTTS Healthy (P 37250 GB 2725.61 100 % 10.3 % = VIDEO (E) Simple Basic NTTS Healthy (P 3725.00 GB 2725.61 100 % = VIDEO (E) Simple Basic NTTS Healthy (P 3725.00 GB 2725.61 100 % = Dick 0 Basic System Reserved Size 27.63 GB NTTS Healthy (Boot, Page File, Crash Dump, Primary Partition) = Dick 1 Basic 2725.90 GB NTTS Healthy (Primary Partition) Healthy (Primary Partition) = Dick 2 Sincine Pick 20 GB NTTS Dick 2 Dick 2



Post Conversion Examples

A5.	🖅 Disk Management – 🗆 🛪
AMD StoreML 1.5.0.21400RC - X	File Action View Help
Tier Status: 1 TierDrive (1 bootable)	Volume Layout Type File System Status Capacity Free Image: C() Simple Basic NTFS Healthy (B23740 GB 200.83 GB 84 % DDTA(N) Simple Basic NTFS Healthy (B23740 GB 200.83 GB 84 % DDTA(D) Simple Basic NTFS Healthy (B23740 GB 303.37100 % System Reserved Simple Basic NTFS Healthy (S569 MB 163 MB 30 % VIDEO(E) Simple Basic NTFS Healthy (P3725.90 GB 3725.61 100 %
RAM Cache Status: Off Enable RAM Cache	Dick 0 Basic System Reserved (C) 238.47 GB S49 MB NTF5 227.54 GB NTF5 Oriline Healthy (System, Active, Prim Healthy (Bock, Page File, Crash Dump, Primary Partition)
License Quick Help	Olik1 VIDEO (E) 3725.90 GB 3725.90 GB NTF5 Orvine Healthy (Pirmary Partition)
 SSD Boot Drive (C:) HDD DATA Drive (E:) StoreMI DATA Drive (D:) 	Disk 2 Basic Online Online
	Disk 4 Basic
A6.	🖬 Disk Management – 🗆 🗙
AMD StoreMI 1.5.0.21400RC - X	File Action View Help
Tier Status: 1 TierDrive (1 bootable)	Volume Layout Type File System Status Capacity Free Incl Simple Basic NTFS Healthy (B
RAM Cache Status: Off Enable RAM Cache	Dick 0 Basic Ovine
License Quick Help	O Dick 1 VIDEO (Ea) 3725590 GB 3725590 GB Orline Healby (Primary Partition)
 StoreMI Boot Drive (C:) HDD DATA Drive (E:) Blank unused SSD 	111.79 GB 111.79 GB Not initialized Unalocated Disk 3 Basic Orline 2017 46 CB NTFS Polik 4 Stystem Reserved 3950.48 GB System Reserved Orline Healthy (System, 2) Unalocated Primary partition



Appendix B: Cleaning Disks Previously Used as a StoreMI during Windows Setup

IMPORTANT: The following steps will completely erase all data from the drives. Ensure you have backed up all important data before using the following commands. Also ensure that you have selected the correct drive. Remove any drives that are not required for the installation if necessary to avoid confusion so that you only have the 1 or 2 drives used as a StoreMI connected, along with the USB or DVD Windows setup drive.

For EFI, the previously used disks will be labeled "EnTier_ESP" in the Windows disk select window. In the above example Drive 0 is one of the drives in question for example. Identify the other also (scroll down).

If you used your drives as data only StoreMIs, we will need to identify them using diskpart as they will not be visible in the Windows disk selection menu.

STEP 1: From the disk selection menu in the Windows setup process (where Windows asks where to install the OS to), press Shift and F10 keys at the same time to open a command line prompt.

STEP 2: Type diskpart, then type list disks.

			Constant of the state of the st		A CONTRACTOR OF THE OWNER OF THE	There is a second second	HERE AND A DESCRIPTION OF
on Administra	tor: X:\windows\system.	32\cmd.exe - d	iskpart				
Microsoft	Windows [Versio	n 10.0.102	40]				
X:\Source	solskpart						
Microsoft	DiskPart vension	n 10.0.102	40				
Copyright	(C) 1999-2013 M	icrosoft C	orporatio	n.			
On compute	er: MINWINPC						
DISKPARTS	list disk						
	LISC GISK						
Disk ###	Status	Size	Free	Dyn	Gpt		
Disk Ø	Online	931 GB	ØB		*		
Disk 1	Online	111 GB	08				
Disk 3	Online	28 GB	0 B				
		20 00					
DISKPART>	-						

For our example, we have three disks. Disk 0 and 2 were previously used as StoreMIs. Drive 1 is an extra data drive we are also going to clean while in diskpart.

STEP 3: Identify the Disks previously used as a StoreMI. Use the size of the disk if necessary and take special care NOT to accidentally select the Windows setup USB disk (for our example, Disk 3 above) or any other drives you may have left attached. It is highly recommended if you see multiple drives and you cannot clearly identify which were the StoreMI raw disks, shutdown your machine and disconnect any data drives or drives you do not want to touch, then reboot. They can be reattached later.



STEP 4: Select each of the disks and clean (i.e. delete all data and metadata off) them as follows (for the example above, disk 0 and 2 were the disks needed to be cleaned):

```
DISKPART> select disk 0
DISKPART> clean
DISKPART> select disk 2
DISKPART> clean
```

optionally for our example:

DISKPART> select disk 1 DISKPART> clean

then type DISKPART> exit

STEP 5: Close the command prompt window and return to the setup disk select menu

STEP 6: Refresh the disk select window to show the clean drives. Any legacy BIOS mode or data StoreMIs should now correctly appear as empty drives and all StoreMI metadata will be safely removed.



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