ASUS Disk Unlocker User Guide

ASUS Disk Unlocker, an ASUS-exclusive utility, provides an intuitive interface that identifies all of your hard disk drive (HDD) spaces and allows you to use all of these spaces, breaking the HDD size limitation of various operating systems.



ASUS Disk Unlocker is designed for hard disk drives with more than 2048GB capacity.

- ASUS Disk Unlocker is exclusively for ASUS motherboards only.
- For Intel[®] platforms, Disk Unlocker supports IDE, AHCI, and RAID modes. For RAID
 mode, ensure that you created the RAID set using Intel[®] Rapid Storage Technology
 10.5/ Intel[®] Rapid Storage Technology Enterprise 3.0.0 or later versions.
- On AMD® platforms, Disk Unlocker supports IDE mode only. AHCI and RAID modes require future AMD® official updates.

Installing ASUS Disk Unlocker

To install ASUS Disk Unlocker:

- 1. Insert the ASUS Support DVD to the optical drive.
- 2. When the menu appears, click Utility tab > Software > Disk Unlocker.
- 3. Follow the onscreen instructions to complete the installation.



- For operating system, BIOS and partition format compatibility, refer to sections Partition style information and Disk Unlocker operating system compatibility for details.
- Due to operating system's structure, Windows® XP requires driver installation for Disk Unlocker support. Refer to section Loading the ASUS Disk Unlocker during Windows® XP Installation for more details.
- After installing ASUS Disk Unlocker in Windows[®] XP operating system, restart your system to complete the installation.



Creating a virtual drive

To create a virtual drive, select a drive from the **Drive** dropdown list then click **Create**. An unallocated drive space appears in the **Virtual Drive** field.



- Only drives that have more than 2048GB capacity will be shown in the Drive dropdown list.
- To partition the newly-created virtual drive, click Partition to launch Windows[®] Disk Management.
- The virtual drives that you created with ASUS Disk Unlocker utility will be removed if you uninstall this utility.
- Drives smaller than 2048GB or in GPT (GUID Partition Table) format will not appear in the Drive dropdown list. Refer to section Partition Style information for more details about GPT format.
- For Windows[®] 8/7/Vista operating systems or later versions, convert the drive to GPT format using Windows[®] Disk Management to fully utilize the virtual drive created with ASUS Disk Unlocker.
- We recommend you to use Windows[®] Drive Management to manage the drive for better compatibility and upgradability when you use the virtual drive as a data drive.

Deleting a virtual drive

To delete a virtual drive, click Recover.



Ensure that you back up all your data to another storage device before deleting your virtual drive.

Partition style information

The following partition styles are used to organize partitions on the disk.

Master Boot Record (MBR)

This partition style is a 512-byte boot sector that contains a small amount of executable code called the master boot code. The partition table in this style is used to identify the type and location of partitions on the hard disk drive.

GUID Partition Table (GPT)

This partition style is a part of the Extensible Firmware Interface (EFI) initiative and provides a more flexible mechanism for partitioning disks than the Master Boot Record (MBR). This style is commonly used for computers.



GPT is not supported under some operating systems due to operating system limitations. Refer to the tables under section **Disk Unlocker compatibility** for more information.

Disk Unlocker operating system compatibility

| BIOS Type | Operating System | 64-bit | | | | | | | 32-bit | | | | | | |
|----------------|---------------------------------|-------------------------------------|------|------|------|------|------|------|--------|------|------|------|------|--|--|
| | Format | Boot | | | Data | | | Boot | | | Data | | | | |
| | Mode | IDE | AHCI | RAID | IDE | AHCI | RAID | IDE | AHCI | RAID | IDE | AHCI | RAID | | |
| Legacy BIOS | MBR without Disk Unlocker | HDD space is unable to be utilized. | | | | | | | | | | | | | |
| | MBR with Disk Unlocker | 0 | O* | 0** | 0 | O* | 0** | 0 | 0* | 0** | 0 | O* | O** | | |
| | GPT without Disk Unlocker | N/A | | | 0 | 0 | х | N/A | | | 0 | 0 | х | | |
| | GPT with Disk Unlocker | N/A | | | 0 | 0 | х | N/A | | | 0 | 0 | х | | |
| UEFI BIOS | MBR without Disk Unlocker | HDD space is unable to be utilized. | | | | | | | | | | | | | |
| | MBR with Disk Unlocker | 0 | 0* | 0** | 0 | O* | O** | 0 | 0* | 0** | 0 | 0* | O** | | |
| | GPT without Disk Unlocker | 0 | 0* | O** | 0 | O* | O** | N/A | | 0 | 0* | O** | | | |
| | GPT with Disk Unlocker | 0 | 0* | 0** | 0 | 0* | 0** | N/A | | 0 | 0* | O** | | | |

Disk Unlocker compatibility for Windows® 8/7/Vista

* Supports Intel Rapid Storage Technology 10.1/Intel Rapid Storage Technology Enterprise 3.0.0 or later versions.

** Supports Intel Rapid Storage Technology 10.5/Intel Rapid Storage Technology Enterprise 3.0.0 or later versions.

| BIOS Type | Operating System | 64-bit | | | | | | | 32-bit | | | | | | |
|----------------|---------------------------------|-------------------------------------|------|------|------|------|------|------|--------|------|------|------|------|--|--|
| | Format | Boot | | | Data | | | Boot | | | Data | | | | |
| | Mode | IDE | AHCI | RAID | IDE | AHCI | RAID | IDE | AHCI | RAID | IDE | AHCI | RAID | | |
| Legacy BIOS | MBR without Disk Unlocker | HDD space is unable to be utilized. | | | | | | | | | | | | | |
| | MBR with Disk Unlocker | 0 | х | х | 0 | х | х | 0 | х | х | 0 | х | х | | |
| | GPT without Disk Unlocker | N/A | | | 0 | х | х | N/A | | | | | | | |
| | GPT with Disk Unlocker | N/A | | | 0 | х | х | N/A | | | | | | | |
| UEFI BIOS | MBR without Disk Unlocker | HDD space is unable to be utilized. | | | | | | | | | | | | | |
| | MBR with Disk Unlocker | 0 | х | х | 0 | х | х | 0 | х | х | 0 | х | х | | |
| | GPT without Disk Unlocker | N/A | | | 0 | х | х | N/A | | | | | | | |
| | GPT with Disk Unlocker | N/A | | | 0 | х | х | N/A | | | | | | | |

Disk Unlocker compatibility for Windows® XP



If you are using Windows [®] XP operating system, load Microsoft[®] Native IDE driver before using ASUS Disk Unlocker.

- If you create a virtual drive on a USB external hard drive, the virtual drive will be identified as a removable device. Always use Safely Remove Hardware to remove the USB external hard drive from the system.
- We recommend you to connect the SATA drives to the motherboard's chipsetcontrolled SATA connectors for better compatibility.
- For better hardware compatibility, we recommend you to update your motherboard's BIOS to its latest version before using Disk Unlocker.
- For Windows[®] 8/7/Vista operating systems or later versions, convert the drive to GPT format using Windows Disk Management to fully utililize the virtual drive created with ASUS Disk Unlocker.
- We recommend you to use Windows[®] Disk Management to manage the drive for better compatibility and upgradability when you use the drive as a data drive.
- You can use Windows[®] Disk Management to convert the physical hard drive's partition from MBR to GPT. This GPT conversion may lead to data loss if the drive's capacity is more than 2048GB and a virtual drive has been created using ASUS Disk Unlocker.

Loading the ASUS Disk Unlocker during Windows® XP Installation



- Ensure that your hard drive has more than 2048GB capacity.
- From the bundled support DVD, copy and save ASUS Disk Unlocker Utility's **XP32** or **XP64** contents to the root directory of a blank 3.5 floppy disk or a USB storage device. Ensure that you copy and save the correct ASUS Disk Unlocker Utility based on the Windows[®] XP version that you want to install.

To load the ASUS Disk Unlocker:

- 1. During Windows[®] XP installation, press <F6> key to install a third party SCSI or RAID driver upon system prompt.
- 2. Press <S> key to add SCSI adapters.
- Insert the floppy disk to the floppy drive or the USB storage device to the USB port then press <Enter>.
- 4. Select ASUS Disk Unlocker then press <Enter>.
- 5. Follow the succeeding onscreen instructions to complete the installation.