

## New Version

HDClone X.3 introduces several completely new features and apps, including the **Rescue App Suite**, which is designed specifically to rescue disks that exhibit severe defects and malfunctions. The “PartitionRestore” app, can restore backups partially while preserving the remaining partitions. The “WIM Restore” app allows you to restore from a **WIM backup image**.

Not only is HDClone X.3 fully compatible with **Windows 11** and **Windows Server 2022**, but it now also offers a native **Windows-on-ARM** variant, specifically for notebooks and tablets with ARM processors. The **Virtual Disk Applet** can now make mounted images available as Windows drives, even without the use of Miray Virtual Disk. WIM images can be mounted directly in HDClone in order to access their contents. During cloning and restoring processes, computer names and WSUS IDs can be modified and MBR partitions can be upsized to a total of 4 GB (versus only 2 GB). Numerous improvements of details, both in the user interface and at its core, perfectly round off HDClone X.3.

Details about HDClone’s ongoing improvements can be found online in the HDClone changelog at: <https://www.miray-software.com/Changelog/HDClone>



## New Features (★ incl. version 12.1)

### Windows 11 / Server 2022 Compatible | 12.0 PE and up

The Windows variant HDClone/W and all copy, backup and restore functions are compatible with the newest Windows operating systems for servers and work stations.

### Rescue App Suite – Data Rescue Rethought | 12.0 PE and up

Several new, specialized apps are available which are geared toward the optimal handling of defective disks: RescueCopy, RescueImage, RescueResume and RescueRestore. There is a new image type specifically for incomplete images, which are then made usable again with RescueRestore.

### Partial Restoring From a Backup | 12.0 AE and up

With the new “PartitionRestore” app it is now possible to restore select partitions from within a backup, while at the same time keeping the remaining partitions on the target disk.

### WIM Restore App – Restore WIM Images | 12.0 PE and up

The new WIM Restore app can be used to restore system installations from WIM images, e.g. for recovery purposes.

### Change WSUS IDs and Computer Names | 12.0 PE and up

The WSUS IDs and computer names of Windows systems can now be automatically reset while copying Windows installations or when restoring from an image. This feature is an integrated option in the relevant apps. The OS-Adjust app can also be used to make the changes outside of a copy or restoration process.

### Browse Images – Mobile + in Windows | 12.0 SE and up

With the new VirtualDisk applet, images mounted with HDClone/W can now be simultaneously displayed as Windows drives. This provides convenient access via the Windows Explorer, even during mobile use and without having to install MVD. This feature is also available on Windows-on-ARM systems.

### Windows-on-ARM – Optimal Support | 12.0 PE and up

There now is new, specialized support for Windows-on-ARM, which is often installed on notebooks and tablets. On these systems, HDClone/W can now run with the fast operation speed that HDClone users are accustomed to.

**Please note:** For ARM processor-based systems, a self-booting version (HDClone/S) is not yet available. Instead, you can use HDClone/W with Windows PE on these systems.



## Resize MBR Partitions up to 4 TB | 12.0 SE and up

HDClone can increase the size for MBR-partitioned disks beyond their actual size limit of 2 TB all the way up to 4 TB. All the necessary adjustments are made automatically by the apps.

**Please note:** This size increase will work on most Windows and Linux operating systems, but explicitly not on Apple PCs.

## Mount WIM Images – Browse Files | 12.0 AE and up

WIM images can be mounted in HDClone (this includes the self-booting variant) by using the VirtualDisk applet in order to access files and folders. If a WIM has multiple volumes, only the first will be visible.

## UAS Standard for USB Mass Storage | 12.0 FE and up

Integrated support for USB storage devices with UAS interfaces has been added, which enables the use of this new device category.

## Thunderbolt Hotplugging for HDClone/L | 12.0 PE and up

HDClone's self-booting variants now also support devices that are connected via Thunderbolt ports.

## Support of Current Standards | 12.0 FE and up

Thanks to updated drivers, new features and improvements in peripheral devices, file and operating systems can now be used with HDClone.

### ★ Partitioner App: Progress Bar | 12.1 PE and up

When formatting partitions, newly created in the Partitioner App, the progress of the formatting process is displayed.

### ★ System Applet: LAN Adapter Info | 12.1 FE and up

The System Applet contains a new pane displaying information about the available LAN network adapters and their IP address configuration.

### ★ Various Features Improved | 12.1 FE and up

Many features were remarkably enhanced and improved, among them:

- the storage format for error data of BitCopy and RescueCopy
- analyzing hibernated Windows systems
- changing of the Windows system SID
- the USB stack and the support of UAS disks,
- resizing of MBR partitioning schemes to up to 4 TB

## Feature Matrix

The table below provides an overview of the main features that have been added to HDClone, along with their availability in the respective editions. Unfilled dots (◻) indicate that, while the feature is available, it cannot be used to its full extent when working with the edition in question.

Ver. New Features in HDClone X	FE	BE	SE	AE	PE	EE
12.0 Windows 11 / Server 2022 Compatible	◻	◻	◻	◻	■	■
12.0 Rescue App Suite - Data Rescue Rethought					■	■
12.0 Partial Restoring From a Backup					■	■
12.0 WIM Restore App – Restore WIM Images					■	■
12.0 Change WSUS IDs and Computer Names					■	■
12.0 Browse Images – Mobile + in Windows				■	■	■
12.0 Windows-on-ARM – Optimal Support					■	■
12.0 Resize MBR Partitions up to 4 TB				■	■	■
12.0 Mount WIM Images – Browse Files					■	■
12.0 UAS Standard for USB Mass Storage	◻	◻	◻	■	■	■
12.0 Thunderbolt Hotplugging for HDClone/L					■	■
12.0 Support of Current Standards	◻	■	■	■	■	■
12.1 ★ Partitioner App: Progress Bar					■	■
12.1 ★ System Applet: LAN Adapter Info	■	■	■	■	■	■
12.1 ★ Various Features Improved	◻	◻	◻	■	■	■

## Information on Modifications

The following information pertains to modifications which do not represent features in the actual sense, yet which bring about a different or new program behavior in comparison to the previous version. Therefore, this information is specifically aimed toward users of HDClone X.2 or older versions.

### **New Apps Marked With '+' in Corner of Icon**

To make this version's new and fundamentally modified apps stand out in the menu, the respective app icons have been marked with a '+' symbol in the upper right hand corner.

### **Additional Executable File for Windows-on-ARM**

To optimally support notebooks and tablets with ARM processors, an executable (.exe) file has been added specifically for these systems named "hdclone.A64.exe". This executable runs exclusively with Windows-on-ARM, and not on common Windows PCs. It is also started automatically on ARM systems when "hdclone.32.exe" is opened.

### **Spot – Mount Images by Right-Clicking Files**

The Spot File Manager now allows you to mount images by simply right-clicking on the image file, allowing you to skip the step of opening the Virtual Disk applet.

### **Open Screenshot and Log Folders (Self-Booting)**

The applet entries "Saved Screenshots" and "Saved Log Files," could previously only be used to open their

respective folders in Windows in an Explorer window. These folders can now also be opened in the Sport File Manager when using the self-booting variants.

### **New Apps Under the Backup Tab**

The app group "Restore" under the "Backup" tab has gained two additional apps:

- "Partitions"
- "WIM Image"

### **New Apps Under the Rescue Tab**

The "Data Rescue" tab has been renamed "Rescue." The apps therein were replaced and expanded by completely new versions, which can now create images (RescueImage) and copies (RescueCopy) of disks that are at a risk of failing.

- For Rescue Images, use the apps "Create," "Resume" and "Restore" in the app group "RescueImage"
- For Rescue Copies, use the apps "Create" and "Resume" in the app group "RescueCopy"