



New Version

The development of **HDClone X.7** was largely focused on a wide array of innovations: from the brand new **SpareDisk** and **HotSpare** concept for dedicated replacement disks, to enhanced **native use on Linux systems** and a refined UI more efficient workflows, all the way to **support for new hardware**, **improved network integration**, **major software improvements**, and **compatibility with current systems and devices**.



What's New?

Copies and backups can be created live on running Linux systems using HotCopy and LiveImage. **ZFS file systems** can be "Smart" copied, backed up, and expanded. **MD-RAIDs** are fully supported, and the **ext file system journal** can be automatically consolidated. These capabilities are also available in HDClone on Windows for such disks and filesystems.

For **enhanced efficiency** and convenience, the user interface now allows you to **save settings** and contains a **side-by-side help**. A built-in **screen saver** displays relevant process information, while **screen color themes** ensure a comfortable and ergonomic workflow.

HDClone X.7 brings completely new hardware support, including **Thunderbolt with SCM**, Intel **Bluetooth**, and OPAL-compliant **self-encrypting drives (SED)**. Network integration has been streamlined, offering **static LAN configurations** in self-booting mode, easy access to NetDisk over LAN, and **HTTP/HTTPS boot support**. On top of that, the creation of **MAI images** and self-booting use on **ARM CPUs** has been significantly accelerated.

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

New Features

HotSpare Backup – Instant Replacement | 16.0 PE and up

The completely new SpareDisk apps solve this by creating a dedicated clone of the system disk that can instantly take over in an emergency – without needing to restore from a backup first. The key advantage: In HotSpare mode, the spare disk can remain directly within the system and can be continuously updated. If the system disk fails, the spare can be activated within seconds, immediately returning the system to its most recent backed-up state.

ZFS Smart Backup, Cloning, and Resizing | 16.0 PE and up

The powerful ZFS file system is increasingly being supported by Linux distributions, including Proxmox. ZFS volumes can now also be copied, backed up, or migrated to larger drives quickly and efficiently with SmartCopy or SmartImage.

HotCopy & LiveImage Available for Linux | 16.0 PE and up

Using Shadow copy is now available for Linux as well. This makes HotCopy and LiveImage available, allowing to create copies and backups while Linux is running, for example of the system disk or other disk that are actively used by other applications.

*) requires the use of the Linux Add-on for HDClone

Self-Encrypting Drives (SED) Supported | 16.0 PE and up

Disks with integrated OPAL-compliant encryption (SED) can be unlocked directly in HDClone. This allows these disks to be easily integrated, even if connected later, via bridge adapters, or if the system firmware (UEFI/BIOS) lacks OPAL support. This works in all versions of HDClone and makes the disks also accessible to other programs, when used in Windows or Linux.



MD-RAIDs Supported | 16.0 PE and up

Software RAIDs created with MDADM (MD-RAIDs) can now be mounted directly. They then can be used for the full spectrum of options – from file access and mounting via an image, to SmartImage, SmartCopy, and conversion to a normal disk. This functionality is available in all variants of HDClone, including Windows and Linux.

Thunderbolt with SCM – Fully Compatible | 16.0 FE/PE and up

Newer systems often require Thunderbolt to be configured via software (Software Connection Manager, SCM) in order to function. Thanks to a dedicated SCM, HDClone now also supports Thunderbolt devices on these systems, especially in the self-booting variant (/S).

Intel USB Bluetooth Adapters Supported | 16.0 FE and up

Bluetooth adapters of this type require dedicated firmware, which can now be downloaded automatically when creating the bootable medium. This allows the use of Bluetooth mice and keyboards that use this adapter type, even in the self-booting variant.

Side-by-Side Help in All Apps | 16.0 SE and up

The new side-by-side help (SxS help) is now shown directly to the right side of the app, eliminating the need to switch back and forth between the help window and the app. The original help window remains available, if needed.

Save App Settings as Templates | 16.0 AE and up

App settings (such as disks, options, and formats) can now be saved permanently as templates with user-defined names. This makes it easy to quickly save settings for different use cases and to re-access them when needed.

Static Network Configuration | 16.0 PE and up

A static network configuration option has been added to ensure that the software's integrated network capabilities work reliably in all LAN environments – including when using the self-booting variant.

NetDisk – Even Easier to Use | 16.0 PEP and up

NetDisk can now be used directly in local networks without requiring a USB token, also making its use in combination with network boot (PXE boot) even simpler.

Network Boot via HTTP/HTTPS | 15.0 PE and up

For booting HDClone over the network, booting via the HTTP/HTTPS protocols is now also supported.

Ext Journal – Automatic Integration | 16.0 PE and up

Ext file systems can at times be in a temporarily inconsistent state, where not all changes are reflected in the file system, instead being stored in the file system journal for later consolidation. HDClone can now perform this consolidation, on-the-fly, while copying or restoring.

MAI Images now Accelerated | 16.0 PE and up

The Miray Archive Image (MAI), which is specifically designed for archiving purposes, has been optimized so that creation and restoration speeds are equal to the usual Miray File Image (MFI). Compatibility is maintained, allowing existing MAI files to still be used without any issues.

Additional Color Themes for the GUI | 16.0 AE and up

In addition to the high-contrast black-and-white theme, the software provides seven new color themes, including the blue legacy design. Each theme is available in two variants: "smooth" and "vibrant." The colors can also help to differentiate multiple versions or bootsticks.

Integrated Screensaver | 16.0 AE and up

The newly integrated screensaver not only prevents screen burn-in (ghosting), but also provides a clearly visible display of the current progress or completion status – easily readable even from a distance.

Online Features (optional) —————

Online Slots – Flexible Activation | 16.0 PEP and up

The concept of online slots is similar to a token: per slot, HDClone can be used consecutively on different systems. When using an online slot, this is even completely location-independent. An optional waiting queue function is also available, which allows HDClone to automatically wait for the next available slot.

Remote Access via Browser | 16.0 PE and up

As an optional feature, HDClone can be equipped with a remote access function via web browser, available across all variants – in Windows, self-booting, and in Linux. It supports multiple licenses within a single account and requires a fee-based online service extension.

Cloud Storage – Maximum Ease | 16.0 PE and up

The optional, fully integrated cloud storage offers seamless functionality similar to a local storage medium. Images (and other files) can be saved directly to the cloud without the need for local intermediate storage. This not only saves valuable storage space but also reduces time spent on file management, enabling more effective collaboration with HDClone. Use is possible for multiple licenses in one account and requires a corresponding paid extension of the online services. Use is possible for multiple licenses in one account and requires a corresponding paid extension of the online services.



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.7	FE	BE	SE	AE	PE	EE
16.0	HotSpare Backup – Instant Replacement					■	■
16.0	ZFS Smart Backup, Cloning, and Resizing					■	■
16.0	HotCopy & LiveImage Available for Linux					■	■
16.0	Self-Encrypting Drives (SED) Supported					■	■
16.0	MD-RAIDs Supported					■	■
16.0	Thunderbolt with SCM – Fully Compatible	◻	◻	◻	◻	■	■
16.0	Intel USB Bluetooth Adapters Supported	■	■	■	■	■	■
16.0	Side-by-Side Help in All Apps			■	■	■	■
16.0	Save App Settings as Templates				■	■	■
16.0	Static Network Configuration					■	■
16.0	NetDisk – Even Easier to Use					◻	■
16.0	Network Boot via HTTP/HTTPS					■	■
16.0	Ext Journal – Automatic Integration					■	■
16.0	MAI Images now Accelerated					■	■
16.0	Additional Color Themes for the GUI					■	■
16.0	Integrated Screensaver				■	■	■
16.0	^[optional] Online Slots – Flexible Activations					◻	■
16.0	^[optional] Remote Access via Browser					■	■
16.0	^[optional] Cloud Storage – Maximum Ease					■	■