

# Cloning - Backup - Migration - Rescue



HDD, SSD, NVMe, USB, Flash, SD

**New:** DataSelect

**New:** Resize Bootable Linux

**New:** Spot File Manager

**New:** DiskTest for Storage Media

## Editions

- Free Edition <sup>F\*</sup>
- Basic Edition <sup>W\*</sup>
- Standard Edition <sup>WV\*</sup>
- Advanced Edition <sup>WV\*</sup>
- Professional Edition <sup>WV.T.M\*</sup>
- Enterprise Edition 4x/8x/16x <sup>M\*</sup>

## Highlights

- HotCopy, LiveImage, SmartCopy
- **New:** SmartImage for Ext, Btrfs, APFS
- **New:** Directly mount images as drives
- **New:** HDClone/L for LAN, SAS/SCSI & RAID
- TRIM for SSDs with SATA, IDE, SAS and SCSI
- Disks above 2 TB and with Advanced Format <sup>1)</sup>



HDClone is the universal cloning solution for storage media and includes backup, data rescue, migration and mass-copy.

The core of HDClone is a specially developed CopyEngine, making it one of the fastest cloning applications in the world.

### Runs with or without Windows

HDClone can be started self-booting or in Windows, offering the familiar drive letters, dynamic volumes, RAIDs and media requiring special Windows drivers to be used for copying.

### Automation

The command line interface (CLI) for Windows can be used from batch scripts or the task scheduler for predefined tasks. Specify drives by ID, port, device name and/or serial number.

### Fault Tolerance with SafeRescue

Special strategies for the reading of defective sectors and timely preferred rescuing of healthy data areas.

### File Images and VM Images – NEW: Save to Ext

Save images to FAT, NTFS, ExFAT, HFS+ and Ext media, network drives<sup>2)</sup> and optionally compressed and/or encrypted, or in VM format (VMDK/VHDX/VDI) for VMware/VirtualPC/VirtualBox.

### HotCopy & LiveImage – NEW: with Verification

Creating clones and images – even at runtime ('live') in Windows and even of the system volume itself, plus verification.

### Adjusting Partition Sizes & Defragmentation

HDClone can automatically enlarge, shrink and defragment NTFS, FAT & HFS+ during copying.

### Faster with SmartCopy & SmartImage

SmartImages and SmartCopies save additional storage space and time. Perfect for faster backup, cloning and migration.

### NEW: DataSelect – Select Files and Folders

Include or exclude individual files and folders for partial backups or to facilitate migration to smaller disks (SSD, NVMe).

## Edition Overview

Complete comparative matrix at: [miray-software.com/HDClone](http://miray-software.com/HDClone)

	Free	Basic	Standard	Advanced	Professional	Enterprise
Max. copying throughput MB/sec	30	50	60	∞ <sup>3)</sup>	∞ <sup>3)</sup>	∞ <sup>3)</sup>
IDE, SATA, USB	▪	▪	▪	▪	▪	▪
SSD performance enhancement with TRIM				▪	▪	▪
SAS/SCSI und RAID <sup>4)</sup> , NVMe and M.2					▪	▪
Dynamic Disks as source					▪	▪
SATA hotplug & Port-Multiplier						▪
HotCopy	▪	▪	▪	▪	▪	▪
Enlarge file system size	▪	▪	▪	▪	▪	▪
Shrink file system size		▪	▪	▪	▪	▪
SafeRescue data retaining		▪	▪	▪	▪	▪
SmartCopy & SmartImage			▪	▪	▪	▪
Advanced Format (4K sectors) <sup>1)</sup>			▪	▪	▪	▪
Verification mode, <b>New:</b> HotCopy & Live Image			▪	▪	▪	▪
Command line interface (CLI)					▪	▪
Save a report (PDF)					▪	▪
MultiCopy (4x, 8x, 16x)						▪
NTFS, FAT (FAT16 & FAT32)	▪	▪	▪	▪	▪	▪
ExFAT			▪	▪	▪	▪
HFS+ (Apple), Ext (Linux), APFS (Apple)				▪	▪	▪
ReFS (Win Server), XFS (Linux Server), Btrfs					▪	▪
LiveImage		▪	▪	▪	▪	▪
SmartImage			▪	▪	▪	▪
Differential images/backups				▪	▪	▪
QuickCompress & StrongCompress				▪	▪	▪
<b>New:</b> Raspberry Pi and Windows 10 IoT Images					▪	▪
AES-encrypted images					▪	▪
Images on Network shares <sup>2)</sup>					▪	▪
VM Images – VMDK, VHDX, VDI, DMG					▪	▪
<b>New:</b> Spot File Manager	□	□	□	▪	▪	▪
<b>New:</b> DiskTest for Storage Media					▪	▪
Miray Virtual Disk (MVD)	▪	▪	▪	▪	▪	▪
Multiple mounted volumes		1	1	7	7	7
Mounting VM Images					▪	▪
<b>New:</b> Command line interface (CLI)					▪	▪
HDClone/W + HDClone/S (32 bit)	▪	▪	▪	▪	▪	▪
HDClone/W64 & <b>New:</b> HDClone/S64 (64 bit)					▪	▪
<b>New:</b> HDClone/L (SAS/SCSI, RAID, LAN) <sup>6)</sup>					▪	▪

## Technical Data

### Areas of Application

- Migrate or duplicate entire system installations
- Data backup, data rescue, system recovery
- Mass installation of computer systems (roll-out, deployment)
- Clone, backup or rescue proprietary file systems
- Copy between HDD, SSD, NVMe, USB, SCSI, SAS & RAID

### HDClone/S, HDClone/S64 & HDClone/L (Self-booting)

Self-booting variants for 32 bit (/S), 64 bit (/S64) and Linux-based (/L) for SAS/SCSI, RAID and LAN <sup>6)</sup>.

- PC Pentium III or higher, 512 MB RAM, CD or USB boot

### HDClone/W (Windows Application)

Launch HDClone directly on Windows.

- Windows XP (SP2), Vista, 7, 8/8.1, 10
- Windows Server 2003, 2008, 2008 R2, 2012, 2016 <sup>4)</sup>

### Supported Media

- IDE-, ATA-, SATA- & eSATA hard disks, SSDs and NVMe
- USB hard disks, USB sticks, USB SSDs
- SD/SDHC/MMC, CompactFlash, xD, Memory Stick etc.
- Firewire/IEEE1394 hard disks (internal & external) <sup>4)</sup>
- Dynamic Disks, RAID, SAS <sup>2)</sup> and others <sup>2)</sup>

### Supported Controllers <sup>5)</sup>

- SATA, SATA-II, SATA 6G over IDE/AHCI, M.2 SSDs with NVMe
- USB 1.1/2.0/3.0/3.1 controllers with UHCI/OHCI/EHCI/XHCI
- Firewire/IEEE1394 controllers with OHCI
- SAS/SCSI host adapters <sup>6)</sup>

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