

oning | Backup | Migration | Rescue

Hard disks, SSDs & USB drives New: NVMe and M 2 SSDs **New:** SmartCopy for Btrfs & APFS New: 64 bit HDClone/W VHDX, VMDK and VDI

- Free Edition ^{F*}
- Basic Edition W,V*
- Standard Edition W,V* ditions
 - Advanced Edition W,V*
 - Professional Edition W,V,T,M*
- ш Enterprise Edition 4x/8x/16x^{M*}

- HotCopy, LiveImage, SmartCopy
- New: SmartImage for Ext, Btrfs, APFS
- New: Mount images as drives directly
- 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 ¹⁾



DClone 8

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.

Running with and 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 reading defective sectors and a timely preferred rescuing of healthy data areas.

File images and VM images - NEW: Ext, XFS, Btrfs

Storing images on FAT and NTFS media, on network drives²⁾ and optionally compressed and/or encrypted, or in VM format (VMDK/VHDX/VDI) for VMware/VirtualPC/VirtualBox.

HotCopy & LiveImage

Consistent copies and images – even at runtime ('live') in Windows and even of the system volume itself.

Adjusting partition sizes & Defragmentation – NEW: ExFAT

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

Faster with SmartCopy & SmartImage – NEW: Btrfs, APFS

Smart images and copies (NTFS/FAT/HFS+) additionally save storage and time. Perfect for backup and migration.

TRIM keeps SSDs fast

The TRIM command optimizes SSDs, reviving their original performance during cloning and for subsequent use.

Edition Overview

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Complete comparative matrix at: miray-software.com/HDClone	Free	Basic	Standarc	Advance	Professior	Enterprise
Max. copying throughput MB/sec	30	50	60	∞ ₃₎	$\infty_{3)}$	∞^3
IDE, SATA, USB	•	•	•	•	•	•
SSD performance enhancement with TRIM				•	•	•
SAS/SCSI und RAID ⁶⁾					٠	٠
Dynamic Disks as source					٠	•
Intel Software RAID 0/1/10/5					٠	•
SATA hotplug & Port-Multiplier						٠
HotCopy	•	٠	٠	•	٠	٠
Enlarging file system's size	•	٠	•	•	•	•
Shrinking file system's size		•	•	•	•	•
SafeRescue data retaining		٠	٠	٠	٠	٠
SmartCopy & SmartImage			٠	•	٠	•
InherentDefrag			٠	•	٠	٠
Advanced Format (4K sectors) ¹⁾			٠	٠	٠	٠
Verification mode			•	٠	•	•
Command line interface (CLI)					٠	٠
Storing a report (PDF)					•	•
MultiCopy (4x, 8x, 16x)						٠
NTFS, FAT (FAT16 & FAT32)	٠	٠	•	•	•	•
ExFAT, New: Ext			٠	٠	٠	٠
HFS+ (Apple), ext (Linux), <mark>New</mark> : APFS (Apple)				٠	•	٠
ReFS (Win Server), XFS (Linux Server), New: Btrfs					٠	٠
LiveImage		٠	•	•	•	٠
SmartImage, New: Single file image format			٠	٠	٠	٠
Compressed images			•	٠	•	•
Differential images/backups				٠	٠	•
QuickCompress				•	•	٠
AES-encrypted images					٠	٠
Images on Network shares ²⁾					•	٠
VM images (VMDK, VHD/X, VDI), New: DMG					٠	٠
Miray Virtual Disk (MVD)		٠	•	•	•	٠
Multiple mounted volumes		1	1	7	7	7
Mounting VM images (VMDK, VHD, VHDX, VDI)					•	•
New: Command line interface (CLI)					٠	•
HDClone/W + HDClone/S (32 bit)	٠	•	٠	٠	•	•
New: HDClone/W (64 bit)					•	•
New: HDClone/L (SAS/SCSI, RAID, LAN) ⁶⁾					•	•

Technical Data

Areas of Application

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- Migrating or duplicating entire system installations
- Data backup, data rescue, system recovery
- Mass installation of computer systems (roll-out, deployment)

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- Clone, backup or rescue proprietary file systems
- Copies between SATA, IDE, USB, Firewire, SCSI, SAS & RAID

HDClone/S & HDClone/L (Self-booting)

Variant /L adds a Linux base to the normal /S variant, including support for SAS/SCSI, RAID and LAN $^{\rm 6)}.$

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, 2016⁴⁾

Supported Media

- IDE-, ATA-, SATA- & eSATA hard disks & SSDs, CompactFlash
- USB hard disks, USB sticks, USB SSDs
- SD/SDHC/MMC, CompactFlash, xD, Memory Stick etc.
- Firewire/IEEE1394 hard disks (internal & external)⁴⁾
- Dynamic Disks, RAID, SAS²⁾ and other²⁾

Supported Controllers 5)

- 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 ⁶⁾

Miray Software AG	Homepage: <u>miray-software.com</u>	
Gaissacher Str. 18	Product page: <u>miray-software.com/HDClone</u>	
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