

# HDClone 3.6

Copy - Backup - Rescue



HDClone is the universal tool for copying hard disks and other mass storage media. Major areas of use are backup, data rescue, migration of system installations and mass copying.

### NEW: HDClone on Windows XP and Windows Vista

HDClone can be started either as a self-booting application<sup>1)</sup> or directly under Windows<sup>2)</sup>. Both variants offer exactly the same graphical user interface. Under Windows, the usual drive letters can be used for copying. Furthermore, dynamic volumes, RAIDs, and media requiring special Windows drivers can be copied, too. The self-booting application even works in the absence of any operating system. It is used for rescuing damaged hard disks, for restoring data from a backup, and for cloning system volumes.

### NEW: AutoExpand – Automatic expanding for NTFS and FAT-32

HDClone can expand NTFS and FAT-32 partitions automatically during copying. When migrating to a larger hard disk, the additional disk space will then be available immediately. In case of a medium containing more than one partition, the last one will be expanded automatically. Other partitions can be expanded as well using partition copy mode.

### Hardware Requirements<sup>3)</sup>

- PC 586 or higher, 90 MHz, 64 MB RAM, VGA
- Keyboard, mouse (optional): Standard, PS/2 or USB (HID)
- bootable floppy disk or CD/DVD drive or USB medium

### Supported Media

- IDE-, ATA-, SATA- and eSATA hard disks (up to 2000 GB)
- CompactFlash via IDE<sup>4)</sup>
- SCSI hard disks
- USB hard disks (internal & external), USB keys<sup>5)</sup>
- SD/MMC<sup>6)</sup>, CompactFlash<sup>6)</sup>, MicroDrive<sup>6)</sup>, xD<sup>6)</sup>, Memory Stick<sup>6)</sup>
- Firewire/IEEE1394 hard disks (internal & external)
- Dynamic Volumes, SAS, RAID and other<sup>7)</sup>

### Supported Controllers<sup>8)</sup>

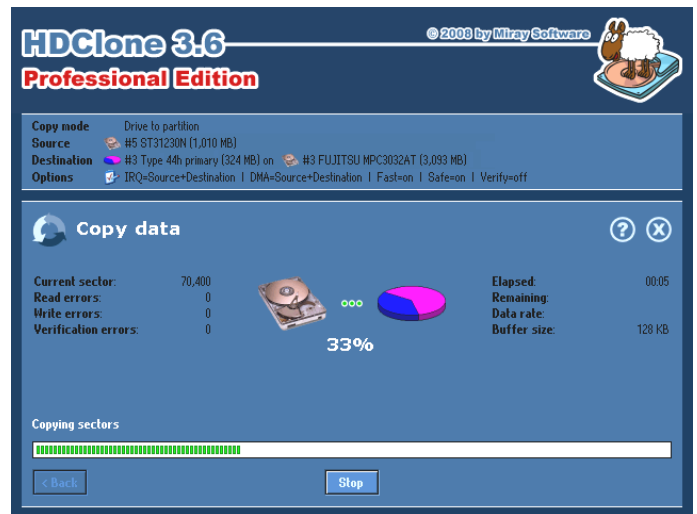
- PCI IDE controller / Busmaster IDE controller
- SCSI host adapters<sup>9)</sup>
- SATA Controllers with IDE interface, SATA-II controllers with AHCI
- USB 1.1/2.0 controllers with UHCI/OHCI/EHCI
- Firewire/IEEE1394 controllers with OHCI

### Applications from Private to Professional use

HDClone offers a cost-efficient solution for every purpose:

- Free Edition (private use only):** Simple and free-of-charge solution for 1:1-copies, especially for one-time system migration.
- Basic Edition (private use only):** For occasional operation on private computers for backup and system migration.
- Standard Edition:** For regular application in home and small-office areas, as backup, migration, and data rescue solution.
- Professional Edition:** Universal professional copying solution for migrating systems, mass installations, backup, and data rescue at high speed, with a wide range of supported devices and special options.
- Enterprise Edition:** Professional solution for mass copying, e.g. for comprehensive mass installations. Up to 16 simultaneous copies with up to 1 GB/sec (60 GB/min) and on all supported device types.

A feature overview is to be found at [www.hdclone.de](http://www.hdclone.de). The Free Edition contains a **compatibility and speed test** and is available as free download at <http://www.miray.de/download/sat.hdclone.html>.



### SmartCopy Mode

This mode creates logical 1:1 copies for NTFS and FAT partitions. Duplication takes only a fraction of the time a physical 1:1 copy needs. The ideal mode for fast backups and for migrating disks/partitions quickly.

### Fault Tolerance

HDClone uses different strategies to rescue defective sectors. Moreover, defective sectors will not obstruct the copying process.

### SafeRescue Mode

This mode is especially suitable for rescuing data. In particular, physical defects will spread over the whole medium while the drive is used further. SafeRescue mode reads the data by stressing the hard disk as little as possible. The copy of the defective hard disk then can be used to try different recovery methods without putting the original data at risk.

### Areas of Use

- migrating or duplicating entire system installations
- data backup / data rescue
- mass installation of computer systems (rollout, system builder)
- copy/backup/rescue 'exotic' file systems
- proprietary hard disk formats
- recovery of defective systems
- copying between SCSI, IDE, USB, Firewire, SATA, SAS, and RAID
- forensics, rescuing and securing of evidence

Edition Overview	Free	Basic	Standard	Professional	Enterprise
USB support	●	●	●	●	●
SCSI support	○	○	○	●	●
Firewire / IEEE1394	○	○	○	●	●
max. copy rate MB/s	5	15	30	90+	1000+
<b>NEW: AutoExpand</b>	●	●	●	●	●
SafeRescue mode	○	●	●	●	●
Verification mode	○	○	●	●	●
SmartCopy mode	○	○	●	●	●
FastCopy mode	○	○	○	●	●
Sector area copy	○	○	○	●	●
MultiCopy (4x, 8x, 16x)	○	○	○	○	●
private use	●	●	●	●	●
companies/institutes	○	○	●	●	●
technician license	○	○	○	●	●

1) SP = self-booting program 2) WP = Windows program 3) WP: the hardware requirements of Windows apply 4) media with TrueIDE support 5) using the USB-Mass-Storage-Class protocol 6) using a card reader (USB/Firewire) 7) WP only 8) WP: all controllers managed by a Windows driver 9) SP: Adaptec SCSI adapters only, see <http://www.miray.de/products/scsicompat.html>