

# *Corporate and Product Overview*

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## **1 Corporate Information**

X-Ways Software Technology AG  
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Company homepage: <http://www.x-ways.net/corporate/>  
Product homepage: <http://www.x-ways.net>  
Support forum: <http://www.winhex.net>  
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### **Legal Issues, People**

X-Ways Software Technology AG is a stock corporation incorporated under the laws of the Federal Republic of Germany. DUNS number: 34-471-4881. NCAGE code : DJ465. Enrolled in CCR U.S. government contractor database. X-Ways is registered in the city of Bünde under No. HRB 1777. A branch office was opened in Freiburg, near the French and Swiss border. Stefan Fleischmann serves as CEO and your main contact person. He received the equivalent of a Master's degree in Information Systems from the University of Münster. Supervisory board: Dr. Marlies Horstmeyer (chairwoman of the board), Marcel Gogolin (vice chairman), and Renate Fleischmann.

### **Line of Business**

X-Ways AG specializes in developing and marketing software technology for [computer forensics](#), data recovery, low-level data processing, and IT security, all on the MS Windows platform. Our software products deal with binary files, hard disk sectors, CD-ROM, DVD, and various other media, main memory (RAM), and PCM-encoded digital audio. Plus X-Ways offers computer forensics training as of 2004.

### **Our Customers**

The majority of our customers reside in the USA (42%), followed by Germany (24%), UK (7%), France (6%), Switzerland (3%), and Canada (3%). Excerpt from our customer list (referenced by name with permission): law enforcement and government agencies (e.g. the German national

customs investigation service, the Australian Department of Defence), military units in various NATO countries, national institutes (e.g. the Oak Ridge National Laboratory in Tennessee, USA), the Technical University of Vienna, the Technical University of Munich (Institute of Computer Science), Microsoft Corp., Hewlett Packard, Toshiba Europe, Siemens AG, Siemens Business Services, Siemens VDO AG, Infineon Technologies Flash GmbH & Co. KG, Ontrack Data International Inc., KPMG Forensic, National Semiconductor, Lockheed Martin, BAE Systems, Ericsson, TDK Corporation, Seoul Mobile Telecom, Visa International, German Aerospace Center, and many other companies and scientific institutes.

### **About Prices, Ordering, and Payment**

Prices mentioned in this document are subject to change. Corporations and public administration may place orders on open account and pay by wire transfer or check within 30 days net. Reseller and volume discount is available for large quantities on request. Unless agreed on otherwise, the software product is provided electronically by means of download/and or e-mail.

## **2 Product Information**

### **2.1 WinHex**

<http://www.x-ways.net/winhex/>

[Download evaluation version](#)

#### **Main Features**

Hexadecimal editor for files, disks & RAM. Powerful system utility. Advanced data recovery, computer forensics, and IT security tool. Features include:

- Disk editor for hard disks, floppy disks, CD-ROM & DVD, ZIP, Smart Media, Compact Flash memory cards, and more.
- Directory browser and special support for FAT12, FAT16, FAT32, and NTFS.
- RAM editor, providing access to other processes' virtual memory
- Data interpreter, knowing 20 data types
- Editing data structures (e.g. partition tables, boot sectors) using templates
- Concatenating and splitting files, unifying and dividing odd and even bytes/words
- Analyzing and comparing files
- Particularly flexible search and replace functions
- Drive cloning. Drive imaging. Sophisticated undo and backup mechanism.
- Scripting. Application programming interface.
- Various data recovery mechanisms.
- 128-bit encryption. Hashing: checksums, CRC16, CRC32, MD5, SHA-1, SHA-256, PSCHF.
- Erase (wipe, shred) confidential files or entire hard drives securely.

- Import of all clipboard formats, incl. ASCII hex values.
- Conversion formats: Binary, Hex ASCII, Intel Hex, and Motorola S.
- Character sets: ANSI ASCII, IBM ASCII, EBCDIC, (Unicode).
- Instant window switching. Printing. Random-number generator.
- Supports files and disks of virtually any size (> 2 GB).
- Very fast. Easy to use. Extensive online help.
- Available in English, German, French, Spanish, Portuguese, and Italian.

Further reading: [WinHex manual](#) and [WinHex White Paper](#)

## Computer Forensics and IT Security Features

Gather Free Space, Gather Slack Space, Gather Inter-Partition Space, Gather Text, Simultaneous Search, Drive Contents Table, Media Details Report, Interpret Image File As Disk, and Trusted Download.

**Simultaneous Search:** A parallel search facility, that lets you specify a virtually unlimited list of search terms, one per line. You may specify people’s names, addresses, goods descriptions, etc. The search terms are searched simultaneously, and their occurrences can be archived either in the Position Manager, or in a tab-delimited text file, similar to the disk catalog, which can be further processed in MS Excel or any database. WinHex will save the offset of each occurrence, the search term, the name of the file or disk searched, and in the case of a logical drive the cluster allocation as well! (i.e. the name and path of the file that is stored at that particular offset, if any). This will narrow down the examination to a list of files upon which to focus.

**Drive Contents Table:** Creates a table of existing and deleted files and directories, with user-configurable information such as attributes, all available date & time stamps, size, number of first cluster, hash codes, NTFS alternate data streams, etc. Extremely useful to systematically examine the contents of a disk. Allows to limit the search for files of a certain type using a filename mask (e.g. \*.jpg). The resulting table can be imported and further processed by databases or MS Excel. Sorting by date & time stamps will result in a good overview of what a disk has been used for at a certain time. E.g. the attributes “encrypted” and “deleted” might quickly reveal what files may turn out to be the most important ones in a forensic analysis.

## License Types & Prices

Only specialist licenses allow to use the Specialist Tools menu, which is useful in particular for computer forensics and IT security specialists. Specialist licenses include X-Ways Replica (see below). One base license is required, and additional licenses for each additional machine where the full version is to be installed on or used from. [Ordering information](#)

	<b>Base License</b>	<b>Each Additional License</b>
<b>Professional</b>	EUR 75.90 / USD 93	EUR 45.90 / USD 56
<b>Specialist</b>	EUR 124.90 / USD 153	EUR 72.90 / USD 89

## 2.2 Evidor

<http://www.x-ways.net/evidor/>

Software for corporate law and IT security departments, law enforcement agencies, licensed investigators, lawyers, and law firms. Evaluation version available to these target groups on request only. Languages: English and German. Evidor comes with the following additional toolset: Davory, X-Ways Trace, and X-Ways Replica.

Evidor retrieves the context of keyword occurrences on a disk, not only by examining all files (the entire allocated space, even Windows swap/paging and hibernate files), but also currently unallocated space and so-called slack space. That means it will even find data from files that have been deleted, if physically still existing.

### **Electronic Evidence Aquisition and Discovery**

Evidor is the easiest and most convenient way for any investigator to find and gather digital evidence on computer media. Evidor also comes most handy in civil (pre-)litigation if one party wants to examine (inspect) the computers of the other party. Evidor can be used on site for electronic discovery, will not disclose irrelevant proprietary or confidential information and does not impose an undue burden on the responding party in terms of personnel, time and money. Evidor serves as an automated forensic examiner, saving you the cost of many hours of hard manual expert work. Evidor produces reliable, replicable, neutral, and simple results, just as needed before court. Powerful and fast.

### **IT Security**

Evidor is also an excellent tool for proving the presence or absence of confidential data on computer media, either to detect a security leak or confirm a lack thereof. With Evidor you often finds remnants (or even intact copies) of classified data that should have been encrypted, securely erased, or should not have existed on a media in the first place.

### **How To Use and What It Does**

Simply select the disk to examine and provide a list of keywords (such as people's names, e-mail addresses, name of traded goods, etc.). Evidor will then retrieve the context of all occurrences of the keywords on the disk. When viewing the output file, you will likely find excerpts from documents that are closely related to the keywords, e.g. purchase orders, e-mail messages, address books, time tables, etc.

Evidor can either produce HTML documents (recommended) or plain text files. HTML documents can be easily imported and further processed in MS Excel. In MS Excel you can sort the search term occurrences by search term and occurrence location, you can cut irrelevant results, etc. Plain text files can be viewed in any text editor, MS Word, etc. Matches are separated in the output file by line breaks and a line with six asterisks and the corresponding keyword.

## Price

EUR 450 / USD 495 per license.

[Ordering information](#)

## 2.3 X-Ways Trace

<http://www.x-ways.net/trace/>

[Download evaluation version](#)

### Browser Log Files and Windows Recycle Bin Deciphered

A computer forensics tool that allows to track and examine the web browsing activity and deletion of files through the Windows recycle bin that took place on a certain computer.

Deciphers Internet Explorer's ever-growing internal history/cache file *index.dat*. Displays complete URLs, date and time of the last visit, user names, file sizes, filename extensions, and more. Allows to sort by any criterion. Reads from a file you specify, or searches complete folders and subfolders, or even entire hard disks in all files, free space, and slack space, for traces of someone having surfed the Internet. Occasionally, accesses to local files are logged, too. You may search for specific domain, file, and user names.

Also deciphers the hidden Windows recycle bin file info2 located in every Recycled/Recycler folder. Displays the original path and filename, date and time of deletion, file size, and more, sometimes even if the recycle bin has been emptied.

All the details compiled by X-Ways Trace can be exported to MS Excel. X-Ways Trace is part of the Evidor toolset, but also available separately. English, German, and French.

## Price

EUR 59.90 / USD 69 per license.

[Ordering information](#)

## 2.4 Davory

<http://www.x-ways.net/davory/>

[Download evaluation version](#)

### Easy-to-use Data Recovery Tool

Davory undeletes files and recovers files from logically damaged or formatted drives. Incorporates data recovery technology introduced with WinHex and concentrates on ease of use. Offers two separate, fully automated data recovery mechanisms to maximize your chances of success. One mechanism works with files of any type, the other one recovers JPEG (JPG), PNG,

GIF, BMP, MS Office (DOC, XLS), PostScript (EPS), Acrobat (PDF), Quicken (QDF), ZIP, RAR, RIFF (WAV, AVI), and MPEG (MPG). Specifically supports FAT12, FAT16, FAT32, and NTFS. Powerful, yet inexpensive.

As Davory works not only on hard drives, floppy disks, CDs, and DVDs, but also on CompactFlash cards, SmartMedia cards, memory sticks etc., it may save your day in particular if you are the owner of a digital camera. Davory can also be put to good use during computer forensic examinations, as you may extract files of certain types or files matching certain filename patterns (like Invoice\*.doc) conveniently and quickly with only a few mouse clicks. Available in English, German, and French. The evaluation version recovers files up to 200 KB.

Davory can be run directly from a floppy disk or CD. It must not be installed on the same drive that contained the files you lost, as this might overwrite them. Such a drive must not be used any more principally, except for pure read operations. Writing to that drive (or just booting Windows from it) considerably diminishes chances of recovery.

Davory does not recover the files it finds in place. It saves them to a different drive. That way the drive where the loss of data occurred will not be written to. It will not be altered at all, which is crucial for an uncompromised evidentiary procedure and guarantees that the data loss situation will not become even worse.

Part of the Evidor toolset, but also available separately. English, German, and French.

### **Price**

EUR 49.90 / USD 59.90 per professional license.

[Ordering information](#)

## **2.5 X-Ways Security**

<http://www.x-ways.net/security/>

[Download evaluation version](#)

### **Permanent Erasure**

The shredder for the digital age. To protect your organization's confidential data or your personal privacy, trust on X-Ways Security as a hard drive cleansing solution. To maximize security, X-Ways Security offers up to 9 fully configurable overwrite passes and the U.S. Department of Defense (DoD) standard for hard drive sanitization as specified in the 5220.22-M operating manual.

- Delete selected confidential files securely, such that they are not recoverable.
- Wipe free drive space, to get rid of sensitive data from deleted files, esp. temporary files.
- Clear slack space and clean formerly used NTFS file records, which usually contain traces of former files as well.

- Erase logical drives or entire physical disks completely and irreversibly, e.g. to produce forensically clean target media or to sanitize media before re-use in a different environment.
- Trusted download: copy files from classified media without slack space overhang.

Incorporates the shredding technology introduced with and known from WinHex and concentrates on ease of use. Available in English, German, and French.

### **Price**

EUR 29.90 / USD 34.90 per license.

[Ordering information](#)

## **2.6 X-Ways Replica**      <http://www.x-ways.net/replica.html>

X-Ways Replica is currently not a separately available product. It is included in Evidor and available for owners of a WinHex specialist license on request at no cost.

### **MS-DOS Disk Cloning and Disk Imaging Tool**

A forensic examination usually should not be performed on the original subject drive. X-Ways Replica is an easy-to-use tool that is able to create a clone or image of an entire hard disk or single hard disk partitions (with any file system). The clones and images are forensically sound, exact bit-by-bit copies, including all unused space and slack space. This enables you to perform the examination on the clone instead. A full log file is optionally written for documentation purposes.

Most Windows environments would access the original drive without asking, once newly attached, thereby e.g. altering the last access dates of some files on the original drive. This can be avoided using X-Ways Replica, as it is DOS-based (runs in plain DOS mode), like on a DOS floppy boot disk. An MS-DOS startup disk can be created by formatting a floppy disk with the Windows Explorer.