User's Guide



RecoveryExpert



www.acronis.com

Copyright © SWsoft, 2000-2002. All rights reserved.

Linux is a registered trademark of Linus Torvalds.

OS/2 is a registered trademarks of IBM Corporation.

Windows and MS-DOS are registered trademarks of Microsoft Corporation.

All other trademarks and copyrights referred to are the property of their respective owners.

Distribution of substantively modified versions of this document is prohibited without the explicit permission of the copyright holder.

Distribution of the work or derivative work in any standard (paper) book form for commercial purposes is prohibited unless prior permission is obtained from the copyright holder.

DOCUMENTATION IS PROVIDED «AS IS» AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Table of Contents

INTRODUC	TION	4
CHAPTER	1. INSTALLING AND STARTING WORK WITH ACRONIS RECOVERYEXPERT	6
1.1	ACRONIS RECOVERYEXPERT SYSTEM PACKAGE	6
1.2	SYSTEM REQUIREMENTS	6
1.3	INSTALLATION	6
1.4	REPAIRING/UPGRADING ACRONIS RECOVERYEXPERT	8
1.5	REMOVING THE SOFTWARE	8
1.6	USER INTERFACE	
1.7	RUNNING ACRONIS RECOVERY EXPERT SOFTWARE	9
CHAPTER	2. WORKING WITH ACRONIS RECOVERYEXPERT	10
2.1	AUTOMATIC RECOVERY	11
2.2	MANUAL RECOVERY	

Introduction

About Acronis RecoveryExpert

Acronis RecoveryExpert is easy-to-use, expert-level software for recovering hard disk partitions. Whether you have deleted a partition by mistake, or you have had a hardware or software failure – Acronis RecoveryExpert will rescue you, your partitions, and your data!

Hard disk partitioning is performed with a partition manager, such as the Acronis OS Selector or Acronis PartitionExpert. This software enables you to create hard disk partitions of different types, split or merge existing partitions, or delete them. It is usually recommend that you back-up important data before changing hard disk configurations, adding partitions, or installing operating systems.

A disk partition can also be deleted by a PC or operating system failure. This can lead to partition destruction making its data – files or folders, stored in hard disk sectors – unavailable to a user. This makes Acronis RecoveryExpert a very essential utility for users with one or more hard disk partitions.

By creating a simple bootable diskette with Acronis RecoveryExpert you are armed and ready for any incident! Whether your disk is damaged due to power supply interruption, a virus infection, or any software or hardware failure, Acronis RecoveryExpert is your ticket to a quick recovery.

Software Usage Conditions

The conditions of Acronis RecoveryExpert software usage are described in the «License agreement», included into the package. The supplied registration card is the confirmation of your legal purchase and usage of Acronis RecoveryExpert system. Each registration card has its own registration number.

From the angle of current legislation the «License agreement» is considered a contract between a user and a software manufacturer. The contract has the legal effect and its violation may entail a court examination.

Illegal use and distribution of software is prosecuted.

Technical Support

Users of legally purchased and registered copies of Acronis RecoveryExpert receive free technical support from the Acronis Company. In case you have problems with installation or using the system, which cannot be solved with this guide or readme, e-mail the technical support. You will need to send us the registration number of your Acronis RecoveryExpert copy. This number is written on a registration card, supplied with the package.

Support URL: <u>http://www.acronis.com/support/</u> E-mail: <u>support@acronis.com</u>

Chapter 1. Installing and Starting Work with Acronis RecoveryExpert

1.1 Acronis RecoveryExpert System Package

Acronis RecoveryExpert system package includes:

- An installation disc,
- This guide,
- License agreement,
- Registration card,
- Advertising materials.

1.2 System Requirements

To take a full advantage of Acronis RecoveryExpert one should have:

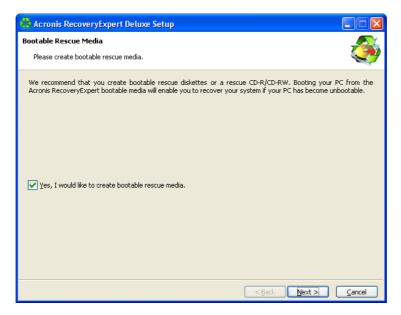
- a PC-compatible computer with a Pentium CPU or similar,
- 32 MB RAM,
- a floppy or a CD-RW drive,
- VGA monitor,
- a mouse (recommended).

1.3 Installation

To install the Acronis RecoveryExpert:

- 1. Insert the Acronis RecoveryExpert installation CD into CD-ROM drive and start the installation procedure.
- 2. Carefully follow the installation program instructions on the screen.

3. After making your installation choices and copying of Acronis RecoveryExpert files onto your hard disk, you will be offered to create a **bootable rescue diskette or CD-R/W** (you may omit this step if you have purchased the boxed product that contains a bootable CD). While RecoveryExpert works in Windows, you may need to recovery system partition when your PC fails to boot or recover a hard disk partition with Linux or other PC operating system.



After installation of Acronis RecoveryExpert is completed, you should restart your computer.

1.4 Repairing/Upgrading Acronis RecoveryExpert

In order to repair or upgrade your software, start the Acronis RecoveryExpert installation program again. It will determine that Acronis RecoveryExpert was already installed on your computer and will ask you if you want to restore (update) the program or completely remove it from disk.

1.5 Removing the Software

To remove the software select **Acronis** \rightarrow **RecoveryExpert** \rightarrow **Uninstall Acronis RecoveryExpert** from the Programs menu. You will see a dialog box asking if you really want to remove the software from your PC hard disk. Press Yes to confirm removal. Acronis RecoveryExpert will be completely removed.

1.6 User Interface

Acronis RecoveryExpert software works under the Windows operating system. It has a graphical user interface, controlled by mouse or Tab, Shift+Tab, Left, Right, Up, Down, Space, Enter and Escape keys, and represents an application of a **Wizard** type, widespread in this OS environment.

If you work with Windows, X Window, or OS/2 applications on a regular basis, you will have no problems understanding and using Acronis RecoveryExpert interface.

While working with a partition store and restore wizard, a user sees a sequence of Wizard **pages**, on each of which he (she) selects from several available actions, and thus sets switches to the desired state.

The switches can be set with the mouse or keyboard.

Each dialog box contains detailed text comments for the dialog's purpose and switches (control elements) as well as for each switch state.

- 8		27
	-	-
n	-	-
1	-	-

8

There is no \mathbb{Help} button on Wizard pages. It is unnecessary because on each page there is detailed information about the purpose of the page and its controls. Moreover, there is detailed information about what possibilities you get if you select any of controls in any possible state.

1.7 Running Acronis RecoveryExpert Software

Acronis RecoveryExpert software runs in different modes during disk/partition image creation or restoration, in case of a serious system malfunction or disk filing structure damage.

To create a disk/partition image under Windows, select **Start** \rightarrow **Programs** \rightarrow **Acronis** \rightarrow **RecoveryExpert** \rightarrow **Acronis RecoveryExpert**. You will immediately see a welcome window containing the partition (disk) image creation and restoration wizard.

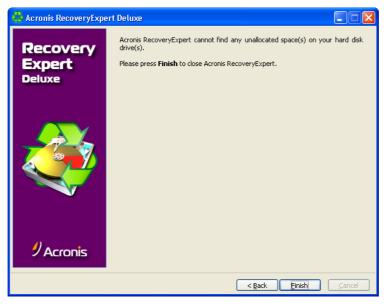
If your system is damaged and you are unable to boot the PC from its system partition, you should use the bootable diskette or CD-R/W that you previously created, selecting **Start** \rightarrow **Program** \rightarrow **Acronis** \rightarrow **RecoveryExpert** \rightarrow **Bootable Rescue Media Builder**.

Chapter 2. Working with Acronis RecoveryExpert

The Acronis RecoveryExpert starts with the welcome page. This lists all the capabilities of this software program.

Then Acronis RecoveryExpert begins reading the partition configuration of your hard disks.

After the process is finished you may see a warning that there are no unallocated spaces on your hard disks:



Hard disks do not have any unallocated spaces

Please note: the entire hard disk space can be partly partitioned and/or partly unallocated. If you delete a disk partition – whether intentionally or by mistake – its space becomes unallocated. You can create a new partition using unallocated space only.

Acronis RecoveryExpert checks to see if your hard disks contain unallocated spaces. If you have no unallocated spaces then it makes no sense to search for deleted partitions. If you have unallocated space, it **may** have contained one or more partitions. Acronis RecoveryExpert will search unallocated space thoroughly – either automatically or manually.

2.1 Automatic Recovery

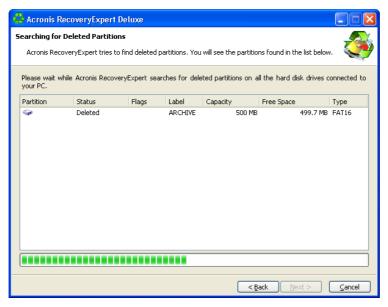
You can recover deleted partitions automatically or manually. To do so set the switch to the necessary position in the **Recovery mode** window.

Let us describe automatic partition recovery first. Set the switch to **Automatic**.

👶 Acronis RecoveryExpert Deluxe	
Recovery Mode You can choose between fully automated and manual recovery modes.	٩
Please select the recovery mode you wish to work under. You can find the description of each in the select	ed to your
<back next=""></back>	Cancel

Selecting Automatic recovery mode

In the next **Searching for Deleted Partitions** window, Acronis RecoveryExpert searches for all deleted partitions. The search progress is shown in the lower part of the window.



Deleted partitions search progress

E

The information about hard disk partitions is stored in a special disk area – the 1st sector of 0th cylinder, 0th head – called the Partition Table. This sector is called a boot-sector or the Master Boot Record, MBR. Acronis RecoveryExpert not only checks the Partition Table for deleted partitions, but also scans the entire disk surface. Therefore the recovery process might take some time to complete.

Please note: Acronis RecoveryExpert may find deleted partition(s) almost at once (in a few seconds). Partition(s) found are then added to the list in the **Searching for Deleted Partitions** window. The search will however continue until the entire disk is scanned for partitions.

In the automatic recovery mode the search must be finished before you can proceed to the next recovery steps. The $\boxed{\text{Next}}$ button becomes enabled only after the progress bar is full in the **Searching for Deleted Partitions** window. The manual mode however enables you to work at once (see 2.2 «Manual Recovery»).

Partitions found during the search are shown in the list with their main parameters:

- number,
- status,
- label,
- capacity,
- partition free space,
- file system.



Please note: Found partitions are automatically added to the list during the search.

ę	👶 Acronis RecoveryExpert Deluxe								
5	Searching for Deleted Partitions								
	Acronis RecoveryExpert tries to find deleted partitions. You will see the partitions found in the list below.								
	Please wait while your PC.	Acronis Recovery	Expert searc	thes for dele	ted partitions on a	I the hard disk drives c	onnected to		
	Partition	Status	Flags	Label	Capacity	Free Space	Туре		
	9	Deleted		ARCHIVE	500 MB	499.7 MB	FAT16		
	Search is completed. Please press Next to proceed with undeleting.								
					< <u>B</u> a	ack Next >	Cancel		

A deleted partition found

Note that you do not have to select partitions for recover in the automatic mode. Acronis RecoveryExpert will recover **all** partitions found.

The **Recovered Partitions** window shows a partition to recover as a part of hard disk partition structure, marking it with an icon in the upper right corner of its rectangle.

👶 Acronis RecoveryExpert Deluxe									
Recovered Partitions You can see the structure of your hard disk drive(s) after recovering in the hard disk layout below. The									
recovered partitions are checked off.									
WIN98 (C:) 27.96 GB 3.907 GB S6 GB FAT32	DATA (E:) 5.86 GB FAT32 5.86 GB FAT32	ARCHIVE (H:) 32 5.86 GB FAT32 0							
SYSTEM (G:) 1.59 GB 628 MB FAT32	DATA (J:) 500 MB FAT16	ARCHIVE (K:) 500 MB FAT16							
Please press Next button to continue.									
	< <u>B</u> ack	K Next > Cancel							

A hard disk partition to be recovered

A partition has been found by Acronis RecoveryExpert and is shown in the disk structure, but has not yet been recovered.

The next window contains a scenario for partition recovery, generated by Acronis RecoveryExpert.

👶 Acronis RecoveryExper	t Deluxe 📃 🗖 🗙
Recovery	Acronis RecoveryExpert is ready to proceed with recovery. Here is a list of complete operations to be processed.
Expert Deluxe	Operation 1 of 1 Recovering partition Hard disk: 2 Drive letter: K: File system: FAT16 Volume label: ARCHIVE Size: 500 MB Cluster size: 8 KB
9 Acronis	Please press Proceed button to start.
	<pre></pre>

Partition recovery scenario

This is the last page of the Wizard, next the scenario will be executed. So far the program has not performed any actions and has only created the

recovery scenario. Please notice that the $\ensuremath{\underline{\tt Next}}$ button of the Wizard is now called $\ensuremath{\underline{\tt Proceed}}$.

After pressing $\fbox{Proceed}$ Acronis RecoveryExpert takes care of everything automatically.

2.2 Manual Recovery

Set the switch to **Manual** in the **Recovery mode** window to select the manual recovery mode.

Acronis RecoveryExpert Deluxe	
Recovery Mode You can choose between fully automated and manual recovery modes.	٩
Please select the recovery mode you wish to work under. You can find the description of each in the sele Automatic Manual	ction below.
Description The manual mode gives you full control over the recovery process. You will be asked to choose the where you want to search for partitions. You can also choose a search method.	free space
<back next=""></back>	Cancel

Selecting manual recovery mode

The **Free Space Selection** window of Acronis RecoveryExpert shows the partition structure and unallocated disk space. As explained above, existed but deleted partitions may be found on unallocated space only.

After deleting a partition, its space becomes unallocated. Thus in the manual recovery mode you must mark the unallocated area that might contain a deleted partition.

This window enables you to simultaneously select multiple unallocated spaces for recovery.

👶 Acronis RecoveryExpert Deluxe								
Free Space Selection Please choose free space(s) to search for the deleted partitions.								
free spaces, on all the hard disk drives, if you a	You must choose one or more free spaces where you think the deleted partitions are located. Please choose all the free spaces, on all the hard disk drives, if you are not sure about the location of the deleted partitions. To select a free space place the mouse pointer over it and then click the left mouse button.							
WIN98 (C:) WIN2P (D:) 27.96 GB 3.907 GB 5.86 GB FAT32	DATA (E:) 5.86 GB FAT32	WIN2K (F:) 5.86 GB FAT32	ARCHIVE (H:) 5.86 GB FAT32					
SYSTEM (G:) 1.59 GB FAT32	DATA (J:) 500 MB FAT16		allocated J.1 MB					
Firmary Logic	cal	🗖 Unallo	cated					
		< <u>B</u> ack	Next > Cancel					

Unallocated space, selected for partition recovery

The next **Searching Method** window enables you to select one of two deleted partition searching methods:

- Fast,
- Complete.

Their difference is as follows. Using the **Fast** search method, Acronis RecoveryExpert checks the beginning of each side of every cylinder of a hard disk. Using the **Complete** method, Acronis RecoveryExpert checks every hard disk sector.

From a user's point of view, the **Fast** method takes less time, while the **Complete** method is slower, but more thorough.



Note that the Fast method should find all deleted partitions in the most cases!

👶 Acronis RecoveryExpert Deluxe
Searching Method Please choose a searching method.
You can choose either Fast or Complete methods. The first method is much faster but may miss some deleted partitions. We do however recommend that you first use the Fast search method.
<back next=""> Cancel</back>

Searching method selection

The Searching for Deleted Partitions window shows you parameters of a partition that had existed on the selected unallocated space before it was deleted (if it has actually existed and been deleted).

👶 Acronis RecoveryExpert Deluxe								
Searching for De	Searching for Deleted Partitions							
Acronis Recove	ryExpert tries to fin	nd deleted pa	rtitions. You	will see the partition	ns found in the list below	. 🥪		
Please select the partitions you want to recover from the list below. The selected partitions will be marked Undeleted. Note that in case you have intersected partitions only one of them can be recovered. The partitions which intersect the selected partition will be marked Invalid.								
Partition	Status	Flags	Label	Capacity	Free Space	Туре		
\$	Deleted		ARCHIVE	500 MB	499.7 MB	PAILO		
				<u>< B</u> a	ick Next >	Cancel		

A deleted hard disk partition found by Acronis RecoveryExpert

E

Unlike the automatic recovery mode, you do not have to wait until the search for deleted hard disk partitions is finished. As a found partition or multiple partitions are added to the list, you can select them for immediate recovery. Selecting a partition enables the Mext button. Clicking it, you stop the search and proceed to recovery.

The manual recovery mode allows you to select all found partitions for recovery. For example, if one of your partitions was deleted intentionally and another by mistake, the manual mode enables you to select and recover only the partition you deleted by mistake. Partitions are selected for recovery by clicking them.

Click the partition rectangle to select the deleted partition and continue recovery.

ć	👶 Acronis RecoveryExpert Deluxe 📃 🗖 🔀								
5	Searching for Deleted Partitions Acronis RecoveryExpert tries to find deleted partitions. You will see the partitions found in the list below.								
	Please select the partitions you want to recover from the list below. The selected partitions will be marked Undeleted. Note that in case you have intersected partitions only one of them can be recovered. The partitions which intersect the selected partition will be marked Invalid.								
	Partition	Status	Flags	Label	Capacity	Free Space	Туре		
	🤝 K:	Undeleted		ARCHIVE	500 MB	499.3	7 MB FAT16		
	Search is completed. Please press Next to proceed with undeleting,								
					< <u>B</u>	ack Next >			

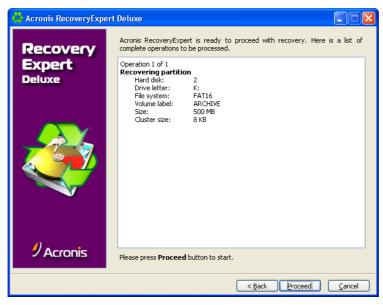
A deleted partition selected for recovery

The following **Recovered Partitions** window shows the location of a partition to be recovered in the disk partition structure.

¢,	👶 Acronis RecoveryExpert Deluxe 📃 🗖 🔀								
R	Recovered Partitions You can see the structure of your hard disk drive(s) after recovering in the hard disk layout below. The recovered partitions are checked off.								
) 1 27.96 GB	WIN98 (C:) 3.907 GB	WINXP (D:) 5.86 GB FAT32	DATA (E:) 5.86 GB FAT32	WIN2K (F:) 5.86 GB FAT32	ARCHIVE (H:) 5.86 GB FAT32	I: 0		
) 2 1.59 GB	SYSTEM (G:) 628 MB FAT3	2	DATA (J:) 500 MB FAT16		ARCHIVE (K:) 500 MB FAT16	~		
	Please press Next button to continue.								
					< <u>B</u> ack	Next >	Cancel		

Location of a partition to be recovered

The next Acronis RecoveryExpert window contains a partition recovery scenario.



Partition recovery scenario

This is the last page of the Wizard, next the scenario will be executed. So far the program has not performed any actions and has only created the recovery scenario. Please notice that the \underline{Next} button of the Wizard is now called $\underline{Proceed}$.

After pressing Proceed Acronis RecoveryExpert takes care of everything automatically.