User's Guide

Acronis
True Image Server 8.0
for Windows

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Table of Contents

Chapter 1. Introduction

1.1   What is Acronis True Image Server 8.0 for Windows

Acronis True Image Server 8.0 for Windows creates the exact disk image of your *live* server for complete backup providing the comprehensive and cost effective server protection solution.

The disk image file includes all the server disk data including system, programs, databases, configurations, preferences, updates, security patches, and the like. After a fatal failure, you can restore the complete server drive contents to a known working state or simply replace lost or corrupted files and folders.

Based on the exclusive Acronis Drive Snapshot technology, Acronis True Image Server 8.0 for Windows creates *live* server disk image without shutting down a server and interrupting server operations.

Fastest recovery

Acronis True Image Server 8.0 for Windows dramatically reduces your server downtime. Unlike traditional file-by-file backup solutions, Acronis True Image Server 8.0 for Windows disk imaging approach provides you with the fastest, bare-metal server recovery without time-consuming reinstallations, configurations and alike.

Rapid ROI

Is server downtime costing you thousands dollars an hour? Acronis True Image Server 8.0 for Windows dramatically reduces IT costs by providing an easy, fast, and reliable way to return your server to its original state in minutes or to restore lost or damaged files and folders.

Disk cloning and new disk deployment

Acronis True Image Server 8.0 for Windows can be used to clone an image onto multiple servers. For example, a company purchased several servers and needs the similar environment on each of them. Traditionally, IT manager should install operating system and programs on each of them. Acronis True Image Server 8.0 for Windows, however, simplifies the process and saves the IT manager time, creating a disk image of the first system deployed. That image can then be duplicated onto multiple servers.

If you need to upgrade the server hard disk drive, Acronis True Image Server 8.0 for Windows simplifies the task to few mouse clicks creating the exact copy of your old disk to a new one and adjusting partitions size to fit a new hard disk.

1.2   What's new in Acronis True Image Server 8.0 for Windows

Acronis True Image Server 8.0 for Windows has the following new features:

- Adjustment of a priority for image creation process;
- Excluding paging/hibernate files from images thereby decreasing the image file size;
- Partition/disk image integrity check before restoration;
- Email or WinPopup notification when backup is finished;
- Logs viewing;
- Two boot disk variants: complete and safe;
- Improved interface and performance;
- Console mode;
- JFS and XFS file systems support (except partition resizing feature).

1.3   What is a disk image

A disk (partition) image is a file that contains a copy of all information stored on a disk. The image stores all the server data, including operating system, databases, all programs, data and settings.

By backing up your information regularly, you will completely protect yourself from data losses in case of system failures and even server malfunctions.

To restore your system after a failure, you simply use a previously created image.

By default, Acronis True Image Server 8.0 for Windows image files have ".tib" extension and can contain images of several partitions or disks.

Images of large partitions or several disks could be sizeable. In that case, an image can be split into several files that together make the original image. A single image can also be split for burning to removable media.

Acronis True Image Server 8.0 for Windows can create **incremental images**.

An incremental image contains only data from those hard disk sectors that changed after the previous disk image (full or incremental) was created. Thus such an image is significantly smaller and takes less time to create than a full image. However, as it does not contain all the necessary information about disks (partitions), it requires all the previous incremental images and the initial complete image for restoration.

You can create incremental images frequently, as they need less space than complete ones and take less time to create.

An incremental image created after a disk is defragmented might be considerably larger than usual. This is because the defragmentation program changes file locations on disk and incremental images reflect these changes.

An incremental image set enables you to restore a disk to any of the states stored in these images. Having created a complete image once and then creating an incremental image each day of a month, you will get the same result as if you created complete images every day. But the cost in time and disk space will be as little as one tenth as much.

Acronis True Image Server 8.0 for Windows stores only those hard disk parts that contain data (for supported partition types). This reduces image size and speeds up image creation and restoration.

A partition image includes all files and folders independently of their attributes (including hidden and system files), boot record, FAT, and Root.

A disk image includes images of all disk partitions as well as the zero track with Master Boot Record (MBR).

1.4   Software usage terms and conditions

The conditions for Acronis True Image Server 8.0 for Windows software usage are described in the «License agreement» (page 3 of this guide). The unique registration number is the confirmation of your legal purchase and use of Acronis True Image Server 8.0 for Windows on your system.

Under current legislation, the «License Agreement» is considered a contract between you and Acronis Inc. The contract is a legal document and its violation may result in legal action.

Illegal use and/or distribution of this software will be prosecuted.

Chapter 2. Installation and running

2.1 System requirements

Acronis True Image Server 8.0 for Windows requires the following hardware:

- Pentium CPU or higher

- 128 MB RAM

- floppy disk drive or CD-RW drive for bootable media creating

- mouse (recommended)

2.2 Supported operating systems

- Windows Windows NT 4.0 Server SP6

- Windows 2000 Server

- Windows 2000 Advanced server

- Windows 2003 Server

2.3 Acronis True Image Server 8.0 for Windows installation

To install the Acronis True Image Server 8.0 for Windows:

1. Insert the installation CD into your drive and start the installation procedure.

2. Follow the instructions on the screen.

3. After making your installation choices and copying of Acronis True Image Server 8.0 for Windows files onto your hard disk, you will be prompted to create a **bootable diskette or CD-R/RW** (you can omit this step if you have purchased the boxed product that contains a bootable CD). While Acronis True Image Server 8.0 for Windows creates disk images in Windows, it might be necessary to run restoration procedure from a bootable disk. Therefore, it is strongly recommended that you create one. However, you can do that after the installation as well.

After installation of Acronis True Image Server 8.0 for Windows is completed, you should restart your server.

When installed, Acronis True Image Server 8.0 for Windows creates a new device in the Device Manager list (**Control Panel** → **System** → **Hardware** → **Device Manager** → **Acronis Devices** → **Acronis TrueImage Backup Archive Explorer**). Do not disable or uninstall this device, as it is necessary for connecting images as virtual disks (see Chapter 6 "Browsing and restoring particular files" of this manual).

You can also install Acronis True Image Server 8.0 for Windows unattendedly using command line or **Run** box in the **Start** menu. To do this:

▪ type in a command line or in **Run** box a command:

```
<setup file> /silent /serial = "AAAAA-BBBBB-CCCCC-DDDDD-EEEEE"
```

where *AAAAA-BBBBB-CCCCC-DDDDD-EEEEE* is a serial number of your personal copy of Acronis True Image Server 8.0 for Windows.

2.4   Running Acronis True Image Server 8.0 for Windows

In normal mode, you can run Acronis True Image Server 8.0 for Windows from Windows by selecting **Acronis** → **TrueImage** → **Acronis True Image Server 8.0 for Windows** from **Start** → **Programs**. This will bring the program window on the screen.

If your operating system does not load for some reason, you can run Acronis Startup Recovery Manager. However, this must be activated prior to use; see "Acronis Startup Recovery Manager" to learn more about this procedure. To run the program, press F11 during server bootup, when you see a message that tells you to press that key. Acronis True Image Server 8.0 for Windows will be run in the standalone mode, allowing you to restore previously created images or an image from the Acronis Secure Zone.

If your disk data is totally corrupted and you can not boot (or if you have not activated Acronis Startup Recovery Manager), you should use the bootable media supplied with the retail box version or created during the installation procedure. It will automatically load Acronis True Image Server 8.0 for Windows allowing you to recover the damaged partitions.

2.5   Removing the program

To remove Acronis True Image Server 8.0 for Windows from your server, select **Acronis** → **True Image** → **Uninstall Acronis True Image Server 8.0 for Windows** in the Programs menu. You will see a dialog to confirm the program removal. Click **Yes** to confirm and Acronis True Image Server 8.0 for Windows will be completely removed.

Chapter 3. General program information

3.1   Main program window

The main program window contains the menu, the toolbar, the sidebar and the main area. The main area contains operation icons, the sidebar features **Operations, Tools** and **Details** panels.
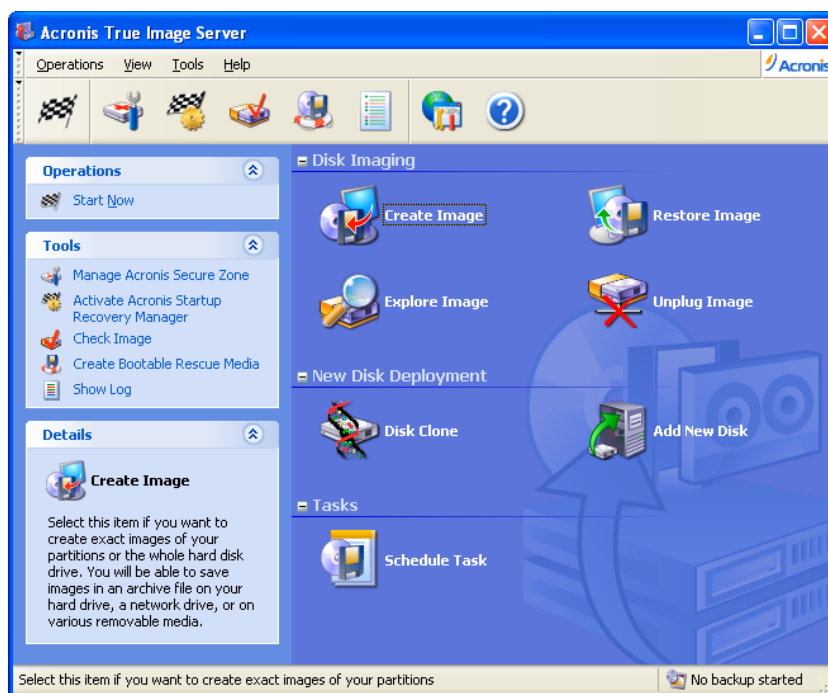
The main program window

Most of the operations are represented two or even three times in different window areas, providing several ways of their selection for more convenience.

Having selected an operation by clicking it, you can run it as follows: by double-clicking its icon, by selecting **Start now** in the **Operations** menu, by selecting the operation in the **Operations** window, or by clicking **Start now** on the toolbar.

The main window contains operation icons divided into three groups.

The **Disk Imaging** group contains disk image operations:

- **Create Image** – create a disk (partition) image.
- **Restore Image** – restore a disk (partition) from a previously created image.
- **Explore Image** – connect an image as a virtual drive.
- **Unplug Image** – disconnect the connected virtual drive.

The **New Disk Deployment** group includes operations required when a new disk drive is installed:

- **Disk Clone** – transfer the operating system, applications and data from the old disk to the new one.

- **Add New Disk** – add a disk for data storage, leaving the operating system and applications on the old one.

The **Tasks** group initially contains only one operation:

- **Schedule Task** – create a scheduled disk (partition) image creation task with specified time or periodicity.

After a scheduled task is created its icon is added to the group. The total number of group icons depends on the amount of scheduled operations.

Program menu

The program menu line contains the **Operations**, **View**, **Tools**, **and Help** items.

The **Operations** menu changes when either an operation icon, or scheduled task is selected. In the first case the menu contains only **Start Now** to execute the selected operation. For information on managing scheduled tasks, see Chapter 9.

- **Delete** – deletes selected operation. Appears only when a scheduled task is selected.

The **View** menu contains items for managing the program window look:

- **Toolbars** – contains commands that control toolbar icons.

- **Common Task Bar** – enables/disables common task panel in the left area.

- **Status Bar** – enables/disables the status bar.

- **Refresh** – refreshes the main program window.

The **Tools** menu contains the following items:

- **Manage Acronis Secure Zone** – creates a special hidden partition for storing disk (partition) images.

- **Activate Acronis Startup Recovery Manager** – activates the boot restoration manager.

- **Check Image** – runs disk (partition) integrity checking procedure.

- **Create Bootable Rescue Media** – runs the bootable media creation procedure.

- **Show Log** – opens a window with logs.

- **Options** – font and email/Winpopup notification settings.

The **Help** menu is used to invoke help and information about Acronis True Image Server 8.0 for Windows.

Status bar

In the bottom of the main window there is a status bar divided into two parts. The left part briefly describes the selected operation; the right one indicates image operations progress and results.

A double-click on the operation progress line opens the operation progress window. If you double-click on the operation results, you will see the logs window (see "Viewing logs").

Taskbar notification area icon

During image creation operations a special indicator icon appears in the notification area (right part of the taskbar with the clocks). If you hover the cursor over it, you will see a tooltip indicating operation progress. This icon doesn't depend on if the main program window is opened. It's present for background execution of scheduled tasks as well.

Disk and partition information

You can change disk schemes and data representation in all schemes you see in various wizards.

To the right are three icons: **Arrange Icons by**, **Choose Details** and **i (Display the properties of the selected item)**, the last duplicated in the context menu invoked by right-clicking objects.

To sort messages by a particular column, click its header (another click will switch order to the opposite) or **Arrange Icons by** button and select the column.

To select columns to view right-click the headers line or left-click the **Choose Details** button. Then flag the columns you want to display.

If you click the **i (Display the properties of the selected item)** button, you will see the selected partition or disk properties window.

This window contains two panels. The left one contains the properties tree, and the right describes the selected property in detail. The disk information includes its physical parameters (connection type, device type, size, etc.); partition information includes both physical (sectors, location, etc.), and logical (file system, free space, assigned letter, etc.) parameters.

You can change columns width by dragging their borders with mouse.

3.2 Acronis Secure Zone

Acronis Secure Zone is a special hidden partition for storing disk and partition images. Usual applications can't access it for image security purposes.

If you create an Acronis Secure Zone, it will be listed along with all partitions available for image creation and restoration.

The Acronis Secure Zone is primarily meant to be used with Acronis Startup Recovery Manager (see below). It is always available for image creation as long as it has space for it. If there's not enough space, older images will be deleted to provide enough space.

This means you can automatically create disk images easily on a schedule (see Chapter 9), and you won't be bothered by zone overflow issues.

The Acronis Secure Zone can still be filled completely when creating incremental images. This happens because the program can't delete the first (full) image, since it might be required for restoration. Thus, you should periodically check zone free space, when creating incremental images, to increase it, if necessary, or re-create the basic full image.

Acronis Secure Zone can be located on any local disk. It's created at the expense of the unallocated space, if it's available, or at the expense of partitions free space. A server can have only one Acronis Secure Zone. To create it on another disk, you must first delete the existing zone.

When you click **Manage Acronis Secure Zone** in the menu, the program searches for such zone on all local drives. If a zone is found, the wizard will offer you to delete or resize it. If such zone is absent, you'll be prompted to create it.

Before you create the Acronis Secure Zone, estimate its size. To do this, start image creation and select disks and partitions to image into the Zone. At the compression level stage you will see estimated image size. Multiply this by about 1.5 to compensate possible inaccuracy of estimation. If you plan to install additional applications or create incremental images, increase the zone size.

3.2.1   Creating Acronis Secure Zone

If there are several disks installed, select one on which to create Acronis Secure Zone.

Select partitions, from which space will be used to create Acronis Secure Zone.
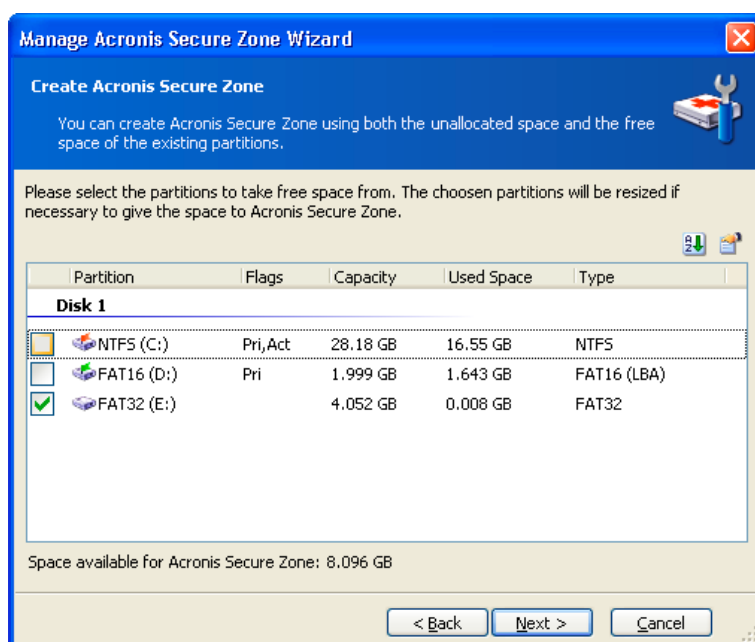
Select the partitions to give space for Acronis Secure Zone

In the next window, enter the size of the zone or drag the slider.

After this, you will be prompted to activate Acronis Recovery Manager, to be able to start Acronis True Image at boot time by pressing F11 key. Alternatively, you can activate this feature later from main program window.

After you click **Proceed,** Acronis True Image Server 8.0 for Windows will start creating the Acronis Secure Zone. Progress will be reflected in the special window. If necessary, you can stop zone creation by clicking **Cancel**. However, the script will be cancelled only after the current operation is finished.

Acronis Secure Zone creation might take several minutes or more. Please, wait until the whole procedure is finished.

3.2.2   Resizing Acronis Secure Zone

When prompted by the wizard, select **Manage Acronis Secure Zone**.

Select to increase or decrease the Acronis Secure Zone. You might need to increase it to provide more space for images. The opposite situation might arise if either partition lacks free space.

After this, select partitions, from which free space will be used to increase Acronis Secure Zone or that will receive free space after the zone is reduced.

In the next window, enter the new size of the zone or drag the slider.

Set the new size for Acronis Secure Zone.

Then you will see an Acronis Secure Zone resize script containing a list of briefly described operations to be performed on partitions (disks).

After you click **Proceed,** Acronis True Image Server 8.0 for Windows will start resizing the zone. Progress will be reflected in the special window. If necessary, you can stop zone creation by clicking **Cancel**. However, the script will be cancelled only after the current operation is finished.

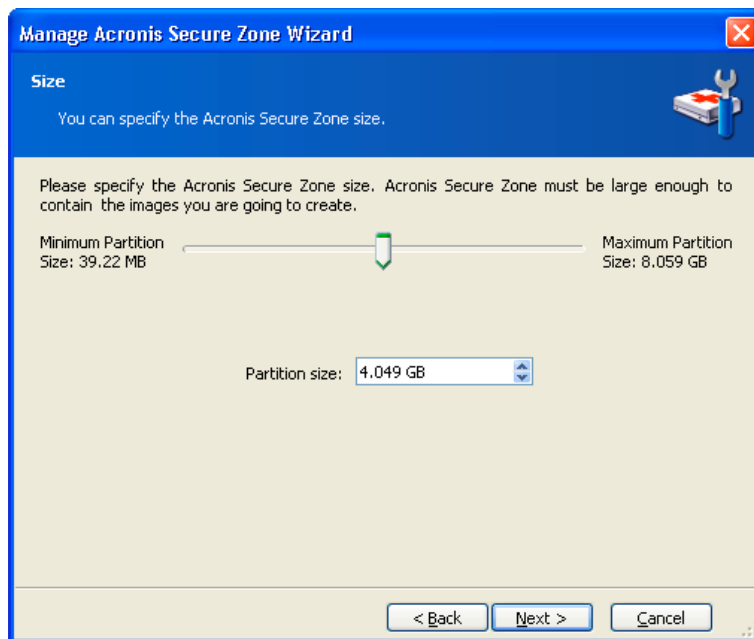Secure zone resizing might take several minutes or more. Please wait until the whole procedure is finished.

3.2.3   Deleting the images in Acronis Secure Zone

The images saved to Acronis Secure Zone are deleted automatically if required. Acronis True Image Server 8.0 for Windows uses the following scheme to clean up Acronis Secure Zone:

- If there is not enough free space in Acronis Secure Zone to create an image, then Acronis True Image Server 8.0 for Windows deletes the most old full image with all subsequent incremental backup images.

- If there is only one full image (with subsequent incremental backup images) left and full backup is in progress, then this only full image (with subsequent incremental backup images) is deleted.

- Otherwise (only one full image left, and incremental backup is in progress) then you will get a message about space error. In this case you will have to either create full image or increase the Acronis Secure Zone size.

You can always check how much free space left in Acronis Secure Zone on the second page of the Manage Acronis Secure Zone wizard.

3.2.4   Deleting Acronis Secure Zone

When you are prompted by the wizard, select **Remove Acronis Secure Zone**.

Select partitions to which you want to add the space freed from Acronis Secure Zone.
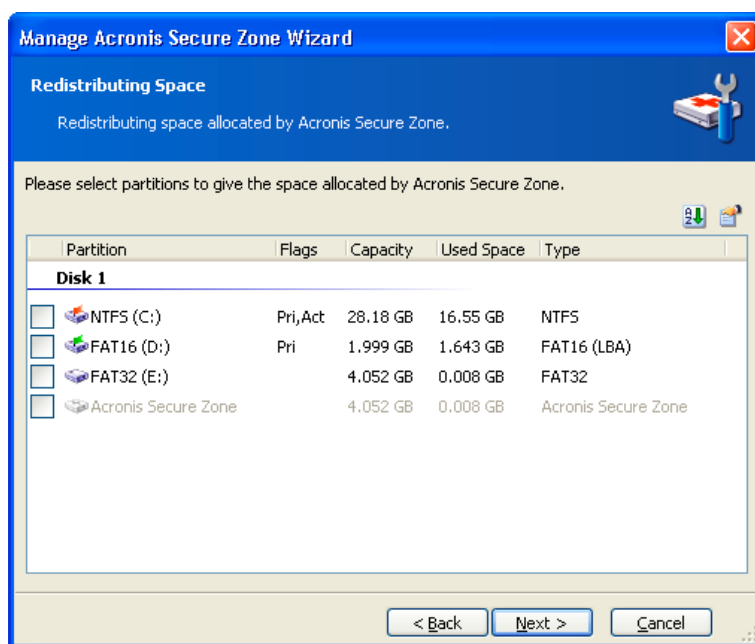
In the next window, you will see an Acronis Secure Zone deletion script containing a list of briefly described operations to be performed on partitions (disks).

After you click **Proceed** Acronis True Image Server 8.0 for Windows will start deleting the Acronis Secure Zone. Progress will be reflected in the special window. If necessary, you can stop zone creation by clicking **Cancel**. However, the script will be cancelled only after the current operation is finished.

Acronis Secure Zone deletion might take several minutes or more. Please wait until the whole procedure is finished.

Acronis Secure Zone deletion will automatically disable Acronis Startup Recovery Manager if it is activated and destroy all images stored in the zone.

Acronis Secure Zone can be located on basic disks only. (A basic disk is a physical disk without any dynamic disks.) If a server has only dynamic disks, you will not be able to create the Acronis Secure Zone.

To run Acronis True Image Server 8.0 for Windows in standalone mode and quickly restore system partitions from images, we recommend that you install the system to a basic disk, creating the Acronis Secure Zone on the same or another disk that does not contain dynamic disks.

Upgrading a disk with an Acronis Secure Zone from basic to dynamic will prevent access to the Acronis Secure Zone and disable the Acronis Startup Recovery Manager. Therefore, we suggest that you delete the Acronis Secure Zone before performing such an operation.

3.3   Acronis Startup Recovery Manager

Acronis True Image Server 8.0 for Windows provides Acronis Startup Recovery Manager that enables to run the program without loading the operating system. This feature is useful if Windows won't load for some reason. Using it, you can run Acronis True Image Server 8.0 for Windows by itself to restore damaged partitions from images.

To use Acronis Startup Recovery Manager (it must be activated), turn on your server and press F11, when you see the "Press F11 for Acronis Startup Recovery Manager" message. This will run a standalone version of Acronis True Image Server 8.0 for Windows that only slightly differs from the Windows version. For information on restoring damaged partitions see Chapter 5.

Be careful! Disk letters in standalone Acronis True Image Server 8.0 for Windows might sometimes differ from Windows notation.

To activate Acronis Startup Recovery Manager, click **Activate Acronis Startup Recovery Manager**.

Acronis Startup Recovery Manager cannot be activated if Acronis Secure Zone is missing on the hard disk. If you have not created this Zone before, you will be prompted to do it (see section 3.2.1 above), then Acronis Startup Recovery Manager will be activated. Otherwise, Acronis Startup Recovery Manager will be activated immediately.

When Acronis Startup Recovery Manager is activated it overwrites the Master Boot Record (MBR) with its own boot code. If you have any third party boot managers installed, then you will have to reactivate them after activating the Startup Recovery Manager. For Linux loaders (e.g. LiLo and GRUB) you might consider installing them to a Linux root (or boot) partition boot record instead of MBR before activating Acronis Startup Recovery Manager.

3.4 Supported file systems

Acronis True Image Server 8.0 for Windows supports the following file systems:

- FAT16/32
- NTFS
- Ext2/Ext3
- ReiserFS
- Linux SWAP
- XFS
- JFS

If a file system is not supported or is corrupted, Acronis True Image Server 8.0 for Windows can copy data using a sector-by-sector approach.

For XFS and JFS file systems partition resizing feature is not supported.

3.5 Using dynamic disks and volumes

Acronis True Image Server 8.0 for Windows works with dynamic disk images as easy as with basic disk images under Windows. However, as dynamic disks are organized differently than basic, physical disk drives, there are several issues that will impact how you store an image.

You can not create an image of the entire dynamic disk, but only of one or more dynamic volumes. This is because a dynamic volume is located on several dynamic disks, so a partial backup would not create a usable image.

The current version of the software is not capable of changing the size and file system of an image being restored to a dynamic volume. However, this is possible when you restore a dynamic volume to a basic disk partition.

When you create a dynamic volume image, its type information (simple, mirror, and the like) is lost, so the restoration is performed independently. In each case, the program stores and restores volume contents only.

If a basic disk image is restored to a dynamic disk, it will destroy the dynamic disk's contents. As a result, you will end up with a basic disk.

You can also create and restore an image of a system partition stored on a dynamic disk.

If Acronis True Image Server 8.0 for Windows runs from Bootable Rescue media, dynamic disks will be not accessible. To be able to restore a system partition, you must keep its image on a basic, network, or removable disk.

3.6   Backing up to tape drive

The current version of Acronis True Image Server 8.0 for Windows supports SCSI tape drives. It can store images on and restore them from tape, store large images to multiple tapes, and append incremental images on to a tape with the existing images.

If you have a SCSI tape drive connected to your server, the list of devices available for image storage and restoration will be extended with a name corresponding to the drive type.

Images are created on and restored from tapes in the same way as from other devices, with the following exceptions.

1. If you are to use data tapes previously used by other programs, their contents will be cleared

2. A new, full image can be stored on an empty tape only. If you use tapes that already contain data, their contents will be cleared and overwritten

3. Incremental images can be appended to the tape containing the previous image, either full, or incremental

4. You don't have to provide a filename to store an image on or restore it from a tape

You might experience short pauses that are required to rewind the tape.

Low-quality or old tape, as well as dirt on the magnetic head, might lead to pauses that can last up to several minutes long.

Chapter 4. Creating a partition (disk) image

Disk (partition) image creation means backing up data stored on your server. Having these images you can restore your server after failures and protect yourself from hard disk data losses.

4.1 Selecting partitions

In the **Select partitions to image** window, you will see the hard disk layout of your server. Flag a partition to select it. Flag a whole disk to select all its partitions. You can select one or more hard disks or any combination of partitions and hard disks.
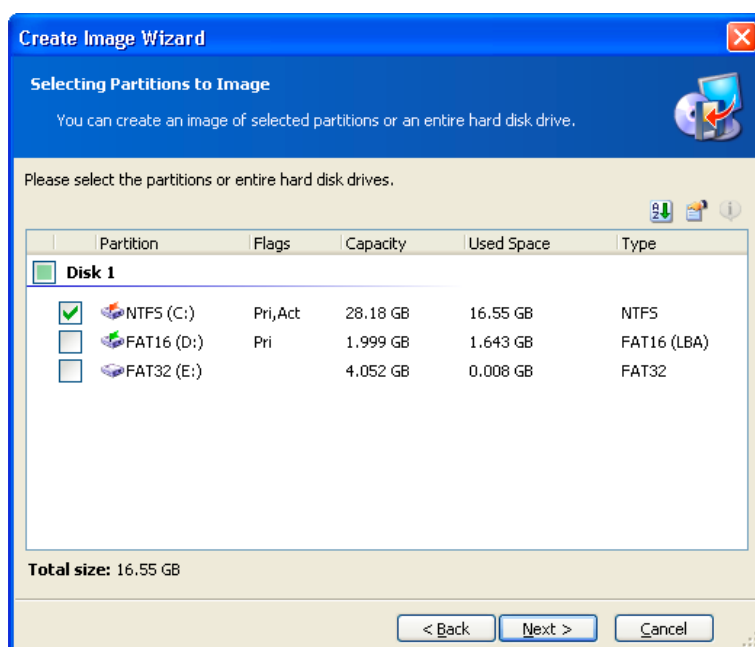
Disk and partition layout

Having selected partitions and/or disks, click **Next**. Note that this button will be disabled until at least one partition or disk is selected.

4.2 Selecting image location

Specify image file location on a storage device:

- Acronis Secure Zone (see "Acronis Secure Zone")
- Hard disk
- Network disk

- Removable media drive, including tapes, CD-R/RW, DVD+R/RW, DVD-RW, Iomega Zip, Iomega Jaz, magneto-optical drives and so on.

> To burn images to DVD, you should have DVD UDF recording software installed, for example: Roxio DirectCD, Ahead InCD and other the same.
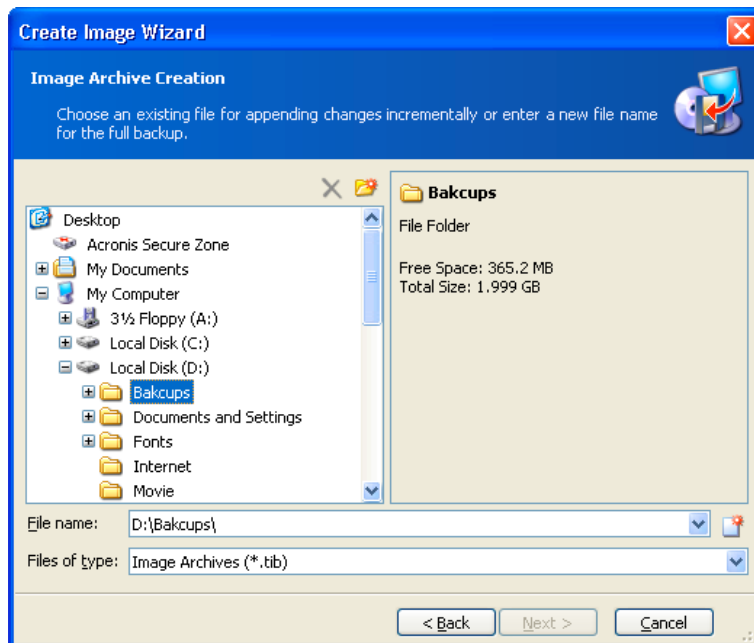
Image location selection

In the drive tree, select a place to locate an image and enter its name in the **File name** field.

> You can store several partitions and/or disks in a single file, but you can't **append** images to a file.

> The program can generate an unique filename. Just click **Generate file name for a new file** button at the right.

You can create a disk (partition) image on the same disk (partition), if there is enough space for it, but do not leave it there. Better burn images to removable media, such as a CD, DVD or Zip disks, move to another hard disk or a network drive. The only reason to place an image on the same disk (partition) is creating a local, secondary image, used to restore damaged files. Remember, if your disk becomes physically damaged, an image stored on the same disk will be inaccessible.

4.3 Selecting image mode

At this point, you must decide if you need to create a complete or incremental partition (disk) image.

Image mode selection

A full image contains all hard disk data, so it takes a lot of space.

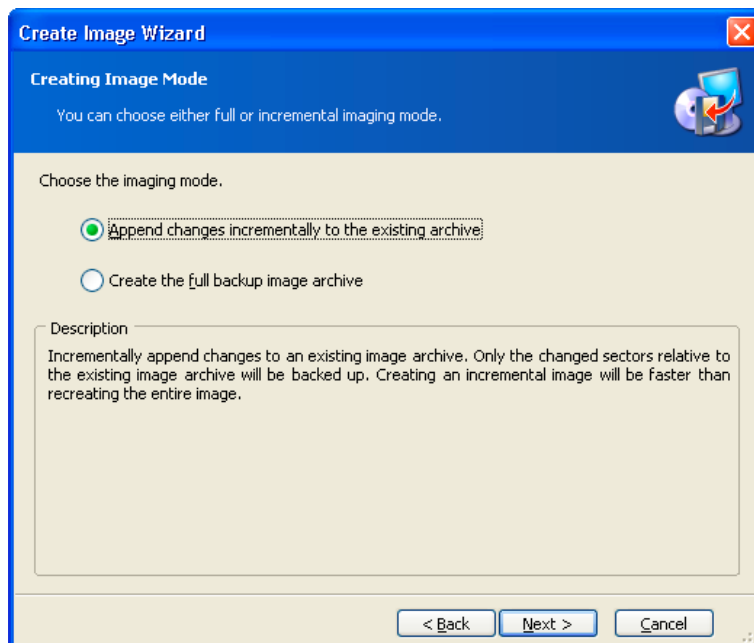Acronis True Image Server 8.0 for Windows does not include **swap file** information (win386.swp under Windows 98/Me and pagefile.sys under Windows NT/2000/XP), or **hiberfil.sys** (a file that keeps RAM contents when the computer goes into hibernation). This considerably reduces the image size and increases the speed of creating the image.

An incremental image contains data only from sectors that changed after the previous full or incremental image was created, so it is usually smaller and takes less time to create.

Therefore, if you create the first disk (partition) image, you should select the complete mode. If you already have a full image, it is recommended that you create incremental images.

If you have defragmented your hard disk since the last full image, an incremental image c**ould be as large as the full image**.

Therefore we recommend you to make a defragmentation of a hard disk **before** the full image of the given disk will be created.

4.3.1 Creating an incremental image

To create an incremental disk/partition image, choose your original full disk image file in the directory tree of **Image Archive Creation** window and press **Next** button.

If you already created the incremental backup, choose the last incremental disk/partition image in the directory tree.

If image archive is stored on the removable media, e.g. CD, insert the last CD and then follow instructions of the **Create Image Wizard**.

(Having a policy for creating full and incremental images is recommended. For example, you might consider creating a full image monthly and incremental images weekly.)

If all image files are stored together, if doesn't matter which one you select, as the program will recognize them as a single image. If you stored these files on several removable discs, you must provide the latest image file, otherwise, restoration problems might occur.

4.4   Selecting image file size

At this step you can specify if the program should create a single file or split it into equal smaller images.

If you select **Automatic**, Acronis True Image Server 8.0 for Windows will try to decide this for every particular case. If there's enough space on the selected disk, the program will create a single image file.

If there's not enough space, Acronis True Image Server 8.0 for Windows will warn you and wait for your decision. You can try to free some additional space and continue or stop Acronis True Image Server 8.0 for Windows , free some space and re-execute the procedure.
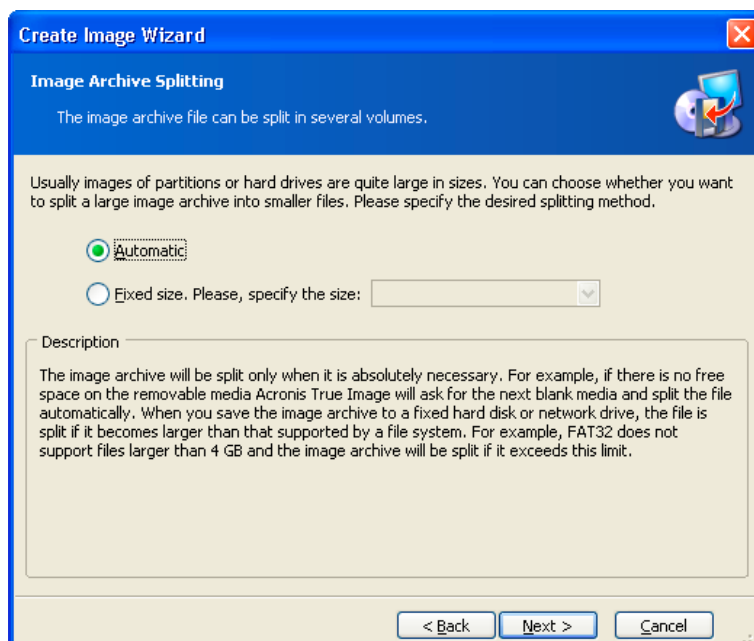

Image file size selection

If You work with removable media, the size of a file of an image is set automatically only.

FAT16 and FAT32 file systems have a limit for maximum file sizes. In particular, FAT16 limit is 2Gb, FAT32 limit – 4Gb. FAT32 is currently the most popular end user file system. At the same time, existing hard drives have capacities of 160Gb and above! Therefore, an image file might easily exceed this limit. In this case Acronis True Image Server 8.0 for Windows will automatically split image into several files.

If you need to create an image **automatically** on CD-R/RW, DVD-RW or DVD+R/RW media or a tape, Acronis True Image Server 8.0 for Windows will ask you to insert a new disc (tape), when the previous is full.

You can also fix image file size by selecting **Fixed size** and entering the desired size or selecting it from the drop-down list. By default, the value is in bytes, but you can also use kilobytes and megabytes by adding needed units.

You can also split the image file into several volumes, when storing it on a hard drive. Later you will be able to easily transfer these files onto CD-R/RW, DVD-R/RW or DVD+R/RW discs. Creating images directly on CD-R/RW, DVD-RW or DVD+R/RW might take considerably longer time then it would on a hard disk.

4.5   Selecting data compression level

Now select the data compression level for image to be created.

If you select **None**, all data will be transferred into an image file as they are, increasing the image size. Maximum compression might prolong image creation.
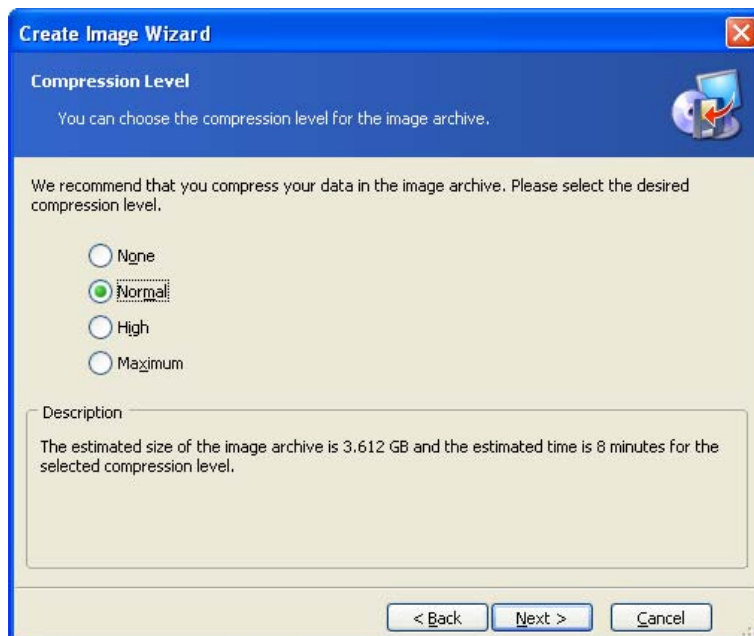

Image data compression level selection

The optimal data compression level depends on disk (partition) files types and can only be understood empirically.

Usually, it is recommended to leave the switch in the **Normal** position. If you need to burn image to removable media, you can select **Maximum** compression.

4.6 Protecting images with passwords

An archive file with a partition (disk) image can be protected with a password. To protect a partition (disk) from being restored by anybody except you, enter a **password** and its confirmation into the text fields of the wizard page **Image Archive Protection**. A password should consist of at least eight symbols and contain both letters (in the upper and lower cases preferably) and numbers to make it more difficult to guess.
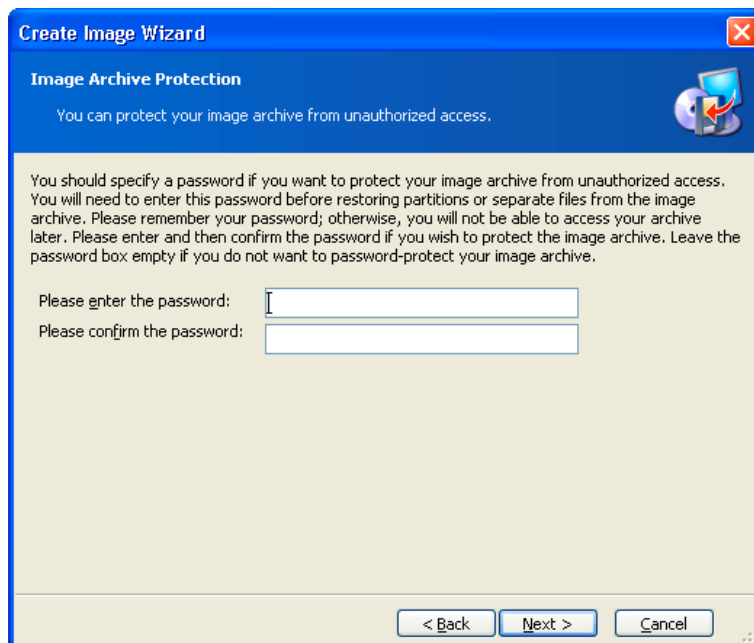
Image password protection

If you try to restore data from a password-protected image, Acronis True Image Server 8.0 for Windows will ask for the password in a special window, allowing access only to authorized users.

4.7 Providing comments

On the **Image Archive Comments** wizard page, you'll be able to provide an archive file with comments about the server and its user, the hard disk, partition data, image creation time, and any peculiarities and conditions.
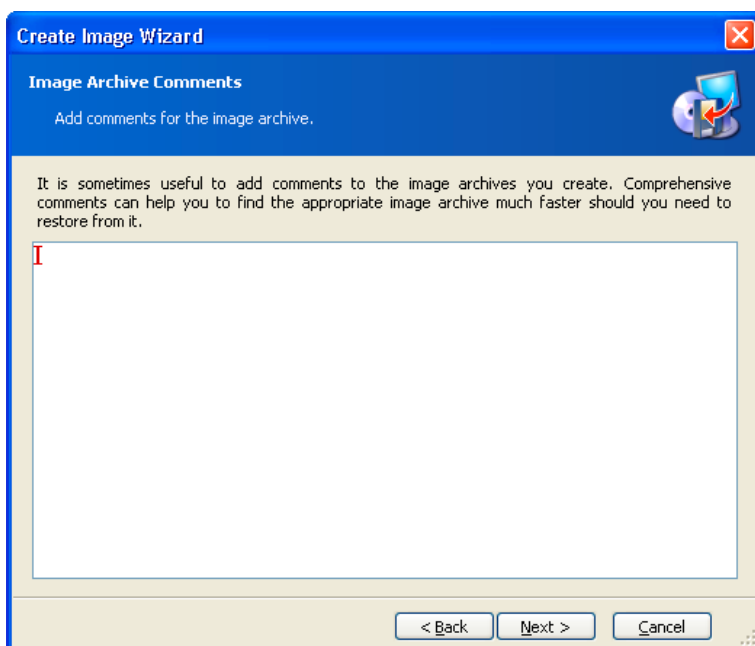
An image comment

The more details you provide in the comments, the better. If you don't provide comments, you might mistake images and restore the wrong system partition, for example.

4.8   Image creation script

In the next window, you will see a disk(s) image creation script that will list all operations to be performed, along with their brief descriptions.

Image creation script

All operations of a partition (disk) image creation in an archive file are delayed in Acronis True Image Server 8.0 for Windows. A partition (disk) image creation script is created first, and then it's executed.
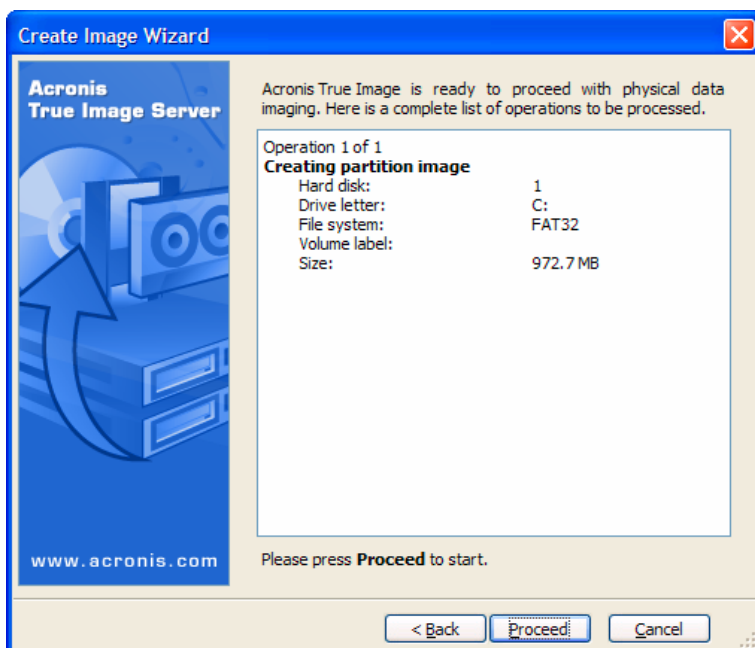
After you click **Proceed**, Acronis True Image Server 8.0 for Windows will start creating an image indicating the progress in the special window. You can stop this procedure by clicking **Cancel**.

You can also close the progress window by clicking **Close**. Image creation will continue, but you will be able to start another operation or close the main program window. In the latter case, the program will continue working in the background and will automatically close once the image is ready. If you prepare some more image creation operations, they'll be queued after the current one.

Icons of the current and queued operations will be shown in the bottom of the main program window in due time.

If you are to burn an image to removable media, be sure to enumerate them, as you will have to insert them in order during the restoration.

4.9 Selecting image creation priority

After image creation is started, an icon appears in the System Tray (see section 3.1 of this Guide).

Clicking this indicator you invoke the menu of image creation priority selection: **Low**, **Normal** or **High**.

Normal is selected by default.

4.10 Operation results notification

Sometimes the backup procedure can require 30 minutes or more. Acronis True Image Server 8.0 for Windows can notify you when it's finished by using the WinPopup service or by sending you an email.

4.10.1 Email notification

To set up Email notification, enable the respective parameter in **Tools → Options → Notification → E-mail**:
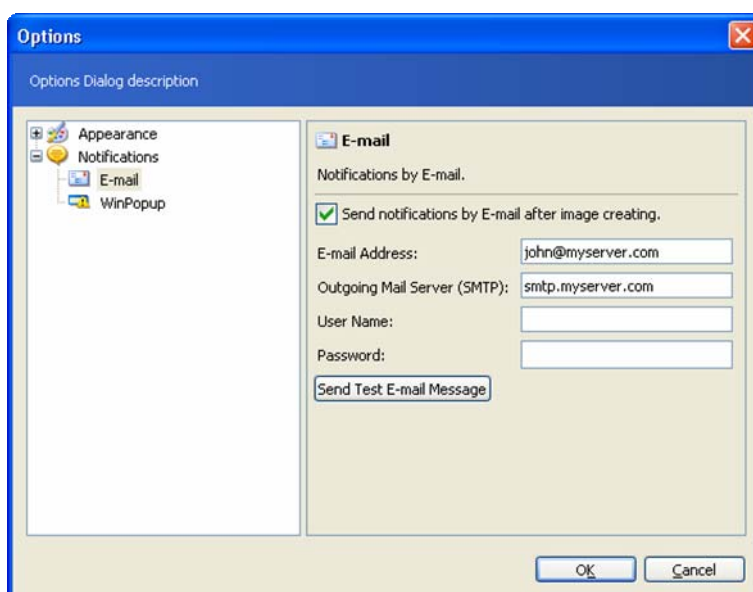
At that point you will need to provide the email address to which you want the notification, as well as the outgoing SMTP server name. Your user name and password might also be needed if the SMTP server requires authentication.

4.10.2   WinPopup notification

To set up the WinPopup notification, enable the respective parameter in **Tools** → **Options** → **Notification** → **WinPopup**:

At that point you will need to provide the network name of the PC to which you want the notification sent.

Chapter 5. Restoring a disk (partition) from an image

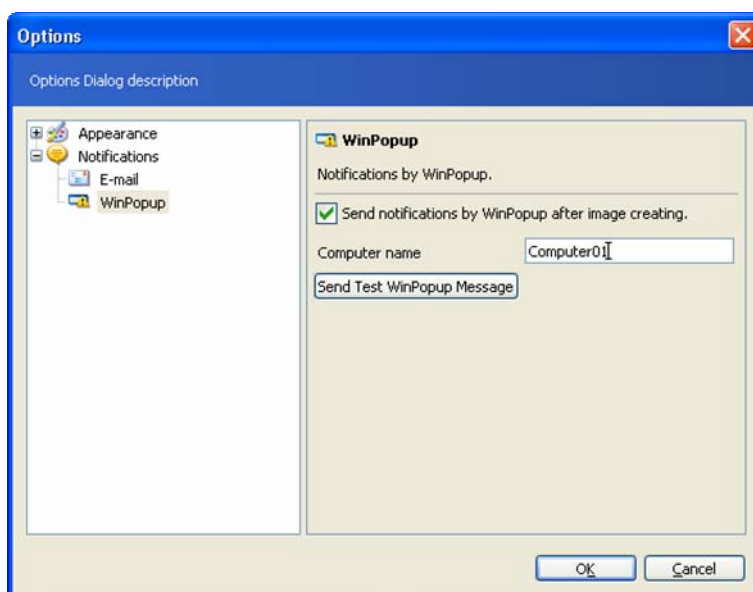As mentioned above (see "Running Acronis True Image Server 8.0 for Windows "), Acronis True Image Server 8.0 for Windows can be run in several ways. However, disk restoration is always performed just one way.

We recommend that you restore disks using Windows, only using other methods if Windows doesn't load.

The boot disk (e.g. a CD) from which you loaded the program does not keep you from using other CDs with images. Acronis True Image Server 8.0 for Windows is loaded entirely into RAM, so you can remove the bootable CD to insert an image disk.

To restore a partition (disk) from an image, Acronis True Image Server 8.0 for Windows must obtain **exclusive access** to this partition (disk). This means no other applications can access it at that time. If you receive a message stating the partition (disk) can not be blocked, close applications that use this partition (disk) and start over. If you can not determine which applications use the partition (disk), close them all.

5.1   Selecting an image to restore from

Find and select file containing an image of the required partition. The **File Name** field will reflect its name and the **Next** will become available. If this image is located in Acronis Secure Zone, select it to select the image on the next step.
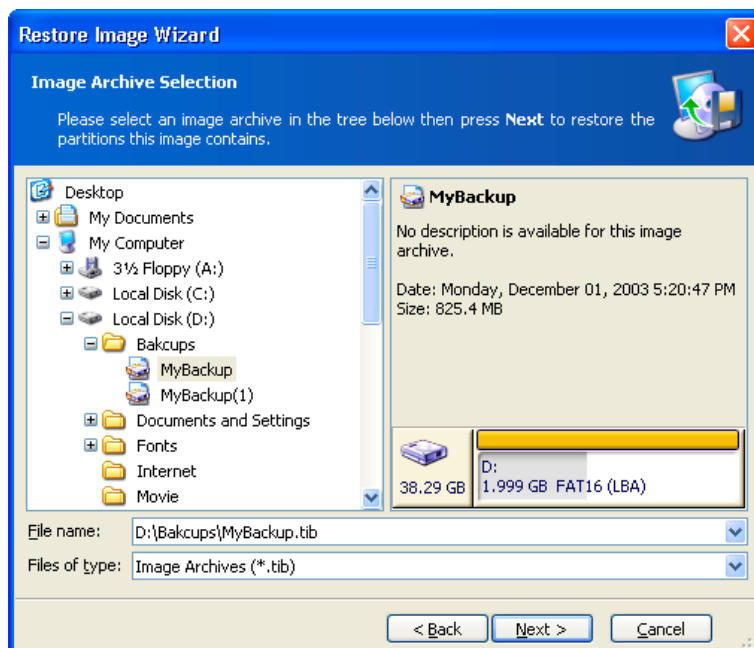

Image selection for restoration

If you are to restore an image from removable media, e.g. CD, first insert the last CD and then follow instructions of the Restore Image Wizard.

If you provided a comment to the image, it will help you know if you selected the right image to restore. The comment is displayed in the right part of the window. Note that the comment can be seen without entering a password for a protected image. However, the contents of such an image will still require a password.

If an image was protected with a password, Acronis True Image Server 8.0 for Windows will ask for it. The **Next** button will be disabled until you enter the correct password.

If you are to restore a disk (partition) from an incremental image, Acronis True Image Server 8.0 for Windows will suggest you to select one of successive incremental files by date/time of its creation. Thus, you can return the disk (partition) state to a certain moment, often called "a point of restore".
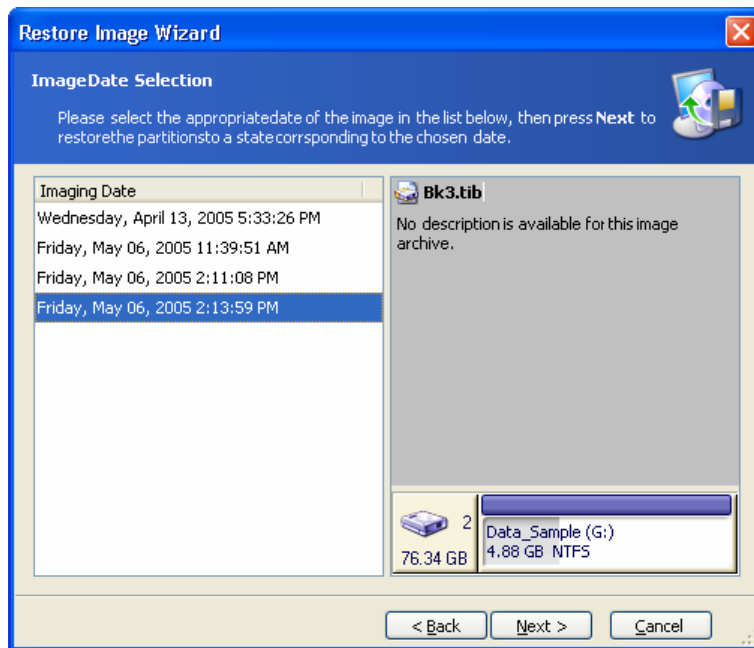
Image Date Selection

To restore data from an incremental image, you must have all previous incremental images and the initial full image. If any of successive images is missing, restoration is impossible.

5.2 Checking image integrity before restoration

Before an image is restored, Acronis True Image Server 8.0 for Windows can check its integrity.

To do this, flag **Yes, I want to verify the image archive** on the **Verify Archive Before the Restoring** page of the image restoration wizard.
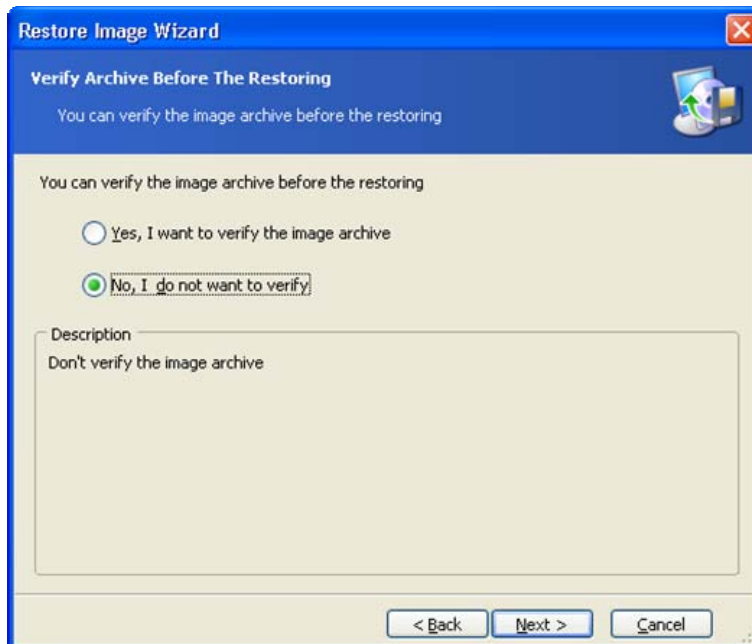
Checking image integrity before restoration

This is disabled by default in Acronis True Image Server 8.0 for Windows.

5.3 Selecting a partition to restore

A single file might contain images of several partitions or even disks, as shown in the figure below.
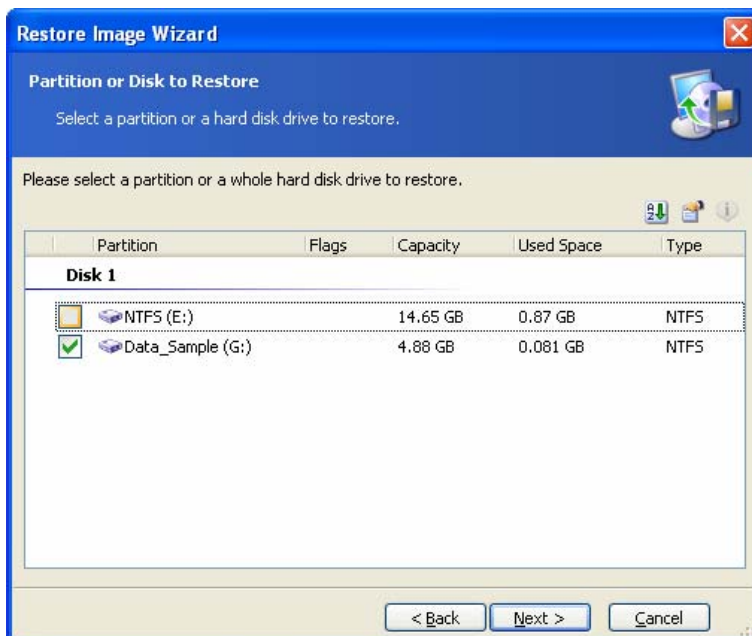
Select a partition to restore

During a single session you can restore several partitions or disks, one by one by selecting one disk and setting its parameters first and then repeating these actions for every partition or disk to be restored.

Select the necessary partition and click **Next**.

5.4 Selecting a location to restore to

As a rule you should restore image to the same partition that the image was created from.

You can restore an image to another partition, but this is needed rather seldom. At that a partition should be of at least the same size as uncompressed image data.

If you don't have a special reason to restore an image to another partition, restore it only to partition that was used to create the image.
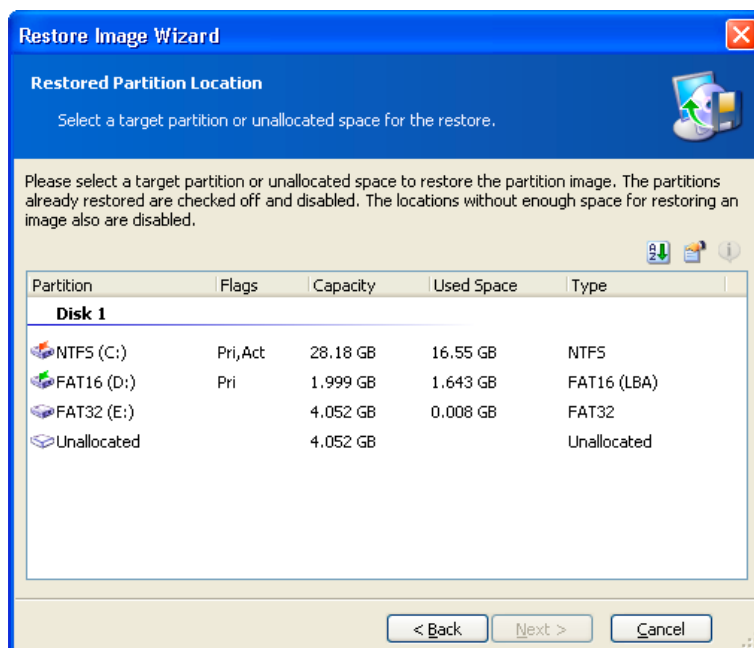
Select partition to restore image to

All the data stored on the restored partition will be replaced by the image data, so be careful and watch for non-backed up data that you might need.

5.5   Selecting partition type

When restoring a partition you can change its type though it's not required in most cases.

To explain why you might need to do this, let's imagine that both OS, and data were stored on the same primary partition on the damaged disk. You are forced to restore the partition from a backup to another hard disk with its own partitions and OS.
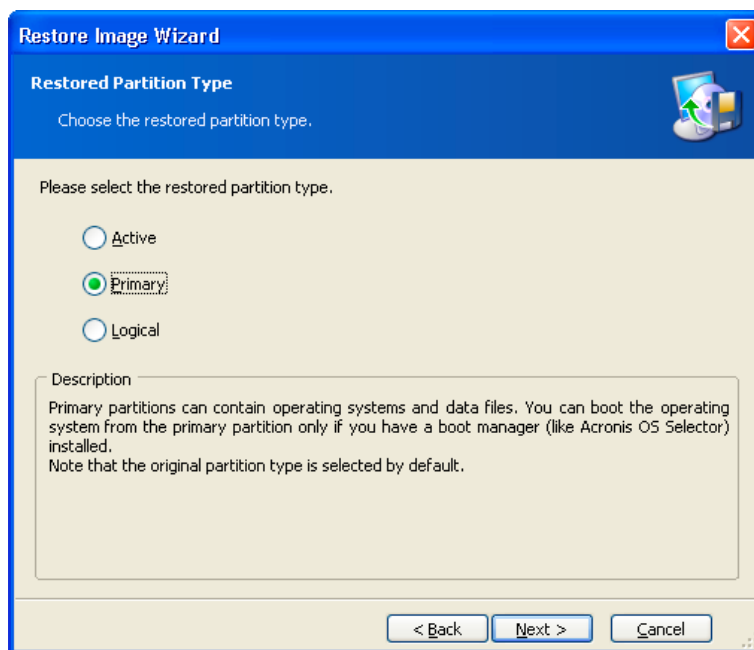
Select partition type

If you need only the data, you don't have to create another primary partition. In this case, you can restore the partition as logical to access the data only.

But if you are to restore a system partition, you should select the **Primary** type for it. Finally, if you want to load operating system from it, select **Active** as well.

Selecting **Active** for a partition without an installed operating system might prevent your server from booting.

5.6   Selecting a file system

Though it is seldom required to change a partition file system, you can change it during its restoration. For partitions with FAT native file systems you can choose between FAT16 and FAT32. For partitions with Ext native file systems you can

choose between Ext2 and Ext3. For partitions with other native file systems this option is not available.

Select a file system

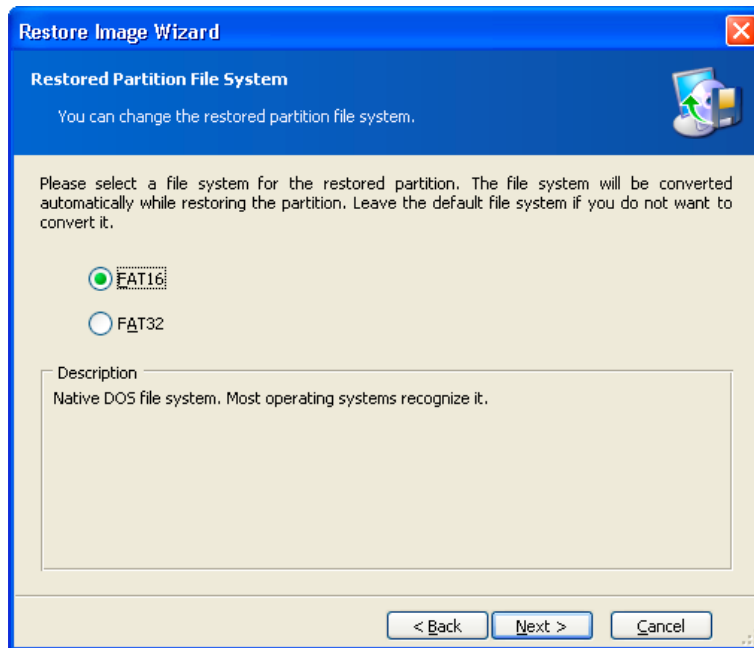Let's imagine you are to restore a partition from an old, low-capacity FAT16 disk to a newer disk. FAT16 wouldn't be effective and might even be impossible to set on the high-capacity hard disk. That's because FAT16 supports partitions up to 4 GB, so you won't be able to restore a 4 GB FAT16 partition to a partition that exceeds that threshold without changing the file system.

It would make sense here to change the file system from FAT16 to FAT32 by setting the appropriate switch.

But you must also have in mind that not all operating systems support FAT32. Windows 4.x doesn't support FAT32 and won't be operable after you restore a partition and change its file system. These can be normally restored on a FAT16 partition only.

However, you can easily convert a FAT16 partition with newer OS into FAT32.

5.7 Selecting restored partition size

In some cases you might need to change partition configuration and size during the restoration. Acronis True Image Server 8.0 for Windows is flexible enough to do this.

You can resize and relocate partition by dragging it or its borders with mouse or by entering corresponding values into the appropriate fields.
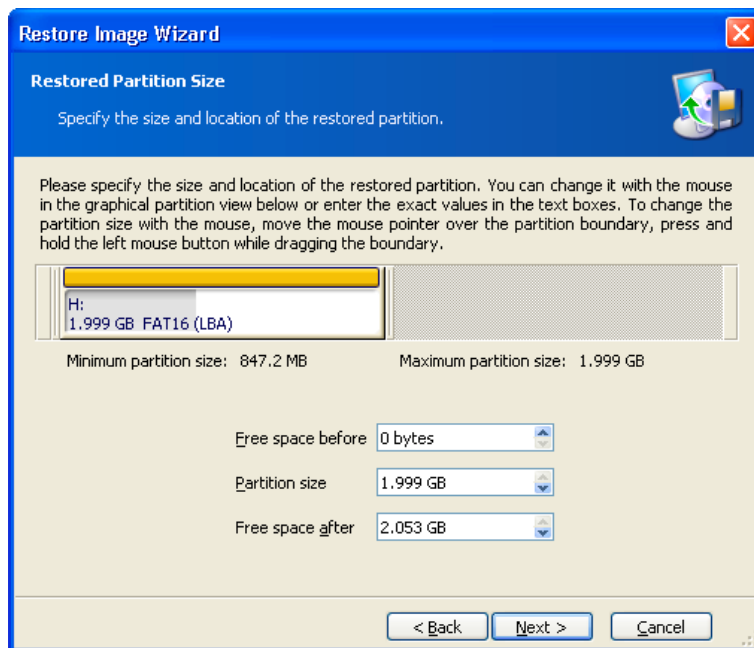
Select partition size and location

You might need to resize and relocate a partition to redistribute the disk space between existing partitions. In this case you will have to restore the partition to be reduced first.

These changes might be useful if you are to copy your hard disk to a new high-capacity one by creating its image and restoring it to a new disk with larger partitions. This way of cloning is used if it is impossible to connect the second hard disk to the server (for more details about cloning see 7.1).

5.8   Assigning a letter to a partition

Windows utilizes letters of Roman alphabet to identify disks and partitions automatically assigning them letters at loading.

Under Windows NT SP6/2000/XP, OS Acronis True Image Server 8.0 for Windows enables you to assign any unused letter a restored partition (logical disk). To do this, select **Yes, I want to assign a logical drive letter to restored partition**. If you don't set this switch, no letters will be assigned to the restored partition, hiding from OS.
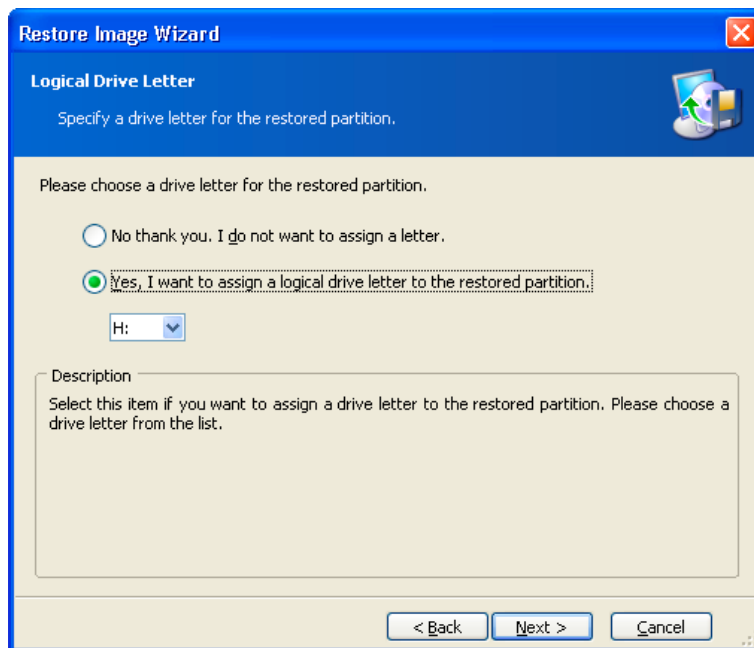
Assign any unused letter to a partition

You should not assign letters to partitions inaccessible to Windows, i.e. to those other than FAT and NTFS.

5.9   Checking file system integrity

Having restored a disk/partition from an image under Windows NT SP6/2000/XP, Acronis True Image Server 8.0 for Windows can check the integrity of its file system.

To do this, flag **Yes, I want to check file system after the restoring** on the **Check File System After the Restoring** page of the image restoration wizard.
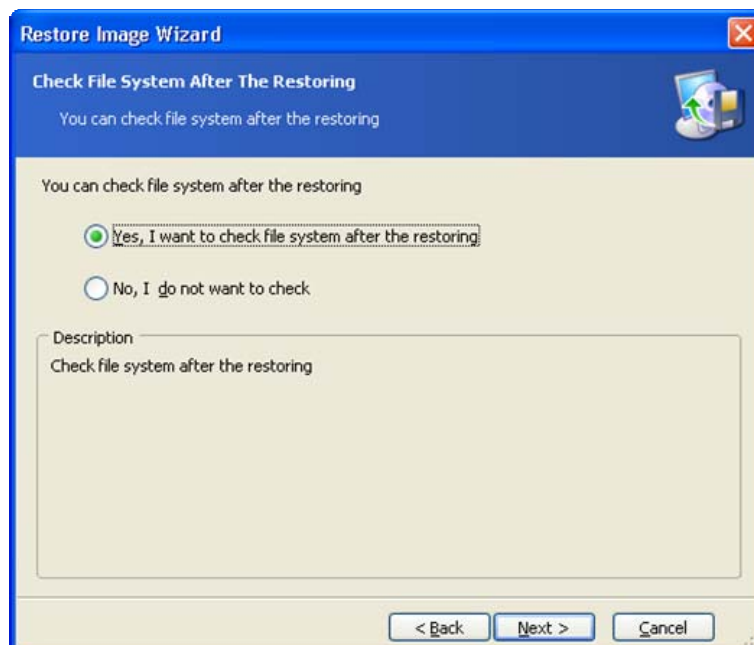
Checking file system integrity after restoration

This is disabled by default in Acronis True Image Server 8.0 for Windows.

Only FAT16/32 and NTFS file systems integrity can be checked.

5.10 Restoring several partitions at once

You can restore several partitions during a single session. To do this select **Yes, I want to restore another partition or hard disk drive** in the **Next Selection** window and click **Next**.
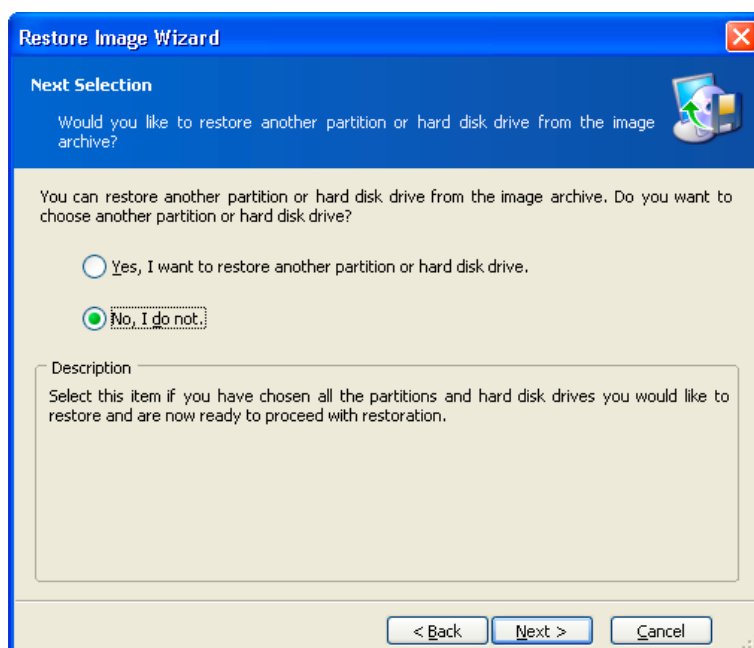
You can restore another partition during this operation

After this you will see partition selection window again and will have to repeat the actions mentioned above.

If you want to restore only one disk (partition) or have already selected all of the partitions you need, don't set this switch and click **Next**.

5.11 Restoration script

In the next window, you will see disk(s) or partition(s) image restoration script containing a list of operations to be performed.
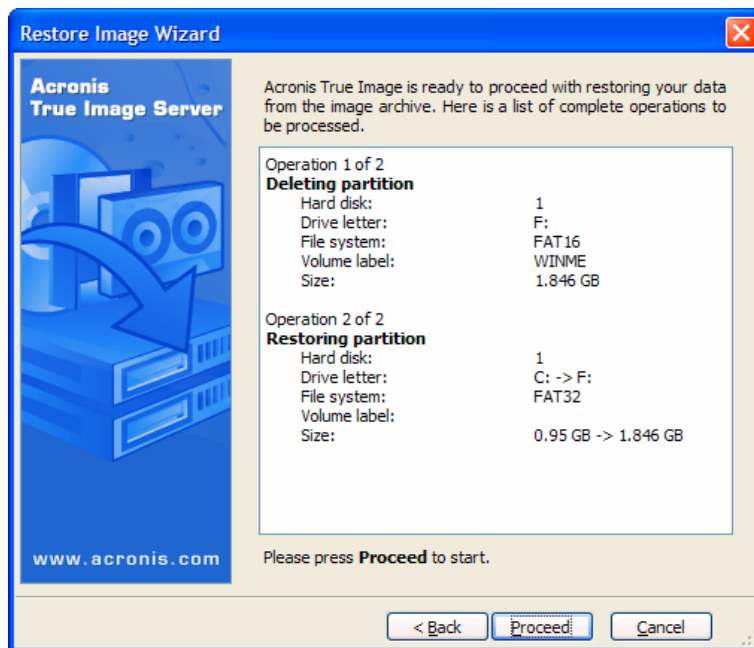
Restoration script

After you click **Proceed**, Acronis True Image Server 8.0 for Windows will start image restoration indicating the progress in the special window. If you click **Cancel**, no changes will be made to disk(s).

You can also stop the procedure by clicking **Cancel**. However, it is critical to note that the partition that should have been restored from the image will be deleted and its space unallocated – the same result you will get if the restoration is unsuccessful. To recover the "lost" partition, you will have to restore it from the image again.

After the restoration is finished you will see a message about its results.

Chapter 6. Browsing and restoring particular files

To browse and restore individual files, Acronis True Image Server 8.0 for Windows can **connect images as virtual drives** thus letting you access them as though they were a physical drive. This means that:

- A new disk with its own letter will appear in the drives list;

- Using Windows Explorer and other file managers, you will be able to see image files as if they were located on a physical disk or partition;

- You'll be able to find necessary files or folders in order to copy them from the virtual disk to the real one.

The connected virtual drive will be read-only and you won't be able to change anything within it.

6.1 Connecting a virtual disk

Use **Explore Image** to connect an image as a virtual disk and click **Next** in the first wizard window.

6.1.1 Selecting an image

In the next window, specify the image you want to open as a virtual disk.

Select image to connect

If the selected image file is not protected by a password, you will immediately see the image comment along with the list of stored partitions. If the file is protected by a password, you will see only the comment.

If you are to connect an incremental image, Acronis True Image Server 8.0 for Windows will suggest you to select one of successive incremental files by date/time of its creation. Thus, you can explore the partition state to a certain moment.

To connect an incremental image, you must have all previous incremental images and the initial complete image. If any of successive images is missing, connecting is impossible.

6.1.2   Selecting partitions to connect and letter assignment

On this step you must select a partition to connect as a virtual disk. Note that you can't connect the entire disk.
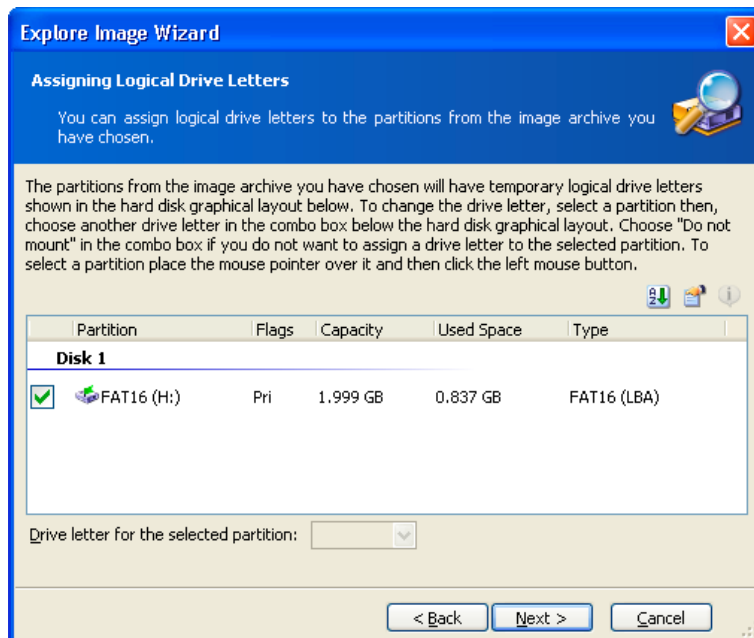
Select partition to connect

Besides, you can also select a letter to be assigned to the connected disk (from the **Drive letter** drop-down list.)

In the next window, you will see a disk connection script containing a single operation. Click **Proceed** to connect the image as a virtual disk.

After the disk is connected the program will run Windows Explorer showing its contents.

Now you can easily copy any file (or folder) from the virtual disk to the real one using Windows Explorer or similar file manager.

6.2   Unplugging a virtual disk

We recommend that you unplug a virtual disk after all necessary files and folders are copied. However, the virtual disk will disappear anyway after your server is turned off.

To disconnect the virtual disk select **Unplug**.

You can also unplug the disk by clicking **Unplug Image** in Acronis True Image Server 8.0 for Windows main window.

Chapter 7. Transferring the system to a new disk

7.1   General information

Sooner or later any server user finds out that his hard disk is too small. If you just don't have space for more data, you can add another disk just for data storage as described in the following chapter.

However, you might find that your hard disk does not have enough space for the operating system and installed applications, preventing you from updating your software. In this case, you have to transfer the system to a higher-capacity hard disk.

To transfer your system to a new disk, you must first install in into the server.

If a server doesn't have a bay for another hard disk, you can temporarily install it in place of your CD-ROM. If it's still impossible, you can clone a hard disk by creating its image and restoring it to a new hard disk with larger partitions.

There are two transfer modes available: automatic and manual.

In the automatic mode, you will only have to take several simple actions to transfer all the data, including partitions, folders and files, to a newer disk, making it bootable if the original disk was bootable.

There will be only one difference between these disks – partitions on the newer disk will be larger. Everything else, including the installed operating systems, data, disk labels, settings, software and everything else on the disk will remain the same.

Of course, this is the only result available in the automatic mode. The program can only duplicate the older disk layout to the new one. To obtain different result, you will have to answer additional questions about cloning parameters.

The manual mode will provide more data transfer flexibility.

1. You will be able to select the method of partitions and data transfer:

   - As is;

   - New disk space is proportionally distributed between the old disk partitions;

   - New disk space is distributed manually.

2. You will also be able to select operations to perform on the old disk:

   - Leave partitions (and data!) on the old disk;

   - Remove all information from the old disk;

- Create new partitions on the old disk (and remove all the older information.)

On program screens, damaged partitions are marked with a red circle and a white cross inside in the upper left corner. Before you start cloning, you should check such disks for errors using corresponding operating system tools.

7.2 Security

Please note the following: if the power goes out or you accidentally press **RESET** during the transfer, the procedure will be incomplete and you will have to partition and format or clone the hard disk again.

No data will be lost because the original disk is only being read (no partitions are changed or resized) until data transfer is completed.

Nevertheless, we don't recommend you to delete data from the old disk until you are sure it is correctly transferred to the new disk, server boots up from it, and all applications work.

7.3 Executing transfers

7.3.1 Selecting clone mode

You will see the **Clone mode** window just after the welcome window.
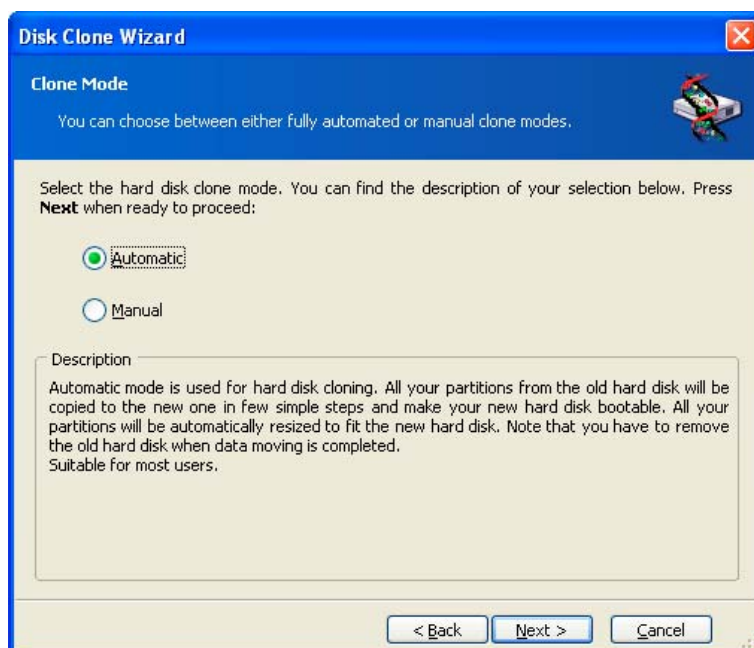
Clone mode selection

We recommend using automatic mode in most cases. The manual mode can be helpful, if you need to change the disk partition layout.

If the program finds two disks, one partitioned and another unpartitioned, it will automatically recognize the source (partitioned) and destination (unpartitioned) disks, so the next two steps will be bypassed.

7.3.2 Selecting source disk

If the program finds several partitioned disks, it will ask you what is the source (i.e. the older data disk).
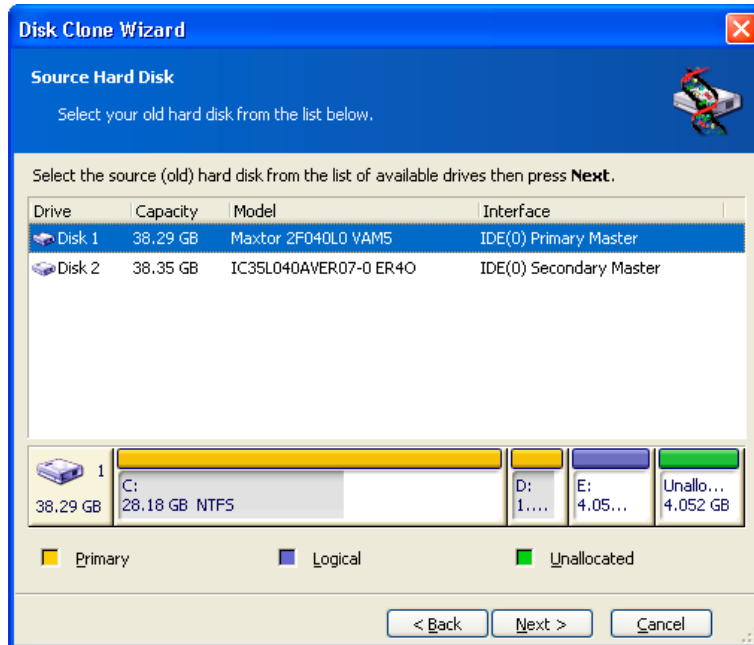
You can determine the source and destination using the information provided in this window (disk number, capacity, label, partition and file system information).

7.3.3 Selecting destination disk

After you select the source disk, you have to select the destination where the disk information will be copied.

The previously selected source becomes grayed-out and disabled for selection.

If either disk is unpartitioned, the program will automatically recognize it as destination and bypass this step.

7.3.4 Partitioned destination disk

At this point, the program checks to see if the destination disk is free. If not, you will be prompted by the **Nonempty Destination Hard Disk** window stating that the destination disk contains partitions, perhaps with data.
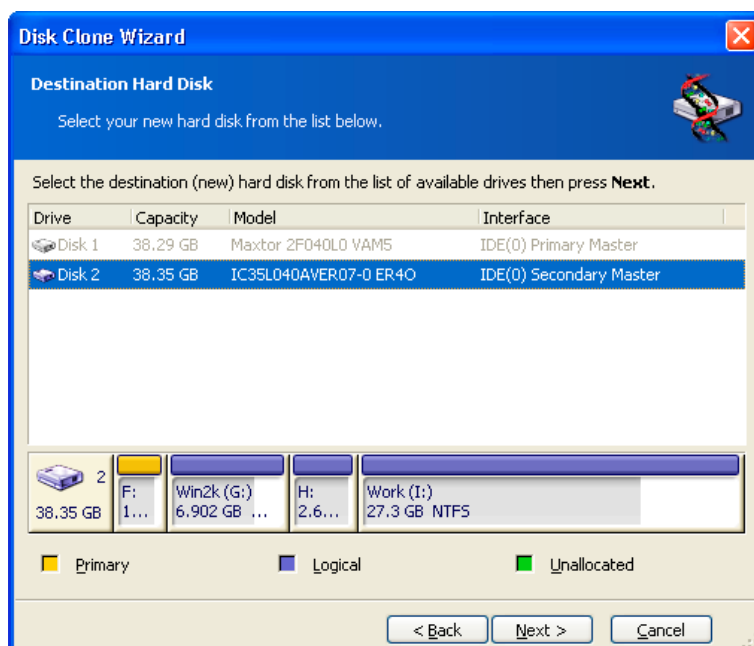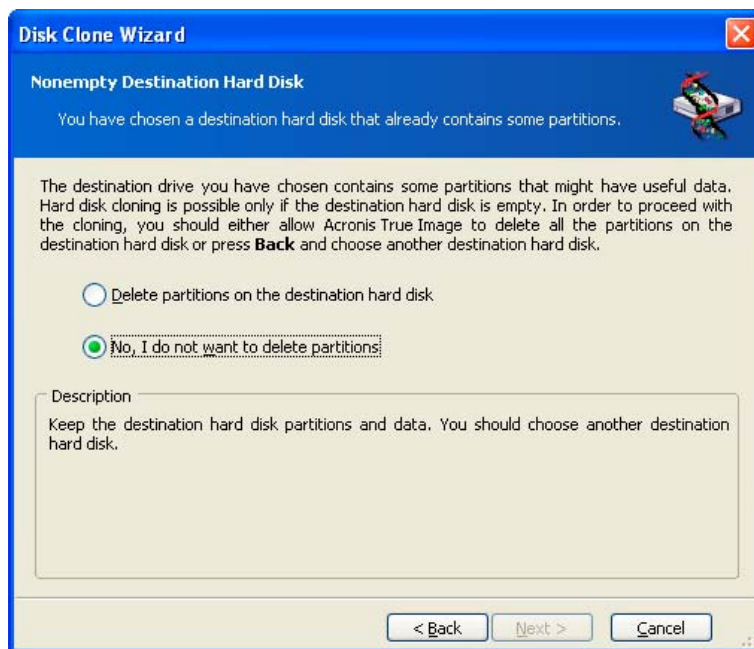

You can continue once existing partitions are deleted

You will have to select between:

• **Delete partitions on the destination hard disk** – all existing partitions will be deleted during cloning and all their data will be lost.

• **No, I do not want to delete partitions** – no existing partition will be deleted making the cloning impossible. You will only be able to cancel this operation and return to select another disk.

To continue select the first choice and click **Next**.

Note that no real changes and data destruction will be performed at this moment! For now the program will just create a cloning script. All changes will be implemented only when you click **Proceed**, after the script is formed.

7.3.5 Old and new disk partition layout

If you selected the automatic mode before, the program will ask you for nothing further. You will see the window graphically illustrating information (as rectangles)

about the source disk (partitions and unallocated space), and the destination disk layout.

Along with the disk number some additional information is provided: partition number, volume label (e.g. SYSTEM), file system (e.g. FAT16 or FAT32), partition size. Partition types – primary, logical – and unallocated space are marked with different colors.

Next you will see the cloning script.

7.3.6   Old disk data

If you selected the manual mode, the program will ask you what to do with the old disk:

- **Create a new partition layout** – create a new partition layout. All existing partitions and their data will be deleted (but they will also be cloned to the new disk, so you won't lose them).

- **Keep data** – leave the old disk partitions and data intact.

- **Destroy data** – delete partitions (and data!) from the old disk.
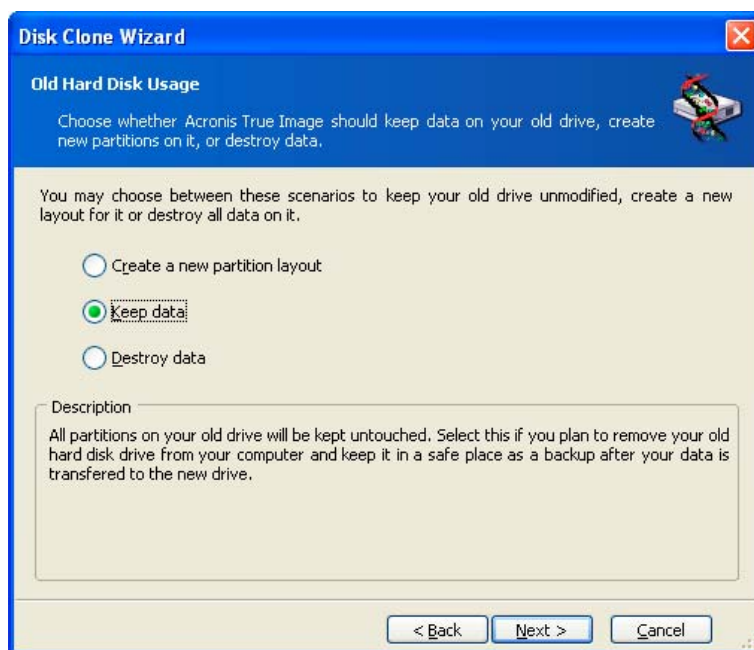
If you are going to sell, present, etc. your old disk, we recommend you to clean it from any information to avoid it getting into wrong hands.

If you are going to keep the old disk for yourself and use it for data storage, you can create a new partition layout on it. In this case the disk will be ready right after cloning is complete.

To protect yourself from unforeseen consequences, it would be better to leave the old disk data intact, as you will be able to delete them anytime you want later.

7.3.7   Destroying the old disk data

If you selected to destroy the old disk data on the previous step, you will have to select the destruction method now:

- **Quick** – quick 1-pass destruction (takes several minutes).

- **Normal** – guaranteed multipass destruction (takes more time).
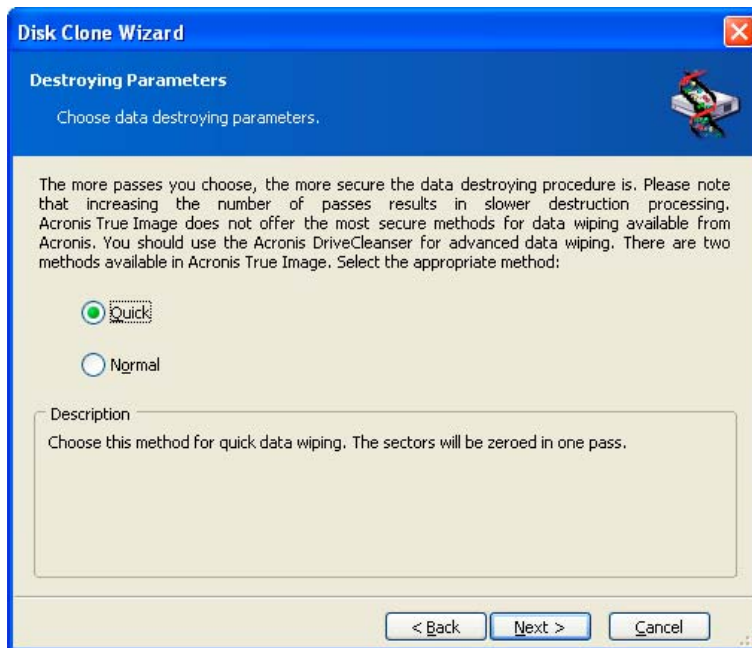
The second method takes more time, but makes it impossible to recover data afterwards even with special equipment.

The first method is less secure, but is still suitable for most cases.

7.3.8   Selecting partition transfer method

Acronis True Image Server 8.0 for Windows will offer you the following data transfer methods:

- **As is**;

- **Proportional** – the new disk space will be proportionally distributed between cloned partitions;

- **Manual** – you will specify the new size and other parameters yourself.
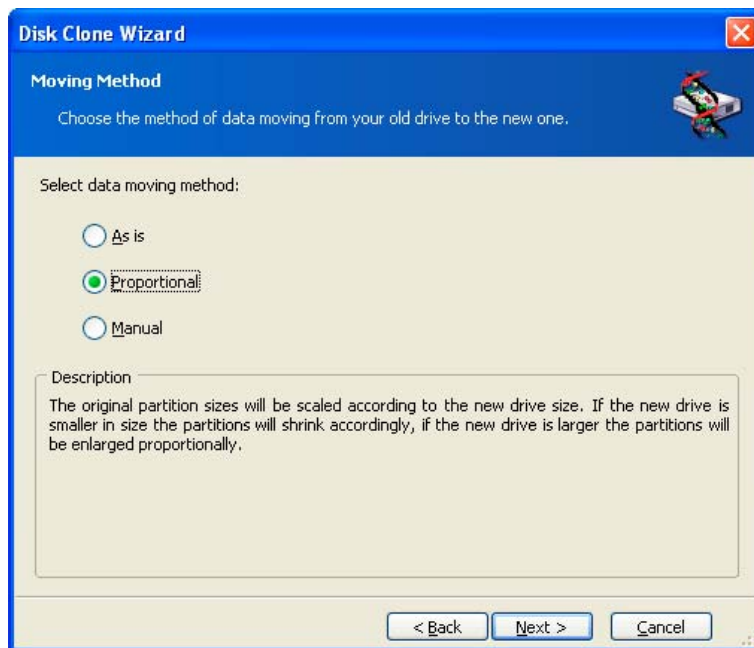
If you select to transfer information "as is", a new partition will be created for every old one with the same size and type, file system and label. The unused space will become unallocated. Further you will be able to use it to create new partitions or to enlarge the existing partitions with special tools (e.g. Acronis Partition Expert).

As a rule, "as is" transfers are inexpedient, as they leave much unallocated space on the new disk.

If you transfer data proportionally, each partition will be enlarged, according to the old and new disk capacities proportion.

In some cases, some partitions may still be transferred "as is" or be enlarged to the less extent comparing to other.

"As is" Acronis True Image Server 8.0 for Windows transfers unsupported and damaged file systems.

FAT16 partitions are enlarged less than other, as they have 4 Gb size limit.

Depending on the selected combination, you will proceed to either old disk partitioning window, or disk partition layout window (see below).

7.3.9 Partitioning the old disk

If you have selected **Create a new partition layout** before, it's now time to re-partition your old disk.

On this step you will see the current disk partition layout. Initially the disk has unallocated space only. This will change when you create new partitions.

Having completed the required steps, you will add a new partition. To create another one simply repeat these steps.

If you made a mistake, click **Back** to redo.

After you created the necessary partitions, uncheck the **Create new partition in unallocated space** box and click **Next**.

7.3.10 Old and new disk partition layouts

In the next window you will see rectangles indicating the source hard disk, including its partitions and unallocated space, as well as the new disk layout.
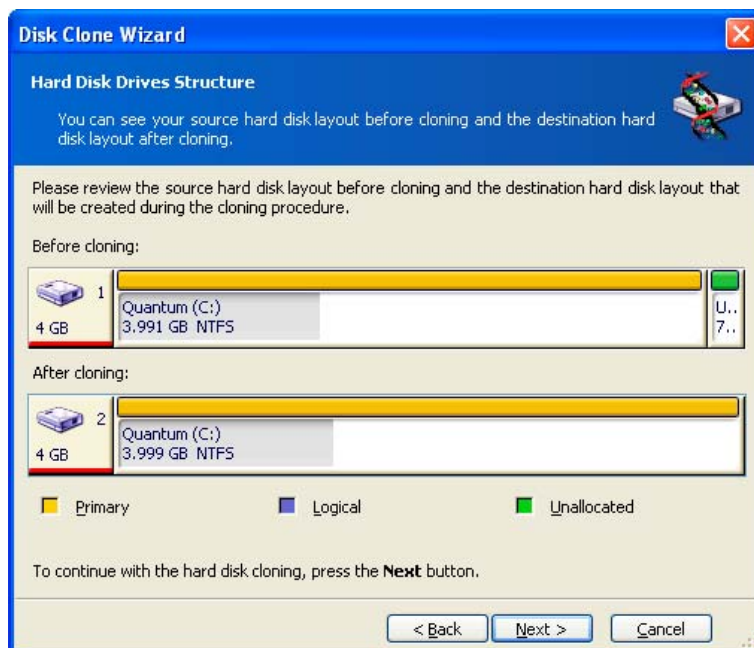
Along with the hard disk number you will also see partition number, volume label (e.g. SYSTEM), file system (e.g. FAT16 or FAT32), partition size. Different partition types, including primary, logical, and unallocated space are marked with different colors.

If you have selected manual partition creation before, the partition layout will look different. This partitioning method is described below.

7.3.11 Cloning script

In the next window you will see the disk cloning script containing a list of briefly described operations to be performed.
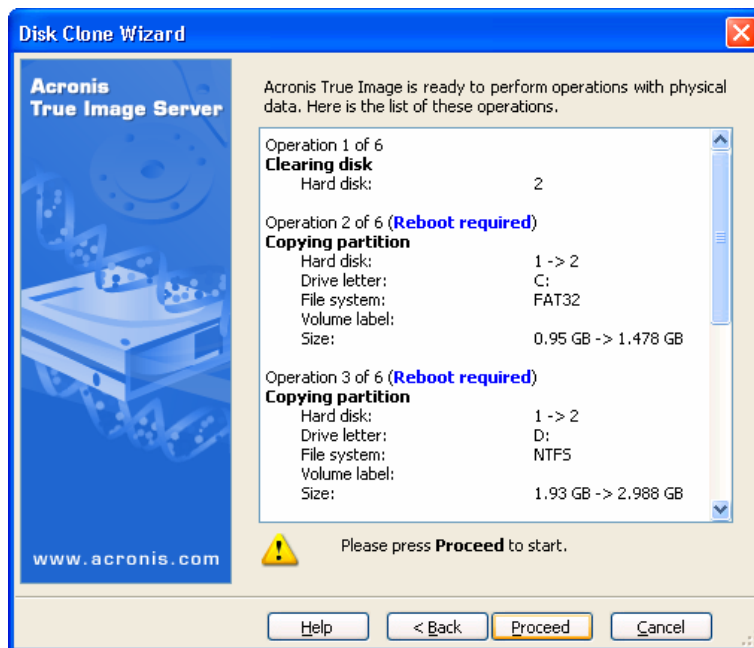
Disk cloning script

Cloning a disk, containing the currently active operating system, will require reboot. In that case, after clicking **Proceed** you will be asked to confirm the reboot. Canceling the reboot will cancel the entire procedure.

Cloning a non-system disk or a disk, containing OS, not active at the moment, will proceed without reboot. After you click **Proceed**, Acronis True Image Server 8.0 for Windows will start cloning the old disk to the new disk, indicating the progress in the special window. You can stop this procedure by clicking **Cancel**. In that case, you will have to repartition and format the new disk or repeat the cloning procedure. After the operation is complete, you will see the results message.

7.4   Cloning with manual partitioning

7.4.1   Old and new disk partition layouts

The manual transfer method enables you to resize partitions on the new disk. By default the program resizes them proportionally.

In the next window you will see rectangles indicating the source hard disk, including its partitions and unallocated space, as well as the new disk layout.

Along with the hard disk number you will also see partition number, volume label (e.g. SYSTEM), file system (e.g. FAT16 or FAT32) and partition size. Different partition types, including primary, logical, and unallocated space are marked with different colors.
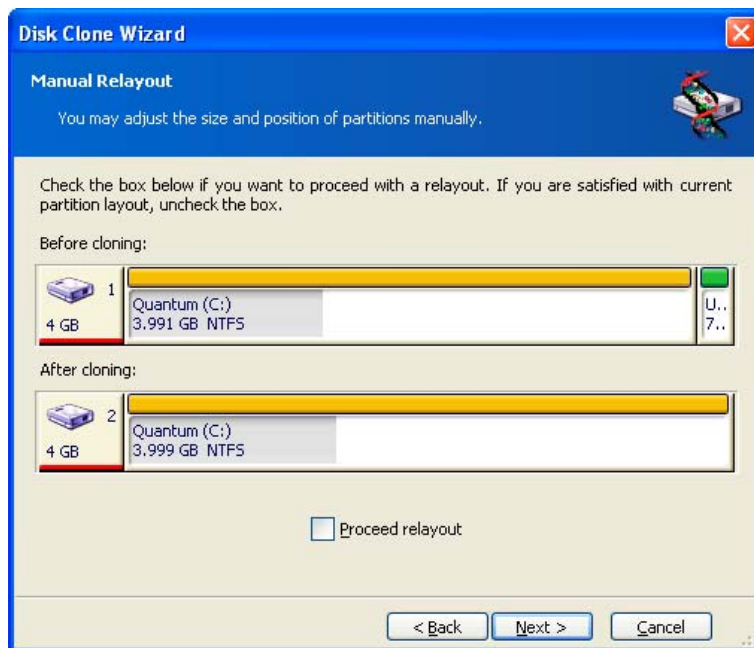
To resize either partition, check the **Proceed Relayout** box. If you are satisfied with the partition layout shown, uncheck this box (if checked). Clicking **Next** you will proceed to the cloning script window.

Be careful! Clicking Back in this window will reset all size and location changes that you've selected, so you will have to specify them again.

First, select a partition to resize. It will become underlined red.

Resize and relocate it on the next step.

You can do this by both entering values to **Unallocated space before**, **Partition size**, **Unallocated space after** fields, by dragging partition borders, or partition itself.

If the cursor turns to two vertical lines with left and right arrows, it's pointed at the partition border, so you can drag it. If the cursor turns to four arrows, it's pointed at the partition, so you can move it to the left or right (if there's unallocated space near it).

Having provided the new location and size, click **Next**. You will be taken two steps back to the partition layout. Perhaps, you will have to perform some more resizing and relocation before you get the layout you need.

Chapter 8. Adding a new hard disk

If you don't have enough space for your data, you can either replace the old disk with a new higher-capacity one (data transfers to new disks are described in the previous chapter), or add a new disk only to store data, leaving the system on the old disk. If the server has space for another disk, it would be easier to add it then clone.

To add a new disk you must first install it into your server.

8.1 Selecting a hard disk

Select the disk that you have added to the server.
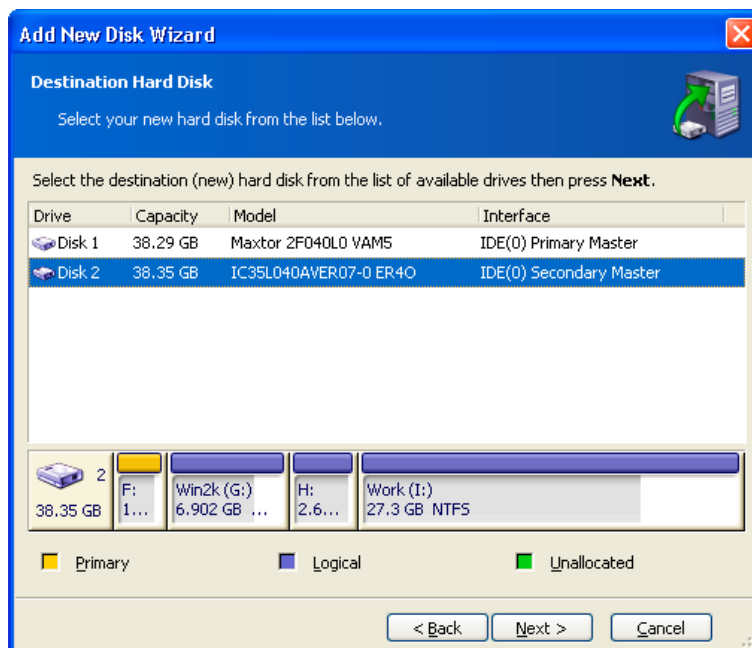
This window might be bypassed if the program detects the new disk itself. In this case, you will immediately proceed to the **New partition creation**.

If there are any partitions on the new disk, they must be deleted first.

Select **Delete partitions on the destination hard disk** and click **Next** to continue.

8.2 Creating new partitions

Next, you will see the current partition layout. Initially all disk space will be unallocated. This will change after you add new partitions.

To create a new partition in the unallocated space, select **Create new partition in unallocated space** and click **Next** to perform steps required by the partition creation wizard.

If you made a mistake at partitioning, click **Back** to redo.

After you create the necessary partition layout, uncheck the **Create new partition in unallocated space** box and click **Next**.

8.3 Disk add script

In the next window you will see the disk add script containing a list of briefly described operations to be performed.
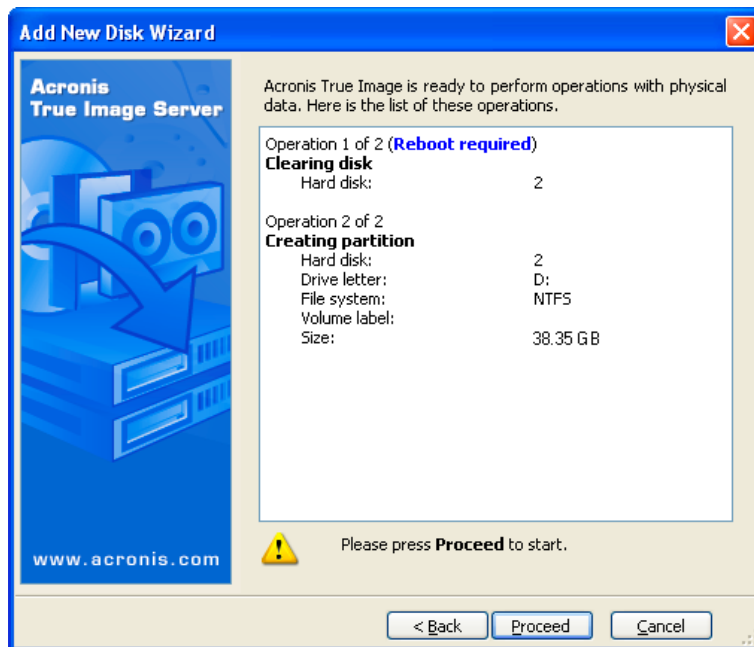
Disk add script

After you click **Proceed**, Acronis True Image Server 8.0 for Windows will start creating and formatting new partitions, indicating the progress in the special window. You can stop this procedure by clicking **Cancel**. In this case, you will have to repartition and format the new disk or repeat the disk add procedure.

After the operation is complete, you will see the results message.

Chapter 9. Scheduling

Acronis True Image Server 8.0 for Windows allows you to schedule tasks, so you won't have to remember the last time you imaged your disks. Acronis True Image Server 8.0 for Windows will do this for you to guarantee the safety of your data.

You can create more than one independent scheduled tasks.

For example, you can image your work documents daily, and backup the application disk only weekly.

This reduces the number of imaging operations and provides nearly the same data safety.

To create scheduled tasks, use Acronis True Image Server 8.0 for Windows scheduler.

Run the **Add New Task** wizard to create a new scheduled task. When the task is created, you will see its icon in the main window.

To edit the previously created task click **Edit** on the toolbar or right-click the task and select **Edit**. The editing is performed in the same way as adding.

To delete a task select it and click **Delete** on the toolbar or right-click the task and select **Delete**.

If any errors occur during the scheduled task execution, its icon will be marked with a warning sign – the red circle with a cross inside – to attract your attention next time you run Acronis True Image Server 8.0 for Windows. A brief error description will be shown in the left part of the window, if you select the task.

9.1 Creating scheduled tasks

9.1.1 Selecting partitions

In the **Partition selection** window you see the current partition layout. To select a partition check the corresponding box. To select all disk partitions check the disk box. At that all the related partitions will be checked. You can also select one or more hard disks or a random disk/partition combination.
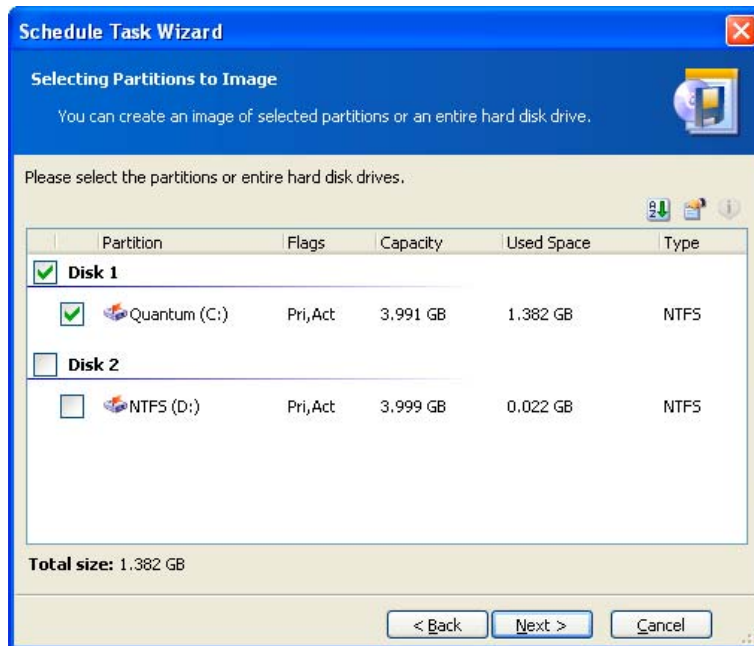
Having selected partitions and/or disks, click **Next**. Note that this button is disabled until at least one partition or disk is selected.

Other parameters are set further in the same way as described in the Chapter 4 related to image creation.

9.1.2 Selecting task periodicity

After you set image parameters, you must set task execution periodicity.
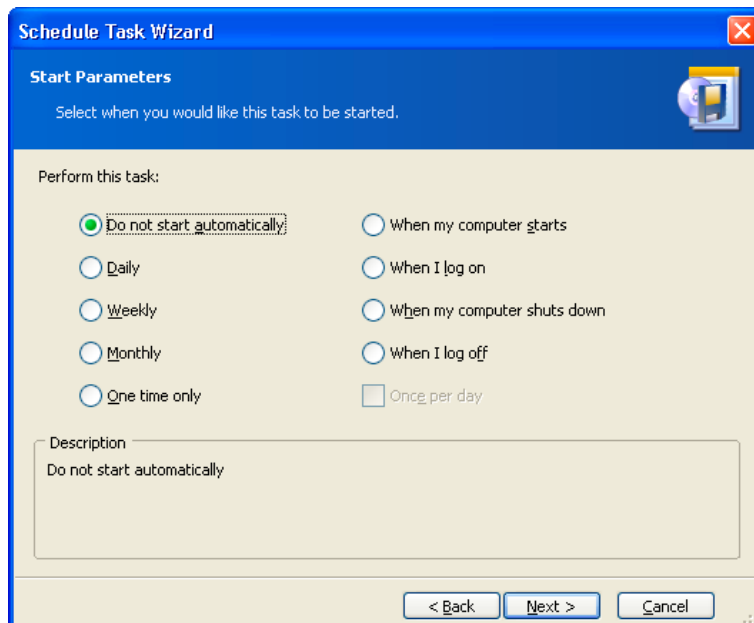
• **Do not start automatically** - a task will not be executed. You can select this variant to leave it disabled.

- **Daily** – a task will be executed daily at the specified time (selected on the next step).

- **Weekly** - a task will be executed weekly or in some weeks at the specified time and day (selected on the next step).

- **Monthly** - a task will be executed monthly at the specified time and day (selected on the next step).

- **One time only** - a task will be executed once at the specified time and day (selected on the next step).

- **When my computer starts** - a task will be executed at OS startup.

- **When I log on** - a task will be executed, when you log in the OS.

- **When my computer shuts down** - a task will be executed before every shutdown or reboot.

- **When I log off** - a task will be executed, when you log off the OS.

Some variants might be disabled depending on the operating system.

9.1.3   Setting up daily execution

If you select the daily execution, you will have to specify some additional parameters. First, the **Start time** (hours and minutes).

In the **Perform this task** group select days to execute tasks on:

- **Every day**;

- **Weekdays**;

- **Every *x* days** – once in several days (specify the interval).

You can execute the task even if your server is turned off at the specified time. To do this select **Perform this task when the computer restarts, only if the computer was turned off at the selected time**. In this case the task will be executed at the nearest startup.

9.1.4   Setting up weekly execution

If you select the weekly execution, you will have to specify some additional parameters. First, the **Start time** (hours and minutes).

Specify periodicity in the **Every x weeks** (each week, in a week, etc.)

Check weekdays to execute the task on.

You can execute the task even if your server is turned off at the specified time. To do this select **Perform this task when the computer restarts, only if the computer was turned off at the selected time**. In this case the task will be executed at the nearest startup.

9.1.5   Setting up monthly execution

If you select the monthly execution, you will have to specify some additional parameters. First, the **Start time** (hours and minutes).

In the **Perform this task** group select time to execute tasks on:

- **Day** – on the specified date.

- **The…** – on the specified weekday (e.g. second Tuesday or fourth Friday); selected from drop-down lists.
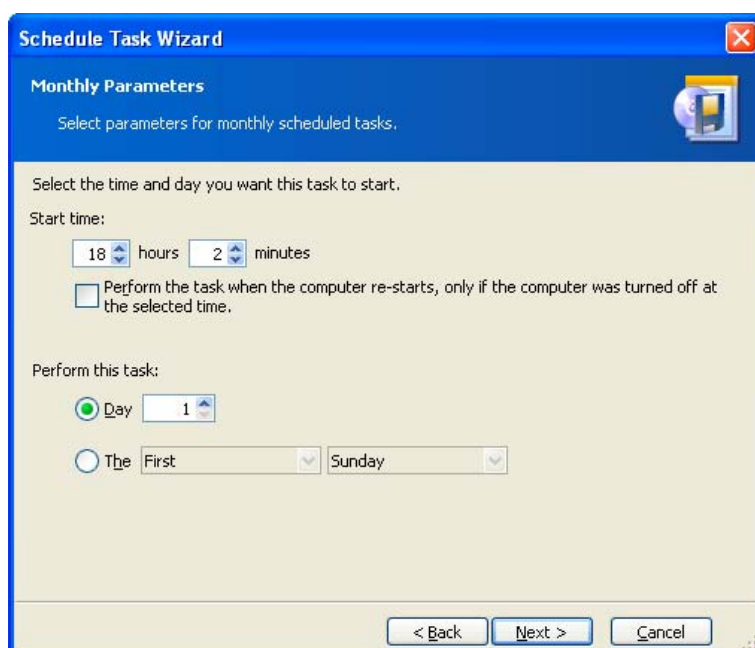
You can execute the task even if your server is turned off at the specified time. To do this select **Perform this task when the computer restarts, only if the computer was turned off at the selected time**. In this case the task will be executed at the nearest startup.

9.1.6 Setting up one time execution

If you select the weekly execution, you will have to specify some additional parameters.

First, the **Start time** (hours and minutes).
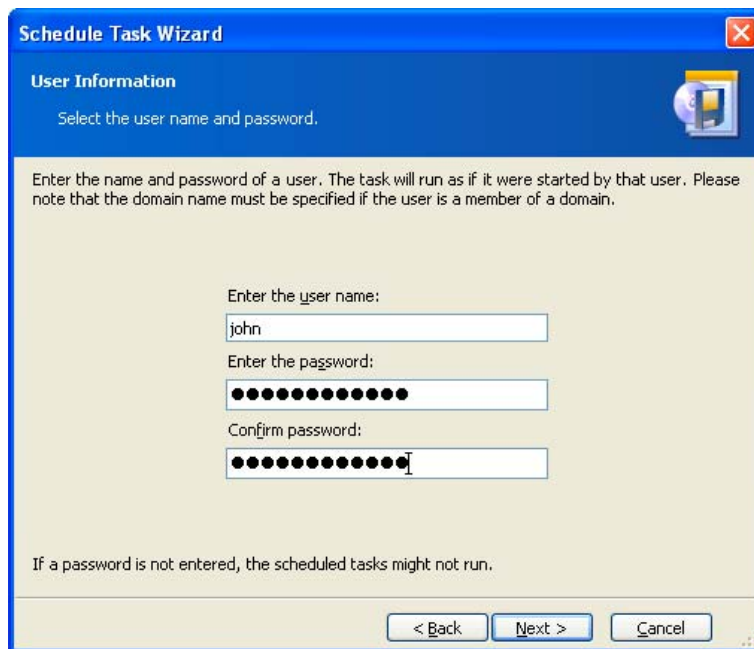
Second, the **Start date**.
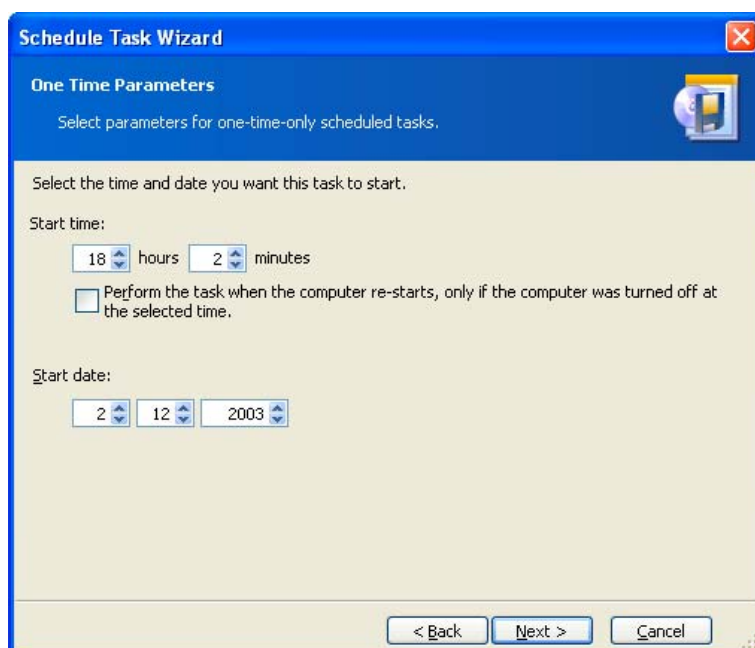
You can execute the task even if your server is turned off at the specified time. To do this select **Perform this task when the computer restarts, only if the computer was turned off at the selected time**. In this case the task will be executed at the nearest startup.

9.1.7 Entering user name

Under Windows NT SP6, 2000, XP, 2003 you will have to specify the name of the user that owns the executed task, otherwise no scheduled execution would be available.

In the upper field enter user name. Enter password twice in two fields below.

9.1.8 Task scheduled successfully

You have finished scheduling a task. The wizard will again remind you the details of the task provided.

To close the wizard and return to the main window click **Finish**. The task created will be named **New task**. You can rename it appropriately.

9.2 Managing scheduled tasks

If you select a task in the main window, you will see its details in the left part. And the **Operations** menu and toolbar will be extended with **Edit**, **Schedule**, **Delete**, and **Rename** icons.

Rename allows you to give your task a more appropriate name.

Delete is used to delete selected task with confirmation.

Edit is used to change any task parameters. This is performed in the same way as creation with two exceptions.

First, there will be specified parameters instead of the default, so you won't have to enter them again.

Second, after you make changes you will be asked about execution order. I.e. you will be able to change image creation parameters like location without touching its execution periodicity and time (though you can change it as well.)

If you want to change only periodicity and time, select **Schedule**. At that you will have to perform only scheduling steps leaving image settings the same.

Chapter 10. Command-line mode and scripting

Acronis True Image Server 8.0 for Windows supports the command-line mode, as well as the GUI mode, and can be used to execute XML scripts.

10.1 Working in the command-line mode

An administrator might need a console interface in some situations. Acronis True Image Server 8.0 for Windows supports this mode with **ti_cons.exe** utility. The file is located in a folder where Acronis True Image Server 8.0 for Windows has been installed, by default it is C:\Program Files\Acronis\TrueImage.

10.1.1 Supported commands

ti_cons has the following format:

ti_cons /[command] /[option$_1$] [option$_2$]...

The following commands are supported (each command may be accompanied by additional options):

1. create

Creates an image file with the specified file name. A complete image is created by default. Use the `/incremental` option to create an incremental image.

Options

`/progress:[on | off]`

Shows/hides the progress information (percent completed). It is shown by default.

`/filename:[filename]`

Sets the image file name.

`/password:[password]`

Protects an image with a password.

`/net_user:[username]`

Specifies a user name when creating an image on a network drive.

`/net_password:[password]`

Specifies a user password when creating an image on a network drive.

`/harddisk:[disk number]`

Specifies the hard disks to include into the image file by numbers. The list of available hard disks is provided by the `/list` command. An image may contain data of more than one hard disk. In that case, separate disk numbers by commas, e.g.:

`/harddisk 1,3`

/partition:[partition number]

Specifies the partitions to include into the image file by numbers. The list of available partitions is provided by `/list`. Partition numbers are specified as <disk number>-<partition number>, e.g.:

`/partition: 1-1,1-2,3-1`

/file_partition:[partition letter]

Specifies the partition where the image file will be stored (by letter or number). This option is used with `/filename:file_name`. In that case the file name must be specified without drive letter or root folder. For example:

`/file_partition:D /filename:"\1.tib"`

/raw

Use this option to create an image of a disk (partition) with unrecognized or unsupported file system. This will copy all disk/partition contents sector-by-sector. Without this option only the sectors containing useful system and user data are imaged.

/compression:[0…9]

Specifies the image compression level. It ranges from 0 to 9 and is set to 3 by default.

/incremental

Sets the image type to incremental. If there is no a basic image file to append an incremental one, a complete image will be created.

/split:[size in MB]

Splits image file into parts of the specified size.

/reboot

Reboots the server after the operation is completed.

/log:[file name]

Creates a log file of the current operation with the specified file name.

2. deploy

Restores a disk or partition from an image.

Options

`/filename:[filename]`

Specifies the name of the image file to restore.

`/net_user:[username]`

Specifies a user name when restoring an image from a network drive.

`/net_password:[password]`

Specifies a user password when restoring an image from a network drive.

`/file_partition:[partition letter]`

Specifies the partition where the image file is stored (by letter or number). This option is used with `/filename:file_name`. In this case the file name must be specified without drive letter or root folder. For example:

`/file_partition:D /filename:"\1.tib"`

`/password:[password]`

Specifies the password for the image file (if required).

`/harddisk:[disk number]`

Specifies the hard disks to restore by numbers.

`/partition:[partition number]`

Specifies the partitions to restore by numbers.

`/target_harddisk:[disk number]`

Specifies the hard disk number where the image will be restored.

`/start:[start sector]`

Sets the start sector for restoring a partition to the hard disk unallocated space.

`/size:[partition size in sectors]`

Sets the new partition size (in sectors).

`/type:[active | primary | logical]`

Sets the new partition type. By default (if this option is not defined) an active partition is created on the first hard disk and logic partitions on other disks.

`/target_partition:[partition number]`

Specifies the target partition number for restoring a partition over the existing one. If the option is not specified, the program assumes that the target partition number is the same as the partition number specified with the `/partition` option.

`/reboot`

Reboots the server after the operation is completed.

`/log:[file name]`

Creates a log file of the current operation with the specified file name.

3. list

Lists the available drives and partitions.

Options

`/filename:[filename]`

Lists the image file contents.

`/password:[password]`

Specifies the password for the image file (if required).

4. clone

Clones a hard disk.

Options

`/harddisk:[disk number]`

Specifies a source hard disk which will be cloned to the new hard disk.

`/target_harddisk:[disk number]`

Specifies the target hard disk number where the source hard disk will be cloned.

5. explore

Connects an image file as a virtual drive.

Options

`/filename:[image file name]`

The image file name.

`/password:[image password]`

The password for the image file (if required).

`/partition:[partitions list]`

Specifies a list of partitions to be mounted as virtual drives. Without this option, all partitions stored in the image file will be plugged.

`/letter`

Assigns letters to the mounted drives. This option is used with `/partition` option only.

`/net_user:[username]`

Specifies a user name when exploring an image from a network drive.

`/net_password:[password]`

Specifies a user password when exploring an image from a network drive.

`/log:[file name]`

Creates a log file of the current operation with the specified file name.

6. unplug

Unplugs the image file connected as a virtual drive.

Options

`/letter:X`

Specifies the virtual disk to be disconnected by letter.

`/letter:all`

Disconnects all virtual drives.

7. create_partition

Creates a new partition.

Options

`/harddisk:[disk number]`

Specifies the hard disk where to create a partition.

`/filesystem:[FAT | FAT 16 | FAT 32 | NTFS | NONE]`

Sets the file system for the new partition. The default value is NONE.

`/label:[partition label]`

Sets the new partition label.

`/type:[active | primary | logical]`

Sets the new partition type. By default (if this option is not defined) an active partition is created on the first hard disk and logic partitions on other disks.

`/start:[start sector]`

Sets the start sector for the new partition.

`/size:[partition size in sectors]`

Sets the new partition size (in sectors).

`/reboot`

Reboots the server after the partition is created.

8. delete_partition

Deletes a partition.

Options

`/partition:[partition number]`

Specifies the number of partition to delete.

/reboot

Reboots the server after deleting the partition.

/log:[file name]

Creates a log file of the current operation with the specified file name.

9. resize_partition

Resizes or/and moves the existing partition.

Options

/partition:[partition number]

Specifies the partition number.

/start:[start sector]

Sets a new start sector for the partition.

/size:[partition size in sectors]

Sets the new partition size (in sectors).

/reboot

Reboots the server after resizing/moving.

/log:[file name]

Creates a log file of the current operation with the specified file name.

10. asz_create

Creates Acronis Secure Zone on the selected drive.

Options

/harddisk:X

Specifies the hard disk number where Acronis Secure Zone will be created.

/partition:[partitions list]

Specifies partitions from which free space will be taken for Acronis Secure Zone creation.

/size:[ASZ size in sectors]

Sets the Acronis Secure Zone size (in sectors). If this size is not specified, it will be set as average between maximal and minimal values, including unallocated spaces on the all listed partitions.

/asz_activate

Activates Acronis Secure Zone after creation (or, rather, activates Acronis Startup Recovery Manager).

> `/asz_activate` option will not take effect, if the system partition is resized during Acronis Secure Zone creation. Use `/asz_activate` command to activate Acronis Secure Zone after it is created.

/reboot

Reboots the server after the Acronis Secure Zone is created.

/log:[file name]

Creates a log file of the current operation with the specified file name.

11. asz_delete

Deletes Acronis Secure Zone from your hard disk.

Options

/partition:[partitions list]

Specifies partitions to which free space will be added after the Acronis Secure Zone is deleted.

/log:[file name]

Creates a log file of the current operation with the specified file name.

12. asz_activate

Activates Acronis Secure Zone (or, rather, activates Acronis Startup Recovery Manager). This command may also be used as an option with 'asz_create' command.

13. verify

Verifies image archive data integrity.

Options

/filename:[filename]

Specifies the name of the image file to verify.

/password:[image password]

Specifies the password for image file (if required).

/net_user:[username]

Specifies a user name when verifying an image from a network drive.

/net_password:[password]

Specifies a user password when verifying an image from a network drive.

14. help

Shows help for commands.

10.1.2   ti_cons.exe usage examples

1. Create image

```
ti_cons /create /filename:"C:\Test\1.tib" /partition:2-1,1-3
```

- This will create an image named **1.tib** of the partitions 2-1 and 1-3. Image will be saved to c:\Test\ folder.

```
ti_cons /create /filename:"\Test\1.tib" /partition:2-1,1-3
/file_partition:3-1
```

- This will create an image named **1.tib** of the partitions 2-1 and 1-3. Image will be saved to partition 3-1.

```
ti_cons /create /filename:"C:\Test\1.tib" /password:qwerty
/harddisk:2 /reboot /raw /incremental /compression:5
/split:640 /progress:off
```

- This will append an incremental image to the image named 1.tib of hard disk 2. Image will be saved to c:\Test\ folder, protected with password "qwerty", split into parts of 640 MB, and contain all cluster data. Image compression level is 5. The server will be rebooted after the operation is completed.

2. Restore image

```
ti_cons /deploy /filename:"C:\Test\1.tib" /partition:2-1
```

- This will restore partition 2-1 from image 1.tib.

```
ti_cons /deploy /filename:"C:\Test\1.tib" /password:qwerty
/harddisk:2
```

- This will restore hard disk 2 from image 1.tib, protected with password 'qwerty'.

```
ti_cons /deploy /filename:"C:\Test\1.tib" /partition:2-1
/target_partition:1-1
```

- This will restore partition 2-1, stored in image 1.tib, to partition 1-1.

```
ti_cons /deploy /filename:"C:\Test\1.tib" /partition:2-1
/target_harddisk:3 /start:0 /size:64000 /type:logical
```

- This will restore partition 2-1, stored in image 1.tib, to hard disk 3. A new logical partition will be created on disk 3 from 0 to 64000 sector.

```
ti_cons /deploy /filename:z:\Server30Cdrive.tib /partition:1-1
/target_partition:2-1 /type:active /password:123qwe
```

- This will restore partition 1-1, stored in image Server30Cdrive.tib, protected with password '123qwe', to partition 2-1. The restored partition will be of active type.

3. List

```
ti_cons /list
```

- This will list available partitions.

4. **Clone**

```
ti_cons /clone /harddisk:2 /target_harddisk:3
```

- Clone hard disk 2 to hard disk 3.

5. **Delete partition**

```
ti_cons /delete_partition /partition:2-1,2-2 /reboot
/log:deleting.txt
```

- This will delete partitions 2-1 and 2-2, create log file 'deleting.txt' and reboot the server, when the operation is completed.

6. **Explore image**

```
ti_cons /explore /filename:\\myserver\backup\mybackup.tib
/net_user:john /net_password:qwerty
```

- This will connect all images, stored in file mybackup.tib on the network drive, as virtual drives.

10.1.3   Command-line mode usage under DOS

For usage in the MS-DOS compatible environments Acronis True Image Server 8.0 for Windows includes **ti_dos.exe** utility. It is located in a folder where Acronis True Image Server 8.0 for Windows has been installed, by default it is C:\Program Files\Acronis\TrueImage.

10.2   Scripting

10.2.1   Script execution parameters

Scripts are executed by the **TrueImageTerminal.exe** utility located in the Acronis True Image Server installation folder (i.e. C:\Program Files\Acronis\TrueImage). This utility is also used to monitor backup progress.

TrueImageTerminal execution parameters:

```
TrueImageTerminal.exe [arguments]
```

Arguments include the following:

/help – outputs help information about TrueImageTerminal.exe parameters.

/progress – outputs progress of backup operations run either from Acronis True Image Server graphics user interface, or from the script.

/execute: [*script file name*] – executes a script. If there are several scripts to be executed, they are queued. An example for executing MyBackup.tis script:

```
TrueImageTerminal.exe/execute:C:\MyBackup.tis
```

/nowait – an optional script execution argument. Enables to terminate TrueImageTerminal before backup is finished. Example:

```
TrueImageTerminal /execute:C:\MyBackup.tis /nowait
```

By pressing **Ctrl+C** you can force backup progress output off and switch **TrueImageTerminal** to background operation.

You can terminate backup operation executed by **TrueImageTerminal** by pressing **Ctrl+B**.

10.2.2   Script structure

Scripts are written in XML language and you can use the following tags:

Source. Specifies partitions or disks to be imaged. Letters assigned to partitions must be used without colon. Disk numbers correspond to their system numbers. To create images of several partitions or disks, use the SOURCE tag for each of them, e.g.:

```
<source letter="C"/>

<source letter="D"/>

<source disk ="1"/>

<source disk ="2"/>
```

Target. Specifies name and location of an image file, e.g.:

```
<target file-"E\Mybackup2.tib" username="username"
password="password"/>
```

username and *password* parameters are optional. They are used to access networked resources.

As a target for image files you can indicate CD-R/RW or tape drive.

Options. This tag can be used with a number of additional parameters:

`Compression`: specifies backup compression level. Can be `None`, `Low`, `Normal`, `High`.

`Incremental`: specifies if you need to create an incremental image file. If equal to `"false"` (or `"0"`), the complete image file will be created. If there's already a file with the name specified, it will be replaced without warnings. If equal to `"true"` (or `"1"`) and there's already a file with the name specified, an incremental image will be created. Otherwise the program will create a complete image file. The default value for this parameter is `"true"`.

`Description`: adds a description to an image file. The comment must be a single string (though its length is not limited.)

`Split`: splits a large image file into a number of smaller files of the specified size, which can be provided in bytes, kilobytes, megabytes, etc.

`Password`: adds password protection to an image file.

10.2.3   Script usage examples

The following example illustrates the usage of a script to backup two partitions (logical drives), C and F. `mybackup2.tib` is specified as an incremental image file. The High compression level is selected and the image is to be split into 650MB parts for recording to CD-R/RW media. Password protection will also be added. The entire script must be located between the `<backup>` and `<backup/>` tags.

```xml
<?xml version="1.0" encoding="utf-8" ?>

<backup>

<source letter="C" />

<source letter="F" />

<target file="e:\mybackup2.tib" />

<options compression="high" incremental="true"
description="this is my backup" split="650 Mb" password="" />

</backup>.
```

The script for backing up to tape (`tapeN` specifies the tapes numbers):

```xml
<?xml version="1.0" encoding="utf-8" ?>

<backup>

<source letter="C" />

<source letter="F" />

<target cdrw="\taperecorder\\\.\tape0|||" />

<target cdrw="\taperecorder\\\.\tape1|||" />

<options compression="high" incremental="true"
description="this is my backup" />

</backup>.
```

Chapter 11. Other operations

11.1 Checking images

To be assured your images are not damaged, you can check their integrity. To do this, select **Check Image** in the **Tools** group (expand it if it's not) or click **Check Image** on the toolbar. You will see the first wizard window. Click **Next** to continue.

11.1.1 Selecting image for checking

In this window you will see the complete list of connected storage devices, including hard disks and any other drives. Using the standard Windows Explorer locate the image file to be checked and select it.

Its name will appear in the **File Name** field and the **Next** button will be enabled.

Click **Proceed** to continue. The checking progress will be indicated in the new window.

You can cancel checking by clicking **Cancel**.

After checking is complete you will see the results window.

11.2   Creating bootable media

In some cases, Acronis True Image Server 8.0 for Windows can be run only from a special bootable diskette or CD. Such a case might be if your server does not boot up normally.

You can create bootable media during or after the installation.

For this, you will need a CD-R/RW blank, several formatted diskettes (the bootable media wizard will tell you the exact number), or any other media your server can boot from, such as a Zip drive.

Click **Create Bootable Rescue Media** on the toolbar or the sidebar, or select **Create Bootable Rescue Media** from the **Tools** menu.

You can also create bootable media without loading Acronis True Image Server 8.0 for Windows itself by selecting **Programs → Acronis → True Image Server 8.0 for Windows → Bootable Rescue Media Builder** from the **Start** menu.

You will see the bootable media wizard that will ask you to select either complete, or safe loader version. The latter doesn't have USB, PC card (PCMCIA), SCSI drivers and is useful only in case the complete version doesn't work.

After you create a boot disk, identify it and keep it in a safe place.

11.3   Viewing logs

Acronis True Image Server 8.0 for Windows allows users to view its working logs. They can provide information about scheduled image creation results, including failure reasons if any. Logs are created only for partition (disk) image creation operations.

To invoke the log window, select **Show log** on the toolbar or from the **Tools** menu.

The log browsing window contains two panels: the left one features the log list, while the right one – selected log contents.
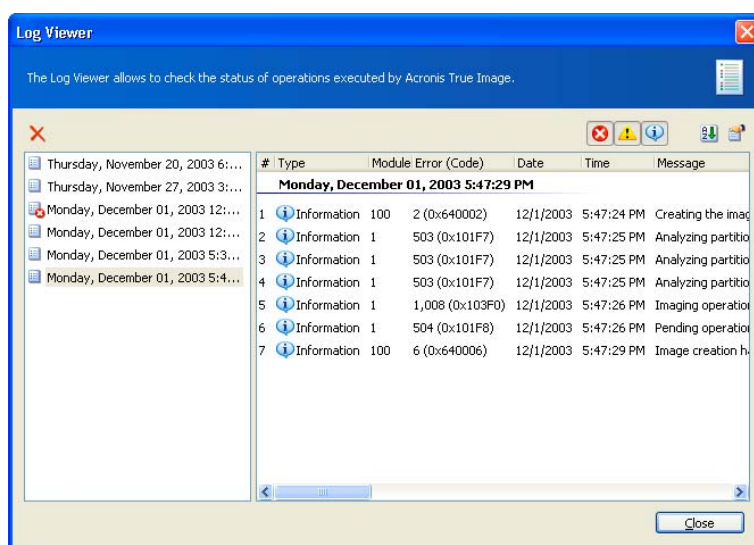
The left panel can contain up to 50 logs. If there's more, you can browse the list using the **More** and **Less** buttons with the left and right arrows.

To delete a log select it and click **Delete**.

If any step was terminated by an error, the corresponding log will be marked with a red circle with a white cross inside.

The right window features the list of steps contained in the selected log. You can flexibly setup list parameters to display only messages of particular type, particular columns, or select sorting order.

To sort messages by a particular column, click its header (click again to reverse order) or the **Arrange Icons by** button (the second from the right) and select the desired column.

To select columns to display right-click the headers line or left-click the **Choose Details** button, and check columns to display.

The three buttons to the left control message filters: the white cross in the red circle filters error messages, the exclamation sign in a yellow triangle filters warnings, and the "i" in the blue circle filters information messages.

You can also change column width by dragging their borders with mouse.

Chapter 12. Troubleshooting

12.1 Recovering Acronis True Image Server 8.0 for Windows

If Acronis True Image Server 8.0 for Windows ceased running or produces errors, its files might be corrupted. To fix it, you will have to recover the program. To do this, run Acronis True Image Server 8.0 for Windows installer again. It will detect Acronis True Image Server 8.0 for Windows on your server and will ask you if you want to recover (update) or remove it.

Click **Recover** and click **Proceed**.

12.2 Frequently asked questions

What storage devices does Acronis True Image Server 8.0 for Windows support for keeping backups?

Backups can be created on hard disks and other storage devices supported by Windows NT 4.0 SP6, 2000, 2003.

What is the purpose of specifying image file size?

The server hard disk is the fastest and most effective storage device. It can write a disk (partition) image considerably faster than any other device, e.g. CD-R/RW. Having specified image volume size equal to about 650–700Mb, you can quickly create image files on your hard disk to burn them to CD-R/RW afterwards. This allows doing the whole task more quickly.

What devices can a system partition be restored from if Acronis True Image Server 8.0 for Windows is loaded from its bootable diskette of CD?

Acronis True Image Server 8.0 for Windows supports any connected hard disks as well as a wide variety of IDE, SCSI, FireWire (IEEE-1394), USB (1.0, 1.1, 2.0), PC card (PCMCIA) interfaces and devices, including CD-ROM, CD-R/RW, DVD-RW, DVD+R/RW, magneto-optical drives, Iomega Zip, Jaz, etc.

Can Easy CD Creator 4.x–5.0 impede Acronis True Image Server 8.0 for Windows ?

Easy CD Creator 4.x and 5.0 automatically installs an old version of Take Two® backup utility that is no longer supported by its manufacturer, Roxio. If Acronis True Image Server 8.0 for Windows detects this utility, it shows you the following message in the beginning of image creation.

"Can't create the image of the logical disk, as it's already used by a running application. Please close all other applications and try again."

We recommend you to update your Easy CD Creator up to 5.1 or newer and/or completely remove Take Two®.

For more information visit
http://www.roxio.com/en/support/roxio_support/taketwo.html

I created an image on CD-R/RW discs, but when I try to browse it Acronis True Image Server 8.0 for Windows tells me it can't connect this image as a virtual disk.

The current version of Acronis True Image Server 8.0 for Windows can connect images only if their files are located in the same place. If your image is located on several CD-R/RW or hard disks, you will have to copy all its files to a single folder on your hard disk.

If it is an incremental image, you will need all of the previous images and the initial full image.

Why I am unable to create images after SafeGuard Easy was installed?

Backing up disks/partitions, encrypted by SafeGuard Easy, will be possible after you reinstall Acronis True Image Server 8.0 for Windows. Acronis True Image Server 8.0 for Windows is compatible with SafeGuard Easy, the only limitation is that it must be installed after SafeGuard. The image will contain volumes without encryption.

I ran Acronis True Image Server 8.0 for Windows from a bootable disk to restore a partition (disk) from an image located on the network drive, but couldn't find the necessary computer.

If there's at least one computer shown in the Network Neighborhood, try to access the required computer by typing its address in the Filename line like \\computer\folder.

If there's no Network icon in My Computer, it means either there are network problems, or that Acronis True Image Server 8.0 for Windows is trying to use the wrong drivers. Contact our technical support (support@acronis.com) and provide all network adapter specifications and the network adapter manufacturer's name.

I ran Acronis True Image Server 8.0 for Windows from a bootable disk to restore a partition (disk) from an image located on the network drive, but it just kept asking me for username and password. What should I do?

In some cases, especially when there's a domain controller installed in the network, you have to specify computer or domain name before username. You must enter username like COMPUTER\USER or DOMAIN\USER.

I received the "Can't create image of disk D:, because it's already used by applications or contains bad sectors" error message, where D: stands for my logical disk, when I tried to create an image under Windows.

Your logical disk might contain bad sectors. We recommend that you to run a complete disk surface test. Type "chkdsk /R D:" in the command line and reboot.

How can I prepare Windows NT, 2000 or 2003 for cloning or transferring to a server with different hardware?

Before you clone or transfer Windows to another server, you must prepare it with Microsoft System Preparation Tool (sysprep). The reasons to do this are described in the 298491 article of Microsoft Knowledge Base: "One problem from duplicating an installation of Windows 2000 is that each cloned computer has the same security identifier (SID) and computer name. This may prevent the cloned computers from functioning correctly in a workgroup or a domain. To work around this problem, administrators use the System Preparation Tool (Sysprep.exe) to remove configuration settings that are unique to the computer such as the computer name and SID." This problem also relates to Windows NT 4.0 and Windows XP, so you should prepare these OS in a similar way.

You can download Microsoft System Preparation Tool from www.microsoft.com or extract from deploy.cab located on Windows XP installation CD.

Below is a brief instruction on how to prepare your hard disk for cloning or transferring to another server:

1. Create Acronis True Image Server 8.0 for Windows bootable media using the corresponding wizard in the Acronis True Image Server 8.0 for Windows menu.

2. Run sysprep.exe. You can specify the following as command line parameters:

   -nosidgen — if you plan to delete all data from the old disk and/or don't plan to use the old and new disks in different servers simultaneously;

   -mini — if you plan to transfer your OS to a server with different hardware.

3. Insert Acronis True Image Server 8.0 for Windows bootable disk into the drive and load the program to create an image of the prepared disk.

4. Install the new disk into your server or provide image access from the new server.

5. Boot from the bootable disk again and restore the image to the new disk or server.

6. Reboot.

We recommend you to read Microsoft's sysprep articles available to the following OS: Windows NT 4.0, Windows 2000, Windows 2003.

How can I burn Acronis True Image Server 8.0 for Windows images to DVD?

Acronis True Image Server 8.0 for Windows can burn images to DVD in Windows, if you have DVD UDF recording software installed. The DVD disk must be formatted. Currently the program supports at least the following DVD recording software:

- Roxio DirectCD — optional component of Roxio Easy CD Creator;

- Ahead InCD — available free on the Nero website for Ahead Nero Burning Rom users (usually bundled with Nero);

- Veritas DLA and all its OEM versions (e.g. HP DLA);

- Pinnacle InstantCD/DVD.

In general, the program also supports all other DVD UDF burst recording software, but the aforementioned applications were tested by Acronis for compatibility with Acronis True Image Server 8.0 for Windows.

To enable image recording to DVD in Acronis True Image Server 8.0 for Windows you should do the following:

- Install DVD UDF recording software;

- Format DVD disks. DVD+RW and DVD-RW disks can be formatted in any of the aforementioned applications, while DVD+R formatting is currently supported by Roxio DirectCD only;

- Run Acronis True Image Server 8.0 for Windows, insert a formatted DVD into your DVD+RW or DVD-RW drive and create an image. No other special actions are required.

Images stored on DVDs can be restored under Windows, and when Acronis True Image Server 8.0 for Windows is loaded from its boot disk.

There is another way to burn an image to a DVD. Using Acronis True Image Server 8.0 for Windows, you can create an image on your hard disk and burn it using the installed DVD recording application to a DVD afterwards. You will be able to restore images from such discs under Windows and when Acronis True Image Server 8.0 for Windows is loaded from the bootable media.

12.3   Technical support

Users of legally purchased copies of Acronis True Image Server 8.0 for Windows are entitled to free e-mail technical support from Acronis. If you have installation or working problems that you can't solve by yourself using this manual and the readme.txt file, e-mail the technical support team.

Before you do this, you will have to register your copy at http://www.acronis.com/registration/ or by mail.

When e-mailing technical support, you must provide the registration number of your Acronis True Image Server 8.0 for Windows copy, bundled with the program.

For more information visit http://www.acronis.com/support/

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