

Acronis[®] Disk Director[®] 11 Advanced Server

Quick Start Guide

Copyright © Acronis, Inc., 2000-2010. All rights reserved.

“Acronis” and “Acronis Secure Zone” are registered trademarks of Acronis, Inc.

"Acronis Compute with Confidence", "Acronis Startup Recovery Manager", "Acronis Active Restore" and the Acronis logo are trademarks of Acronis, Inc.

Linux is a registered trademark of Linus Torvalds.

VMware and VMware Ready are trademarks and/or registered trademarks of VMware, Inc. in the United States and/or other jurisdictions.

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

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

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

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

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

Third party code may be provided with the Software and/or Service. The license terms for such third-parties are detailed in the license.txt file located in the root installation directory. You can always find the latest up-to-date list of the third party code and the associated license terms used with the Software and/or Service at <http://kb.acronis.com/content/7696>

1 Introducing Acronis® Disk Director® 11 Advanced

Acronis® Disk Director® 11 Advanced is a powerful and easy-to-use tool for managing disks and volumes on local and remote machines. With a comprehensive set of operations, you can organize your hard disk and volume configuration for optimal performance, while keeping your data safe.

Key features

Acronis Disk Director offers many features including:

- **New! Create both basic and dynamic volumes**

The handy Create Volume wizard has been improved to support dynamic volumes creation. Now, in addition to basic volumes, you can easily create dynamic volumes in Acronis Disk Director to:

 - Increase the volume size beyond the capacity of a single disk, by using a spanned volume
 - Reduce access time to files, by using a striped volume
 - Achieve fault tolerance, by using a mirrored and RAID-5 volumes*
- **New! Add, remove, or break mirrored volumes***

Make your basic or simple volume fault-tolerant in just one action by adding a mirror. If you need extra unallocated space on a disk containing one of the mirrors—remove a mirror. Break a mirrored volume to get two independent simple volumes with initially identical content.
- **New! Copy or move a volume of one type as a volume of another type**

Change the type of a volume when copying or moving it. For example, you can copy the contents of a mirrored volume to a spanned volume.
- **New! Convert primary volumes to logical and vice versa**

Convert a primary volume to logical to create a fifth volume on a disk that currently has four primary volumes.
- **New! Repair RAID-5 volumes**

Restore a RAID-5 volume performance by reconstructing the data of the failed member on another disk.
- **New! Convert basic disks to dynamic and vice versa**

Convert the existing basic disks to dynamic to achieve additional disk reliability for data storage.
- **New! Convert GPT disks to MBR and vice versa**

Change the partitioning scheme of your disk to the way you need it.
- **New! Import foreign disks**

Make dynamic disks added from another machine accessible for the system.
- **New! Changing a disk status: online to offline and vice versa***

Change a disk status to offline in order to protect it from unintentional use.
- **New! Disk cloning**

The Disk Cloning wizard lets you replace the old basic MBR disk with a new one without reinstalling operating systems and applications. It transfers all of the source disk data to a target disk. The source disk volumes can be cloned to the target disk "as is", or resized automatically according to the target disk size.

- **Disk and volume management operations**

Experience the vast array of disk and volume management operations:

- Resize, move, copy, split and merge volumes without data loss or destruction
- Format and label volumes, change file systems, clusters size, assign volume letters, and set volumes active
- Delete volumes and clean up disks
- Hide/unhide volumes
- Specify i-node density
- Initialize newly added hard disks
- Explore volume data, even on Linux volumes, before performing operations
- Preview changes made in disk and volume layout before applying them
- Browse through the detailed information about all hard disks, volumes, and file systems

- **Acronis Recovery Expert**

Helps you to recover accidentally lost or deleted volumes on basic MBR disks.

- **Acronis Bootable Media Builder**

Now, you can create bootable media based both on WinPE and Linux to use Acronis Disk Director on bare metal or outside of an operating system.

- **Acronis Disk Editor**

A professional tool that performs a variety of actions on a hard disk.

- **Log**

Examine information about disk and volume operations, including reasons for failure, if any.

** For the operating systems that support such functionality.*

2 Acronis Disk Director components

This section contains a list of Acronis Disk Director components with a brief description of their functionality.

Acronis Disk Director 11 Advanced Agent for Windows

The agent provides disk management functionality such as, creating, resizing and merging volumes, cloning disks, converting disks, changing a disk partitioning style between MBR and GPT or changing a disk label, etc. These operations can be performed either in the operating system or using bootable media. Each agent requires a license to perform operations on each managed machine.

Acronis Disk Director 11 Advanced Management Console

The management console is an administrative tool for remote or local access to Acronis agents. Usage of the console is not licensed.

Acronis Disk Director 11 Advanced Bootable Media Builder

With bootable media builder, you can create bootable media in order to use the agents and other rescue utilities in a rescue environment. Availability of the agent add-ons in a rescue environment depends on whether an add-on is installed on the machine where the media builder is working.

3 Installation and operation

3.1 System requirements

System requirements

Component	Memory (above the OS and running applications)	Disk space required during installation or update	Disk space occupied by the component(s)	Additional
Complete installation	300 MB	2 GB	1.01 GB	
Agent for Windows	120 MB	500 MB	260 MB	BIOS-based*
Bootable Media Builder	80 MB	700 MB	350 MB	CD-RW or DVD-RW drive
Management Console	30 MB	700 MB	400 MB	Screen resolution 1024*768 pixels or higher

* Machines that are based on Extensible Firmware Interface (EFI) are not supported.

Bootable media

Media type	Memory	ISO image size
Based on Windows PE	512 MB	300 MB
Linux-based	256 MB	130 MB

3.2 Supported operating systems

Acronis Disk Director 11 Advanced Agent for Windows

- Windows XP Professional SP2+
- Windows Server 2003/Server 2008
- Windows SBS 2003/SBS 2008
- Windows XP Professional x64 Edition, Windows Server 2003/2008 x64 Editions
- Windows Vista - all editions except for Vista Home Basic and Vista Home Premium
- Windows 7 - all editions except for the Starter and Home editions

Acronis Disk Director 11 Advanced Management Console

- Windows XP Home Editions/XP Professional SP2+
- Windows Server 2003/Server 2008
- Windows SBS 2003/SBS 2008
- Windows XP Professional x64 Edition, Windows Server 2003/2008 x64 Editions
- Windows Vista - all editions
- Windows 7 - all editions

3.3 Supported file systems

Acronis Disk Director supports the following file systems for performing operations:

- FAT16
- FAT32
- NTFS
- Ext2
- Ext3
- Reiser3
- Linux SWAP

The operations resulting in a change of volume size—that is: Create, Resize, Copy, Move, Merge, Split—are not available for the XFS, Reiser4, HPFS and JFS file systems.

3.4 Supported media

- Hard disk drives (HDD) and solid-state drives (SSD)
- Support for IDE, SCSI and SATA interfaces
- CD-R/RW, DVD-R/RW, DVD+R (including double-layer DVD+R), DVD+RW, DVD-RAM, BD-R, BD-RE for bootable media creation*
- USB 1.1 / 2.0 / 3.0, FireWire (IEEE-1394) hard disk drives
- PC card storage devices

* Burned rewritable discs cannot be read in Linux without a kernel patch.

3.5 Where to install the components

The minimum configuration that enables you to perform disk management operations on a machine includes Agent and Management Console. Connect the console to the machine where the agent is installed and perform disk management operations on the machine.

An agent has to be installed on **each machine you want to manage**. The console, which provides the GUI to the agents, should be installed on the **machines from where** the disk management operations have to be performed.

3.6 Installation procedure

Do the following to install Acronis Disk Director:

1. Log on as an administrator and start the setup program.
2. Click **Install Acronis Disk Director**.
3. Accept the terms of the license agreement.
4. Select the installation type:
 - The **Typical installation** will install all Disk Director components.
 - The **Custom installation** lets you specify the components that you want to install.
5. Enter the license key. You need to enter the product license key at each agent installation.

6. Specify where to install the components. By default, the setup program will install components to the `C:\Program Files\Acronis\`.
7. Specify credentials for the account under which the agent service will run. By default, the setup program will create a dedicated user account for the service.
8. Confirm opening of the Microsoft Windows Firewall port.
Details. Acronis Disk Director uses TCP port 9876 for local installation and for communication between components. If you use a different firewall, make sure that the port is open for both incoming and outgoing requests through that firewall.
9. The summary window displays the list of components that will be installed on the machine. Click **Install** to proceed with the installation.
10. After the installation, click **Close** to exit the setup program.

If you have several full licenses and need to install agents on other machines, repeat this procedure for each machine.

Note: When canceling the installation process, only the last package is removed. Other components, if any, remain installed.

3.7 Precautions

To avoid any possible disk and volume structure damage or data loss, please take all necessary precautions and follow these simple rules:

1. Back up the disk whose volumes will be created or managed. Having your most important data backed up to another hard disk or CD will allow you to work on disk volumes being reassured that your data is safe.

Acronis has an extremely effective comprehensive data backup and recovery solution — Acronis True Image. It creates a data or disk backup copy stored in a compressed archive file that can be restored in case of an accident.

2. Check volumes to make sure they are fully functional and do not contain any bad sectors or file system errors.
3. Do not perform any disk/volume operations while running other software that has low-level disk access. Acronis Disk Director must obtain exclusive access to the target disk/volume. This means no other disk management utilities (such as the Windows Disk Management utility) can access it at that time. If you receive a message stating that the disk/volume cannot be blocked, close the disk management applications that use this disk/volume and start again. If you cannot determine which applications use the disk/volume, close them all.

With these simple precautions, you will protect yourself against accidental data loss.

3.8 User privileges

In order to perform any operation using Acronis Disk Director, you must be logged on as a member of the **Administrators** group.

3.9 Running Acronis Disk Director

Running Acronis Disk Director in Windows

1. Start the management console by selecting it from the Start menu.

2. Connect the management console to the machine where the agent is installed.
3. In the **Disk management** view, examine the current layout of disks and volumes.
4. Add one or more management operations on disks and volumes to the queue of pending operations. These operations will take effect only after you commit them.
5. In the **Disk management** view, examine how the layout of disks and volumes will look when the pending operations are completed.
6. Commit the pending operations. Monitor the operation progress in the **Tasks** view. Use the **Log** view to examine the history of operations performed on the machine.

Some operations, such as changing the size of a volume from which Windows starts, may require restarting the machine.

Running Acronis Disk Director from a bootable media

Acronis Disk Director has a bootable version that can be run on a bare metal system, or on a crashed machine that cannot boot normally, or even on a non-Windows system, like Linux. A bootable version of Acronis Disk Director is created with Acronis Bootable Media Builder.

To run Acronis Disk Director, boot the machine from a bootable media, and then select **Acronis Disk Director**.

While working under bootable media, Acronis Disk Director can perform almost all the operations on any disks and volumes that can be performed under Windows.

3.10 Upgrading Acronis Disk Director

This section describes how to upgrade Acronis Disk Director.

3.10.1 Upgrading from demo to full product version

The demo key required at installation can be obtained on the Acronis Web site.

The demo version of Acronis Disk Director is fully functional, except for the following limitations:

- All volume operations can be performed on volumes whose initial and resulting size is not larger than 100 MB. Operations on volumes whose size is larger than 100 MB cannot be committed.
- The following disk operations can be committed only if the total size of all volumes on the disk is not larger than 100 MB:
 - MBR to GPT and vice versa disk conversion.
 - Basic to dynamic and vice versa disk conversion.
 - Clone basic disk.
 - Clean up disk.

To upgrade from the demo version to the full product, you do not need to re-download the software.

To upgrade from demo to full product version

1. Connect the console to the machine and click **Help > Switch to full license**.
2. Enter the full license key.

3.10.2 Upgrading from previous product versions

Preparation

If the languages of the two products are different, uninstall Acronis Disk Director 10 before installing Acronis Disk Director 11. Otherwise, the installation will fail.

The procedures below assume that you have an upgrade license key, but you can also use these procedures if you have a full license key.

Upgrading Acronis Disk Director 10 Server to Acronis Disk Director 11 Advanced Server

Before proceeding with the upgrade, make sure that:

- You have the license key for Acronis Disk Director 10 Server.
- You have a full or upgrade license key for Acronis Disk Director 11 Advanced Server.

The upgrade procedure

1. Log on as an administrator to the machine where Acronis Disk Director 10 Server is installed.
2. Start the Acronis Disk Director 11 Advanced setup program.
3. Click **Install Acronis Disk Director**.
4. *For the upgrade license key:* Specify the upgrade license key and the license key for Acronis Disk Director 10 Server.
For the full license key: specify only the key for Acronis Disk Director 11 Advanced Server.
5. Follow the on-screen instructions as described in Installation procedure (p. 7).

Result: Acronis Disk Director 10 Suite is replaced with Acronis Disk Director 11 Advanced Server.

4 Technical Support

Maintenance and Support Program

If you need assistance with your Acronis product, please go to <http://www.acronis.eu/support/>

Product Updates

You can download the latest updates for all your registered Acronis software products from our website at any time after logging into your **Account** (<https://www.acronis.eu/my>) and registering the product. See **Registering Acronis Products at the Website** (<http://kb.acronis.com/content/4834>) and **Acronis Website User Guide** (<http://kb.acronis.com/content/8128>).