Acronis Backup & Recovery 11 Server for Linux

Update 0

Installation Guide

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1 Before installation

This section answers questions that might arise before the product installation.

1.1 Types of licenses (stand-alone and advanced editions)

Acronis Backup & Recovery 11 licensing is based on the number of machines backed up by the product.

Stand-alone editions

These are the following editions:

- Acronis Backup & Recovery 11 Server for Windows
- Acronis Backup & Recovery 11 Server for Linux
- Acronis Backup & Recovery 11 Workstation

The stand-alone editions are designed for backing up the data of a single machine. With any of the above licenses, you can install all the product components on the same machine only. You will be asked for the license key of any of the above editions during the product installation.

Advanced editions (editions with centralized management)

These are the following editions:

- Acronis Backup & Recovery 11 Advanced Server
- Acronis Backup & Recovery 11 Virtual Edition
- Acronis Backup & Recovery 11 Advanced Server SBS Edition
- Acronis Backup & Recovery 11 Advanced Workstation

These editions are designed for backing up multiple machines. In addition to components that need to be installed on a backed up machine, these editions include a management server that enables centralized management, and storage nodes for storing backed up data on them. Unlike stand-alone editions, advanced editions allow remote connection to a backed up machine.

As with stand-alone editions, a separate license is required for every machine you want to back up. During installation of a licensed component (agent), you can either specify a license server or enter a license key manually. Installation of other components is not licensed. For example, you can install as many storage nodes as you wish - up to 50.

Components of stand-alone editions do not interact with the components of advanced editions.

1.2 Acronis Backup & Recovery 11 components

This section contains a list of Acronis Backup & Recovery 11 components with a brief description of their functionality.

Components for a managed machine (agents)

These are applications that perform data backup, recovery and other operations on the machines managed with Acronis Backup & Recovery 11. Agents require a license to perform operations on each managed machine. Agents have multiple features, or add-ons, that enable additional functionality and so might require additional licenses.

Console

The console provides Graphical User Interface to the agents. Usage of the console is not licensed. In stand-alone editions of Acronis Backup & Recovery 11, the console is installed together with the agent and cannot be disconnected from it.

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. In stand-alone editions of Acronis Backup & Recovery 11, Bootable Media Builder is installed together with the agent. All add-ons to the agent, if installed, will be available in a rescue environment.

1.2.1 Agent for Linux

This agent enables disk-level and file-level data protection under Linux.

Disk backup

Disk-level data protection is based on backing up either a disk or a volume file system as a whole, along with all information necessary for the operating system to boot; or all the disk sectors using the sector-by-sector approach (raw mode.) A backup that contains a copy of a disk or a volume in a packaged form is called a disk (volume) backup or a disk (volume) image. It is possible to recover disks or volumes as a whole from such backup, as well as individual folders or files.

File backup

File-level data protection is based on backing up files and directories residing on the machine where the agent is installed or on a network share accessed using the smb or nfs protocol. Files can be recovered to their original location or to another place. It is possible to recover all files and directories that were backed up or select which of them to recover.

1.2.1.1 Universal Restore

The Universal Restore add-on enables you to use the restore to dissimilar hardware functionality on the machine where the agent is installed and create bootable media with this functionality. Universal Restore handles differences in devices that are critical for the operating system start-up, such as storage controllers, motherboard or chipset.

1.2.2　Management Console

Acronis Backup & Recovery 11 Management Console is an administrative tool for local access to Acronis Backup & Recovery 11 agent. Remote connection to the agent is not possible.

1.2.3　Bootable Media Builder

Acronis Bootable Media Builder is a dedicated tool for creating bootable media. The media builder that installs on Linux creates bootable media based on Linux kernel.

The Universal Restore (p. 5) add-on enables you to create bootable media with the restore to dissimilar hardware functionality. Universal Restore handles differences in devices that are critical for the operating system start-up, such as storage controllers, motherboard or chipset.

1.3　Supported operating systems

Acronis Backup & Recovery 11 Management Console, Acronis Backup & Recovery 11 Agent for Linux

> Linux with kernel 2.4.20 or later (including 2.6.x kernels) and glibc 2.3.2 or later
>
> Various 32-bit and 64-bit Linux distributions, including:
>
> Red Hat Enterprise Linux 4.x, 5.x and 6.x
>
> Ubuntu 9.10 (Karmic Koala), 10.04 (Lucid Lynx) and 10.10
>
> Fedora 11, 12, 13, 14
>
> SUSE Linux Enterprise Server 10 and 11
>
> Debian 4 (Lenny) and 5 (Etch)
>
> CentOS 5
>
> Before installing the product on a system that does not use RPM Package Manager, such as an Ubuntu system, you need to install this manager manually; for example, by running the following command (as the root user): `apt-get install rpm`

1.4　System requirements

The components installed in Linux

Edition name	Memory (above the OS and running applications)	Disk space required during installation or update	Disk space occupied by the component(s)	Additional
Server for Linux	120 MB	815 MB	475 MB	Screen resolution 1024*768 pixels or higher
Bootable Media Builder (Linux)	70 MB	495 MB	270 MB	

Bootable media

Media type	Memory	ISO image size	Additional
Linux-based	512 MB	310 MB	

2 Installing Acronis Backup & Recovery 11

This section helps answer questions that might arise during the product installation.

2.1 Preparation

RPM Package Manager

Make sure that the RPM Package Manager (RPM) is installed in your system. Before installing the product on a Linux distribution that does not use RPM, such as Ubuntu, you need to install RPM manually; for example, by running the following command:

```
sudo apt-get install rpm
```

Linux distributions where RPM is already installed include Red Hat Enterprise Linux, Fedora, and SUSE Linux Enterprise Server.

Linux packages

The following Linux packages must be installed in the system: **gcc**, **kernel**, **kernel-headers**, and **kernel-devel**. The names of these packages may vary depending on the Linux distribution.

- To install these packages in Red Hat Enterprise Linux or Fedora, run the following command as the root user:
  ```
  yum install -y gcc kernel kernel-headers kernel-devel
  ```

- In Ubuntu, the necessary packages are normally already installed. We recommend running the following command before installing Acronis Backup & Recovery 11:
  ```
  sudo apt-get update
  ```

- For other Linux distributions, refer to the distribution's documentation regarding the names of these packages and the ways to install them.

Installation file

Depending on the machine platform (x86 or x86_64), you need the .i686 or the .x86_64 installation file. Make sure that the file is assigned the necessary access permissions to execute it; for example, by running the following command:

```
chmod 777 ABR11*
```

2.2 Installation in the interactive mode

1. Run the installation file (an .i686 or an .x86_64 file).
2. Read the terms of the license agreement, then select **Next**.
3. Select **Enter the license key**, and then type your Acronis Backup & Recovery 11 license key. Likewise, you can add a license key for Acronis Backup & Recovery 11 Universal Restore (if purchased).
4. When prompted to select the edition to install, select **Next**.
5. Select the components that you want to install.
6. The setup program may ask you to compile the SnapAPI module for your Linux kernel. Select **Continue** to compile the module now (recommended), or select **Skip** to compile it manually later.

> *Note*: *If the setup program could not compile the necessary module for your Linux distribution, or if you have chosen to compile the module manually later, please refer to the file:*
> */usr/lib/Acronis/BackupAndRecovery/HOWTO.INSTALL*

2.3 Installation in the unattended mode

To install the product or any of its components in the unattended mode (without asking for confirmations), run the installation file with the **-a** command-line parameter. You may need to use other parameters (p. 8) to specify how to perform the installation.

The following example assumes that the name of the installation file is ABR11ServerForLinux.i686.

The following command installs Acronis Backup & Recovery 11 Agent for Linux and Acronis Backup & Recovery 11 Management Console in the unattended mode (without asking for confirmations) and uses the license key 12345-7890-ABCDE:

```
./ABR11ServerForLinux.i686 -a -i BackupAndRecoveryAgent,ManagementConsole -l
12345-67890-ABCDE
```

2.4 Command-line parameters

When running the installation file of Acronis Backup & Recovery 11, you can specify one or more of command-line parameters.

Parameters

`-a` or `--auto`

Performs installation in the so-called unattended setup mode, as opposed to the default interactive mode.

The setup program will proceed without asking for interaction, such as typing the license key or clicking the **Next** buttons. Specify the license key by using the **-l** parameter. Specify the component to install by using the **-i** parameter.

If the SnapAPI module needs to be compiled and the compilation is possible, the setup program will automatically compile the module; otherwise, it will skip the compilation.

`-n` or `--nodeps`

Ignores dependencies during an unattended setup. This option is effective only in the unattended setup mode (see the **-a** parameter described previously).

`-u` or `--uninstall`

Uninstalls the component. You do not need to specify a license key.

`-s` or `--disable-native-shared`

Forces using the setup program's own redistributable libraries during installation, instead of those present in the system.

Redistributable libraries are standard sets of internal tools. Programs use these libraries for purposes such as displaying the user interface.

The setup program contains copies of all the libraries it needs. By default, it uses a copy of a library only when no such library is present in the system. With this parameter, the setup program always uses the copy.

You may want to use this parameter when experiencing problems with installation; for example, when the user interface of the setup program is not displayed correctly.

`-d` or `--debug`

Puts verbose information to the installation log.

`-i <Component name>` or `--id=<Component name>`

Specifies the name of the component being installed:

For Acronis Backup & Recovery 11 Agent for Linux: **BackupAndRecoveryAgent**

For Acronis Backup & Recovery 11 Bootable Components and Media Builder: **BackupAndRecoveryBootableComponents**

For Acronis Backup & Recovery 11 Management Console: **ManagementConsole**

The names are case-sensitive.

Without this parameter, all components will be installed.

`--aur`

Enables the Universal Restore feature. You need to specify a license key for this feature, by using the `-l` parameter.

`-l <License key>` or `--serial=<License key>`

Specifies the license key for Acronis Backup & Recovery 11.

If you are enabling the Universal Restore feature (see the `--aur` parameter described previously), also specify the corresponding license key, separating it by a comma; for example:

`-l 11111-AAAAA,22222-UUUUU`

`-v` or `--version`

Displays the product version and then exits.

`-?` or `--help`

Displays help and then exits.

`--usage`

Displays a brief usage message and then exits.

3 Upgrading from trial to full product version

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

To upgrade from the trial version to the standard product you do not need to re-download the software. When the trial period is over, the product GUI displays a notification requesting you to specify a standard license key.

To specify the standard license key, use the **Change License** window in the management console. Specifying the standard key by running the setup program is not possible.

3.1 Limitations of the trial version

The Acronis Backup & Recovery 11 trial version has the following limitation:

- Universal Restore functionality is disabled.

Additional limitations for bootable media:

- The disk management functionality is not available. You can try the user interface, but there is no option to commit the changes.
- The recovery functionality is available, but the backup functionality is not. To try the backup functionality, install the software in the operating system.

3.2 Changing a license

By changing the license, you switch to a different version or edition of the product. The following table summarizes the available options.

Switching a license	Why you may need it
trial > full	Upgrade from trial to full product version
trial > trial different edition	Define the edition that better fits your needs
trial > full different edition	The edition you bought differs from the edition of the trial version

You can also enable Acronis Deduplication and Acronis Universal Restore by using additional licenses, if these are available for the version and edition you are switching to.

Switching between advanced and standalone editions is not possible.

To change a license:

1. Click **Help > Change license**.
2. Enter the new license key. If you have a license key for Acronis Universal Restore, you can add it here.

Please do not forget that you cannot enable Acronis Universal Restore while using a trial product version.

4   Checking for software updates

Each time you start the management console, Acronis Backup & Recovery 11 checks whether a new version of the software is available on the Acronis Web site. If so, the software provides a link for downloading a setup program of the new version.

To check for updates manually, start the management console and then click **Help > Check for updates**. In that window, you also can disable the automatic checks for updates.

5 Uninstalling Acronis Backup & Recovery 11

To uninstall all components of Acronis Backup & Recovery 11

Do the following as the root user:

1. Run the following commands to uninstall Acronis Backup & Recovery 11 components:

```
# /usr/lib/Acronis/BackupAndRecovery/uninstall/uninstall
# /usr/lib/Acronis/BootableComponents/uninstall/uninstall
# /usr/lib/Acronis/BackupAndRecoveryConsole/uninstall/uninstall
```

2. Run the following command to delete the source files of the SnapAPI module:

```
# rm -rf /usr/src/snapapi*
```

To uninstall all components in the unattended mode, run each of the **./uninstall** commands with the **-a** parameter.

6   Deleting Acronis Secure Zone

Uninstallation of Acronis Backup & Recovery 11 does not affect Acronis Secure Zone and its contents. You will still be able to recover data from Acronis Secure Zone on booting from bootable media.

If you need to delete Acronis Secure Zone, perform the following steps in the operating system (before the agent uninstallation) or under bootable media.

To delete Acronis Secure Zone

1. On the **Actions** menu, click **Manage Acronis Secure Zone**.
2. In the **Delete Acronis Secure Zone** window, select volumes to which you want to add the space freed from the zone and then click **OK**.

    If you select several volumes, the space will be distributed proportionally to each partition. If you do not select any volume, the freed space becomes unallocated.

After you click **OK**, Acronis Backup & Recovery 11 will start deleting the zone.