Upgrading to advanced editions of Acronis Backup & Recovery 11

Applies to the following editions:

☑ Advanced Server

☑ Virtual Edition

☑ Advanced Server SBS Edition

☑ Advanced Workstation

☐ Server for Linux

☐ Server for Windows

☐ Workstation

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Acronis Backup & Recovery 11 succeeds Acronis Backup & Recovery 10 as the next generation disaster recovery solution. To make customers comfortable about migration to the new product, Acronis gives them the flexibility of performing a gradual upgrade; imports backup strategies from Acronis Backup & Recovery 10 into Acronis Backup & Recovery 11; and provides documentation that covers all aspects of the upgrade process.

1 Overview

Out of Acronis Backup & Recovery 10 components, only agents can interact with components of Acronis Backup & Recovery 11. Hence, you first need to upgrade the management console, license server, management server and storage nodes. Acronis Backup & Recovery 10 agents can continue backing up to the existing vaults.

After that, upgrade some or all of the Acronis Backup & Recovery 10 agents. For example, you can upgrade agents on a single machine or on a few machines to test the new product, while the remaining machines are protected by Acronis Backup & Recovery 10. Then, upgrade the majority of the Acronis Backup & Recovery 10 agents and apply the proven technology to them.

All agents that back up to tape devices attached to a storage node must be upgraded along with the storage node.

1.1 Using old agents in the new environment

New console

Acronis Backup & Recovery 11 console displays Acronis Backup & Recovery 11 Help even if connected to an Acronis Backup & Recovery 10 agent. It means that descriptions in the context help may differ from the appearance of the product windows and that the help may describe features which are not present in the product.

New management server

When creating a centralized backup plan, you cannot directly select data on a machine with an Acronis Backup & Recovery 10 agent. Use selection rules as you did when creating a backup policy in Acronis Backup & Recovery 10.

When you run or stop a centralized backup plan manually, only Acronis Backup & Recovery 11 agents carry out the action. Acronis Backup & Recovery 10 agents do not respond.

New storage node

After upgrading the storage node, its managed vaults (except for those located on tapes) automatically become backward compatible. It means that both Acronis Backup & Recovery 10 agents and Acronis Backup & Recovery 11 agents can back up to the vaults.

Should you need to create a new managed vault and set up Acronis Backup & Recovery 10 agents to back up to it, enable the backward compatibility option when creating the vault.

Remember that you cannot define **Vault administrators** and **Vault users** for backward compatible vaults. This functionality is exclusive for Acronis Backup & Recovery 11. You cannot convert a backward compatible vault to an ordinary managed vault either.

Managed vaults located on tapes are not backward compatible. You need to upgrade all the agents that back up to such vaults.

How different software versions work in a backward compatible managed vault

- Acronis Backup & Recovery 10 agents and Acronis Backup & Recovery 11 agents write the data to such vaults in their respective formats.

- Acronis Backup & Recovery 10 agents have access only to their backups while Acronis Backup & Recovery 11 agents can access any backup.

- In a deduplicating vault, the backups written by Acronis Backup & Recovery 10 agents are not deduplicated with the backups written by Acronis Backup & Recovery 11 agents and vice versa. Each product has its own deduplication datastore.

- Disk-level backups which Acronis Backup & Recovery 10 agents save to a backward compatible deduplicating vault, are deduplicated only at the source.

1.2 What happens with backup policies and plans

After the upgrade, all backup plans, recovery tasks and validation tasks will be preserved. Backup policies will be converted to centralized backup plans.

Centralized backup plans that reside on a management server provide all the functionality previously provided by backup policies. If you edit such a plan, the changes will be deployed to all machines included in the plan. To "apply" such a plan to a machine or a group or to "revoke" it, just edit the plan to add or remove the machine or the group. In addition to using selection rules, you can directly select data to back up on each machine. However, both methods of selection cannot be used within one backup plan.

1.3 Backup to tapes

Unlike Acronis Backup & Recovery 10, Acronis Backup & Recovery 11 does not use Windows Removable Storage Manager (RSM). During an upgrade from Acronis Backup & Recovery 10, Acronis Backup & Recovery 11 writes the necessary information from RSM to its own database in the new format.

This means that Acronis Backup & Recovery 11 can back up to tapes even if the Windows version installed on the machine does not support RSM.

2 Before the upgrade

Update Acronis Backup & Recovery 10 if necessary

If your version of Acronis Backup & Recovery 10 is earlier than Update 2 (build 11639), you need to update Acronis Backup & Recovery 10 to the latest version before upgrading it to Acronis Backup & Recovery 11. Otherwise, the setup program will remove Acronis Backup & Recovery 10 and will install Acronis Backup & Recovery 11 anew. Hence, you will lose all your logs, tasks, vaults and configuration settings.

If your version of Acronis Backup & Recovery 10 is Update 2 or Update 3 (build 12497), update Acronis Backup & Recovery 10 to the latest version only on the machine with the license server.

Obtain the upgrade license keys

Prior to the upgrade, make sure that you have the appropriate number of upgrade license keys for Acronis Backup & Recovery 11. The Acronis Backup & Recovery 10 license keys should be present on the license server. Otherwise, you will need to load the old license keys to the license server during the upgrade. Upgrading with full license keys is also possible. In this case, old license keys are not required.

Back up a machine

We recommend that you back up a machine before upgrading the software on it. This will allow you to roll back the machine to a previous state if the upgrade fails for any reason or if there are any issues after the upgrade.

Choose the right time for the upgrade

During the upgrade, Acronis services will be restarted and all Acronis tasks related to these services will be stopped. We recommend that you select the time for the upgrade when no backup plan or recovery task is running.

3   Upgrade procedure

3.1   Upgrading the license server

On the machine where the license server is installed, do the following:

1. Run the Acronis Backup & Recovery 11 setup program.
2. Click **Install Acronis Backup & Recovery 11**.
3. Accept the terms of the license agreement, and then click **Next**.
4. Click **Update**.
5. Add the upgrade license keys to the license server. If old license keys are not present on the license server, add them as well.
6. Click **Update** to proceed with the upgrade.
7. On successful upgrade, click **Finish** to close the wizard window.

If several Acronis Backup & Recovery 10 components are installed on the machine, all of them are upgraded.

3.2   Upgrading the management server, console and storage nodes

On each machine where the management console, management server or storage node is installed, do the following:

1. Run the Acronis Backup & Recovery 11 setup program.
2. Click **Install Acronis Backup & Recovery 11**.
3. Accept the terms of the license agreement, and then click **Next**.
4. Click **Update** or **Modify**.

   Details. Click **Modify** if you need to add or remove the product components. Select the check boxes next to the components you want to add, and clear the check boxes next to the components you want to remove. The components whose check boxes you leave selected will be upgraded.

   If you want to remotely upgrade agents on machines running Windows, add **Components for Remote Installation** when upgrading the management server.
5. Follow the on-screen instructions.

3.3   Upgrading Agent for Windows

You can upgrade the agents either locally or remotely.

The remote upgrade is most effective when you have many machines with an identical set of Acronis Backup & Recovery 10 components installed.

To learn which agents are installed on a machine, connect the console to the management server, click **Machines with agents** > **All machines with agents**, right-click the required machine, and then click **Details**. To view whether Deduplication and/or Universal Restore is installed on the machine, right-click the required machine, and then click **Change license**.

3.3.1 Local upgrade

On each machine with an agent, do the following:

1. Run the Acronis Backup & Recovery 11 setup program.
2. Click **Install Acronis Backup & Recovery 11**.
3. Accept the terms of the license agreement, and then click **Next**.
4. Click **Update**.
5. Follow the on-screen instructions.
6. If Acronis Startup Recovery Manager was activated on the machine, activate it again after the upgrade.

3.3.2 Remote upgrade

Preparation

Before proceeding with remote upgrade, prepare the remote machines as follows:

- **Simple file sharing.** For successful upgrade on a remote machine running any Windows XP version, the option **Control panel > Folder options > View > Use simple file sharing** must be *disabled* on that machine.

- **User Account Control.** For successful upgrade on a remote machine running Windows Vista or later, User Account Control (UAC) must be *disabled* on that machine. To access this option, go to **Control panel > User Accounts > Change User Account Control Settings**.

- **File and Printer Sharing** must be *enabled* on a remote machine. To access this option:
  - On a machine running Windows XP with Service Pack 2 or Windows 2003 Server: go to **Control panel > Windows Firewall > Exceptions > File and Printer Sharing**.
  - On a machine running Windows Vista, Windows Server 2008, or Windows 7: go to **Control panel > Windows Firewall > Network and Sharing Center > Change advanced sharing settings**.

- **Ports.** Acronis Backup & Recovery 11 uses TCP ports 445 and 25001 for remote upgrade. Make sure that these ports are added to exceptions in the firewall settings on the remote machines. TCP port 445 is added to exceptions automatically by Windows Firewall when you enable File and Printer Sharing.

  To add a port to exceptions:
  - In Windows XP, Windows 2003 Server, and Windows Vista: go to **Control panel > Windows Firewall > Exceptions > Add Port**
  - In Windows 7: go to **Control panel > Windows Firewall > Advanced settings > Inbound Rules > New Rule > Port**

    *Tip: If the remote machines are members of an Active Directory domain and use no firewall other than Windows Firewall, you can add TCP port 25001 to exceptions by using Group Policy. On a domain controller, create a Group Policy object, then go to **Administrative Templates > Network > Network Connections > Windows Firewall > Domain Profile > Windows Firewall: Define port exceptions** (or: **Define inbound port exceptions**), and then add the following port exception:*
    25001:tcp:*:enabled:Acronis remote install

  You can exclude both ports from exceptions after the remote upgrade is complete.

Upgrade

1. Connect the console to the management server where you have installed the **Components for Remote Installation**.

2. On the **Tools** menu, click **Install Acronis components**.

3. Select the machines on which the components are to be upgraded. Specify each machine's name or IP address and the administrator's user name and password. You can also add machines by browsing the network, browsing an Active Directory domain or importing the list of the machines from a .txt or .csv file. Click **Next** to continue.

4. In the list of components, select all components that are installed on the machines, plus the Agent Core component. Be sure to select the agents' add-ons (Deduplication, Universal Restore) if they are installed. You can also add other Acronis Backup & Recovery 11 components or add-ons to install.

5. Specify the license server and provide access credentials for it.

6. Follow the on-screen instructions.

7. If Acronis Startup Recovery Manager was activated on the machines, activate it again after the upgrade.

3.4 Upgrading Agent for Linux

Downloading installation files

Before proceeding with the upgrade, you need to download the installation files and assign them necessary access permissions:

1. Go to the Acronis Web site.

2. Depending on the machine platform and your edition of Acronis Backup & Recovery 11, download the installation file or files (.i686 or .x86_64 files).

3. Copy the installation files to a directory on the machine where you want to install Acronis Backup & Recovery 11.

4. Go to the directory where you copied the installation files, and then run the following command:
   ```
   chmod 777 ABR11*
   ```

Upgrade steps

On each machine with an agent, do the following:

1. Run the downloaded installation file as the root user.

2. In the welcome window, select **Next**.

3. Accept the terms of the license agreement, and then select **Next**.

4. Select **Next**, and then specify the license server.

5. Follow the on-screen instructions.

6. If Acronis Startup Recovery Manager was activated on the machine, activate it again after the upgrade.

3.5 Upgrading Agent for ESX(i)

You can upgrade only those agents that are registered on the management server. If some of the agents are not registered, register them before upgrading.

Also, make sure that you have upgrade licenses for all ESX(i) hosts managed by your vCenter Server. Add these licenses to the license server before starting the upgrade.

Please do not deploy or install Acronis Backup & Recovery 11 agents until you upgrade the existing ones. The new management server automatically distributes virtual machines among the agents. Since the old agents do not provide the information necessary for automatic distribution, they do not

participate in it. As a result, all of the load will be concentrated on the new agent. If, in addition, there are no Acronis Backup & Recovery 11 licenses on the license server, all your backups will cease to run.

To upgrade the agents from the management server

1. Connect the console to the management server.
2. In the **Navigation** tree, right-click the group that has the same name as the vCenter Server. If VMware vCenter integration is not enabled, right-click **Virtual machines**.
3. Click **Update Agent for ESX(i)**.
4. Select the agents that you want to upgrade. Agents that are already of the latest version are unavailable for selection.
5. Click **Update Agent for ESX(i)**.

The agents will be upgraded; their configuration settings will be preserved.

3.6   Upgrading Agent for Hyper-V

Agent for Hyper-V enables you to back up and recover virtual machines from a Hyper-V host without installing agents on the virtual machines. To upgrade Agent for Hyper-V, you need one upgrade license per Hyper-V host.

- In Windows 2008/2008 R2, Agent for Hyper-V is upgraded along with Agent for Windows (p. 7).
- In Microsoft Hyper-V Server 2008/2008 R2, you can upgrade the agent remotely (p. 8).

Acronis Backup & Recovery 11 features Hyper-V cluster support. If you have a Hyper-V cluster (also called a failover cluster), we recommend that you install Agent for Hyper-V on each node of the cluster. This will enable you to back up a clustered virtual machine no matter what node it migrates to.

3.7   Upgrading the command-line utility

Acronis Backup & Recovery 11 supports the command-line interface with the **acrocmd** utility.

Unlike the **trueimagecmd** utility used in the older Acronis products, **acrocmd** does not contain any tools that physically execute the commands. It merely provides the command-line interface to Acronis Backup & Recovery 11 components—agents, storage nodes and the management server. As with Management Console, you install the command-line utility on the machine from which you prefer to operate (run commands or scripts).

If you are not going to use old scripts, it is enough to install the utility on one machine (for example, where the console is installed). Other machines will be operated remotely.

How to continue using old scripts

To continue using your existing scripts, install the utility on every machine where the scripts are located. Also, edit the scripts so that **trueimagecmd** is replaced with **acrocmd**. If your scripts contain the path to the **trueimagecmd** utility, replace it with the path to the **acrocmd** utility. Retain all other parameters and values.

Installation procedure

In Linux, the command-line utility is always installed when you upgrade Management Console or Agent for Linux. No additional actions are required.

In Windows, you can install the utility during or after the upgrade. In the Acronis Backup & Recovery 11 setup program, click **Modify** and select the **Command-Line Tool** component in the tree. Or you can extract and run the corresponding .msi file.

3.8 Upgrading bootable media

As a part of the upgrade process, you should create an Acronis Backup & Recovery 11 bootable media.

Bootable Media Builder usually installs along with an agent or a console. If you have upgraded the agents and the console, your media builder has also probably been upgraded. If there is a machine where only the media builder is installed, run the setup program on this machine and upgrade the media builder in the same way as other components. Then, create bootable media using the upgraded media builder.

4 Tips for further usage

4.1 Catalog old backups

Acronis Backup & Recovery 11 has a feature called data catalog. It allows you to easily find the required version of data and select it for recovery. Backups created by Acronis Backup & Recovery 11 are cataloged automatically.

You can include the backups created by Acronis Backup & Recovery 10 in the catalog. To do this, connect the console to the management server or to a new agent, go to the vault where the backups are located, click the **Data view** tab and click the **start cataloging now** or **update the catalog now** link. Please be aware that the cataloging procedure may be time- and resource-consuming.

4.2 Use 64-bit Storage Node

Acronis Backup & Recovery 11 Storage Node has a 64-bit version. It provides better deduplication performance and can process more unique data. In a 64-bit system, the 64-bit version is installed automatically during the upgrade. No additional action is required.

If you are using deduplication on a 32-bit storage node, we highly recommend that you migrate to a 64-bit system. A 32-bit system can effectively process not more than 400 GB of unique data. Even if you are satisfied with the current deduplication performance, the appropriate hardware will provide a reserve in case you will need to back up more machines in the future.

For more information about requirements for the storage node, see the "Deduplication best practices" section of the product Help or User Guide.

4.3 Use the management server Web page for installation

The management server Web page, available in Acronis Backup & Recovery 11, can be used for installation on multiple machines in a network that does not allow sharing folders. You can go to that Web page from any machine with a supported Web browser.

To start using the Web page, make sure that the **Components for Remote Installation** component is installed on the machine with the management server. If not, install these components. To activate the service, run the **Services** snap-in, change the logon parameters of the AmsWebServer service to the account of any user belonging to the Acronis Centralized Admins group, and then start the service.

4.4 Retire backward compatible managed vaults

After you have upgraded all the Acronis Backup & Recovery 10 agents, backward compatible managed vaults are no longer needed. You have two options to choose from:

- **Leave a backward compatible vault "as is" and continue backing up to it**

    You will not be able to define **Vault administrators** and **Vault users** for the vault. Besides, if the vault is a deduplicating one, the old archives will not be deduplicated with the archives written by Acronis Backup & Recovery 11 agents. This decreases the deduplication ratio.

- **Create a new vault without the backward compatibility property**

You will have to edit the backup plans to redirect the backups to the new vault. The backups in the old vault remain available as long as you need them. Once their retention period expires, delete the backups and the vault.

If you want to move the old archives to the new vault, export them using the following command:

```
acrocmd export archive --service=asn --host=<storage node> --loc=<old vault> --
credentials=<old    vault    user    name>,<password>   --target=<new    vault>    --
credentials=<new vault user name>,<password>
```

Since the export is performed by Acronis Backup & Recovery 11, the old archives will be treated as if they were created by Acronis Backup & Recovery 11. If the target vault is a deduplicating one, the old archives will be deduplicated with the archives written by Acronis Backup & Recovery 11 agents.

After the export is completed, you need to catalog the new vault.

5 What else you may want to know

Will the backup and recovery options be preserved after the upgrade?

The user-defined values of the default backup and recovery options are not preserved. However, the values of the backup and recovery options specified in the backup policies, plans and recovery tasks remain unchanged.

Is it possible to upgrade to a different language version of the product?

If the language version of Acronis Backup & Recovery 10 does not match the language version of Acronis Backup & Recovery 11, you have to uninstall Acronis Backup & Recovery 10 and then install Acronis Backup & Recovery 11 anew using the full license keys.

Is it possible to upgrade from Acronis True Image Echo?

If you want to upgrade from Acronis True Image Echo to Acronis Backup & Recovery 11 and retain your tasks and settings, you need to upgrade to Acronis Backup & Recovery 10 first. For more details, see the "Upgrading to advanced editions of Acronis Backup & Recovery 10" document.