



# Acronis Backup & Recovery 11

Update 0

## Command-Line Reference

**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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# 1 Command-line utility overview

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.

Once installed on a Windows or Linux machine, the `acrocmd` utility can be run from any folder or directory. This utility is also available when operating in both Linux-based and PE-based bootable media.

## 1.1 Installation

### Stand-alone editions of Acronis Backup & Recovery 11

If you have installed a stand-alone edition of Acronis Backup & Recovery 11, the command-line utility is already on your machine. Only local management of this machine is available. This means that any command or script for this machine can be run only locally.

### Editions with centralized management

Advanced editions of Acronis Backup & Recovery 11 enable you to perform local, remote and centralized management (p. 9) of any machine where an Acronis Backup & Recovery 11 agent is installed.

As with Management Console, you install the command-line utility on the machine from which you prefer to operate (run commands or scripts). The machine may run Windows or Linux. Using the command-line utility, you can manage a Windows machine from a machine running Linux or vice versa.

### Installation steps

In Linux, the command-line utility is installed by default with Management Console or Agent for Linux.

In Windows, you install the utility from the setup file as a separate component. To access this component in the installer, select the **I want to manually select the Acronis components and customize the installation process** check box. Or you can extract and run the corresponding .msi file.

#### *To install the command-line utility from the .msi file:*

1. Run the Acronis Backup & Recovery 11 setup file.
2. Click **Extract installation files**.
3. Select the check box corresponding to the **AcronisCommandLineTool.msi** file.
4. Specify the folder where to extract the file.
5. Click **Extract**.
6. After the file is successfully extracted, click **Finish**.
7. Go to the folder where the **AcronisCommandLineTool.msi** file is extracted, and launch the file.
8. Follow the Install Wizard instructions on the screen.

## Installation paths

The default installation paths are:

- `%ProgramFiles%\Acronis\CommandLineTool` (in 32-bit Windows)
- `%ProgramFiles(x86)%\Acronis\CommandLineTool` (in 64-bit Windows)
- `/usr/lib/Acronis/CommandLineTool` (in Linux)

## 1.2 Backward compatibility and upgrade

### Upgrading the command-line utility from Acronis Backup & Recovery 10

When you upgrade a stand-alone edition of Acronis Backup & Recovery 10 to Acronis Backup & Recovery 11, no additional actions are needed to upgrade the command-line utility.

When you upgrade an edition with centralized management, the software installs the command-line utility on every machine where an agent is installed. No additional actions are needed.

### Backward compatibility

The Acronis Backup & Recovery 11 command-line utility is backward compatible with the Acronis Backup & Recovery 10 command-line utility. You can continue using the old syntax. Just type `acrocmd` instead of `trueimagecmd`.

To continue using your existing scripts, 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.

---

*Before switching to `acrocmd`, make sure that all the product components are upgraded. Acronis Backup & Recovery 10 does not support `acrocmd`.*

---

Combination of the old and new syntaxes is acceptable within a script, but is not acceptable within a command string. When you create new scripts, we recommend that you use the new syntax.

Even when using the old syntax, logs and commands' output will appear in the new format.

### Extensions of backup file names

The behavior of the `/filename` parameter with the backup commands is slightly different in Acronis Backup & Recovery 10 and Acronis Backup & Recovery 11. Unlike Acronis Backup & Recovery 10, where the extension of a backup file is exactly the same as you specify in the parameter value, Acronis Backup & Recovery 11 adds the `*.tib` extension to this value.

For example:

- In Acronis Backup & Recovery 10, if you specify `/filename:<path>my_backup.bak`, the backup file name will be `my_backup.bak`
- In Acronis Backup & Recovery 11, if you specify `/filename:<path>my_backup.bak`, the backup file name will be `my_backup.bak.tib`. However, if you specify `/filename:<path>my_backup.tib`, the backup file name will also be `my_backup.tib`.

## 1.3 Syntax

`acrocmd` has the following format:

```
acrocmd <command> --<parameter 1>=<value list 1> ... --<parameter N>=<value list N>
```

### Typographic conventions

Descriptions of commands and parameters use the following specific typographic conventions.

- Between angle brackets (<>) – information that the user must supply. Example: <IP address or hostname>
- Between braces ({}); choices separated by pipe (|) – a set of choices from which the user must choose only one. Example: {on|off}.

### Parameter values

For some parameters, you should specify only one value. The description of such value is written in the singular. For example, if you see `--arc=<archive name>`, specify only one archive name in this parameter.

For some parameters, you can enter one or more values. The description of such values is written in the plural. For example, if you see `--volume=<volume numbers>`, you can specify a list of volume numbers in this parameter.

### Separators

A parameter name and a value list can be separated by either an equals sign or a space character. Values in a value list can be separated by either a comma or a space character.

#### Examples:

```
acrocmd backup disk --disk=1,2
acrocmd backup disk --disk=1 2
acrocmd backup disk --disk 1,2
acrocmd backup disk --disk 1 2
```

### Files with input parameters

`acrocmd` supports files with input parameters. The contents of an input parameter file are concatenated with the parameters in the command line.

For example, the command

```
acrocmd backup disk -f params.txt
```

where the content of the file `params.txt` is

```
--disk=1 --loc=e:\my_backups --arc=archive123
```

equals to

```
acrocmd backup disk --disk=1 --loc=e:\my_backups --arc=archive123
```



## 1.4 Local, remote and centralized management

Advanced editions of Acronis Backup & Recovery 11 enable you to perform local, remote and centralized management of any machine where an Acronis Backup & Recovery 11 agent is installed.

### Local management

For local management, you install the command-line utility on the same machine where the Acronis Backup & Recovery 11 agent is installed. The operations are performed under the user account you are logged on with.

#### Example

To view all disks of the local machine, run the following command:

```
acrocmd list disks
```

### Remote management

For remote management, you install the command-line utility on the machine from which you prefer to operate (run commands or scripts).

Along with the command, you specify:

- the IP address or host name of the remote machine that has an Acronis Backup & Recovery 11 agent (`--host`)
- credentials (a pair of user name and password) for access to that machine

The user whose credentials you specify must be a member of the Acronis Remote Users security group on that machine. The operations are performed under this user account.

#### Example

To view all disks of a remote machine, run the following command:

```
acrocmd list disks --host=<IP address or hostname> --credentials=<user name>, <password>
```

### Centralized management

#### Commands on a machine

Through Acronis Backup & Recovery 11 Management Server, you can manage any registered machine using the credentials of the management server's administrator. Credentials for each remote machine are not required.

For a number of commands, you can specify comma-separated addresses of multiple machines. The operation will be executed on all the specified machines one after another.

Along with the command, you specify:

- the IP address or host name of the machine that has an Acronis Backup & Recovery 11 agent (`--address`)
- the IP address or host name of the management server (`--host`)
- the name of the management server service (`--service=ams`)
- credentials for access to the management server

The user whose credentials you specify must be a member of the Acronis Centralized Admins security group on the management server. If you are running the command-line utility on a different machine, the user must also be a member of the Acronis Remote Users security group on the management server.

The operations on the machine are performed under the account of the agent service running on that machine (Acronis Agent User account).

### Example

To view all disks of a machine through the management server, run the following command:

```
acrocmd list disks --host=<ams hostname> --credentials=<user name>,<password> -  
-service=ams --address=<IP address or hostname>
```

### Commands on the management server

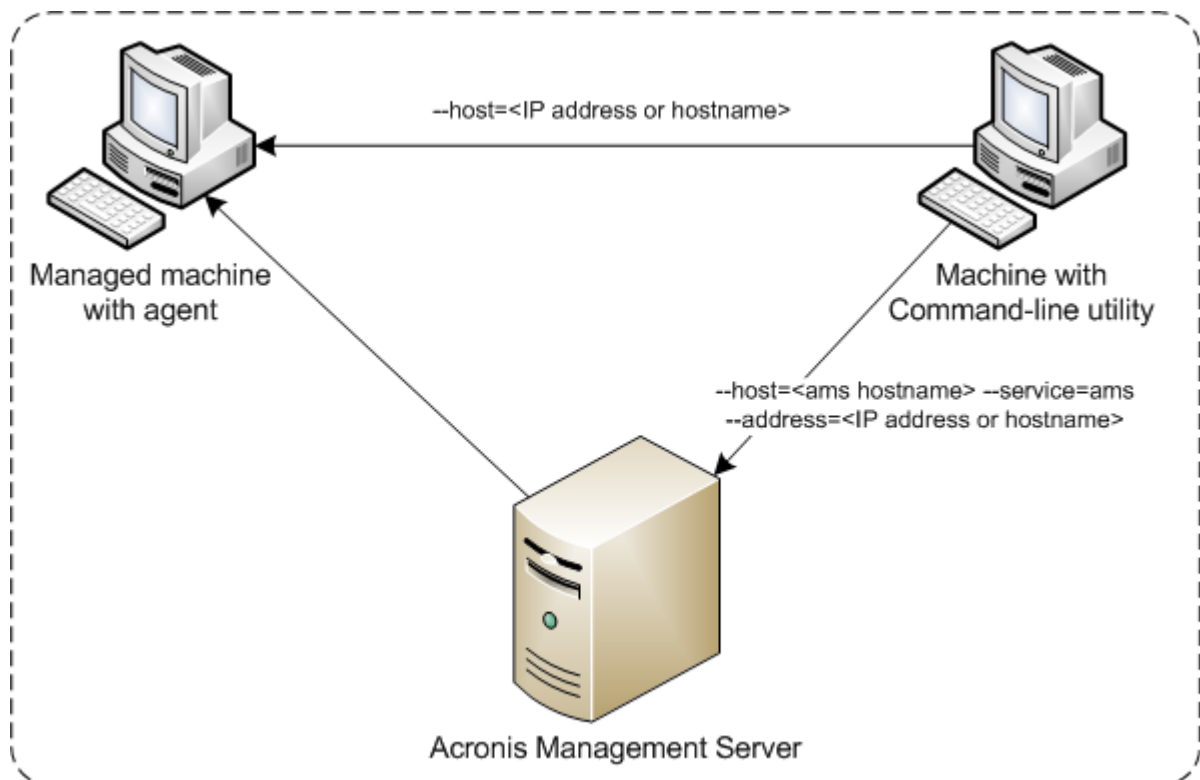
There are commands that can be executed by the management server itself.

### Example

To view the current activities of the management server, run the following command:

```
acrocmd list activities --host=<ams hostname> --credentials=<user  
name>,<password> --service=ams
```

The below diagram shows options of access to a managed machine directly or via Acronis Backup & Recovery 11 Management Server.



Options of access to a managed machine

## 1.5 Uninstallation

### Uninstallation in Linux

In Linux, run the following commands to uninstall the command-line utility:

```
# cd /usr/lib/Acronis/CommandLineTool/uninstall
# ./uninstall
```

To uninstall the command-line utility in the unattended mode, run the `./uninstall` commands with the `-a` parameter.

### Uninstallation in Windows

When you uninstall Acronis Backup & Recovery 11 by clicking **Start -> All Programs -> Acronis -> Uninstall Acronis Backup & Recovery 11**, the command-line utility is uninstalled along with all product components.

#### *To uninstall the command-line utility separately from the product*

1. Run the Acronis Backup & Recovery 11 setup file.
2. Click **Extract installation files**.
3. Select the check box corresponding to the **AcronisCommandLineTool.msi** file.
4. Specify the folder where to extract the file.
5. Click **Extract**.
6. After the file is successfully extracted, click **Close**.
7. Run the following command:

```
msiexec /uninstall <path>\AcronisCommandLineTool.msi /qb
```

where `<path>` is the folder where the file is extracted.

If you have an edition with centralized management, you can also uninstall the command-line utility from the setup file. To do so, run the Acronis Backup & Recovery 11 setup file, click **Install Acronis Backup & Recovery 11**, then click **Modify**, and then clear the check box next to the name of the command-line utility.

## 1.6 List of abbreviated names

This document uses the following abbreviated names.

**AMS** – Acronis Backup & Recovery 11 Management Server and this component's service.

**MMS** – Acronis Managed Machine Service, the service running on a machine where an Acronis agent is installed.

**ASN** – Acronis Backup & Recovery 11 Storage Node and this component's service.

**Agent for ESX(i)** – Acronis Backup & Recovery 11 Agent for VMware vSphere ESX(i).

## 2 Commands

This section lists the supported commands and compatible parameters.

When using the command-line utility, you can view the information about the supported commands by means of the `help` (p. 14) command.

### 2.1 Commands by services

The following table summarizes the commands that can be executed by the Acronis services. For questions on how to connect to an Acronis service, please see the `--service` (p. 49) command description.

Command	AMS	MMS				ASN
		Agent for Windows	Agent for Linux	Agent for ESX(i) or Hyper-V	Bootable media	
Backup and recovery						
<code>list disks</code> (p. 14)		+	+	+	+	
<code>backup disk</code> (p. 15)		+	+	+	+	
<code>recover disk</code> (p. 16)		+	+	+	+	
<code>recover mbr</code> (p. 18)		+	+	+	+	
<code>backup file</code> (p. 19)		+	+		+	
<code>recover file</code> (p. 20)		+	+		+	
<code>list vms</code> (p. 21)	+			+		
<code>backup vm</code> (p. 22)	+*			+		
<code>recover vm</code> (p. 23)	+*	+ (create vm files)		+ (create vm on a server)		
Operations with archives and backups						
<code>list archives</code> (p. 25)	+	+	+	+	+	+
<code>export archive</code> (p. 26)	+	+	+	+	+	+
<code>validate archive</code> (p. 26)	+	+	+	+	+	+
<code>delete archive</code> (p. 27)	+	+	+	+	+	+
<code>list backups</code> (p. 27)	+	+	+	+	+	+
<code>list content</code> (p. 28)	+	+	+	+	+	+
<code>validate backup</code> (p. 29)	+	+	+	+	+	+
<code>export backup</code> (p. 29)	+	+	+	+	+	+
<code>replicate backup</code> (p. 30)	+	+	+	+	+	+
<code>convert full</code> (p. 31)	+	+	+	+	+	+

Command	AMS	MMS				ASN
		Agent for Windows	Agent for Linux	Agent for ESX(i) or Hyper-V	Bootable media	
<code>consolidate backup</code> (p. 31)	+	+	+	+	+	+
<code>delete backup</code> (p. 32)	+	+	+	+	+	+
<code>list mounts</code> (p. 33)		+	+		+	
<code>mount</code> (p. 33)		+	+		+	
<code>umount</code> (p. 34)		+	+		+	
Operations with Acronis Secure Zone						
<code>create asz</code> (p. 35)		+	+		+	
<code>cleanup asz</code> (p. 35)		+	+		+	
<code>delete asz_files</code> (p. 36)		+	+		+	
<code>delete asz</code> (p. 37)		+	+		+	
Operations with Acronis Startup Recovery Manager						
<code>activate asrm</code> (p. 37)		+	+		+	
<code>deactivate asrm</code> (p. 38)		+	+		+	
Operations with tapes						
<code>list tape_libraries</code> (p. 38)		+	+			
<code>list tape_drives</code> (p. 39)		+	+			
Operations with vaults						
<code>validate vault</code> (p. 39)	+	+	+	+	+	+
Operations with disks						
<code>clone disk</code> (p. 40)		+	+		+	
Administration operations						
<code>get log</code> (p. 41)	+	+	+	+	+	+
<code>list activities</code> (p. 41)	+	+	+	+		+
<code>list plans</code> (p. 42)	+	+	+	+		
<code>delete plan</code> (p. 43)	+	+	+	+		
<code>export plan</code> (p. 43)	+	+	+	+		
<code>import plan</code> (p. 44)	+	+	+	+		
<code>disable plan</code> (p. 45)	+	+	+	+		
<code>enable plan</code> (p. 45)	+	+	+	+		
<code>list tasks</code> (p. 46)	+	+	+	+		

Command	AMS	MMS				ASN
		Agent for Windows	Agent for Linux	Agent for ESX(i) or Hyper-V	Bootable media	
<code>run task</code> (p. 46)	+	+	+	+		
<code>stop task</code> (p. 47)	+	+	+	+		
<code>delete task</code> (p. 47)	+	+	+	+		
<code>list licenses</code> (p. 48)		+	+	+	+	

\* The AMS service does not execute these commands by itself. It only defines which Agent for ESX(i) or Agent for Hyper-V can execute the command and transmits the command to the corresponding MMS. If you want Agent for Windows to perform the operation, specify its registration address in the `--address` (p. 49) parameter.

## 2.2 help

The command provides the information about the supported commands.

- Type `acrocmd help` to get the list of all available commands.
- Type `acrocmd help <text fragment>` to get the list of all commands that begin with the fragment you specified.  
For example, `acrocmd help ba` lists the following commands: `backup disk`, `backup file`, etc.
- Type `acrocmd help <complete command name>` to view the information about this command.  
For example, `acrocmd help backup disk` displays the information about the `backup disk` command.

## 2.3 Backup and recovery

### 2.3.1 Disks and volumes

#### list disks

Lists available disk groups, disks, volumes and unallocated space.

**Examples** (p. 71)

#### Parameters

##### Units of measurement

`--size_measure={s|kb|mb|gb}`

Measure of the size of disks and volumes. If not specified, the value is `mb`.

`--start_measure={s|kb|mb|gb}`

Measure of the offset of volumes. If not specified, the value is `mb`.

## General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

## Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

## Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## Access to a virtual machine (Virtual edition only)

`{--vmid=<virtual machine ID>|--vmname=<virtual machine name>}` (p. 50)

## backup disk

Creates a backup of the specified disks or volumes. If neither the `--disk` nor the `--volume` parameter is specified, the command backs up all volumes.

## Examples (p. 71)

## Parameters

### What to back up

`--disk=<disk numbers>` (p. 54)  
`--volume=<volume numbers>` (p. 55)  
`--oss_numbers` (p. 71)  
`--exclude_names=<names>` (p. 57)  
`--exclude_mask=<masks>` (p. 57)  
`--exclude_system` (p. 57)  
`--exclude_hidden` (p. 57)

### Where to save the backup

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)

### How to back up

`--plain_archive` (p. 57)  
`--backuptype={full|incremental|differential}` (p. 58)  
`--raw` (p. 58)  
`--cleanup` (p. 58)  
`--archive_comment=<comments>` (p. 58)  
`--backup_comment=<comments>` (p. 58)

## Backup options

```
--encryption={none|aes128|aes192|aes256} (p. 59)
--pre_cmd=<command> (p. 59)
--post_cmd=<command> (p. 59)
--use_vss={none|auto|software_auto|software|hardware|acronis|native}
(p. 60)
--compression={none|normal|high|max} (p. 60)
--fast (p. 60)
--split=<size> (p. 61)
--reboot_after (p. 69)
--silent_mode={on|off} (p. 70)
--ignore_bad_sectors (p. 61)
--retry_count=<number of attempts> (p. 70)
--retry_delay=<delay> (p. 70)
--ftp_active (p. 71)
--cataloging={true|false} (p. 61)
```

## General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

## Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP addresses or hostnames> (p. 49)
```

## Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams} (p. 49)
```

## recover disk

Recovers the specified disk or volume. You can recover only one disk or volume at a time.

A disk is always recovered along with its MBR. When you recover a volume, the MBR is not recovered. You can use the `recover mbr` (p. 18) command in this case.

## Examples (p. 71)

### Parameters

#### What to recover

```
--loc=<path> (p. 52)
--credentials=<user name>,<password> (p. 51)
--arc=<archive name> (p. 52)
--password=<password> (p. 69)
--backup=<backup ID> (p. 53)
--disk=<disk number> (p. 54)
```



`--nt_signature={auto|new|backup|existing}` (p. 54)  
`--volume=<volume number>` (p. 55)  
`--oss_numbers` (p. 71)

### Where to recover

`--target_disk=<disk number>` (p. 62)  
`--target_volume=<volume number>` (p. 63)

#### *Recovering a disk*

If the `--target_disk` parameter is specified, the software will recover to the specified disk.

If the `--target_disk` parameter is not specified, the software will first try to recover to the original disk, namely, to that very disk you backed up. If the original disk is not found, the command will fail.

#### *Recovering a volume*

If the `--target_volume` parameter is specified, the software will recover to the specified volume.

If the `--target_volume` parameter is not specified, and the `--target_disk` parameter is specified, the software will try to recover to the first unallocated space of a suitable size on the specified disk. If no unallocated space of a suitable size is found, the command will fail.

If neither the `--target_volume` parameter nor the `--target_disk` parameter is specified, the software will first try to recover to the original volume, namely, to that very volume you backed up. If the original volume is not found, the software will recover to the first unallocated space of a suitable size. If no unallocated space of a suitable size is found, the command will fail.

A volume will not be considered original if its size, location or other physical parameters have been changed after backup. Changing the volume letter or label does not prevent the software from recognizing the volume.

`--start=<offset>{s|kb|mb|gb}` (p. 56)  
`--size=<volume size>{s|kb|mb|gb}` (p. 56)

### How to recover

`--fat16_32` (p. 63)  
`--ext2_3` (p. 63)  
`--type={active|primary|logical}` (p. 63)  
`--preserve_mbr` (p. 64)  
`--active_restore`

If the parameter is specified, the Acronis Active Restore technology is enabled.

### Recovery options

`--reboot` (p. 69)  
`--reboot_after` (p. 69)  
`--silent_mode={on|off}` (p. 70)  
`--retry_count=<number of attempts>` (p. 70)  
`--retry_delay=<delay>` (p. 70)  
`--ftp_active` (p. 71)

## Acronis Universal Restore parameters

`--ur_driver=<INF file name>`

Specifies using Acronis Universal Restore and the mass storage driver to be installed.

`--ur_path=<search folder>`

Specifies using Acronis Universal Restore and the path to the driver storage.

## General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

## Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>,<password>` (p. 51)

`--address=<IP addresses or hostnames>` (p. 49)

## Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## recover mbr

Recovers the MBR from a disk or volume backup.

### Examples (p. 71)

## Parameters

### What to recover

`--loc=<path>` (p. 52)

`--credentials=<user name>,<password>` (p. 51)

`--arc=<archive name>` (p. 52)

`--password=<password>` (p. 69)

`--backup=<backup ID>` (p. 53)

`--disk=<disk number>` (p. 54)

### Where to recover

`--target_disk=<disk number>` (p. 62)

### Recovery options

`--reboot` (p. 69)

`--reboot_after` (p. 69)

`--silent_mode={on|off}` (p. 70)

`--retry_count=<number of attempts>` (p. 70)

`--retry_delay=<delay>` (p. 70)

`--ftp_active` (p. 71)

## General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

## Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP addresses or hostnames>` (p. 49)

## Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## 2.3.2 Files

### backup file

Creates a backup of specified files and folders.

**Examples** (p. 73)

### Parameters

#### What to back up

`--include=<paths>` (p. 56)  
`--exclude_names=<names>` (p. 57)  
`--exclude_mask=<masks>` (p. 57)  
`--exclude_system` (p. 57)  
`--exclude_hidden` (p. 57)

#### Where to save the backup

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)

#### How to back up

`--plain_archive` (p. 57)  
`--backuptype={full|incremental|differential}` (p. 58)  
`--cleanup` (p. 58)  
`--archive_comment=<comments>` (p. 58)  
`--backup_comment=<comments>` (p. 58)

#### Backup options

`--encryption={none|aes128|aes192|aes256}` (p. 59)  
`--pre_cmd=<command>` (p. 59)  
`--post_cmd=<command>` (p. 59)

```
--snapshot={always|possible|none} (p. 59)
--use_vss={none|auto|software_auto|software|hardware|acronis|native}
(p. 60)
--compression={none|normal|high|max} (p. 60)
--split=<size> (p. 61)
--reboot_after (p. 69)
--silent_mode={on|off} (p. 70)
--ignore_bad_sectors (p. 61)
--retry_count=<number of attempts> (p. 70)
--retry_delay=<delay> (p. 70)
--ftp_active (p. 71)
--cataloging={true|false} (p. 61)
```

### General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>, <password> (p. 51)
--address=<IP addresses or hostnames> (p. 49)
```

### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams} (p. 49)
```

## recover file

Recovers files and folders from a file-level or disk-level backup.

### Examples (p. 73)

### Parameters

#### What to recover

```
--loc=<path> (p. 52)
--credentials=<user name>, <password> (p. 51)
--arc=<archive name> (p. 52)
--password=<password> (p. 69)
--backup=<backup ID> (p. 53)
--file=<paths> (p. 61)
--exclude=<files, folders and masks> (p. 62)
```

#### Where to recover

```
--target=<path> (p. 53)
--credentials=<user name>, <password> (p. 51)
```

## How to recover

```
--overwrite={always|older|newer} (p. 64)
--recover_absolute_path (p. 64)
--recover_security={true|false}
```

This parameter is effective only when recovering from a file-level backup of Windows files. If the value is `true` or if the parameter is not specified, recover NTFS permissions for files along with the files themselves. Otherwise, the files will inherit the NTFS permissions from the folder to which they will be recovered.

```
--original_date
```

Recover files' original date and time from the backup. If not specified, the current date and time are assigned.

## Recovery options

```
--reboot (p. 69)
--reboot_after (p. 69)
--silent_mode={on|off} (p. 70)
--retry_count=<number of attempts> (p. 70)
--retry_delay=<delay> (p. 70)
--ftp_active (p. 71)
```

## General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

## Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP address or hostnames> (p. 49)
```

## Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams} (p. 49)
```

## 2.3.3 Virtual machines

The commands listed in this section are available in the Acronis Backup & Recovery 11 Virtual Edition only if Agent for ESX(i) or Agent for Hyper-V is installed. (This does not apply to the `recover vm` (p. 23) command.)

### list vms

Lists virtual machines that are present on the specified management server or that are managed by Agent for ESX(i) or Agent for Hyper-V, depending on the service that will execute the command.

**Examples** (p. 74)

## Parameters

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>,<password>` (p. 51)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## backup vm

Creates a backup of specified disks and volumes of the specified virtual machines. If neither `--disk` nor `--volume` parameter is specified, the command backs up the entire machine.

### Examples (p. 74)

## Parameters

### Access to a virtual machine

`{--vmid=<virtual machine IDs>|--vmname=<virtual machine names>}` (p. 50)

You can specify one or more virtual machines to be backed up.

`--simultaneous_backup=<number>`

Number of virtual machines to be backed up simultaneously by Agent for ESX(i) or Agent for Hyper-V. If not specified, each agent will back up virtual machines two at a time simultaneously.

To back up machines one at a time, set the parameter value to 1.

### What to back up

`--disk=<disk numbers>` (p. 54)  
`--volume=<volume numbers>` (p. 55)  
`--exclude_names=<names>` (p. 57)  
`--exclude_mask=<masks>` (p. 57)  
`--exclude_system` (p. 57)  
`--exclude_hidden` (p. 57)

### Where to save the backup

`--loc=<path>` (p. 52)  
`--credentials=<user name>,<password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)

## How to back up

```
--backuptype={full|incremental|differential} (p. 58)
--raw (p. 58)
--cleanup (p. 58)
--archive_comment=<comments> (p. 58)
--backup_comment=<comments> (p. 58)
```

## Backup options

```
--encryption={none|aes128|aes192|aes256} (p. 59)
--compression={none|normal|high|max} (p. 60)
--fast (p. 60)
--split=<size> (p. 61)
--silent_mode={on|off} (p. 70)
--retry_count=<number of attempts> (p. 70)
--retry_delay=<delay> (p. 70)
--ftp_active (p. 71)
--cataloging={true|false} (p. 61)
```

## General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

## Access to a remote physical machine

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
```

## Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams} (p. 49)
```

## recover vm

Recovers a disk or volume backup onto a new or existing virtual machine. The `recover vm` command replaces and enhances the `convert` command which was available in earlier versions of the Acronis software.

The `recover vm` command can be executed by the following agents:

- **Agent for ESX(i)** recovers a disk (volume) backup to a new or existing ESX(i) virtual machine.
- **Agent for Hyper-V** recovers a disk (volume) backup to a new or existing Hyper-V virtual machine.
- **Agent for Windows** recovers a disk (volume) backup to a new virtual machine of any of the following types: VMware Workstation, Microsoft Virtual PC, Parallels Workstation or Citrix XenServer Open Virtual Appliance (OVA).

Files of the fully configured and operational machine will be placed in the folder you select. You can start the machine using the respective virtualization software or prepare the machine files for further usage. The OVA virtual appliance can be imported to XenServer. Disks of a Virtual PC can be attached to a Hyper-V virtual machine.

---

*A virtual machine must be powered off during the recovery to this machine. The target machine located on an ESX(i) or Hyper-V host will be powered off without a prompt. Please be sure to specify the correct machine.*

---

## Examples (p. 74)

### Parameters

#### What to recover

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--backup=<backup ID>` (p. 53)  
`--disk=<disk number>` (p. 54)  
`--volume=<volume number>` (p. 55)

#### Where to recover

- If you want to recover to an existing virtual machine:  
`{--vmid=<virtual machine ID>|--vmname=<virtual machine name>}` (p. 50)
- If you want to recover to a new virtual machine:  
`--vmname=<virtual machine name>` (p. 50)  
`--vmtype={vmware|esx|hyperv|virtualpc|parallels|citrix}` (p. 50)  
`{--vmserver_name=<server name>|--vmserver_id=<server GUID>}` (p. 50)  
`--vmstorage=<path>` (p. 50)  
`--credentials=<user name>, <password>` (p. 51)  
Credentials for a network folder where a `vmware`, `virtualpc`, `parallels` or `citrix` virtual machine is to be created.

`--target_disk=<disk number>` (p. 62)  
`--target_volume=<volume number>` (p. 63)  
`--start=<offset>{s|kb|mb|gb}` (p. 56)  
`--size=<volume size>{s|kb|mb|gb}` (p. 56)

#### How to recover

`--fat16_32` (p. 63)  
`--ext2_3` (p. 63)  
`--type={active|primary|logical}` (p. 63)  
`--preserve_mbr` (p. 64)

#### Recovery options

`--power_on` (p. 65)  
`--silent_mode={on|off}` (p. 70)  
`--retry_count=<number of attempts>` (p. 70)  
`--retry_delay=<delay>` (p. 70)  
`--ftp_active` (p. 71)

#### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)



```
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

#### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
```

#### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams} (p. 49)
```

## 2.4 Operations with archives and backups

### 2.4.1 Archives

#### list archives

Lists the information about archives in the specific location. The displayed records are sorted by date in descending order.

#### Examples (p. 76)

#### Parameters

```
--loc=<path> (p. 52)
--credentials=<user name>,<password> (p. 51)
--filter_type=<types> (p. 68)
{-a|--all}
```

If the parameter is specified, the following properties will be displayed for each archive: name; type; creation date; machine whose data is contained in the archive; owner (the user who saved the archive to the destination); occupied space in bytes; and comments on the archive. If not specified, only name, type and creation date will be displayed for each archive.

#### General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

#### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP address or hostname> (p. 49)
```

#### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams|asn} (p. 49)
```

## export archive

Copies the archive specified by the `--arc` parameter from the location specified by the `--loc` parameter to the location specified by the `--target` parameter.

If the `--arc` parameter is not specified, the command will export all the archives stored in the source location.

The command always creates a new archive in the target location. You cannot specify an existing archive in the `--target_arc` parameter.

Using this command, you can, for example, import an archive to a centralized managed vault or export the entire vault to a different location.

**Examples** (p. 76)

### Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--target=<path>` (p. 53)  
`--credentials=<user name>, <password>` (p. 51)  
`--target_arc=<archive name>` (p. 54)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams|asn}` (p. 49)

## validate archive

Validates the archive data integrity.

**Examples** (p. 76)

### Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)

## General parameters

```
--log=<full path> (p. 68)  
--output={formatted|raw} (p. 68)  
--progress (p. 69)  
{-f|--file_params}=<full local path> (p. 69)
```

## Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)  
--credentials=<user name>,<password> (p. 51)  
--address=<IP address or hostname> (p. 49)
```

## Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams|asn} (p. 49)
```

## delete archive

Deletes an archive.

**Examples** (p. 76)

## Parameters

```
--loc=<path> (p. 52)  
--credentials=<user name>,<password> (p. 51)  
--arc=<archive name> (p. 52)
```

## General parameters

```
--log=<full path> (p. 68)  
--output={formatted|raw} (p. 68)  
--progress (p. 69)  
{-f|--file_params}=<full local path> (p. 69)
```

## Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)  
--credentials=<user name>,<password> (p. 51)  
--address=<IP address or hostname> (p. 49)
```

## Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams|asn} (p. 49)
```

## 2.4.2 Backups

### list backups

Lists backups in the specified archive. The displayed records are sorted by date in descending order.

**Examples** (p. 76)

## Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--filter_date=<dates and times>` (p. 67)  
`--filter_type=<types>` (p. 68)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams|asn}` (p. 49)

## list content

Lists the contents of a backup (backed up disks, volumes, files, virtual machines).

### Examples (p. 76)

## Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--backup=<backup ID>` (p. 53)  
`--content_type={volume|file}` (p. 66)  
`--content_path=<path>` (p. 66)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams|asn}` (p. 49)

## validate backup

Validates the backup data integrity.

**Examples** (p. 76)

### Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--backup=<backup ID>` (p. 53)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams|asn}` (p. 49)

## export backup

Copies the archive specified by the `--arc` parameter from the location specified by the `--loc` parameter to the location specified by the `--target` parameter. The copy will contain only the backups specified by the `--backup` parameter.

The command always creates a new archive in the target location. You cannot specify an existing archive in the `--target_arc` parameter. Both the `--target` and the `--target_arc` parameters are mandatory.

If the `--backup` parameter is not specified, the command will export only the latest backup.

**Examples** (p. 76)

### Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)

```
--backup=<backup IDs> (p. 53)
--target=<path> (p. 53)
--credentials=<user name>,<password> (p. 51)
--target_arc=<archive name> (p. 54)
```

### General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP address or hostname> (p. 49)
```

### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams|asn} (p. 49)
```

## replicate backup

Replicates the latest backup of the specified archive to a different location. The target archive has the same name as the source one. If the target archive exists, the command will append the backup to it.

If the target location is the same as the source one, the command will fail. If the `--backup` parameter is specified, the specified backups will be replicated.

Using this command, you can copy each backup of your archive to a second location, immediately after backing up or on a schedule. This helps you make your archive more reliable by maintaining its copy in a different location.

### Examples (p. 76)

### Parameters

```
--loc=<path> (p. 52)
--credentials=<user name>,<password> (p. 51)
--arc=<archive name> (p. 52)
--password=<password> (p. 69)
--target=<path> (p. 53)
--credentials=<user name>,<password> (p. 51)
--backup=<backup IDs> (p. 53)
```

### General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams | asn}` (p. 49)

## convert full

Converts an incremental or differential backup into a full one. The backup time stamp remains unchanged. The dependent incremental and differential backups are also updated. However, the old backup versions are deleted only after the new ones have been created. Therefore, the location must have enough space to temporarily store both the old and the new versions.

**Examples** (p. 76)

### Parameters

`--loc=<path>` (p. 52)

The command does not support the following locations: Acronis Online Backup Storage, tape and CD/DVD.

`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--backup=<backup ID>` (p. 53)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted | raw}` (p. 68)  
`--progress` (p. 69)  
`{-f | --file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams | asn}` (p. 49)

## consolidate backup

Modifies an archive so that only the backups specified in the `--backup` parameter are kept. All other backups of the archive are deleted.

If the `--backup` parameter is not specified, only the latest backup of the archive is kept. As a result, the archive will contain only one backup.

**Examples** (p. 76)

## Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--backup=<backup IDs>` (p. 53)

## General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

## Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

## Access to a specific service within a machine (advanced editions only)

`--service={mms|ams|asn}` (p. 49)

## delete backup

Deletes the selected backup from an archive. If incremental or differential backups depend on the backup being deleted, the consolidation will be performed. This consolidation may be time and resource consuming.

**Examples** (p. 76)

## Parameters

`--loc=<path>` (p. 52)  
`--credentials=<user name>, <password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--backup=<backup ID>` (p. 53)

## General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

## Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)



### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams|asn}` (p. 49)

## 2.4.3 Mounting

Mounting volumes from a disk-level backup lets you access the volumes as though they were physical disks.

### list mounts

Lists the volumes mounted from backups.

**Examples** (p. 77)

#### Parameters

##### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

##### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>,<password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

##### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

### mount

Mounts the specified volume from the backup to the system where Agent for Windows or Agent for Linux is installed. Only one volume can be mounted within a single mount operation.

---

**Limitation:** You can only mount backups stored in a local or shared folder or on Acronis Secure Zone.

---

**Examples** (p. 77)

#### Parameters

##### What to mount

`--loc=<path>` (p. 52)  
`--credentials=<user name>,<password>` (p. 51)  
`--arc=<archive name>` (p. 52)  
`--password=<password>` (p. 69)  
`--backup=<backup ID>` (p. 53)  
`--volume=<volume number>` (p. 55)

### How to mount (Agent for Windows only)

`--rw` (p. 65)  
`--letter=<letter>` (p. 65)

### How to mount (Agent for Linux only)

`--rw` (p. 65)  
`--mount_point=<mount point>` (p. 65)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## umount

Unmounts the volume with the specified letter (Agent for Windows only).

Unmounts the device mounted at the mount point, destroys the kernel space block device and stops the user space daemon (Agent for Linux only).

### Examples (p. 77)

### Parameters

`{--letter=<letter>|all}` (p. 65) (Agent for Windows only)  
`--mount_point=<mount point>` (p. 65) (Agent for Linux only)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## 2.5 Operations with Acronis Secure Zone

Acronis Secure Zone is a secure volume for storing backup archives within a managed machine.

### 2.5.1 create asz

Creates Acronis Secure Zone on the selected disk taking space from the selected volumes and from the unallocated space.

**Examples** (p. 78)

#### Parameters

`--disk=<disk number>` (p. 54)  
`--volume={<volume numbers>|all}` (p. 55)  
`--oss_numbers` (p. 71)  
`--asz_size={<size>{s|kb|mb|gb}|unallocated}` (p. 66)  
`--password=<password>` (p. 69)  
`--reboot` (p. 69)  
`--later` (p. 69)  
`--silent_mode={on|off}` (p. 70)

#### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

#### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>,<password>` (p. 51)  
`--address=<IP addresses or hostnames>` (p. 49)

#### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

### 2.5.2 cleanup asz

Deletes the backups corrupted due to a power loss or another reason, from Acronis Secure Zone.

**Examples** (p. 78)

## Parameters

### General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP addresses or hostnames> (p. 49)
```

### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams} (p. 49)
```

## 2.5.3 delete asz\_files

Deletes the latest backup of an archive located in Acronis Secure Zone. If the specified archive contains only one backup, such backup will not be deleted.

Examples (p. 78)

### Parameters

```
--credentials=<password> (p. 51)
```

Password for Acronis Secure Zone.

```
--arc=<archive name> (p. 52)
```

```
--password=<password> (p. 69)
```

Password for the archive.

```
--silent_mode={on|off} (p. 70)
```

### General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP address or hostname> (p. 49)
```

### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams} (p. 49)
```

## 2.5.4 delete asz

Deletes Acronis Secure Zone.

**Examples** (p. 78)

### Parameters

`--volume=<volume numbers>` (p. 55)

`--oss_numbers` (p. 71)

`--silent_mode={on|off}` (p. 70)

### General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>,<password>` (p. 51)

`--address=<IP addresses or hostnames>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## 2.6 Operations with Acronis Startup Recovery Manager

Acronis Startup Recovery Manager is the bootable rescue utility that can be started at boot time by pressing F11.

### 2.6.1 activate asrm

Activates the Acronis Startup Recovery Manager.

**Examples** (p. 78)

### Parameters

#### General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

#### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>,<password>` (p. 51)

`--address=<IP addresses or hostnames>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## 2.6.2 deactivate asrm

Deactivates the Acronis Startup Recovery Manager.

**Examples** (p. 78)

### Parameters

#### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

#### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>,<password>` (p. 51)  
`--address=<IP addresses or hostnames>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## 2.7 Operations with tapes

### 2.7.1 list tape\_libraries

Lists tape libraries attached to a machine where an Acronis Backup & Recovery 11 agent is running.

---

*Listing tape libraries attached to Acronis Backup & Recovery 11 Storage Node is not possible.*

---

**Examples** (p. 79)

### Parameters

`--filter_guid=<GUIDs>` (p. 67)  
`--filter_name=<names>` (p. 67)

#### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP address or hostname> (p. 49)
```

### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams|asn} (p. 49)
```

## 2.7.2 list tape\_drives

Lists drives of tape libraries and/or stand-alone tape drives attached to a machine where an Acronis Backup & Recovery 11 agent is running.

---

*Listing drives of tape libraries attached to Acronis Backup & Recovery 11 Storage Node is not possible.*

---

**Examples** (p. 79)

### Parameters

#### General parameters

```
--log=<full path> (p. 68)
--output={formatted|raw} (p. 68)
--progress (p. 69)
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)
--credentials=<user name>,<password> (p. 51)
--address=<IP address or hostname> (p. 49)
```

### Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams|asn} (p. 49)
```

## 2.8 Operations with vaults

### 2.8.1 validate vault

Validates data integrity of all archives in the specified location except for password-protected ones. To validate a password-protected archive, use the `validate archive` (p. 26) command.

**Examples** (p. 79)

### Parameters

```
--loc=<path> (p. 52)
--credentials=<user name>,<password> (p. 51)
```

## General parameters

```
--log=<full path> (p. 68)  
--output={formatted|raw} (p. 68)  
--progress (p. 69)  
{-f|--file_params}=<full local path> (p. 69)
```

## Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)  
--credentials=<user name>,<password> (p. 51)  
--address=<IP address or hostname> (p. 49)
```

## Access to a specific service within a machine (advanced editions only)

```
--service={mms|ams|asn} (p. 49)
```

# 2.9 Operations with disks

## 2.9.1 clone disk

Clones a hard disk. Use this operation if you need to transfer all the source disk data to a target disk.

If the capacities of the source and the target disks differ, the volumes will be resized to fit into the target disk. If the target disk capacity is bigger, the volumes will be increased. If the target disk capacity is smaller, the volumes will be decreased.

### Examples (p. 80)

#### Parameters

```
--source=<source disk number>
```

The number of the source disk.

```
--target=<target disk number>
```

The number of the target disk.

```
--reboot (p. 69)
```

```
--later (p. 69)
```

```
--reboot_after (p. 69)
```

#### General parameters

```
--log=<full path> (p. 68)  
--output={formatted|raw} (p. 68)  
--progress (p. 69)  
{-f|--file_params}=<full local path> (p. 69)
```

#### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)  
--credentials=<user name>,<password> (p. 51)  
--address=<IP address or hostname> (p. 49)
```



### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## 2.10 Administration operations

### 2.10.1 Logs and activities

#### get log

Exports the log of the activity with the specified GUID in the Acronis xml format. To learn GUIDs of activities, use the `list activities` (p. 41) command.

**Examples** (p. 80)

#### Parameters

`--id=<GUID>` (p. 71)

`--loc=<full path>` (p. 52)

The file to export the log to. The following locations are supported: local path, SMB, NFS, FTP and SFTP. The software exports logs in the Acronis xml format regardless of the extension of the file.

`--credentials=<user name>, <password>` (p. 51)

#### General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>, <password>` (p. 51)

`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams|asn}` (p. 49)

#### list activities

Lists the current and past activities of the specified service (Acronis Managed Machine Service, Acronis Backup & Recovery 11 Management Server, Acronis Backup & Recovery 11 Storage Node).

The command displays no more than the latest 5000 records. The displayed records are sorted by date in descending order.

If the `--service` (p. 49) parameter is not specified, the activities of Acronis Managed Machine Service are listed.

For Acronis Backup & Recovery 11 Management Server, only its own activities are listed. The activities of the Managed Machine Services that run on the registered machines are not included in the list.

If a machine performs too slowly, you might want to use the command to find out the activity that has been running for an unexpectedly long time. Thus, you will be able to detect and end hung-up processes.

**Examples** (p. 80)

### Parameters

```
--filter_guid=<GUIDs> (p. 67)  
--filter_state=<states> (p. 67)
```

### General parameters

```
--log=<full path> (p. 68)  
--output={formatted|raw} (p. 68)  
--progress (p. 69)  
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

```
--host=<IP address or hostname> (p. 49)  
--credentials=<user name>, <password> (p. 51)  
--address=<IP address or hostname> (p. 49)
```

### Access to a specific service within a machine (advanced editions only)

```
--service={mms | ams | asn} (p. 49)
```

## 2.10.2 Plans

### list plans

Lists the backup plans existing on a managed machine or on the management server. The displayed records are sorted by date in descending order.

**Examples** (p. 80)

### Parameters

```
--filter_state=<states> (p. 67)  
--filter_status=<statuses> (p. 68)  
--filter_user=<user names> (p. 68)
```

### General parameters

```
--log=<full path> (p. 68)  
--output={formatted|raw} (p. 68)  
--progress (p. 69)  
{-f|--file_params}=<full local path> (p. 69)
```

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>,<password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams}` (p. 49)

## delete plan

Deletes the specified backup plan.

**Examples** (p. 80)

### Parameters

`--id=<GUID>` (p. 71)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f | --file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>,<password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams}` (p. 49)

## export plan

Exports the specified backup plan to an \*.xml file. The operation creates a file with complete configuration of the backup plan. You can import the file (p. 44) to reuse the exported backup plan on another machine.

The export files of backup plans can be edited with text editors. Passwords are encrypted in the export files.

Centralized backup plans can be exported from a management server and imported to a management server only.

**Examples** (p. 80)

## Parameters

`--id=<GUID>` (p. 71)

`--loc=<full path>`

Full path to the file to which the backup plan will be exported.

`--credentials=<user name>, <password>` (p. 51)

### General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>, <password>` (p. 51)

`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## import plan

Imports a backup plan from an \*.xml file. An XML file with complete configuration of a backup plan can be created by means of the `export plan` (p. 43) command.

Centralized backup plans can be exported from a management server and imported to a management server only.

### Examples (p. 80)

## Parameters

`--loc=<full path>`

Full path to the file from which the backup plan will be imported.

`--credentials=<user name>, <password>` (p. 51)

### General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>, <password>` (p. 51)

`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## disable plan

Disables the specified backup plan. As a result, the backup plan will not run according to its schedule.

**Examples** (p. 80)

### Parameters

`--id=<GUID>` (p. 71)

### General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>,<password>` (p. 51)

`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## enable plan

Enables a previously disabled (p. 45) backup plan. As a result, the specified backup plan will run again according to its schedule.

**Examples** (p. 80)

### Parameters

`--id=<GUID>` (p. 71)

### General parameters

`--log=<full path>` (p. 68)

`--output={formatted|raw}` (p. 68)

`--progress` (p. 69)

`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)

`--credentials=<user name>,<password>` (p. 51)

`--address=<IP address or hostname>` (p. 49)

## Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

## 2.10.3 Tasks

### list tasks

Lists the tasks existing on a managed machine or on the management server. The displayed records are sorted by date in descending order.

**Examples** (p. 81)

#### Parameters

`--filter_state=<states>` (p. 67)  
`--filter_user=<user names>` (p. 68)  
`--filter_last_result=<last_results>`

To display only tasks with specific last execution results, specify one or more of the following values: `not_run_yet`, `succeeded`, `succeeded_with_warnings`, `failed`, or `stopped`.

#### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

#### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>,<password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

#### Access to a specific service within a machine (advanced editions only)

`--service={mms|ams}` (p. 49)

### run task

Starts execution of the specified task.

**Examples** (p. 81)

#### Parameters

`--id=<GUID>` (p. 71)

#### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams}` (p. 49)

## stop task

Stops execution of the specified task.

**Examples** (p. 81)

### Parameters

`--id=<GUID>` (p. 71)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f | --file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams}` (p. 49)

## delete task

Deletes the specified task.

---

*A task belonging to a backup plan cannot be deleted separately from the plan.*

---

**Examples** (p. 81)

### Parameters

`--id=<GUID>` (p. 71)

### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f | --file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams}` (p. 49)

## 2.10.4 Licenses

### list licenses

Lists Acronis Backup & Recovery 11 licenses assigned to a machine. If the licenses are registered on the license server, the agent also checks the status of the licenses on the license server.

**Examples** (p. 81)

### Parameters

#### General parameters

`--log=<full path>` (p. 68)  
`--output={formatted|raw}` (p. 68)  
`--progress` (p. 69)  
`{-f|--file_params}=<full local path>` (p. 69)

### Access to a remote machine (advanced editions only)

`--host=<IP address or hostname>` (p. 49)  
`--credentials=<user name>, <password>` (p. 51)  
`--address=<IP address or hostname>` (p. 49)

### Access to a specific service within a machine (advanced editions only)

`--service={mms | ams}` (p. 49)



## 3 Parameters

### 3.1 Access to a physical machine

#### 3.1.1 host

```
--host=<IP address or hostname>
```

Specifies the machine running an Acronis service to connect to. If not specified, the command-line utility connects to the local host.

##### Examples:

```
--host=server1  
--host=192.168.1.2
```

#### 3.1.2 service

```
--service={mms|ams|asn}
```

Specifies the Acronis service to connect to.

If not specified, the command-line utility connects to the agent service (Acronis Managed Machine Service, MMS). To connect to a storage node or the management server, you must explicitly specify the `asn` or the `ams` service using the `--service` parameter. This parameter is required even if an agent is not installed on that server or is unable to execute the command by design.

##### Example

```
acrocmd validate archive --loc=bsp://<storage node>/<vault name> --  
arc=<archive name>
```

- You can run this command on a machine where an agent and the command-line utility are installed. The command-line utility connects to the local agent. The agent addresses a storage node.

```
acrocmd validate archive --loc=bsp://<storage node>/<vault name> --  
arc=<archive name> --host=<storage node> --credentials=<user name>,<password>  
--service=asn
```

- You can run this command on a machine where only the command-line utility is installed. In this case, the command-line utility connects directly to a storage node.

In both cases validation will be performed by a storage node, using that node's CPU resource.

#### 3.1.3 address

```
--address=<IP address or hostname>
```

Specifies a machine registered on the management server.

Some commands can be applied to multiple machines. This is done by separating the machine addresses with commas. Such commands include `backup disk` (p. 15), `backup file` (p. 19), `recover disk` (p. 16), `recover mbr` (p. 18), `recover file` (p. 20), `create asz` (p. 35), `delete asz` (p. 37), `activate asrm` (p. 37), and `deactivate asrm` (p. 38). The operation

will be executed on the specified machines one after another. The parameter for the above commands has been specified in the following way: `--address=<IP addresses or hostnames>`.

The management server must also be specified when using this parameter. Credentials for the machine are not required. Only the management server credentials are needed.

### Example

To view all machine disks through the management server, run the following command:

```
acrocnd list disks --host=<ams hostname> --credentials=<user name>,<password> -  
-service=ams --address=<IP address or hostname>
```

## 3.2 Virtual machines

### 3.2.1 Access to a virtual machine

```
{--vmid=<virtual machine ID>|--vmname=<virtual machine name>}
```

#### The methods of access to a virtual machine

If Agent for ESX(i) or Agent for Hyper-V is registered on the management server, you can access a virtual machine directly from the management server without specifying the virtualization host:

```
--host=<ams hostname> --credentials=<user name>,<password> --service=ams --  
vmname=<virtual machine name>
```

If Agent for ESX(i) or Agent for Hyper-V is not registered on the management server, specify the virtual appliance or the Windows host running the agent:

```
--host=<agent hostname> --credentials=<user name>,<password> --vmname=<virtual  
machine name>
```

When operating within the virtual appliance or the Windows host running the agent, you do not need to specify access parameters other than `--vmname` or `--vmid`.

#### vmid

```
--vmid=<virtual machine ID>
```

Virtual machine unique identifier, assigned by the virtualization software. Use the `list vms` (p. 21) command to obtain identifiers of virtual machines.

#### vmname

```
--vmname=<virtual machine name>
```

Virtual machine name. If the Acronis agent finds more than one virtual machine with the same name, an error occurs (this does not apply to clustered Hyper-V virtual machines). In this case, use the `--vmid` parameter.

## 3.2.2 New virtual machine

### vmname

```
--vmname=<virtual machine name>
```

Name of a new virtual machine.

### vmtype

```
--vmtype={vmware|esx|hyperv|virtualpc|parallels|citrix}
```

Type of a new virtual machine. The `esx` and `hyperv` values can be used only with Agent for ESX(i) and Agent for Hyper-V, respectively.

### vmserver\_name

```
--vmserver_name=<server name>
```

Name of the ESX(i) or Hyper-V server or cluster where a virtual machine will be created. The `--vmserver_name` and `--vmserver_id` parameters are mutually exclusive.

### vmserver\_id

```
--vmserver_id=<server GUID>
```

Identifier of the ESX(i) or Hyper-V server or cluster where a virtual machine will be created. The `--vmserver_id` and `--vmserver_name` parameters are mutually exclusive.

### vmstorage

```
--vmstorage=<path>
```

Location of the new virtual machine.

- When creating a `vmware`, `virtualpc`, `parallels` or `citrix` machine in a local or network folder, specify the path to the folder.

**Examples:**

```
--vmstorage=c:\vms  
--vmstorage=\\srv1\folder1
```

- When creating a virtual machine on an ESX(i) server, specify the name of the datastore.

**Example:**

```
Storage_1
```

- When creating a virtual machine on a Hyper-V server, specify the path to the server's local folder.

**Example:**

```
C:\ProgramData\Microsoft\Windows\Hyper-V\Virtual Machines
```

## 3.3 credentials

```
--credentials=<user name>,<password>
```

Credentials to access a location, service, machine, archive.

A command can contain several `--credentials` parameters. Each of them must follow the parameter that defines the object to which credentials are required (`--loc`, `--host`, `--service`, `--target`).

To access Acronis Secure Zone, specify only the password in this parameter.

## 3.4 Location

### 3.4.1 loc

```
--loc=<path>
```

When backing up, the path to the location where the backup is to be created. For other operations, the path to the location where the backups are stored.

The path can be specified in the following formats:

Type of storage	Format
Local path (in Windows)	<drive>:\<folder>
Local path (in Linux)	/<directory 1>/.../<directory N>
SMB	\\<server>\<folder>
NFS	nfs://<server>/<folder>/
FTP, SFTP	ftp://<server>/<folder>/ sftp://<server>/<folder>/
Acronis Backup & Recovery 11 Storage Node	bsp://<storage node>/<vault name>
Acronis Online Backup Storage (only for Windows)	online://
Acronis Secure Zone	atis:///asz
Tape	atis:///tape?<GUID of attached library>*

\*Using this format, you can access a tape library or drive only if it is directly attached to the managed machine. You can determine the GUID of this library or drive by using the `list tape_libraries` (p. 38) and `list tape_drives` (p. 39) commands, respectively.

For a tape library or drive attached to a storage node, a centralized vault should be created on that storage node. To access such tape library or drive, use the `bsp://<storage node>/<vault name>` format.

### 3.4.2 arc

```
--arc=<archive name>
```

Name of the archive. Parameter values are case-sensitive.

#### Using variables in archive names

When you back up more than one machine with a single backup command, data from all of the machines is saved to the same location. Each machine backs up to a separate archive. Archive names must be unique within the location. Otherwise, the backup operation will fail.

Add variables to the archive names to make them unique within the location. For the `backup vm` (p. 22) command, the archive name must contain the `[Virtualization Server Type]` and

[Virtual Machine Name] variables. For other backup commands, use the [MachineName] variable.

You can also use these variables when backing up a single machine if this is practical or efficient for you.

#### Examples:

```
--arc="[Virtualization Server Type]_[Virtual Machine Name]_archive1"
– for the backup vm command
--arc=[MachineName]_archive1 – for the backup disk and backup file commands
```

### Specifying archives by backup file names

In this parameter, you can specify an archive by the file name of a backup that belongs to the archive; for example: `--arc=my_backup2.tib`.

If the archive does not contain metadata, the command will apply to the backup chain. (A backup chain is a full backup and all of its dependent incremental and differential backups.)

This syntax is useful for archives created using the `--plain_archive` (p. 57) parameter. Also, this syntax is the only way to access an archive if its metadata has not been created or is lost for some reason.

If you need to use the `--backup` (p. 53) parameter with the command, specify a backup identifier rather than a file name as this parameter value. For example:

Correct

```
--arc=my_backup2.tib --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

Incorrect

```
--arc=my_backup2.tib --backup=my_backup3.tib
```

**Restriction:** You cannot specify file names of backups stored on Acronis Storage Node, Acronis Online Backup Storage, Acronis Secure Zone or tape.

### 3.4.3 backup

```
--backup=<backup ID>
```

Identifier of the backup with which the operation is to be performed (for example, the backup from which the data is to be recovered).

With the `export backup` (p. 29), `consolidate backup` (p. 31) and `replicate backup` (p. 30) commands, you can specify several backups.

If the parameter is not specified, the operation will be applied to the latest backup.

### 3.4.4 target

```
--target=<path>
```

In the `recover file` (p. 20) command, the parameter specifies a folder where folders/files will be recovered (a target folder). The formats of the parameter value are the same as in the `--loc` (p. 52) parameter. If the parameter is not specified, the original path will be re-created from the backup.

In the `export archive` (p. 26), `export backup` (p. 29), or `replicate backup` (p. 30) command, the parameter specifies the location where the archive or backup will be exported or

replicated. The formats of the parameter value are the same as in the `--loc` (p. 52) parameter, except for `online://` which is not supported. If the parameter is not specified, the command will fail.

### 3.4.5 target\_arc

```
--target_arc=<archive name>
```

The name of the target archive in the `export archive` (p. 26) and `export backup` (p. 29) commands.

The name has to be unique within the target location. If there is an archive with the same name or if the parameter is not specified, the command will fail.

## 3.5 Disks and volumes

### 3.5.1 disk

**Commands:** `backup disk` and `backup vm`

```
--disk=<disk numbers>
```

The parameter is used with the `backup disk` (p. 15) and `backup vm` (p. 22) commands to specify disks to be backed up.

Use the `list disks` (p. 14) command to obtain numbers of available disks and volumes.

You can use the `--disk` and `--volume` (p. 55) parameters within one command line, for example:

```
--disk=1 --volume=E
```

**Commands:** `recover disk`, `recover mbr`, `recover vm`, `create asz`

```
--disk=<disk number>
```

The number of the disk with which the operation is to be performed. In the `recover disk` (p. 16) and `recover vm` (p. 23) commands, this is the disk whose data is to be recovered from a backup. In the `recover mbr` (p. 18) command, the parameter is the disk whose MBR is to be recovered from a backup. In the `create asz` (p. 35) command, this is the disk on which Acronis Secure Zone is to be created.

### 3.5.2 nt\_signature

```
--nt_signature={auto|new|backup|existing}
```

The NT signature is a record that is kept in the hard disk's MBR. It uniquely identifies the hard disk for the operating system.

When recovering a disk containing a system volume, you can choose what to do with the NT signature of the target disk. Specify any of the following parameters:

- `auto` (default)

The software will keep the NT signature of the target disk if it is the same NT signature as the one stored in the backup. (In other words, if you recover the disk to the same disk that was backed up.) Otherwise, the software will generate a new NT signature for the target disk.

- `new`  
The software will generate a new NT signature for the target disk.
- `backup`  
The software will replace the NT signature of the target disk with the one from the backup.
- `existing`  
The software will leave the NT signature of the target disk untouched.

### 3.5.3 volume

#### Commands: `backup disk` and `backup vm`

```
--volume=<volume numbers>
```

The parameter is used with the `backup disk` (p. 15) and `backup vm` (p. 22) commands to specify volumes to be backed up.

Volume numbers are specified as in the following format: `<disk number>-<volume number>`, for example:

```
--volume=1-1,1-2
```

Dynamic volumes are specified with the `DYN` prefix or by their GUIDs, for example:

```
--volume=DYN1
--volume=e6ee6edc-d1ba-11d8-813e-806e6f6e6963
```

Both basic and dynamic volumes can be specified by their letters, for example:

```
--volume=C
```

Mixed notation is also acceptable, for example:

```
--volume=1-1,E,e6ee6edc-d1ba-11d8-813e-806e6f6e6963
```

To view available disks, volumes and GUIDs of volumes, use the `list disks` (p. 14) command.

You can use the `--disk` (p. 54) and `--volume` parameters in one command, for example:

```
--disk=1 --volume=E
```

#### Commands: `recover disk`, `recover vm`, `mount`

```
--volume=<volume number>
```

The volume with which the operation is to be performed. The parameter is used with the `recover disk` (p. 16), `recover vm` (p. 23), `mount` (p. 33) commands.

#### Selecting a dynamic volume for recovery

The software considers all dynamic volumes of a backup as belonging to a separate disk. To learn the correspondence between the dynamic volumes you backed up and the numbers assigned to these volumes by the software, run the `list content` (p. 28) command without specifying the `--content_path` (p. 66) parameter.

For example, if you backed up volumes `1-2` (the second volume of the first disk), `2-1` (the first volume of the second disk) and `DYN1` (the first dynamic volume), the software considers the latter as

the first volume of the third disk. So, when you recover the dynamic volume, you should specify `--volume=3-1`.

### Command: `create asz`

```
--volume={<volume numbers>|all}
```

Volumes from which the free space for Acronis Secure Zone will be taken. The parameter is used with the `create asz` (p. 35) command. If not specified, Acronis Secure Zone will use the unallocated space only. If `--volume=all` is specified, the free space will be taken from all volumes of the specified disk.

### Command: `delete asz`

```
--volume=<volume numbers>
```

Volumes to which the free space will be added after the Acronis Secure Zone deletion. The parameter is used with the `delete asz` (p. 37) command. The space will be distributed in proportion to each volume's size. Without this parameter, the freed space becomes unallocated.

## 3.5.4 start

```
--start=<offset>{s|kb|mb|gb}
```

This parameter specifies the start position of the volume being recovered. If no measurement unit is specified, the offset is measured in megabytes (`mb`).

Use this parameter with the `recover disk` (p. 16) and `recover vm` (p. 23) commands when recovering a volume to the hard disk unallocated space.

The `--start` parameter and the `--target_volume` (p. 63) parameter are mutually exclusive. If you specify both, an error will occur.

## 3.5.5 size

```
--size=<volume size>{s|kb|mb|gb}
```

The parameter specifies the new size of the volume being recovered. If no measurement unit is specified, the size is measured in megabytes (`mb`).

Use this parameter with the `recover disk` (p. 16) and `recover vm` (p. 23) commands if you need to resize the volume during recovery.

## 3.6 Backup parameters

### 3.6.1 include

```
--include=<paths>
```

Files or folders to be included into the backup. The parameter is used with the `backup file` (p. 19) command.



## 3.6.2 exclude

### exclude\_names

```
--exclude_names=<names>
```

Files and folders to be excluded from the backup. For example, `c:\pagefile.sys,c:\hiberfil.sys`.

### exclude\_mask

```
--exclude_mask=<masks>
```

Masks to select files to be excluded from the backup. For more details, see the description of the `exclude` (p. 62) parameter used in the `recover file` command.

### exclude\_system

```
--exclude_system
```

In file systems that are supported by Windows, type this parameter to skip files and folders with the **System** attribute. If a folder is **System**, all of its contents — including files that are not **System** — will be excluded.

### exclude\_hidden

```
--exclude_hidden
```

In file systems that are supported by Windows, type this parameter to skip files and folders with the **Hidden** attribute. If a folder is **Hidden**, all of its contents — including files that are not **Hidden** — will be excluded.

In Linux, a file is considered hidden if the first symbol in the file name is a dot.

## 3.6.3 plain\_archive

```
--plain_archive
```

Enables simplified naming of backup files and disables adding metadata to the backup archive.

With this parameter, full backups are named using the archive name (the `--arc` parameter value); for example: `MyData.tib`. Names of incremental or differential backups have an index; for example: `MyData2.tib`, `MyData3.tib`. Before creating a new full backup, the software will delete the entire archive and start a new one.

This parameter is useful in the following cases:

- If you want to create a portable image of a machine on a detachable media
- If you are planning to move the backups to a different location by using a script
- If you want to rotate USB hard drives so that each drive keeps a single full backup or all backups created during a week

Without this parameter, each backup will have a unique file name with the exact time stamp and the backup type; for example: `MyData_2010_03_26_17_01_38_960D.tib`. This standard file naming allows for a wider range of backup destinations and backup schemes.

## Restrictions

When using simplified file naming, the following functionality is not available:

- Backup of virtual machines from host
- Backup to Acronis Storage Node, Acronis Online Backup Storage, Acronis Secure Zone or tape

---

*Tip.* The FAT16, FAT32, and NTFS file systems do not allow the following characters in the file name: backslash (\), slash (/), colon (:), asterisk (\*), question mark (?), quotation mark ("), less than sign (<), greater than sign (>), and pipe (|).

---

### 3.6.4 backuptype

```
--backuptype={full|incremental|differential}
```

Type of the backup. If not specified, the value is `full`.

### 3.6.5 raw

```
--raw
```

The parameter is used with the `backup disk` (p. 15) and `backup vm` (p. 22) commands. Use this parameter to create a backup of a disk (volume) with unrecognized or unsupported file system. This will copy all disk/volume contents sector-by-sector. Without this parameter only the sectors containing data are backed up.

### 3.6.6 cleanup

```
--cleanup
```

With this parameter, the software will clear space for the backup being created by deleting old backups. If the parameter is not specified and the destination is out of space, the backup will fail.

The archive will be cleaned up only during backup and only if there is not enough space to complete the operation. The software will act as follows:

- Delete the oldest full backup with all dependent incremental/differential backups
- If there is only one full backup left and a full backup is in progress, then delete the last full backup with all dependent incremental/differential backups
- If there is only one full backup left, and an incremental or differential backup is in progress, an error occurs saying there is a lack of available space

### 3.6.7 Comments

#### archive\_comment

```
--archive_comment=<comments>
```

Comments on the archive that is specified in the `--arc` (p. 52) parameter. To view comments on archives, use the `list archives` (p. 25) command with the `-a` parameter.

## backup\_comment

```
--backup_comment=<comments>
```

Comments on the backup that is specified in the `--backup` (p. 53) parameter. To view comments on backups, use the `list backups` (p. 25) command.

## 3.6.8 Backup options

### encryption

```
--encryption={none|aes128|aes192|aes256}
```

The algorithm to encrypt the archive. If not specified, the value is `none`.

This parameter cannot be used without the `--password` (p. 69) parameter.

### Pre and post commands

#### pre\_cmd

```
--pre_cmd=<command>
```

Pre data capture command. Specifies a command or a batch file that will suspend operation of a database or application for a short period of time. This period of time is required to take a snapshot of the data being backed up. While suspending the database, all running transactions are completed to prevent loss of data consistency. You must specify a command or file to resume the database or application after the data capture is complete.

#### Example:

```
--pre_cmd="net stop MSSQLSERVER"
```

#### post\_cmd

```
--post_cmd=<command>
```

Post data capture command. Specifies a command or a batch file that will resume operation of the database or application after the data capture is complete.

#### Example:

```
--post_cmd="net start MSSQLSERVER"
```

### snapshot

```
--snapshot={always|possible|none}
```

Defines whether to back up files directly (one by one) or by taking an instant data snapshot.

Available values of the parameter are as follows:

- **possible** (by default)  
Create a snapshot if it is possible. Back up files directly if taking a snapshot is not possible.

- **none**  
Do not create a snapshot. Always back up files directly. Trying to back up files that are opened for exclusive access will result in a read error. Also, files in the backup may not be time-consistent.
- **always**  
Always create a snapshot. Using a snapshot enables the backing up of all local files. This includes files opened for exclusive access. The files will be backed up at the same point in time. If a snapshot cannot be taken, the backup will fail.

## use\_vss

```
--use_vss={auto|software_auto|acronis|native|software|hardware|none}
```

Volume Shadow Copy Service (VSS) notifies VSS-aware applications that the backup is about to start. This ensures the consistent state of all data being used by such applications. Then, VSS tells a snapshot provider to create the snapshot. You can select the snapshot provider that VSS will use for taking snapshots.

Available values of the parameter are as follows:

- **auto** (by default)  
VSS will use the hardware-based provider that supports the source volume. If none is found, VSS will use the Microsoft Software Shadow Copy provider.
- **software\_auto**  
In most cases, VSS will use the Microsoft Software Shadow Copy provider.
- **acronis**  
VSS will use Acronis VSS Provider for taking snapshots.
- **native**  
VSS will use the system provider (Microsoft Software Shadow Copy provider) for taking snapshots.
- **software**  
VSS will use any available software-based provider that supports the source volume.
- **hardware**  
VSS will use the hardware-based provider that supports the source volume. If no hardware-based provider is found, snapshots will be created by means of Acronis Backup & Recovery 11.
- **none**  
Choose this value if your database is incompatible with VSS. Snapshots will be created by means of Acronis Backup & Recovery 11. Snapshots are taken faster but data consistency of the applications whose transactions are not completed cannot be guaranteed.

## compression

```
--compression={none|normal|high|max}
```

Data compression level. If not specified, the value is `normal`.

## fast

```
--fast
```

Defines whether a file change is detected using the file size and time stamp or by comparing the file contents to those stored in the archive. Use this parameter to speed up incremental and differential disk-level backup.

If specified, the software determines whether a file has changed or not by the file size and the date/time when the file was last modified.

If not specified, the software will compare the entire file contents to those stored in the archive.

## split

```
--split=<size>
```

If specified, the backup will be split into multiple files of the specified size (in MB). If not specified, the software will split the backup when necessary. Such might be the case when the backup is placed on removable media or on FAT16 and FAT32 file systems that have a file size limit of 2GB and 4GB, respectively.

## ignore\_bad\_sectors

```
--ignore_bad_sectors
```

Use this parameter to back up a rapidly dying disk without user interaction. Without this parameter, the software asks for user interaction each time it comes across a bad sector during backup. This behavior does not change even if the silent mode (p. 70) is enabled.

## cataloging

```
--cataloging={true|false}
```

If the parameter value is `true` or is not specified, the backup content will be added to the data catalog automatically as soon as it is created. The data catalog enables you to easily find the required version of data using GUI and select it for recovery. If the value is `false`, the backup will be faster but the data catalog will display no more than 3 levels of nested items.

## 3.7 Recovery parameters

### 3.7.1 file

```
--file=<paths>
```

Files and folders to recover from the file-level backup. If not specified, all contents of the backup are recovered.

You can disable recovery of certain files and folders by using the `--exclude` (p. 62) parameter.

A file or folder specified in both the `--file` and `--exclude` parameters *will* be recovered.

## 3.7.2 exclude

```
--exclude=<files, folders and masks>
```

Files and folders to be excluded from the recovery. You can either specify files and folders explicitly or use certain criteria that are called file masks.

You can use one or more wildcard characters \* and ? in a file mask:

- The asterisk (\*) substitutes for zero or more characters in a file name; for example, file mask "Doc\*.txt" yields files such as "Doc.txt" and "Document.txt".
- The question mark (?) substitutes for exactly one character in a file name; for example, file mask "Doc?.txt" yields files such as "Doc1.txt" and "Docs.txt" — but not the files "Doc.txt" or "Doc11.txt".

To exclude a folder specified by a path containing the drive letter, add a backslash (\) to the folder name in the criterion; for example: "C:\Finance\".

### Exclusion examples

Criterion	Example	Description
<b>Windows and Linux</b>		
By name	F.log	Excludes all files named "F.log"
	F	Excludes all folders named "F"
By mask (*)	*.log	Excludes all files with the .log extension
	F*	Excludes all files and folders with names starting with "F" (such as folders "F", "F1" and files "F.log", "F1.log")
By mask (?)	F????.log	Excludes all .log files with names consisting of four symbols and starting with "F"
<b>Windows</b>		
By file path	C:\Finance\F.log	Excludes the file named "F.log" located in the folder C:\Finance
By folder path	C:\Finance\F\	Excludes the folder C:\Finance\F (be sure to specify the full path starting from the disk letter)
<b>Linux</b>		
By file path	/home/user/Finance/F.log	Excludes the file named "F.log" located in the directory /home/user/Finance
By folder path	/home/user/Finance/	Excludes the directory /home/user/Finance

*The above settings are not effective for the files or folders that were explicitly selected for recovery. For example, assume that you selected the folder my\_folder and the file my\_file.tmp outside that folder, and selected to skip all .tmp files. In this case, all .tmp files in the folder my\_folder will be skipped during the backup process, but the file my\_file.tmp will not be skipped.*

### 3.7.3 target\_disk

```
--target_disk=<disk number>
```

Disk where you will recover data which has been selected in the `--disk` (p. 54) parameter.

### 3.7.4 target\_volume

```
--target_volume=<volume number>
```

Volume where you will recover data which has been selected in the `--volume` (p. 55) parameter.

If you need to recover a volume to the unallocated space of a basic disk, use one of the following methods:

- Specify the `--start` (p. 56) parameter instead of the `--target_volume` parameter.
- Type `--target_volume=<disk number>-<unallocated space sequence number>` to specify unallocated space on a specific disk.
- Specify the `--target_disk` (p. 62) parameter without the `--target_volume` parameter. In this case, the software will try to recover to the first unallocated space of a suitable size on the specified disk.

#### Examples

```
--target_volume=C – to recover to a basic volume
```

```
--target_volume=DYN1 – to recover to a dynamic volume
```

```
--target_volume=UNALLOCATED-1-1 – to recover to the first unallocated space of the first basic disk
```

```
--target_volume=UNALLOCATED-DYN – to recover to the unallocated space of the disk group (for Windows only)
```

### 3.7.5 fat16\_32

```
--fat16_32
```

If the parameter is specified, the file system will be converted from FAT16 to FAT32. The parameter is used with the `recover disk` (p. 16) and `recover vm` (p. 23) commands. Without this parameter, the recovered volume will inherit the file system from the backup.

It is recommended to use the parameter if the volume size after recovery is likely to exceed 2 GB.

### 3.7.6 ext2\_3

```
--ext2_3
```

If the parameter is specified, the file system will be converted from Ext2 to Ext3. The parameter is used with the `recover disk` (p. 16) and `recover vm` (p. 23) commands. Without this parameter, the recovered volume will inherit the file system from the backup.

### 3.7.7 type

```
--type={active|primary|logical}
```

Sets the recovered volume as active, primary or logical. However, this may not be possible (for example, because there cannot be more than four primary volumes on a disk). Setting a volume active sets it as primary. On the other hand, a volume set primary may remain inactive.

If the type is not specified, the software will try to keep the target volume type. If the target volume is active, the recovered volume is set active. If the target volume is primary and there are other primary volumes on the disk, one of them will be set active while the recovered volume becomes primary. If no other primary volumes remain on the disk, the recovered volume is set active.

When recovering a volume on unallocated space, the software extracts the volume type from the backup. For the primary volume, the type will be set as follows:

- if the target disk is the 1st according to BIOS and it has no other primary volumes, the recovered volume will be set active
- if the target disk is the 1st according to BIOS and there are other primary volumes on it, the recovered volume will be set logical
- if the target disk is not the 1st, the recovered volume will be set logical.

### 3.7.8 preserve\_mbr

```
--preserve_mbr
```

When recovering a volume over an existing one, the target volume is deleted from the disk along with its entry in the target disk MBR. Then, with this parameter, the recovered volume's entry will occupy the upper empty position in the target disk MBR. Thus, the target disk MBR is preserved. If the parameter is not specified, the recovered volume's entry will occupy the same position as in the source disk MBR saved in the backup. If the position is not empty, the existing entry will be moved to another position.

### 3.7.9 overwrite

```
--overwrite={always|older|newer}
```

The parameter is used with the `recover file` (p. 20) command. Choose what to do if the program finds in the target folder a file with the same name as in the backup:

- **always** (by default) - this will give the file in the backup priority over the file on the hard disk.
- **older** - this will give priority to the most recent file modification, whether it be in the backup or on the disk.
- **never** - this will give the file on the hard disk priority over the file in the backup.

If you allow files to be overwritten, you still have an option to prevent overwriting of specific files by excluding (p. 62) them from the recovery operation.

### 3.7.10 recover\_absolute\_path

```
--recover_absolute_path
```

The parameter is used with the `recover file` (p. 20) command. Recover with full paths to files and folders. If not specified, full paths are not used.



## Example

You backed up folder **My folder** located at **C:\My data\Dir1**, and now you recover it from the latest backup to **D:\Sample\Dir2**.

```
recover file --loc=E:\my_backups --archive=my_archive --file="My folder" --target=D:\Sample\Dir2
```

The `--recover_absolute_path` parameter is not specified. The recovered folder will be located at **D:\Sample\Dir2\My folder**.

```
recover file --loc=E:\my_backups --archive=my_archive --file="My folder" --target=D:\Sample\Dir2 --recover_absolute_path
```

The `--recover_absolute_path` parameter is specified. The recovered folder will be located at **D:\Sample\Dir2\C\My data\Dir1\My folder**.

### 3.7.11 power\_on

```
--power_on
```

Power on the target virtual machine when the recovery is complete.

## 3.8 Mounting parameters

### 3.8.1 rw

```
--rw
```

If specified, the backed up volume will be mounted in the read/write mode. You will be able to modify its contents (save, move, create, delete files or folders) and run executables consisting of one file.

If not specified, the volume will be mounted in the read-only mode.

### 3.8.2 letter

**Command:** `mount`

```
--letter=<letter>
```

The letter to be assigned to the mounted volume. The parameter is used with the `mount` (p. 33) command when mounting a volume in Windows.

**Command:** `umount`

```
{--letter=<letter>|all}
```

The letter of the volume to be disconnected. If the value is `all`, all volumes will be disconnected. The parameter is used with the `umount` (p. 34) command when unmounting a volume in Windows.

### 3.8.3 mount\_point

```
--mount_point=<mount_point>
```

The directory to mount the volume to or unmount from. The parameter is used with the `mount` (p. 33) and `umount` (p. 34) commands in Linux.

## 3.9 Acronis Secure Zone parameters

### 3.9.1 asz\_size

```
--asz_size={<size>{s|kb|mb|gb}|unallocated}
```

The size of Acronis Secure Zone. If no measurement unit is specified, the size is measured in megabytes (`mb`).

The parameter is used with the `create asz` (p. 35) command.

If not specified, the size is set as the average between the maximal (unallocated space plus free space on the volumes selected with the `--volume` (p. 55) parameter) and minimal (about 50 MB) values.

Either way, the software will first use the unallocated space. If there is not enough unallocated space, the selected volumes will be decreased. Resizing of locked volumes requires a reboot, which is allowed only if the `--reboot` (p. 69) parameter is specified.

With the `unallocated` value, the zone will use all unallocated space on the disk. Volumes will be moved, if necessary, but will not be resized. Moving of locked volumes requires a reboot. The `--volume` (p. 55) parameter is ignored.

## 3.10 Filtering

The filtering parameters are used to filter the data retrieved by the listing commands (`list activities` (p. 41), `list archives` (p. 25) and others).

### 3.10.1 content\_type

```
--content_type={volume|file}
```

Type of content to display. The parameter is used with the `list content` (p. 28) command when viewing the contents of a disk-level backup only.

If the value is `volume` or if the parameter is not specified, the command will list disks and volumes contained in the backup. Otherwise, the list of backed up files and folders will be shown.

### 3.10.2 content\_path

Path to content inside the backup. The parameter is used with the `list content` (p. 28) command and only if the `--content_type` (p. 66) parameter value is other than `disk`. If not specified, the first 5000 root elements will be shown.

For disk-level and file-level backups, this parameter is a file system path. In Windows, specify volumes in the path by their letters (not numbers, like 1-1). In Linux, specify the volume's mount point.

#### Examples:

```
--content_path=C:\Windows\system32  
--content_path=/home/user1/work
```

### 3.10.3 filter\_date

```
--filter_date=<dates and times>
```

The parameter is used with the `list backups` (p. 27) command. If specified, the command will retrieve only backups that were created on certain dates and at certain time. If not specified, backups with any creation date and time will be displayed.

Specify a list of exact dates and times in the following format: "`DD.MM.YYYY HH24:MM:SS`". You can omit seconds, minutes and hours. This will mean "any second", "any second and any minute" or "any second, any minute and any hour", respectively.

#### Examples:

- `--filter_date="15.02.2011 12:00"` shows backups created between 15.02.2011 12:00:00 and 15.02.2011 12:00:59.
- `--filter_date="15.02.2011 12"` shows backups created between 15.02.2011 12:00:00 and 15.02.2011 12:59:59.
- `--filter_date=15.02.2011` shows backups created between 15.02.2011 00:00:00 and 15.02.2011 23:59:59.

### 3.10.4 filter\_guid

```
--filter_guid=<GUIDs>
```

GUIDs for selecting objects to be output. The parameter is used with the `list tape_libraries` (p. 38) and `list activities` (p. 41) commands. If not specified, objects with any GUID will be displayed.

### 3.10.5 filter\_name

```
--filter_name=<names>
```

Object names for selecting objects to be output. The parameter is used with the `list tape_libraries` (p. 38) command. If not specified, objects with any name will be displayed.

### 3.10.6 filter\_state

```
--filter_state=<states>
```

States for selecting objects to be output. The parameter is used with the `list activities` (p. 41), `list tasks` (p. 46), and `list plans` (p. 42) commands. If the parameter is not specified, objects with any state will be listed.

For the `list activities` (p. 41) command, you can specify one or more of the following states: `running`, `paused`, `waiting`, `waiting_for_children`, or `completed`.

For the `list tasks` (p. 46) and `list plans` (p. 42) commands, you can specify one or more of the following states: `idle`, `waiting`, `running`, or `need_interaction`.

### 3.10.7 filter\_status

```
--filter_status=<statuses>
```

Statuses for selecting objects to be output. The parameter is used with the `list plans` (p. 42) command. If not specified, objects with any status will be displayed.

You can specify one or more of the following statuses: `ok`, `warning`, `error`, or `unknown`.

### 3.10.8 filter\_type

```
--filter_type=<types>
```

Types for selecting objects to be output. The parameter is used with the `list archives` (p. 25) and `list backups` (p. 27) commands. If not specified, objects with any type will be displayed.

For the `list archives` (p. 25) command, you can specify one or more of the following types: `disk` and `file`.

For the `list backups` (p. 27) command, you can specify one or more of the following types: `full`, `incremental` and `differential`.

### 3.10.9 filter\_user

```
--filter_user=<user names>
```

The parameter is used with the `list tasks` (p. 46) and `list plans` (p. 42) commands. If specified, the software will list only tasks that run (or only plans whose tasks run) under the specified user accounts. If not specified, tasks run under any user account will be displayed.

## 3.11 General parameters

### 3.11.1 log

```
--log=<full path>
```

Saves the log of the operation with which the parameter is used to the specified file. The software writes logs in the Acronis xml format regardless of the extension of the file.

### 3.11.2 output

```
--output={formatted|raw}
```

Output mode. Applicable values are:

- **formatted** (by default)

Outputs human-readable formatted table. The maximum width of a table column is 20 characters. The text is left aligned. Table headers and header separators are shown.

- **raw**

This mode is intended for use as input for a third-party parser. Headers are not visible; column header separator lines are not visible; the column separator is "\t" (tab character). Also, this mode enables you to see the full length of a value that is longer than 20 characters (for example, the GUID of a backup plan).

### 3.11.3 progress

```
--progress
```

Enables displaying the operation progress information (percent completed, elapsed time, estimated time) on the screen. The progress information is recorded in the log regardless of the `--progress` parameter presence.

### 3.11.4 file\_params

```
{-f|--file_params}=<full local path>
```

Specifies the full path to an input parameter file. The path must be local (for example, `c:\temp\1.txt` or `/home/user1/1.txt`). For more detailed information, see Syntax (p. 7).

### 3.11.5 password

```
--password=<password>
```

Password for the archive in the backup and recovery operations, archive and backup management operations.

Password for Acronis Secure Zone in the `create asz` (p. 35) command.

### 3.11.6 reboot

#### reboot and reboot later

```
--reboot  
--reboot --later
```

Reboot the machine before the operation (if required).

Use the `--reboot` parameter when performing the following operations that require a reboot: recovering a volume that contains the currently active operating system, recovering locked files, creating/deleting Acronis Secure Zone on a system disk, cloning a system disk. The machine will be rebooted without a prompt.

To display the prompt during the operations that require a reboot, specify the `--silent_mode=off` parameter instead of the `--reboot` parameter. If neither the `--reboot` parameter nor the `--silent_mode=off` parameter is specified, the operation will fail.

To postpone the operation until a user reboots the system manually, add the `--later` parameter. With this parameter, the operation will be performed after the user initiates a reboot.

If you specify the `--reboot` parameter with operations that do not necessarily require a reboot, this parameter will be ignored.

## reboot after

```
--reboot_after
```

Reboot the server after the operation is completed.

### 3.11.7 silent\_mode

```
--silent_mode={on|off}
```

If the parameter value is `on` or if the parameter is not specified, the silent mode is enabled. It means that the software will automatically handle situations requiring user interaction. If an operation cannot continue without user interaction, it will fail. Details of the operation, including errors, if any, can be found in the operation log.

If the value is `off`, the command allows interaction with the user. Set this value if the operation requires a user interaction, such as inserting removable media (CD, DVD or tape).

To prohibit interaction when the software comes across a bad sector during backup, use the `--ignore_bad_sectors` (p. 61) parameter. The `--silent_mode` parameter does not work in this particular case.

### 3.11.8 Error handling

```
--retry_count=<number of attempts>  
--retry_delay=<delay>
```

These parameters are used with the backup and recovery commands only.

When a recoverable error occurs, the software re-attempts to perform the unsuccessful operation. You can set the time interval between attempts and the number of attempts. The attempts will be stopped as soon as the operation succeeds OR the specified number of attempts is performed, depending on which comes first.

The interval may be set in seconds (`s`, by default), minutes (`m`) or hours (`h`).

If the parameters are not specified, the time interval between attempts is 30 seconds and the number of attempts is 5 (as if you typed `--retry_count=5 --retry_delay=30s`). To completely disable re-attempts, specify `--retry_count=0`.

#### Examples:

10 seconds interval:

```
--retry_delay=10
```

or

```
--retry_delay=10s
```

1 minute interval:

```
--retry_delay=1m
```

1 hour interval:

```
--retry_delay=1h
```

### 3.11.9 ftp\_active

```
--ftp_active
```

Use an FTP server in the Active mode.

### 3.11.10 id

```
--id=<GUID>
```

GUID of the activity, task or backup plan with which the operation is to be performed. The parameter is used with the `get log` (p. 41) command and with the `task` (p. 46) and `plan` (p. 42) management commands.

### 3.11.11 oss\_numbers

```
--oss_numbers
```

The parameter is used with the `backup disk` (p. 15), `recover disk` (p. 16), `create asz` (p. 35), and `delete asz` (p. 37) commands. If specified, the numbers of the volumes in the `--volume` (p. 55) parameter value are adjusted for the MBR partition table. This means that primary volumes have numbers 1-1, 1-2, 1-3, 1-4; logical volume numbers start with 1-5.

If the parameter is not specified, consecutive volume numbering must be used.

For example, if the disk has one primary and two logical partitions, their numbers can appear as follows:

```
--oss_numbers --volume=1-1,1-5,1-6
```

or

```
--volume=1-1,1-2,1-3
```

## 4 Usage examples

### 4.1 Backup and recovery

#### 4.1.1 Disks and volumes

##### Listing disks (p. 14)

- Listing all disks of the local machine.

```
acrocnd list disks
```

- Listing disks of a remote machine.

```
acrocnd list disks --host=192.168.1.2 --credentials=user1,pass1
```

- Listing disks of a virtual machine.

```
acrocnd list disks --host=srv1 --credentials="srv1\AMS user",pass1 --  
service=ams --vmid=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

## Backing up disks and volumes (p. 15)

- Backing up the first volume of the second disk and the third volume of the first disk. The backup will be saved to a local folder and will be split into 4.5-GB parts to be later written on DVDs. To get the volume numbers, use the `list disks` (p. 14) command.

```
acrocmd backup disk --volume=2-1,1-3 --split=4608 --loc="F:\my backups" --arc="my archive"
```

- Backing up the entire machine to a file with a simplified name. No archive metadata will be added. For more details, see the `--plain_archive` (p. 57) parameter description. The operation log will be saved to a text file.

```
acrocmd backup disk --loc=F:\ --arc=my_machine --plain_archive --log=D:\logs\log.txt
```

- Backing up disks 1 and 2 excluding .bak files. The compression level will be set to maximum. The backup will be saved to a network shared folder. To get the disk numbers, use the `list disks` (p. 14) command.

```
acrocmd backup disk --disk=1,2 --compression=max --exclude_mask=*.bak --loc=\\bkpsrv\backups --credentials=bkuser,pass --arc=disk_archive
```

- Creating an incremental backup of volume C:. The Volume Shadow Copy Service (VSS) will be enabled and will automatically select between the available hardware-based and software-based snapshot providers. The backup will be saved to a managed vault.

```
acrocmd backup disk --volume=C --backuptype=incremental --use_vss=auto --loc=bsp://storage_node1/my_vault --credentials=bkuser,pass --arc=c_archive
```

- Backing up the first (according to the `list disks` (p. 14) command output) dynamic volume in Windows or logical volume in Linux. The backup will be saved to a network shared folder.

```
acrocmd backup disk --volume=DYN1 --loc=\\srv1\backups --credentials=netuser1,pass1 --arc=dyn1_arc
```

For more information about selecting logical volumes in Linux, see [Selecting logical volumes and MD devices for backup](#) (p. 82)

- Backing up all dynamic volumes in Windows or all logical volumes in Linux. The backup will be saved to an FTP server.

```
acrocmd backup disk --volume=DYN --loc=ftp://srv1/backups --credentials=ftpuser1,pass1 --arc=alldyn_arc
```

## Recovering disks and volumes (p. 16)

- Recovering hard disk 1 from the latest backup of an archive to hard disk 2.

```
acrocmd recover disk --loc=F:\backups --arc=my_archive --disk=1 --target_disk=2
```

- Recovering hard disk 2 from a backup located in an NFS shared folder to hard disk 1.

```
acrocmd recover disk --loc=nfs://server/backups --arc=my_archive --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --disk=2 --target_disk=1
```

- Recovering hard disk 1 from the latest backup of an archive to the original disk. The archive is specified by the file name of a backup that belongs to the archive (`my_machine2.tib`). This syntax is useful for archives created using the `--plain_archive` (p. 57) parameter.

Please be aware that the command will apply to the latest backup rather than to the one specified in the `--arc` parameter. If the archive does not contain metadata, the command will apply to the latest backup of the backup chain. (A backup chain is a full backup and all of its dependent incremental and differential backups.)

```
acrocmd recover disk --loc=F:\backups --arc=my_machine2.tib --disk=1
```



- Recovering the first volume of the first disk from a backup residing in a managed vault to hard disk 2. A new volume will be created starting from megabyte 8192. It will have the size of 6400 megabytes and the "active" flag.

```
acrocmd recover disk --loc=bsp://storage_node1/my_vault --
credentials=admin,pass --arc=my_archive --backup=XXXXXXXX-XXXX-XXXX-XXXX-
XXXXXXXXXXXX --volume=1-1 --target_disk=2 --start=8192 --size=6400 --
type=active
```

- Recovering the first volume of the second disk from the latest backup of an archive to the first dynamic volume.

```
acrocmd recover disk --loc=\\srv1\backups --credentials=netuser1,pass1 --
arc=machine1_dyn1 --volume=2-1 --target_volume=DYN1
```

- Recovering the second volume of the first disk from the latest backup of an archive to the original volume. In other words, you are recovering to the volume you backed up. If the original volume is not found, the software will recover to the first unallocated space of a suitable size. If no unallocated space of a suitable size is found, the command will fail.

```
acrocmd recover disk --loc=/home/user1/my_backups --arc=my_machine1 --volume=1-
2
```

- Recovering a volume (either basic or logical) to the unallocated space of a basic disk. If no unallocated space of a suitable size is found, the command will fail. The resulting volume will be basic.

```
acrocmd recover disk --loc=F:\ --arc=my_machine --backup=XXXXXXXX-XXXX-XXXX-
XXXX-XXXXXXXXXXXX --volume=2-2 --target_disk=3
```

- Recovering a volume to the unallocated space of a disk group. The resulting volume will be dynamic. The type of the resulting volume will be simple (if a basic volume was backed up) or will be inherited from the backed up volume (if a dynamic volume was backed up).

```
acrocmd recover disk --loc=ftp://srv1/backups --arc=alldyn_arc --volume=1-1 --
target_volume=UNALLOCATED-DYN
```

## Recovering MBR (p. 18)

- Recovering an MBR of hard disk 1 from the latest backup of an archive located in Acronis Secure Zone to the same hard disk 1.

```
acrocmd recover mbr --loc=atis:///asz --arc=my_archive --disk=1 --target_disk=1
```

## 4.1.2 Files

### Backing up files and folders (p. 19)

- Backing up a file. The backup will be saved to a local folder.

```
acrocmd backup file --include=C:\documents\my_thesis.doc --
loc=E:\backups\my_thesis --arc=my_thesis
```

- Creating a backup of network shared folders. The backup will be saved to a local folder. The archive will be protected by a password and encrypted.

```
acrocmd backup file --include=\\srv1\folder1 \\srv2\folder2 --password=123 --
encryption=aes256 --loc=D:\backups --arc=my_archive
```

- Creating a backup of a local folder. The backup will be saved to a vault on a storage node. The disk snapshot must be taken. If taking a snapshot is not possible, the backup will fail.

```
acrocmd backup file --include=D:\documents --snapshot=always --
loc=bsp://storage_node1/my_vault --arc=my_archive
```

- Backing up the user home directory in Linux. The backup will be saved to a SAMBA share.

```
acrocmd backup file --include=/home/anna --loc=\\bkpsrv\backups\anna --
credentials=netuser1,pass1 --arc=home_dir
```

- Creating a backup of a local folder. The backup will be placed to an online storage, with encryption enabled.

```
acrocmd backup file --include=c:\work --password=123 --encryption=aes256 --
loc=online:// --credentials="user@mail.com",pass --arc=my_archive
```

## Recovering files and folders (p. 20)

- Recovering a file from a backup stored in a local folder to the original folder. Since the `--overwrite` parameter is not specified, the existing file will be overwritten.

```
acrocmd recover file --loc=E:\backups\my_thesis --arc=my_thesis --
backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --file=C:\documents\my_thesis.doc
```

- Recovering a folder and its contents from the latest backup of an archive residing in Acronis Secure Zone to a local folder.

```
acrocmd recover file --loc=atis:///asz --arc=my_archive --file=C:\Documents --
target=D:\my_folder
```

- Recovering a folder and its contents from a backup. The archive is specified by the file name of a backup that belongs to the archive (`my_machine3.tib`). This syntax is useful for archives created using the `--plain_archive` (p. 57) parameter.

Please be aware that the command will apply to the backup specified in the `--backup` parameter rather than to the one specified in the `--arc` parameter.

```
acrocmd recover file --loc=E:\backups\my_machine --arc=my_machine3.tib --
backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --file=C:\Documents --
target=D:\my_folder
```

- Recovering all contents of the latest backup of an archive residing on a network share to the original folder. The existing files and folders will not be overwritten. The files' security settings and original dates will be preserved.

```
acrocmd recover file --loc=nfs://server/backups --arc=my_data --overwrite=never
--recover_security=true --original_date
```

- Recovering the user home directory in Linux from a backup stored on a SAMBA share.

```
acrocmd recover file --loc=\\bkpsrv\backups\anna --credentials=netuser1,pass1 -
-arc=home_dir --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --file=/home/anna
```

- Recovering the contents of the latest backup of an archive residing on a network share. The software will recover all files and folders except for the `*.tmp` and `*.bak` files.

```
acrocmd recover file --loc=\\srv1\folder1 --credentials=user1,pass1 --
arc=my_docs --exclude=*.tmp,*.bak
```

### 4.1.3 Virtual machines

#### Listing virtual machines (p. 21)

- Listing virtual machines that are managed by the management server.

```
acrocmd list vms --host=srv1 --credentials="srv1\AMS user",pass1 --service=ams
```

## Backing up virtual machines (p. 22)

- Backing up a virtual machine. The incremental backup will be saved to a managed vault. Progress will be shown.

```
acrocmd backup vm --vmid=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --  
loc="bsp://storage_node1/my vm vault" --arc="my vm archive" --  
backuptype=incremental --progress --host=srv1 --credentials="srv1\AMS  
user",pass1 --service=ams
```

- Backing up four virtual machines. A separate archive will be created for each machine. All machines will be backed up in parallel.

```
acrocmd backup vm --vmid=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX1,XXXXXXXX-XXXX-  
XXXX-XXXX-XXXXXXXXXXXX2,XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX3,XXXXXXXX-XXXX-  
XXXX-XXXX-XXXXXXXXXXXX4 --loc=\\srv1\folder1 --credentials=netuser1,pass1 --  
arc="[Virtualization Server Type]_[Virtual Machine Name]_archive1" --  
simultaneous_backup=4 --host=srv1 --credentials="srv1/AMS user",pass1 --  
service=ams
```

## Recovering virtual machines (p. 23)

- Recovering all disks from the latest backup of the archive residing in a managed vault to an existing virtual machine.

```
acrocmd recover vm --vmid=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --  
loc="bsp://storage_node1/my vm vault" --arc="my vm archive" --host=srv1 --  
credentials="srv1\AMS user",pass1 --service=ams
```

- Recovering the first disk from the latest backup of an archive stored in the **\\bkpsrv\vms** shared folder to a new VMware Workstation virtual machine. The virtual machine files will be saved to the **\\srv1\vms** shared folder.

```
acrocmd recover vm --disk=1 --vmname=my_vm_1 --vmtype=vmware --  
vmstorage=\\srv1\vms --credentials=netuser1,pass1 --loc=\\bkpsrv\vms --  
credentials=netuser2,pass2 --arc="my vm archive" --host=srv1 --  
credentials="srv1/AMS user",pass1 --service=ams
```

- Recovering all disks from the specified backup to a new ESX(i) virtual machine. The virtual machine will be created in Storage1 of the specified ESX(i) server (Server1).

```
acrocmd recover vm --vmname=my_vm_1 --vmtype=esx --vmserver_name=Server1 --  
vmstorage=Storage1 --loc=\\bkpsrv\vms --credentials=netuser1,pass1 --arc="my vm  
archive" --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --host=srv1 --  
credentials="srv1/AMS user",pass1 --service=ams
```

- Recovering all disks from the latest backup of an archive to a new Hyper-V virtual machine. The virtual machine will be created in a local folder of the specified Hyper-V server (Server1).

```
acrocmd recover vm --vmname=my_vm_1 --vmtype=hyperv --vmserver_name=Server1 --  
vmstorage="C:\ProgramData\Microsoft\Windows\Hyper-V\Virtual Machines" --  
loc=\\bkpsrv\vms --credentials=netuser1,pass1 --arc="my vm archive" --host=srv1  
--credentials="srv1/AMS user",pass1 --service=ams
```

## 4.2 Operations with archives and backups

### 4.2.1 Archives

#### Listing archives (p. 25)

- Listing archives in a managed vault. Since the `--all` parameter is specified, all fields will be output for each archive: GUID; name; creation date; machine where the archive was created; owner (the user who saved the archive to the location); and occupied space in bytes.

```
acrocmd list archives --all --loc=bsp://storage_node1/my_vault --credentials="ASN user",pass123
```

#### Exporting an archive (p. 26)

- Exporting a password-protected archive stored in a shared folder to a local folder.

```
acrocmd export archive --loc=\\bkpsrv\backups --credentials=netuser1,pass --arc=my_archive --password=123 --target=E:\copies --target_arc=my_archive_copy
```

#### Validating an archive (p. 26)

- Validating all backups of an archive.

```
acrocmd validate archive --loc=E:\backups\ --arc=my_archive
```

#### Deleting an archive (p. 27)

- Deleting an archive.

```
acrocmd delete archive --loc=bsp://storage_node1/my_vault --credentials="ASN user",pass123 --arc=my_archive
```

### 4.2.2 Backups

#### Listing backups (p. 27)

- Listing backups of an archive located in a managed vault.

```
acrocmd list backups --loc=bsp://storage_node1/my_vault --credentials="ASN user",pass123 --arc=my_archive
```

#### Listing backup content (p. 28)

- Listing the content of a backup from an archive residing in Acronis Secure Zone.

```
acrocmd list content --loc=atis:///asz --credentials=aszpass --arc=my_archive --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

#### Validating a backup (p. 29)

- Validating a backup.

```
acrocmd validate backup --loc=E:\backups\ --arc=my_archive --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

#### Exporting backups (p. 29)

- Exporting the selected backups of an archive stored in a managed vault to a local folder.

```
acrocmd export backup --loc=bsp://storage_node1/my_vault --credentials="ASN user",pass --arc=my_archive --password=123 --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX1,XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX2 --target=E:\copies --target_arc=my_archive_copy
```

## Replicating a backup (p. 30)

- Replicating the latest backup of an archive stored in a local folder to a tape device directly attached to the machine.

```
acrocmd replicate backup --loc=C:\Backups --arc=my_archive --password=123 --target=atis:///tape?XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

## Converting a backup to full (p. 31)

- Converting the latest backup of the archive to a full backup. As a result of the operation, the incremental or differential backup is substituted with a full one (for the same point in time).

```
acrocmd convert full --loc=C:\Backups --arc=my_archive --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

## Consolidating backups (p. 31)

- Deleting all backups from an archive except for the specified ones.

```
acrocmd consolidate backup --loc=C:\Backups --arc=my_archive --password=123 --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX1,XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX2
```

## Deleting backups (p. 32)

- Deleting the specified backups from an archive.

```
acrocmd delete backup --loc=C:\Backups --arc=my_archive --password=123 --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX1,XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX2
```

## 4.2.3 Mounting

### Listing mounts (p. 33)

- Listing the volumes mounted from backups.

```
acrocmd list mounts
```

### Mounting (p. 33) (Agent for Windows only)

- Mounting the first volume of the first disk from a backup in the read-only mode. The resulting volume will be assigned letter "Z".

```
acrocmd mount --loc=E:\backups --arc=my_archive --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --volume=1-1 --letter=Z
```

### Mounting (p. 33) (Agent for Linux only)

- Mounting the first volume of the second disk from the latest backup of an archive located on the `srv1` node in the `/backups` directory exported by NFS.

```
acrocmd mount --mount_point=/mnt/md1 --loc=nfs://srv1/backups --arc=my_archive --volume=1-2
```

- Mounting the first volume of the first disk from a backup in the read-write mode.

```
acrocmd mount --mount_point=/mnt/md2 --loc=/home/backups --arc=mybackup --backup=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --volume=1-1 --rw
```

### Unmounting (p. 34) (Agent for Windows only)

- Unmounting a volume.

```
acrocmd umount --letter=Z
```

## Unmounting (p. 34) (Agent for Linux only)

- Unmounting a device mounted at the mount point.

```
acrocmd umount --mount_point=/mnt/md1
```

## 4.3 Operations with Acronis Secure Zone

### Creating Acronis Secure Zone (p. 35)

- Creating Acronis Secure Zone on disk 2 of the local machine. Since the `--asz_size` (p. 66) parameter is not specified, Acronis Secure Zone will be created with a default size which is the average between the maximal (all the unallocated space) and minimal (about 50 MB) values.

```
acrocmd create asz --disk=2
```

- Creating Acronis Secure Zone of size 500 MB on disk 1 of the local machine. If the unallocated space is not enough, the space will be taken from the second volume of that disk.

```
acrocmd create asz --disk=1 --volume=1-2 --asz_size=500
```

- Creating Acronis Secure Zone of size 20 GB on disk 1 of a remote machine.

```
acrocmd create asz --host=192.168.1.2 --credentials=john,pass1 --disk=1 --asz_size=20gb
```

### Cleaning up Acronis Secure Zone (p. 35)

- Cleaning up Acronis Secure Zone on the local machine. The cleanup operation deletes the backups corrupted due to a power loss or another reason.

```
acrocmd cleanup asz
```

- Cleaning up Acronis Secure Zone on a remote machine.

```
acrocmd cleanup asz --host=srv1 --credentials="srv1/AMS user",pass1 --service=ams --address=192.168.1.2
```

### Deleting a backup from Acronis Secure Zone (p. 36)

- Deleting the latest backup of an archive stored in Acronis Secure Zone on the local machine.

```
acrocmd delete asz_files --credentials=asz_pass --arc=my_archive --password=123
```

### Deleting Acronis Secure Zone (p. 37)

- Deleting Acronis Secure Zone from the local machine. The freed space will be added to the 1st volume of disk 1. (This is the disk where Acronis Secure Zone is located.)

```
acrocmd delete asz --volume=1-1
```

- Deleting Acronis Secure Zone from a remote machine. The freed space will become unallocated.

```
acrocmd delete asz --host=srv1 --credentials="srv1/AMS user",pass1 --service=ams --address=192.168.1.2
```

## 4.4 Operations with Acronis Startup Recovery Manager

### Activating Acronis Startup Recovery Manager (p. 37)

- Activating Acronis Startup Recovery Manager on the local machine.

```
acrocmd activate asrm
```

- Activating Acronis Startup Recovery Manager on a remote machine.

```
acrocmd activate asrm --host=srv1 --credentials="srv1/AMS user",pass1 --service=ams --address=192.168.1.2
```

## Deactivating Acronis Startup Recovery Manager (p. 38)

- Deactivating Acronis Startup Recovery Manager on the local machine.

```
acrocmd deactivate asrm
```

- Deactivating Acronis Startup Recovery Manager on a remote machine.

```
acrocmd deactivate asrm --host=srv1 --credentials="srv1/AMS user",pass1 --service=ams --address=192.168.1.2
```

## 4.5 Operations with tapes

### Listing tape libraries (p. 38)

- Viewing the information about all tape libraries attached to the local machine.

```
acrocmd list tape_libraries
```

- Viewing the information about a tape library attached to the local machine.

```
acrocmd list tape_libraries --filter_name="hp MSL6060"
```

### Listing tape drives (p. 39)

- Viewing the information about drives of tape libraries and stand-alone tape drives attached to the local machine.

```
acrocmd list tape_drives
```

## 4.6 Operations with vaults

### Validating a vault (p. 39)

- Validating all archives in a managed vault except for password-protected ones. To validate a password-protected archive, use the [validate archive](#) (p. 26) command.

```
acrocmd validate vault --loc=bsp://storage_node1/my_vault --credentials="ASN user",pass123
```

- Validating all archives in a network shared folder except for password-protected ones.

```
acrocmd validate vault --loc=\\srv1\backups --credentials=netuser1,pass1
```

### Exporting a vault

- Exporting all archives from a managed vault to a shared folder. This is performed by means of the [export archive](#) (p. 26) command.

In the example below, the command will be executed by the storage node service. We recommend you to use the `asn` value of the `--service` parameter. If the service is not specified, the command will be executed by the agent service. This will unnecessarily load the machine where the command is run.

The first credentials are required for the storage node to execute the command. This user may be an administrator on the machine where the management server is installed. The second credentials will ensure export of all archives stored in the specified vault. This user should have access to all of the archives.

```
acrocmd export archive --service=asn --host=storage_node --credentials=user1,pass1 --loc=bsp://storage_node/my_vault --credentials=user2,pass2 --target=\\bkpsrv\backups --credentials=netuser,pass3
```

## 4.7 Operations with disks

### Cloning a disk (p. 40)

- Cloning disk 2 of the local machine to disk 3 of the same machine.

```
acrocmd clone disk --source=2 --target=3
```

## 4.8 Administration operations

### 4.8.1 Logs and activities

#### Getting log (p. 41)

- Exporting the log of an activity with the specified GUID to a file.

```
acrocmd get log --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --loc=c:\logs\task.log
```

#### Listing activities (p. 41)

- Viewing all current activities of Acronis Managed Machine Service that runs on the local machine.

```
acrocmd list activities
```

- Viewing the running activities of Acronis Backup & Recovery 11 Management Server.

```
acrocmd list activities --host=srv1 --credentials="srv1\AMS user",pass1 --service=ams --filter_state=running
```

- Viewing activities of Acronis Managed Machine Service that runs on a remote machine. The software will show only completed activities.

```
acrocmd list activities --host=srv1 --credentials="srv1\AMS user",pass1 --service=ams --address=192.168.1.2 --filter_state=completed
```

- Viewing the running activities of Acronis Backup & Recovery 11 Storage Node. By reviewing the command output, which displays the time elapsed from an activity start, you can detect hung-up processes on the storage node.

```
acrocmd list activities --host=srv1 --credentials="srv1\ASN user",pass1 --service=asn --filter_state=running
```

### 4.8.2 Plans

#### Listing plans (p. 42)

- Viewing all backup plans on the local machine.

```
acrocmd list plans
```

- Viewing all centralized backup plans existing on Acronis Backup & Recovery 11 Management Server.

```
acrocmd list plans --host=srv1 --credentials="srv1\AMS user",pass1 --service=ams
```

- Viewing all backup plans with the **warning** status on the local machine.

```
acrocmd list plans --filter_status=warning
```

#### Deleting a plan (p. 43)

- Deleting a backup plan on the local machine.

```
acrocmd delete plan --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```



### Exporting a plan (p. 43)

- Exporting a backup plan from the local machine to a file.

```
acrocmd export plan --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX --  
loc=c:\temp\plan.xml
```

### Importing a plan (p. 44)

- Importing a backup plan to the local machine.

```
acrocmd import plan --loc=c:\temp\plan.xml
```

### Disabling a plan (p. 45)

- Disabling a backup plan on the local machine.

```
acrocmd disable plan --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

### Enabling a plan (p. 45)

- Enabling a previously disabled backup plan on the local machine.

```
acrocmd enable plan --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

## 4.8.3 Tasks

### Listing tasks (p. 46)

- Viewing all tasks on the local machine.

```
acrocmd list tasks
```

- Viewing all running tasks on a remote machine.

```
acrocmd list tasks --host=192.168.1.2 --credentials=user1,pass1 --  
filter_state=running
```

### Running a task (p. 46)

- Starting execution of a task on the local machine.

```
acrocmd run task --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

### Stopping a task (p. 47)

- Stopping execution of a task on a remote machine.

```
acrocmd stop task --host=svr1 --credentials="svr1/AMS user",pass1 --service=ams  
--address=192.168.1.2 --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

### Deleting a task (p. 47)

- Deleting a task on the local machine.

```
acrocmd delete task --id=XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX
```

## 4.8.4 Licenses

### Listing licenses (p. 48)

- Listing the Acronis Backup & Recovery 11 licenses assigned to a remote machine.

```
acrocmd list licenses --host=192.168.1.2 --credentials=user1,pass1
```

## 4.9 Selecting logical volumes and MD devices for backup

Let's assume that the system has four physical disks: Disk 1, Disk 2, Disk 3 and Disk 4.

- A RAID-1 volume is configured on two basic volumes: sdb1, sdd1
- A logical volume is configured on two basic volumes: sdb2, sdd2
- Disk 3 is empty.

A list of volumes can be obtained by using the following command:

```
acrocmd list disks
Num          Partition  Flags      Start      Size      Type      GUID
-----
Disk 1
1-1          sda1        Pri,Act    0.031 MB   203.9 MB  Ext 2
1-2          sda2        Pri        204 MB     12,002 MB Reiser
1-3          sda3        Pri        12,206 MB  1,028 MB  Linux swap
Unallocated-1-1 Unallocated 13,233 MB  3,151 MB
Disk 2
Unallocated-2-1 Unallocated 4,110 MB   4,082 MB
Disk 3
Unallocated-3-1 Unallocated 0 MB       1,024 MB  PS_NONE
Disk 4
Unallocated-4-1 Unallocated 4,110 MB   4,082 MB
Dynamic volumes:
1 Dyn1       MyVG-MyLV   0 MB       4,096 MB  Ext 3     A5C349F8...
1 Dyn2       md0         0 MB       2,055 MB  Ext 2     FFF5E076...
```

The logical volume, DYN1, occupies basic volumes 2-2 and 4-2 (which are not shown by the above command). The RAID-1 volume, DYN2, occupies basic volumes 2-1 and 4-1 (which are not shown by the above command either).

To back up the logical DYN1 volume, run the following command (here, the name of the backup is assumed to be `my_archive` and its location to be `/home/user`):

```
acrocmd backup disk --volume=DYN1 --loc=/home/user --arc=my_archive
```

To back up the RAID-1 volume DYN2, run the following command:

```
acrocmd backup disk --volume=DYN2 --loc=/home/user --arc=my_archive
```

To back up all three hard disks with volumes, select the volumes 1-1, 1-2, 1-3, DYN1 and DYN2:

```
acrocmd backup disk --volume=1-1,1-2,1-3,DYN1,DYN2 --loc=/home/user --arc=my_archive
```

If you select Disk 3 or volumes 2-1, 2-2, 4-1 or 4-2, the program will create a raw (sector-by-sector) backup.

## 4.10 Scheduling backups under Linux using the cron service

To automate backups, you can use the `cron` service familiar to many UNIX users.

### Example

Let's assume that you need to back up a volume regularly. A full backup has to be created weekly, supported by incremental backups created daily.

Use the `list disks` (p. 14) command to obtain the necessary volume number. For example, the volume number is 2-1.

Create two executable files for the daily and weekly backup (for example, **abr.cron**) and place them into the `/etc/cron.daily` and `/etc/cron.weekly` directories, respectively.

To initiate weekly full backups of volume 2-1, add the following line to the `/etc/cron.weekly/abr.cron` file:

```
#!/bin/bash
acrocmd backup disk --volume=2-1 --loc=/mnt/my_archives/my_host --
arc=my_archive
```

where `/mnt/my_archives/my_host` is the path to the backup location.

The second **abr.cron** file is needed to initiate daily incremental backups.

```
#!/bin/bash
acrocmd backup disk --volume=2-1 --backuptype=incremental --
loc=/mnt/my_archives/my_host --arc=my_archive
```

For more information, see Help of the `cron` service.

## 5 Comparison of the old and new command-line syntax

The following table lists commands that were used in the Acronis Backup & Recovery 10 command-line utility, and the corresponding commands of the Acronis Backup & Recovery 11 command-line utility. This comparison can help you learn new commands faster and easier.

Old syntax	New syntax
<code>asrm_activate</code>	<code>activate asrm</code>
<code>asrm_deactivate</code>	<code>deactivate asrm</code>
<code>asz_content</code>	<code>list archives</code>
<code>asz_create</code>	<code>create asz</code>
<code>asz_delete</code>	<code>delete asz</code>
<code>asz_delete_files</code>	<code>delete asz_files</code>
<code>asz_files</code>	—
<code>clone</code>	<code>clone disk</code>
<code>consolidate</code>	<code>export backup</code>
<code>convert</code>	<code>recover vm</code>
<code>create</code>	<code>backup disk</code>
<code>deploy</code>	<code>recover disk</code>
<code>deploy_mbr</code>	<code>recover mbr</code>
<code>explore</code>	<code>mount</code>
<code>export</code>	<code>export archive</code>
<code>export /include_pits:[pits numbers]</code>	<code>export backup</code>
<code>filebackup</code>	<code>backup file</code>
<code>filerestore</code>	<code>recover file</code>
<code>list</code>	<code>list disks</code>
<code>list /arc:[archive name] or list /arc_id:[archive id]</code>	<code>list backups</code>
<code>list /filename:[file name]</code>	<code>list content</code>
<code>list /vault:[path]</code>	<code>list archives</code>
<code>ls_check</code>	<code>list licenses</code>
<code>pit_info</code>	<code>list backups</code>
<code>unplug</code>	<code>umount</code>
<code>verify</code>	<code>validate archive</code>