Acronis

Acronis True Image for Western Digital

USER GUIDE

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1 Introduction

In this section

1.1 What is Acronis True Image for Western Digital?

Acronis True Image for Western Digital is an application that protects all information on your Mac, including the operating system, applications, settings, and all of your data. To protect your Mac, you need to perform two easy operations:

1. **Create a complete backup of your Mac.**

   This saves your operating system files and all your data to a file called backup. You can store this file in local or network storage. Refer to Backing up to local or network storage (p. 10) for details.

2. **Create Acronis bootable media.**

   This is a removable drive containing boot files. When your Mac cannot start up, this media allows you to start an Acronis recovery environment and use your backup to rollback your Mac to a healthy state. Refer to Creating Acronis bootable media (p. 20) for details.

After performing these two steps, you can be sure that you will be able to repair your Mac OS X and recover your lost documents in a few minutes.

Key features:

- Backup of selected disks or entire Mac contents to local or network storage (p. 10)
- Backup of selected files and folders to local or network storage (p. 10)
- Creating Acronis bootable media (p. 20)
- Mac OS X recovery in the bootable media environment (p. 22)
- Recovery of specific files and folders under Mac OS X (p. 24)

1.2 System requirements

Supported operating systems:

- macOS Catalina 10.15
- macOS Mojave 10.14
- macOS High Sierra 10.13
- macOS Sierra 10.12
- OS X El Capitan 10.11

Supported file systems:

- APFS
- HFS+ (including Core Storage)

- FAT32
- NTFS (including Boot Camp)

  You cannot back up data to a disk with an NTFS file system. However, you can recover data from a backup located on this type of file system.

Requirements for Acronis bootable media:

- To create a bootable media, you can use any removable drive with 4 GB (or more) of free space and that is formatted with the Mac OS Extended file system.
- The version of macOS Recovery must match the version of macOS installed on your Mac.
- CD and DVD media are not supported.

Supported storage media:

This product is licensed for storage devices by Western Digital hardware brands, including WD, SanDisk, and G-Tech.

- Internal drives (HDD, SSD, RAID)
- USB drives
- FireWire drives
- Thunderbolt drives
- Network shares, NAS
  - My Cloud (Sequoia)
  - My Cloud (Glacier)
  - WD Cloud for Japan
  - My Cloud Mirror
  - My Cloud Mirror (Gen 2)
  - My Cloud EX2
  - My Cloud EX2 Ultra
  - My Cloud EX2100
  - My Cloud EX4
  - My Cloud EX4100
  - My Cloud DL2100
  - My Cloud DL4100
  - My Cloud PR2100

General requirements:

- You need to have administrator privileges to run Acronis True Image for Western Digital.
- If your Mac includes the Apple T2 chip, select "Medium Security" and "Allow booting from external media" in the Secure boot settings. For more information, refer to https://support.apple.com/en-us/HT208330.

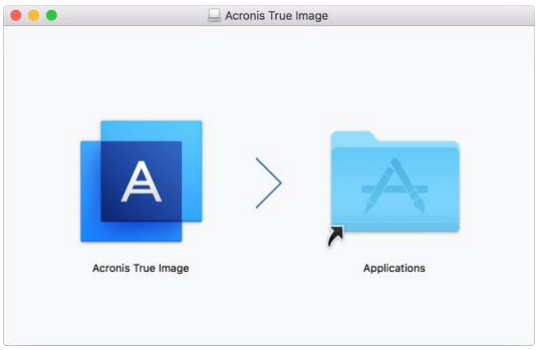
1.3 Install, update, or remove Acronis True Image for Western Digital

Installation

You cannot install Acronis True Image for Western Digital in the same system where Acronis True Image or any other Cyber Protection software by Acronis is already installed.

To install Acronis True Image for Western Digital:

1. Download the Acronis True Image for Western Digital setup file from the Western Digital website.
2. Double-click the Acronis True Image for Western Digital setup file (the file has a .dmg extension).



3. Drag the Acronis True Image for Western Digital icon to the Applications folder.
4. Run the installed program.
5. When prompted, provide administrator credentials.
6. Read and accept the terms of the license agreement and the Acronis Customer Experience Program.

When you start Acronis True Image for Western Digital for the first time, the product will be activated. Refer to Activating Acronis True Image for Western Digital (p. 7) for details.

Note: If your Mac is running macOS High Sierra 10.13 or Mojave 10.14, you need to perform additional steps after the installation in order to have disk backup, disk cloning, and ransomware protection. Please do the following:

1. Open System Preferences.
2. Go to the General tab of Security & Privacy.
3. Click **Allow** to accept the prompt that appears.

On macOS Mojave 10.14, you also need to grant full disk access to Acronis True Image for Western Digital if you want to back up your personal data (e.g., Mail, Calendar, Messages). For this, when the window requesting Full Disk Access appears, follow the on-screen instructions. Refer to https://kb.acronis.com/content/61832 for details.

Update

When an update for Acronis True Image for Western Digital is available from the Acronis website, you can download it, and then install it over your version of Acronis True Image for Western Digital. All your backups and settings will be kept.

To turn on an automatic check:

- In the **Acronis True Image for Western Digital** menu, click **Preferences**, and then select the **Automatically check for updates at startup** check box.

To check for updates manually:

- In the **Acronis True Image for Western Digital** menu, click **Check for Updates**.

Uninstallation

To remove Acronis True Image for Western Digital from your Mac:

1. Open the Finder, and then click **Applications**.
2. Find Acronis True Image for Western Digital in the list, and then drag it to the Trash.

1.4 Activating Acronis True Image for Western Digital

Acronis True Image for Western Digital is activated automatically when a Western Digital storage device is detected on your system. The license is valid for 5 years after the activation date.

Checking the license expiration date

To check the date when your license expires, navigate to the **About** tab in Acronis True Image for Western Digital.

Extending the license for Acronis True Image for Western Digital

The license for Acronis True Image for Western Digital is valid for 5 years after the last addition of a storage device by Western Digital. You can prolong your license for Acronis True Image for Western Digital by adding a new storage device by Western Digital to your system.

To prolong your license expiration date:

1. On the sidebar, click **About**.
2. Click **Prolong** and follow the on-screen instructions.

1.5 Acronis Customer Experience Program

Acronis Customer Experience Program (CEP) is a new way to allow Acronis customers to contribute to the features, design and development of Acronis products. This program enables our customers to provide us with various information, including information about the hardware configuration of your host computer and/or virtual machines, the features you use most (and least), and the nature of the problems you face. Based on this information, we will be able to improve the Acronis products and the features you use most often.

To make a decision:

1. In the **Acronis True Image for Western Digital** menu, click **Preferences**.
2. To leave the program, clear the **Participate in the Acronis Customer Experience Program** check box.

If you choose to participate, the technical information will be automatically collected every week. We will not collect any personal data, like your name, address, phone number, or keyboard input. Participation in the CEP is voluntary, but the end results are intended to provide software improvements and enhanced functionality to better meet the needs of our customers.

1.6 Application preferences

The Preferences window contains general settings of Acronis True Image for Western Digital. To open it:

1. Open Acronis True Image for Western Digital.
2. In the Acronis True Image for Western Digital menu, click **Preferences**.

The following settings are available:

- **Do not back up when working on battery power**
  Refer to Laptop power settings (p. 15) for details.
- **Automatically check for updates at startup**
  Refer to Install, update, or remove Acronis True Image for Western Digital (p. 6) for details.
- **Participate in the Acronis Customer Experience Program**
  Refer to Acronis Customer Experience Program (p. 7) for details.
- **Show notifications in Notification Center**
  Refer to Notifications (p. 16) for details.

1.7 Technical Support

Maintenance and Support Program

If you need assistance with Acronis True Image for Western Digital, please refer to the official support resources of Western Digital at https://www.westerndigital.com/support (https://www.westerndigital.com/support).

2 Backup

In this section

2.1 Basic concepts

Backup and recovery

Backup refers to making copies of data so that they can be used to **recover** the original data after a data loss event.

Backups are useful primarily for two purposes:

- To recover an operating system (p. 22) when it is corrupted or cannot start. This process is called disaster recovery. For information about protecting your Mac from a disaster, refer to Backing up to local or network storage (p. 10) for details.
- To recover specific files and folders (p. 24) after they have been accidentally deleted or corrupted.

Recovery method:

- **Full recovery** can be performed to the original location or to a new one.

  When the original location is selected, the data in the location is completely overwritten with the data from the backup. In case of a new location, the data is just copied to the new location from the backup.

Backup versions

A backup version is created during a backup operation. Each version represents a point in time to which the system or data can be restored. The first backup version contains all the data selected for backup. The second and subsequent versions contain only data changes that occurred since the previous backup version. All the backup versions are stored in a single backup file.

Backup file format

When you back up your Mac to a local storage or a network place, Acronis True Image for Western Digital saves backup data in the proprietary .tib or .tibx format, by using compression. The data from .tib or .tibx file backups can be recovered only through Acronis True Image for Western Digital.

Schedule

For your backups to be really helpful, they must be as up-to-date as possible. Schedule your backups (p. 12) to run on a regular basis.

Backup retention rules

Every time you run a backup operation, manually or on a schedule, Acronis True Image for Western Digital creates a new backup version in the backup location. To delete obsolete backup versions automatically, you can set the backup retention rules. Refer to Cleaning up backups, backup versions, and replicas (p. 13) for details.

2.2 What you can and cannot back up

The table below shows what and where you can back up.

	Backup destinations			
	Internal drives (HDD, SSD, RAID)	USB drives	Thunderbolt	Network share, NAS
Internal drives (HDD, SSD)	+	+	+	+
USB drives	+	+	+	+
FireWire drives	+	+	+	+
Thunderbolt	+	+	+	+
Fusion Drive	+	+	+	+
Hard drives protected with FileVault 2	+	+	+	+
Hard drives with Boot Camp installed	+	+	+	+
Specific files	+	+	+	+
Separate partitions	-	-	-	-
RAID, Apple RAID	-	-	-	-
APM disks	-	-	-	-

2.3 Backing up to local or network storage

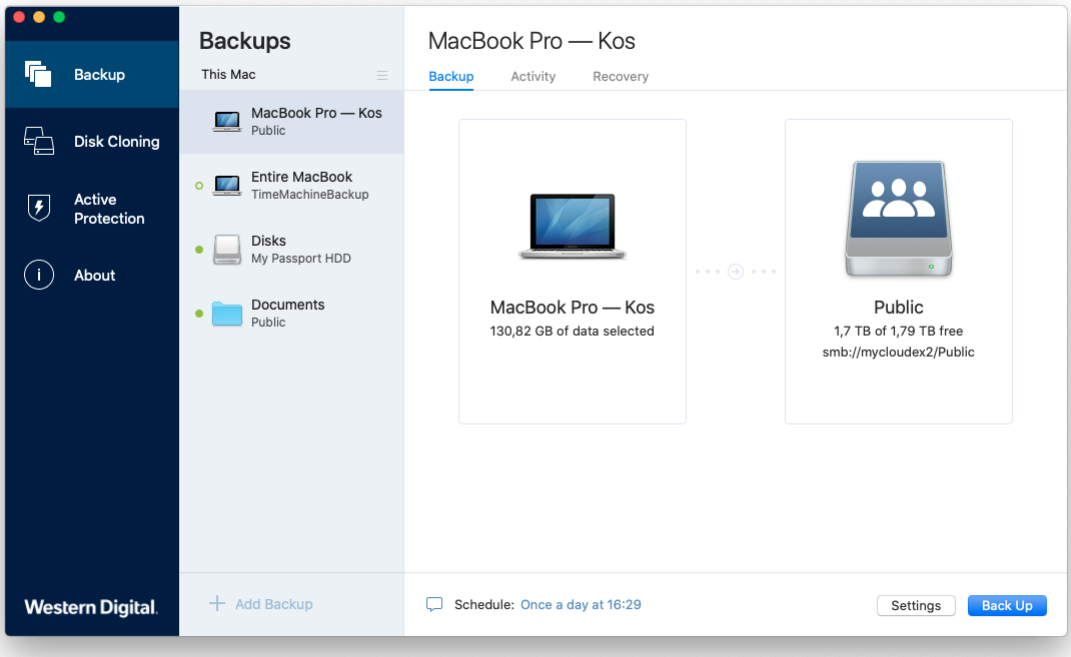
To back up your data to local or network storage:

1. Open Acronis True Image for Western Digital.
2. Perform one of the following:
   - If this is your first backup, skip this step.
   - If you already have a backup and you want to create a new one, click **Add Backup** at the bottom of the backup list.

   *Note: To delete a backup, right-click it, and then click **Delete**. The backup will be removed from the list and the backup files and the files of the backup replica will be permanently deleted from the backup storage. These files cannot be ever recovered.*

3. Click the backup source icon, and then select what you want to back up:
   - **Entire Mac**

     When you select this option, Acronis True Image for Western Digital backs up all your internal hard drives in disk mode. The backup contains the operating system, installed programs, system settings, and all your personal data including your photos, music, and documents.
   - **Disks**
   - **Files and folders**
   - NAS device (if any connected)



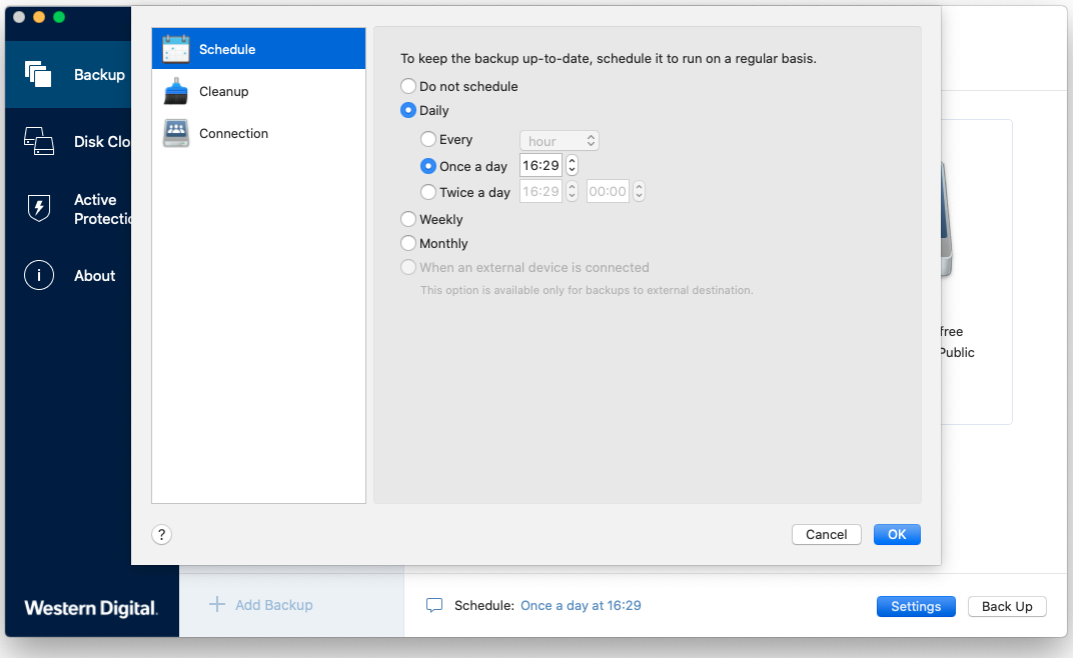
4. Click the backup destination icon, select where you want to save the backup file to, and then click **OK**. If the location is not listed, click **Browse**, and then select a location.

   If you have an NAS device, it will be automatically detected and listed along with other locations.
5. [Optional step] Configure additional settings. You can:
   - Configure the backup schedule at **Settings** —> **Schedule**. Refer to Scheduling (p. 12) for details.
   - Set the backup retention rules at **Settings** —> **Cleanup**. Refer to Cleaning up backups, backup versions, and replicas (p. 13)for details.
6. After you have configured all settings and you are ready to start a backup, click **Back Up**.

To recover your Mac from a Acronis True Image for Western Digital backup, you must have an Acronis bootable media. If you do not have one, please create it. Refer to Creating Acronis bootable media (p. 20) for details.

2.4 Scheduling

For your backups to be really helpful, they should be as up-to-date as possible. Schedule your backups to run on a regular basis. By default, your Mac is backed up daily.



To schedule the backup:

1. Click **Settings**, choose backup frequency, and then specify the start time.
   - **Do not schedule**

     This option turns scheduling off.
   - **Daily**

     The backup starts once or twice a day at the specified time or with a time interval that you select.
   - **Weekly**

     The backup starts every week on the selected days and at the specified time.
   - **Monthly**

     The backup starts every month on the selected dates and at the specified time.
   - **When an external device is connected** (available for backups to external destination only)

     If you schedule a task for performing backup to a USB flash drive or external HDD, the backup starts every time the same external device is attached. Select the **Once a day** check box if you want the backup to be performed only once a day for the device.
2. After you have configured all settings, click **OK**.

If your Mac is switched off or it is in the sleep mode when the scheduled time comes, the backup will run the next time the Mac starts or when it wakes up. You can use Mac Power Nap to avoid gaps in backing up your data.

To use Mac Power Nap:

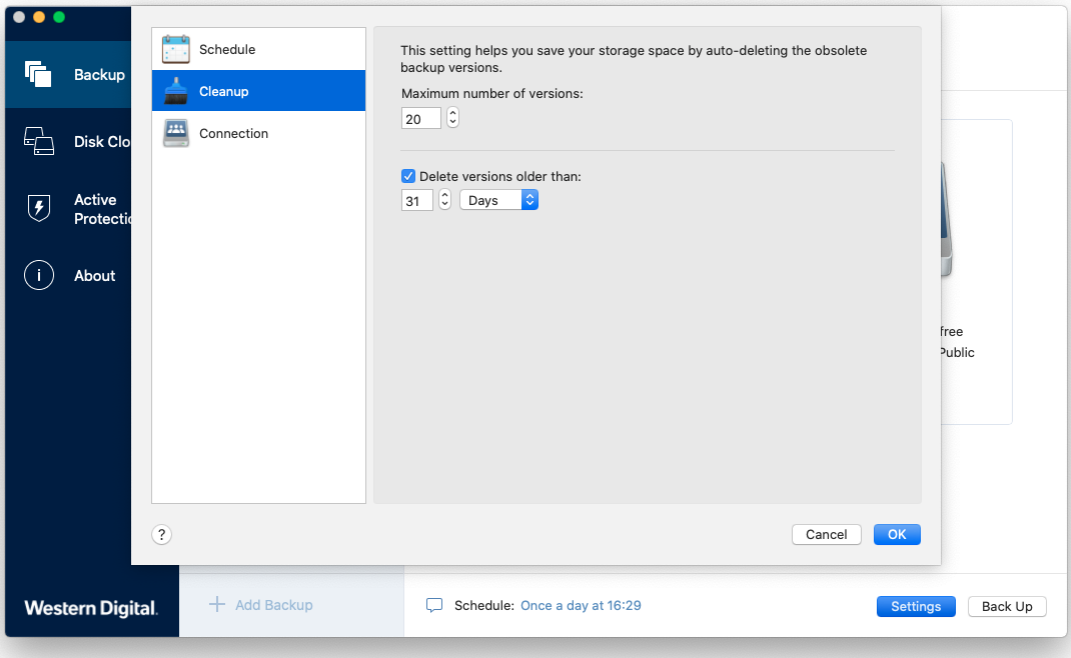
- Turn on the Power Nap in your mac **Energy Saver** > **Power Adapter** parameters.

- In the **Acronis True Image for Western Digital** menu, click **Preferences**, click **General**, and then select the **back up when your Mac is in Power Nap** check box. Click **OK**.

When this setting in turned on, and your Mac is in the sleep mode when the scheduled time comes, the backup will run in the next Power Nap. Please be aware that backing up during Power Nap works only if your computer is connected to the power supply.

2.5 Cleaning up backups, backup versions, and replicas

Every time you run a backup operation, manually or on a schedule, Acronis True Image for Western Digital creates a new backup version in the backup location. By default, Acronis True Image for Western Digital stores 20 recent versions. This rule applies to both local and network folders. When you create the twenty-first version, Acronis True Image for Western Digital automatically deletes the oldest version of the backup. You can change the default value and set a different limit on the number of backup versions.



In addition to the number of versions, you can limit their age. Select the **Delete version older than** check box, and then specify how long to store a version. All versions that are older than the specified period will be automatically deleted.

2.6 Adding an existing backup to the list

You may have Acronis True Image for Western Digital backups created by a previous product version or copied from another computer. Every time you start Acronis True Image for Western Digital, it scans your computer for such backups and adds them to the backup list automatically.

If you have backups that are not shown in the list, you can add them manually.

To add backups manually:

1. In the **File** menu, point to **Add Existing backup**. The program opens a window where you can browse for backups on your computer.

   Also, you can use Spotlight to search by .tib or .tibx files.
2. Select a backup version (a .tib or .tibx file). The entire backup will be added to the list.

You can restore data from all backups in the list. You can also reconfigure backups created on the same Mac.

To reconfigure a backup:

1. Click the backup source icon, and then select what you want to back up.
2. [Optional step] Schedule your backup to run on a regular basis.
3. To start the backup, click **Back Up**.

*Note: If you want to hide some local backup from the list, right-click it, and then click **Hide from the list**. You will not be able to do any operations with this backup until you add it again manually.*

2.7 Connection settings

If you are connecting to a networked computer or an NAS device, in most cases you will need to provide the necessary credentials for accessing the network location. For example, this is possible when you select a backup destination. Then, if the credentials to the location are modified, you need to correct them manually in the backup settings. Otherwise, all further backup operations will fail.

To change credentials to a network location:

1. Open Acronis True Image for Western Digital.
2. In the **Backup** section, select the backup that has a network location as a source or destination.
3. Click the gear icon to open the backup settings.
4. In the **Connection** section, specify the user name and password to access the network location.
5. [Optional step] Click **Test connection**.

   If the connection has been established, the credentials are correct.
6. Click **OK** to apply the changes.

2.8 Backup activity and statistics

On the Activity tab and the Backup tab, you can view additional information on a backup, such as backup history and file types the backup contains. The Activity tab contains a list of operations performed on the selected backup starting from its creation, the operation statuses, and statistics. This comes in handy when you need to find out what was happening to the backup in background mode, for example the number and statuses of scheduled backup operations, size of backed-up data, results of backup validation, etc.

When you create the first version of a backup, the Backup tab displays a graphical representation of the backup content by file types.

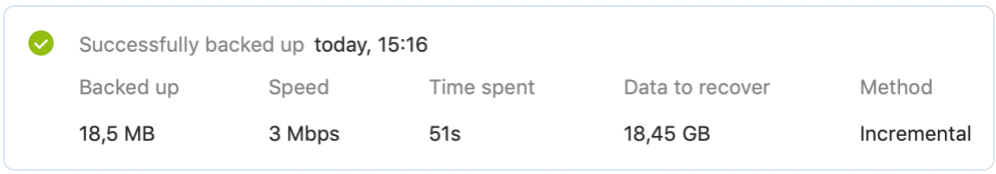
The Activity tab

Nonstop backup and mobile backups do not have an activity feed.

To view a backup activity:

1. On the sidebar, click **Backup**.

2. In the backup list, select the backup, the history of which you want to view.
3. On the right pane, click **Activity**.



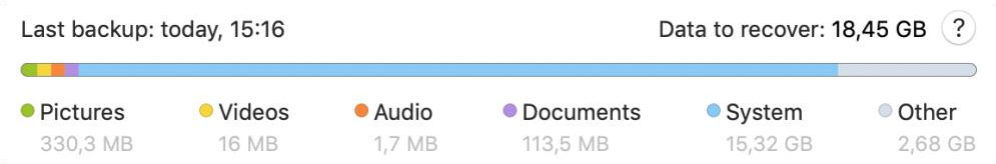
What you can view and analyze:

- Backup operations and their statuses (successful, failed, canceled, interrupted, and so on)
- Operations performed on the backup, and their statuses
- Error messages
- Backup comments
- Backup operation details, including:
  - **Backed up**—Size of backed-up data, with compression.
  - **Speed**—Backup operation speed.
  - **Time spent**—Time spent for the backup operation.
  - **Data to recover**—Initial size of data, without compression.
  - **Method**—Backup operation method (full, incremental).

For more information, refer to the Knowledge Base article: https://kb.acronis.com/content/60104.

The Backup tab

When a backup is created, you can view statistics on types of the backed-up files:



Point to a color segment to see the number of files and the total size for each data category:

- Pictures
- Video files
- Audio files
- Documents
- System files
- Other file types, including hidden system files

Information on the data size:

- **Data to recover**—size of the original data that you selected to back up.

2.9 Laptop power settings

This setting is only available on computers with batteries (laptops, computers with UPS).

Long-term backups may consume the battery power quite fast. When you work on your laptop and there is no power supply around you or when your computer has switched to UPS after a blackout, it's reasonable to save the battery charge.

To save the battery charge:

- In the **Acronis True Image for Western Digital** menu, click **Preferences**, then click **Battery Saver**, and then select the **Do not back up when battery power is less than** check box. Then click **OK**.

When this setting is turned on, if you unplug your laptop power adapter or use a UPS for your computer after a blackout, and the remaining battery charge is equal or below the level in the slider, all current backups are paused and scheduled backups will not start. Once you plug the power adapter back in or the power supply is restored, the paused backups will be resumed. The scheduled backups that have been missed because of this setting will be started as well.

This setting does not block backup functionality completely. You can always start a backup manually.

Local mobile backups do not depend on this setting. Your mobile data is backed up to local storage on your computer as usual.

2.10 Notifications

Notifications in OS X Notification Center

You can duplicate Acronis True Image for Western Digital notifications in OS X Notification Center to view them in their usual place and without opening the Acronis True Image for Western Digital console. The notifications in OS X Notification Center will display automatically.

To duplicate in-product notifications in Notification Center:

- In the **Acronis True Image for Western Digital** menu, click **Preferences**, and then select the **Show notifications in Notification Center** check box.

Notifications in Acronis Tray Notification Center

When Acronis True Image for Western Digital is open, you can see the status of any operation in it. However, since some operations can take quite a while, such as a backup, there is no need to keep Acronis True Image for Western Digital to learn its result. The notifications in OS X Notification Center stay open until you close them, but you cannot open a notification that has been closed. To view the information, you need to open Acronis True Image for Western Digital.

The Tray Notification Center contains latest notifications in one place, lets you see important operation statuses without opening Acronis True Image for Western Digital at the moment when you need them. The following notifications are shown in Acronis Tray Notification Center: personal offers, information on the results of backup operations, and other important notifications from Acronis True Image for Western Digital. The Tray Notification Center is minimized and hidden under Acronis True Image for Western Digital in the Mac tray.

2.11 Parallels Desktop support

What is Parallels Desktop?

Parallels Desktop is an application that allows you to run different operating systems on your Mac, by using a special virtual environment. It is usually used to run Windows, but you can also run Mac OS X, Linux, Google Chrome OS, and other operating systems. For more details, please visit the Parallels website: https://www.parallels.com/products/desktop/.

How does Acronis True Image for Western Digital handle Parallels Desktop virtual machines?

Acronis True Image for Western Digital provides complete support of your virtual machines created with Parallels Desktop 14 or higher. When you back up your Mac, the virtual machines are backed up as well. When you recover your Mac, the virtual machines revert to the state they were in when the backup started. After recovery, all your virtual machines remain consistent and bootable.

How does it work?

Every time you run a backup, Acronis True Image for Western Digital creates snapshots of all Parallels Desktop virtual machines stored on the disks or in the folders selected to back up. These snapshots are used as time points to revert to when you recover your Mac. After the created snapshots are stored in the backup, they are automatically deleted from your Mac.

Which virtual machines are backed up?

Acronis True Image for Western Digital backs up all virtual machines that are:

- Stored on the disks being backed up
- Added to the Parallels Desktop application
- Currently running, stopped, and suspended

How do I recover virtual machines?

If your virtual machines were created with Parallels Desktop 14 or higher, all restored virtual machines will boot after recovery. If you used an earlier version of Parallel Desktop, you should run the recreate_pd_hdd.sh script to restore the bootability of your recovered machines.

This script is shipped with the product and is located in /Applications/Acronis True Image.app/Contents/MacOS/recreate_pd_hdd.sh. If you use an earlier version, download the script file from: https://kb.acronis.com/system/files/content/2016/08/49198/recreate_pd_hdd.zip.

To run the script:

1. Unpack the .zip file of the script.
2. Open Terminal.
3. Type *bash "[script_path]" "[vm_path]"*, where
   - [script_path] is a path to the script file.
   - [vm_path] is a path to the folder, where the recovered virtual machine files are located.

   For example:

```
bash "/Applications/Acronis True Image.app/Contents/MacOS/recreate_pd_hdd.sh"
"/Users/John/Downloads/My Windows Virtual Machine.pvm"
```

Note: We recommend recovering the PD machines as new virtual machines and rather than overwriting the previous ones.

Limitations

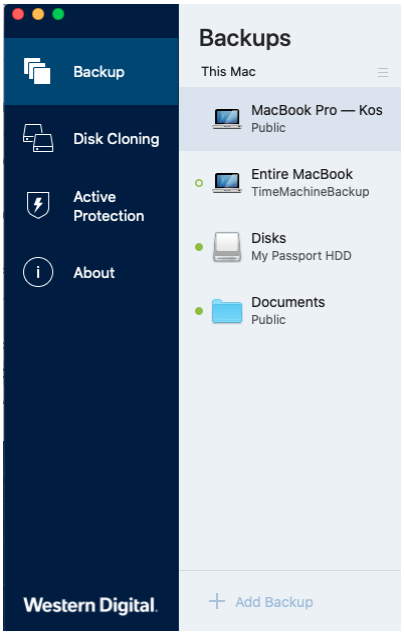
If you have Parallels Desktop virtual machines configured to use the Boot Camp partition, pay attention to the following limitations:

- If the virtual machine is running, backup of the Boot Camp partition will fail in most cases.
- If the virtual machine is suspended, backup of the Boot Camp partition will succeed, but recovery from the backup will fail in most cases.

- If the virtual machine is suspended, recovery to the Boot Camp partition will fail. Instead, remove the Boot Camp partition, and then recover it from the backup to the unallocated space.

2.12 Backup list

While working with the backup list, you will see special icons. The icons give you a backup type and backup current state.



Backup state indication:

Icon	Description
	The backup successfully completed.
	The backup is queued.
 (blinking)	The backup is in progress.
	The backup was paused by user.
	The last backup failed.
	The backup completed with warnings.

Sorting backups in the list

By default, the backups are sorted by the date they were created, starting from the newest to oldest. To change the order, select the appropriate sorting type in the upper part of the backup list. You have the following options:

Command		Description
	Name	This command sorts all backups in alphabetical order. To reverse the order, select **Z —> A**.

Command		Description
Sort by	**Date created**	This command sorts all backups starting from newest to oldest. To reverse the order, select **Oldest on top**.
	Date updated	This command sorts all backups by date of the last version. The newer the last backup version, the higher the backup will be placed in the list. To reverse the order, select **Least recent on top**.
	Size	This command sorts all backups by size, from biggest to smallest. To reverse the order, select **Smallest on top**.
	Source type	This command sorts all backups by the source type. The order is as follows: entire PC backups - disk backups - file backups - nonstop backup.
	Destination type	This command sorts all backups by the destination type. The order is as follows: internal disk drives - external disk drives - NAS devices - network shares.

3 Creating bootable media

In this section

3.1 Creating Acronis bootable media

Acronis bootable media is a removable drive containing boot files. When your Mac does not start, you use the drive to boot the Acronis recovery environment and recover your Mac from a previously created backup.

Fusion Drive is not supported as target for Acronis bootable media and Acronis Survival Kits.

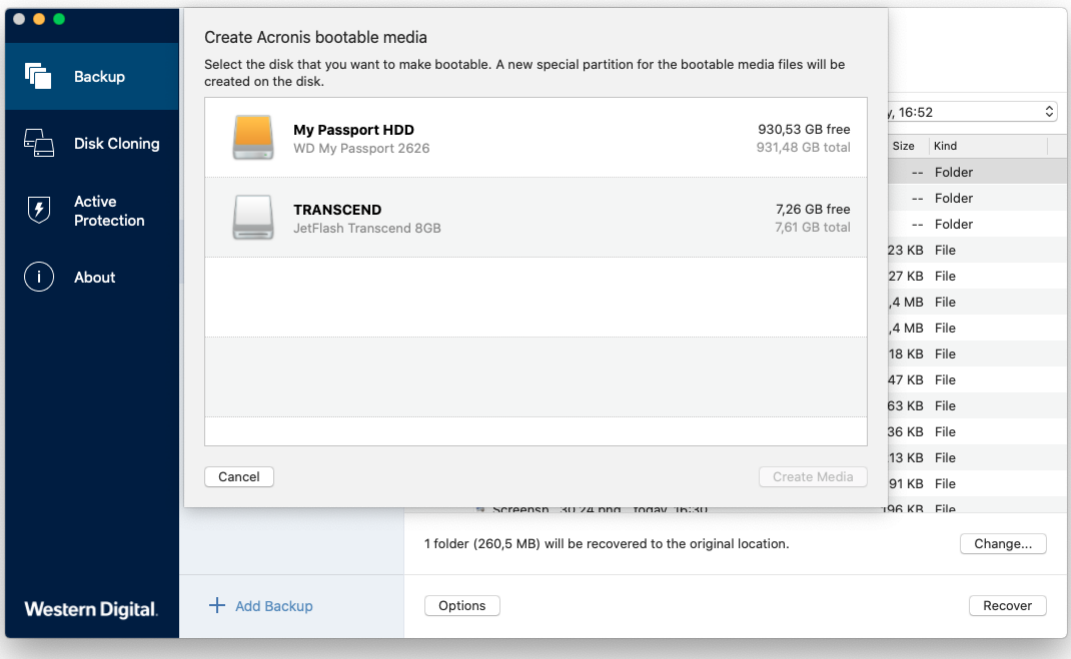
If you do not have a backup yet, please create it. Refer to Backing up to local or network storage (p. 10) for details.

⚠ *Using Acronis bootable media is the only way to recover your Mac from an Acronis True Image for Western Digital backup.*

To create Acronis bootable media:

1. Connect a removable drive to your Mac.

   The drive must have at least 4 GB of free space. For example, you can use an external hard drive or a USB flash drive. The drive will be formatted with the Mac OS Extended file system. Note that CD and DVD media are not supported.
2. Open Acronis True Image for Western Digital.
3. In the **File** menu, click **Create** **Acronis Bootable Media**. In the opened window, click **Create Media**.
4. The Acronis Media Builder window opens.



5. Select the drive that you want to make bootable.
6. Click **Create Media**.

   Acronis True Image for Western Digital creates a small partition on the selected drive and writes the boot files there. To create it, one of the existing volumes will be resized. If the disk is not a GPT one and it has a file system different from Mac OS Extended or APFS, Acronis True Image for Western Digital suggests formatting the disk. Pay attention, as disk formatting deletes all the data stored on the disk.
7. When the progress is complete, disconnect the media and keep it in a safe place. You can store your own data on the media, but make sure that you do not delete or modify the Acronis boot files.

We recommend that you create a new bootable media every time you upgrade your Mac OS X to a newer version. Otherwise, your bootable media may not work properly.

4 Recovery

In this section

4.1 When do I recover my Mac?

When your computer does not start up or you notice that your Mac OS X or some applications do not work properly, in most cases that means that it's time to recover your operating system from the disk image. First though, we recommend that you determine the source of the problem.

System errors can be due to two basic factors:

- **Hardware failure**

  In this scenario, it is better to let your service center handle the repairs.
- **Corruption of an operating system, applications or data**

  When the failure cause is a virus, malware or corruption of system files, recover the system from the backup. Refer to Recovering your Mac (p. 22) for details.

To determine source of the problem:

1. Check the cables, connectors, power of external devices, etc.
2. Restart your Mac. Press and hold the **Option** key while the Mac is starting. The recovery menu will be displayed.
3. Choose **Disk Utility** from the list, and then click **Continue**.
4. Select the disk that you want to check, and then click **First Aid**.

   If the Disk Utility informs you that the disk is going to fail, the cause is due to the physical condition of the disk. For example, it may contain bad sectors. We recommend that you back up the disk as soon as possible, and then replace it.
5. Click **Verify Disk**.
   - If there is an error, click **Repair Disk**. If the Disk Utility reports that the disk is OK or it has been repaired, restart your Mac and continue using it as usual. If the errors persist, recover your Mac from a Acronis True Image for Western Digital backup. Refer to Recovering your Mac (p. 22) for details.
   - If the Disk Utility does not detect any errors, recover your Mac from a Acronis True Image for Western Digital backup. Refer to Recovering your Mac (p. 22) for details.

4.2 Recovering your Mac

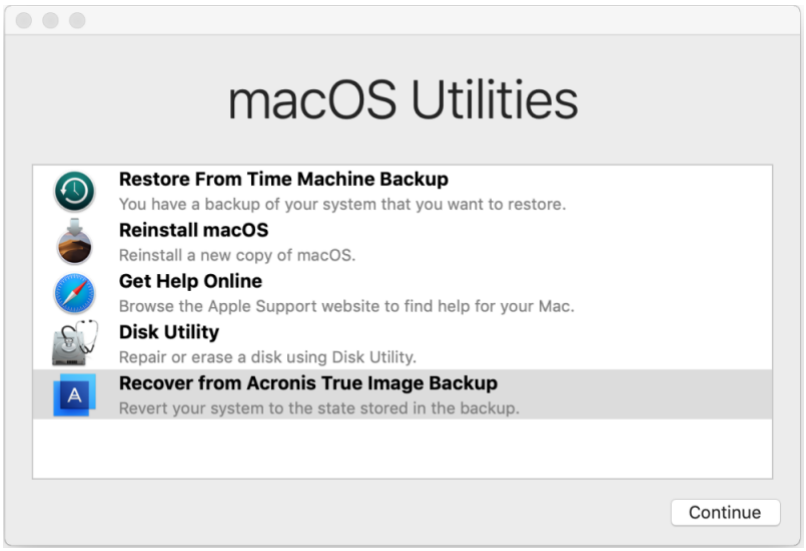
Follow the instructions below to recover your Mac when it cannot start or when it is working incorrectly.

To recover your Mac:

1. Make sure that you have:

- A previously created Acronis True Image for Western Digital backup. Without the backup recovery is impossible. Refer to Backing up to local or network storage (p. 10) for details.
- Acronis bootable media. If you do not have one and you can start Acronis True Image for Western Digital on your Mac, please create the media as soon as possible. Refer to Creating Acronis bootable media (p. 20) for details.

2. Plug in the bootable media to your Mac.
3. Start or restart your Mac. Press and hold the **Option** key while the Mac is starting. The boot menu will be displayed.
4. Choose Acronis Bootable Media as a device to boot from. The **OS X Utilities** list is displayed.



5. Select **Recover from Acronis True Image for Western Digital Backup**, and then click **Continue**.
6. In the window that opens, choose the location of your backup:
   - **Acronis Survival Kit**
   - **Local Storage**
   - **Network**

   Select your backup, and then click **Open**.
7. From the list, select the backup version from which you want to recover your Mac, and then click **Next**. The contents of the version are displayed.
8. Select the check boxes next to the partitions that you want to recover. Select a destination for each partition.

Note *If Acronis True Image for Western Digital automatically determines a destination for each partition in the backup, the simplified view appears. You cannot make changes in this mode. If you need to select partitions manually, click the* ***Advanced View*** *button.*

9. To start recovery, click **Recover**, and then confirm that you want to erase all data on the destination partitions.
10. When recovery is complete, restart your Mac.

4.2.1 FAQ about Boot Camp partition

- **How do I back up my Boot Camp partition?**

  Back up the hard drive where Boot Camp is installed. The backup will contain all the data stored on the drive, including the Boot Camp partition.

- **Can I back up my Boot Camp partition separately?**

  No, you can't. Acronis True Image for Western Digital allows you to create disk-level backups only. Back up the hard drive that contains the Boot Camp partition, instead.

- **How do I recover my Boot Camp partition?**

  You can do this in the bootable media environment. At the recovery source and destination selection step, select all the listed partitions. This will recover the entire hard drive. To recover the Boot Camp partition only, select the check box next to this partition, and then clear all other check boxes.

- **Can I resize my Boot Camp partition before recovery?**

  No, you can't. The Boot Camp partition remains the same size as it is in the backup.

- **What recovery destinations can I select for a Boot Camp partition?**

  We strongly recommend that you recover your Boot Camp partition to itself, though you can select any recovery destination.

- **Can I recover specific files from the backed up Boot Camp partition?**

  Yes, you can recover them without limitations, the same way that you would recover any other files.

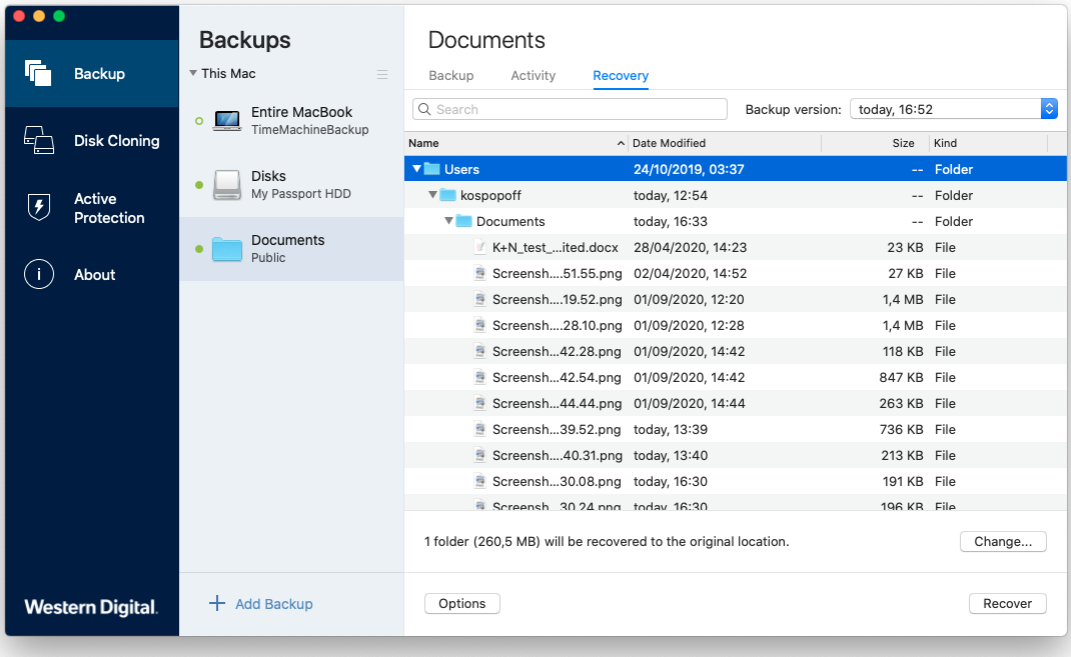
4.3 Recovering your files

Follow the instructions below when you need to recover specific files and folders from a backup.

To recover files and folders:

1. Open Acronis True Image for Western Digital.
2. On the left pane, select the backup that contains the files and folders to recover, and then open the **Recovery** tab.

The window with the backup contents opens.



3. In the **Backup version** list, select the backup version by its backup date. When you complete the procedure, the files and folders will be recovered to the state they were in on that date.
4. Select the files or folders that you want to recover.
5. [Optional step] By default, the selected files or folders will be recovered to the original location. To recover to a custom location, click **Change** and browse to the location that you want to use for the recovery.
6. Click **Recover**. When the progress is complete, your data is recovered to the selected date and time and stored in the original or custom location.

   In case of notarized backup, Acronis True Image for Western Digital will additionally verify the authenticity of the recovered files.

4.4 Searching backup content

While recovering data from local backups, you can search for specific files and folders stored in the selected backup.

To search for files and folders:

1. Start recovering data as described in Recovering files from local or network storage (p. 24).
2. When selecting files and folders to recover, enter the file or folder name into the **Search** field. The program shows search results.

   You can also use the wildcard characters: * and ?. For example, to find all files with extension **.exe**, enter ***.exe**. To find all .exe files with names consisting of five symbols and starting with “my”, enter **My???.exe**.
3. By default, Acronis True Image for Western Digital searches the folder selected on the previous step. To include the entire backup in the search, click **Entire Backup**.

   To return to the previous step, click the cross icon.
4. After the search is complete, select the files that you want to recover, and then click **Next**.

Note: Pay attention to the Version column. The files and folders that belong to different backup versions cannot be recovered at the same time.

5 Disk cloning

In this section

5.1 Clone disk utility

The usual copy operation does not make your new hard drive identical to the old one. For example, if you open Finder and copy all files and folders to the new hard drive, macOS will not start from the new hard drive. The Clone disk utility allows you to duplicate all your data and make macOS bootable on your new hard drive. As a result, your new disk becomes an exact clone of your old one.

Note *The Clone disk utility is available only when a Western Digital brand storage device is attached to your system.*

When you need it:

- You have bought a new iMac or MacBook and you want to transfer all your data, including macOS, from your old Mac to the new one.
- You want to make an external drive a portable clone of your Mac's hard drive. You will be able to connect this external drive to any Mac and boot it to instantly make this Mac an exact copy of your own one.

What drives you can use:

- Internal system drive of your Mac (can be used as a source disk only)
- Internal non-system drive of your Mac
- Internal drive of another Mac
- External drive
- USB flash drive

If the destination drive is larger or smaller than the source one, the partitions of the source drive will be proportionally resized on the destination drive to fully occupy its space. The only exception is partitions smaller than 1 GB. Those partitions will not be resized.

It is not necessary that the destination disk is of the same size as the source one, it can be bigger or smaller, but its overall size must be larger than the used space of the source disk plus 10%. For example, you have a 1000 GB hard drive in your Mac, only 200 GB is used. If you want to clone it, the destination drive size must be 200+10%=220 GB, or larger. If your destination drive is too small, try deleting some unnecessary data from the source drive or moving the data to an external drive or an USB flash drive.

5.2 Cloning disks

The usual copy operation does not make your new hard drive identical to the old one. For example, if you open Finder and copy all files and folders to the new hard drive, macOS will not start from the new hard drive. The Clone disk utility allows you to duplicate all your data and make macOS bootable on your new hard drive. As a result, your new disk becomes an exact clone of your old one. Refer to Clone disk utility (p. 27) for details.

To clone a disk:

1. If you have Parallels Desktop virtual machines running on your Mac, make sure that they are turned off.
2. Make sure that the source and destination drives are connected to your Mac. If you need to connect another Mac, make sure that it is connected in target disk mode. Refer to Connecting two Macs (p. 29) for details.
3. Open Acronis True Image for Western Digital.
4. On the sidebar, click **Disk Cloning**, and then click **Continue**.
5. By default, your internal system drive is pre-selected as a cloning source. If you want to change it, click the cloning source icon, and then select the drive that you want to clone.
6. Connect the destination drive.

   Note that APM disks are not supported. If you have an APM disk, we suggest converting it to GPT or to MBR.
7. Click the cloning destination icon, and then select the destination drive for the cloned data.

   ⚠ When you start the cloning operation, the destination drive will be formatted, and all of the data stored on it will be irreversibly erased. Make sure that the disk is empty or does not contain valuable data.
8. Click **Clone**.

If the cloning operation is stopped for some reason, you will have to configure and start the procedure again. You will not lose your data, because Acronis True Image for Western Digital does not alter the original disk and data stored on it during cloning.

Cloning a Fusion Drive

A **Fusion Drive** is a hybrid drive that combines a relatively slow hard disk drive (HDD) with a fast solid-state drive (SSD). On your Mac you see the Fusion Drive as a single logical volume with the space of both drives combined.

Acronis True Image for Western Digital allows you to clone a Fusion Drive either to a Fusion Drive or to any other target drive.

To clone a Fusion Drive:

1. If you have Parallels Desktop virtual machines running on your Mac, make sure that they are turned off.
2. Please ensure that the source and destination drives are connected to your Mac. Disconnect all unnecessary external devices.
3. Open Acronis True Image for Western Digital.
4. On the sidebar, click **Disk Cloning**, and then click **Continue**.
5. Select a Fusion Drive as a cloning source.
6. Connect the destination drive.
7. Click the cloning destination icon, and then select the destination drive for the cloned data.

   When you have more than one disk, the **Create a Fusion Drive** check box appears. Select it, if you want to create a Fusion Drive, and then choose two disks. Confirm your choice.

   ⚠ When you start the cloning operation, the destination drive will be formatted and all of the data stored on it will be irreversibly erased. Make sure that the disks are empty or do not contain valuable data.
8. Click **Clone**.

5.3 Connecting two Macs

When you want to clone your hard drive to another Mac, the destination Mac must be connected in target disk mode.

To connect the destination Mac to the source one:

1. Turn on both the source and destination Macs.
2. Connect them by using a FireWire or Thunderbolt cable.
3. On the destination Mac, click **Apple menu** > **System Preferences**, click **Startup Disk**, and then click **Target Disk Mode**.

   Once the computer is restarted, a new disk icon appears on the desktop of the source Mac. Since that moment you can work with the hard drive of the destination Mac as an ordinary external drive, including selecting it as a destination drive for the cloning operation.
4. When the cloning operation is complete, eject the destination drive by dragging its icon to the Trash.
5. Turn off the destination Mac, and then disconnect the cable.

6 Acronis Active Protection

What is ransomware?

Ransomware is malicious software that blocks access to some of your files or entire system and demands a ransom for unblocking. The software shows you a window informing you that your files are locked and that you have to pay urgently, otherwise you will not be able to access the files anymore. The message may also be disguised as an official statement from authorities, for example, the police. The purpose of the message is to frighten a user and make them pay without asking for help from an IT specialist or the authorities. Moreover, there is no guarantee that you will regain control over your data after paying the ransom.

Your computer can be attacked by ransomware when you visit unsafe websites, open email messages from unknown people, or when you click suspicious links in social networks or instant messages.

Ransomware can block your access to:

- **Entire computer**

  You cannot use Mac OS X or do anything on your computer. As a rule, ransomware does not encrypt your data in this case.
- **Specific files**

  Usually, this is your personal data, such as documents, photographs, and videos. Ransomware encrypts the files and demands money for the encryption key, which is the only way to decrypt your files.
- **Applications**

  Ransomware blocks some of your programs so that you cannot run them. It most often attacks your web browser.

How Acronis True Image for Western Digital protects your data from ransomware

To protect your computer from ransomware, Acronis True Image for Western Digital uses the Acronis Active Protection technology. Based on a heuristic approach, this technology monitors processes running on your computer by using the real-time mode. When it detects a third-party process that tries to encrypt your files or inject malicious code into a healthy process, it informs you about it and asks if you want to allow the process to modify your files or block the process. Refer to Protecting your data from ransomware (p. 31) for details.

A heuristic approach is widely used in modern antivirus software as an effective way to protect data from malware. As opposed to the signature-based approach which can detect only one sample, heuristics detects malware families that include samples with similar behavior. One more advantage of this approach is an ability to detect new kinds of malware that do not have a signature yet.

Acronis Active Protection uses behavioral heuristics and analyzes chains of actions done by a program, which is then compared with the chain of events in a database of malicious behavior patterns. Since this method is not precise, it admits so-called false positives, when a trusted program is detected as malware. To eliminate such situations, Acronis Active Protection asks you if you trust the detected process. When the same process is detected for the second time, you can add it to the permission list and set the default action for this process by marking it as trusted or blocked. If you do not, you will be able to blacklist this process. In this case, this process will be blocked every time it tries to modify your files.

To collect as many as possible different patterns, Acronis Active Protection uses Machine Learning. This technology is based on mathematical processing of big data received with telemetry. It is a self-learning approach, because the more data is processed, the more precisely a process may be detected as ransomware or not.

In addition to your files, Acronis Active Protection protects the Acronis True Image for Western Digital application files, your backups, and archives.

6.1 Protecting your data from ransomware

The Acronis Active Protection service monitors the processes running on your computer in real time. When a process tries to encrypt your files, the service displays a warning. You must review the list of detected processes and decide what to do next.

Decide what to do with detected processes

1. Select a process from the list.
2. (Optional) By default, the Active Protection service asks you what to do with detected processes after each scan. To save your choice for the selected service, select the **Remember my choice for this process** check box.

   Your decision about the process will be added to the Managed processes list. You can manage the list in **Active protection** > **Manage processes**.
3. Decide what to do with the process.
   - To allow the process to modify the files, click **Trust**.
   - To prevent the process from modifying the files, click **Block**.

     After blocking the process, we recommend that you check if your files have been encrypted or corrupted in any way.
   - If you are unsure what to do, click **Block**.

Configure automatic file recovery after blocking a process

You can configure Acronis True Image for Western Digital to recover your files automatically after you block a process.

1. In Acronis True Image for Western Digital, click **Active protection**.
2. On the protection tab, click **Settings**.
3. Select the **Automatically recover files after blocking a process** check box.

When you block a process, Acronis True Image for Western Digital will search the latest file versions and recover the files from one of the following locations:

- Temporary file copies that were preliminarily created during the process verification
- Local backups

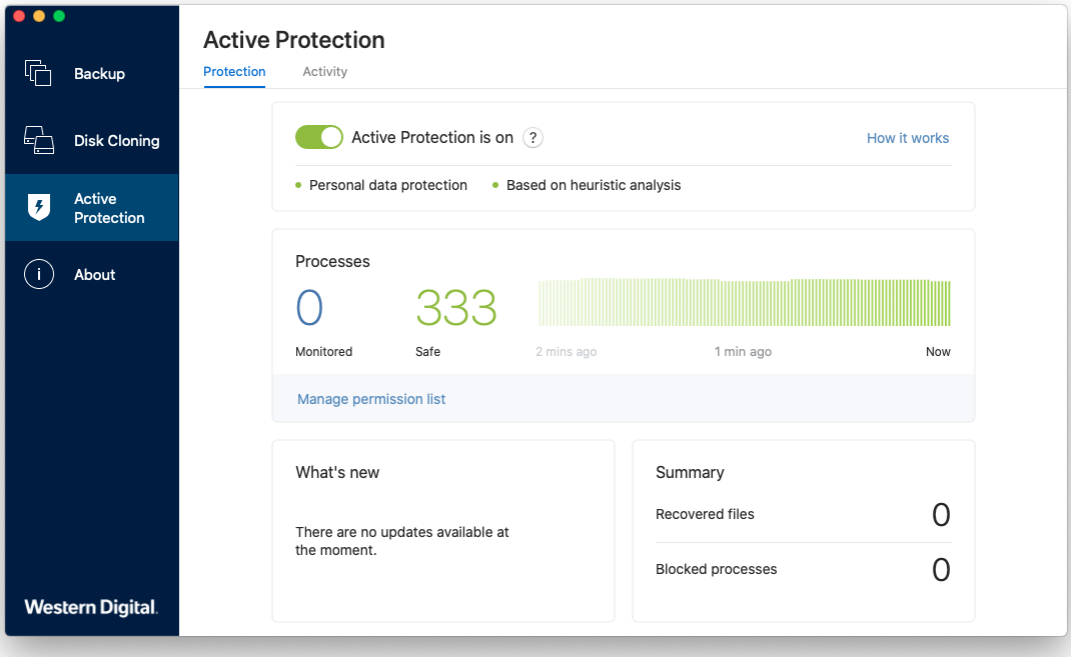
6.2 Acronis Active Protection settings

When the Acronis Active Protection service is on, it monitors the processes running on your computer by using the real-time mode. When it detects a third-party process that tries to encrypt your files, the service informs you about it and asks if you want to allow the process to modify your files or block the process.

Acronis Active Protection dashboard

The dashboard represents a number of statistic data on the protection process and allows you to configure the main Acronis Active Protection settings, such as permission list and exclusions.

To open the dashboard, start Acronis True Image for Western Digital, and then click **Active Protection** on the sidebar.



The dashboard allows you to:

- Turn the Acronis Active Protection service on and off
- Manage the permission list

  This list allows you to trust or block applications.
- Manage exclusions

  Use the exclusion list to specify files and folders that you do not want to protect from ransomware.
- See in real-time mode the current number of monitored and safe processes
- View summary information on the service operation
- Read the data protection-related articles

Status icon on the macOS menu bar

The Acronis Active Protection utility has its own status icon on the menu bar.

Clicking the icon opens the following menu items:

- **Open Acronis True Image for Western Digital**—click to open the Acronis Active Protection dashboard.
- **Turn Off Acronis Active Protection** (**Turn On Acronis Active Protection**)—click to turn the ransomware protection off or on.

- **Manage Processes**—click to open the list of applications added to the permission list. Each application is marked as blocked or trusted. You can add and remove applications from the list and change their status.
- **Help**—click to open Help for Acronis Active Protection.

Copyright Statement

Acronis patented technologies

Technologies, used in this product, are covered and protected by one or more U.S. Patent Numbers: 7,047,380; 7,246,211; 7,275,139; 7,281,104; 7,318,135; 7,353,355; 7,366,859; 7,383,327; 7,475,282; 7,603,533; 7,636,824; 7,650,473; 7,721,138; 7,779,221; 7,831,789; 7,836,053; 7,886,120; 7,895,403; 7,934,064; 7,937,612; 7,941,510; 7,949,635; 7,953,948; 7,979,690; 8,005,797; 8,051,044; 8,069,320; 8,073,815; 8,074,035; 8,074,276; 8,145,607; 8,180,984; 8,225,133; 8,261,035; 8,296,264; 8,312,259; 8,347,137; 8,484,427; 8,645,748; 8,732,121; 8,850,060; 8,856,927; 8,996,830; 9,213,697; 9,400,886; 9,424,678; 9,436,558; 9,471,441; 9,501,234; and patent pending applications.