SmartMask AI

Selection Made Easy

akvis.com

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AKVIS SMARTMASK AI 14.0 | SELECTION MADE EASY

AKVIS SmartMask AI is efficient object selection software that saves you time and is fun to use. Equipped with artificial intelligence tools, the program is the most convenient and fastest way to select and mask objects in an image. Selection has never been so simple!

There are many occasions when you need to target a specific area of an image. It is often necessary to highlight regions to which an effect or correction should be applied. Creating photo collages and montages requires a precise selection of objects. This can be a painful task because many objects don't have clearly defined edges and fade into the background. For instance, just try selecting yourself in a group photo.

AKVIS SmartMask AI makes even a difficult selection incredibly simple! Now, you can spend less of your time on selection of objects and more of it on creativity.

Extracting Complex Objects a Breeze!

The software provides powerful tools for masking objects on images and removing backgrounds. The program works equally well with both soft and sharp edges of a fragment. It allows you to instantly select objects with both clearly drawn or with blurred, semi-transparent edges.

All you need is a couple of movements, SmartMask AI will complete the image processing and remove unnecessary parts, leaving the selected object. The program also allows you to get rid of unwanted color shades of the previous background, which may remain on the cut-out object.

Outstanding Tools You'll Love

The software includes a set of smart and helpful brushes to select objects and touch up the result where needed.

Using the **AI-powered Object Selection tools** or the **Quick Selection** tool is often enough to produce a professional-looking result.

In cases where the selected object stands against a background of a similar color range, or the object's edges are uneven, you can use touch-up brushes, like the **Magic Brush** and **Background Eraser**.

Also, it is possible to automatically remove the solid background color from an image with the **Chroma Key** technology.

The edges of the cut-out object can be additionally adjusted using the **Refine Edges** feature.

Afterward, place the resulting cut-out object on a new image by adding a **Custom Background** - there's no limit to your creativity!

Less Time on Selections, More on Creating!

Like all AKVIS products, SmartMask AI is not only a straightforward tool but also fun to use. It makes the dull process of image manipulation fun and entertaining.

Making selections can take a great deal of time out of a designer's workday. For this reason, with **AKVIS SmartMask AI** you can considerably increase your productivity! You will be freed from boring work and will have more room for creativity and the realization of your ideas.

Saving Project

When using the software, you can save a working draft of your project into an .**akvis** file which contains the original image, the state of the image at the moment it was saved with all its parameters and settings, and, in the *Deluxe/Business* versions, any manually created *checkpoints* which where added during your work. This very helpful feature is highly appreciated by professionals.

AKVIS SmartMask AI is available as a *standalone* program and as a *plugin* for photo editors. The plugin version is compatible with AliveColors, Adobe Photoshop, Corel PaintShop Pro, and other image editors.

The functionality of the product depends on the license type. Some features are only available for the *Home Deluxe* and *Business* licenses. Compare the licenses and features.

During the trial period, you can try all options and choose the license you like.

INSTALLATION ON WINDOWS

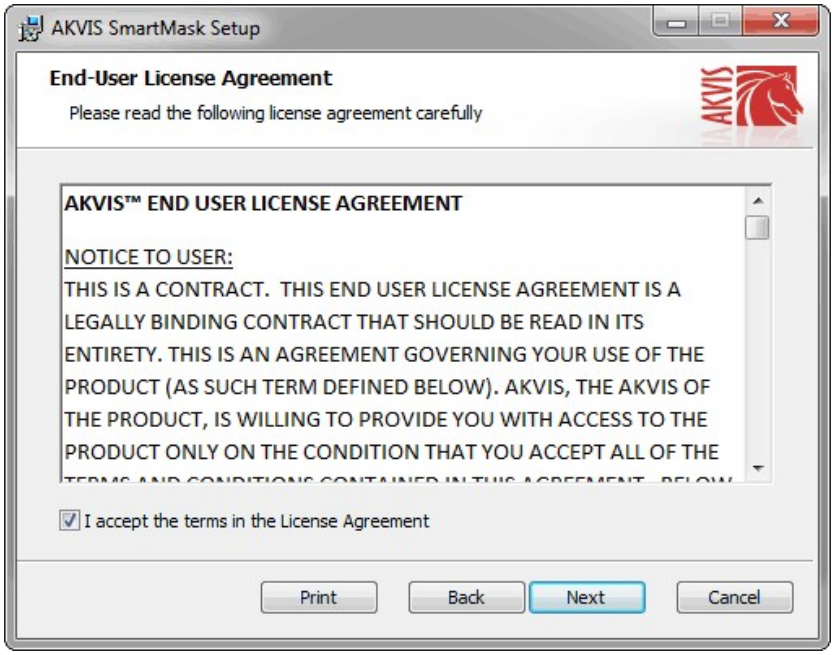
Please find instructions below on how to install the AKVIS programs on Windows.

You must have administrator rights to install the program on your computer.

Before installing the AKVIS plugins, please make sure that the image editor where you want to install the plugins, is closed. Or re-run the image editor after the installation of the plugin.

1. Run the setup **exe** file.
2. Select your language and press the **Install** button.
3. To continue the installation process you have to read and accept the **End User License Agreement**.

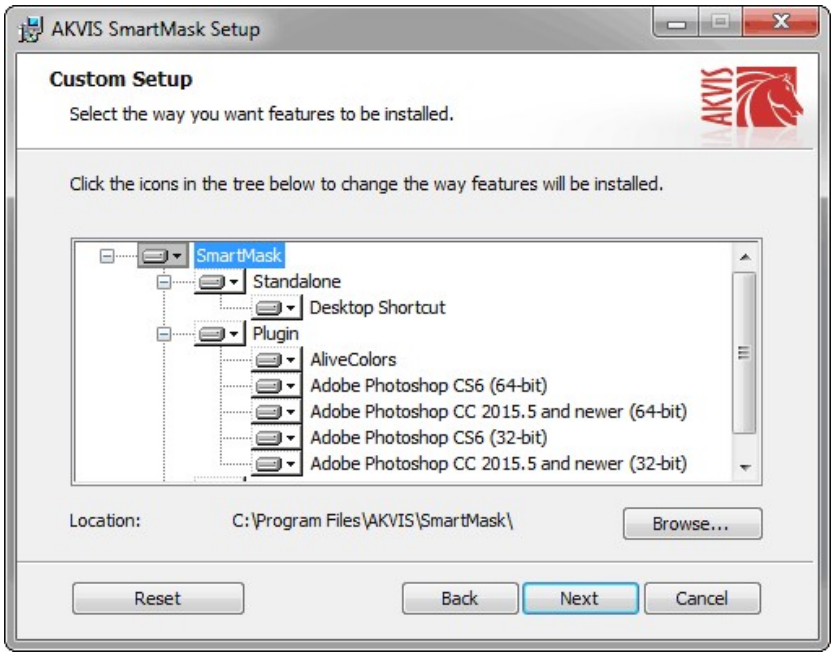
   Activate the check box **"I accept the terms in the License Agreement"**, and press **Next**.



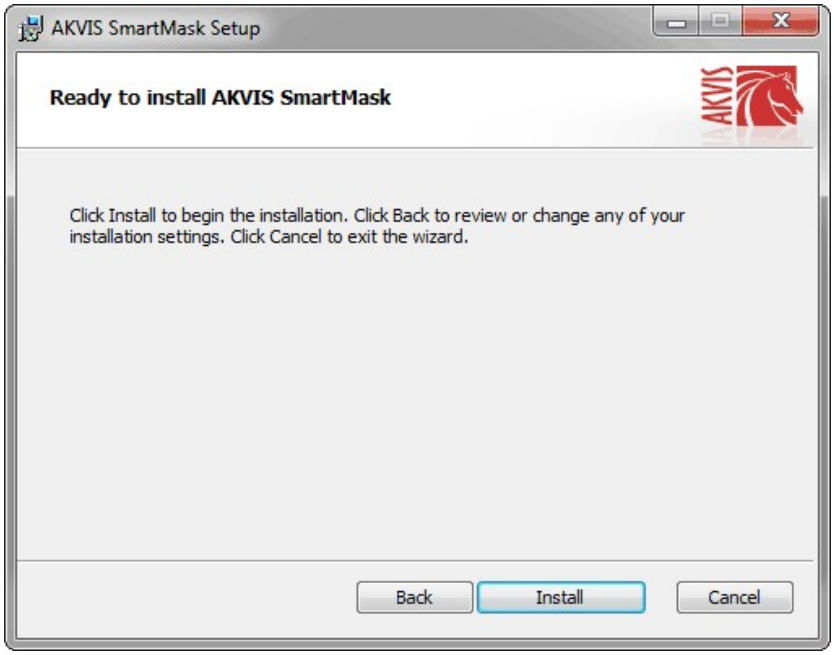
4. To install the **Plugin**, select your photo editor(s) from the list.

   To install the **Standalone** version, make sure that the corresponding option is activated.
   To create a shortcut for the program on desktop, activate **Desktop Shortcut**.

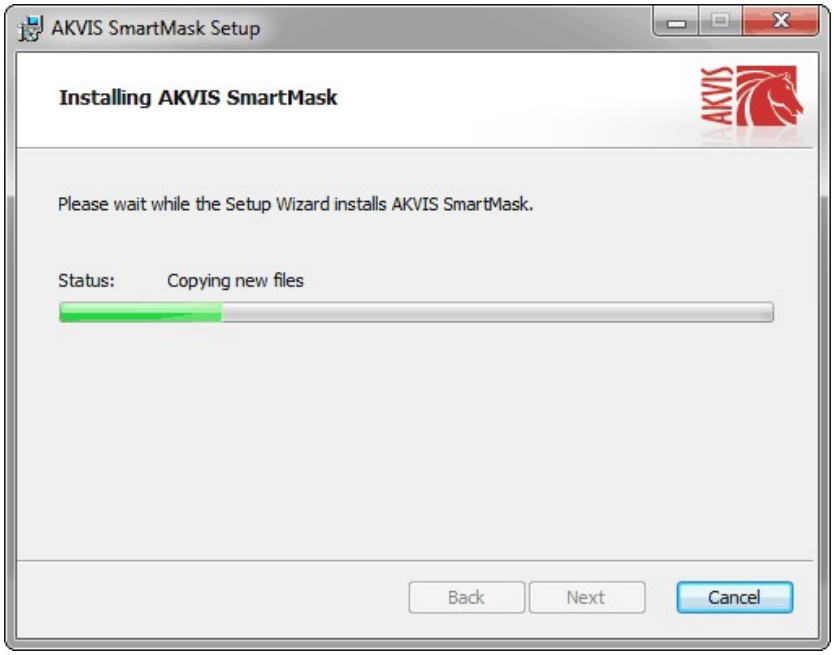
   Press **Next**.



5. Press the **Install** button.

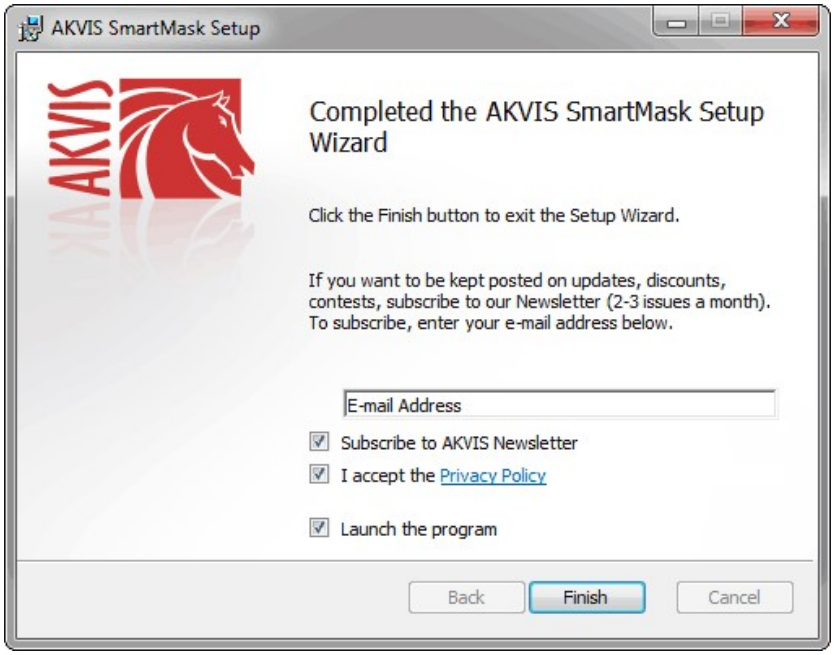


6. The installation is in progress.



7. The installation is completed.

   You can subscribe to the **AKVIS Newsletter** to be informed about updates, events, and special offers. Enter your e-mail address and confirm that you accept the Privacy Policy.



8. Press **Finish**.

After installation of the **standalone** version, you will see the program name in the **Start** menu and a shortcut on the desktop, if during installation the corresponding option was enabled.

After installation of the **plugin**, you will see a new item in the **Filter**/**Effects** menu of your photo editor. For example in **Photoshop**: **Filter -> AKVIS –> SmartMask AI**, in **AliveColors**: **Effects -> AKVIS –> SmartMask AI**.

INSTALLATION ON MAC

Follow the instructions to install the AKVIS software on a Mac computer.

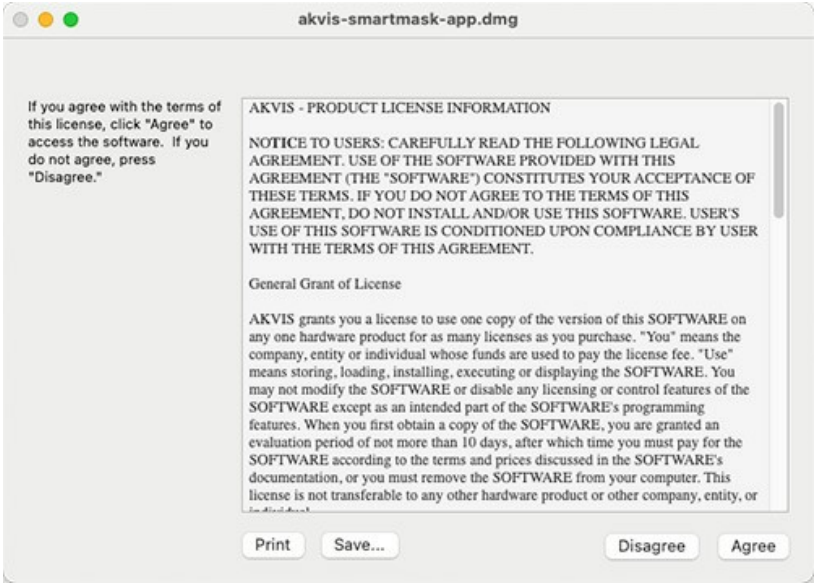
You must have administrator rights to install the program on your computer.

1. Open the **dmg** file:

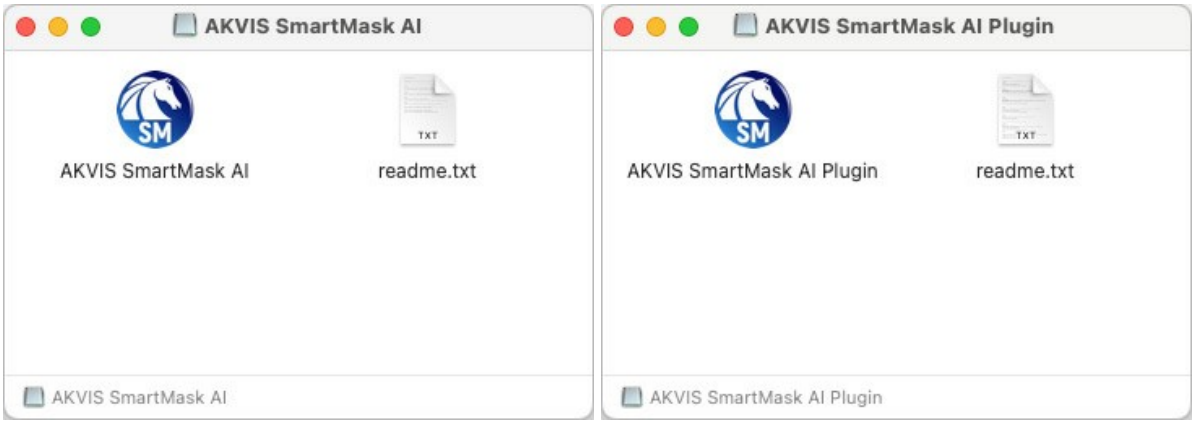
   - **akvis-smartmask-app.dmg** to install the **Standalone** version

   - **akvis-smartmask-plugin.dmg** to install the **Plugin** into your image editor.

2. Read the **License Agreement** and press **Agree**, if you agree with the conditions.



3. **Finder** will open with **AKVIS SmartMask AI** application or **AKVIS SmartMask AI PlugIn** inside.

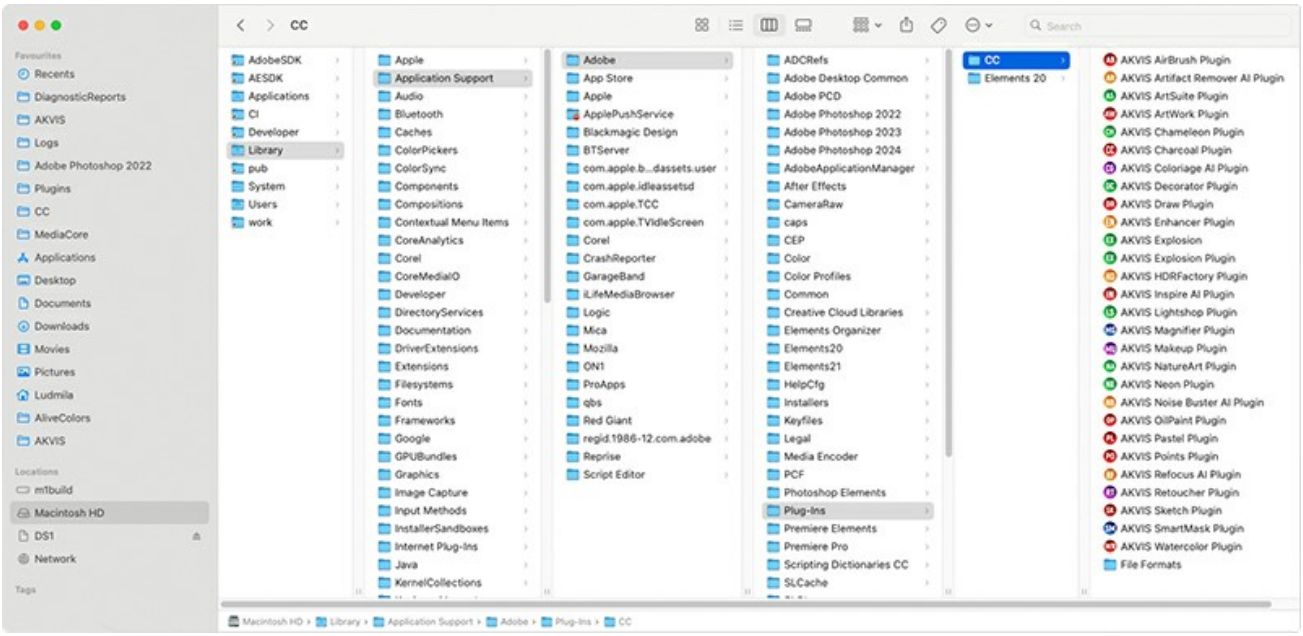


4. To install the **Standalone** version, drag the **AKVIS SmartMask AI** app into the folder **Applications** (or any other place you like).

   To install the **Plugin**, drag the entire **AKVIS SmartMask AI PlugIn** folder into the **Plug-Ins** folder of your graphic editor:

   AliveColors: You can choose in the program's **Preferences** the folder of the plugins.

   Adobe Photoshop: **Library / Application Support / Adobe / Plug-Ins / CC**
   (except CS6 version: Applications/Adobe Photoshop CS6/Plug-ins)



After installation of the **plugin**, you will see a new item in the filters/effects menu of your photo editor.
Select in **Photoshop**: **Filter -> AKVIS -> SmartMask AI**, in **AliveColors**: **Effects -> AKVIS -> SmartMask AI**.

Run the **standalone** application by double-clicking on its icon in **Finder**.

You can also run the AKVIS programs from the **Photos** app by choosing the **Image -> Edit With** command (in High Sierra and later versions of macOS).

INSTALLATION ON LINUX

Note: The AKVIS programs are compatible with **Linux kernel 5.0+ 64-bit**. You can find out the kernel version using the **uname -srm** command.

Follow the instructions to install the AKVIS software on a Linux computer.

Installation on **Debian**-based systems:

Note: You need apt-install or apt-get permissions required to install software.

1. Run the terminal.
2. Create a directory to store keys:

```
sudo mkdir -p /usr/share/keyrings
```

3. Download the key that signed the repository:

```
curl -fsSL https://akvis.com/akvis.gpg | sudo tee /usr/share/keyrings/akvis.gpg >/dev/null
```

or

```
wget -O - https://akvis.com/akvis.gpg | sudo tee /usr/share/keyrings/akvis.gpg >/dev/null
```

4. Add the repository to the list where the system looks for packages to install:

```
echo 'deb [arch-=i386 signed-by=/usr/share/keyrings/akvis.gpg] https://akvis-deb.sfo2.cdn.digitaloceanspaces.com akvis non-free' | sudo tee /etc/apt/sources.list.d/akvis.list
```

5. Update the list of known packages:

```
sudo apt-get update
```

6. Install AKVIS SmartMask AI

```
sudo apt-get install akvis-smartmask
```

7. The installation is completed.

   Launch the program via the terminal or using the program shortcut.

8. For automatic updates, use the command:

```
sudo apt-get upgrade
```

   To remove the program:

```
sudo apt-get remove akvis-smartmask --autoremove
```

Installation on **RPM**-based systems (**CentOS**, **RHEL**, **Fedora**):

1. Run the terminal.
2. Register the key that signed the repository:

```
sudo rpm --import https://akvis.com/akvis.asc
```

3. Add the repository to the system:

```
sudo wget -O /etc/yum.repos.d/akvis.repo https://akvis.com/akvis.repo
```

4. Update the package list:

   when using the **dnf** package manager:

```
sudo dnf update
```

   when using the **yum** package manager:

```
sudo yum update
```

5. Install AKVIS SmartMask AI:

   when using the **dnf** package manager:

```
sudo dnf install akvis-smartmask
```

when using the **yum** package manager:

```
sudo yum install akvis-smartmask
```

6. The installation is completed.

   Launch the program via the terminal or using the program shortcut.

7. For automatic updates:

   when using the **dnf** package manager:

   ```
   sudo dnf upgrade
   ```

   when using the **yum** package manager:

   ```
   sudo yum upgrade
   ```

8. To remove the program:

   when using the **dnf** package manager:

   ```
   sudo dnf remove akvis-smartmask
   ```

   when using the **yum** package manager:

   ```
   sudo yum remove akvis-smartmask
   ```

Installation on **openSUSE**.

1. Run the terminal.
2. Login as a root user.
3. Add the key that signed the repository:

   ```
   rpm --import http://akvis.com/akvis.asc
   ```

4. Add the repository to the system:

   ```
   zypper ar -r https://akvis.com/akvis.repo akvis
   ```

5. Update the package list:

   ```
   zypper ref
   ```

6. Install AKVIS SmartMask AI:

   ```
   zypper install akvis-smartmask
   ```

7. The installation is completed.

   Launch the program via the terminal or using the program shortcut.

8. For automatic updates:

   ```
   zypper update
   ```

   To remove the program:

   ```
   zypper remove akvis-smartmask
   ```

Installation using **Flatpak**:

1. Run the terminal.
2. Add the Flathub repository

   ```
   sudo flatpak remote-add --if-not-exists flathub https://flathub.org/repo/flathub.flatpakrepo
   ```

3. Add the AKVIS repository

   ```
   sudo flatpak remote-add --if-not-exists akvis --from https://akvis-
   flatpak.sfo3.cdn.digitaloceanspaces.com/com.akvis.flatpakrepo
   ```

4. Install AKVIS SmartMask AI:

```
sudo flatpak install -y akvis com.akvis.akvis-smartmask
```

5. The installation is completed.

   Launch the program using the program shortcut or the terminal:

   ```
   flatpak run com.akvis.akvis-smartmask
   ```

6. To update all installed flatpaks, use the command:

   ```
   sudo flatpak update -y
   ```

   to remove the program:

   ```
   sudo flatpak remove -y com.akvis.akvis-smartmask
   ```

In order to display the program interface correctly, it is recommended to install the Compton or Picom composite manager.

AKVIS SOFTWARE ACTIVATION

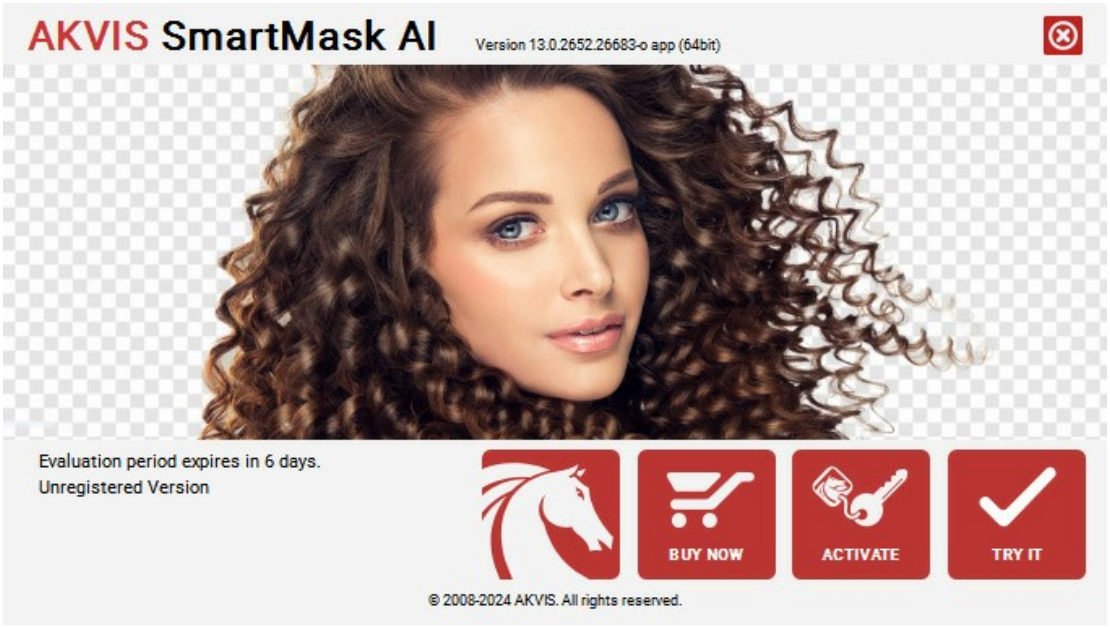
Attention! During the activation process your computer must be connected to Internet.

If it is not possible, we offer you an alternative way (see below for Offline Activation).

Download **AKVIS SmartMask AI** and install the program. Read the Installation Instruction here.

When you run the unregistered version, a splash window will appear displaying general information about the version and the number of days left in your trial period.

You can also open the **About the Program** window by pressing the button in the program's Control Panel.



Click on **TRY IT** to evaluate the software. A new window will appear with variants of licenses to test.

You do not need to register the trial version to try all features of the software. Just use the program during the evaluation time (10 days after the 1st start).

During the test period you can try all options and choose the license you like. Select one of the offered functionality types: **Home** (Plugin or Standalone), **Home Deluxe**, or **Business**. Your choice of license will affect which features will be available in the program. Consult the comparison table for more details about license types and versions of the software.

If the trial period has expired, the **TRY IT** button is disabled.

Click on **BUY NOW** to choose a license to order.

When the payment is effected, your serial number for the program will be sent to you within minutes.

Click on **ACTIVATE** to start the activation process.

Enter your name (the program will be registered to this name).

Enter your serial number (your license key).

Choose the method of activation — either direct connection to the activation server or by e-mail.

Direct connection:

We recommend activating the program using direct connection, as it is the easiest way.

At this step your computer must be connected to Internet.

Press **ACTIVATE**.

Your registration is completed!

Request by e-mail:

In case you have chosen activation by e-mail, a message with all necessary information will be created by the program.

NOTE: You can also use this method for **Offline Activation**:

If your computer is not connected to Internet, transfer the activation message to a computer connected to Internet, for example, with a USB stick. Send us this information to: activate@akvis.com.

Please do not send the screenshot! Just copy the text and save it.

We need your serial number for the software, your name, and HardwareID (HWID) of your computer.

We will generate your license file (**SmartMask.lic**) using this information and will send it to your e-mail address.

Save the **.lic** file (do not open it!) to your computer where you want to register the software, in the **AKVIS** folder in Users' Shared (Public) Documents:

- **Windows**:

  C:\Users\Public\Documents\AKVIS

  (This PC > Local Disk (C:) > Users > Public > Documents > AKVIS)

- **Mac**:

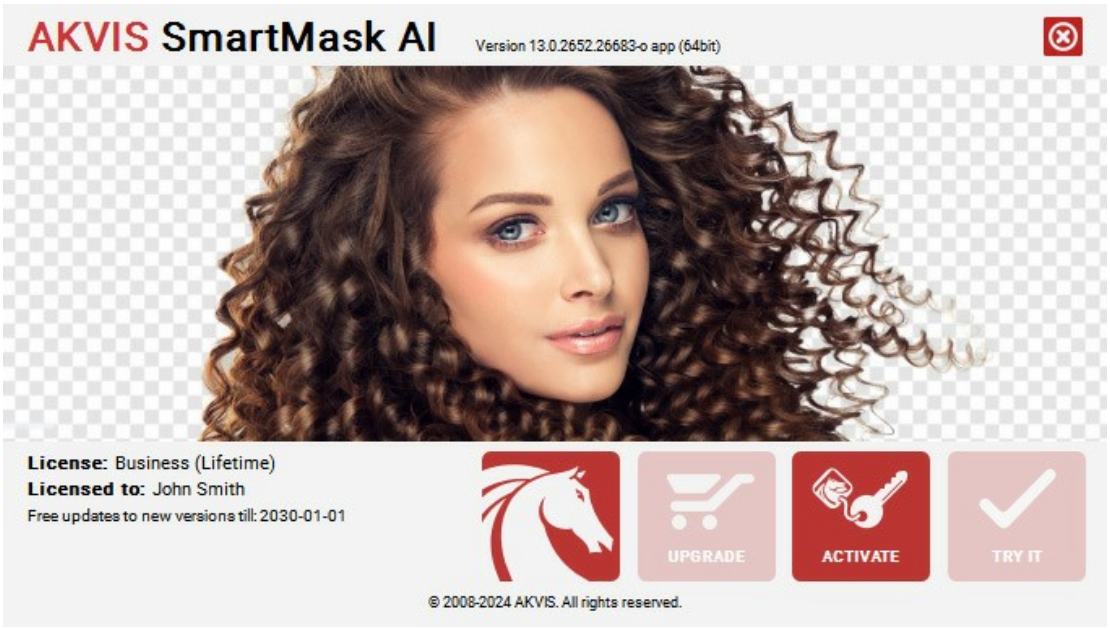
  /Users/Shared/AKVIS

  Open the **Finder**, select the **Go** menu, then select **Go to Folder...** (⌘+Shift+G), type "/Users/Shared/AKVIS", and click **Go**.

- **Linux**:

  /var/lib/AKVIS

Your registration is completed!



When the program is registered, **BUY NOW** turns to **UPGRADE** that lets you improve your license (for example, change **Home** to **Home Deluxe** or **Business**).

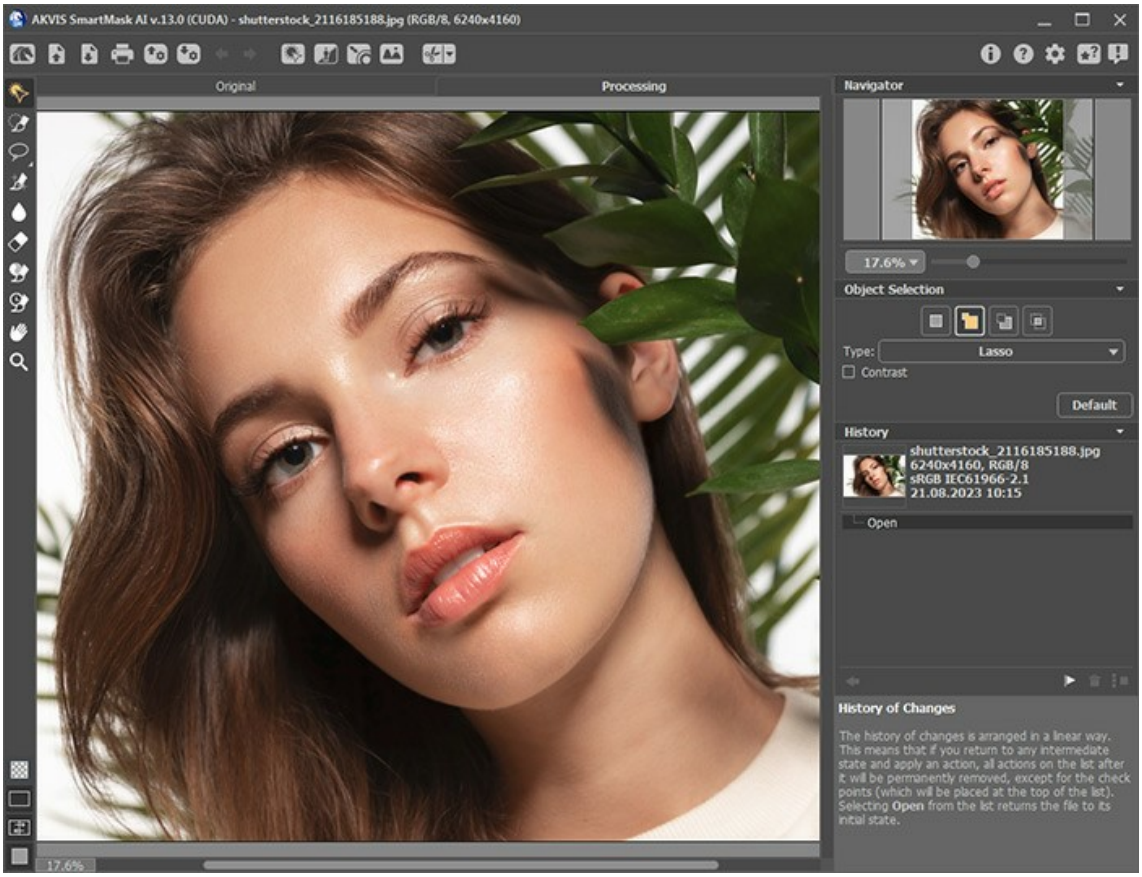
WORKSPACE

AKVIS SmartMask AI can be used as a standalone program or as a Photoshop compatible plugin.

Standalone is an independent program. You can run it in the usual way.

Plugin is an additional module for Photoshop and other compatible image editors. To call the plugin, select **AKVIS –> SmartMask AI** from the filters of your image editing program.

Attention! Before you call the plugin you must copy the image to a separate layer. Or just unlock the layer.



AKVIS SmartMask AI Workspace

Most of the program's workspace is taken up by the **Image Window** with two tabs - **Original** and **Processing**. All operations are performed in the **Processing** tab. You can choose how these tabs will be shown by adjusting the **Image View Modes**.

In the upper part of the program's window you can see the **Control Panel**:

The button opens the home page of **AKVIS SmartMask AI**.

The button (only in the standalone version) opens an image for processing. The hotkeys for the command are Ctrl+O on Windows, ⌘+O on Mac. Right-click the button to display the list of recent files. You can change the number of the recent images in the program's **Preferences**.

The button (only in the standalone version) allows you to save an image. The hotkeys are Ctrl+S on Windows, ⌘+S on Mac.

The button (only in the standalone version) opens the **Print** options. The hotkeys are Ctrl+P on Windows, ⌘+P on Mac.

The button allows you to save a project into a file with the **.akvis** extension.

The button allows you to load the saved project (the **.akvis** file).

The button cancels the last operation made with the tools. It is possible to cancel several operations in a row. The hotkeys are Ctrl+Z on Windows, ⌘+Z on Mac.

The button returns the last operation cancelled with . It is possible to return several operations in a row. The hotkeys are Ctrl+Y on Windows, ⌘+Y on Mac.

The button calls the **Select Subject** feature which creates a precise selection of the most noticeable subject(s) in the image using a specially trained neural network.

The button (only for Deluxe and Business licenses) calls the **Chroma Key** feature that allows you to quickly remove a monochromatic background.

The button (only for Deluxe and Business licenses) calls the **Refine Edges** feature that allows you to quickly adjust the edges of selections or cut-out objects.
The button (only in the standalone version) calls the **Custom Background** feature that lets you insert a cut-out fragment into a custom background.
The button opens a list of actions that can be performed with the created selection: **Remove Selected Areas**, **Remove Unselected Areas**, **Invert Selection**, or **Deselect**.
The button (only in the plugin) applies the result, closes the plugin's window, and the selected object appears in the workspace of your photo editor.
The button calls information about the program and opens the registration window.

The button calls the Help files.

The button calls the **Preferences** dialog box for changing the program's options.

The button opens the How-to panel with links to video tutorials and instructions.

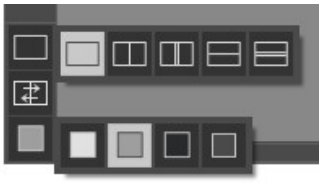
The button opens a window showing the latest news about SmartMask AI.

At the left side of the Image Window, there is the **Toolbar**. The tool's parameters are shown in the Settings Panel (on the right) or in a pop-up box after right-clicking in the image window.

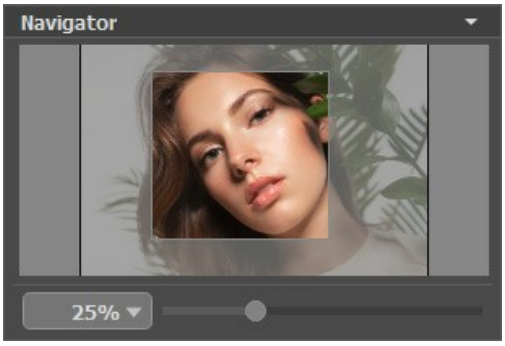
You can set up keyboard shortcuts ("hot keys") for all tools and actions in the **Preferences**.

At the bottom part of the left panel, you can switch between the **Mask View Modes**:

Below you can adjust the **Image View Mode**.



Navigate and scale the image using the **Navigator**. The frame in the **Navigator** surrounds the area of the image which is visible in the main window; the area outside of the frame will be shaded. The frame can be dragged, thereby changing the visible portion of the image. To move the frame, place the cursor within it, left-click the mouse, and then drag.



You can hide/show the **Navigator** by clicking on its title.

Use the slider to scale the image in the **Image Window**. When you move the slider to the right, the image scale increases. When you move the slider to the left, the image scale decreases.

To scroll the image in the **Image Window** you can press the spacebar on the keyboard and drag the image with the left mouse button. Use the scroll wheel of the mouse to move the image up/down, by keeping the `Ctrl` key pressed (Mac: ⌘) – to the left/to the right, by keeping the `Alt` key pressed (Mac: `Option`) – scale the image. Right-click the scroll bar to activate the quick navigation menu.

You can also change the image scale by entering a new coefficient into the scale field and pressing the button `Enter` (`Return` in

Mac). The drop-down menu shows some frequently used coefficients.

You can also use hotkeys to zoom in and zoom out.

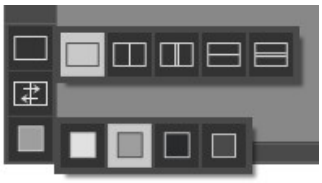
Under the **Navigator**, there is the **Settings Panel** with the parameters of the chosen mode and the tool's options. The **Default** button recovers the default settings of the parameters.

Below, you'll find the **History** panel (available only for the Deluxe and Business licenses), which shows the list of every change made to a file. By clicking on an item in the list, you can revert the file to a previous state.

Under the Settings Panel, you can see **Hints** for the parameters and buttons when you hover over them with the cursor. In **Preferences** , you can choose where the hints will be shown or hide this field.

IMAGE VIEW MODES: BEFORE AND AFTER

At the bottom of the Toolbar of **AKVIS SmartMask AI**, there are three buttons which let you choose how the **Image Window** will look like and arrange the **Before** and **After** tabs.



- Click the first button to open a submenu that contains various options for viewing the original and processed images:

  - The button provides the standard image window mode with two tabs: **Before** and **After**.

  - The buttons and divide the main window into two parts, vertically or horizontally, respectively. The original and processed images become partially visible and the tabs are combined to form the whole picture.

With this arrangement, it's possible to drag the splitter changing the aspect ratio between the **Before** and **After** parts.

- The buttons and split the main window into two parts, vertically or horizontally, as well. However, in contrast to the previous option, the windows display the same fragment of the image before and after processing.

Note: Use two windows side by side when you want to see and compare the original and processed versions of an image fragment on one screen. If you would rather see the final image as a whole, you can choose the standard image view mode.

- The button swaps the positions of the original image and result when displaying two windows.

- The 3rd button lets you choose the background color of the **Image Window**. Pressing , , or changes the background color to white, gray, or black, while clicking on opens the **Select Color** dialog where you can choose a color of your choice.

HOW TO USE THE PROGRAM

AKVIS SmartMask AI is an efficient AI-powered object selection tool that saves you time and is fun to use. The software can be used as a standalone program as well as a plugin to a photo editor.

Follow these instructions to cut out an object using **AKVIS SmartMask AI**:

Step 1. Open an image.

- If you work with the standalone edition:

The **Select File to Open** dialog box appears if you double-click in the empty workspace of the program or if you click on the Control Panel. You can also drag the required image into the workspace of the program.

The standalone version of **AKVIS SmartMask AI** supports **BMP**, **JPEG**, **PNG**, **TIFF**, **WEBP**, **TGA**, **RAW**, and **AKVIS** file formats.

- If you work with the plugin:

Open an image in your photo editor by calling the command **File -> Open** or using the key combination `Ctrl`+`O`.

Then call the **AKVIS SmartMask AI** plugin in the Filter/Effects menu of the photo editor:

in **AliveColors**: Effects -> AKVIS -> SmartMask AI;
in **Adobe Photoshop**: Filter –> AKVIS –> SmartMask AI;
in **Corel PaintShop Pro**: Effects –> Plugins -> AKVIS –> SmartMask AI;
in **Corel Photo-Paint**: Effects –> AKVIS –> SmartMask AI.

Attention! Before you call the plugin you must copy the image to a separate layer. Or just unlock the layer.

AKVIS SmartMask AI

Step 2. Process the original image using the **AI-based selection tools**, the **Quick Selection** tool, the **standard selection tools**, or the **Magic Brush** tool.
Step 3. To remove a monochromatic background, use the **Chroma Key** mode (only for Home Deluxe and Business licenses).
Step 4. Using the **Refine Edges** mode (only for Home Deluxe and Business licenses) you can quickly adjust edges of selections or cutout objects.
Step 5. To add the cut-out object to a custom background, activate the **Custom Background** mode (available only in the *standalone* version).
Step 6. You can save your project into an **.akvis** file by clicking on . Load it with .

The **AKVIS** file contains the original image, the image in the current state, the tools' parameters, the color groups, and the checkpoints (for the Deluxe/Business licenses) if they were created.

Step 7. In the standalone version, you can also print your picture with .

Step 8. Save the processed image.

- If you work with the standalone edition:

Click to open the **Save as** dialog box. Enter a name for the file, choose the format (**TIFF**, **BMP**, **JPEG**, **WEBP**, **PNG**, **TGA**, or **AKVIS**) and indicate the target folder.

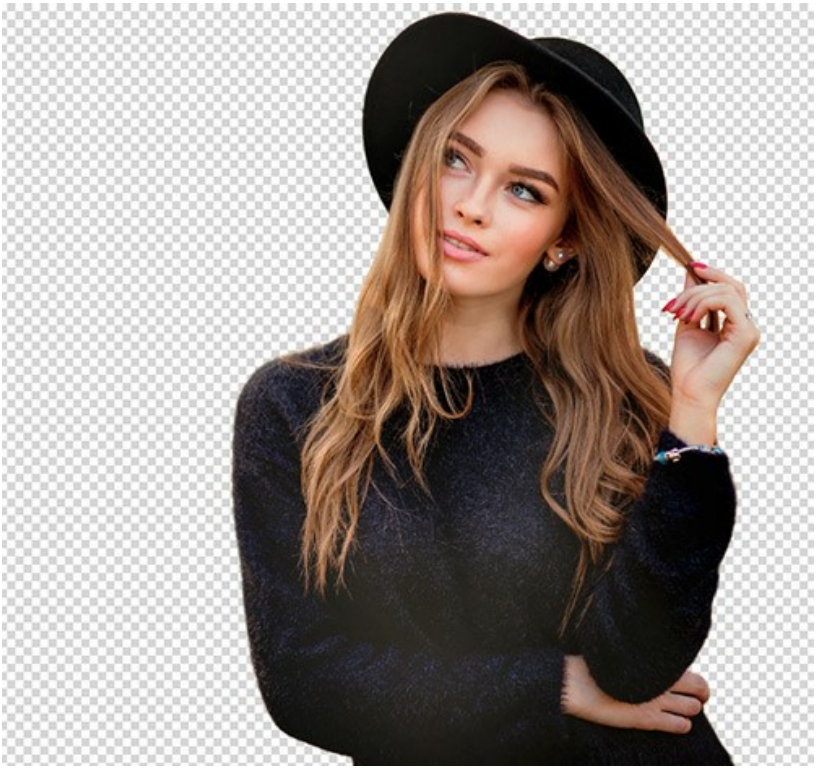
Note: If you activate the **Color Background** option in the Mask View Modes please keep in mind that the result will be saved on the selected color background, just as you see it in the Image Window.

Hint: To save the selected object on a transparent background please choose the corresponding mask view option and use the **PNG** format when saving the image (or other formats that support transparency).

- If you work with the plugin:

Press the button to apply the result and close the plugin window. The **AKVIS SmartMask AI** plugin will close and the fragment will appear in the workspace of the photo editor.

Call the **Save As** dialog box using the command **File -> Save As**, enter a name for the file, choose the format and indicate the target folder.



Result

MASK VIEW MODES

In the Toolbar of **AKVIS SmartMask AI**, you can switch between the **Mask View Modes** to display the cut out object on different backgrounds.

Click the button to open a submenu containing various options:

Transparent Background :

This view mode shows the result on a transparent background.

Color Background :

This view mode shows the cut-out object on a color background. By default the background is orange, but you can change the color any time. For this purpose, click the color plate that appears when you hover with the mouse over the button, and select a color from the dialog box.

Custom Background :

The cut-out fragment will be placed on a new background. You can adjust the background image by using the **Custom Background** mode.

Note: The result will be saved or printed on the selected background, just as you see it in the window!

To save the selected object on a transparent background please choose the **Transparent Background** option and use the **PNG** format when saving the image.

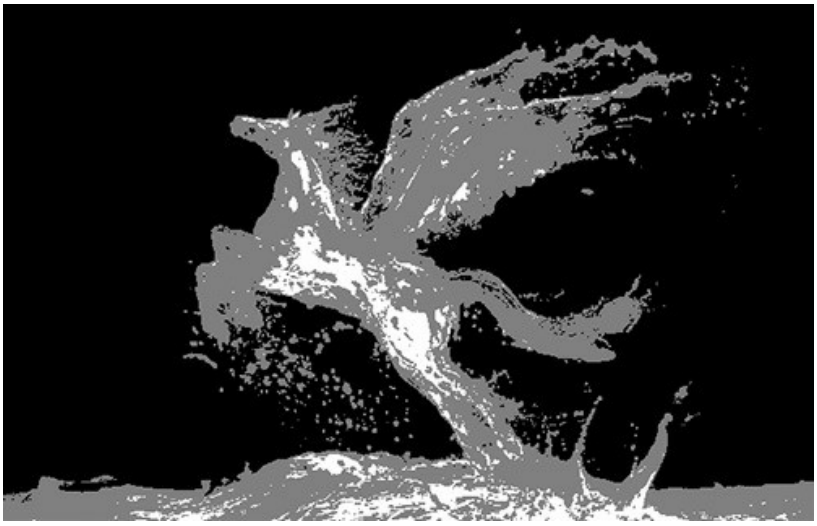
Grayscale Mask :

This view mode shows all pixels with Transparency of 100% as black points. White points are the pixels with Transparency of 0%. The pixels having Transparency between 0% and 100% are shown as shades of gray. The darker the gray shade, the higher the transparency of this point.

Find Unselected Areas :

This view mode uses a *trimap* method - it separates the image for three regions:

All pixels with Transparency = 100% are shown as black points, the pixels with Transparency = 0% are shown as white, and the gray points are all other pixels (0% < Opacity < 100%).
This mode is good for finding areas that seem to be deleted, but they are not.



CUSTOM BACKGROUND

The **Custom Background** mode (available only in the standalone version) allows you to place a new background image behind the cut-out object.

New Background

The **Load** button is used to load a new background image.

The **Delete** button removes the background image.

Adjust the uploaded background image using the parameters in the Settings Panel:

Opacity (10-100). This auxiliary parameter allows you to place the fragment more accurately by adjusting its transparency. It does not affect the final result.

The **Transform** tab contains settings to adjust the size and position of the background image and the cut-out fragment.

Edit Fragment. Enable the check-box to move and transform the cut-out object.
Size. You can resize the background image using the **W** and **H** fields. Also, you can increase or decrease the size of the background by dragging one of the eight square markers on the image frame. Couple the link to maintain the aspect ratio. If the link icon is in the open state, the width and height will be scaled independently of each other.

Rotation Angle. Set the rotation angle of the background image using the **A** field. Also, you can rotate the image by moving your mouse in the Image Window. Outside the bounding frame the cursor turns to a rounded two-sided arrow. Holding down the left mouse button, rotate the image clockwise or counter-clockwise. If you press `Alt`, the rotation angle will change in five degrees.

Click to rotate the background image by 90 degrees counterclockwise.

Fit to Original. The background will be scaled to completely fit the original image.

Fill. The background will be scaled to cover the entire original image.

Flip Horizontal. This option allows the background to be mirrored along the standing axis, i.e. interchanging the left and right sides.

Flip Vertical. This option mirrors the background by turning it upside down.

Use the **Correction** tab to make adjustments to the tonal range of the background image.

Brightness (-100..100). The parameter changes the brightness of the background image. At higher values, the background image becomes lighter. At lower values, the image becomes darker.

Brightness = -50

Brightness = 50

Contrast (-100..100). The parameter increases (at values greater than 0) or decreases (at values less than 0) the difference between light and dark areas of the background image.

Contrast = -50

Contrast = 50

Saturation (-100..100). The parameter defines the color intensity of the background image.

Saturation = -50

Saturation = 50

Blur (0-100). This parameter reduces the sharpness of the background image.

Blur = 5

Blur = 50

Temperature (-100..100). The parameter makes the image colder or warmer. Moving the cursor to the left of 0 increases the number of cool (blue) tones, while moving it to the right of 0 increases the number of warm (yellow) tones.

Temperature = -50

Temperature = 50

Tint (-100..100). The parameter adjusts the tint of the image. The default value is 0. Negative values give the image a green hue while positive values add magenta to the image.

Tint = -50

Tint = 50

Click **OK** to confirm the changes. Press **Cancel** to exit the mode without saving the changes. Press the **Default** button to restore the image to its original state.

HISTORY PANEL

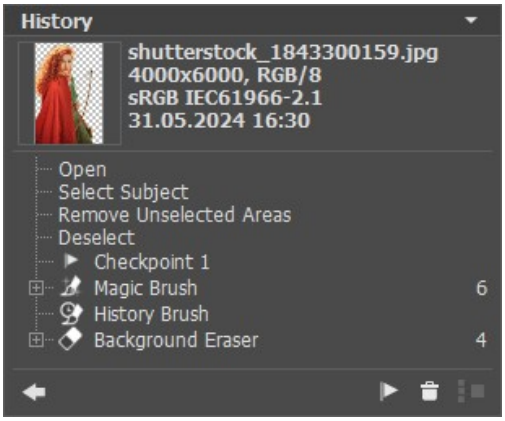
The **History** panel shows the list of every change made to a file. By clicking on an item in the list, you can revert the file to a previous state.

> **Attention!** The **History** panel is only available for Home Deluxe and Business licenses.
>
> Users with any licenses also can use the **Undo**/**Redo** / commands and the **History Brush** tool .

You can hide/show the **History** panel by clicking on its title.

At the top of the panel, near a **thumbnail** of the image, there is information about the file: its name, size (in pixels), color mode, profile, and date and time of creation.

The history of changes is arranged in a linear fashion. This means that if you return to any intermediate state and apply an action, all actions on the list after it will be permanently removed, except for the control points (which will be placed at the top of the list). Selecting **Open** from the list returns the file to its initial state, as it was when loading to the program (before changes were applied).



History of Changes

All changes made are shown with their corresponding icon. Any successive changes made by the same tool (two or more) are arranged in a group; the number of elements in a group is shown by a gray number to the right of the icon. The list of elements in a group can be collapsed and reopened by pressing the "+" to the left of the tool's icon.

The following buttons are at the bottom of the **History** panel:

- The button **Undo/Redo Position State** and switches between two states in the list. In contrast to the buttons and that allow moving one step back/forward in a row, this button allows restoring the history after the last change. Use this button if you want to restore the history after the commands **Delete States** or **Collapse Group** .
- Individual states on a list can be preserved using checkpoints, with the **Create Checkpoint** button. Each control point that is added is given a name in succession (Checkpoint 1, Checkpoint 2, etc). The checkpoint no longer has the history of that element but retains the change made to it.

  To rename a checkpoint, double left-click the checkpoint's name, enter a new name, and press `Enter`.

  You can save the checkpoints with the current state of the image to a file with the **.akvis** extension.
- By pressing the button **Delete States** all states below the selected one will be removed and all checkpoints will be brought to the top of the list. If this button is pressed while a checkpoint is selected, the checkpoint will be deleted.
- The **Collapse Group** button collapses the list in a group and combines it into one state, removing the individual history of each element. After this button is pressed individual elements in a group cannot be edited.

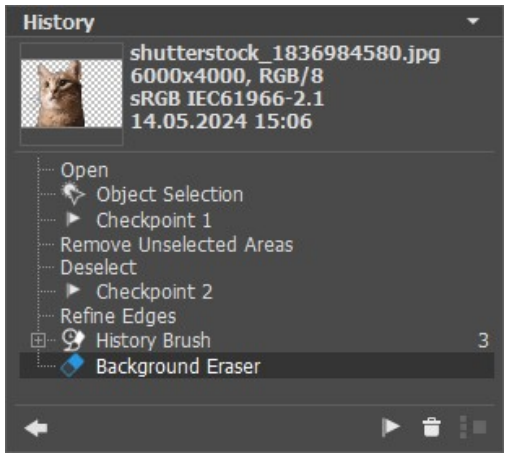
SAVE AND LOAD PROJECTS (AKVIS FILES)

In **AKVIS SmartMask AI**, you can save a working draft of your project into a file with the **.akvis** extension. This file contains the original image, the state of the image at the moment it was saved, and manually created checkpoints added during your work. It will also contain the most recently used color sets for the **Magic Brush** and tools' parameters.

How to work with a project in **AKVIS SmartMask AI**:

Step 1. Use the program's tools and periodically save the result of your work with **checkpoints** by pressing the **Create Checkpoint** button in the **History** panel.

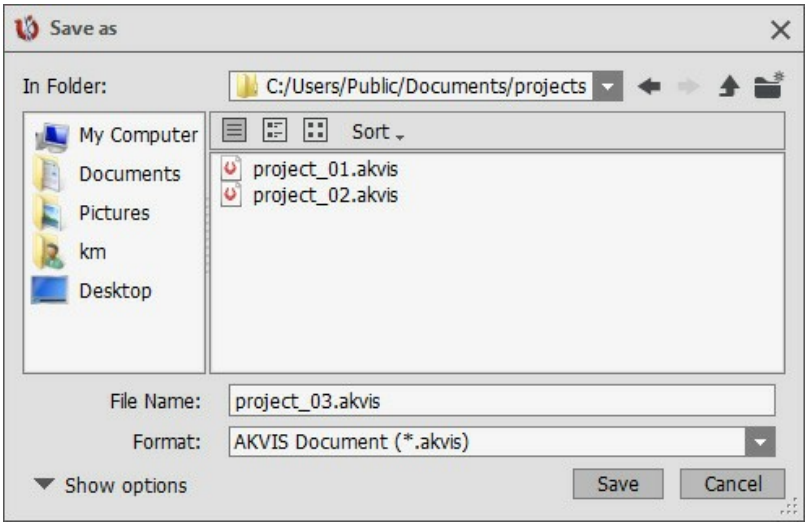
The checkpoints (snapshots) allow you to preserve the current state of the image with selections.



Note: The **History** panel with checkpoints is only available under the Home Deluxe and Business licenses, therefore only users with these licenses can create checkpoints.
With Home (Plugin/Standalone) licenses, you can save the project to the **AKVIS** file with the state at the moment of saving, with all parameters and settings, and with the original image, but without checkpoints.

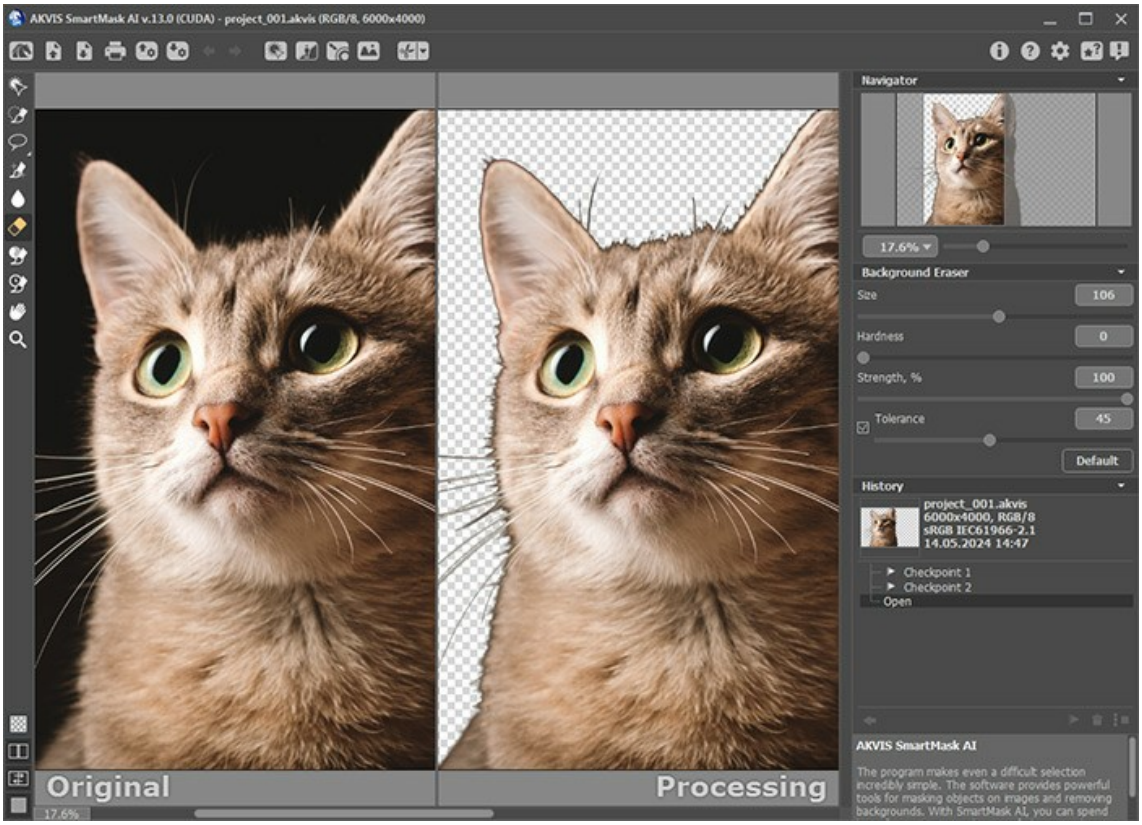
Step 2. Save the result into a file with the **.akvis** extension.

To do this, click , then choose a name for the file, and press **Save**.



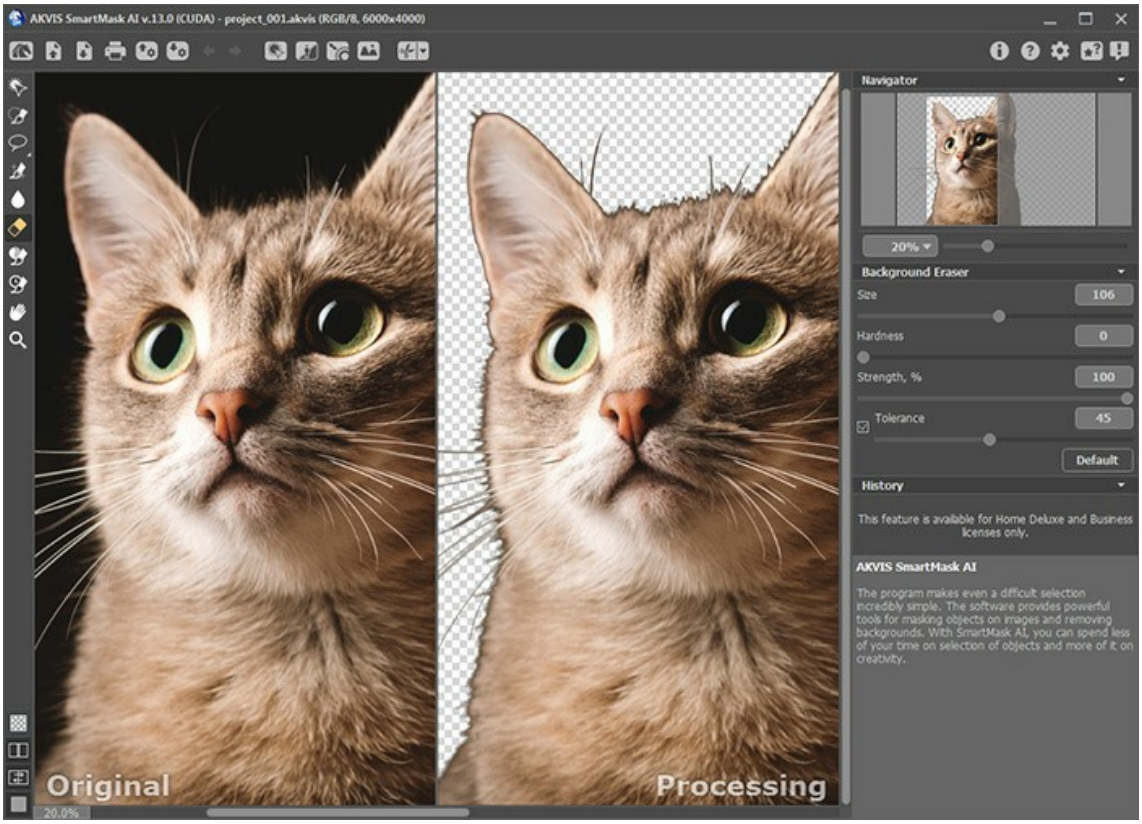
Step 3. Open the saved project (***.akvis**) with . In the standalone version, the **AKVIS** file can also be opened with .

The **History** panel shows the saved checkpoints and the result. The original image is shown in the **Original** tab and the **Processing** tab shows the last saved state.

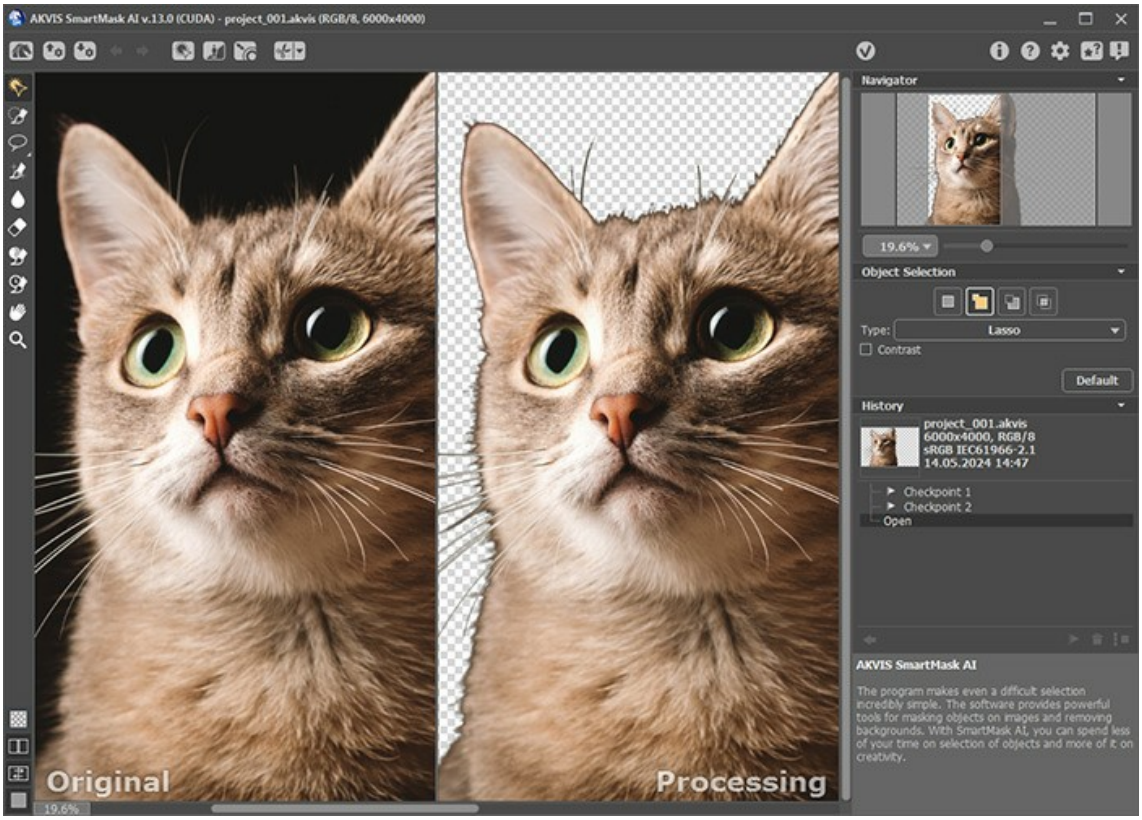


You can switch between checkpoints in the **History** panel. The corresponding image will be shown in the **Processing** tab.

Users of the Home Plugin or Home Standalone versions can only see the original file and the result, in the **Original** and **Processing** tabs, respectively.

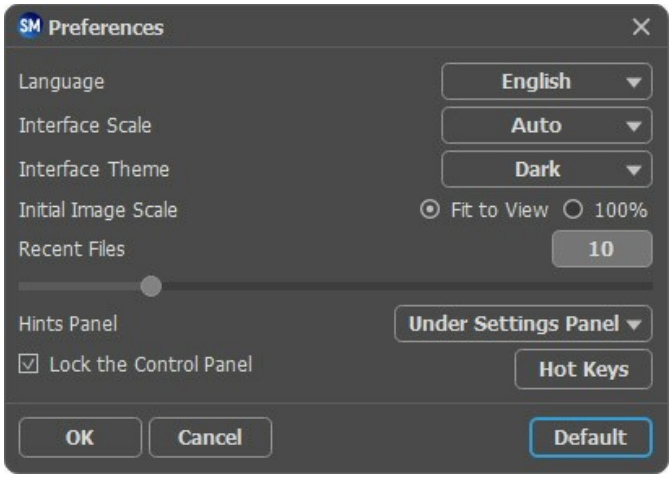


You can work with a project in the **AKVIS SmartMask AI** plugin in the same way as in the standalone edition.


AKVIS SmartMask AI v.13.0 (CUDA) - project_001.akvis (RGB/8, 6000x4000)
Navigator
19.6%
Object Selection
Type:
Lasso
Contrast
Default
History
project_001.akvis
6000x4000, RGB/8
sRGB IEC61966-2.1
14.05.2024 14:47
Checkpoint 1
Checkpoint 2
Open
AKVIS SmartMask AI
The program makes even a difficult selection incredibly simple. The software provides powerful tools for masking objects on images and removing backgrounds. With SmartMask AI, you can spend less of your time on selection of objects and more of it on creativity.
Original
Processing
19.6%

PREFERENCES

In **AKVIS SmartMask AI**, you can click to open the **Preferences** dialog. It looks like this:



- **Language**. Change the program language by selecting another from the drop-down list.
- **Interface Scale**. Choose the size of the interface elements. When it is set to **Auto**, the program workspace will automatically scale to fit the screen resolution.
- **Interface Theme**. Select the style of the program interface: **Light** or **Dark**.
- **Initial Image Scale**. This parameter defines the way the image is scaled in the **Image Window** after opening. The parameter can take one of two values:

  - image scaling **Fit to View**. The scale adjusts so that the image will be completely visible in the **Image Window**;
  - if the option **100%** is checked, image doesn't scale. Generally, when the scale = 100%, only part of the image will be visible.

- **Recent Files** (available only in the standalone version). The number of recent documents. The list of the recent files, sorted by time, become visible by right mouse clicking on . Maximum: 30 files.
- **Hints Panel**. When you hover over parameters and buttons with the cursor you can see a brief description of them in the **Hints** field. You can choose how the hints will be shown:

  - **Under Settings Panel**. Select this to show hints at the bottom of the right part, under the settings;
  - **Under Image Window**. It shows the hints in the main window, under the image. This mode is useful if there is not enough space by height to display this field under the settings;
  - **Hide**. Use this option if you do not need the hints.

- **Lock the Control Panel** check-box. It disables the possibility to hide/show the top panel. If the check-box is enabled the panel is always visible. Uncheck the option to unlock the panel, and you will be able to hide/show it by clicking on the small triangle button (in the middle of the panel). The minimized panel will be shown when moving the cursor over it.
- **HotKeys**. Click the button to open the dialog box where you can set up keyboard shortcuts for tools and actions.

To save changes made in the **Preferences**, click **OK**.

To reset to the default settings, click **Default**.

HOTKEYS (KEYBOARD SHORTCUTS)

Some operations are easier and faster to do using the so-called *"hot keys"* on the keyboard.

To activate a tool, click the corresponding icon or use key combinations on the keyboard. The latter method can substantially increase your productivity.

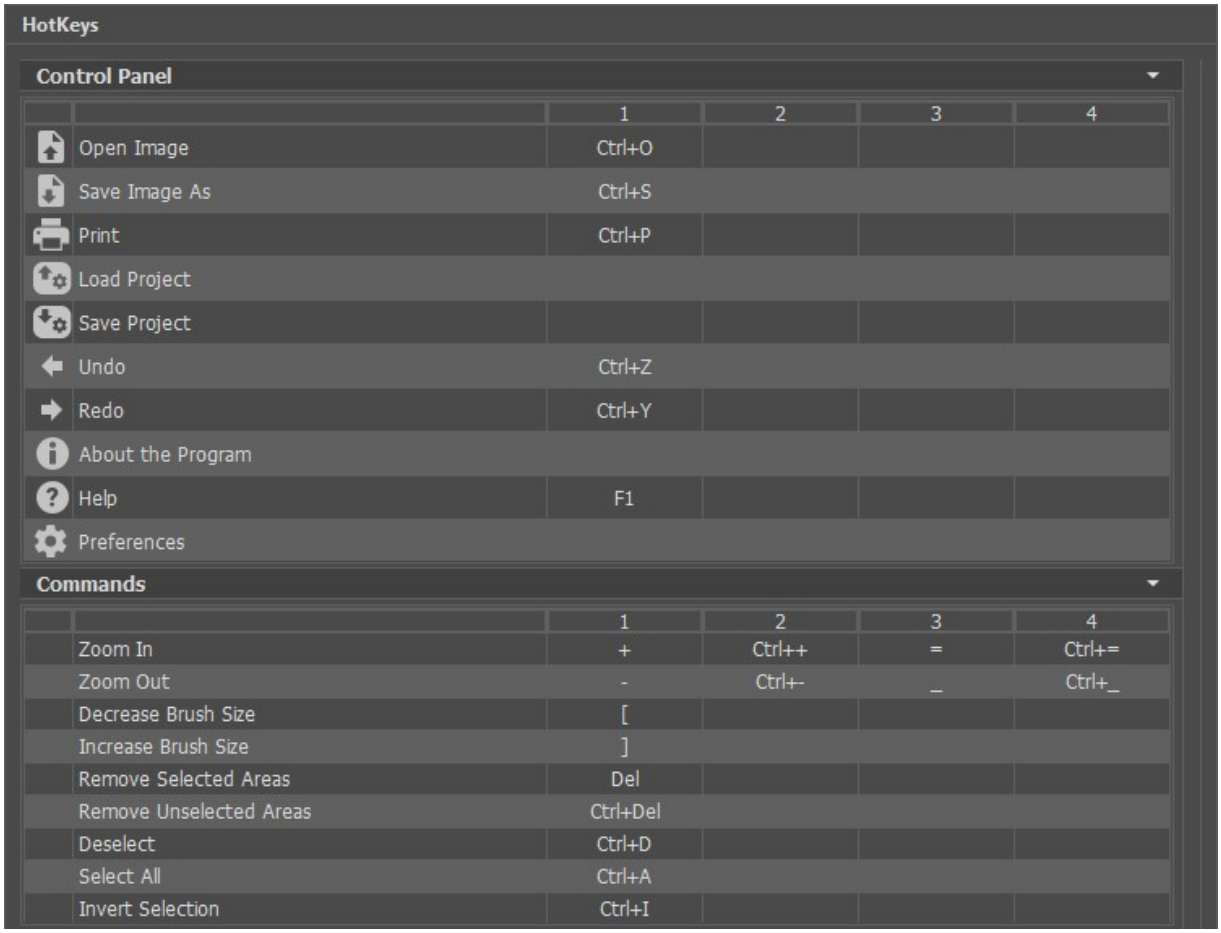
In **AKVIS SmartMask AI**, you can see the list of all available shortcuts, and edit them.

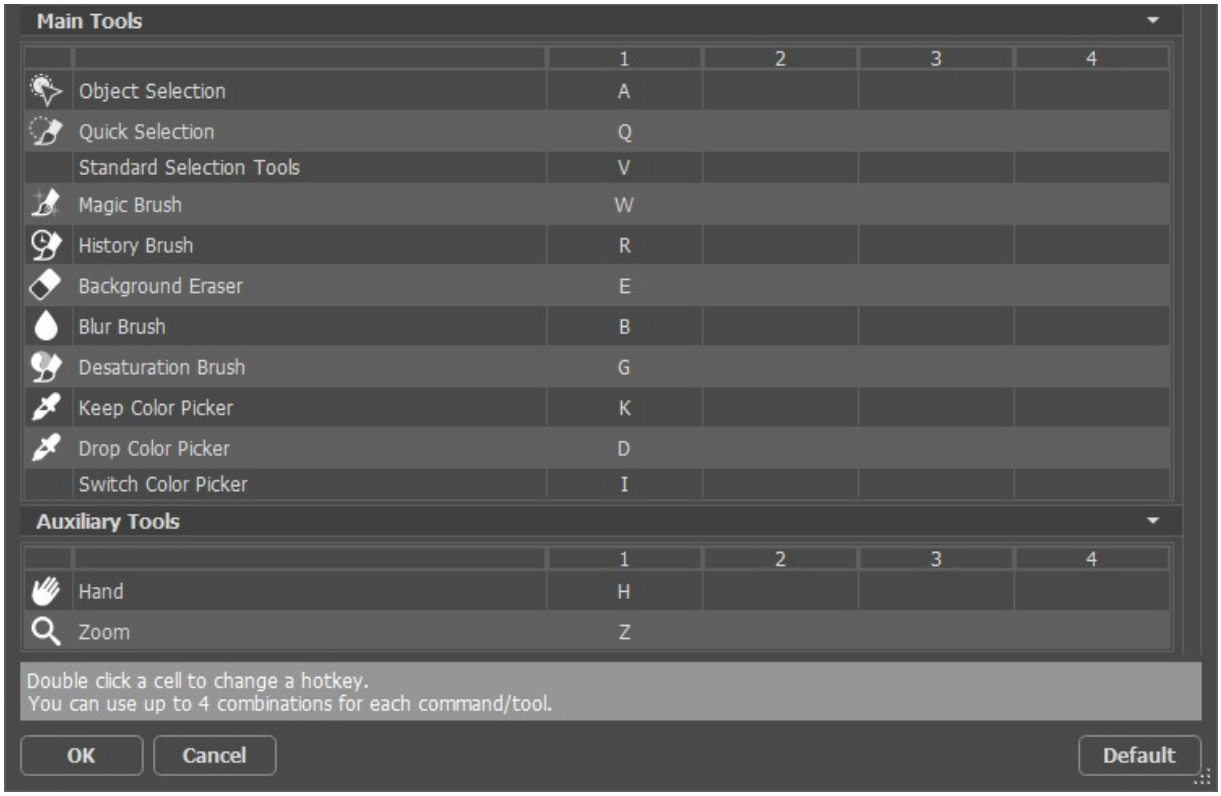
To customize your hot keys, open the **Preferences** and press on the **HotKeys** button.

Select the item (command, tool) whose shortcut you want to change. Double click a cell to make it editable.

You can use up to 4 combinations for each command/tool.

Keyboard shortcut list (default hotkeys) in **AKVIS SmartMask AI**:



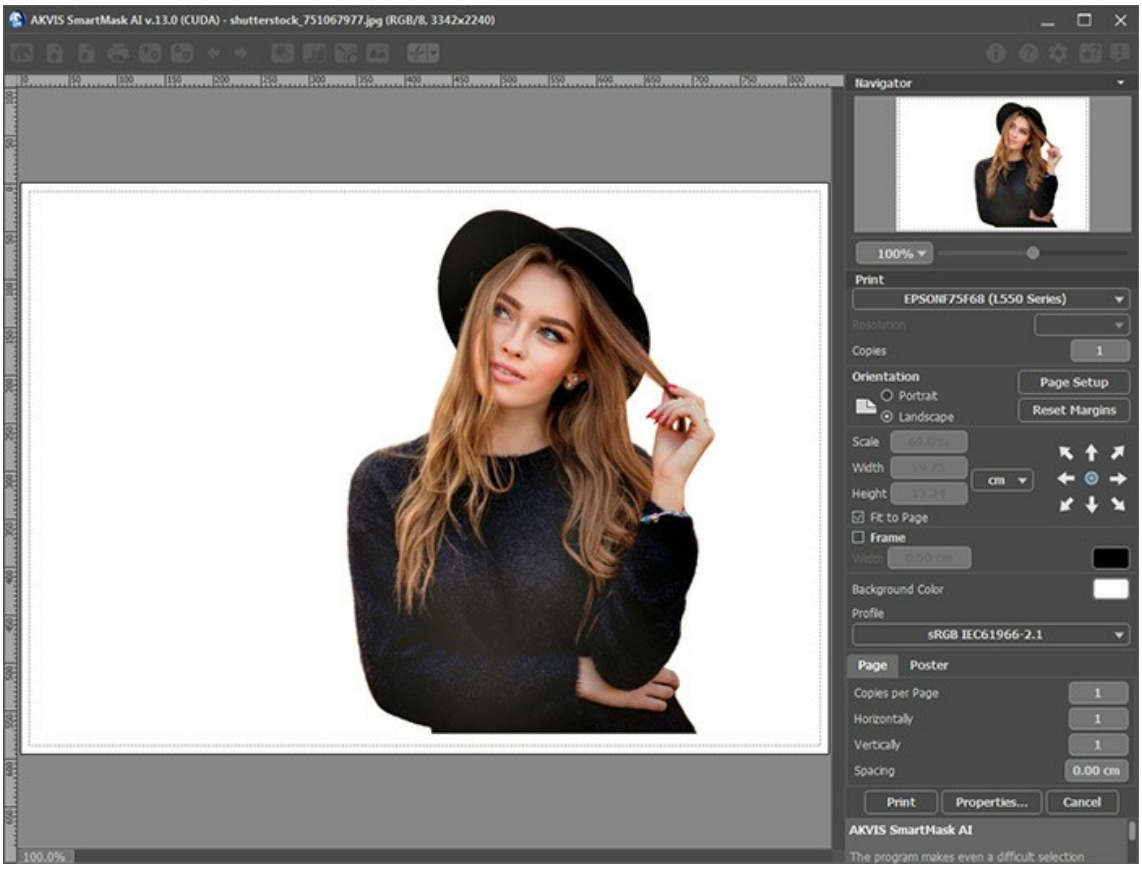


To save changes, click **OK**.

To restore the default shortcuts, click **Default**.

PRINT IMAGES IN AKVIS SMARTMASK AI

In the standalone version of **AKVIS SmartMask AI** you can print the image. Press the button to open the **Print** options.



Print Options in AKVIS SmartMask AI

Adjust the parameters appearing in the Settings Panel:

Choose a printer from the list of available devices, set the desired resolution, as well as the number of copies to print.

In the **Orientation** group, set the position of paper: **Portrait** (vertically) or **Landscape** (horizontally).

Click the **Page Setup** button to open a dialog box to choose the size of the paper and its orientation, as well as the print margins.

Press the **Reset Margins** button to return the page margins to the default size.

Change the size of the printed image adjusting the parameters **Scale**, **Width**, **Height** and **Fit to Page**. These parameters have no effect on the image itself, just on the print version. You can change the size of the printed image by entering any value in %, or by entering new values in **Width** and **Height**.

To adjust the size of the image to the paper size, select **Fit to Page**.

Move the image on the page with the mouse or align it using the arrow buttons.

You can activate **Frame** for the image and adjust its width and color.

Choose the **Background Color** by clicking on the color plate.

In the **Page** tab, you can adjust printing of the multiple copies of the image on a single sheet.

Print Page

- **Copies per Page**. It lets you specify the number of copies of the image on one page.
- **Horizontally** and **Vertically**. These parameters indicate the number of rows and columns for the copies of the image on the page.
- **Spacing**. The parameter sets the margins between the copies of the image.

In the **Poster** tab, it's possible to customize printing of the image on multiple pages for the subsequent junction into a large picture.

- **Pages**. If the check-box is enabled, you can specify the maximum number of the pages in which the image will be divided. The image scale will be adjusted to fit this number of the sheets. If the check-box is disabled, the program will automatically select the optimal number of the pages in accordance with the actual size of the image (scale = 100%).
- **Glue Margins**. If the check-box is enabled, you can adjust the width of the padding for bonding sheets. Margins will be added to the right and to the bottom of each part.
- **Show Numbers**. With the enabled check-box, a sequence number of each part, by a column and a row, will be printed in the margins.
- **Lines of Cut**. Activate the check-box to display the cut marks in the margins.

To print the image with the chosen parameters, press the **Print** button.
To cancel and close the printing options click on **Cancel**.

Click the **Properties...** button to open a system dialog box that enables you to access the advanced settings and send the document to print.

AI-BASED SELECTION TOOLS

AKVIS SmartMask AI offers two innovative selection features which use specially trained neural networks: the **Select Subject** filter in the Control Panel and the **Object Selection** tool in the Toolbar.

Select Subject . When you click the button in the Control Panel, a precise selection of the most noticeable subject (or several) in an image will be automatically created.

Select Subject

Object Selection (A-key). This tool is designed to select any object in an image using a specially trained neural network. It's helpful when you need to separate an object from the other ones.

Enable the tool in the Toolbar, create an approximate selection around the object you want to select - a precise selection will be created after releasing the mouse button.

Object Selection

Tool's Parameters:

Selection Modes (in the form of icons) - logic operations, which determine the result of the interaction between selected areas.

New . When creating a new selection, the previous selection disappears.

Add (Shift-key). A new selection is added to the existing one by adding new fragments.

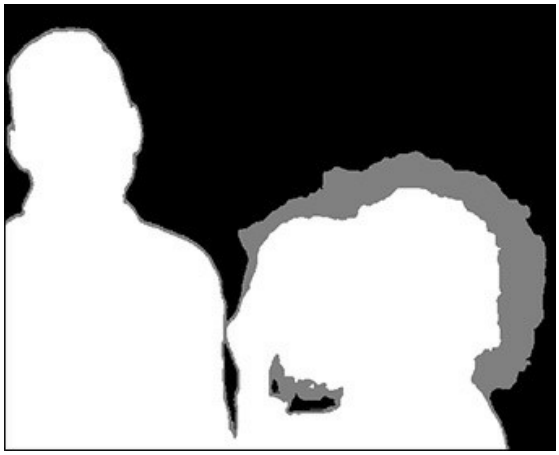
Subtract (Alt-key). A new selection is excluded from the selection area.

Intersect (Shift+Alt). Only the overlapping area of the selections remains on the image.

Selection Type. In the drop-down list, select a tool for creating a rough selection around the object: **Rectangular Selection** or **Lasso**.

Contrast. When the check-box is enabled, clearer selection borders are created.

Check-Box is Enabled



Check-Box is Disabled

In the Control Panel, click and choose a command (what you want to do with the selection): **Remove Selected Areas**, **Remove Unselected Areas**, **Invert Selection**, or **Deselect**.

You can edit the selection using the **Magic Brush** and post-processing tools.

QUICK SELECTION

The **Quick Selection** tool (Q-key) selects an object by analyzing colors of neighboring pixels. Draw with this brush over the image, and the selection expands, automatically finding edges and filling areas.

Original Image

Step 1. Choose a mode to make a selection: **New**, **Add**, or **Subtract**.

New . In this mode a new selection will be created. If there are selected areas on the image, they will be deselected. Once you draw with the brush, the mode will automatically switch to **Add**.

Add . The selection area will be increased by adding new fragments.

Subtract . You can remove the areas of the selection you don't want by activating this mode.

Step 2. Adjust the tool's parameters:

Size. It's the diameter of the brush.

All similar colors will be selected, considering the edges of the objects and the value of the **Tolerance** parameter.

Tolerance. When the value of this parameter is increased, more colors are included in the selected area. If it is set to 0 the brush selects only the areas where it's applied.

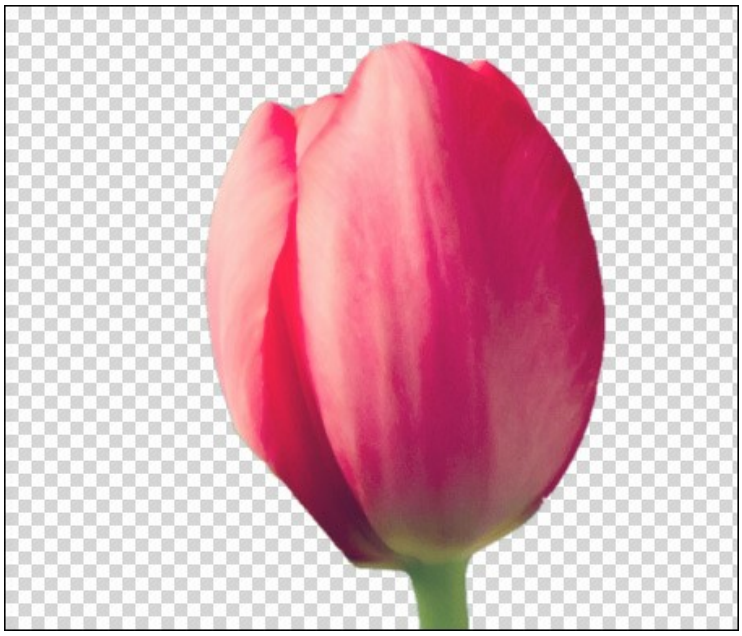
Tolerance = 5

Tolerance = 50

Step 3. Make a new selection drawing with the brush over the image.

Step 4. In the Control Panel, click and choose a command (what you want to do with the selection): **Remove Selected Areas**, **Remove Unselected Areas**, **Invert Selection**, or **Deselect**.

For example, use the second command to remove the background:

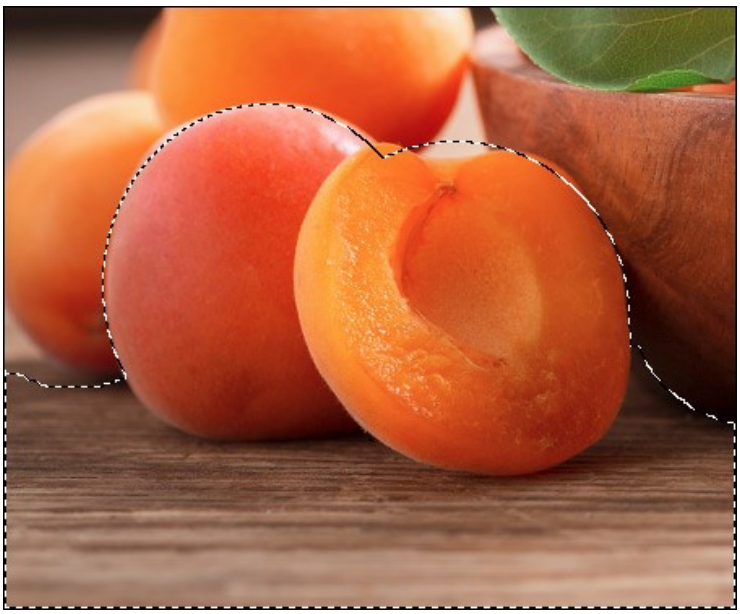


Result

You can edit the selection using the **Magic Brush** and post-processing tools.

STANDARD SELECTION TOOLS

The standard selection tools in **AKVIS SmartMask AI** are intended for creating geometric shapes and free-form selections. The selected area is marked by a dotted outline. You can move the selection outline in the image by placing the cursor inside the selected area and dragging it.



Selection

Selections Tools:

Rectangular Selection lets selecting rectangular and square areas. Drag over the area you want to select with the left mouse button.

Elliptical Selection lets selecting elliptical or circular areas.

Lasso allows creating freehand selections. Draw a selection line around an object. When you release the left mouse button, the contour will be closed, the final point will be connected to the start one.

Polygonal Lasso lets creating a freehand selection from straight segments. Move the cursor and left-click on each point, the program will automatically draw a straight line between two points. To close the contour bring the cursor to the first point or make a double-click in the final point.

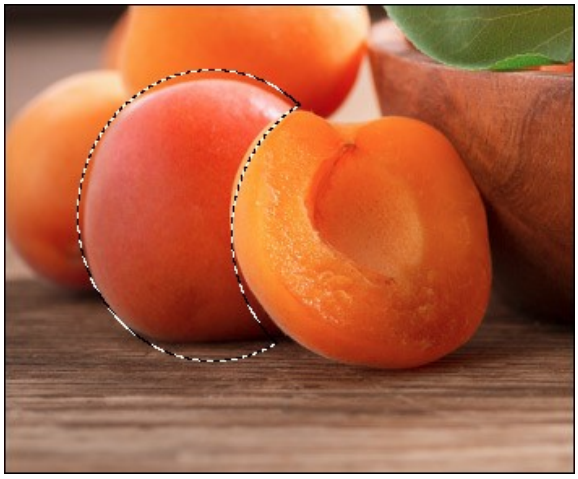
Hold `Shift` to make a square or a circle and to draw a perfectly vertical/horizontal line.

The tools options will be shown in the Settings Panel and in a floating box when right-clicking on the image:

Selection Mode defines the result of the interaction of selections:

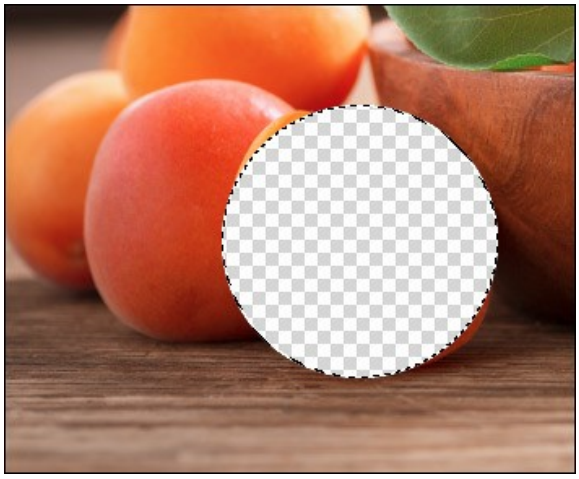
- **New** . When creating a new selection, the previous selection disappears.
- **Add** . The selection area will be increased by adding new fragments.
- **Subtract** . This mode lets removing the part of the selection.
- **Intersect** . This mode lets keeping only the intersection area of the selections.

Add

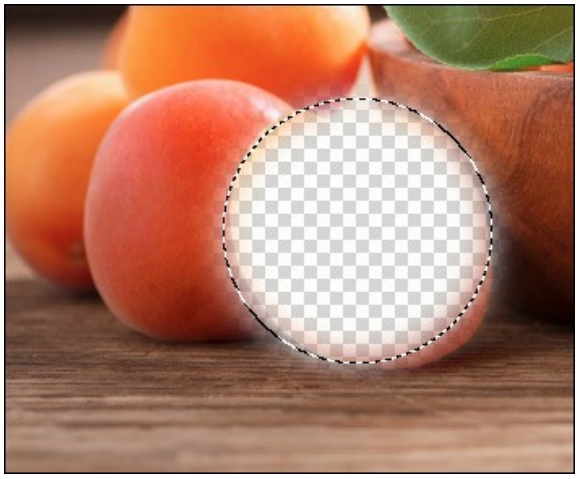


Subtract

Feather (0-250). The parameter lets blurring edges of the selection.

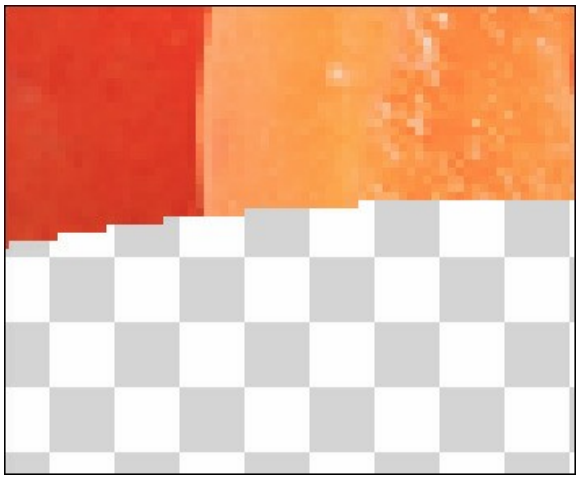


Feather = 0

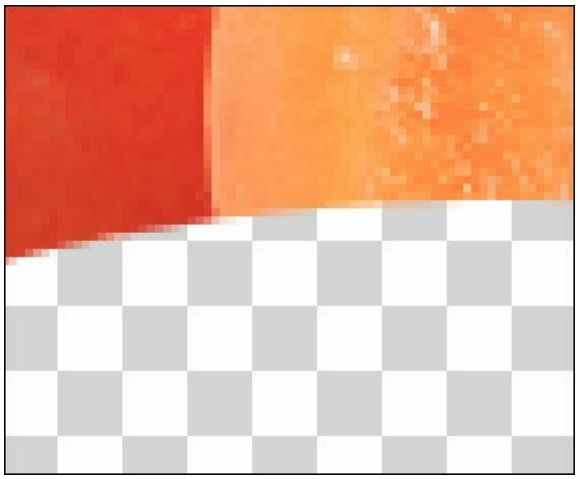


Feather = 10

Anti-aliasing. The check-box lets smoothing the jagged edges of the selection. Enable this option *before* creating a selection!



Anti-aliasing is disabled



Anti-aliasing is enabled

From Center. The check-box lets creating a selection (a rectangle or an ellipse) using a start point, where the cursor is, as a center. Otherwise, selections are created from a corner.

Style. You can specify a size of a selection:

Normal. The size of a selection is determined by dragging the cursor.

Fixed Size. This option lets you create a selection with exact dimensions (height and width, in pixels).

Fixed Ratio. The ratio of height and width of a selection remains fixed.

In the Control Panel, click and choose a command (what you want to do with the selection): **Remove Selected Areas**, **Remove Unselected Areas**, **Invert Selection**, or **Deselect**.

You can edit the selection using the **Magic Brush** and post-processing tools.

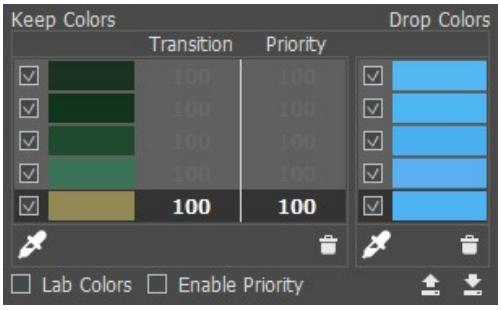
MAGIC BRUSH

The **Magic Brush** tool (W-key) lets you select complex objects and is also helpful to improve the result achieved with the automatic selection tools. This intelligent brush works with color sets: it keeps some colors and deletes others.

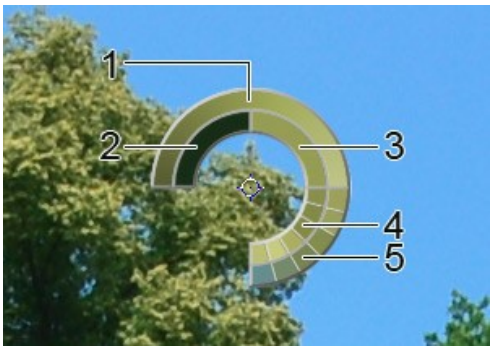
This smart tool keeps the points having the colors listed in the **Keep Colors** field and deletes the points having the colors listed in the **Drop Colors** field. Other colors are kept or deleted according to their closeness to one or another color set.

Original Image

Step 1. Select colors for the fields: **Keep Colors** and **Drop Colors** using the eyedroppers under each list in the **Settings Panel**. You can select a maximum of 5 colors in a list.



When you click on the image with the eyedropper, it displays a **Color Ring** with 5 sectors that shows the information about the colors in this area:



1. Gradient line with the current color in the center, on the left side is +30% black, and on the right side +30% white.

2. The previously selected color.

3. The current color of the pixel where the cursor is.

4. Colors of surrounding pixels.

5. Average colors from areas of 3x3, 5x5, 11x11, 31x31, 51x51, 101x101 px (around the eyedropper's tip).

This smart tool helps you select colors more precisely. If it's hard to catch a certain color, you can see adjacent tints in the **Color Ring** and select the color on the ring while holding the Ctrl-key.

The check marks in the Keep/Drop lists define the colors that will be taken into consideration when calculating the result. To exclude a color from processing just uncheck it.

In the **Keep Colors** field, you can configure the following settings for each color:

Transition (10-100). The parameter defines the smoothness of the boundary between the given color and the background that should be deleted. The smaller the value of the parameter, the rougher the processed boundary will be.

Priority (10-100). Colors with a higher priority will remain in the image after processing with the brush. The lower the priority, the higher the probability that the color will be removed.

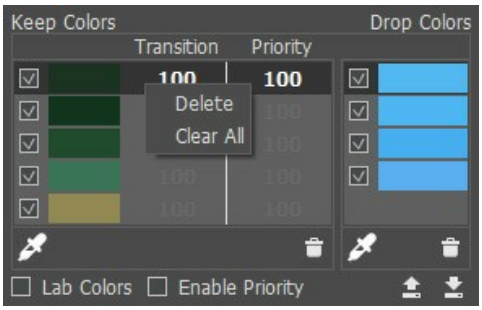
Activate the **Enable Priority** check-box in order for the specified values for the **Transition** and **Priority** parameters to be taken into account when processing.

Check-Box Disabled Check-Box Enabled

Lab Colors check-box. When the check- box is activated, the brush uses the Lab color space, which can improve the accuracy of the processing result. When the check-box is disabled, the brush uses the RGB color space.

Check-Box Disabled Check-Box Enabled

To delete a color from the list, select this color with a left-click of the mouse and click on . You can select several colors with the Ctrl-key. It's possible to clear the list using the menu that shows by right clicking on the list.

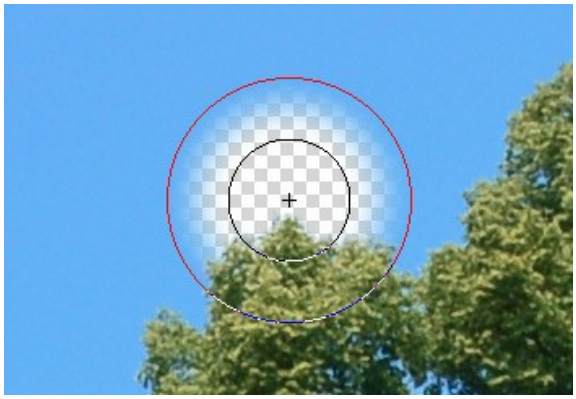


You can save the lists of the colors by using and load by clicking on .

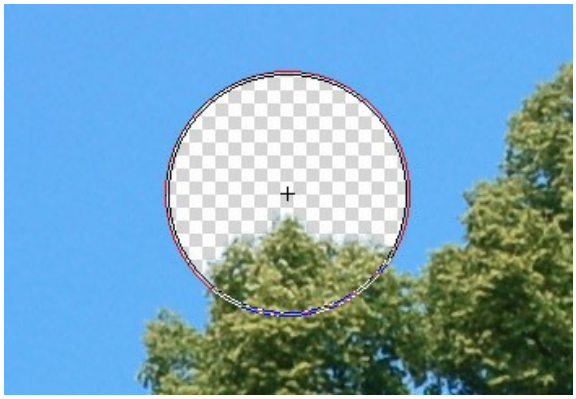
Step 2. Adjust the diameter and hardness of the brush:

Size is the tool's diameter (in pixels).

Hardness is the blurriness of the tool's edges. The lower the value the more blurry the tool's edges become.



Hardness = 50



Hardness = 100

Step 3. Choose the operation mode for the tool:

Drop . In this mode the **Magic Brush** deletes only the points having the same colors as listed in the **Drop Colors** field.

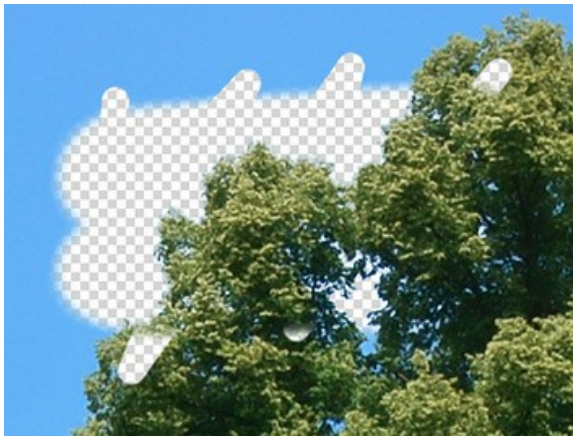
Keep . In this mode the **Magic Brush** restores only the points having the same colors as listed in the **Keep Colors** field.

Keep & Drop . When this mode is enabled, the **Magic Brush** removes the points having the same colors as those listed in the **Drop Colors** field and colors close to them, and it restores the points having the same colors as those listed in the **Keep Colors** field and colors close to them.

Before application of the tool

Using Drop mode

Using Keep mode



Using Keep & Drop mode

Step 4. You can also adjust the parameters of the brush in the **Brush Sensitivity** group:

Keep Colors. The higher the value of this parameter, the wider the range of the colors *kept* on the image.

Drop Colors. The higher the value of this parameter, the wider the range of *deleted* colors.

General Sensitivity. This parameter influences the amount of details recovered in difficult zones. The higher the value of this parameter, the more semitransparent details are visible.

> **Note.** When the **Enable Priority** check-box is selected, the value of the **Drop Colors** parameter is ignored. If the value of the **Transition** parameter is less than the value of the **Keep Colors** parameter + 10, the **Transition** value is ignored and the **Keep Colors** value + 10 is used.

Step 5. If you need to change a color shade of the object activate the **Foreground Recovery** check-box.

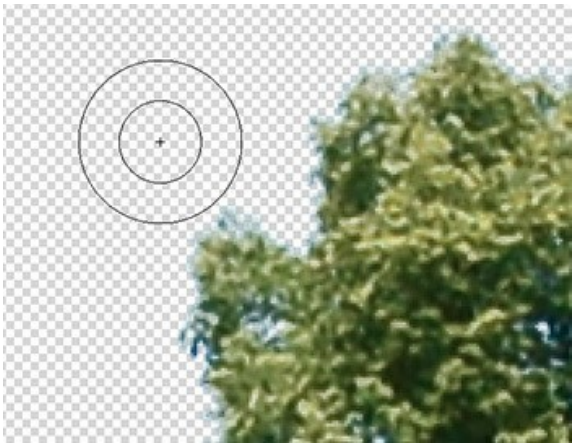
In most cases the objects on a photo are not evenly lighted, therefore the cutout object can have shades and colors

reflected from nearby objects. Such color shades can be absolutely inappropriate on a new background: for example, hair having a blue cast from the sky or a green shade from the trees, shadows of objects on clothes...

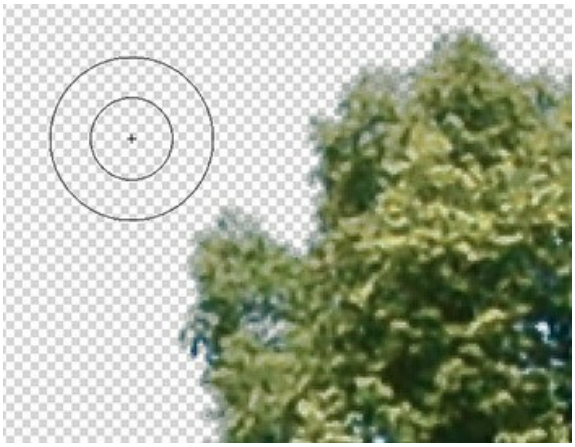
Foreground Recovery helps to *get rid of these unwanted color shades*. Just select a color with a click on the color plate. One click activates the eyedropper tool to pick a color from the image. Double click opens the **Select Color** dialog. If you set **Transparency** (with a right click on the plate), the brush will use the colors from the **Keep Colors** list.

The **Strength** parameter defines the influence of the applied color. The higher the value of the parameter, the more the colors are subject to change.

Apply the **Magic Brush** on the area you want to change, and the colors will get the chosen shade.

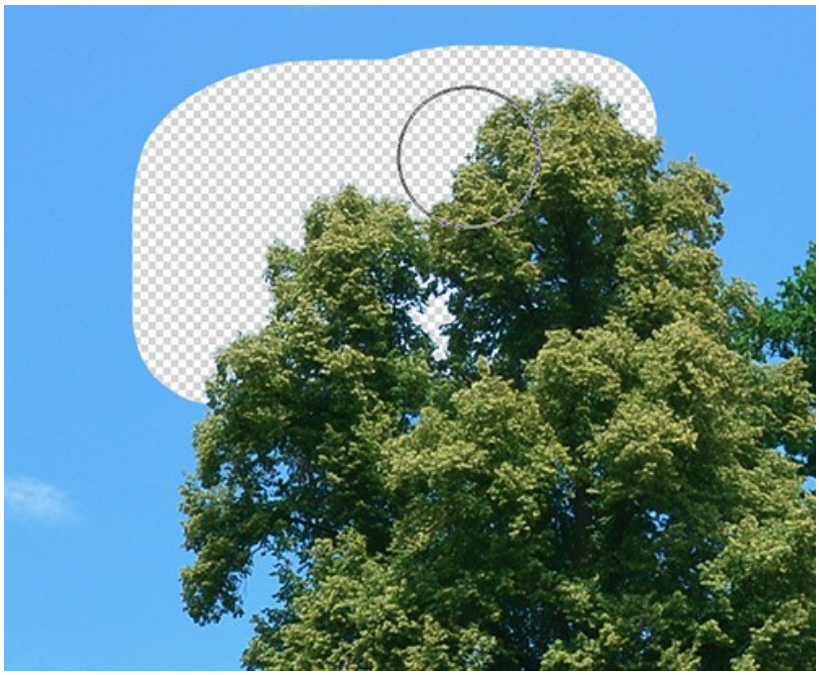


Without Foreground Recovery



Using Foreground Recovery
green color selected

Step 6. Process the fragment you need using the **Magic Brush** tool.



Using Magic Brush

After you have adjusted the color sets and the parameters, draw over all areas you want to process.

Result on the white background

You can also use the post-processing tools to edit the result.

CHROMA KEY

Chroma Key is a technique used in film and TV production to combine multiple images or frames into a single composition. During the filming, the foreground object is placed in front of a monochromatic backdrop (usually green or blue). In the post production, the color background is removed and replaced with an alternative footage.

The **Chroma Key** mode in **AKVIS SmartMask AI** allows you to quickly and accurately remove a monochrome background.

Note: The feature is available only in Home Deluxe and Business licenses.

Removing Background

Attention! The chroma key should always be applied to the original image, so use this mode at the first processing stage. Otherwise, the previous changes will be lost.

To remove the background from an image, adjust the following parameters:

Color. Using three color plates select the colors to remove. Click on a plate to activate the eyedropper tool and sample a color from the image. Double-click on a plate to call the color selection dialog. Right-click on a color plate to clear it.
Background. Select a type of your image's background. Depending on the chosen option, the program will use different pixel removing methods. You can choose between three options:

Uniform. The background pixels will be removed by the difference between their colors and luminance levels. Use this option for removing monochrome backgrounds as in blue screen or green screen images. Note that this method preserves more details than other methods.

Non-Uniform. The background pixels will be removed only by the difference between their colors. Use this option for images with an uneven background.

Gradient. This option uses a complex approach and is intended for removing gradient backgrounds.

Uniform Background

Non-Uniform Background

Gradient Background

Drop Colors / Keep Colors (0-100). The parameter determines the range of colors that should be deleted.

The higher the **Drop Colors** value, the more shades of the specified color will be removed from the image. The higher the **Keep Colors** value, the more shades of the specified color remain in the image. The range between these two parameters determines the number of pixels that become translucent.

Drop Colors = 5, Keep Colors = 20

Drop Colors = 25, Keep Colors = 50

Edges Recovery (0-100). The parameter replaces the colors of semi-transparent pixels on the fragment's edges with the colors of neighboring opaque pixels.

Edges Recovery = 10

Edges Recovery = 100

Desaturation (0-100). The parameter reduces the color saturation of semi-transparent pixels on the edges of the cut-out fragment.

Desaturation = 0

Desaturation = 100

Blur (0-100). The parameter blurs the fragment's edges.

Blur = 1

Blur = 5

In the **View Mode** drop-down menu, you can select an option for displaying the cut-out object in the Image Window.

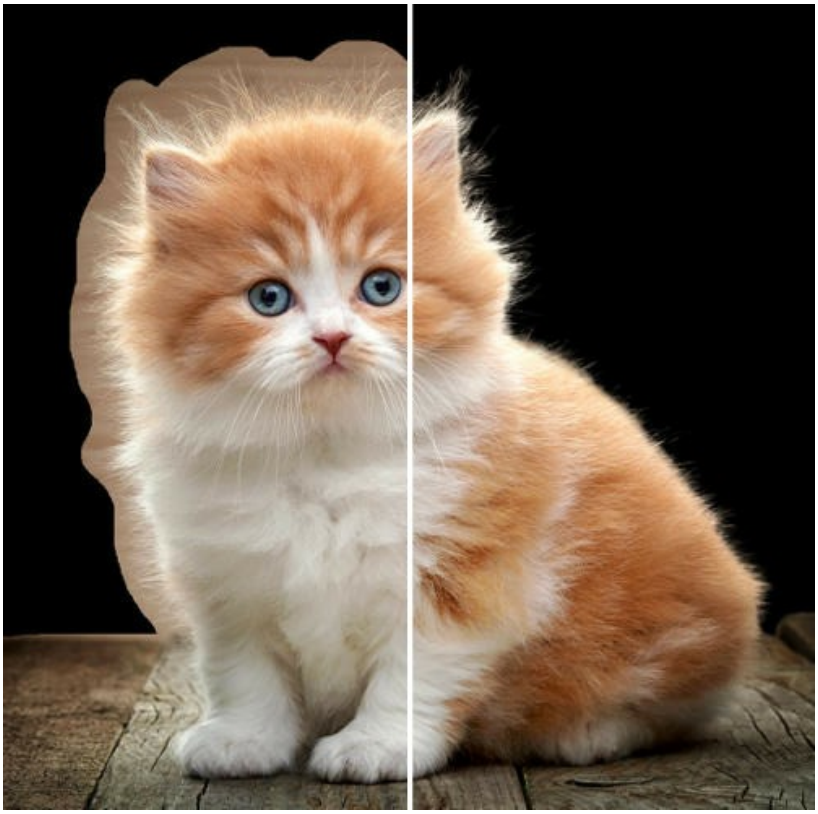
To accept the changes, press the **OK** button. To exit the mode without saving changes, click the **Cancel** button. To restore the default settings, click on **Default**.

To edit edges of the resulting fragment use the **Refine Edges** mode.

To replace the old background with a new one, use the **Custom Background** mode.

REFINE EDGES

The **Refine Edges** feature (available for Home Deluxe and Business licenses) is extremely helpful for quick editing edges of selections or cutout objects.



Refine Edges

Using tools and parameters in the **Settings Panel**, adjust the edges of the selection area.

Specify the type of an area to change. Choose **Selection** to change the selection outline, or **Cutout** to tweak the edges of the extracted object.

In the **Preview** pop-up menu, select how the selection/cutout will be displayed in the Image Window when editing.

The **Refine Radius** tool allows you to more accurately define the area of edge refinement for the selection or mask (blue zone).

The **Restore Edge** tool restores the original selection/mask (red zone).

The **Eraser** tool allows you to remove strokes, both blue and red.

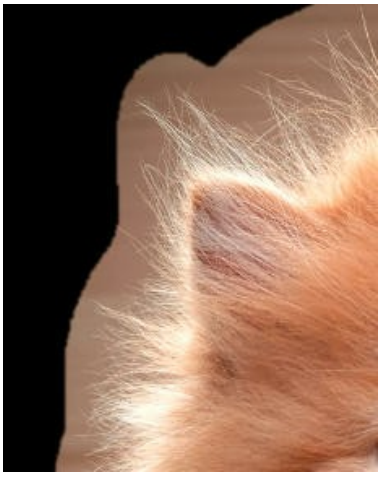
The tool's options:

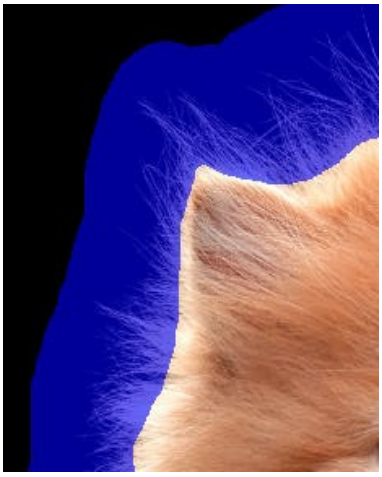
Size (10-3000). The maximum line width that can be achieved with a brush (in pixels).

Hardness (0-100). The degree of blurriness of the outer edge of the brush.

Show Strokes check-box. When the check-box is enabled, the area drawn with the tool is always displayed; when it is inactive, it is hidden.

Using the buttons / you can undo/redo the operations with the tools.


Initial Cutout


Processing

Result

Adjust the edges using the following parameters:

Radius (0-250). The parameter specifies the width of the area around the selection/cutout, where the edge refinement is applied.

Radius = 50

Radius = 200

Threshold (-10..80). The parameter specifies the brightness/color range of pixels that will be deleted when increasing the parameter.

Threshold = 0

Threshold = 50

Transition (0-100). The parameter increases the smoothness of the transition within the specified area.

Transition = 20

Transition = 90

Note. The **Threshold** and **Transition** parameters affect the image only if the value of the **Radius** parameter is not zero or the **Refine Radius** tool was used.

The **Radius** parameter and the **Refine Radius** tool work in a similar way, with the main difference being that the parameter sets the same width for the area along the entire edge, and the tool allows you to change the size of the area in different parts of the border.

Smoothness (0-100). The parameter smoothes the corners of the area, makes the selection/mask contour smoother.

Smoothness = 5

Smoothness = 50

Feather (0-100). The parameter softens the transition between the selection/object and the surrounding background creating a semi-transparent area.

Feather = 2

Feather = 20

Contrast (0-100). The parameter sharpens the edges of the selection or the cutout object.

Contrast = 5

Contrast = 50

Shift (-100..100). The parameter reduces or enlarges the selection/object within the transition area changing the transparency of the semi-transparent pixels.

Shift = -50

Shift = 50

Desaturation (0-100) (only for **Cutout**). The parameter decreases the color saturation of the semi-transparent pixels on the edges of the extracted object.

Desaturation = 0

Desaturation = 50

Press **OK** to apply changes, or **Cancel** to close the options.

Click the **Reset** button to discard all changes made in this mode and set the parameters to the default values.

POST-PROCESSING TOOLS

In **AKVIS SmartMask AI**, there are the post-processing tools to make final touches and correct the result: **Blur Brush**, **Background Eraser**, **Desaturation Brush**, and **History Brush**.

Blur Brush. This tool creates a blur effect by reducing the color contrast between adjacent pixels.

The brush is adjusted with the **Strength** parameter. The higher the value of the parameter, the stronger the effect is.

Before Using the Blur tool

After Using the Blur tool

Background Eraser. This tool erases the areas to which it is applied.

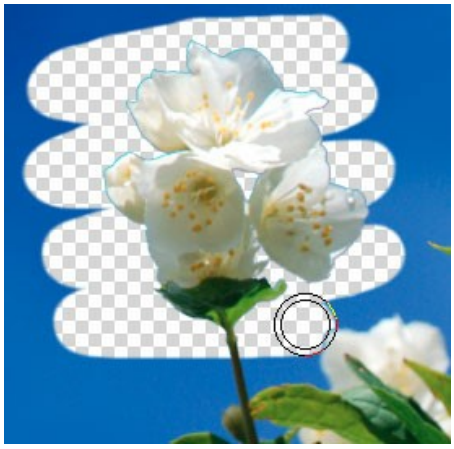
Strength (1-100). The amount of influence on an image. As this parameter's value is increased, the degree of transparency left by the brush increases.

The **Tolerance** check-box lets you control the range of the colors to remove. By default the check-box is disabled, and the tool removes all colors.

When it's enabled, the tool samples the color in the center of the brush at the moment of the click. Draw with this tool over the image, and the selected color will be erased.

The lower the value of the **Tolerance** parameter, the less colors are used. When the value of this parameter is increased, more colors are erased.

Using Background Eraser: Tolerance Off



Using Background Eraser: Tolerance On

Desaturation Brush . The tool reduces the color saturation in the image area being processed.

Strength (1-100). The parameter controls the intensity of the desaturation. The higher the value of the parameter, the weaker the saturation of the pixels becomes.

Before Using the Desaturation Brush

After Using the Desaturation Brush

History Brush . This tool restores the area to its original state.

Strength (1-100). The degree of restoration to the original state. At lower values there will be less restoration and more blending with the effect; at values near 100% the original condition will be restored more completely.

Before Using the History Brush

After Using the History Brush

You can adjust the parameters for these tools:

Size. The maximum width of a line drawn with the brush.

Hardness. The degree of blurriness of the brush's edges. As the value of this parameter is increased the brush's edges become harder. At lower values the transition between these areas is smoother.

ADDITIONAL TOOLS

The program also has additional tools which will make your work easier and more convenient

The **Hand** tool is designed to scroll the displayed area of the image in the window if the whole image doesn't fit into the window at the chosen scale. To move the image you should press this button, put the cursor onto the image, press the left button and, keeping it pressed, move the image in the window.

To scroll the image in the Image Window you can also press the spacebar on the keyboard and drag the image with the left mouse button.
Double-clicking the tool's icon on the Toolbar makes the image fit the Image Window.

Scrolling Image with Hand Tool

The **Zoom** tool is designed to change the image scale.

To zoom in left click on the image. To zoom out left click with `Alt` on the image. You can use hotkeys to change the image scale.
It is also possible to increase the scale of the selected area. For this purpose press and select a rectangular area on the image. When the rectangular area is selected, the image scale will be changed so that the selected part of the image will fill the whole window.
Double-clicking the tool's icon on the Toolbar makes the image scale to 100% (actual size).

Increasing Scale with Zoom Tool

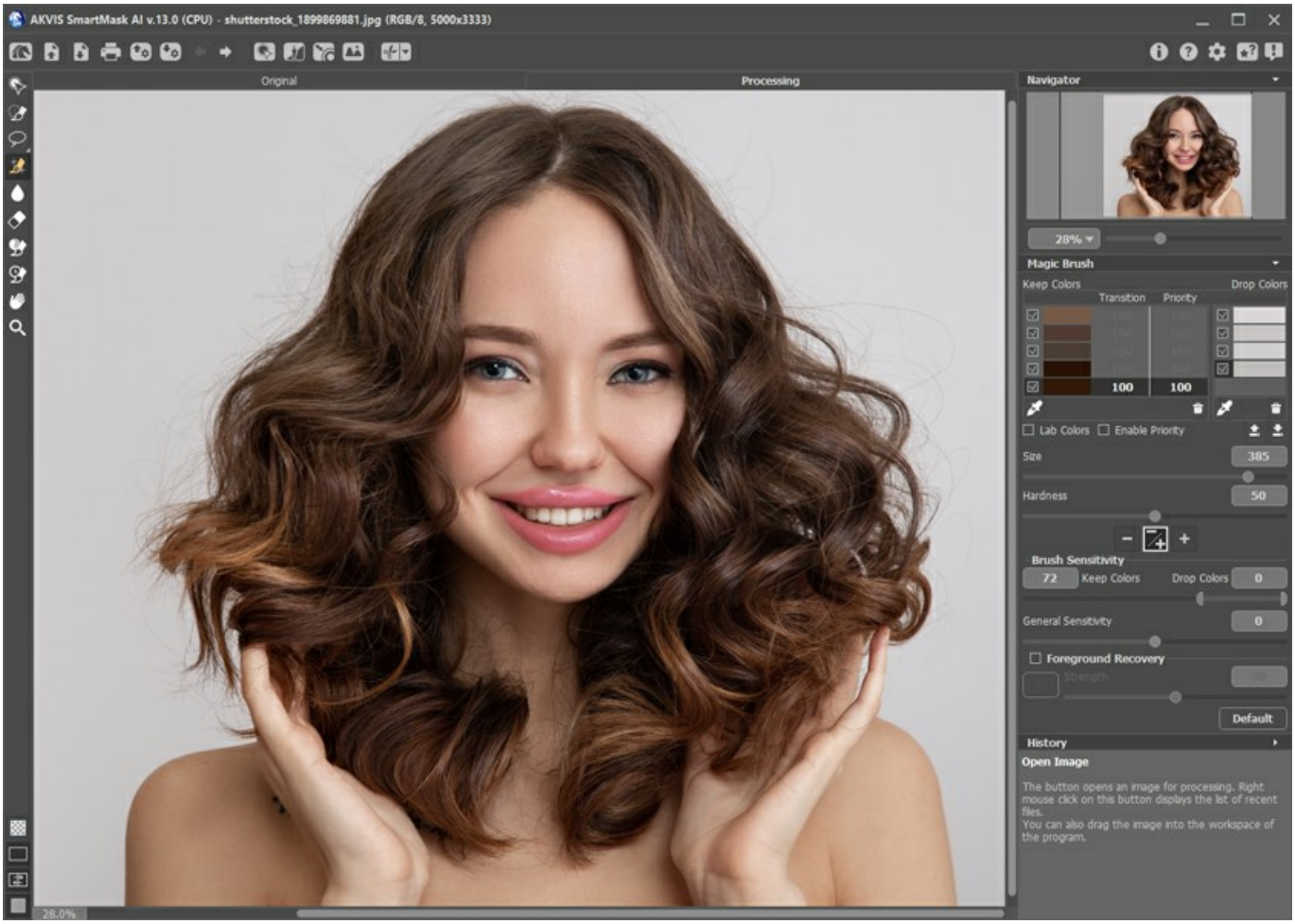
TIPS FOR PERFECT HAIR SELECTION

Selecting hair in photos can be quite challenging. Using **AKVIS SmartMask AI** you can easily cut out hair from backgrounds.

A basic selection is done automatically using the **Object Selection** tool or the **Select Subject** option . These cutting-edge AI tools create a nice selection with one click, but for some tasks you may need to fine-tune the edges of a selection. To do this, use the following tips.

How to Keep Hair Fluffiness

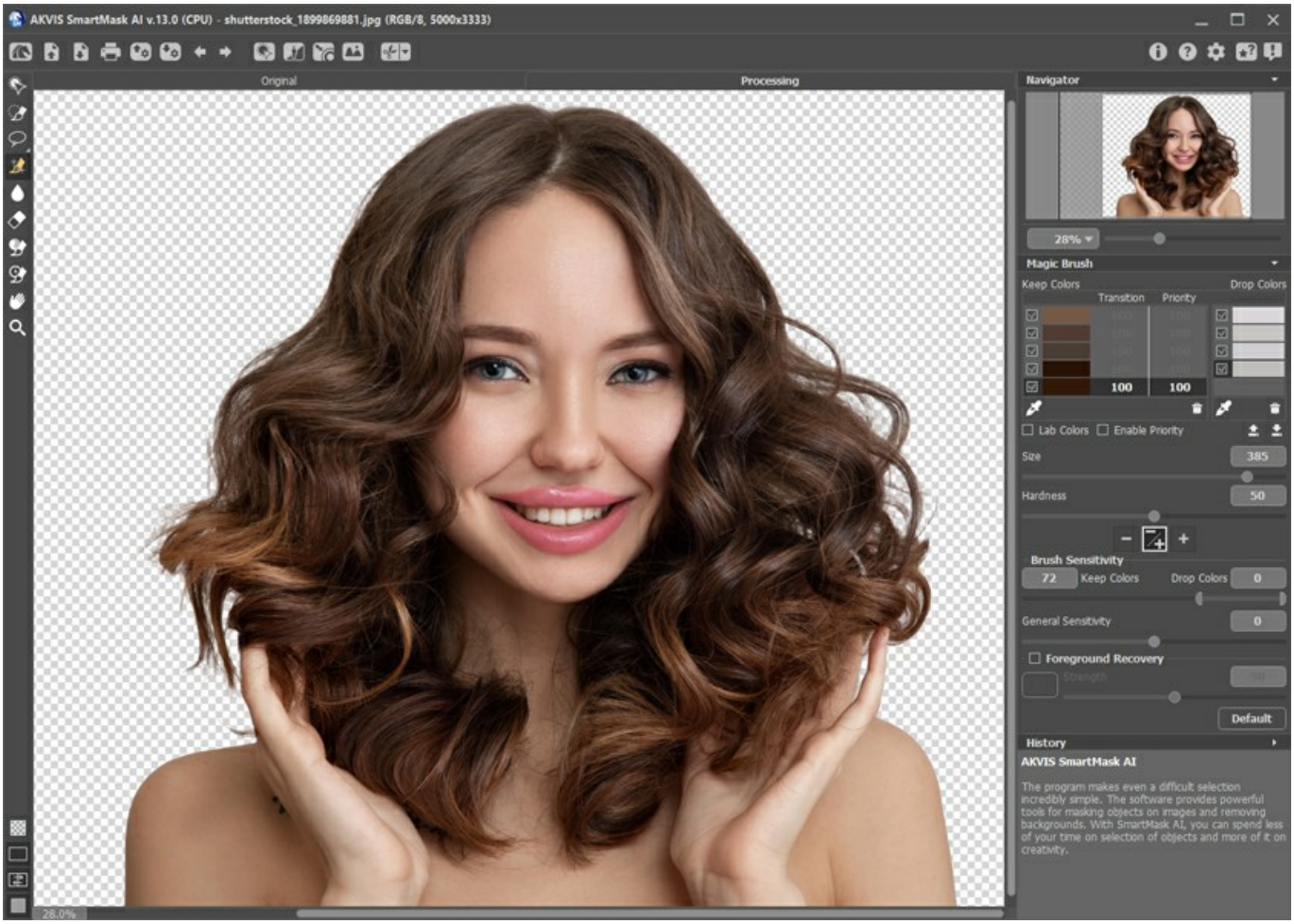
Step 1. Load a photo in **AKVIS SmartMask AI**.



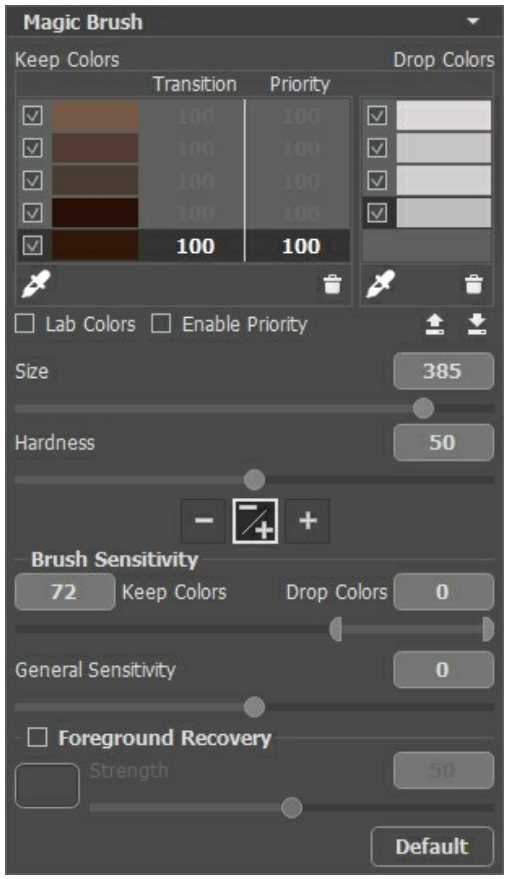
Step 2. Activate the **Object Selection** tool in the Toolbar and draw a rectangular selection around the girl. Alternatively, you can use the **Select Subject** option .

Remove the background by using the **Remove Unselected Areas** command (`Ctrl`+`Del`) and reset the selection with the **Deselect** command (`Ctrl`+`D`).

The result is very good. But comparing it with the original, you can see that the smallest hairs were cut out and the natural fluffiness disappeared.



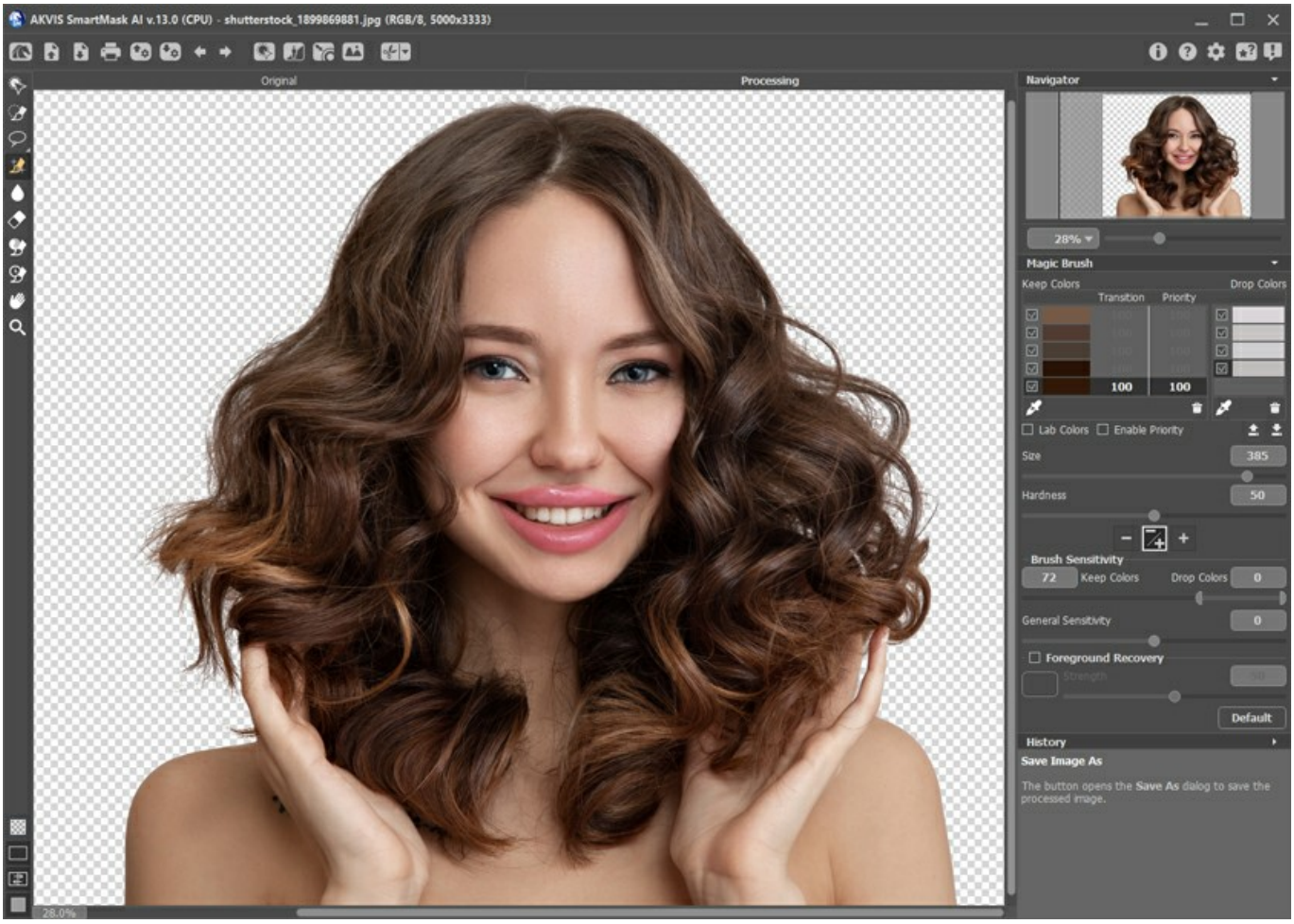
Step 3. You can improve the selection using the **Magic Brush** . Activate the tool in the Toolbar, go to the **Original** tab and select colors for **Keep Colors / Drop Colors** fields. The colors selected for **Keep Colors** will be saved when creating a selection. The colors selected for **Drop Colors** will be deleted. For each image, it is necessary to select its own individual set of colors.



Step 4. Go to the **Processing** tab and use the **Magic Brush** on the fluffy areas. Adjust the parameters in the **Brush Sensitivity** section to regulate the amount of details revealed in problem areas.

Accidentally deleted areas can be restored using the **History Brush** tool.

Now it's much better!



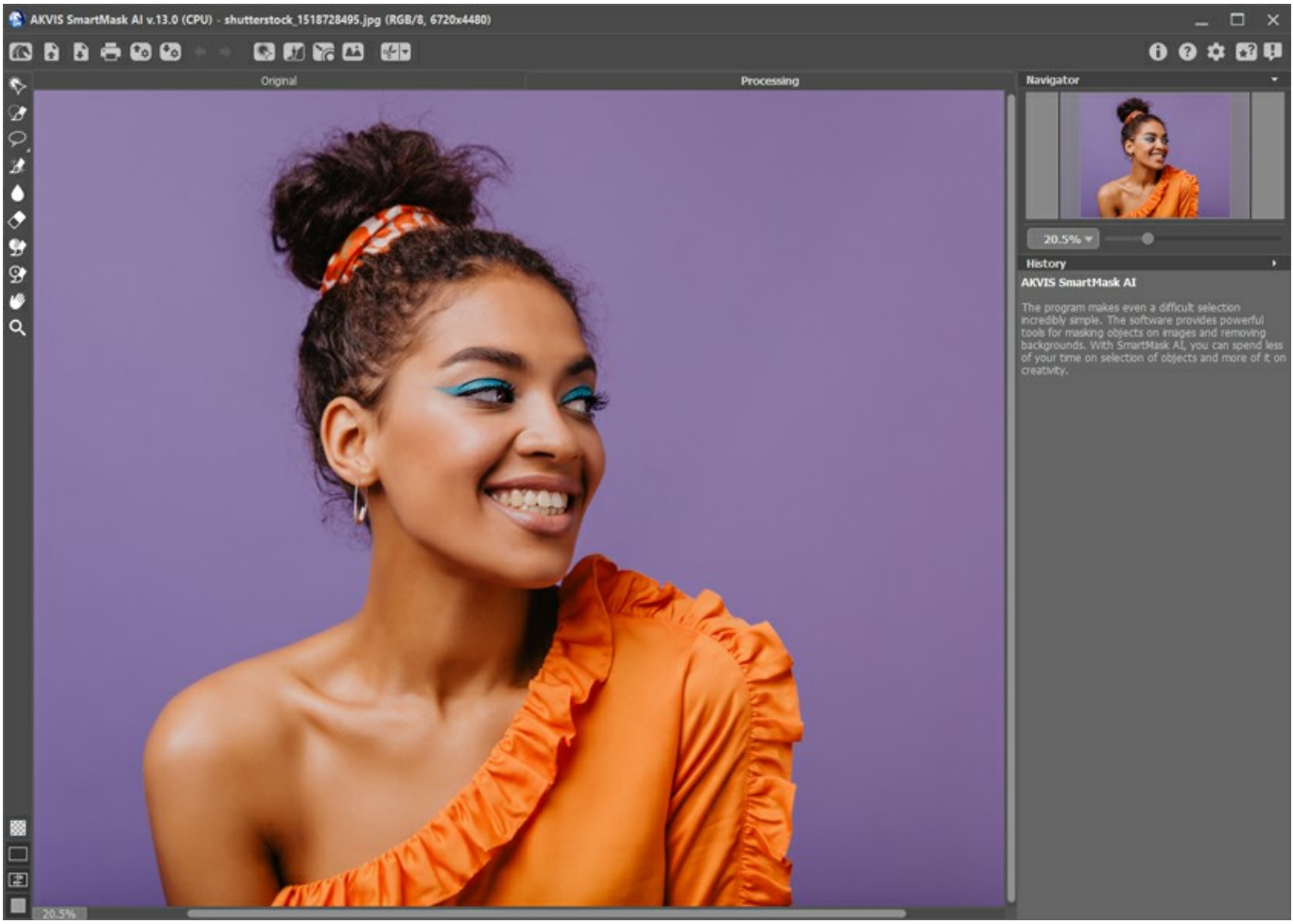
Compare hair before and after additional editing.

AI Selection

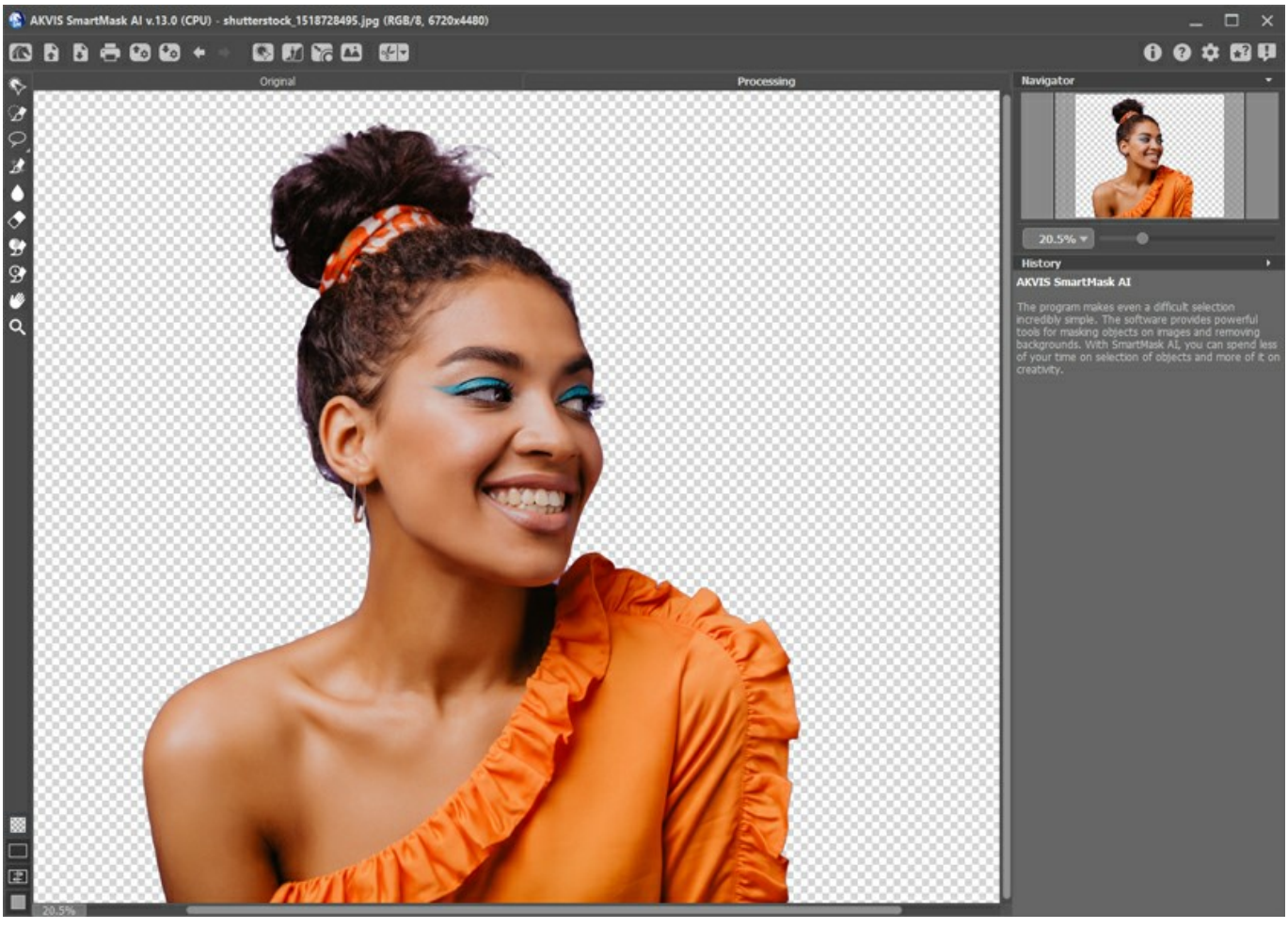
AI Selection + Magic Brush

How to Get Rid of Color Reflections

Step 1. Another problem that can be encountered when selecting hair is color reflections left from the background. Let's look at another photo as an example.

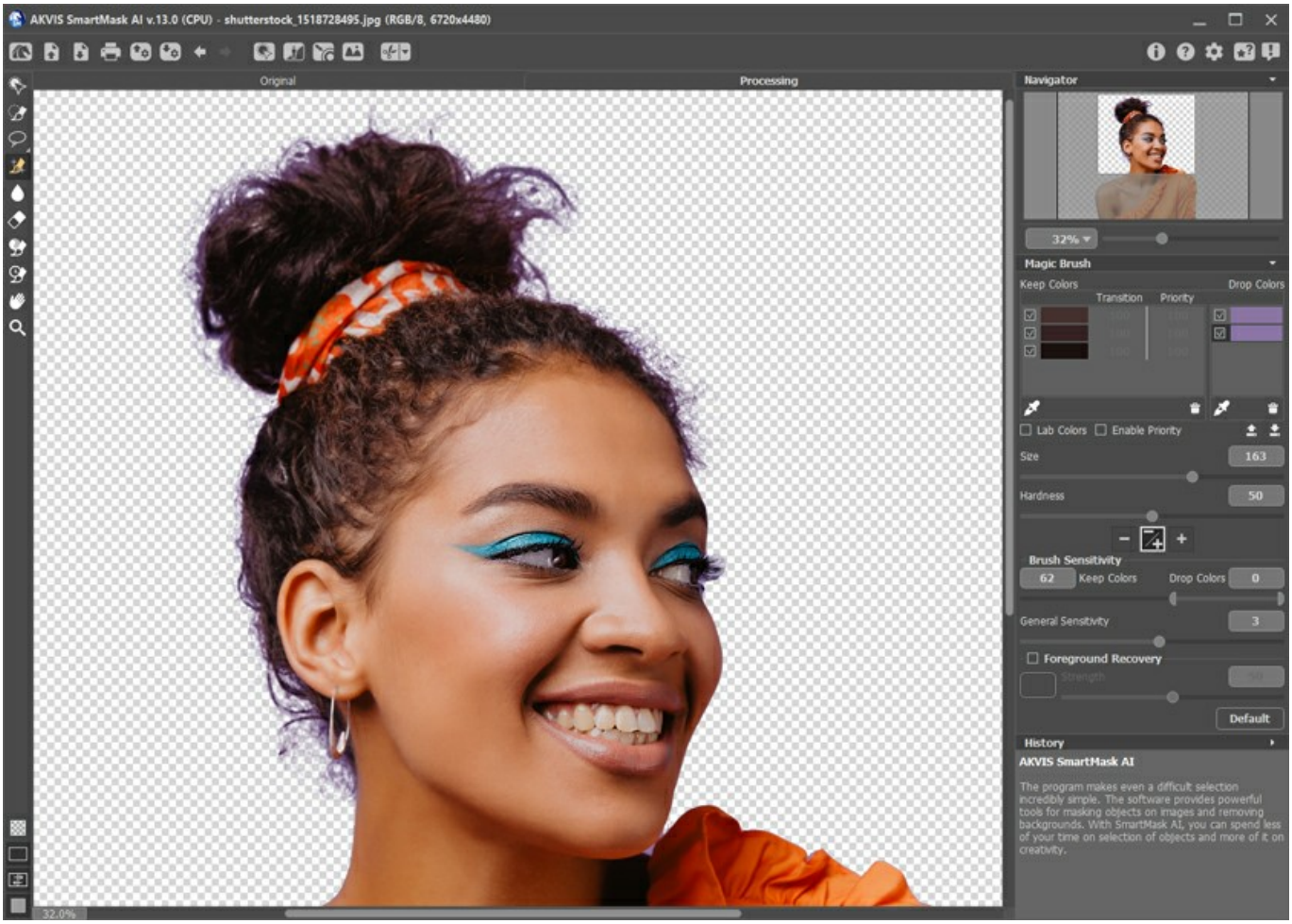


Step 2. This time we use the **Select Subject** option to remove the background. To do this, just click in the Control Panel to start the processing.

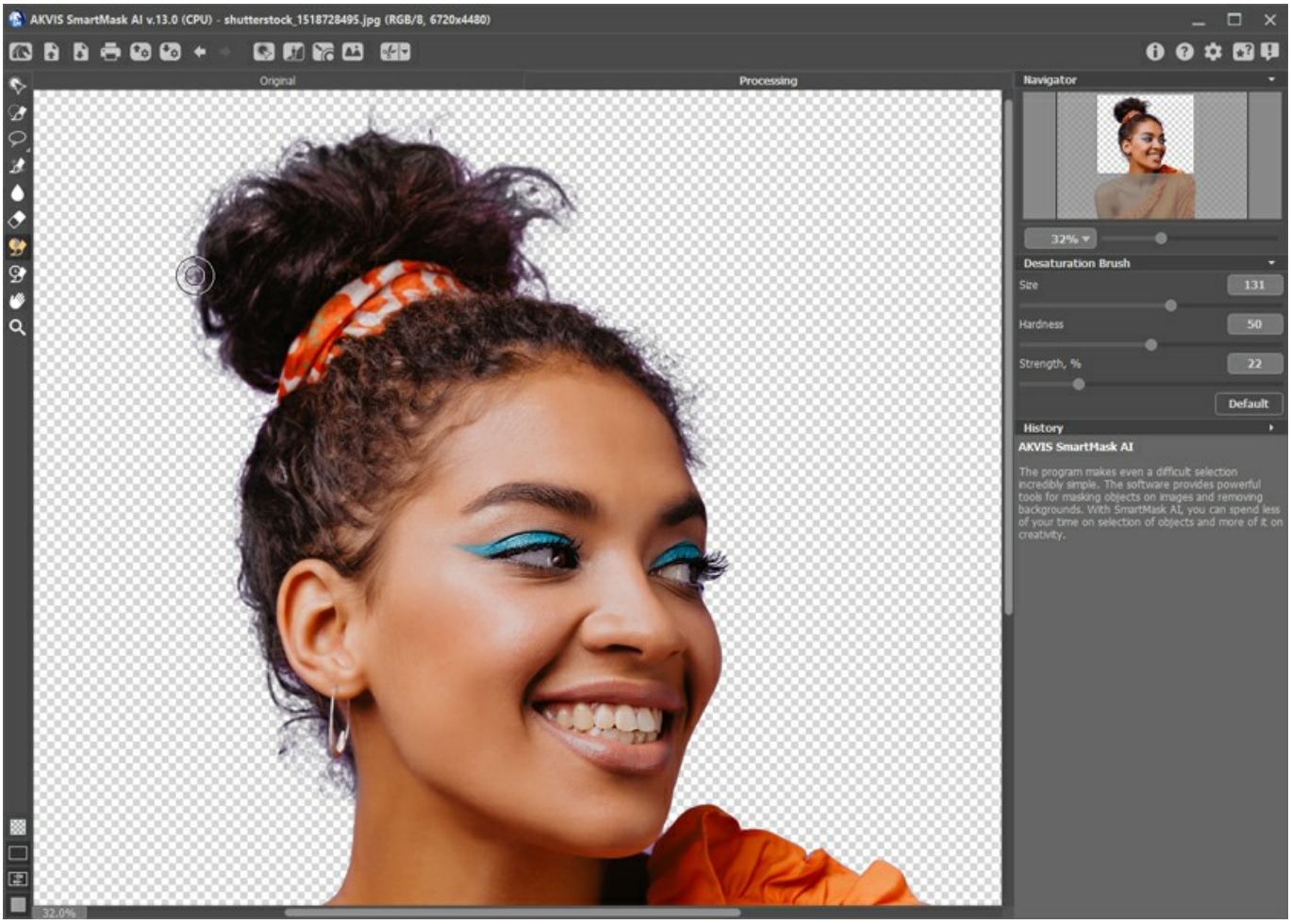


Step 3. Just like in the first case, we will use the **Magic Brush** to restore the fine hairs.

Since the background is rich in color, there are colored reflections on the hair. And **AKVIS SmartMask AI** allows you to fix it.



Step 4. Activate the **Desaturation Brush** in the Toolbar. Adjust the parameters in the Settings Panel and use the brush to treat areas with color reflections.



Compare hair before and after desaturation.

Color Reflections

After Using Desaturation Brush

Using these simple techniques, you can make accurate selections quickly and with no struggle.

NEW BACKGROUND FOR A WEDDING PHOTO

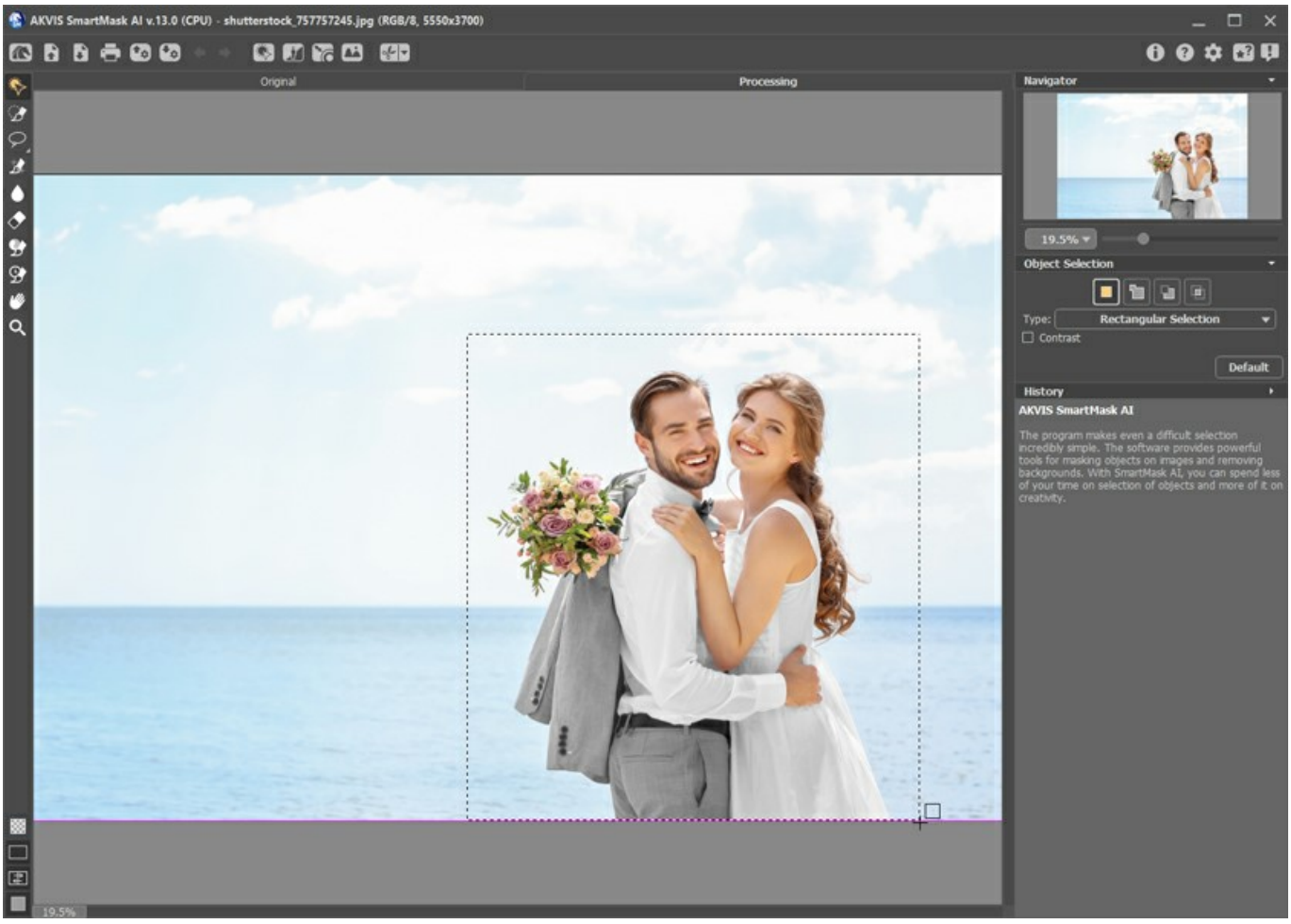
The background in a photo is just as important as the focus point! Unfortunately, in real life, the background in a photograph does not always meet expectations. Using **AKVIS SmartMask AI** you can easily remove the background in a photo and replace it with a different image. In this way you change the mood, context, or aesthetic of the photo.

In this tutorial we'll show you how to create a stunning wedding photo that's worthy of becoming wall art or posting on social media.

New Background for a Wedding Photo

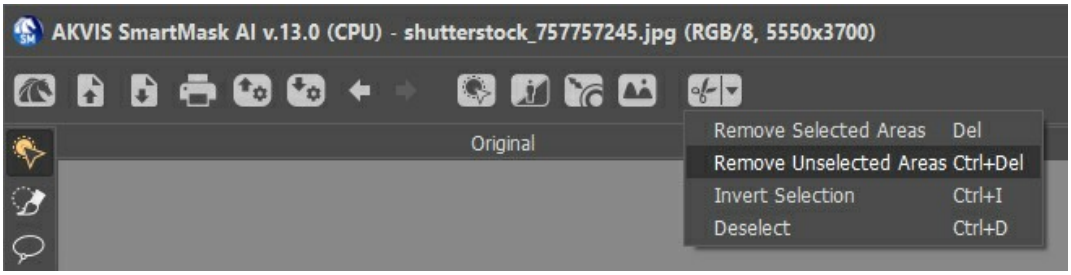
Step 1. Open a photo in **AKVIS SmartMask AI**.

Step 2. Activate the **Object Selection** tool in the toolbar and draw a rectangular selection around the object to be selected. If necessary, you can change the selection type to **Lasso** (in the Settings Panel).

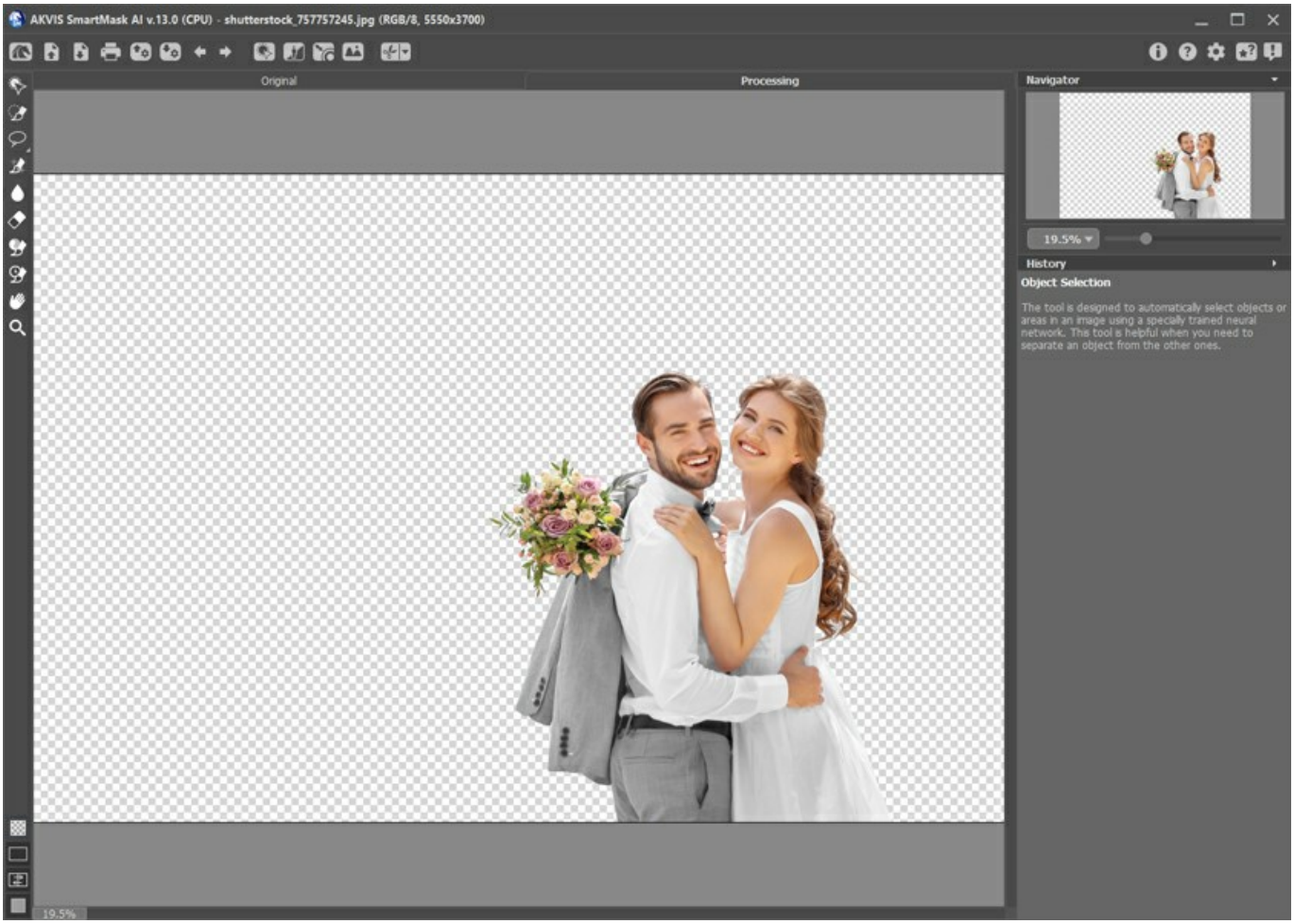


Step 3. The tool automatically detects the edges of the fragment and creates a precise selection.

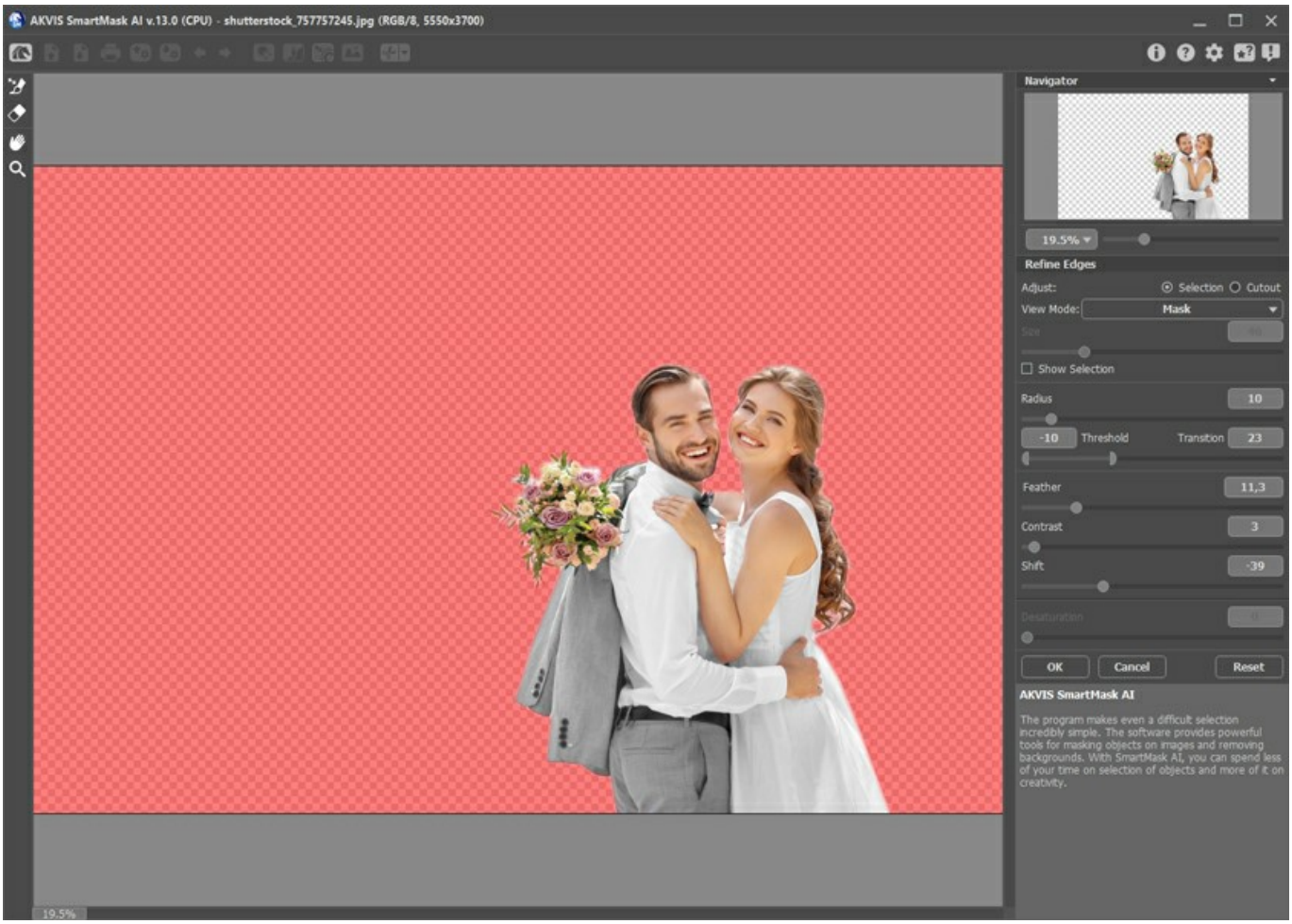
Step 4. In the top panel, press to call a menu of the commands. Remove the background by using the **Remove Unselected Areas** command (`Ctrl`+`Del`) and reset the selection with the **Deselect** command (`Ctrl`+`D`).



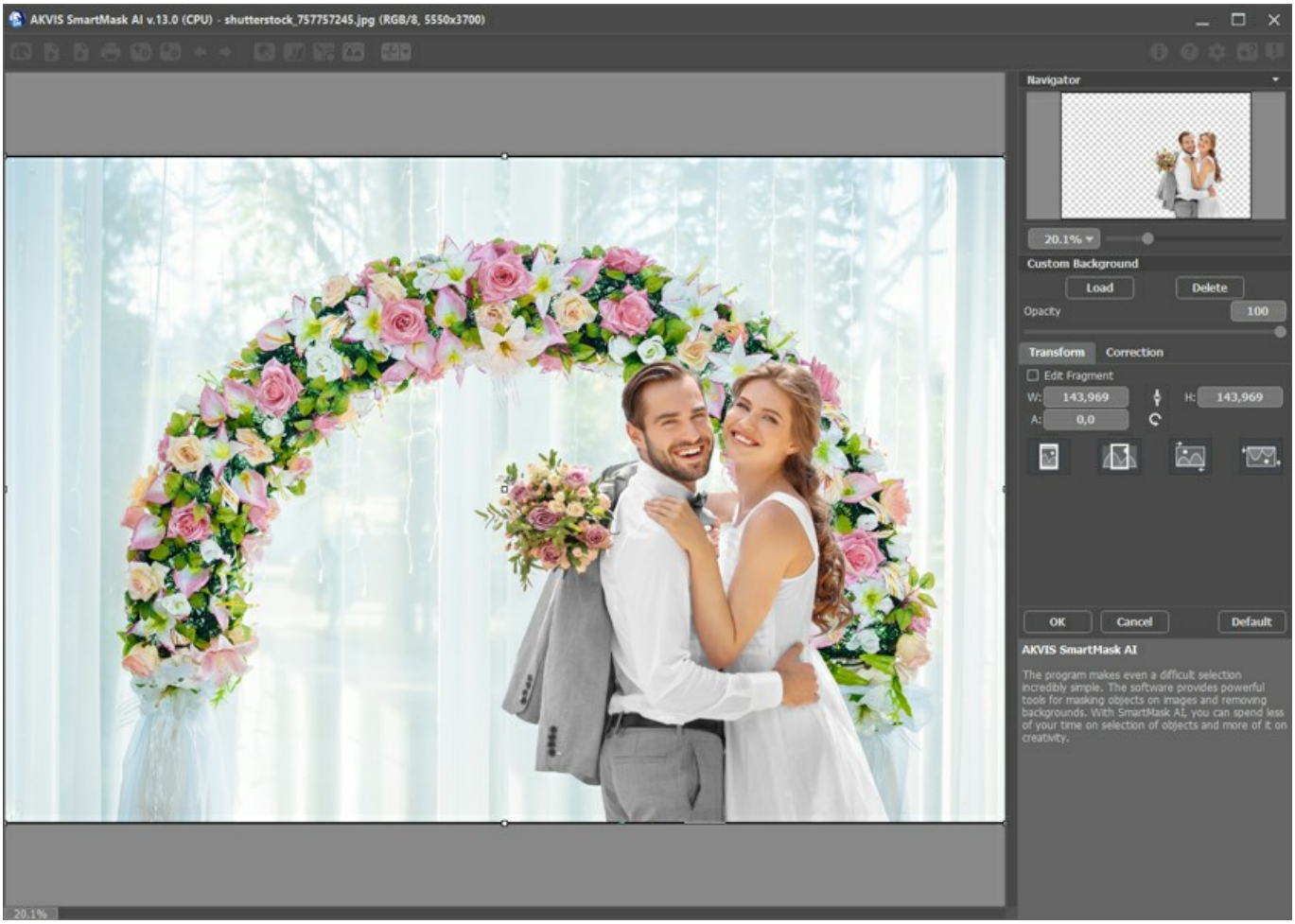
We got a fragment isolated from the background.



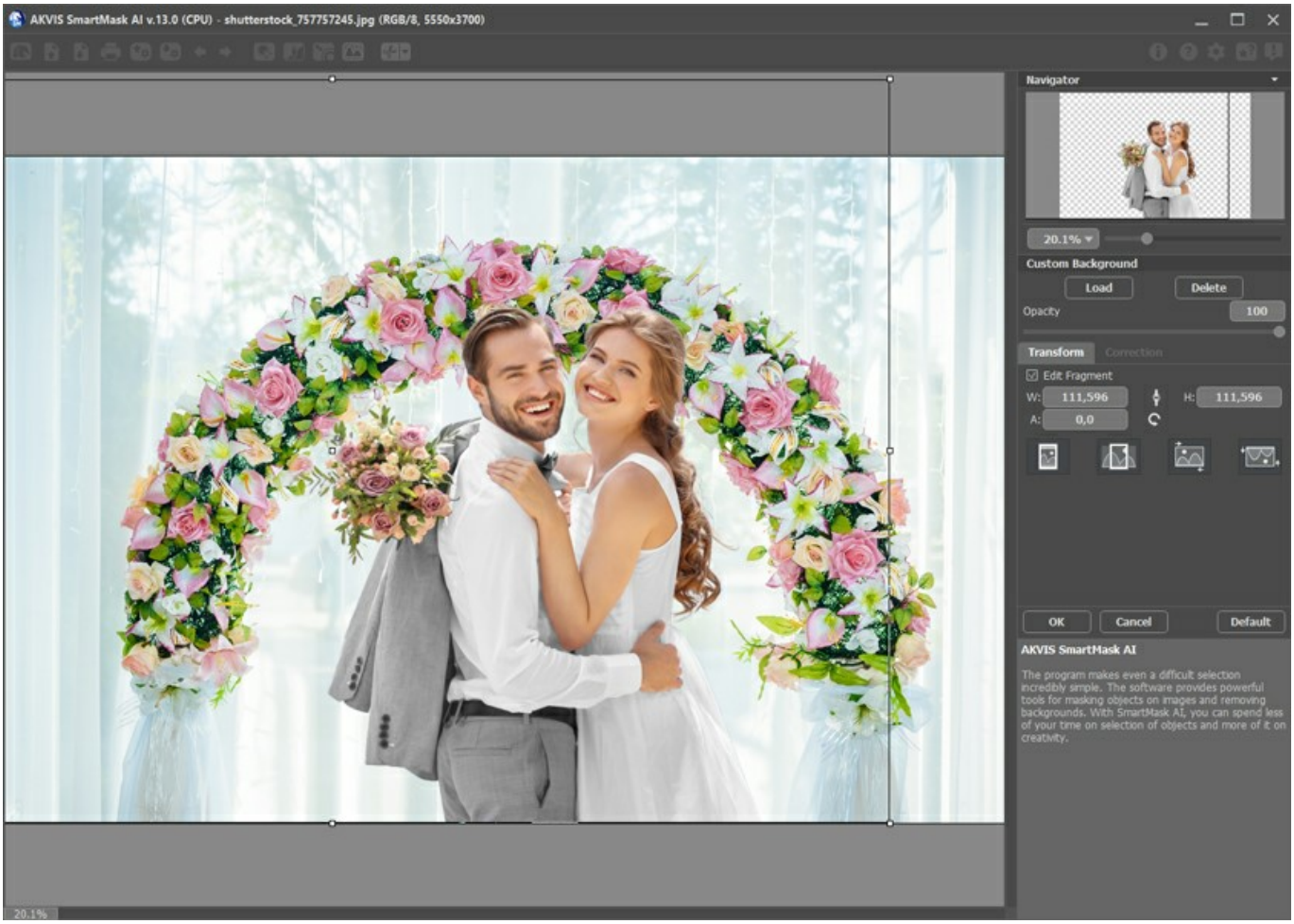
Step 5. If your image contains complex objects such as hair, you can polish up the selection using the **Refine Edges** feature or the **Magic Brush** tool.



Step 6. Switch to the **Custom Background** mode by clicking on the top panel. Select a new background for the image. The result is not very realistic yet. Let's fix that.

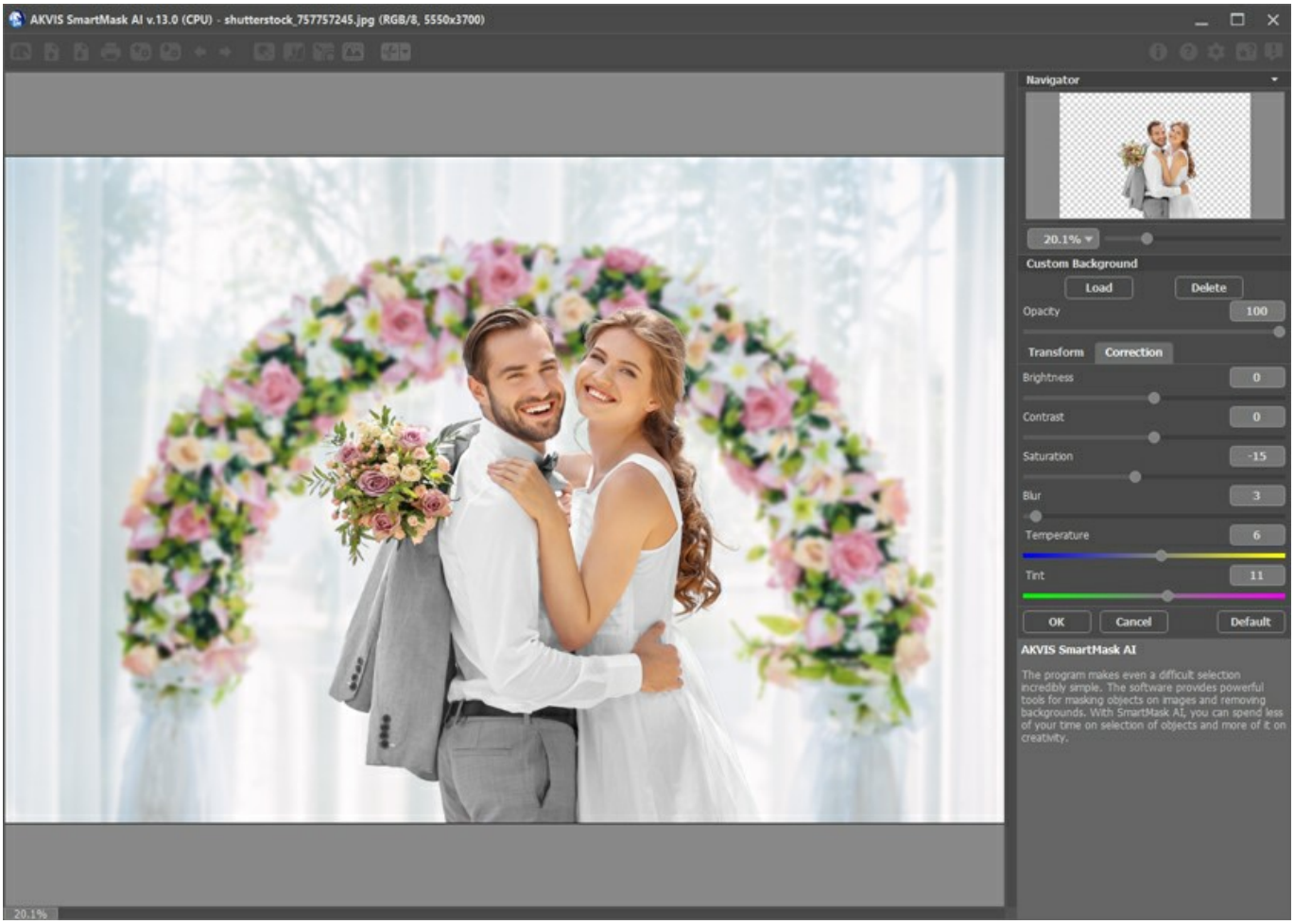


Step 7. Adjust the position of the fragment by enabling the **Edit Fragment** check-box in the **Transform** tab. Disable the check-box to apply the changes.



Step 8. The new background has a distinct blue-green undertone, unlike the fragment. Let's match them by making the background color more neutral.

Go to the **Correction** tab and adjust the settings. Pay special attention to the **Temperature** and **Tint** of the image. We also added some blur to the background to bring focus to the couple and make it stand out.



Experiment with the photo backgrounds and create stunning images!

HOW TO REPLACE A BACKGROUND OF A PHOTO

The neural networks-based selection tools can quickly and accurately select an object in an image in just a click.

In this example, we will show how to replace the background of a photo using the **AKVIS SmartMask AI** program.

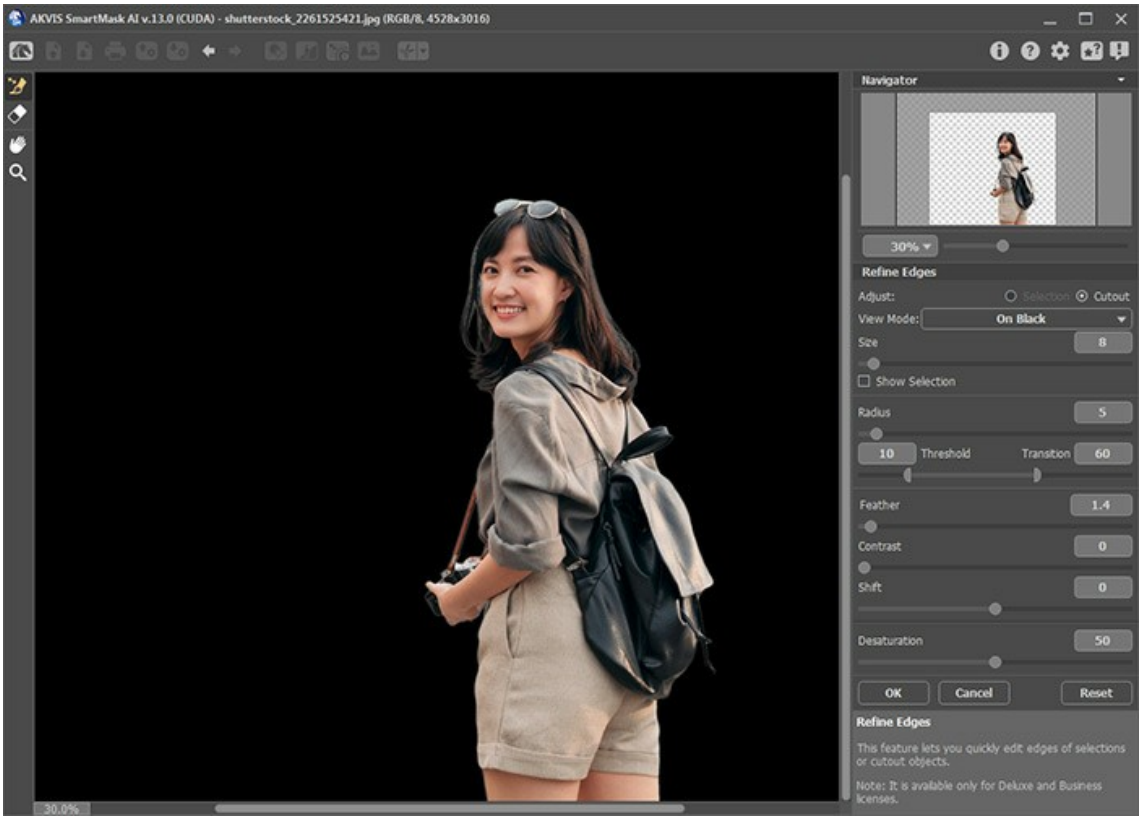
Background Replacement

Step 1. Open a photo in the **AKVIS SmartMask AI** program.

Step 2. Since there is only one person in focus in the photo, we will use the **Select Subject** feature. Click on the top panel, the selection will be created automatically.

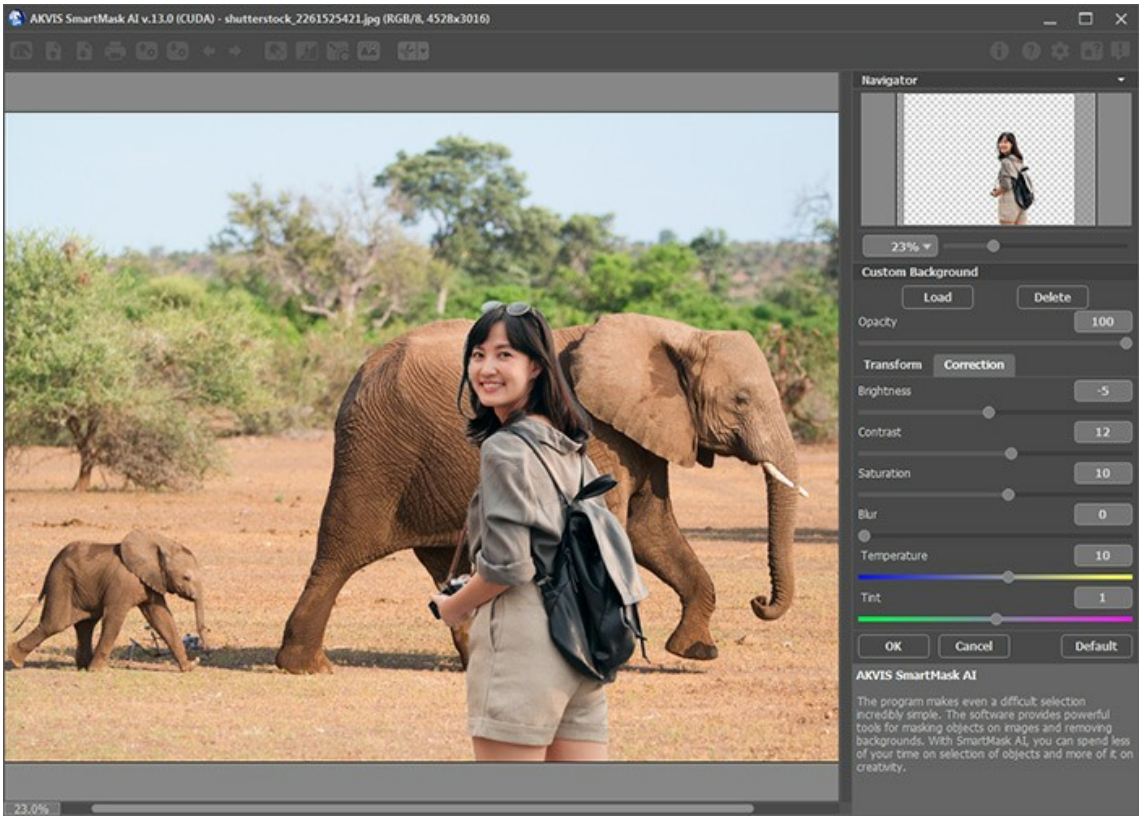
Step 3. In the top panel, press to call a menu of the commands. Get rid of the background by using the **Remove Unselected Areas** command (`Ctrl`+`Del`) and reset the selection with the **Deselect** command (`Ctrl`+`D`).

Step 4. If necessary, you can adjust the edges of the cut-out subject using the **Refine Edges** feature.



Step 5. To add a new background, switch to the **Custom Background** mode by clicking on the top panel. Here, you can select an image to be used as a background.

Step 6. Adjust the position of the background and the subject relative to each other and, if necessary, perform tone and color correction of the background image.



Create travel memories by simply changing the background of your photo!

AKVIS PROGRAMS

AKVIS AirBrush — Airbrushing Techniques on Your Photos

AKVIS AirBrush automatically transforms a photograph into a work of art which looks like made with a special airbrush tool that sprays paints or inks. The software works as an artistic filter creating stylish colorful airbrush designs from images using chosen settings of photo-to-painting conversion. More...

AKVIS Artifact Remover AI — JPEG-Compressed Image Restoration

AKVIS Artifact Remover AI uses artificial intelligence algorithms to remove JPEG compression artifacts and restore the quality of compressed images. This program provides 4 image enhancement modes, each involves a unique neural network developed especially for this occasion. The software is available free of charge for home users. For commercial use, a Business license is offered. More...

AKVIS ArtSuite — Frames and Effects for Your Photos

AKVIS ArtSuite is an impressive collection of versatile frames and effects for photos. ArtSuite contains many templates and texture samples that can be used to create a virtually limitless variety of options for generating frames.
Decorate a photo to give it an original and festive look! More...

AKVIS ArtWork — Collection of Painting & Drawing Techniques

AKVIS ArtWork is photo to painting software designed to imitate different artistic techniques: *Oil Painting*, *Watercolor*, *Gouache*, *Comics*, *Pen & Ink*, *Linocut*, *Stencil*, *Pastel*, and *Pointillism*. ArtWork helps you to create a piece of art out of any picture! More...

AKVIS Chameleon — Photo Collage Creation

AKVIS Chameleon is a fun to use tool for photo collage creation. It makes the process easy and entertaining. The tool is very easy to handle as it does not require precise selection of objects.
Using the software you can quickly create your own photo collages. More...

AKVIS Charcoal — Turn Photos into Charcoal & Chalk Drawings

AKVIS Charcoal is a creative tool for conversion of photos into charcoal and chalk drawings. Using the program you can make professional-looking expressive black and white images. Playing with colors and options you can achieve outstanding artistic effects such as sanguine, sepia, and others. More...

AKVIS Coloriage AI — Add Color to Black and White Photos

AKVIS Coloriage AI allows colorizing B&W photos. The program includes an AI-powered image colorization mode based on machine learning, as well as the classic method of manual coloring using zone selection. Breathe new life into your old family photographs! More...

AKVIS Decorator — Resurface and Recolor

AKVIS Decorator lets you change the surface of an object in a realistic manner. The program puts on a texture keeping the volume of an object, following its folds and creases. The new pattern looks absolutely natural and makes you see things differently. Recoloring is also made easy. More...

AKVIS Draw — Hand-made Pencil Drawing Effect

AKVIS Draw converts your photos into hand made pencil drawings. The software creates realistic looking line art illustrations, produces both B&W and color drawings. Add a hand-drawn look to your pictures! More...

AKVIS Enhancer — Bring Detail To Your Pictures

AKVIS Enhancer is image enhancement software that detects detail in underexposed, overexposed and mid tone areas of a photo with uneven exposure. Enhancer improves every part of the image! The software works in three modes: *Improve Detail*, *Prepress*, and *Tone Correction*. The program offers a fast method to fix a dark photo, add contrast and brightness to a picture, it lets you improve color and adjust tones. More...

AKVIS Explosion — Fabulous Particle Explosion Effects

AKVIS Explosion offers creative destruction and particle explosion effects for your photos. It bursts an object and applies dust and sand particles to an image. With the software, you can create eye-catching graphics in just a few minutes! More...

AKVIS Frames — Decorate Your Photos with Frames

AKVIS Frames is a free program designed for working with the AKVIS frame packs

AKVIS HDRFactory — High Dynamic Range Images: Brighter than Reality!

AKVIS HDRFactory lets you create a High Dynamic Range image from a series of shots or from one single photo. The program can also be used for photo correction. The program brings life and color to your photos! More...

AKVIS Inspire AI — Artistic Stylization of Images

AKVIS Inspire AI stylizes images using various samples of painting. The AI-based program applies the color scheme and style of a selected artwork to a photo creating a new masterpiece. The software includes a gallery of art styles and allows to load a custom sample. Imitate the style of world famous artists! More...

AKVIS LightShop — Light and Star Effects

AKVIS LightShop lets you create an infinite number of astounding light effects! The program offers advanced lighting techniques for adding stars and glow effects to images. A light effect draws attention and brighten up any photo. Add a little magic to your pictures! More...

AKVIS Magnifier AI — Enlarge Images & Enhance Quality

AKVIS Magnifier AI allows you to increase the size of photos and improve image quality and appearance. Featuring neural network-based algorithms, Magnifier AI upscales images to super-high resolution, up to 800%, and produces wall-sized prints. Improve image resolution, create clear, detailed images with perfect quality! More...

AKVIS MakeUp — Retouch Your Portrait Photos!

AKVIS MakeUp improves your portraits giving them a professional look. The software retouches facial imperfections making your skin radiant, beautiful, pure and even. The program adds glamour to your pictures and creates a high key effect. Look your best in every photo with AKVIS MakeUp! More...

AKVIS NatureArt — Bring Nature to Your Photos

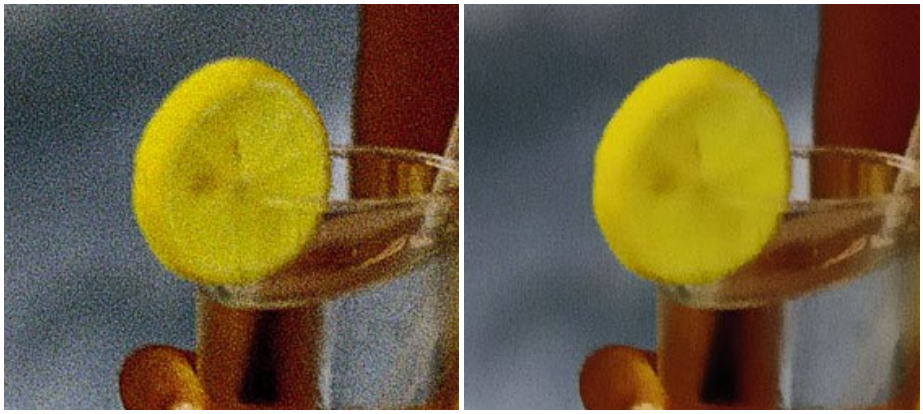
AKVIS NatureArt is an excellent tool for imitating the magnificence of natural phenomena on your photos. The program includes a number of effects: Rain

AKVIS Neon — Glowing Drawings from Photos

AKVIS Neon lets you create amazing glowing lines effects. The software transforms a photo into a neon image that looks like drawn with luminescent ink. More...

AKVIS Noise Buster AI — Digital Noise Reduction

AKVIS Noise Buster AI is software for noise suppression on digital and scanned images. The program is efficient for removing any type of digital noise. It reduces both luminance and color noise without spoiling other aspects of photos. The software includes AI technologies and adjustments for manual refining. More...



AKVIS OilPaint — Oil Painting Effect for Your Photos

AKVIS OilPaint turns your photos into oil paintings. The mysterious production of a painting happens right before your eyes. The unique algorithm authentically reproduces the technique of the real brush. With this cutting-edge software you can become a painter! More...

AKVIS Pastel — Turn Photos into Pastel Paintings

AKVIS Pastel turns your photos into pastel paintings. The program converts your photo into a lifelike digital art imitating one of the most popular artistic techniques. AKVIS Pastel is a powerful tool to unleash your creativity! More...

AKVIS Points — Apply Pointillism Effect to Your Photos

AKVIS Points lets you transform your photos into paintings using one of the most exciting artistic techniques - pointillism. With the software you can easily create gorgeous works of art in a pointillist manner. Discover the world of bright colors! More...

AKVIS Refocus AI — Focus Improvement & Blur Effects

AKVIS Refocus AI improves the sharpness of out-of-focus and blurry photos, enhances the entire image or partially, creating a selectively focused area. It's also possible to add bokeh and lens blur effects to your photos. The program provides five image processing modes: *Refocus AI*, *Tilt-Shift*, *Iris Blur*, *Motion Blur*, and *Radial Blur*. More...

AKVIS Retoucher — Image Restoration Software

AKVIS Retoucher is an efficient program for photo restoration and photo retouching. The software removes dust, scratches, stains, and other defects that appear on damaged photos. It intelligently reconstructs the missing parts of the photo using the information of the surrounding areas. More...

AKVIS Sketch — Turn Your Photos into Pencil Sketches

AKVIS Sketch converts photos into amazing pencil drawings. The software creates realistic color artworks and B&W sketches, imitating the technique of graphite and color pencil. The program offers these photo to drawing conversion styles: *Classic*, *Artistic*,

Maestro, and *Multistyle*, - each with a series of presets. AKVIS Sketch allows you to feel like a real artist! More...

AKVIS SmartMask AI — Selection Made Easy

AKVIS SmartMask AI is efficient selection tool that saves time and is fun to use. Equipped with artificial intelligence tools, the program is the most convenient and fastest way to mask objects in an image. The software considerably increases your productivity. You will be freed from boring work and will have more room for creativity and realization of your ideas. More...

AKVIS Watercolor — Aquarelle Art from Photos

AKVIS Watercolor easily makes a photo look like a brilliant and vibrant watercolor painting. The program includes two styles of photo to painting conversion: *Classic Watercolor* and *Contour Watercolor*; each comes with a wide range of ready-to-use presets. The software turns ordinary images into aquarelle pieces of art. More...