AKVIS

Retoucher

Image Restoration & Retouching



akvis.com

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IMAGE RESTORATION SOFTWARE

AKVIS Retoucher is an efficient program for **photo restoration** and **photo retouching**.



AKVIS Retoucher not only **removes dust, scratches, stains** and other defects that appear on damaged photos but is also able to **reconstruct missing parts** of a photo using the information of the surrounding areas.

The work is done automatically; you only have to indicate areas to be restored, push the *Run* button, and here you are - the surface becomes smooth and imperfections disappear.
It looks like magic when you observe the scratches vanishing before your very eyes!

AKVIS Retoucher is also a handy tool for improving photo composition. It is possible to **remove date stamps**, small **irrelevant details** (wires, refuse bins, etc) and even bigger **objects** (i.e. people who fell into the shot by accident, cars in the background).

If you need to increase the canvas size (from one side or proportionally) to bring the main object into focus, i.e. to center it, Retoucher will help you to extend image patterns to the blank areas of the canvas.

Polygraphists will find Retoucher useful in doing the prepress processing job. They often have the problem of extending the borders of a layout that does not have space for cropping. **AKVIS Retoucher** saves much time by doing this quickly and efficiently!

Use **AKVIS Retoucher** for the following purposes:

- Restore old and damaged photos from your family archive by removing scratches, stains and other defects;

- Improve the composition of your photos by removing the date stamp, distracting details (wires, refuse bins, etc) and by extending the photo canvas (increase the image canvas and the plug-in will recreate the image patterns in the blank areas);

- Reconstruct missing parts of the photo (to restore a torn photo, in polygraphy to extend the borders of a layout that does not have space for cropping).

- Remove larger and complex objects (people, cars, buildings).

AKVIS Retoucher is your reliable tool for increasing productivity!

AKVIS Retoucher is available as an independent program (*standalone*) and as a *plugin* to a photo editor.
The functionality of the program depends on the license type.

The plugin version is compatible with Adobe Photoshop, Photoshop Elements, Corel Paint Shop Pro, etc.
Check the compatibility page for more details.

INSTALLATION

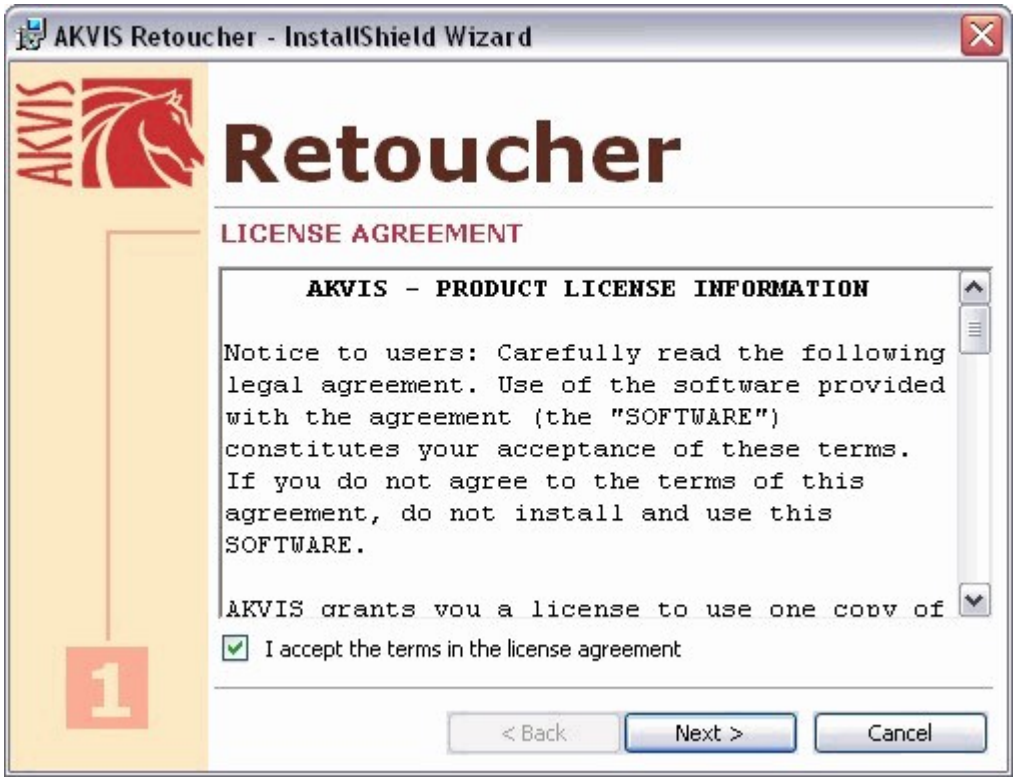
Attention! You must have administrator rights to install the program on your computer.

Before installing the AKVIS Plugin, please make sure that the photo editor where you want to install the plugin, is closed.

Follow the instructions to install **AKVIS Retoucher** in Windows.

- Start the setup **exe** file.
- Select your language and press the **OK** button to launch the installation process.
- To continue the installation process you have to read and accept the **License Agreement**.

  Activate the check box **"I accept the terms in the license agreement"**, and press **Next**.



- To install the **Plugin** you should select your photo editor(s) from the list.

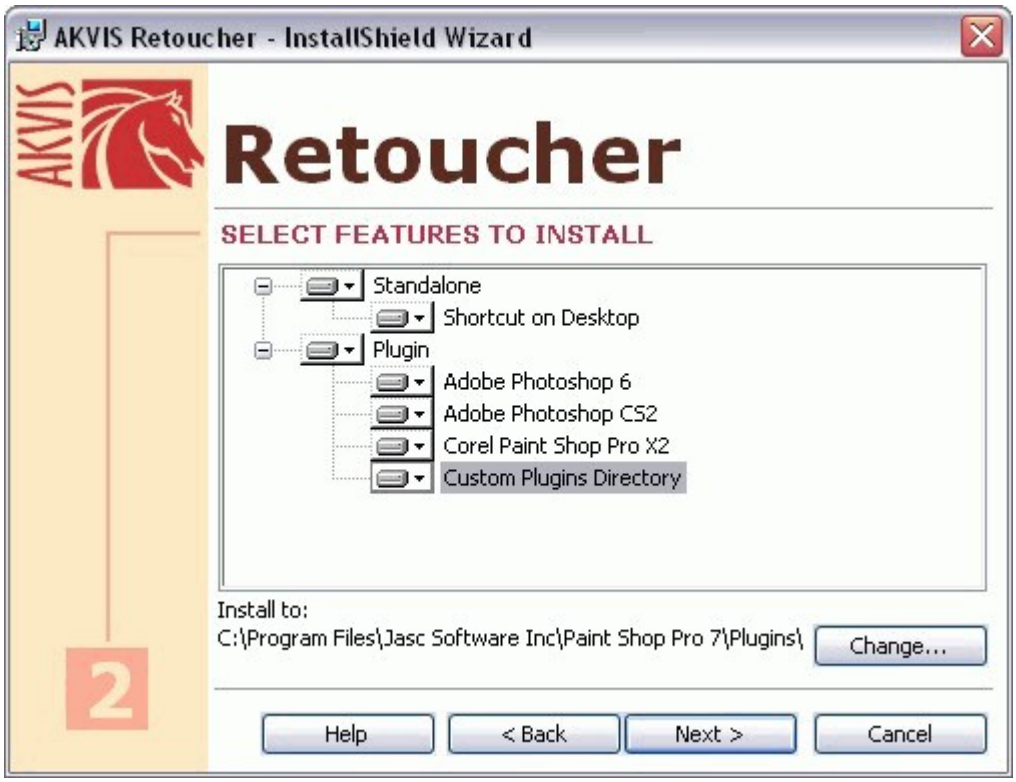
  Hint:

  If your photo editor is not in the list, activate the component **Custom Plugins Directory** and choose the folder where you keep all plugins and filters, for example, **C:\My Plugins**. In this case you should set this folder as the plugins folder in the settings of your photo editor.

  Or you can copy the **8bf** file into the Plug-ins folder of your image editor.

  To install the **Standalone version**, make sure that the check-box **Standalone** is activated.
  To create a shortcut for the program on desktop, activate the component **Shortcut on Desktop**.

  Press the button **Next**.



- Press the button **Install**.



- The installation is in progress.



- The installation is completed.

  You can subscribe to the **AKVIS Newsletter** to be informed about updates and events. Enter your e-mail address.



- Press **Finish** to exit Setup.

After installation of the **standalone** version of Retoucher, you will see a new line in the **Start** menu: **AKVIS** - **Retoucher** and a shortcut on desktop, if during installation the component **Shortcut on Desktop** was enabled.

After installation of the Retoucher **plugin** you will see a new item in the Filter/Effects menu of your photo editor. For example in Photoshop: **Filter** -> **AKVIS** –> **Retoucher**. Please use this command to launch the plugin in the editor.

INSTALLATION

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

Before installing the AKVIS Plugin, please make sure that the photo editor where you want to install the plugin, is closed.

Follow the instructions to install **AKVIS Retoucher** in Mac OS X:

- Open the virtual disk **dmg**:
  - **akvis-retoucher-app.dmg** to install the **Standalone** version
  - **akvis-retoucher-plugin.dmg** to install the **Plugin** to your image editor.
- Read the **License Agreement** and press **Agree**, if you agree with the conditions.



- **Finder** will open with **AKVIS Retoucher** application or **AKVIS Retoucher PlugIn** inside.



- To install the **Standalone** version just drag the **AKVIS Retoucher** application into the folder **Applications** (or any other place you like).

  To install the **Plugin** drag the entire **AKVIS Retoucher PlugIn** folder into the **Plug-Ins** folder of your graphic editor.

  For example:

  If you use **Photoshop CS6**, move the plugin into **Applications/Adobe Photoshop CS6/Plug-ins**.

  To add the plugin to **Photoshop CC**, copy it into **Applications/Adobe Photoshop CC/Plug-ins**.



After installation of the Retoucher plugin, you will see a new item in the Filter/Effects menu of your photo editor: **AKVIS -> Retoucher**. Please use this command to launch the plugin in the editor. For example, in Photoshop select in menu: **Filter - AKVIS - Retoucher**.

The standalone version is run by double-clicking on the application.

HOW TO REGISTER AKVIS SOFTWARE

To buy a license you should fill in the form on the product buy-page and order the software using a secure payment system. We offer a number of payment options (credit card, bank transfer, etc). When the form is filled in and the payment is made, the serial number will be sent to you within minutes.

Having received the serial number you can proceed to the program registration.

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).

Follow the steps below to register the program:

- Open the window **About the program** of **AKVIS Retoucher**.



This window appears when you launch **AKVIS Retoucher**. You can also see this window by pressing the button in the program. Also, **Adobe Photoshop** lets you call the **About the program** window right from its menu **Help -> About Plug-In -> Retoucher** (**Photoshop -> About Plug-In -> Retoucher** in Macintosh).

Note that the functionality of the program depends on the license type. During the **test period** you can try all options and choose the license you like. For this select in the window **About the program** one of the offered functionality types: **Home**, **Deluxe** or **Business** (below these is a brief description of the features of the license types). Your choice of license will affect which features are available in **AKVIS Retoucher**.

The button **Buy** redirects you to the order page, where one can continue to choose a program or proceed to registration.

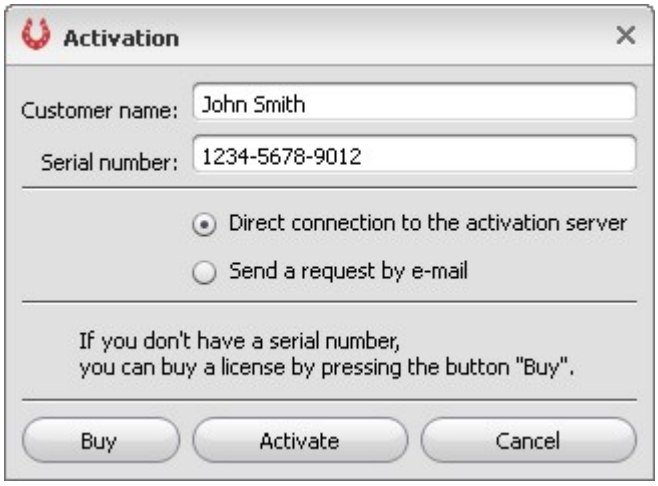
If you have a **Home** license you can improve it (for example, upgrade to **Home Deluxe** or **Business**) any time by paying the price difference. Click on the **Upgrade** button (it appears instead of **Buy** if the program is registered).

Please consult the comparison table for more details about license types and versions of the program.

- Click on **Activate** in the window **About the program** 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 mail.

  We recommend activating the program using direct connection, as it is the easiest way. At this step your computer must be connected to Internet.

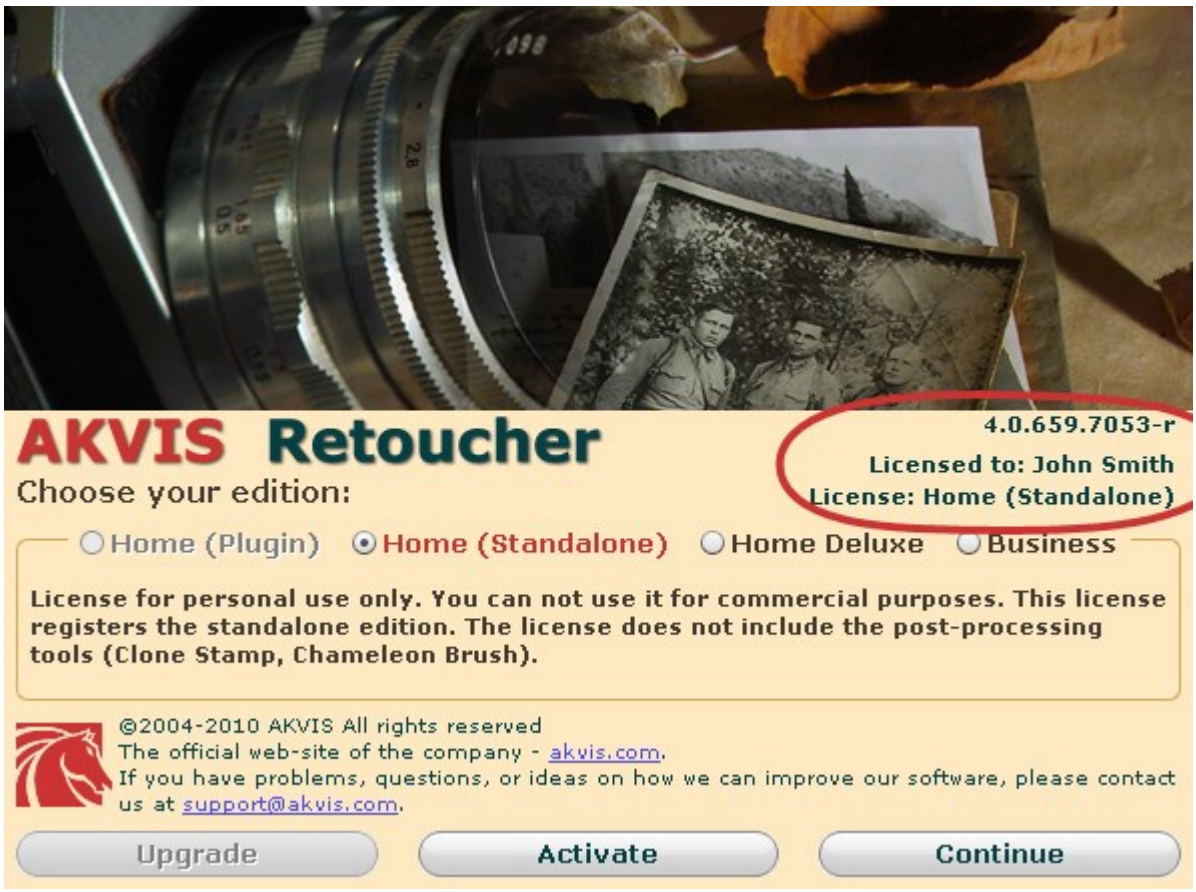
  If you choose activation via email please put the lic-file into the folder AKVIS in Users' Shared (Public) Documents, and the program will be registered.



- Press the button **Activate**.

  The registration is completed.

  You can start working with the photo editing software and building your unique photo collection.



Note: In case you have chosen **activation by mail**, you should put the file **Retoucher.lic** (that you will receive enclosed in the e-mail) into the folder **AKVIS** in **Users' Shared (Public) Documents**:

- **Windows Vista, Windows 7, Windows 8**:

Users\Public\Documents\AKVIS;

- **Windows XP**:

  Documents and Settings\All Users\Documents\AKVIS;

- **Mac OS X**:

  Users/Shared/AKVIS *or* a user's home folder.

Do not try to open the license file (it won't work), just copy it!

If your computer is not connected to Internet

If your computer can not be connected to Internet, follow the instructions below:

- Choose the option **Send a request via e-mail** as a method of activation. Your mailing program will create an activation letter with all necessary information.
- Save the message to a USB stick and transfer to the computer connected to Internet. Send us this information.

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

  We need your serial number for the software, HardwareID of your computer, and your activation name.
- We will generate your license file (**Retoucher.lic**) and will send it to you.
- Save the **.lic** file to a USB stick and move it to your computer where you want to register the software.

  Put the file in the folder **AKVIS** in **Users' Shared (Public) Documents** (*see above*).

IMAGE RESTORATION SOFTWARE

AKVIS Retoucher is an efficient program for photo restoration and photo retouching.

The functionality of the program depends on the license type. During the evaluation period you can try all options and choose the license you like.

License Comparison:	**Home** (Plugin)	**Home** (Standalone)	**Home Deluxe** (Plugin+Standalone)	**Business** (Plugin+Standalone)
Purpose				
non-commercial use	✓	✓	✓	✓
commercial use	–	–	–	✓
Edition				
Plugin	✓	–	✓	✓
Standalone	–	✓	✓	✓
Features				
Automatic Restoration	✓	✓	✓	✓
Selection and Retouching Tools	✓	✓	✓	✓
Post-Processing Tools	–	–	✓	✓
Import/Export Files: *.retouch (Selection)	✓	✓	✓	✓
Batch Processing	✓	✓	✓	✓
Print	–	✓	✓	✓
EXIF, IPTC	–	✓	✓	✓
Color Space				
RGB	✓	✓	✓	✓
CMYK	✓	✓	✓	✓
Lab	✓	✓	✓	✓
Grayscale	✓	✓	✓	✓
8 / 16 bits	✓	✓	✓	✓
32 bits	✓	✓	✓	✓
Image Format				
TIFF	✓	✓	✓	✓
JPEG	✓	✓	✓	✓
BMP	✓	✓	✓	✓
PNG	✓	✓	✓	✓

RAW	✓	✓	✓	✓
DNG	✓	✓	✓	✓
PSD	✓	–		
OS				
Windows	✓	✓	✓	✓
Mac OS X	✓	✓	✓	✓
10-days trial	✓	✓	✓	✓
Price	**$ 87 - € 67**	**$ 87 - € 67**	**$ 98 - € 75**	**$ 154 - € 118**

WORKSPACE

AKVIS Retoucher is available as a standalone program as well as a plug-in for graphics editors.

- *Standalone* is an independent program; you can open it by clicking on the program's icon.

  To launch the standalone version, run the program directly:

  On a Windows computer - select it from the **Start** menu or use the program's shortcut.

  On a Macintosh computer - launch the app from the **Application** folder.

- *Plugin* is an add-on for a photo editor, for example for Photoshop.

  To call the plugin, select it from filters of your image editing program.

The workspace view depends on which editing mode is chosen in the **Control Panel**: **Express** or **Advanced**.

In **Express** mode, the program's interface is extremely simplified, with a minimal set of tools designed to quickly achieve a satisfactory result.



AKVIS Retoucher Workspace (Express)

In **Advanced** mode, all options and tools are available.



AKVIS Retoucher Workspace (Advanced)

Most of the program's workspace is taken up by the **Image Window**, above which is the **Control Panel** with the following controls:

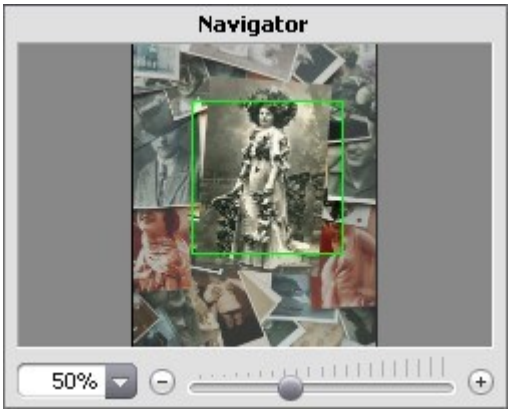
- The button  opens the home page of **AKVIS Retoucher**.
- The button  (only in the standalone version) opens the image which will be edited. The hot-keys are `Ctrl`+`O` on Windows, ⌘+`O` on Macintosh.

  Right mouse click on this button displays the list of recent files. You can change the number of recent documents in the program's **Preferences**.
- The button  (only in the standalone version) saves the edited image to a file. The hot-keys are `Ctrl`+`S` on Windows, ⌘+`S` on Macintosh.
- The button  (only in the standalone version) is used to print an image. The hot-keys are `Ctrl`+`P` on Windows, ⌘+`P` on Macintosh.
- The button  lets posting pictures from the program to the social networks: Facebook, Twitter, Flickr, Tumblr, Google+.
- The button  loads selected areas that have been saved to a file (**.retouch**).
- The button  saves selected areas to a separate file in the **.retouch** format.
- The buttons  show/hide selected areas.
- The button  opens the **Batch Processing** dialog to automatically process a series of images.

- The button cancels the last action. If it is pressed multiple times, it will cancel several previous actions. This can also be activated with the keyboard, by pressing Ctrl+Z on Windows, ⌘+Z on Macintosh.
- The button restores an action cancelled by .
  An action can also be restored with the keyboard, by pressing Ctrl+Y on Windows, ⌘+Y on Macintosh.
- The button begins the restoration process. The hot-keys are Ctrl+R on Windows, ⌘+R on Macintosh.
- The button (only in the plug-in) applies the processing result and then closes **AKVIS Retoucher**.
- The button shows information about the program.
- The button opens the program's help files. The hot-key is F1.
- The button opens the **Preferences** dialog box.

To the left of the **Image Window** there is the **Toolbar**. Different tools will appear, depending on the workspace mode **Express / Advanced** chosen. The tools' parameters are shown in the **Settings Panel** or in a pop-up box after right-clicking in the image window.

Navigate and scale the image using the **Navigator**. In the **Navigator** you can see the reduced copy of the image. The frame shows the part of the image that is now visible in the **Image Window**; the areas outside the frame will be shaded. Drag the frame to make other parts of the image visible. To move the frame, bring the cursor inside the frame, press the left mouse button and, keeping it pressed, move the frame in the **Navigator**.



Navigator

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 on Windows (⌘ on Macintosh) key pressed – to the left/to the right, by keeping the Alt (Option on Mac) key pressed – scale the image. Right-click on the scroll bar to activate the quick navigation menu.

Use the slider or the buttons ⊕ and ⊖, to scale the image in the **Image Window**. When you click on the ⊕ button or move the slider to the right, the image scale increases. When you click on the ⊖ button or move the slider to the left, the image scale reduces.

You can also change the image scale by entering a new coefficient into the scale field. The fall-down menu shows some frequently used coefficients.

You can use hot-keys to change the image scale + and Ctrl++ (⌘++ on Mac) to increase the image scale and - and Ctrl+- (⌘+- on Mac) to reduce the scale.

Under **Navigator** is the **Settings Panel** with parameters for the algorithm and tools.

Under the **Settings Panel** you can see **Hints** for the parameters and buttons when you hover over them with the cursor.

HOW IT WORKS

To retouch photos using **AKVIS Retoucher**, follow these steps:

- **Step 1.** Open the image, which needs to be restored or edited, from which unnecessary details and defects need to be removed.

  - If you work with the standalone version:

    Run the standalone program **AKVIS Retoucher**.

    To open an image in the program, you can double-click in the empty workspace of Retoucher, or drag the image into the workspace, or press  on the Control Panel. The program supports **RAW**, **JPEG**, **PNG**, **BMP**, and **TIFF** file formats.

  - If you work with the plugin:

    Run your photo editor. The Retoucher plugin is compatible with Adobe Photoshop, Adobe Photoshop Elements, Corel Paint Shop Pro, and many other image editors.

    Open an image in your photo editor by calling the command **File -> Open** or using the keyboard shortcut `Ctrl`+`O` on Windows, ⌘+`O` on Macintosh.

    Then call the **AKVIS Retoucher** plugin in the Filter/Effects menu of the photo editor. Choose the command **Filter –> AKVIS –> Retoucher** in **Adobe Photoshop**; **Effects –> Plugins -> AKVIS –> Retoucher** in **Corel PaintShop Photo Pro**; or **Effects –> AKVIS –> Retoucher** in **Corel Photo-Paint**.

    Note: Selections made in the graphics editor will be transferred to the plug-in.

- **Step 2.** The first time the program starts it will be in **Express** mode, with a simplified interface and a minimal set of tools designed to quickly achieve a satisfactory result.



AKVIS Retoucher Workspace ("Express" Mode)

Experienced users can work in the advanced editing mode. Switch to this mode by clicking **Advanced** in the **Control Panel**: the interface's appearance will change, providing access to the full functionality of the program.



AKVIS Retoucher Workspace ("Advanced" Mode)

- **Step 3.** Mark the areas of the image which need to be retouched. It might be a scratch, text, or a small object which needs to be removed. Selections made in the graphics editor are transferred to the plug-in.

  You can use the following tools to make a selection: **Selection Brush**, **Exclusion Tool**, **Eraser**, **Selection Bucket**, and **Magic Wand**.

  The selected areas will be highlighted in red.



Defects Marked

You can save your work on a selection to a file (in **.retouch** format) with the button. You can then load this selection at any time by pressing the button.

- **Step 4.** When working in **Advanced** mode, selection areas can be processed further using the tools **Linear Retouch** and **Patch** .

  More about using these tools can be learned from these examples.

- **Step 5.** Press to start reconstructing the image. The hot key for this operation is `Ctrl`+`R` (`⌘`+`R` on Macintosh).

  If you are not satisfied with the result, you can make correct the selection areas or adjust the algorithm's parameters in the **Settings Panel** and start processing the image again.

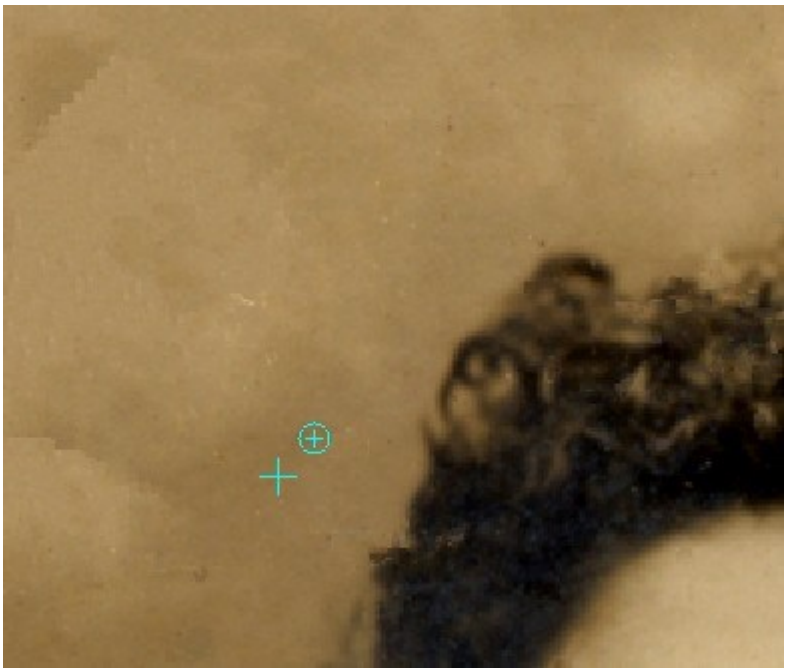
  The result will immediately begin to appear after processing has started. If you are sure that the result will not turn out as you would like, you can interrupt processing by clicking on the **Cancel** button, which is located to the right of the progress bar, then make changes to the parameters and start processing again by pressing .

  > **Note:** In **Advanced** mode you can use **Local Run** to focus more clearly on individual selections in the image. Press `L` to quickly access this tool. Processing begins after you click on an individual selected area. You can work step by step, selection by selection, fine-tuning the parameters to restore each selection more effectively. This is useful when you want to remove a large, complex object. If the processing result is not entirely successful, it is possible to undo the change with the / buttons and make a correction (for example, remove unnecessary fragments, change the selection or the algorithm's parameters, apply a patch, etc.)



Result of Automatic Processing

- **Step 6.** Those using the Home Deluxe and Business have the opportunity to perform post-processing with the tools **Clone Stamp**, **Chameleon Brush**, and **Spot Remover**.



Post-Processing with the Clone Stamp

- **Step 7.** Save the resulting image.

  - When using the standalone:

    Press the button and in the **Save Image** dialog window, type a name for the file,

select a format (**TIFF**, **BMP**, **JPEG** or **PNG**), and choose a folder in which to save the file.

- When using the plug-in:

Press the button to apply the result (in the plug-in only). The **AKVIS Retoucher** plug-in's window closes, and the image is returned to the graphic editor's window.

Open the save file dialog **File -> Save As** in the graphics editor, type a file name, specify a file format and choose a folder, in which to save the file.



Result

In the standalone version of **AKVIS Retoucher** it's possible to print the resulting image. To do this press the button, set the printing options and press the **Print** button.

TOOLBAR

The **Toolbar** in **AKVIS Retoucher** contains groups of tools used to select defects and retouch images. The tools parameters can be adjusted in the **Settings Panel**, or in a pop up window which appears after right-clicking in the image.

You can quickly change the brush size with the [and] keys.

To draw a straight line, select a starting point by clicking the left mouse button, then, while holding down Shift, drag the cursor with the mouse to a new location on the image, click the left mouse button again and release Shift. If Shift is not released, a new line will be drawn to each point where the left mouse button is clicked.

The tools are divided into four sets. Different tools are visible, depending on the workspace mode **Express**/**Advanced** chosen.

Selection Tools:

- The **Selection Brush**  is used to highlight areas and details that need to be retouched. The transparency of lines made with the brush can be changed in the **Preferences** dialog. Press B to quickly access this tool.

  If the **Keep Exclusion Area** is activated, the brush can not draw in excluded areas.

- The **Exclusion Tool**  is used to protect areas. Parts of the image marked by this tool will be excluded from the area used for calculation. You can use this tool to mark areas adjacent to a selection to prevent them from being cloned.

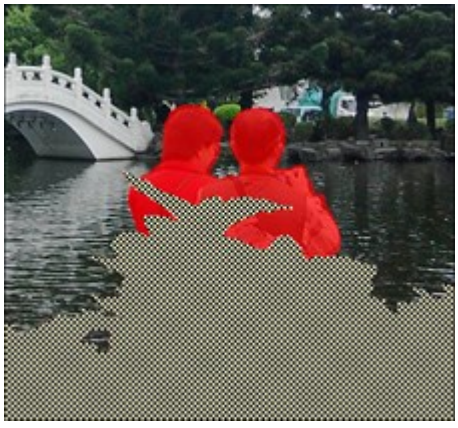
  If the **Keep Selection** check box is activated, the tool can not draw in selected areas.



Original Image



Selection



Area to be excluded is marked



Area is excluded from reconstruction



Result without using the exclusion tool



Result when exclusion tool is used

- The **Eraser** erases lines. Press E to quickly access this tool. The following modes can be selected:

  - erase all lines;
  - erase only selection area;
  - erase only exclusion area.

- The **Selection Bucket** fills an area outlined with the **Selection Brush** (useful for selecting large areas).

- The **Magic Wand** selects all pixels of the same color. When the value of **Tolerance** is increased, more colors are included in the selected area.

  If the **Contiguous Mode** check box is activated, only adjacent pixels of the same color are selected. If it is deactivated, all pixels the same color throughout the image will be selected. This tool is useful for selecting one color objects, text, etc.

Manual Processing Tools:

- **Linear Retouch** allows you to restore the background in a specified direction: for example, to align the junction of areas or preserve the smooth edges of an object. Lines should be drawn as long as possible, into the red zone or across it.

  Parameters:

  Gradient. If this check-box is activated, areas between the beginning and the end of the line will be restored evenly, with a smooth transition between one part of the image and another. If this is not the result you want, deactivate the check box.



Original Image



Linear Retouch
(Smooth Transition)



Restoration from left to right
('Gradient' Check Box Not Activated)



Restoration from right to left
('Gradient' Check Box Not Activated)

Zone of Influence affects the width of the area which is restored. The higher the value, the wider the restored area will be.



Original Image



Selection



Result without
Linear Retouch



Zone of Influence = 2



Zone of Influence = 8



Result using
Linear Retouch

Search Distance affects the size of the area from which fragments are taken, which are used to restore along a line. A large value increases processing time and may lead to the capture of unwanted fragments.



Original Image



Selection



Search Distance = 1



Search Distance = 5



Result without
Linear Retouch



Result with
Linear Retouch

- **Patch** restores by copying similar square fragments from other parts of the image. To apply a patch, bring the cursor over the appropriate area, hold down the left mouse button, then drag the clone into the red area.

  Parameters:

  Patch Size affects the size of the patch used in restoration.



Patch Size = 15



Patch Size = 50

- **Local Run** is used to process selected areas of the image individually. Processing begins by clicking on a selected area. You can focus more clearly on individual selections, fine-tuning the parameters to restore each selection more effectively. Press L to quickly access this tool.

Post-Processing Tools (available for Home Deluxe and Business licenses):

- **Spot Remover** removes small imperfections on an image: stains, dust, etc. You can also use it to retouch portraits, it looks like it "heals" skin problems. Just click with the tool on the defect. Press O to quickly access this tool.
- **Clone Stamp** copies parts of an image from one area to another while preserving the cloned area's original color palette, shadows, textures, lighting, and other characteristics. The hot-key

for the tool is S.

- **Chameleon Brush** copies parts of an image from one area to another, while taking into account the color palette, shadows, textures, lighting, and other characteristics of the background, onto which the clone is placed. Unlike the **Clone Stamp**, this tool preserves the texture of the image. The hot-key is H.

  To duplicate an object, select an area to be cloned by holding down Alt on Windows or Option on Macintosh.

  To remove a part of the clone, press the Ctrl-key on Windows / ⌘ on Macintosh, and keeping it pressed draw over the area.

  Tools' options:

  You can change the **Tool Size** (diameter of the brush).

  For **Clone Stamp** it's possible to adjust **Hardness** that defines blurriness of the fragment's edges.

  For **Clone Stamp** and **Chameleon Brush** you can select the cloning method using the **Aligned** option. When the check-box is activated, a single clone will be created using information from around the selected source: in this case each time the left mouse button is pressed a clone will be selected from the relevant area. When the check-box is disabled, each time the mouse button is released the cursor returns to the source area, and new clone fragments are created from the same area.



Left: Aligned check-box is disabled Right: Aligned check-box is enabled

It's also possible to mirror a clone horizontally and/or vertically:

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

Flip Vertical. This option mirrors a clone by turning the image upside down.



Mirror Image

Additional Tools:

- **Hand** lets you scroll the image when it does not fit within Image Window at the desired scale. To use it click on the button, bring the cursor over the image, and while keeping the left mouse button pressed move in the desired direction.

  Double-clicking on the tool's icon on the Toolbar makes the image fit the window.

- **Zoom** lets you change the image's scale. To zoom in left click on the image. To zoom out left click with `Alt` on the image. The hot-key is `Z`.

  Double-clicking on the tool's icon makes the image scale to 100% (actual size).

THE ALGORITHM PARAMETERS

AKVIS Retoucher is an efficient photo restoration program. The work is done automatically - just select areas to be restored and click the button .

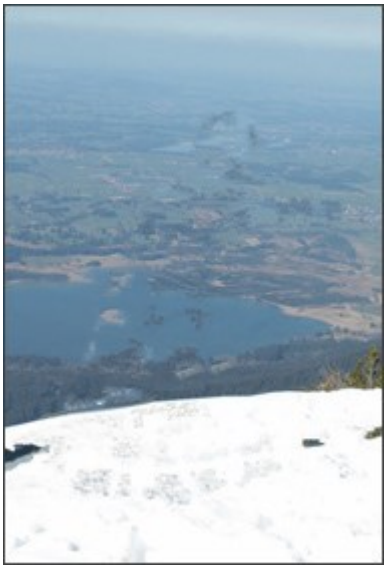
The program reconstructs selected parts using samples from surrounding areas.

You can adjust the algorithm parameters:

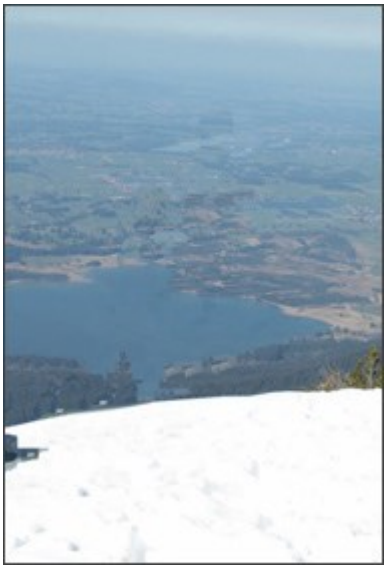
- **Sample Size** (0-16) affects the size of sample fragments. At higher values of this parameter, more of the background's texture is preserved, but image detail appears coarser.



Original Image



Sample Size = 3



Sample Size = 14

- **Sample Number** (1–50) affects the number of sample fragments taken from surrounding areas and used in reconstruction. They are chosen randomly. At higher values, more of the background's texture is reconstructed, but processing time increases.



Original Image



Selection



Sample Number = 1



Sample Number = 50

- **Search Radius** (16-250) affects the size of the area used to search for sample fragments used in reconstruction. The higher the value, the longer reconstruction takes. If the radius is too large, sample fragments from remote areas of the image could be chosen, which would not be suitable in reconstruction.



Original Image



Selection



Search Radius = 30



Search Radius = 220

- **Smoothing** Check Box. This mode reduces the transition between fragment edges. It's helpful if edges are similar in texture but not in color. If the check box is deactivated there is no alignment.



Original Image With Selection | 'Smoothing' Check Box Deactivated | Reconstruction and Smoothing

- **Fast Processing** Check Box. When this check box is activated, processing speed is increased by simplifying the original image. This is useful in most cases and allows you to quickly get a good result.



Original Image | Selection



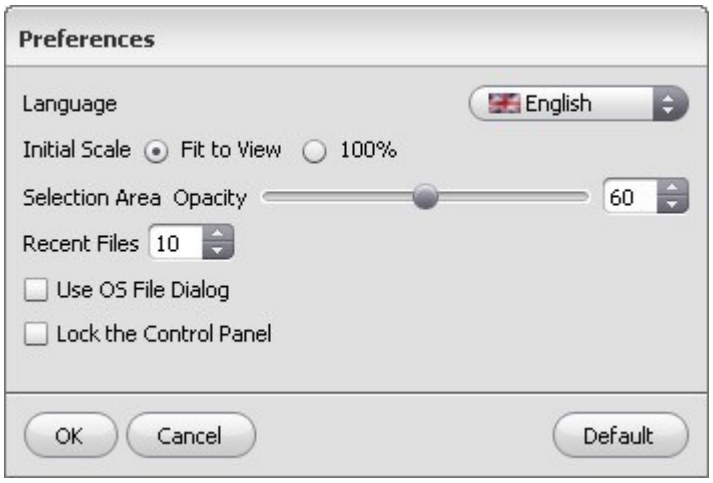
Result After Full Processing | Result After Fast Processing



Original Image With Selection Result After Full Processing Result After Fast Processing

PREFERENCES

Open the **Preferences** dialog by pressing on . The dialog window looks like this:



- **Language**. To switch the interface language, select another language from the drop down list.
- **Initial Scale**. This parameter affects how the image will appear in the program when you first open it. The parameter can have one of two values:

  - If the parameter is set to **Fit to View**, the image will be scaled so that it will fit completely within the **Image Window**;

  - If the parameter is set to **100%** the image will not be scaled. In most cases, when an image is opened at 100% scale the entire image will not fit within the **Image Window**.
- **Selection Area: Opacity**. The parameter allows you to adjust the opacity of the color used when a selection is created.
- **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.
- **Use OS File Dialog** check-box. You can check this option if you want to use the System Open/Save Dialog. By default, the AKVIS File Dialog is used.
- **Lock the Control Panel** check-box. It disables the possibility to hide/show the top panel. If the check-box is selected 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.

To apply changes made in the **Preferences** window press **OK**.

If necessary, you can return to the default settings by pressing **Default**.

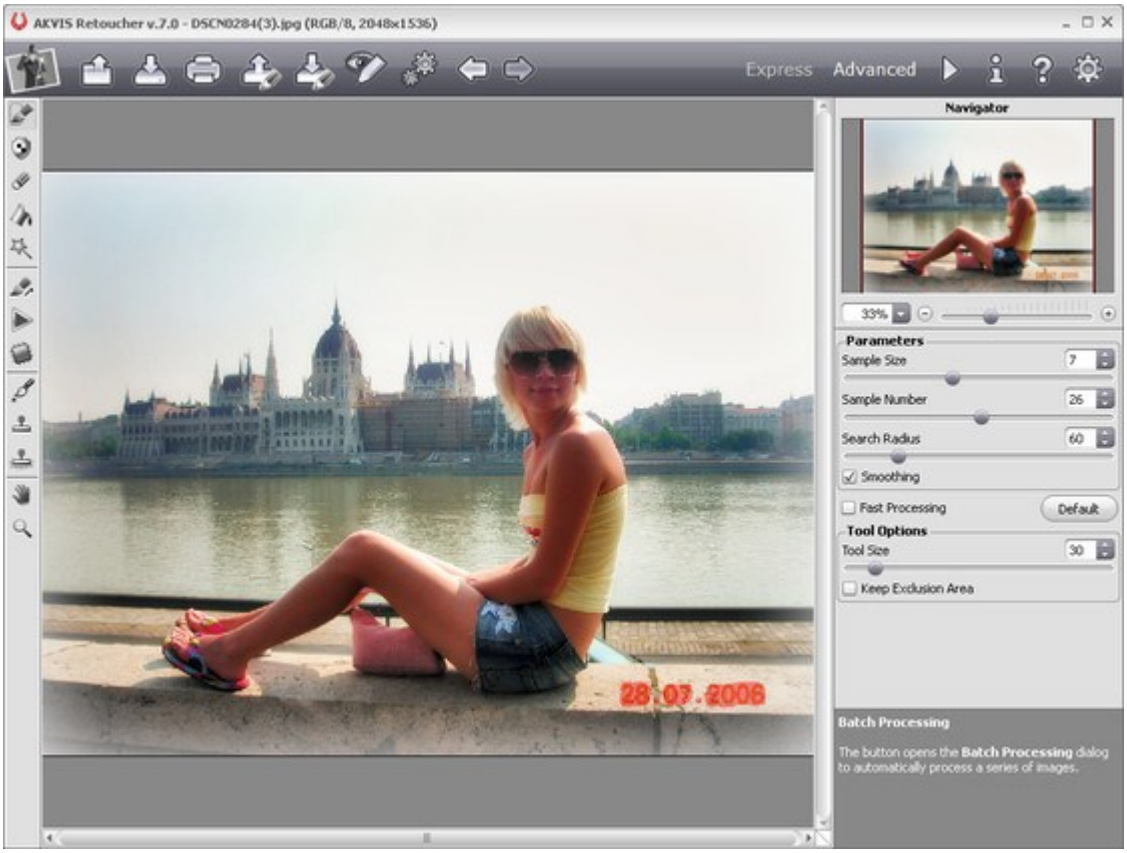
BATCH PROCESSING

AKVIS Retoucher supports **batch processing** that lets you automatically process a series of images. This feature is useful when retouching a lot of photos with similar defects or with the same date stamp.

It's possible to use batch processing in both (standalone and plugin) versions of **AKVIS Retoucher**, the steps are the same:

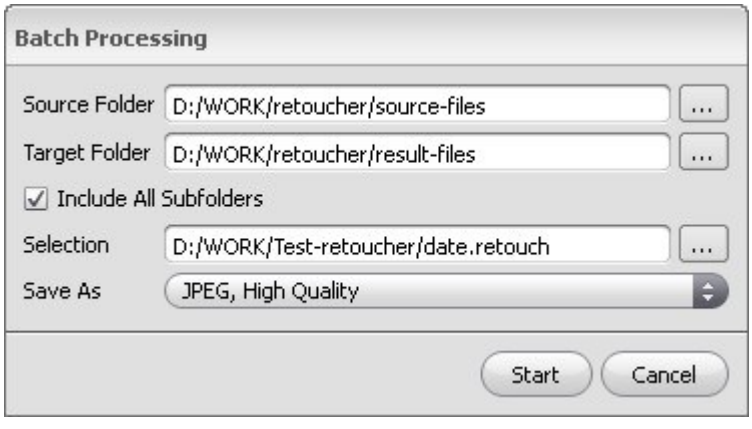
- **Step 1.** Using the selection tools of **AKVIS Retoucher** mark the areas with the defects. These areas will be retouched in all photos in the selected folder.

  Save the selection to a **.retouch** file by clicking on .



AKVIS Retoucher Window with Marked Defects

- **Step 2.** Adjust the parameters. These settings will be applied to all photos in the folder.
- **Step 3.** Click on the button  in the **Control Panel** to open the **Batch Processing** dialog window.



In the **Source Folder** field choose the folder which contains the photos to be processed.

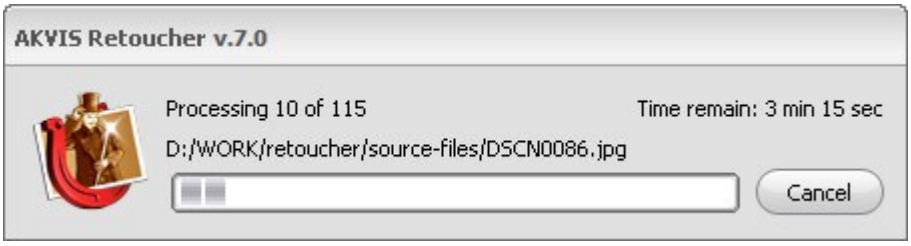
In the **Target Folder** choose the folder where the processed photos will be saved. You can

check **Include All Subfolders** to process all images in all subfolders of the selected folder (keeping the structure).

Choose a **.retouch** file with the selection.

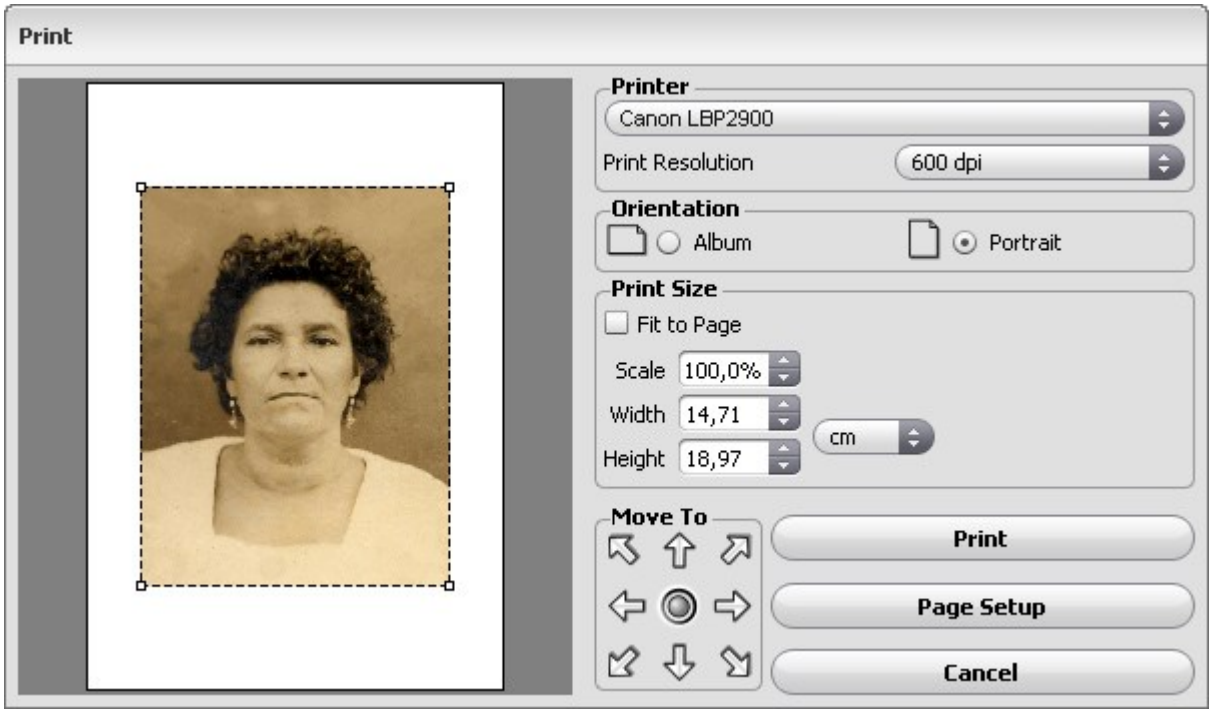
In the **Save As** list specify the file format and quality level for the images.

- **Step 4.** Press **Start** to begin batch processing of the photos.



PRINT IMAGES IN AKVIS RETOUCHER

The standalone version of **AKVIS Retoucher** lets you print the image. Just press the button on the **Control Panel**. The **Print** dialog box will be opened.



Print dialog box in AKVIS Retoucher

The left part of the **Print** dialog box is the preview area where the current position of the image on the page is shown. On the right side of the dialog window the following print settings can be adjusted:

- **Printer**. If your computer is connected to a local network with many printers or if it is connected to many output devices itself, you will need to choose one of the available printers to print your image. Choose the desired print resolution from the **Print Resolution** drop-down list. The available choices will be based on those available for the printer you have chosen.
- **Orientation** of the printed image. There are two types of orientation available - **Album** and **Portrait**. **Album** corresponds to the horizontal page orientation (width is greater than height), while **Portrait** - corresponds to the vertical orientation of the paper.
- **Print Size**. To change the size of the printed image, adjust the parameters **Scale**, **Width**, **Height** and **Fit to Page**. These parameters have no effect on the image itself, just on the printed version. You can change the size of the printed image by entering any value in % (any value less than 100% will result in a smaller print size, and any value larger than 100% - will result in a larger print size), or by entering new values in **Width** and **Height**. If you want the size of the image to be adjusted to the paper size, then just select **Fit to Page**.
- **Move To**. Choose the position of the image on the page by clicking on one of the the eight arrows.

  The **size** of the printed image and its **orientation** can also be selected manually. A frame with markers is displayed around the image in the preview window. To change the size of the image move the cursor to one of the corner markers or to a side (the cursor changes in shape to a double sided arrow) and drag the marker or side. To change the position of the image on the page, bring the cursor over the image, press the left mouse button, and move the cursor.

Clicking the **Page Setup** button opens a dialog window in which you can choose the size of the paper and its orientation, as well as the print margins. To print an image with the chosen parameters, press the **Print** button. To cancel and close the printing dialog window press the **Cancel** button.

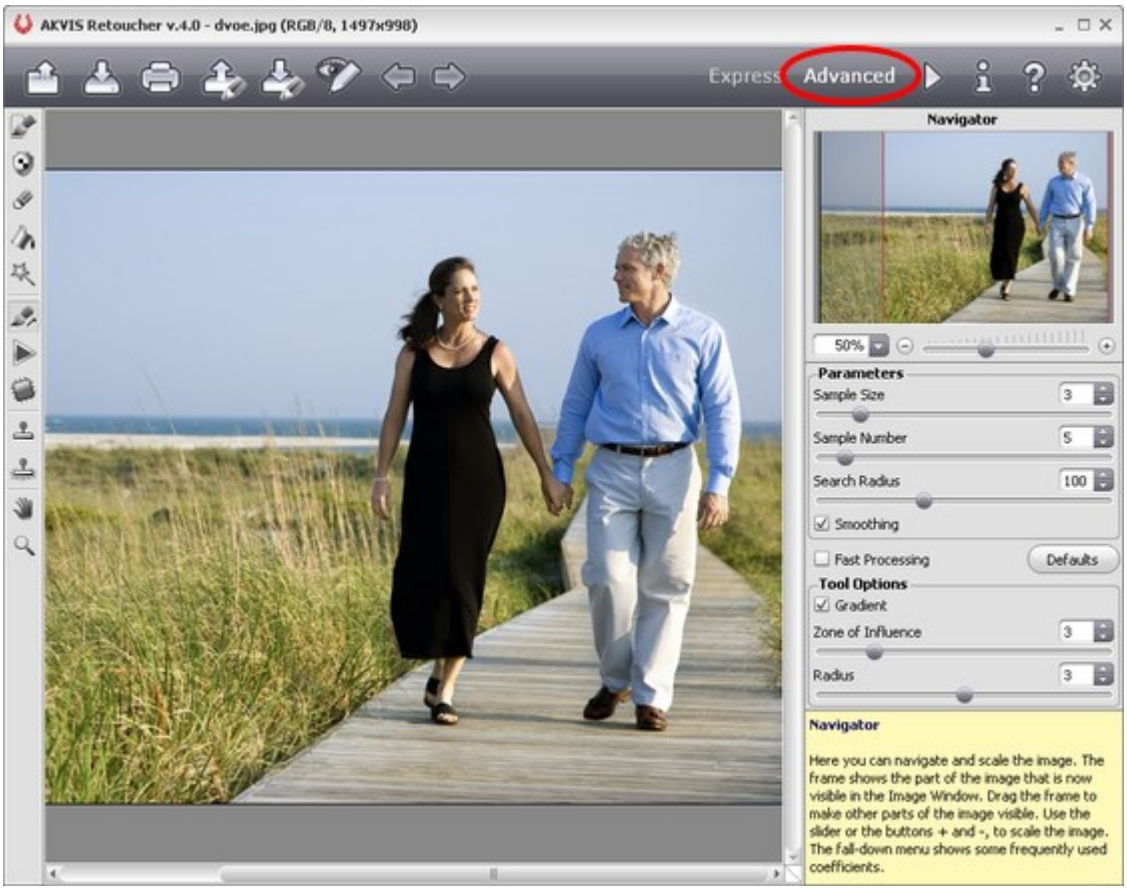
REMOVING LARGE OBJECTS

AKVIS Retoucher offers two types of processing for photographs: retouching (eliminating defects and scratches) and removing objects. The sequence of actions involved in both cases is different: retouching is mainly performed through automatic processing, while when removing large objects, part of the work is done manually and requires learning how to use the **Linear Retouch** and **Patch** tools.




The following are general suggestions for removing a large object. At any stage you can undo changes with the / buttons, make adjustments and then process the image again.

- **Step 1.** Open the image in **AKVIS Retoucher**, and switch to **Advanced** mode.



AKVIS Retoucher Workspace

- **Step 2.** Select the object which you want to remove (along with any shadows or reflections).



Selecting the Object

- **Step 3.** Use the **Linear Retouch** tool to restore the main lines of the background through the image. Linear Retouch allows you to restore the background in a specified direction: for example, to align the junction of areas or preserve the smooth edges of an object. It is also useful for breaking a large object into smaller pieces, making it easier to remove.



Direction of Lines

Draw lines as long as possible, through the red zone and beyond it. Once a line is drawn, the fragments along it are immediately restored:



After Using Linear Retouch

- **Step 4.** Use the **Patch**  to fill in the red zone with samples from the image which are the best suited for restoring the background.



Select a fragment for the patch



Place the fragment in the red zone



Result

Placing more patches in heterogeneous areas produces a better result, such as for an area covered in grass. Fewer samples would need to be placed in a homogeneous area, such as the sky.



Filling with Patches

It's better to use the **Linear Retouch** tool over the walkway, since it has a pronounced banded pattern.



Using Linear Retouch on the Walkway

The area around the path now looks like this:



After Linear Retouch Has Been Applied

- **Step 5.** Use the **Linear Retouch**  to connect all patches and divide the selection into homogeneous fragments. You can draw small lines through fragments.



Dividing Fragments

- **Step 6.** Use **Local Run**  to restore individual fragments, starting with those at the edges of the object to be removed. Processing is started by clicking on a fragment. Parameters for each selection can be adjusted in the **Settings Panel**.

  Why process the selection in fragments? When full processing (with the  button) is applied, all of the fragments are processed at the same time. It's a long process in which samples are taken from areas adjacent to the selection, so they may not be best suited for properly restoring the entire selection. Therefore, areas processed in this manner will tend to appear rougher.

  When you use the Local Run tool, samples are taken not only from the original background but also from newly restored areas adjacent to the fragment, allowing the background to be restored more gradually and accurately. Each fragment can be processed selection by selection. Therefore, the overall result depends on the order in which selections are processed.



Processing Selection by Selection

If a fragment was processed unsucessfully, press the button and readjust the settings (or add more patches). If it is difficult to find suitable parts of the background for patches, you can select from restored areas.



Adding Patches

This is the result after all areas have been processed.



After Using Local Run

- **Step 7.** Perform post-processing on the image, to remove seams and other irregularities in restored areas. This can easily be done with the **Clone Stamp** and **Chameleon Brush** (which are available in the Home Deluxe and Business versions of the program).

  If your version does not have these tools, you can select any remaining defects as done in previous steps and process the image again.

  Now the figures have been removed from the picture.



Restoration Result

- **Step 8.** Save the resulting image.

RESTORATION OF AN OLD FAMILY PHOTO

Take a look at the old scanned photo and the result of restoration in **AKVIS Retoucher**.




This old photo is considerably damaged. We will restore this photo in two stages. At the first stage we will apply automatic processing in **AKVIS Retoucher** that will perform the preliminary work of removing most scratches and making big scratches less visible. At the second stage we will retouch the remaining defects with the post-processing retouching tools.



- **Selection of the damaged area**

  First of all, we should paint over all scratches and the inscription on the child's shoulder using the **Selection Brush**  in **AKVIS Retoucher**.

  We do not paint over the fold line that crosses the photo as it goes across the faces of the mother and child and it can be retouched better manually.



- **Automatic restoration**

  Press the ▷ button to start the photo restoration process. The program reconstructs selected parts of a photo by using information from surrounding areas.

  When Retoucher is through with its job, the photo will look like this:



- **Retouching tools**

  Now you can proceed to the second stage of restoration and retouch minor defects with the post-processing tools: **Clone Stamp** and **Chameleon Brush** . Both are available only in Home Deluxe and Business versions of Retoucher.

  Alternatively, you can remove small defects using **AKVIS MiltiBrush** which offers these and some other useful retouching tools.



The original picture is taken from the School of Art, Design and Art History site — art.sdsu.edu .

LIONESS IN A CAGE: REMOVE IRON RODS

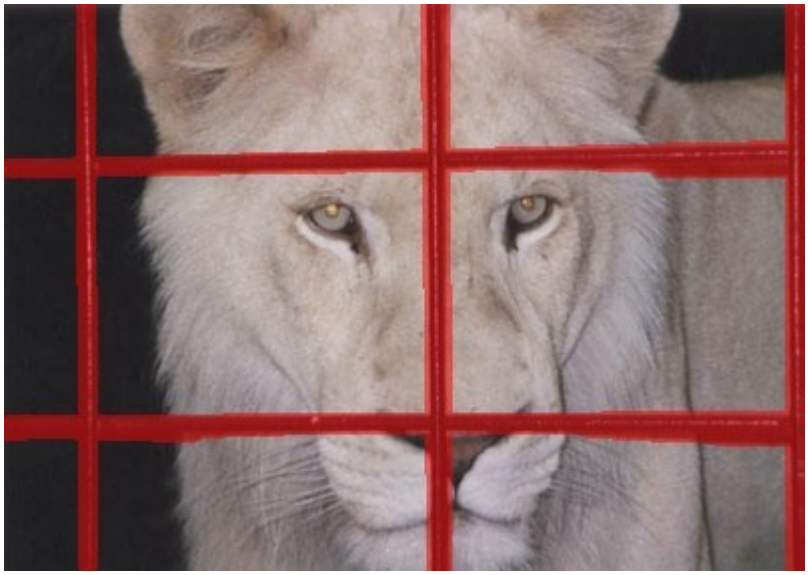
AKVIS Retoucher is efficient for photo restoration tasks. It can be applied to restore old damaged photos or to remove a date stamp or an unwanted object, like a finger that covered the lens when shooting or an irrelevant object that spoils the shot.




This tutorial illustrates the second case: we will use AKVIS tools to remove the cage rods from the photo below.



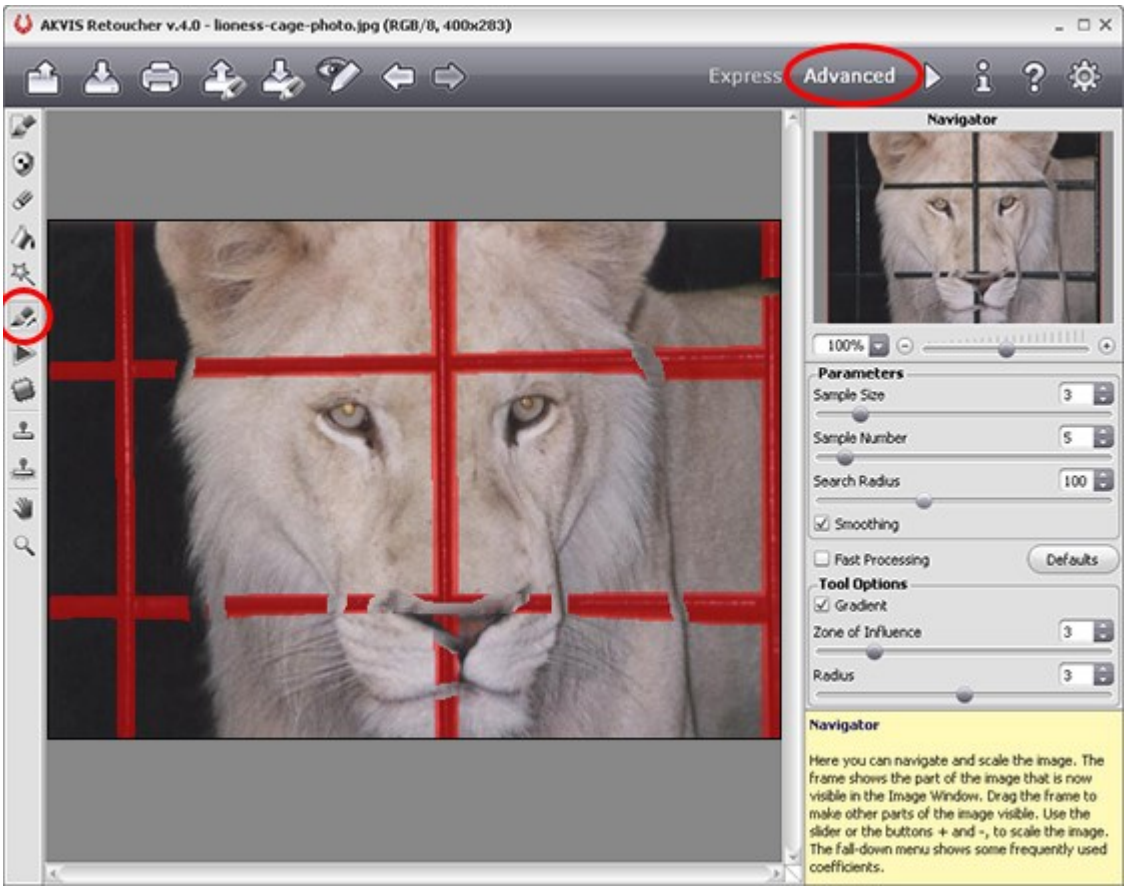
- **Step 1.** Open the image in **AKVIS Retoucher**. Select the bars using the **Selection Brush** . Don't forget to also select their shadows.



- **Step 2.** After starting the retouching process by pressing , the red area (along with the cage's bars) disappears. The image will appear like this:



- **Step 3.** The joint at the bottom does not look correct. The image needs to be processed more accurately. Therefore, press to cancel the previous action. Switch to **Advanced** and choose the **Linear Retouch** tool. Draw a few strokes over places where you want to restore lines:



Process the image by pressing .



- **Step 4.** The processing result, of course, is not ideal: **Retoucher** failed to restore the nose, which was almost completely obscured by the cage's bars. We can use the **Clone Stamp** tool to deal with the incongruities of the fur.

  The **Clone Stamp** repairs damaged areas using cloned fragments from other parts of the photo. Choose a cloning sample by left-clicking on a suitable area while holding `Alt` (`Option` in Macintosh). To apply the clone sample, bring the cursor over the area you want to repair and left click.

  Look at this picture — the cage is gone, the lioness is free, and she even looks happier.



RESTORATION OF A DAGUERREOTYPE

The photo has been sent to us by **Oleg Rakhimov**. It is a daguerreotype of his relative made in 1893.




- **Step 1.** Open the photograph in **AKVIS Retoucher**. We can say, that this daguerreotype was wisely preserved up to our times, so it will require very little retouching: just hiding a few scratches and "growing" the corners.



- **Step 2.** Before the photo can be retouched, all of its damaged areas should be selected. First scale the image, so that it will be easier to see even the smallest scratches, and select them using the **Selection Brush** . Gradually paint over the scratches and missing areas of the picture.



- **Step 3.** Press ▷ to begin the retouching process, and it will become apparent that the red highlighted areas disappear, along with the damage beneath them.

  Here is the result, after the retouching process is complete.



AKVIS PROGRAMS

AKVIS AirBrush — Airbrushing Techniques on Your Photos

(Windows | Mac OS X)

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 ArtSuite — Apply Effects to Your Photos!

(Windows | Mac OS X)

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 — Convert Your Photo Into Painting

(Windows | Mac OS X)

AKVIS ArtWork is photo to painting software, it is designed to imitate different painting techniques (Oil, Watercolor, Gouache, Comics, Pen&Ink, Linocut, Pastel). ArtWork helps you to create a piece of art out of any digital photo.

Create an oil portrait of your friend, a landscape painting or a still life picture. Express yourself in new genres! More...



AKVIS Chameleon — Photo Collage Creation

(Windows | Mac OS X)

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.

Create your own photo collages! More...



AKVIS Coloriage — Add Color to Black and White Photos

(Windows | Mac OS X)

AKVIS Coloriage allows colorizing B&W photos and replacing colors in color photos.

Just indicate the desired colors by the stroke of the brush; the program does the rest of the work: recognizes the object's border and tailors the new color to the grayscale tones of the initial picture. More...



AKVIS Decorator — Resurface and Recolor

(Windows | Mac OS X)

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

(Windows | Mac OS X)

AKVIS Draw converts your photo into a hand made pencil drawing. 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 — Photo Enhancement Software

(Windows | Mac OS X)

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 HDRFactory — Brighter than Reality!

(Windows | Mac OS X)

AKVIS HDRFactory lets you create an HDR image from a series of shots or from one single photo. The program can also be used for photo correction.

AKVIS HDRFactory brings life and color to your photos! More...



AKVIS LightShop — Light and Star Effects

(Windows | Mac OS X)

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 — Change Image Size without Quality Loss

(Windows | Mac OS X)

AKVIS Magnifier helps to resize images without loss in quality.
Whether creating poster-size images, adding resolution for printing an enlargement, or reducing image size, Magnifier will make your prints look sharper and better defined. More...



AKVIS MakeUp — Create Your Ideal Portrait!

(Windows | Mac OS X)

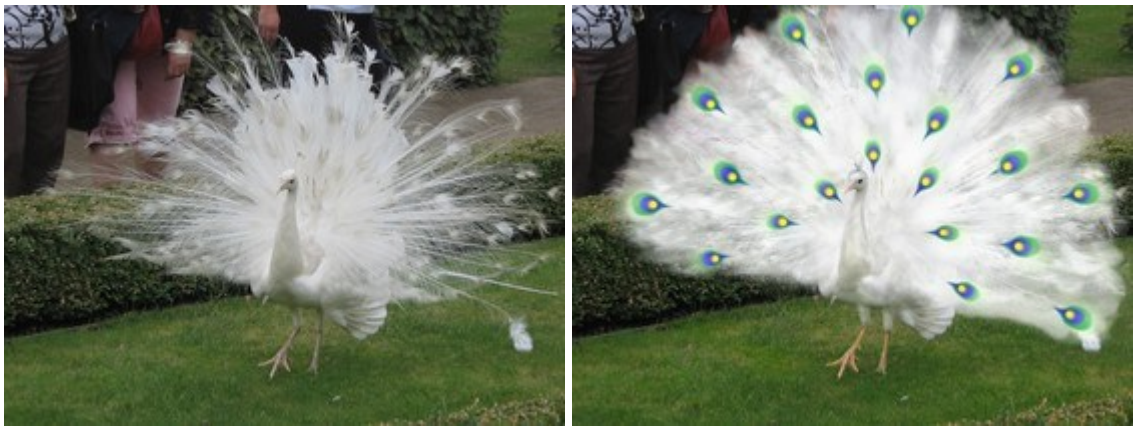
AKVIS MakeUp improves portraits and adds glamour to photos, giving them a professional look. The software lets you retouching small defects on a skin, making it radiant, beautiful, pure and even, as you can see on artistic images. More...



AKVIS MultiBrush — Photo Retouching Made Easy

(Windows | Mac OS X)

AKVIS MultiBrush makes it easy to retouch photos and enhance portraits. Featuring a collection of healing and enhancement brushes, stamping and drawing tools, AKVIS MultiBrush helps artists, photographers and home users to perform portrait enhancement, retouch image flaws and remove unwanted objects from digital pictures, paint funny details on a photo or create an image from scratch. The program offers two sets of tools — Standard and Artistic Brushes. More...



AKVIS NatureArt — Bring Nature To Your Photos

(Windows | Mac OS X)

AKVIS NatureArt is an excellent tool for imitating the magnificence of natural phenomena on your digital photos. Nature effects have an impact on our mood and can be used to strengthen the impression from a picture.

Add dramatic nature effects to your photo, change the weather on it! With NatureArt you can become a wizard! More...

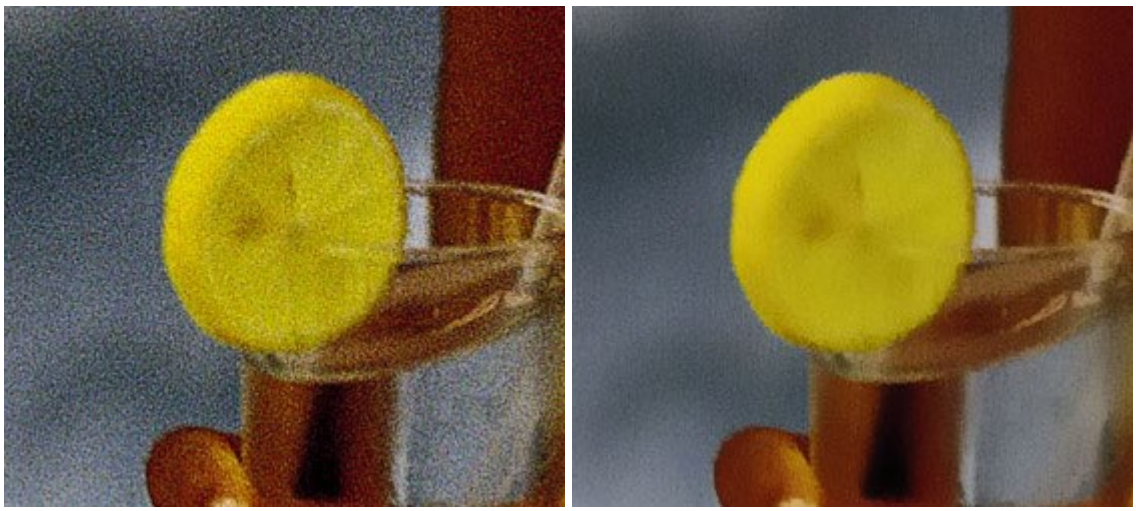


AKVIS Noise Buster — Noise Reduction Software

(Windows | Mac OS X)

AKVIS Noise Buster is software for noise suppression on digital and scanned images.

Digital noise can be seen as artifacts and random red and blue pixels that compromise the smoothness of a photo. The program is efficient against both color and luminance noise. More...



AKVIS OilPaint — Oil Painting Effect

(Windows | Mac OS X)

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 Refocus — Focus Improvement & Blur Effects

(Windows | Mac OS X)

AKVIS Refocus improves sharpness of out of focus images. The program can process the entire photo or bring into focus only the selected part to make the subject stand out against the background. It's also possible to add bokeh and lens blur effects to your photos.

The software works in three modes: Refocus, Tilt-Shift, and Iris Blur. More...



AKVIS Retoucher — Image Restoration Software

(Windows | Mac OS X)

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 — Convert a Photo to a Pencil Sketch

(Windows | Mac OS X)

AKVIS Sketch converts digital photos to amazing pencil sketches and watercolor drawings.

Now you do not need to handle a pencil to feel like an artist. All you need to create your original work of art is good taste and AKVIS Sketch. More...



AKVIS SmartMask — Save Time on Complex Selections!

(Windows | Mac OS X)

AKVIS SmartMask is an efficient selection tool that saves time and is fun to use. Selection has never been so simple!

With AKVIS SmartMask you can considerably increase your productivity! You will be freed from boring work and will have more room for creativity and realization of your ideas. More...

