ABOUT THIS GUIDE

This User Guide is a reference for the Snap selection tool made for Adobe Photoshop and Photoshop Elements. You can read from start to finish or just jump around as you please.

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About Us

Digital Film Tools brings together the unbeatable combination of superior software designers, motion picture visual effects veterans, video editors and photographers. Add three Emmy Awards and experience in creating visual effects for hundreds of feature films, commercials and television shows and you have a recipe for success. The understanding of photography, film and video editing, and in particular visual effects, allows us to design productive and highly specialized software. Software that is useful as well as easy to use. Our products stand up to the rigors of production and are the culmination of many years of experience.

Our philosophy is to bring our visual effects tools and techniques to the masses. What was once found only in expensive high-end packages or existed as proprietary in-house tools, is now available to photographers, artists, designers, and video/film editors. Did I mention affordable? Our software doesn't cost an arm and a leg and won't break the bank.

On-Line Help

Navigation

Previous / Next

Click on the Previous or Next icons to navigate through the help topics.

Show Navigation

If you enter any of the help pages through What's This? or through the direct links to the tutorials, you will not see the Table of Contents displayed on the left side of the screen. To display the Table of Contents, click on the Show Navigation icon at the top left of the screen.

Books

Click on a closed book to expand the topic.
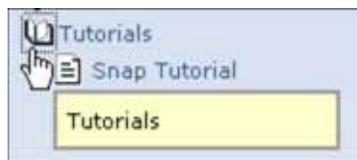
Search

Click the Search tab, type in some text and click Go to find what you are looking for.

Blue Text

If you place your cursor over any text that is highlighted blue, it will turn into a hand. Click on the blue, hyperlinked text and it will navigate you to that portion of the manual.

Print

Click on the Print icon to print the currently displayed topic.

INSTALLATION

Adobe Photoshop and Photoshop Elements

1   **Download Snap at www.digitalfilmtools.com**

2   **Double-click on the file that was downloaded and run through the installation process.**

3   **When prompted, select your Adobe/Photoshop/Plug-Ins folder as the installation location.**

   Note: If you are running Adobe Photoshop Elements, you may need to change the installation folder to the Adobe/Photoshop Elements/Plug-Ins folder.

4   **Start Photoshop and load an image.**

5   **From the Select pull-down menu, choose Snap v2.5 from the Digital Film Tools group.**

   A dialog box pops up when you run Snap.

6   **If you purchased the software, select Activate Snap and follow the instructions.**

   or

7   **Select Request Trial Activation (Internet Required) and click Next to receive a fully functioning version of Snap for the specified trial period. At the end of the trial period, Snap reverts to a limited demo mode.**

   or

8   **Select Run in Demo Mode and click Finish.**

   Note: Rendering is disabled in Demo Mode.

UNINSTALLING

Windows

1 **Click the Windows Start Menu**

2 **Select Programs > Digital Film Tools > Snap Version > Uninstall Snap**

Macintosh

Adobe Photoshop

1 **Go to /Applications/Digital Film Tools**

2 **Remove the Snap v2.5 Photoshop folder**

3 **Go to /Applications/Adobe Photoshop (version)/Plug-Ins**

4 **Remove DFT Snap v2.5**

ACTIVATING, DEACTIVATING AND TRANSFERRING LICENSES

Activation Options

Internet Activate (Recommended)

Activates Snap over the Internet.

Request License from Self-Service Website

If you do not have an Internet Connection on the computer where you want to run Snap, use this option. The self-service website will generate a license file which you can then transfer to the desired computer.

Telephone Activation

Allows you to activate Snap when you do not have access to the Internet at all.

Install a License File

Loads a license file obtained from the self-service website or received by email.

Note: If you experience an error when using Internet Activate, it is because you or your company uses a proxy server to access the Internet and/or your firewall is blocking our program's access to the Internet. For proxy server users, select Advanced Options and enter the appropriate proxy server settings. For firewall users, open your firewall software and allow our software to access the Internet.

Deactivation Options

Once Snap has been activated, you can access the Deactivation Options by selecting the License menu.

Internet Deactivate (Recommended)

Deactivates Snap over the Internet and is only available if you initially activated over the Internet. Use this method to return your Product Code back to the activation server. You will then be able to use your Product Code to activate Snap on another computer.

Remove License

Permanently removes the Snap license from your computer. You will no longer be able to activate Snap using the Product Code or license file that you originally activated with. Only use this option if instructed by customer support.

Note: Do not use Remove License to move the license to another computer.

To deactivate Snap:

1   **Select License from the Help menu (? icon).**

2   **Choose Internet Deactivate (Recommended) and click Next.**

License Transfer

Your Product Code allows you to run Snap on one computer at a time. However, you may transfer the license by deactivating on one computer and activating on another.

Internet Deactivate / Internet Activate is the preferred method of license transfer between computers, but is only available if you initially activated over the Internet and currently have Internet access. If you do not have Internet access, you will need to contact customer support to assist you in transferring the license.

To transfer a license:

1   **Select License from the Help menu (? icon).**

2   **Choose Internet Deactivate (Recommended) and click Next.**

Snap is now deactivated.

3   **On the target computer, select Activate Snap and follow the instructions.**

Snap will then activate on the new computer.

Snap - Introduction

Description

Snap is an easy to use interactive image cutout tool designed to extract solid or opaque objects. Image cutout is the process of removing or isolating an object in a picture.

Before	After

Photos © THINKSTOCK LLC--**WWW.THINKSTOCK.COM**

The extracted object can then be combined with another image or individually filtered in Adobe Photoshop or Photoshop Elements. The challenge becomes defining which parts of the image are foreground, the portion to be cutout, and those which belong to the background. Snap provides instant visual feedback by snapping an editable curve to an object's boundary even if it has vague or low contrast edges. This is made possible by utilizing unique graph-cutting and segmentation algorithms. More accurate results are achieved in a shorter amount of time than using existing tools and techniques.

For the most difficult of image cutouts, Snap also includes the ability to manually create paths using an intuitive and easily editable shape format called X-Splines. A path is an outline created by placing sequential points along an object. Think of it as connecting the dots if you will. X-Splines are designed to make user manipulations as intuitive as possible. The points that make up X-Splines can be of three different types: Cardinal, Polygon or B-Spline and can

be changed before, after or during the creation of the path. Manually drawing a path is often a good solution for objects that can't be extracted in any other way and using X-Splines is a vast improvement over existing shape and path creation methods.

TUTORIALS

Snap Tutorial

1   **Start Photoshop and load an image.**

2   **From the Select pull-down menu, select Snap v2.5 from the Digital Film Tools group.**

3   **Define the area to be cutout by drawing a foreground mark with the left mouse button.**

4   **Define background areas by drawing marks with the right mouse button.**

As soon as the first background line is drawn, Snap calculates a boundary curve that is displayed as a black and white dashed line around the object.
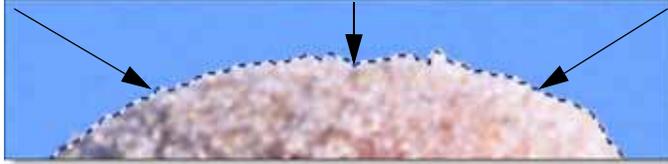
5 **Draw additional foreground and background marks as needed until the object that you'd like to cutout is roughly surrounded by a boundary.**

Where the boundary doesn't correctly follow the edge of your object, refine it by using either the Override Edge or Edit Points controls. When either of these tools is selected, the boundary created in the object marking step is converted into editable polygons and you will see a noticeable refinement in the boundary.

6   Click the Override Edge icon and draw a mark along the edge of your object where the boundary doesn't correctly follow the edge.

Before   After
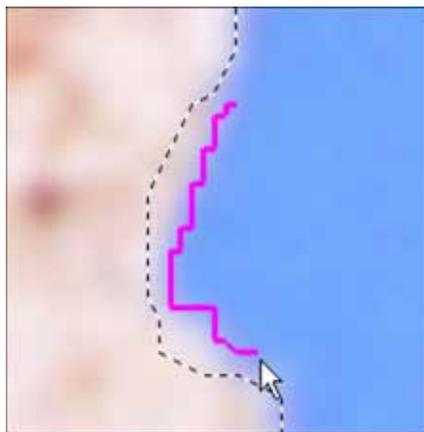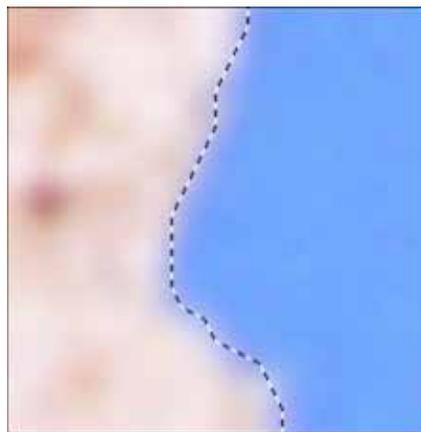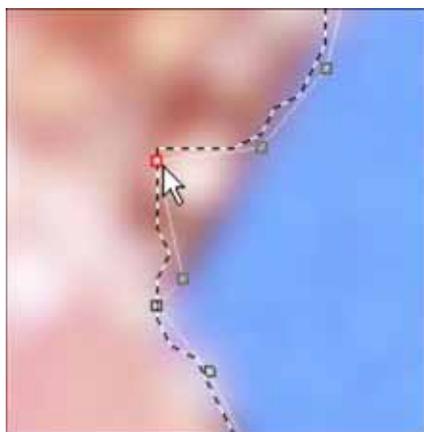

An entire segment of the polygon is replaced by drawing a single stroke and is much easier than dragging individual points. However, when individual point control is necessary, use the Edit points feature.
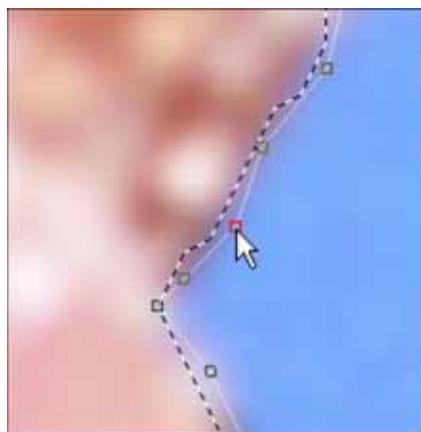
7   Click the Edit Points icon and drag a point to adjust the shape of the polygon.

Before   After

Compared with a simple polygon where you need to modify many points, Snap uses far fewer points to define the object shape. You should see variation in the boundary even though there are no points directly over the variations.

When boundary refinement is completed, the selected portion of the image can be cutout and placed over an image or filtered individually in Adobe Photoshop or Photoshop Elements.

8 **If you are happy with the boundary you have created, you can click the Done icon to exit Snap and convert the boundary into a Photoshop selection. Skip ahead to Step 14 and 15 if you choose this option.**

or

9 **Click the Add Path icon in the Toolbar to convert the Snap boundary to a path for further editing and refinement.**
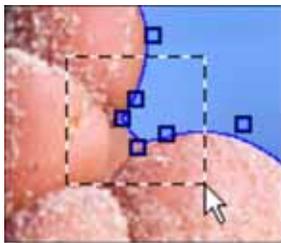

A slider pops up that controls the number of points on the path. If you drag the slider to the right, more points will be added to the path. The default slider position is good for most cases.
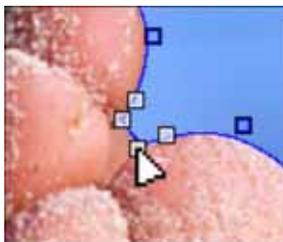

10 **To edit the path, click the Path Mode icon on the left of the screen to display and edit the path points.**

11 **Click on one point to select it or click and drag around a group of points.**

12 **Click and drag on one of the selected points to move them.**

The cursor turns into a triangle when it is ready to move the points.

If needed, you can add new points by **Alt**-clicking on the path between two points. The cursor will turn into a + sign when it is ready to add a point.

Points are deleted by selecting them and hitting the Delete key.

13 **Click the Done button and all paths are converted into a Photoshop selection.**

The selected portion of the image can be cutout and placed over an image or filtered individually in Adobe Photoshop or Photoshop Elements.

14 **Once in Photoshop, press Ctrl-C(Win) or Cmd-C(Mac) to copy the selection.**

15 To paste the copied selection, select an image and press Ctrl-V(Win) or Cmd-V(Mac).

Before	After

Path Tutorial

A path is an outline created by placing sequential points along an object. Think of it as connecting the dots if you will. A Snap boundary can be converted to path for additional editing and refinement. For the most difficult of image cutouts, Snap also includes the ability to manually create paths using an intuitive and easily editable shape format. Manually drawing a path is often a good solution for objects that can't be extracted in any other way.

1   **Start Photoshop and load an image.**

2   **From the Select pull-down menu, select Snap v2 from the Digital Film Tools group.**

3   **To create a path manually, click the Path Mode icon on the left of the screen.**

The points that make up a path can be of three different types: Cardinal, Polygon or B-Spline. The point type can be changed before, after or during the creation of the path using the path icons.

- **Cardinal creates a path that passes smoothly through each point.**
- **Polygon makes a path that consists of angular corner points.**
- **B-Spline creates a smooth path that is determined by the surrounding points.**

Cardinal is the default point type.

4   **Select one of the Point types.**

5   **Click repeatedly on the image to create a new path.**

6 **Click on the first point that was added to close the path.**

If the path color is too hard to see against the image, you can change it using the Options > Path Color control.
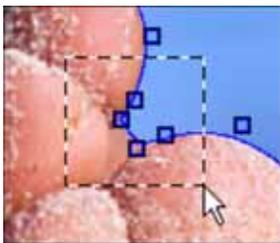
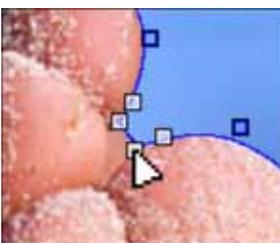**7** **Press the Settings icon and click Path Color.**

8 **When the color picker opens, select a path color that will contrast well with your image.**

To change the shape of the path, move the controls points.

9 **Click on one point to select it or click and drag around a group of points.**

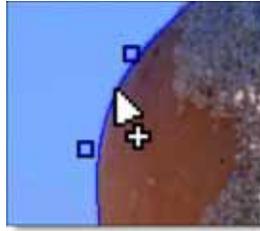**10** **Click and drag on one of the selected points to move them.**

The cursor turns into a triangle when it is ready to move the points.

If needed, you can add new points by **Alt**-clicking on the path between two points. The cursor will turn into a + sign when it is ready to add a point.
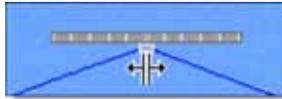

Points are deleted by selecting them and hitting the Delete key.

11 **To adjust a point's tension, select one or more points and select a different point type from the Toolbar.**

or

12 **Alt-click-drag on a selected point.**

A point tension slider opens. Left of center forces the path to curve through the point (Cardinal). The center position creates a corner (Polygon) point while the right position moves the curve towards the center of the path (B-Spline). If multiple points have been selected, they will all be set to the same tension.

13 **Create as many paths as you'd like by clicking on the image.**

Note: If you have multiple boundaries or paths and they overlap, a hole in the mask is created.

14 **Click the Done button and all paths are converted into a Photoshop selection.**

The selected portion of the image can be cutout and placed over an image or filtered individually in Adobe Photoshop or Photoshop Elements.

15 **Once in Photoshop, press Ctrl-C(Win) or Cmd-C(Mac) to copy the selection.**

16 **To paste the copied selection, select an image and press Ctrl-V(Win) or Cmd-V(Mac).**

Before	After

SNAP - OVERVIEW

User Interface

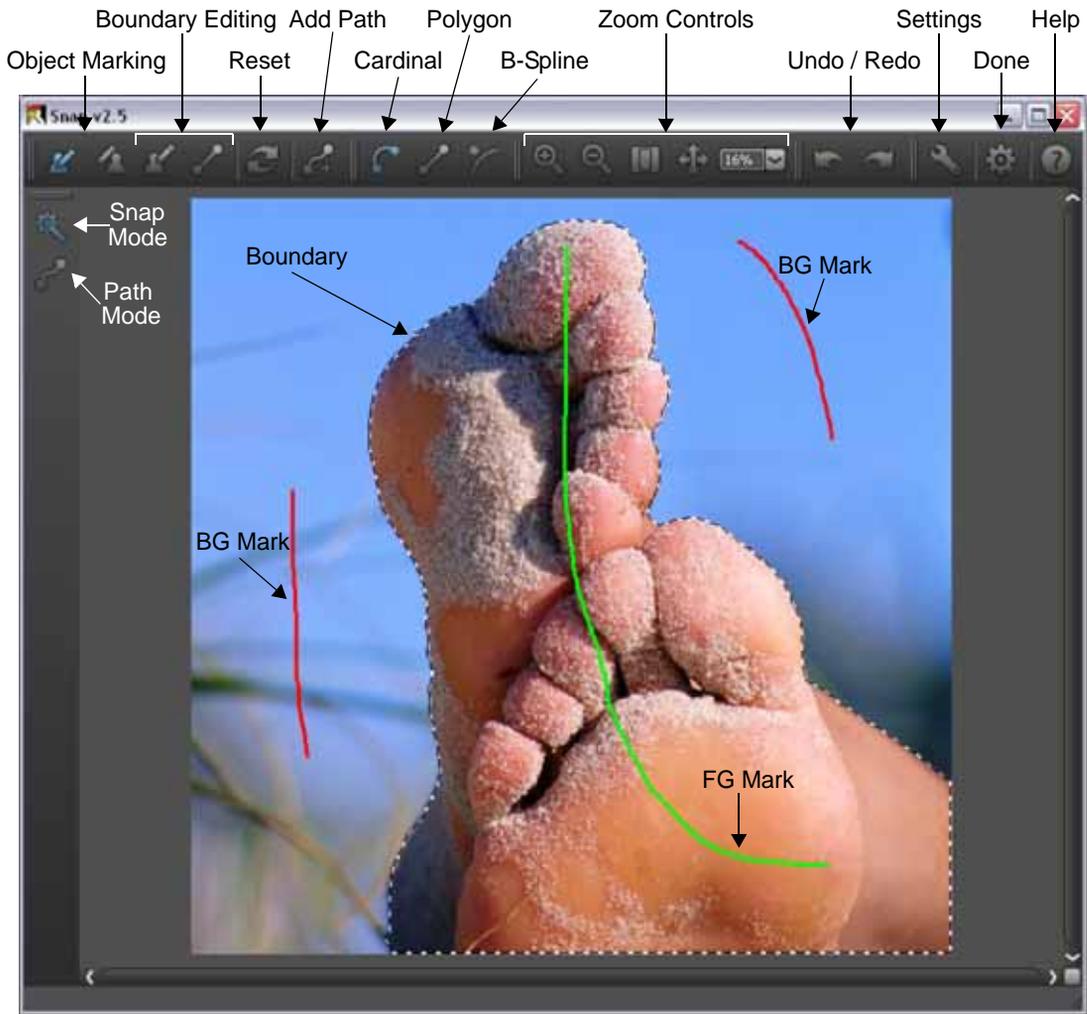Object Marking · Boundary Editing · Add Path · Polygon · Zoom Controls · Settings · Help · Reset · Cardinal · B-Spline · Undo / Redo · Done

Tool Tips

If you hover your cursor over an icon, a tool tip will appear indicating what the

icon does along with its keyboard shortcut.

Help

Opens the Help menu.

Help Shortcuts

Shortcut	Action
F1	Opens Snap Help
Shift-F1	Opens What's This? help

Zoom Controls

At the bottom of the Snap window, there are four zoom controls.

Zoom In

Zooms into the image.

Zoom Out

Zooms the image out.

Zoom to Fit

Fits the image to the Snap adjustment window.

Pan

Pans the image when the Viewer is zoomed in.

Zoom Keyboard Shortcuts

Shortcut	Action
Scroll wheel	Zooms the image in and out
Middle-mouse double click	Fits the image in the Viewer
Middle-mouse drag	Pans the image
Space Bar-drag	Pans the image

Size Window

Change the size of the Snap window by dragging one of the bottom corners.

Undo

Successively undoes operations.

Redo

Successively redoes operations.

Done

Closes the Snap adjustment window and converts the boundary to a Photoshop selection.

SNAP MODE

Snap can operate in either Snap or Path mode. Snap mode is on by default and is where you mark the object to be cutout.

Workflow

Using a coarse to fine editing approach, an area of the image is cutout by marking the object and then refining the boundary that is created.

1 **Object marking occurs at a coarse level, which roughly defines an object by marking a few lines.**

2 **Boundary editing works at a finer scale by either clicking and dragging polygon points to edit the object boundary or drawing a stroke along the object's edge.**

3 **The boundary can be converted to a path where it can be further refined and manipulated.**

Object Marking

Instead of tracing the boundary of an object, Snap uses lines and curves to define the object.

Mark Foreground

Click the Mark Foreground icon and draw lines to mark the foreground area--
the region to be cutout. By default, the Select FG icon is selected when you
enter Snap, so you can immediately start drawing foreground marks. With each
click and drag of the mouse, a green line is drawn.

Mark Background

Click the Mark Background icon and draw lines to mark the background area. With each click and drag of the mouse, a red line is drawn.

Object Marking Shortcuts

Shortcut	Action
f	Selects Mark Foreground
b	Selects Mark Background
Right-mouse drag	Draws a background stroke without selecting Mark Background

As soon as the first background line is drawn, Snap calculates a boundary curve that is displayed as a black and white dashed line around the object.
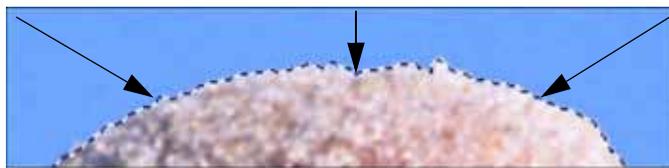
Add additional foreground and background marks as needed so that your object is surrounded by the boundary. Don't be concerned at this point if the boundary is not exactly following your object. The curve can be refined further using the boundary editing tools.

Reset

Reset Marks

Resets the current boundary's object marking.

Reset All

Resets all boundaries and paths.

Boundary Editing

Even though object marking does a pretty good job of creating an accurate boundary, there can still be some errors, especially around vague or low contrast edges. To remedy these errors, there are simple polygon point editing tools to refine the object's boundary. Two tools are provided for polygon editing: Edit Points and Override Edge. When either of these tools is selected, the boundary created in the object marking step is converted into editable polygons and you will see a noticeable refinement in the boundary.

Override Edge

Click the Override Edge icon and draw a stroke along the edge of your object where the boundary doesn't correctly follow the edge.

Once a stroke has been drawn, Snap optimizes the object boundary. The optimized boundary automatically snaps to the object boundary even though the polygon points may not be on it.
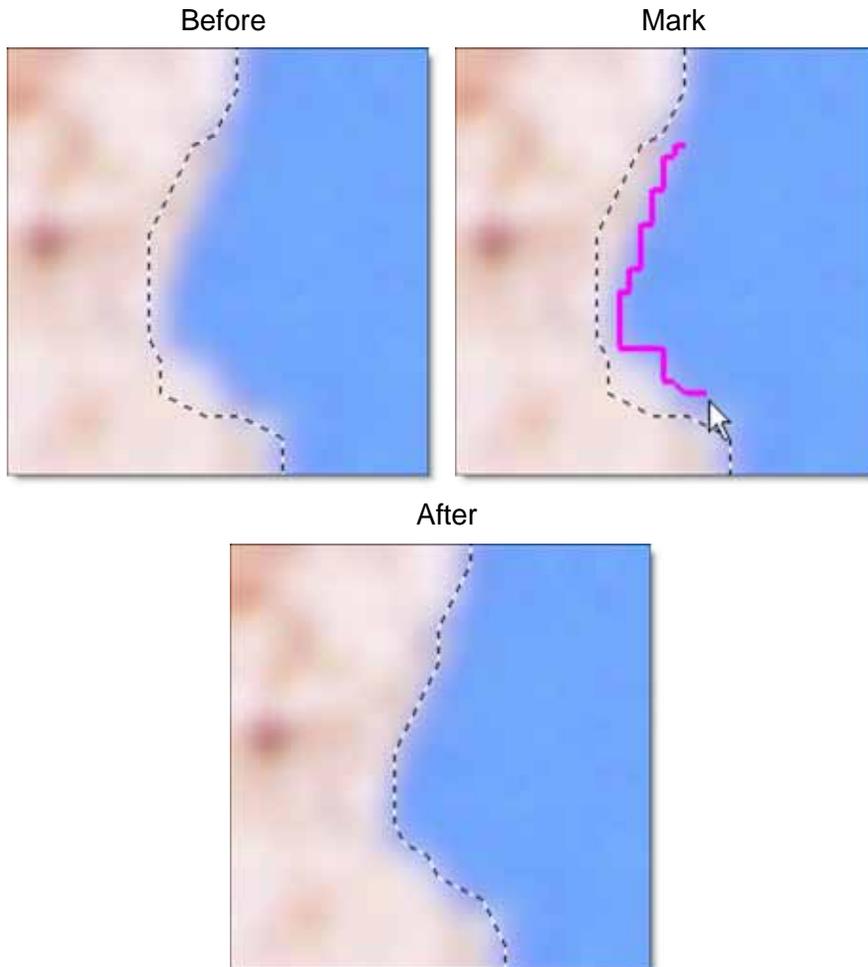
Before   Mark

After

An entire segment of the polygon is replaced by drawing a single stroke and is much easier than dragging individual points.

Edit Points

Click the Edit Points icon and drag points to adjust the shape of the polygon.
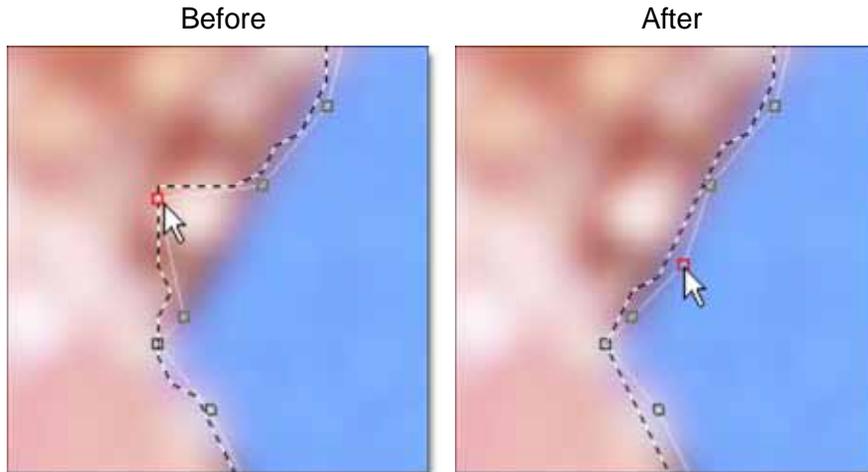
Before	After

Compared with a simple polygon where you need to modify many points, Snap uses far fewer points to define the object shape. You should see variation in the boundary even though there are no points directly over the variations.

Point Editing Keyboard Shortcuts

Shortcuts	Action
Alt-click on the boundary	Inserts a new point along the boundary
Delete key	Delete the selected point
Click and drag a point	Moves the point
Alt-drag a point	Uses magnetism to snap a point to an object's boundary

Boundary Editing Shortcuts

Shortcut	Action
e	Selects Override Edge
p	Selects Edit Points

PATHS

A path is an outline created by placing sequential points along an object. Think of it as connecting the dots if you will. A Snap boundary can be converted to a path for additional editing and refinement. For the most difficult of image cutouts, Snap also includes the ability to manually create paths using an intuitive and easily editable shape format called X-Splines. Manually drawing a path is often a good solution for objects that can't be extracted in any other way.

Add Path

As soon as you hit the Add Path icon, the current Snap boundary is converted to a path.

A slider pops up that controls the number of points on the path. If you drag the slider to the left, less points will be added.

Multiple paths can be created using this method. To edit one of the converted paths, click the Path mode icon on the left side of the screen.

Note: If you have multiple boundaries or paths and they overlap, a hole in the mask is created.

Warning: You can't undo the conversion of a Snap boundary to a path.

Path Mode

Path mode allows you to create new paths as well as edit any path created from a Snap boundary in the form of X-Splines. X-Splines are designed to make user manipulations as intuitive as possible.

Point Types

The points that make up X-Splines can be of three different types: Cardinal, Polygon or B-Spline. The point type can be changed before, after or during the creation of the path using the path icons.

Cardinal

Creates a path that passes smoothly through each point.

Polygon

Creates a path that consists of angular corner points.

B-Spline

Creates a smooth path that is determined by the surrounding points.

Point Type Shortcuts

Shortcut	Action
Shift-c	Selects the Cardinal point type when in Path mode
Shift-p	Selects the Polygon point type when in Path mode
Shift-b	Selects the B-Spline point type when in Path mode

Manually Create a Path

Create a path by selecting one of the point types and then click on the image in the Viewer. With each click of the mouse, a point is created. Click on the first point that was added to close the shape. If multiple paths are drawn and overlap, a hole in the mask is created.

Closing Open Paths

If you neglect to close a path and would later like to close it, select one of the end points and then select the other end point. The path will then close.

Selecting Points

Individual or multiple points can be selected. Once selected, various point editing operations are available.
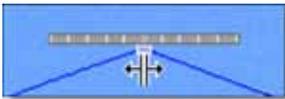
Point Selection Keyboard Shortcuts

Shortcuts	Action
Click a point	Selects one point
Click and drag over multiple points	Selects multiple points
Ctrl-click on a point	Toggles the selection on or off
Shift-click a point	Adds the point to the current selection

Point Editing

Significant modification to the path is made possible by point editing controls or keyboard shortcuts.

Point Editing Keyboard Shortcuts

Shortcuts	Action
Alt-click on a curve	Inserts a new point along the curve
Delete key	Delete all selected points
Click and drag selected points	All selected points move
Click and drag an unselected point	Moves one point
Alt-click-drag on a point	Opens a slider to adjust the point's tension. Left of center forces the path to curve through the point (Cardinal). The center position creates a corner point (Polygon) while the right position moves the curve towards the center of the path (B-Spline). If multiple points have been selected, they will all be set to the same tension.
Alt-click-drag-**Shift** on a point	Holding **Shift** while **Alt**-dragging a point will snap the tension to Cardinal, Polygon or B-Spline positions.

SETTINGS

Opens a configuration window where various preferences can be set.

Foreground Color

Sets the color of the foreground marks. The default color is green.

Background Color

Sets the color of the background marks. The default color is red.

Override Color

Sets the color of the override edge marks. The default color is magenta.

Path Color

Sets the color of the Snap boundaries and paths. The default color is blue.

Show Control Points

It is sometimes helpful to turn off the display of path points to see the accuracy of your path. When turned off, you can still adjust the hidden points by click-dragging on the path and the nearest point will be adjusted.

Accuracy

The Accuracy setting determines the initial accuracy of the object marking process. By default, it is set to Medium. Setting the Accuracy to High creates a more accurate boundary, but takes longer to process. When set to low, a less accurate boundary is created, but processes faster. For most images, the Medium setting should be sufficient. You can also change the Accuracy setting after the image has been marked. It will take a moment or two to re-process, but the boundary should better follow the contour of your object.

Low

Snap processes using the lowest accuracy setting.

Medium

Snap processes using a medium accuracy setting.

High

Snap processes using the highest accuracy setting.

SNAP KEYBOARD SHORTCUTS

Mode Shortcuts

Shortcut	Action
s	Selects Snap mode
x	Selects Path mode

Object Marking Shortcuts

Shortcut	Action
f	Selects Mark Foreground
b	Selects Mark Background
Right-mouse drag	Draws a background stroke without selecting Mark Background

Boundary Editing Shortcuts

Shortcut	Action
e	Selects Override Edge
p	Selects Edit Points

Snap Mode Point Editing Keyboard Shortcuts

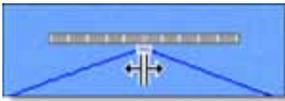| Shortcuts	Action
Alt-click on the boundary	Inserts a new point along the boundary
Delete key	Delete the selected point
Click and drag a point	Moves the point
Alt-drag a point	Uses magnetism to snap a point to an object's boundary

Path Point Type Shortcuts

Shortcut	Action
Shift-c	Selects the Cardinal point type when in Path mode
Shift-p	Selects the Polygon point type when in Path mode
Shift-b	Selects the B-Spline point type when in Path mode

Path Point Selection Keyboard Shortcuts

Shortcuts	Action
Click a point	Selects one point
Click and drag over multiple points	Selects multiple points
Ctrl-click on a point	Toggles the selection on or off
Shift-click a point	Adds the point to the current selection

Path Point Editing Keyboard Shortcuts

Shortcuts	Action
Alt-click on a curve	Inserts a new point along the curve
Delete key	Delete all selected points
Click and drag selected points	All selected points move
Click and drag an unselected point	Moves one point
Alt-click-drag on a point	Opens a slider to adjust the point's tension. Left of center forces the path to curve through the point (Cardinal). The center position creates a corner point (Polygon) while the right position moves the curve towards the center of the path (B-Spline). If multiple points have been selected, they will all be set to the same tension.
Alt-click-drag-**Shift** on a point	Holding **Shift** while **Alt**-dragging a point will snap the tension to Cardinal, Polygon or B-Spline positions.

Zoom Keyboard Shortcuts

Shortcut	Action
Scroll wheel	Zooms the image in and out
Middle-mouse double click	Fits the image in the Viewer
Middle-mouse drag	Pans the image
Space Bar-drag	Pans the image

Help Shortcuts

Shortcut	Action
F1	Opens Snap Help
Shift-F1	Opens What's This? help