SnapRect
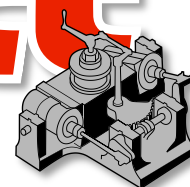
by APPARATEN

User manual

First…

Thank you for choosing SnapRect developed by APPARATEN! Hope that you will have a lot of pleasure from the program and get great use of it in the future.

If you discover bugs in SnapRect, do not hesitate to contact us at contact@apparaten.se and we will try to solve the problem as soon as possible. If you have any requests for changes or new functionality, please do not hesitate to contact us at the address above. Having a dialogue with users is important so we can adapt the programs to your needs.

If you like SnapRect, we hope you rate it on the Mac App Store. The support from you hopefully gives more SnapRect users and will spur us to make even better products in the future!

Once again THANK YOU!

Peter
APPARATEN

We've tried to make SnapRect as self-explanatory as possible, and hopefully you'll never have to look at this user manual again. SnapRect is easy to use but powerful so scroll through the user guide to see its potential.

Contents

SnapRect version 1.0.0
Date: 2021-07-01

1   SnapRect overview

SnapRect (Snapshot Rectangle) is a screen capture tool for MacOS. What makes SnapRect unique is its functionality to capture a specific area of the screen over and over again, a (what we think) fundamental feature that most screen capture tools lack. In reports or writings, you often want images of the same size or dimension and often the image is captured from a recurring and well-defined part of the screen. Example is when you want to capture presentation slides from a digital meeting or images from YouTube, see Figure 1.
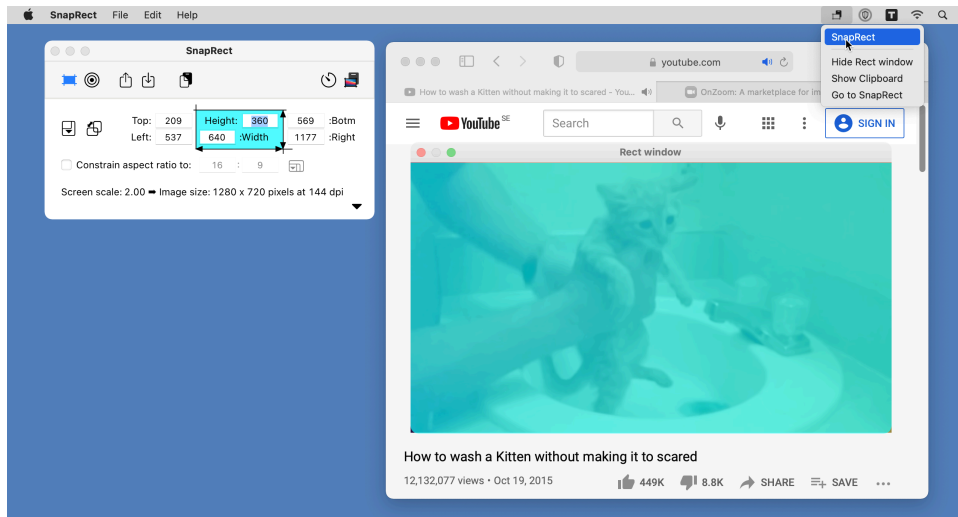

Figure 1   Snapshot that well-defined rectangle of the screen over and over again

The dimensions of the capture rectangle (width x height in pixel) can be set by modifying a "Rect window" but can also be set manually. Several common image dimensions (e.g., 1920 x 1080, 1334 x 750...) are available as menu selections.
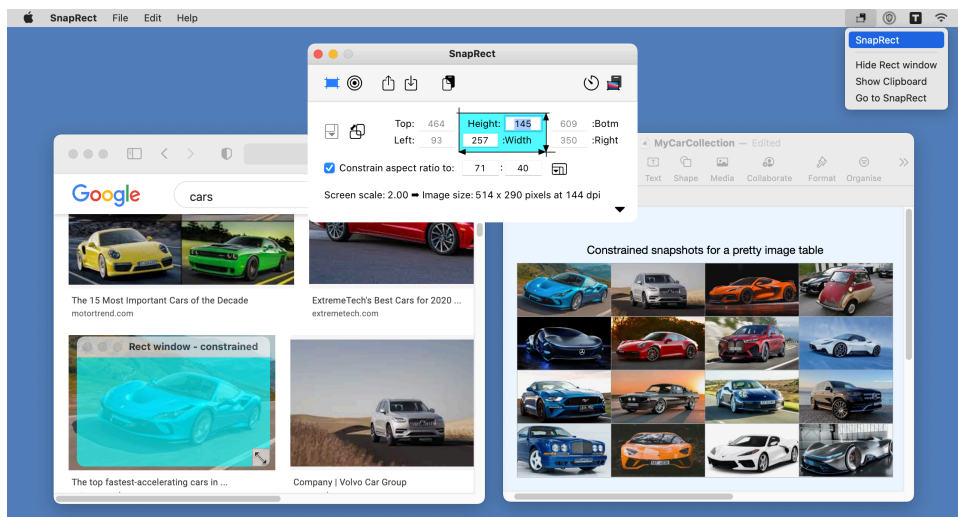

Figure 2   Snapshot multiple constrained aspect ratio images to create a pretty image table

Being able to specify the snapshot aspect ratio (16:9, 4:3, Letter Paper Size, Golden Ratio,…) is another unique feature of SnapRect. Several common aspect ratios (image formats) are available

as menu selections. For example, if 16:9 is set to the aspect ratio (Full HD image format), the capture rectangle is scaled with this aspect ratio. A feature that is handy when you want to constrain all images to a specific aspect ratio or image format. One example is when you want to create pretty image tables, see Figure 2.

SnapRect has features for capture snapshots using a timer and also capturing multiple snapshots at intervals (time-laps). Time-lapse recording is handy for recording stock development or tracking down computer problems, see Figure 3.
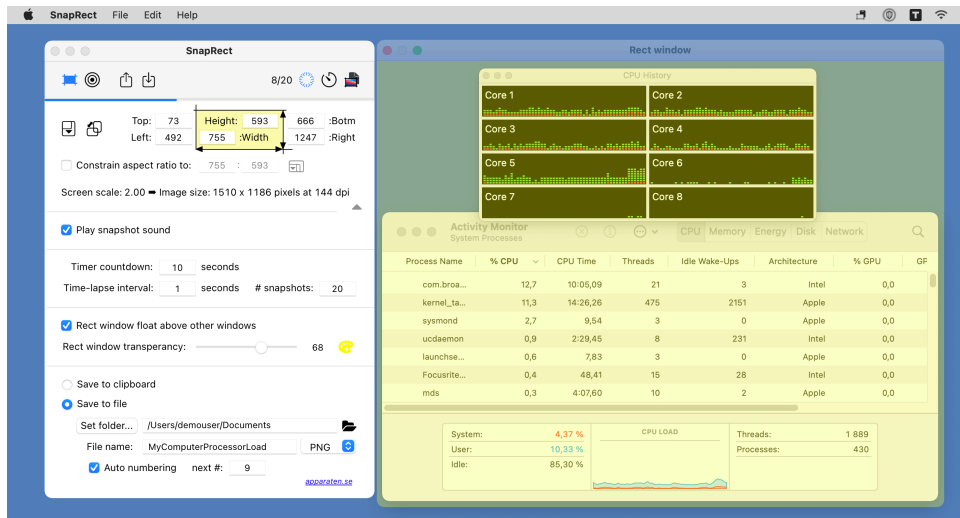

Figure 3   Track down computer problems using time-lapse recording of the Activity monitor

SnapRect handles scaled screens (such as Retina) and delivers the image in full resolution. The image can be stored on the clipboard or saved directly to file in PNG, JPEG, GIF, BMP or PBM format. Images saved directly to file can be named and numbered automatically. When SnapRect saves to the clipboard, the clipboard can be viewed and pasted to other documents or saved to file with a right-click in the "Clipboard" window.

There are certainly several other uses of SnapRect than the shown above. If you have found other useful or fun use of SnapRect, please let us know on contact@apparaten.se

1.1 Features

- Snapshot a rectangle of the screen over and over again (avoid getting manic)
- Snapshot from SnapRect or use SnapRect system menu that is always available even if SnapRect is minimized
- Select the image rectangle manually or by using a scalable semi-transparent "Rect window"
- View the aspect ratio of the rectangle
- Lock aspect ratio and scale the rectangle proportionally
- Take a time-delayed snapshot with a timer
- Take time-lapse snapshots
- Manually take a snapshot by right-clicking in the "Rect window", clicking the "SnapRect" button, or selecting "SnapRect" from the system menu
- SnapRect keyboard shortcuts to show/hide the "Rect window" (⌘+R), show/hide clipboard (⌘+B), and take a snapshot (⌘+S)
- Choose from a pop-up menu common image dimensions
- Choose from a pop-up menu common aspect ratios (image formats)
- Modify the color and transparency of the "Rect window"
- Play a sound when the snapshot is taken
- Save snapshot to clipboard or file
- Show Clipboard window
- Export to file from the Clipboard window
- Save snapshots directly to file
- Auto-number snapshots that are directly written to file (for example, when using time-lapse snapshots)
- Save snapshots to file in PNG, JPEG, GIF, BMP, or PBM format
- SnapRect captures snapshot in maximum resolution (Retina)

2   System requirements

SnapRect is a 64-bit application and works on MacOS 10.9.x (Mavericks) or later. SnapRect works on Apple Silicon M1 under MacOS Big Sur (11.x) supported by Rosetta 2.

3   Install/uninstall

SnapRect is purchased and installed through the Mac App Store. Updates are automatically deployed from the Mac App Store.

On MacOS, only the application SnapRect.app is installed in /System/Applications. The operating system may require SnapRect to be able to make screen recordings, in which case allow this.

SnapRect does not create any other program files so the program is easily deleted by just removing the application file.

Since SnapRect does not create any program files, the program also does not remember previous settings. However, the settings are not that many and are easy to see.

4 SnapRect User Interface

4.1 Application menu

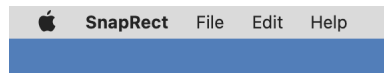SnapRect has a menu with the options: SnapRect, File, Edit, and Help.

Figure 4   Application menu

The menu items can be found in the table below.

Table 1   Menu Items

Menu	Menu item	Shortcut	Description
SnapRect	About SnapRect		Displays a window with information about SnapRect, version numbers, and version and build numbers for the runtime environment (LiveCode), see Figure 5
	Quit SnapRect	⌘+Q	Closes open SnapRect window and exits SnapRect
File	Save Rect as...		Saves the current rectangle in a very simple text format with Top,Left,Right,Botm. The file receives the ".rect" extension
	Load Rect...		Opens a ".rect" file and sets the Top, Left,Right, and Botm values
Edit	Cut	⌘+X	Cuts selected to clipboard
	Copy	⌘+C	Copies selected to clipboard
	Paste	⌘+V	Pasting from clipboard
	Show/Hide Rect window	⌘+R	Shows/Hides the "Rect window"
	Show/Hide Clipboard	⌘+B	Shows/Hides the clipboard if an image is on clipboard
	SnapRect	⌘+S	Take a snapshot of the defined rectangle
Help	Help		Go to http://www.apparaten.se/apps/snaprect/about.html

Figure 5 shows the "About SnapRect" window, showing a short description, SnapRect version, the LiveCode runtime engine version and build numberincluding legal documentation and copyrights.

Figure 5   About SnapRect

4.2 System menu

When SnapRect is running, an icon ⊟ appears in the system menu, see Figure 6.
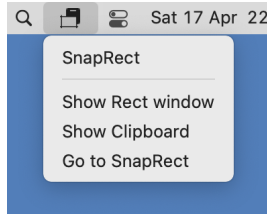

Figure 6   SnapRect system menu

This menu is always available when SnapRect has started.

- "SnapRect" takes a snapshot of the defined rectangle
- "Show/Hide Rect window" shows/hides the "Rect window"
- "Show/Hide Clipboard Shows/Hides the "Clipboard" window
- "Go to SnapRect" activates SnapRect

4.3 Collapsed and expanded mode

SnapRect can be displayed in two different modes, a collapsed mode (smaller window) where the most commonly used features are available, and an expanded mode with more setting options. When SnapRect is started, its collapsed mode appears, see Figure 7.
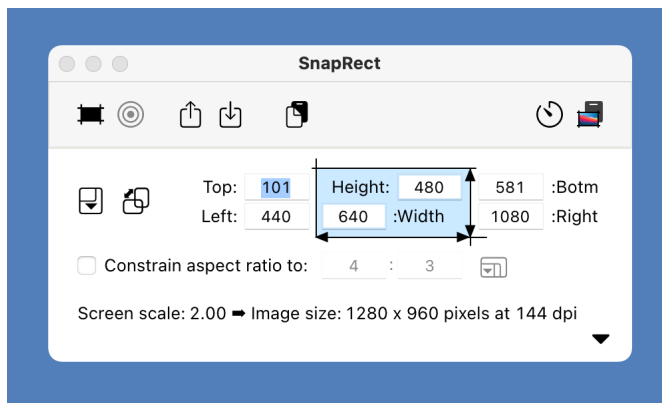
Figure 7   SnapRect collapsed

Clicking on ▾ in the right corner expands the window. In the expanded window, see Figure 8, properties for snapshot sound, timer and time-laps settings, display settings for the "Rect window" and whether to save the snapshot to clipboard or file is shown. Click ▴ to collapse SnapRect.
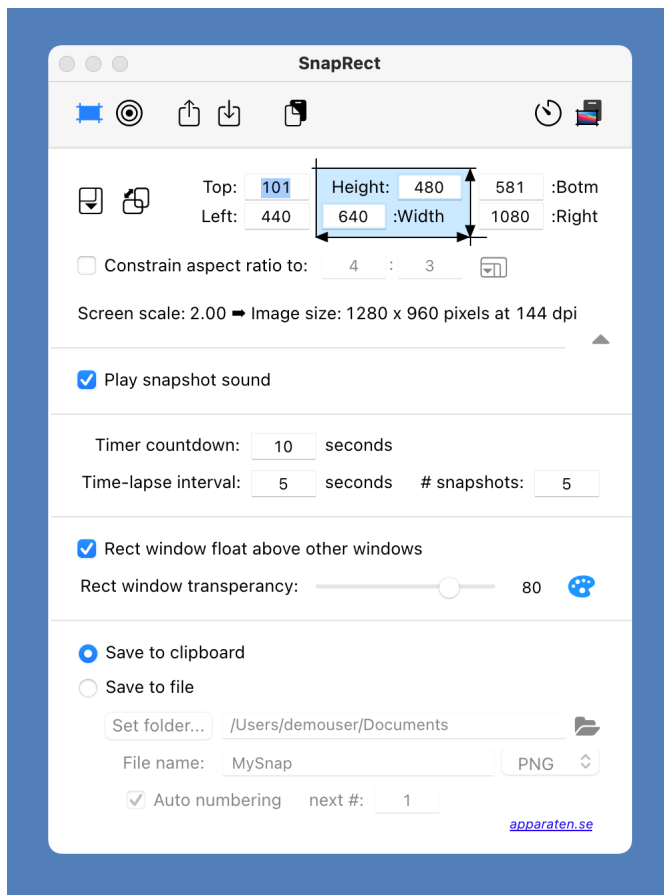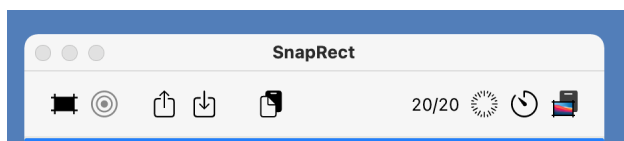
Figure 8　SnapRect expanded

4.4　Toolbar

At the top of the SnapRect user interface, there is a toolbar.

⊏⊐　Show/hide the "Rect window" (⌘+R), see chapter 4.6

◎　Reveal the "Rect window", see chapter 4.6.1

⬆　Save rectangle coordinates, see chapter 4.5.1

⬇　Import rectangle coordinates, see Chapter 4.5.1

🗐　Show/hide clipboard (⌘+B), see chapter 6.1

⚙　Start time-laps snapshots, see chapter 5.3. Appears when Save to File is enabled.

🕐　Start capture timer, see chapter 5.2

🖥　Take a snapshot of the rectangle (⌘+S), see chapter 6

Below the toolbar are controls to specify the dimensions of the rectangle. Dimensions can be specified in three ways, see chapter 4.6.2 and 4.6.3:

- Modify the "Rect window"
- Enter the dimensions directly in the fields: Top, Left, Botm (Bottom), Right, Width, and Height
- Select a dimension in the preset menu ⊡

4.5 Rectangle coordinates

The definition of the positions and dimensions of the rectangle is shown in Figure 9. Origin is in the upper-left corner of the screen.
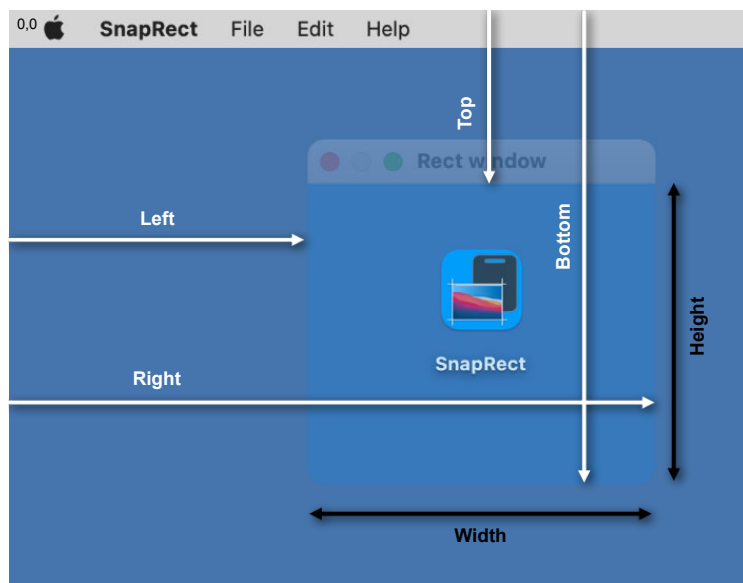

Figure 9   Definitions of positions and dimensions of the rectangle

The rectangle coordinates are shown below the toolbar, see Figure 10
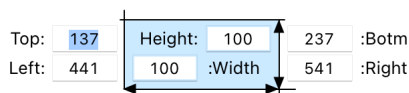
Figure 10   Rectangle coordinates in SnapRect. The color inside the rectangle is a "preview" of the color and transparency of the "Rect window".

4.5.1 Export/import rectangle coordinates

If you often capture the same rectangle, you can save the coordinates to file. The coordinates are stored in a very simple text file with the ending ". rect". The contents of the file are the coordinates: Left, Top, Right, Botm (Bottom).

⬆ saves the coordinates to file and ⬆ imports the coordinates from file.

4.6   The "Rect window"

The "Rect window" is designed to support positioning and scaling of the capture rectangle. The window can remain on the screen, as it is automatically hidden when capturing, but can be closed to reduce the number of windows on screen.

Right-click or ctrl+left-click in the "Rect window" to take a snapshot directly.

4.6.1   "Rect window" display options

Clicking the ⊟ rectangle or selecting ⌘+R shows/hides the "Rect Window" that you move and scales to fit over the area you want to capture (the "Rect Window" title bar area is not captured). When the icon is selected (blue icon), the "Rect window" is showing, see Figure 11. You can also show/hide "Rect window" from the system menu.
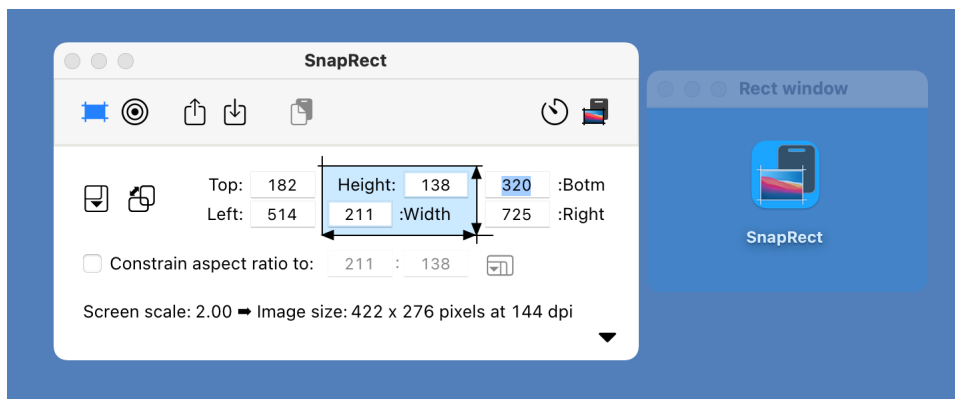
Figure 11   "Rect window" is shown

The "Rect window" has a tint and transparency that can be changed in the expanded mode, see below. Tint and transparency are also shown as an example at the coordinates of the "preview" rectangle, see Figure 10. To make it easier to find the "Rect window", you can hover on the reveal button ◎, that sets the "Rect window" to opaque, see Figure 12.
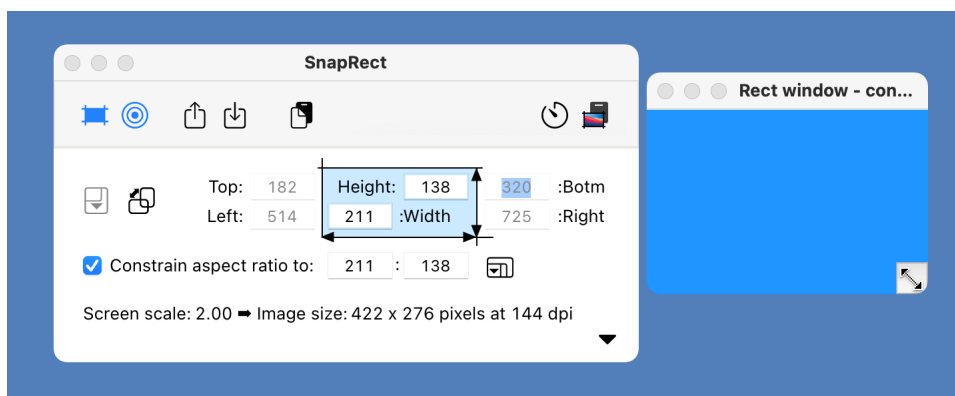
Figure 12   Reveal "Rect window"

In the expanded mode, additional properties for the "Rect window" can be set. Clicking the palette button 🎨 displays a dialog where the window color can be set, see Figure 13.
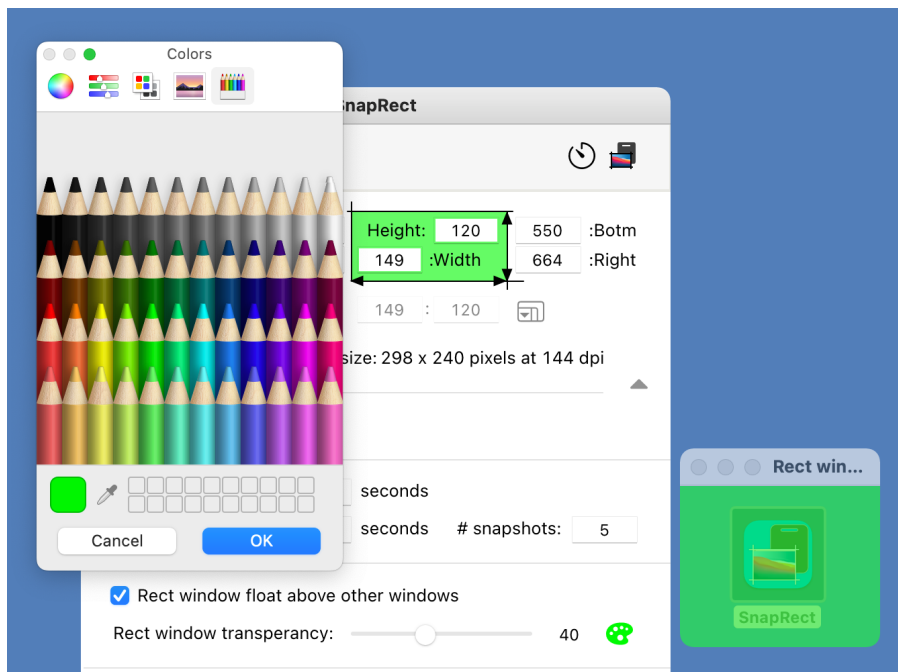
Figure 13   Change the color of the "Rect window"

By dragging the "Rect window transperancy" slider, the transparency of the "Rect window" is set (0 opaque – 100 completely transparent). By selecting the "Rect window float above other windows" button, the "Rect window" is not hidden by other windows.

4.6.2   Scale "Rect window" freely

When you move or resize the "Rect window", its position appears in the Top, Left, Botm (Bottom), Right, and dimensions fields in the Width, Height fields. When you resize the rectangle the rectangle aspect ratio is calculated.

You can also directly specify the position and dimension of the capture rectangle by filling in Fields: Top, Left, Botm (Bottom), Right, Width and Height.

The third way to set the rectangle is to click on ⊡ to displays a menu of common image dimensions, see Figure 14. Selecting an image dimension scales the "Rect window" to the selected dimension. The TopLeft coordinate retains its value so that the "Rect window" does not disappear off screen.

By clicking ⊕, the rectangle switches between landscape and portrait mode.

Top: 191   Height: 480   581 :Botm

Display resolution standards
640 x 480 (4:3, VGA)
800 x 600 (4:3, SVGA)
1024 x 768 (4:3, XGA)
1600 x 1200 (4:3, UXGA)
2048 x 1536 (4:3, QXGA)

720 x 480 (3:2, SDTV NTSC)

720 x 576 (5:4, SDTV PAL)
1280 x 1024 (5:4, SXGA)

1280 x 720 (16:9, HD Ready)
1920 x 1080 (16:9, Full HD)
2560 x 1440 (16:9, WQHD)
3840 x 2160 (16:9, 4K_UHD)
7680 × 4320 (16:9, 8K_UHD)

320 x 200 (16:10, CGA)
1280 x 800 (16:10, WXGA)
1440 x 900 (16:10, WXGA+)
1680 x 1050 (16:10, WSXGA+)
1920 x 1200 (16:10, WUXGA)
2560 x 1600 (16:10, WQXGA)

Some computer resolutions
512 x 342 (256:171, 9" Apple Macintosh)
512 x 384 (4:3, Apple Macintosh II)
2560 x 1700 (128:85, Chromebook Pixel)
2736 x 1824 (3:2, Microsoft Surface Pro 4)
2880 x 1800 (8:5, 15" Apple MacBook Pro Retina)
5120 x 2880 (16:9, Apple 27" iMac 5K Retina Display)

Apple Mobile resolutions (Landscape orientation)
480 x 320 (3:2, Apple iPhone 1, 3G)
960 x 640 (3:2, Apple Iphone 4)
1136 x 640 (71:40, Apple IPhone 5, SE)
1334 x 750 (667:375, Apple IPhone 6, 7)
2208 x 1242 (16:9, Apple iPhone 6, 7 Plus)

2048 x 1536 (4:3, Apple iPad Mini 2, 3, 4)
2048 x 1536 (4:3, Apple iPad 3, 4, Air, Air 2, 9.7" iPad Pro)
2224 x 1668 (4:3, Apple 10.5" iPad Pro)

Figure 14   Common image dimensions

4.6.3 Scale "Rect window" proportionally

In SnapRect the aspect ratio of the rectangle is continuously calculated. Clicking in the "Contrain aspect ratio" locks the proportions of the rectangle. The "Rect window" titlebar displays "Rect window – constrained" and displays a scaling button in the lower-right corner of the window. Dragging the scale button scales the window to maintain the rectangle aspect ratio.
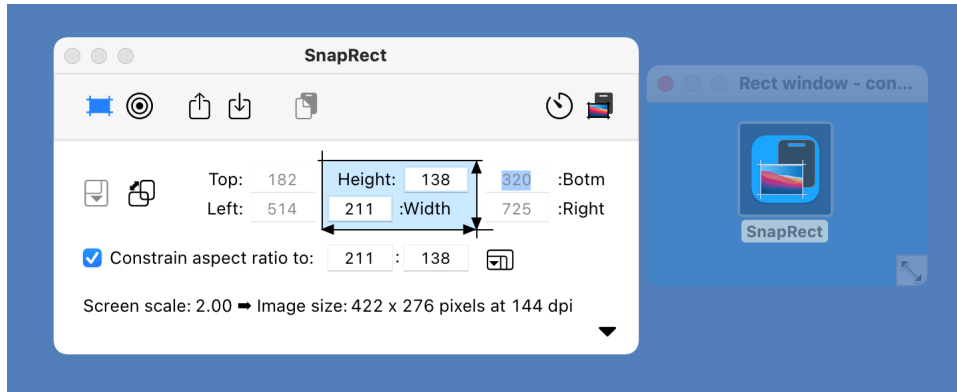

Figure 15   Contrain aspect ratio. To the right of the "Contrain aspect ratio" check box, the aspect ratio of the window is displayed (in this example 211:138)
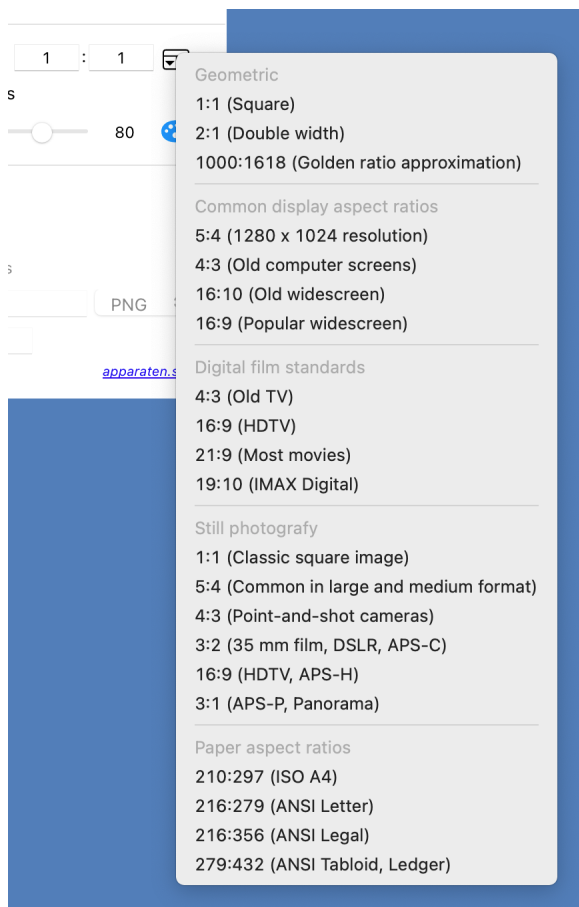

With "Contrain aspect ratio" highlighted the width and the height aspect ratio factors can be entered manually in the aspect ratio fields.

With "Contrain aspect ratio" highlighted the image dimension menu Figure 14, is disabled. The width and height of the rectangle can still be entered in the fields and scaled according to the set aspect ratio.

When "Contrain aspect ratio" is enabled, the image format menu ⊟ is activated to the right of the aspect ratio fields, see Figure 16. In the menu, common image formats can be selected.

Figure 16   Common image formats

4.6.4 Image information

At the bottom of the collapsed SnapRect window, information about the scale of the screen is displayed and the resulting image size, see Figure 17.

Screen scale: 2.00 ➡ Image size: 200 x 200 pixels at 144 dpi
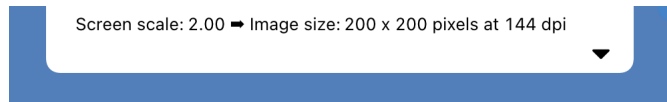
Figure 17   Image Information (a 100 x 100 pixel rectangle is selected)

The scale indicates how many physical pixels (device) are represented for each screen pixel (logical) in height and width. That is, a scaling of 2 means that each screen pixel is represented by 2 x 2 pixels = 4 physical pixels. SnapRect captures the screen at the highest resolution, and since the image area is defined in logical screen pixels, the pixel size of the clipboard grows with the screen scaling. In order for the image not to appear magnified, its DPI value (dots per inch) is adjusted.

4.7   The "Clipboard" window

If an image is on the clipboard, the "Clipboard" window can be displayed by clicking the ⬚ icon in the toolbar or selecting ⌘+B. When the window is open, the icon turns blue and a click on the icon closes the clipboard. See Figure 18. You can also show/hide the "Clipboard" window from the system menu.
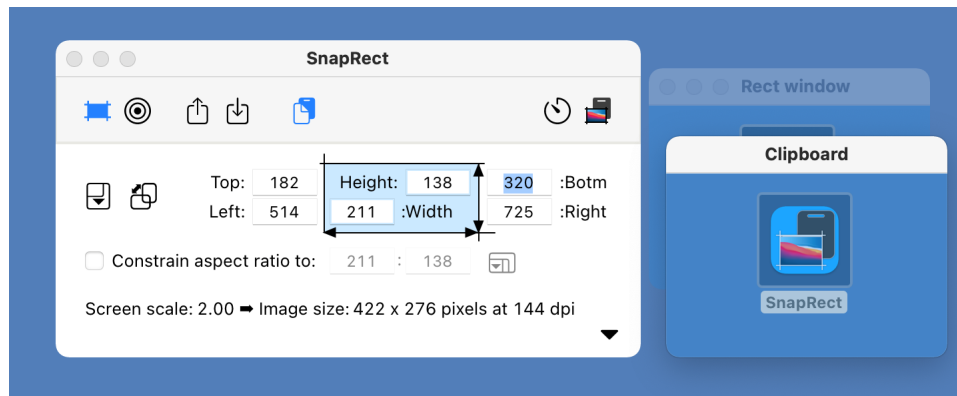

Figure 18   "Clipboard" window opened

The "Clipboard" window is useful for studying the snapshot. The clipboard image can be pasted into another document or saved to files in different formats by right-clicking in the window, see Chapter 6.1.

5 Take a snapshot with SnapRect

5.1 Manually

After the capture rectangle is set, an image is taken by either, see Figure 19:

- In SnapRect: right-click or ctrl+left-click in "Rect window"
- In SnapRect: click the SnapRect button or select the Edit > SnapRect menu option or use the keyboard shortcut ⌘+S
- Select SnapRect from the system menu ⊡

Figure 19   Take a picture by: on the left, right-click or ctrl+left-click in "Rect window"; in the middle, click (⌘+S) the SnapRect-button or select SnapRect from the Edit menu; on the right select SnapRect from the system menu.

The image ends up on the clipboard (default) and can be studied in the "Clipboard" window or written to file depending on settings in the expanded window, see Chapter 6. When the snapshot is taken, a camera shutter sounds. In the expanded window, the sound can be disabled by unchecking "Play snapshot sound", see Figure 20.

5.2 Timer snapshot

SnapRect can capture an image with a timer. The length of the delay is set in the expanded window under "Timer countdown" seconds. Clicking the icon ⟳ starts the timer and displays a progress bar below the toolbar, see Figure 20. When the progress bar reaches the right side of the window, a snapshot is taken.
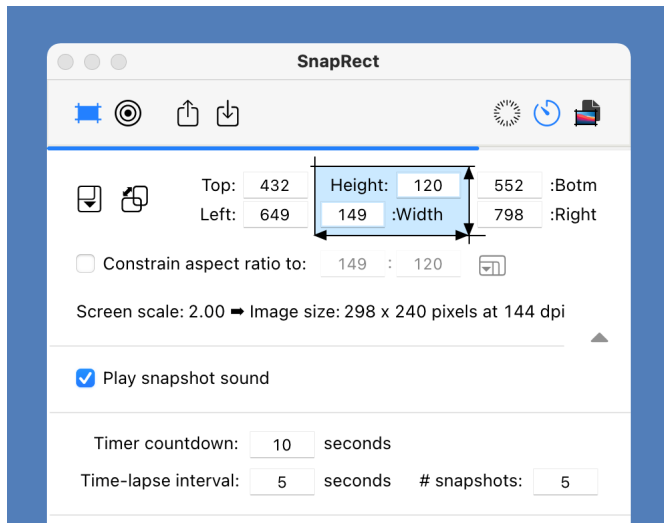
Figure 20 Timer snapshot. The Timer icon is highlighted blue, and a progress bar shows how much time is left. When the progress bar reaches the right side of the window, a snapshot is taken.

The image ends up on the clipboard (default) and can be studied in the "Clipboard" window or written to file depending on settings in the expanded window, see Chapter 6.

5.3   Time-lapse snapshots

SnapRect can take interval images – time-lapse snapshots. The interval between snapshots and the number of snapshots to be taken is set in the expanded window under "Time-laps interval" seconds and "# snapshots".

In order to take time-lapse snapshots, "Save to file" must be enabled in the expanded window, see chapter 6. In addition, the folder to create the files must exist and auto numbering must be enabled. If these conditions are not met, a dialog window appears when you try to start the time-lapse operation, see Figure 21.
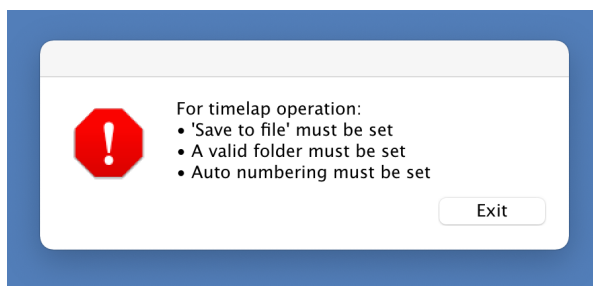

Figure 21 Conditions for time-laps operation not met

To start the time-lapse operation, click the ⟳ button in the toolbar. If all time-lapse conditions are met, a dialog box appears that displays information about the impending operation, see Figure 22.
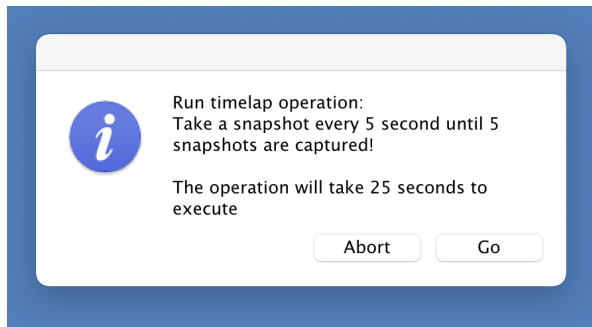
Figure 22   Information on the time-lapse operation

If "Go" is clicked, the time-laps operation will start. The time-lapse icon ⏳ is highlighted blue and a progress bar as well as a text to the right of the time-lapse icon shows how far the process is, see Figure 23
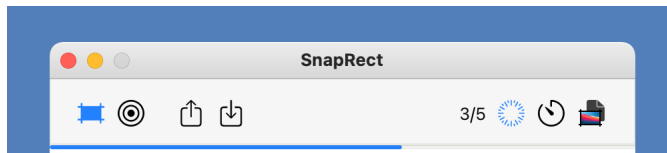

Figure 23   Running time-laps operation. Progress bar and text shows how many snapshots have been taken/total number of snapshots.

6   Save the snapshot

At the bottom of the expanded window, settings can be made if the snapshot is to be sent to the clipboard and studied in the "Clipboard" window or if it should be automatically written to file, see the two options in Figure 24.
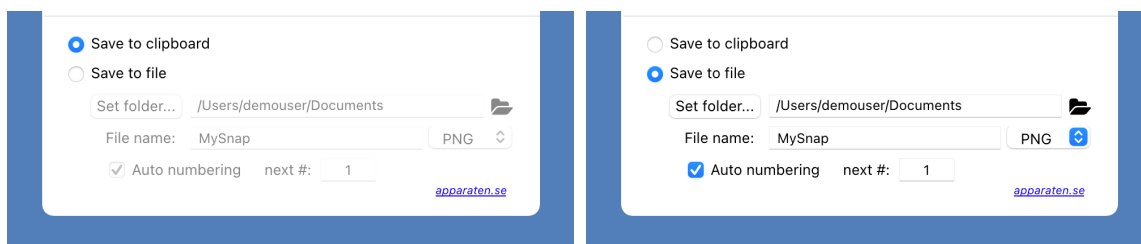

Figure 24   On the left save to clipboard. To the right save to file.

The options are described below.

6.1   Clipboard

When an image is on the clipboard, the "Clipboard" window can be displayed by clicking the 🗗 icon in the toolbar or select ⌘+B. When the window is open, the icon turns blue and a click on the icon closes clipboard. See Figure 25. You can also show/hide the "Clipboard" window from the system menu.
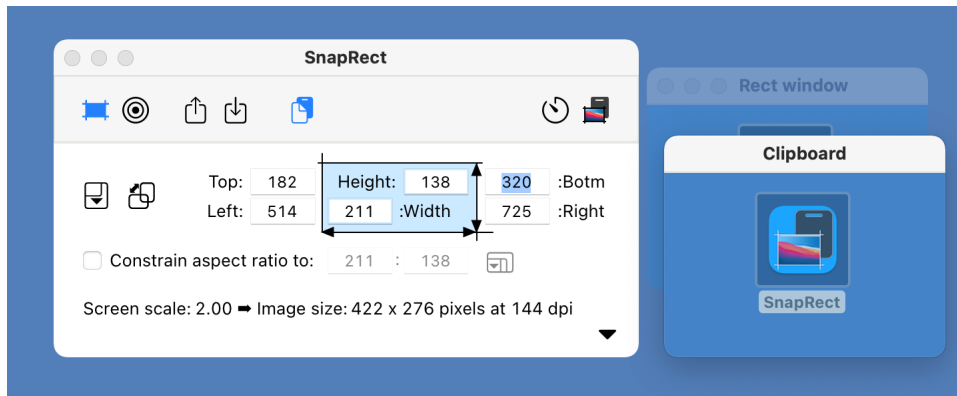
Figure 25   Clipboard window opened

The "Clipboard" window is useful for studying how the image became. The clipboard image can be pasted into another document or saved to files of different formats (PNG, JPEG, GIF, BMP, PBM) by right-clicking in the window, see Figure 26.
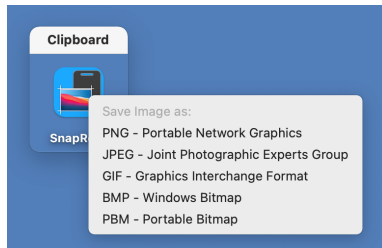

Figure 26   Right-click in the "Clipboard" window to save the clipboard image to file

If an option is selected, a default file dialog window opens and the file is saved in the selected format, see Figure 27.
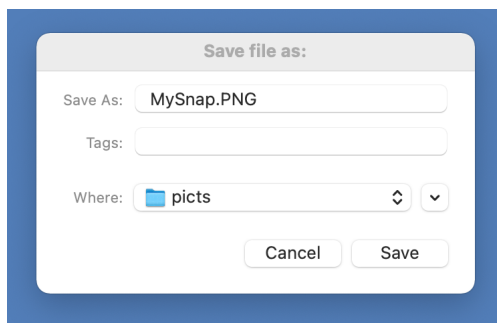

Figure 27   Save file as dialog

See Chapter 6.2.1 of supported file formats.

6.2   Save to File

When "Save to file" is selected in the expanded SnapRect window and the SnapRect button is clicked (⌘+S), a timer or time-laps operation has finished, the file is saved according to these settings, see Figure 28.
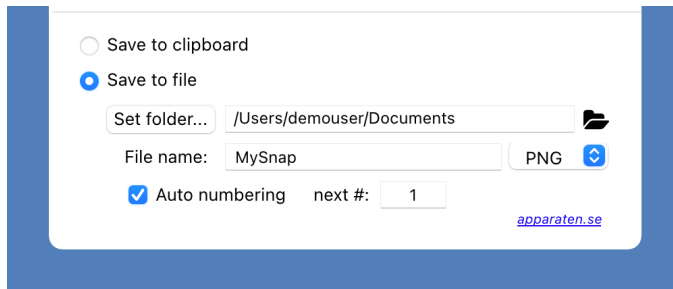
Figure 28   Save to file settings

The "Set folder" button displays a dialog that specifies the path to the folder where the file(s) will be saved. When the path is set, it appears in the field to the right of the button. Clicking the 📂 icon opens the folder in the Finder.
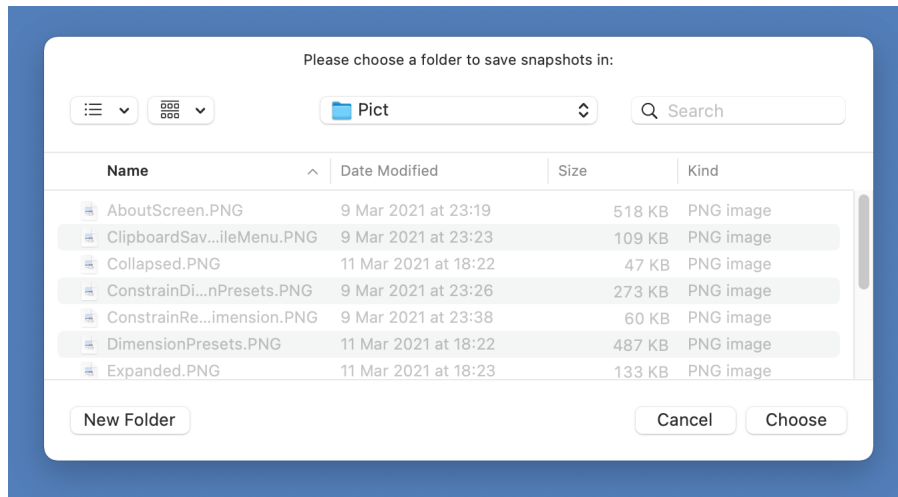

Figure 29   "Set folder" dialogue

The "File name" field specifies the file name, and the pop-up menu specifies the file format (PNG, JPEG,GIF, BMP, or PBM). See supported file formats in Chapter 6.2.1.

If the file already exists on the path, a dialog appears where the selections are available to replace the file rename the file to be saved or cancel the operation, see Figure 30.
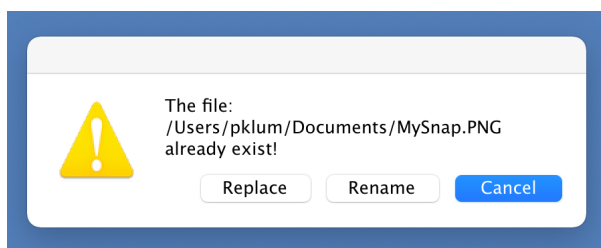

Figure 30   File dialog already exists

If the option "Rename" is selected, a dialog appears where a new name can be entered, see Figure 31.
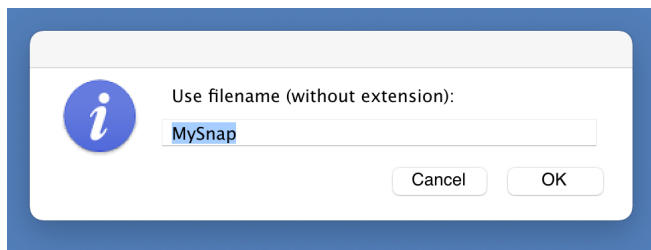
Figure 31   New file name if the name already exists

6.2.1   File formats

Table 2 lists the file formats that SnapRect supports.

Table 2   Supported File Formats

Ext	Format	Properties
PNG	Portable Network Graphics	Lossless compression. 24-bit (16.7 million colors), supports DPI.
JPEG	Joint Photographic Experts Group	Loss on compression. 24-bit (16.7 million colors), supports DPI
GIF	Graphics Interchange Format	Lossless compression. 8-bit (256 colors)
BMP	Windows bitmap file	Uncompressed. Common in Microsoft Windows
PBM	Portable Bitmap file	Simple file format

The recommended file format is PNG.