



# Sketchify Tutorial Macros

[sketchify.sf.net](http://sketchify.sf.net)

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# Macros – Grouping Actions

- Macro enable creating more complex actions
- A macro is a list of successive commands that is triggered by a single event
  - Macro enable creation of complex actions by grouping simple ones
- Macros can include pauses in between actions, facilitating control of dynamic effects



# Sketchify Macros

- Two types of Sketchify macro constructs:
  - Commands
  - Control Flow Structures



# Sketchify Macro Commands

- Currently supported commands include:
  - The transition to another sketch
  - Pausing macro execution for a specified time
  - Actions on variables, including updating, appending text, and incrementing
  - Starting and stopping timers
  - Starting and stopping other macros
  - Opening external programs or files



# Sketchify Macros Control Flow

- IF <condition>
- REPEAT <n | Forever>
- PAUSE
- WAIT UNTIL <condition>
- WAIT FOR UPDATE <variable>
- STOP



# Sketchify Macro Example

- Pause for 3 seconds and then go to Sketch 1
  - **PAUSE 3**
  - Go To Sketch    Sketch 1**

The screenshot shows the Sketchify macro editor interface. The 'On Entry' tab is selected. The macro sequence consists of two blocks:

Block	Value	Order	Repeat	Test
PAUSE	3.0	1	1	<input type="checkbox"/>
Go to sketch	Sketch 1	2	1	<input type="checkbox"/>

At the bottom of the interface, there are controls for 'Repeat: 1', 'Complete Blocks', 'Reset', 'Test', and a checkbox for 'highlight execution'.



# Creating Sketchify Macros

- Build in Macros
  - On Sketch Entry/Exit
- Shared Macros
  - Can be called on any event, and shared among sketches



# Build-In Sketchify Macros

- On Sketch Entry

The screenshot shows the 'On Sketch Entry' macro configuration window. The 'On Entry' tab is selected. The macro list contains two items: 'PAUSE' with a duration of 3.0, and 'Go to sketch' with the target 'Sketch 1'. The 'PAUSE' item is highlighted in yellow. At the bottom, there is a 'Repeat' dropdown set to 1, and buttons for 'Complete Blocks', 'Reset', and 'Test'. A checkbox for 'highlight execution' is present and unchecked.

- On Sketch Exit

The screenshot shows the 'On Sketch Exit' macro configuration window. The 'On Exit' tab is selected. The macro list is currently empty. At the bottom, there is a 'Repeat' dropdown set to 1, and buttons for 'Complete Blocks', 'Reset', and 'Test'. A checkbox for 'highlight execution' is present and unchecked.





# Shared Macros

The screenshot displays a software interface with a macro editor on the left and a macro list on the right. The macro editor is titled "Macro 1" and contains the following configuration:

- Name: Macro 1
- Repeat: 1
- IF block:  $a > b$
- Variable update:  $c = a$
- END block

Buttons for "Complete Blocks", "Reset", and "Test" are visible. A checkbox for "highlight execution" is present and unchecked. The macro list on the right shows "Macro 1" as the only entry. The "Macros" tab in the list is circled in red, and a red arrow points from it to the "Macro 1" editor.



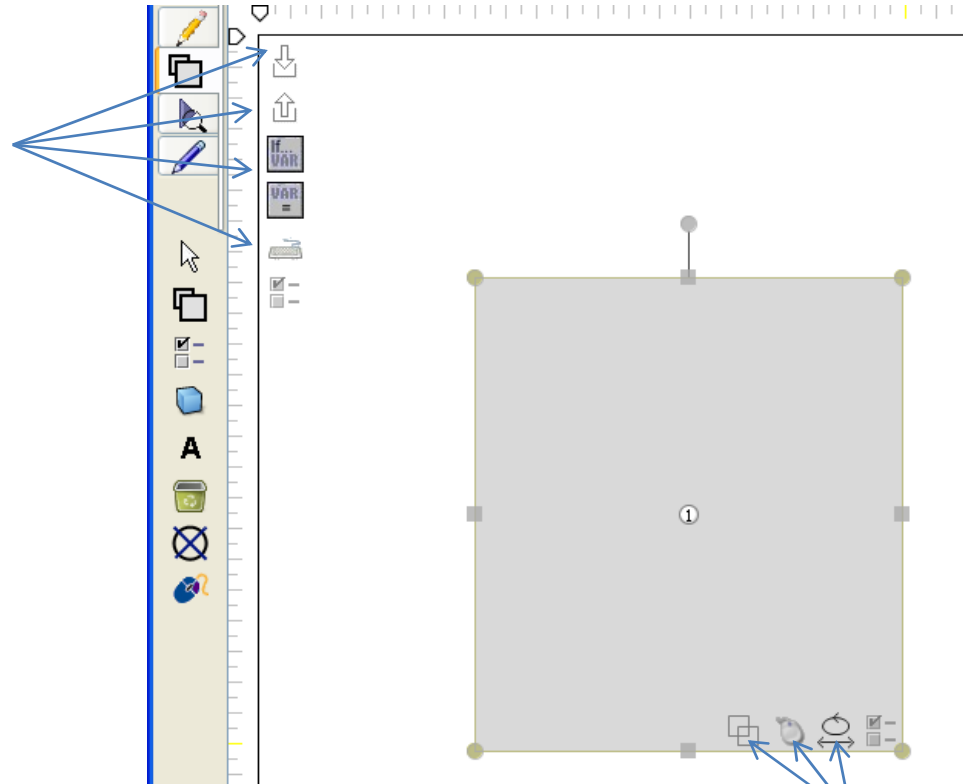
# Calling Shared Macros

- Macros can be called from several places
  - On active region mouse events
  - On sketch events (entry or exit)
  - On variable updates ("On Variable Update" actions)
  - On keyboard events
  - From other macros, as one of the commands
- Drag-and-Drop on any sketch or region event
- Directly specify in settings



# Drop Event Anchors

Anchors for connecting sketch events (on entry, on exit, on variable update, on keyboard event) by drag-and-drop of variables, timers and macros. You can also double-click on these icons to open current settings for these events and properties.



Anchors for connecting region events (region overlap, discrete mouse events, continues mouse events) by drag-and-drop of variables, timers and macros. You can also double-click on these icons to open current settings for these events and properties.

