



## 9 Editors - UV Editor

### Table of content

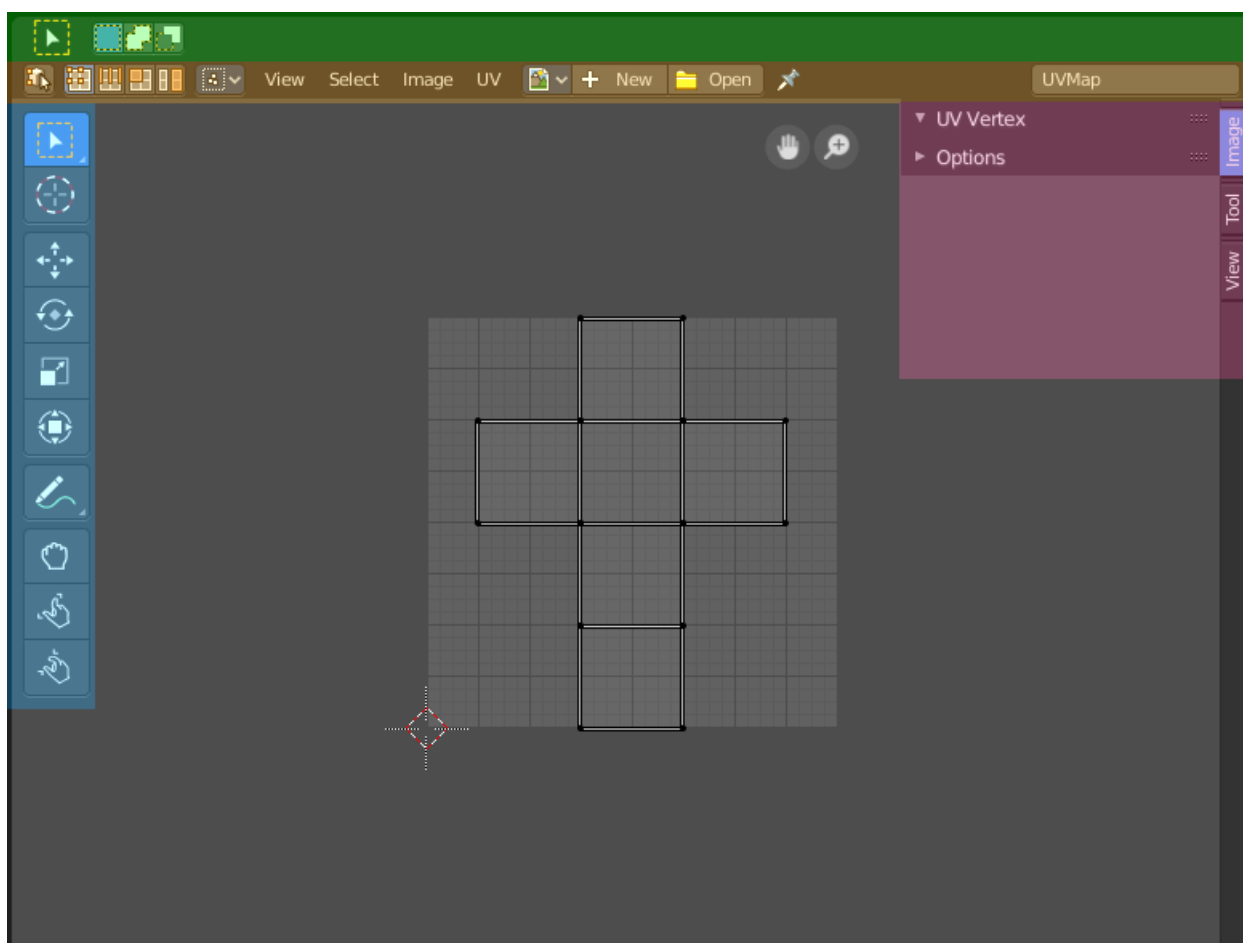
UV Editor.....	3
Navigating in the UV Image Editor viewport.....	3
Hotkeys.....	4
Navigation Elements.....	4
2D Cursor.....	4
UV context menu.....	4
Unwrap.....	4
Last Operator Unwrap.....	4
Method.....	4
Fill Holes.....	5
Correct Aspect.....	5
Use Subsurf Modifier.....	5
Margin.....	5
Follow Active Quads.....	5
Last Operator Follow Active Quads.....	5
Edge Length Mode.....	5
Pin.....	5
Unpin.....	5
Snap.....	6
Last Operator Snap Selection and Snap Cursor.....	6
Target.....	6
Last operator Pin.....	6
Clear.....	6
Mirror X.....	6
Mirror Y.....	6
Last Operator Mirror.....	6
Orientation.....	6
Constraint Axis.....	6
Proportional Editing.....	7
Proportional Editing Falloff.....	7
Connected.....	7
Projected(2D).....	7
Straighten.....	7
Straighten X.....	7
Straighten Y.....	7
Align Auto.....	7
Align X.....	7
Align Y.....	7
Last operator Align.....	8
Axis.....	8
Merge.....	8
At Center.....	8
At Cursor.....	8
Last operator Snap Selection.....	8
Target.....	8
By Distance.....	8
Last operator Merge UVs by Distance.....	8

Merge Distance.....	8
Unselected.....	8
Stitch.....	9
Last Operator Stitch.....	9
Use Limit.....	9
Snap Island.....	9
Limit.....	9
Static Island.....	9
Active Object.....	9
Snap at Midpoint.....	9
Clear Seams.....	9
Operation Mode.....	9
Split.....	10
Selection.....	10
Quick Favorites menu.....	10
Slider snapping.....	10
Hotkey only functionality.....	10
Loop Select - Alt Left Mouse.....	10
Loop Select - Shift Alt Left Mouse.....	11
Edge Ring Select - Ctrl Alt Left Mouse.....	11
Edge Ring Select - Shift Ctrl Alt Left Mouse.....	11
Unwrap - U.....	11
Last Operator Unwrap.....	11
Method.....	11
Fill Holes.....	11
Correct Aspect.....	11
Use Subsurf Modifier.....	11
Margin.....	11
Pick shortest path.....	11
Last operator Pick shortest path.....	12
Face stepping.....	12
Topology Distance.....	12
Deselected.....	12
Selected.....	12
Offset.....	12

## UV Editor

The UV Image Editor is the place where you can display and edit the UV mapping, which doesn't necessarily require to have an image to be loaded.

The functionality of the UV Editor is connected to the 3D view. You need to have a mesh object selected, and you need to be in Edit mode to show the UV wire.



The UV editor is divided into several areas has several tool areas.

Green - Tool Settings Area

Grey - Viewport

Orange - Header

Blue - Tool Shelf

Pink - Sidebar

The Tool Settings area contains the same functionality than the Tools tab in the Sidebar. So we won't cover it.

## Navigating in the UV Image Editor viewport

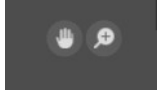
## Hotkeys

Pan the view - MMB

Zoom - Mouse Wheel, LMB+CTRL, Numpad + / -

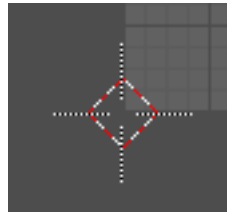
## Navigation Elements

There are also two navigation elements for panning and zoom in the upper right corner. Click at them, hold the mouse button down, and move.



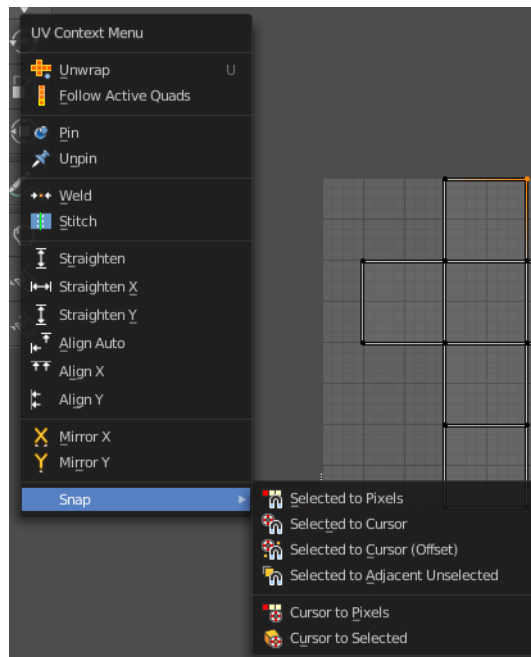
## 2D Cursor

The 2D Cursor is the center point for tool operations. It can be set to mouse position with Alt + Right Mouse click. Or with the Cursor tool in the



## UV context menu

When you double right click into the viewport, then you will open a menu. The UV Context menu. Its content is to 100% double content to already existing menus. And it is despite the name not contextual.



## Unwrap

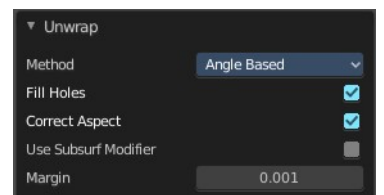
Unwraps the selected geometry with the method Angle based. ABF stands for Angle Based Flattening.

## Last Operator Unwrap

The last operator appears in the 3D view. Unwrap ABF and Unwrap LSCM shares the same Last Operator.

### Method

Method is a drop down box where you can choose between Unwrap method Angle Based and Conformal.



## **Fill Holes**

Fill holes in the mesh before unwrapping.

## **Correct Aspect**

Take the Image Aspect Ratio into account.

## **Use Subsurf Modifier**

Unwraps an existing Subsurf Modifier. You need to add a Subsurf Modifier first.

## **Margin**

The distance between the single UV patches.

## **Follow Active Quads**

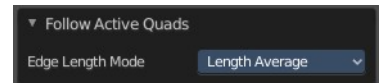
Follow Active quads maps UV coordinates starting from an active face, and maps all adjacent faces in quad shape then. This way you can for example unwrap a pipe or a road. You first need to have a face selected. Then select everything. And then click at Follow Active Quads.

## **Last Operator Follow Active Quads**

The Last Operator contains the same settings than the Settings dialogue.

## **Edge Length Mode**

Edge Length Mode is a drop-down box where you can choose the Length method.

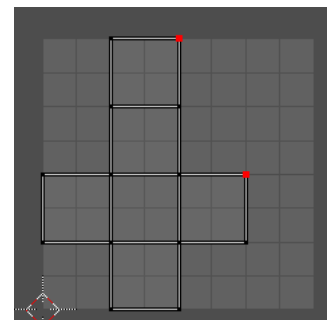


## **Pin**

Pins the selected vertices . This vertices are now nailed for the unwrap algorithms Angle based and Conformal. Their positions will not change when you repeat the unwrapping. And the algorithms will try to fit the rest of the geometry to this pinned vertices.

Pinned vertices are marked red.

A use case is for example when you have a distorted result for symmetric geometry like a face with the Conformal method. Then you can try to align two center vertices, pin them, and repeat the conformal method. It may be more symmetrical afterwards.

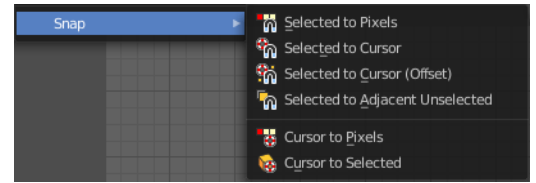


## **Unpin**

Unpins pinned geometry.

## Snap

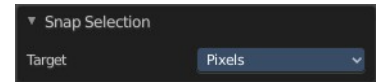
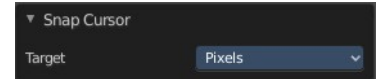
Snap is a sub menu with some snapping tools. The menu items should be pretty self explaining. Selected to Pixels snaps the selected geometry to the pixels of the image, and so on.



## Last Operator Snap Selection and Snap Cursor

### Target

Set the snap target method again.



### Last operator Pin

This last operator appears in the 3D view. Pin and unpin shares the same last operator.



### Clear

Unpins pinned geometry.

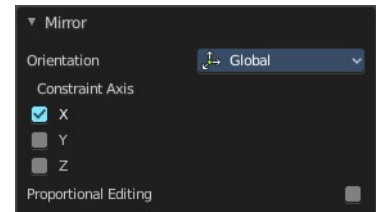
---

## Mirror X

Mirrors the selection along the X axis. The mirror point is the pivot of the selection.

## Mirror Y

Mirrors the selection along the Y axis. The mirror point is the pivot of the selection.

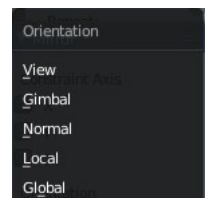


## Last Operator Mirror

The Last Operator Mirror panel gives you tools to adjust the mirror action.

### Orientation

Orientation is a drop-down box where you can choose the type of orientation for the mirroring action.



### Constraint Axis

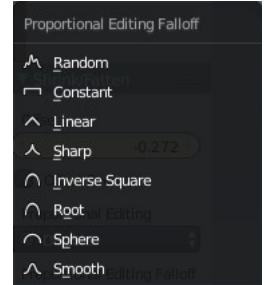
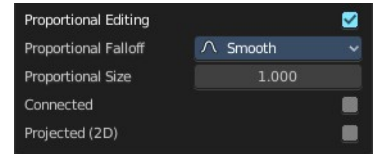
Constraint Axis gives you the possibility to define the mirror axis. You can choose more than one axis here.

## ***Proportional Editing***

Activates proportional editing

## ***Proportional Editing Falloff***

Proportional Editing Falloff is a drop-down box where you can choose a method for the falloff for the proportional editing.



## ***Connected***

The proportional falloff gets calculated for connected parts only.

## ***Projected(2D)***

The proportional falloff gets calculated in the screen space. Depth doesn't play a role. When it's in the radius, then it gets calculated.

## **Straighten**

Straightens the selected geometry in both directions, X and Y axis.

## **Straighten X**

Straightens the selected geometry along the X axis.

## **Straighten Y**

Straightens the selected geometry along the Y axis.

## **Align Auto**

Aligns the selection. The align axis gets chosen from the selection itself. When it's higher than tall, then it aligns along the Y axis. When it's taller than high, then it aligns along the X axis.

The align point is the pivot of the selection.

## **Align X**

Aligns the selection along the X axis. The align point is the pivot of the selection.

## **Align Y**

Aligns the selection along the Y axis. The align point is the pivot of the selection.

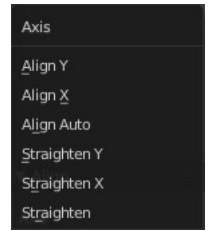
## Last operator Align

The Last operator Align unions all the single straighten and align actions in one operator.



## Axis

Lists the straighten and align methods again.



## Merge

### At Center

Merges the selected vertices at the center.

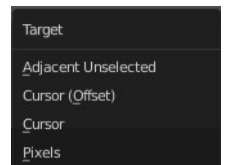
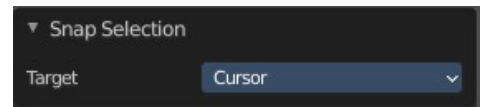
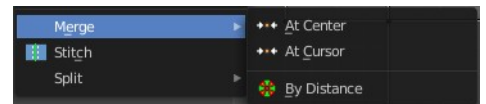
### At Cursor

Merges the selected vertices at the 2d cursor

### Last operator Snap Selection

#### Target

To which element to snap to.



## By Distance

Merge vertices that are below a specified distance to each other.

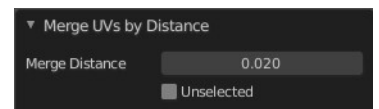
### Last operator Merge UVs by Distance

#### Merge Distance

Maximum distance for welding vertices.

#### Unselected

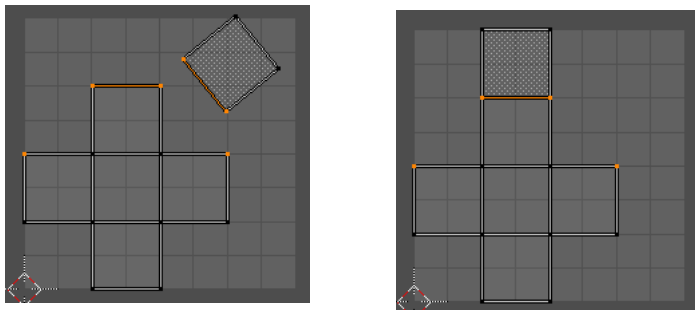
Merge selected vertices to other unselected vertices.





## Stitch

Stitch tries to union UV patches along the selected edges or vertices.



### Last Operator Stitch

This last operator appears in the 3D view.

#### **Use Limit**

Just snap when the elements are below a given distance.

#### **Snap Island**

Snap the whole UV patch, or just the selected edge(s)/vertices

#### **Limit**

The limit distance for Use Limit.

#### **Static Island**

Adjust which island stays in place when stitching.

#### **Active Object**

Index of the active object.

#### **Snap at Midpoint**

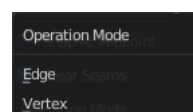
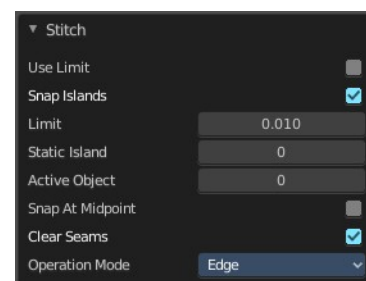
Snap at the center point of the two elements instead the first to the last.

#### **Clear Seams**

Unmarks seams when stitching.

#### **Operation Mode**

The operation mode. Calculate with Edges or Vertices.



## Split

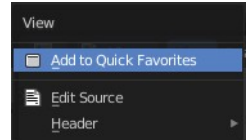


## Selection

Split the selected geometry from the not selected geometry.

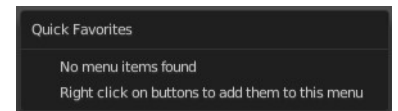
## Quick Favorites menu

When you right click at a menu or a button, then a right click menu will open. Tools have usually an Add to Quick Favorites menu entry.



The Quick Favorites Menu is empty by default. With Add to Quick favorites you can add this menu to the Quick menu.

In the 3D view we have a menu called Quick in the header, which shows this content then. In the Image Editor you can just call it with its hotkey. Q. It has no regular menu entry here.



## Slider snapping

Snapping also works at sliders. Hover with the mouse over the slider, start to slide, and holding down **Ctrl** will snap the sliders in incremental steps.



When it's a default value between 0 and 1 then it usually snaps in 0.1 steps. When it's a default value over 1 then it usually snaps in steps of 10.

## Hotkey only functionality

Important! These hotkeys works with the default Bforartists key map And they do not list the N dof hotkeys. N dof is a 3d connexion mouse device that is also used for tablets.

Most of the tools can be found in the graphical UI. But there are still some tools that are hotkey only. Some have a UI brother with equal functionality. For example, Pick shortest path is the hotkey sister of Select shortest path. Some are hotkey only since they cannot be integrated in the graphical UI. Like calling the File menu under the mouse. Or mouse position dependent functionality like selecting an edge loop.

The navigation hotkeys and the context menus are excluded here since they are already covered.

## Loop Select - Alt Left Mouse

Select an edge loop.

## Loop Select - Shift Alt Left Mouse

Select an edge loop. Adds to selection.

## Edge Ring Select - Ctrl Alt Left Mouse

Select an edge ring.

## Edge Ring Select - Shift Ctrl Alt Left Mouse

Select an edge ring. Adds to selection.

---

## Unwrap - U

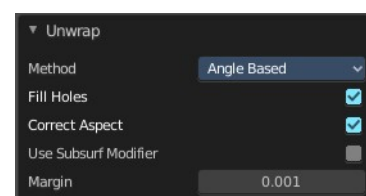
Unwraps the selected geometry. This operator starts with the method Angle based.

### Last Operator Unwrap

The last operator appears in the 3D view. Unwrap ABF and Unwrap LSCM shares the same Last Operator.

#### **Method**

Method is a drop down box to choose between Unwrap method Angle Based and Conformal.



#### **Fill Holes**

Fill holes in the mesh before unwrapping.

#### **Correct Aspect**

Take the Image Aspect Ratio into account.

#### **Use Subsurf Modifier**

Unwraps an existing Subsurf Modifier. You need to add a Subsurf Modifier first.

#### **Margin**

The distance between the single UV patches.

---

## Pick shortest path

Click at the first edge or vertice, hold down ctrl, click at the last edge or vertice.

## Last operator Pick shortest path

### ***Face stepping***

Traverse connected faces. Including diagonals and edge rings.

### ***Topology Distance***

Find the minimum number of steps. And ignore the spatial distance.

### ***Deselected***

Don't select the whole path, but just every nth element of it.

### ***Selected***

This is connected to nth element. Number of elements to skip at once.

### ***Offset***

This is connected to nth element. Start with an offset.

