

GIMP

align tool project

SS 13

Team members

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design goals

control

Using the align tool should offer the users a good workflow. Users shall be able to work exactly and precisely with the tool. Both easy and more difficult tasks should be simple to perform for GIMP users.

the freedom to create

After a while using the tool, handling the align tool itself should somehow be done automatically. If this is the case GIMP users can focus on the creative part of using the tool, instead of figuring out how the things are done.

speed in handling

Not just control and the freedom to create is an important aspect the align tool, but how fast users can handle these different options within the tool. The faster users are in creating things the more likely they are to use the tool in future.

functionality list

Align

The align tool is used to align and distribute different objects. Under the term object is meant layers, selections, paths and channels.

In alignment the function is to align layers, which include image, text and shapes; paths, top, bottom, right and centers (vertical and horizontal), as well as center and middle. Also the alignment to the canvas, active shape or layer and pre-set templates.

Distribute

In distribution the function is to distribute layers which include image, text and shapes; paths, active layers, shape, offset and distribute within the canvas.

user scenarios

Simple Align

These following user scenarios are used to cover the most essential functions of the align tool. By going through the scenarios the good and bad aspects of the align tool get to daylight.

The simple alignment scenario is about simple align objects (selections, layers or paths) with the canvas.

keeping things together

Keeping things together and align objects (selections, layers or paths) to other objects is important for working with the align tool.

real distribution

In that scenario the goal it is to put all the objects together with an specific offset, that we can change in the toolbox.

everything together

The last scenario is the most complex one, because it includes all the previous scenarios.



the evaluation

These previous scenarios were used to create a professional evaluation of the align tool.

The current tool was founded not to accomplish the goals for GIMP. The Align and Distribute functions had not a clear presentation, which made their performance complicated. The Distribution takes quiet a long time and the freedom to create is not guaranteed as it is now. As well as that both alignment and distribution have the same icons,

so it is very confusing for users. There is an irregularity in the measurements of the offset with the canvas which makes the hole process of measures unmanageable. Also there is no drop down box where you can determine the number of pixels so users have to put the value manually or take extra time clicking all the numbers to get to the desired number; actions we agree that were unnecessary. Whereas the speed of handling the tool suffers alot from that case.

the brainstorming

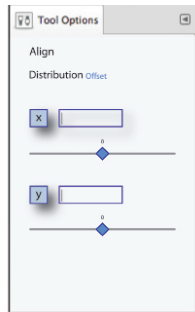
In the next step a brainstorm session was used to gain as many ideas as possible. To build a solid base for the redesign of the tool.

Redesign of a align tool

This chapter consists the re-design of the align tool. This Redesign is trying to avoid the negative aspects we gained from out of the evaluation.

This solution is more or less without the toolbox and it gets everything done within the canvas. However there are some parts inside of the toolbox, because otherwise users could get confused if they had to use shortcuts or right click etc. for setting the offset for example.

And this would cause on the one hand a reduction of the handling speed of the tool and the freedom to create.



toolbox

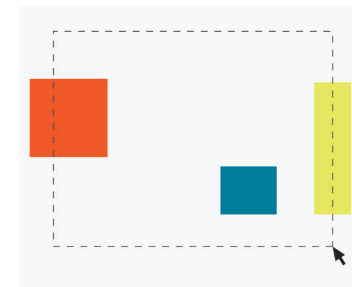
The only thing what appears in the toolbox is the vertical and horizontal distribution buttons and offsets.

objects

Objects that can be aligned are layers, selections, paths and channels.

leader object

The leader object is the object to which all other objects can be aligned or distributed to(it can be a layer, selection or path). Multiple selections with using "shift" will set the first selected object to the leader object.



rubber band

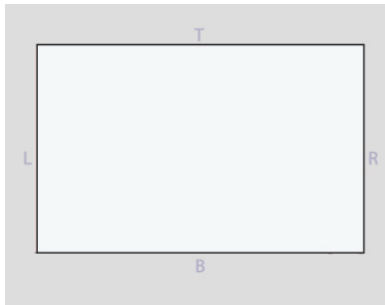
Rubber band is used to select multiple objects at the same time without using the shift key.



set leader object when rubber band

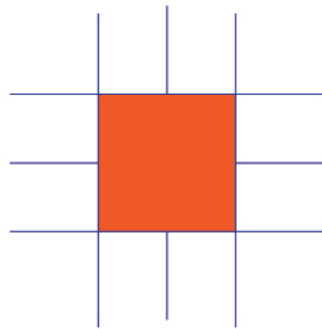
If objects are selected with rubber band, there is no leader object at first. A leader object can be set by right click on the wished object and choosing set leader.

alignment



alignmap

The align map is a feature of the alignment tool which helps GIMP users align layers (images, texts, etc.) paths and selections to the canvas edges. There are four basic possibilities: top, bottom, left and right.



object alignmap

The “object align map” will appear to the leader object. With this map users can align other objects to the leader object. The “object align map” offers users the ability to tell selected objects where they shall exactly align to the leader object. GIMP users can execute an alignment by just clicking one of the edges of the “object align map”.

This align map guarantees users the freedom to create and a total speed of handling the alignment.

distribution



y-button

The y button is used for executing the vertical distribution. The distribution will be executed by just clicking the button.



x-button

The x button is used for executing the horizontal distribution. The distribution will be executed by just clicking the button.

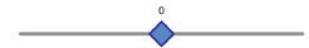
Offset

Offset is the space between two objects. The offset can be both positive and negative. A positive value enlarges the space between two objects, where a negative value reduces the space between objects. They can even overlap with a negative value.



the offset field

With the offset field offers the possibility to set an positive or negative value for the offset.



offset slide bar

The offset slide bar is used to adjust offset really fast, but in comparison to the offset field the slide bar is imprecise.

examples

example 1

align an object (layer, path and selection) to the edges of the canvas

example 2

align objects to a leader object

example 3

set a leader when you rubber band

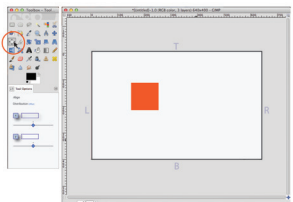
example 4

distribute objects vertically and horizontally with offset

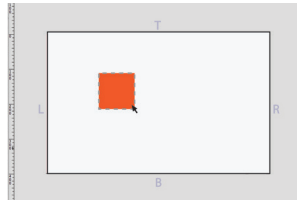
example 1

align an object (layer, path and selection) to the edges of the canvas

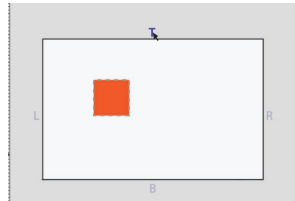
In this example users can see step by step how simple alignment works.



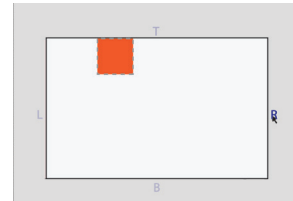
By selecting the alignment tool the align map will appear around the canvas.



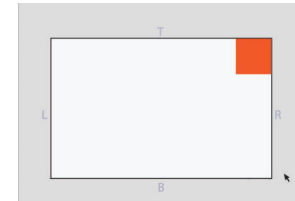
To select an object just click on it.



After selecting objects you can align them with the T (top), B (Bottom), L (left) and R (Right) buttons.



In this case "T" was clicked and the object aligns to the top edge of the canvas.

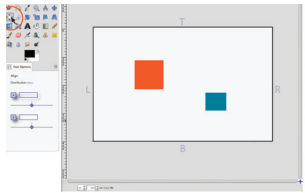


To align the object to a certain corner you can make a second move. Here it was first Top then right to align the object to the upper-right corner.

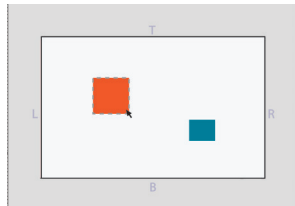
example 2

align objects to a leader object

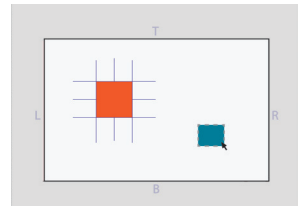
In this example you will see how you can align object to a leader object.



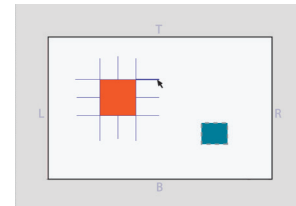
In this scenario you want to keep things together (align objects to a leader object).



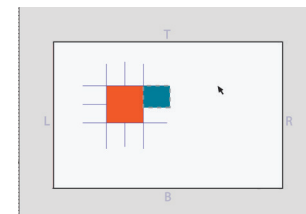
Here the orange object is selected.



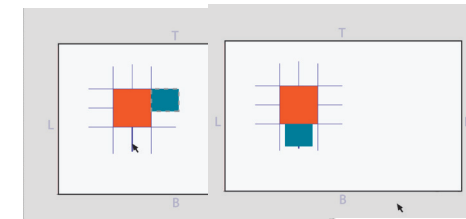
When you select a second item the orange object automatically becomes the leader object. When a object is set as a leader the "object align map" will appear at the leader object like in this picture.



All objects selected (except for the leader object itself) can now be aligned to the leader object. In this case you see the blue object aligns to the right and top edge of the leader object.



Now you want to have it on the bottom edge centered. So you click the "object align map element" on the middle of the bottom edge of the "object align map".

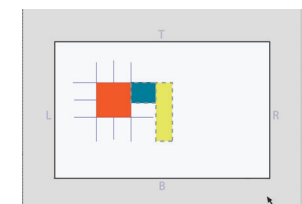
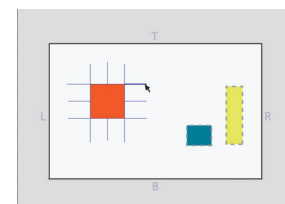
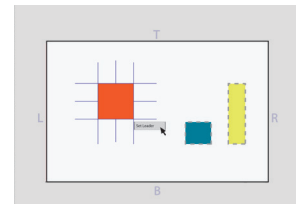
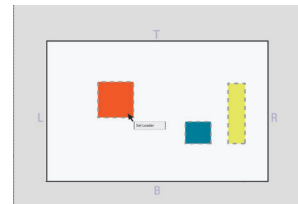
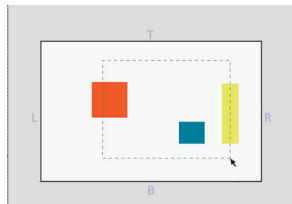
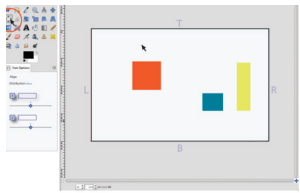


The blue object is now on the bottom edge of the leader object and it is centered.

example 3

set a leader when you rubber band

In this example you will see how you set a leader when you rubber band.



if you select objects one by another, the first one automatically becomes the leader object. So this scenario is about how to set a leader if you select objects via rubber band.
In this case you have 3 objects

You select them by rubber band.

Right click on the object you want to become a leader object (the orange one in this case) and select "set leader".

After setting the leader object the "object align map" appears on the orange object.

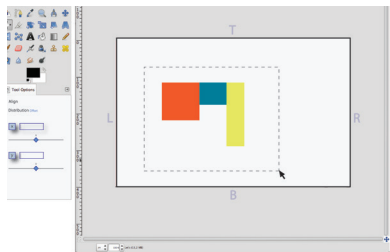
And GIMP users can align the other selected objects to the leader object again. In this case to the right edge, aligned with their top edges.

Here the object are in its final position

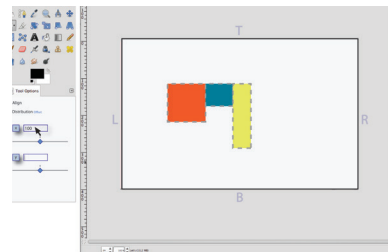
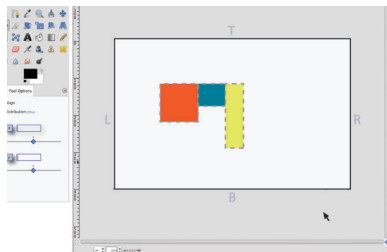
example 4

distribute objects vertically and horizontally with offset

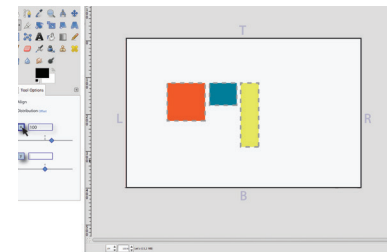
In this example you will see how the vertical and horizontal distribution tool works with offset



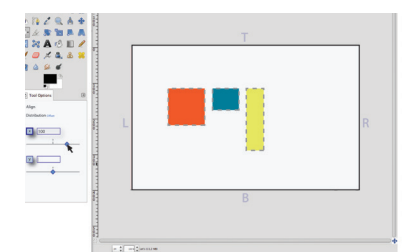
First select the objects you want to distribute.



After selecting the objects you can choose the offset precisely by typing in the value.



After clicking the x-button in this case (horizontal) the offset will be executed.



You can adjust the offset with the slider right beneath the offset value as well.