

USER MANUAL

Tiling+



CALDERA 2014

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Author: Diane Hoehlinger
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Introduction

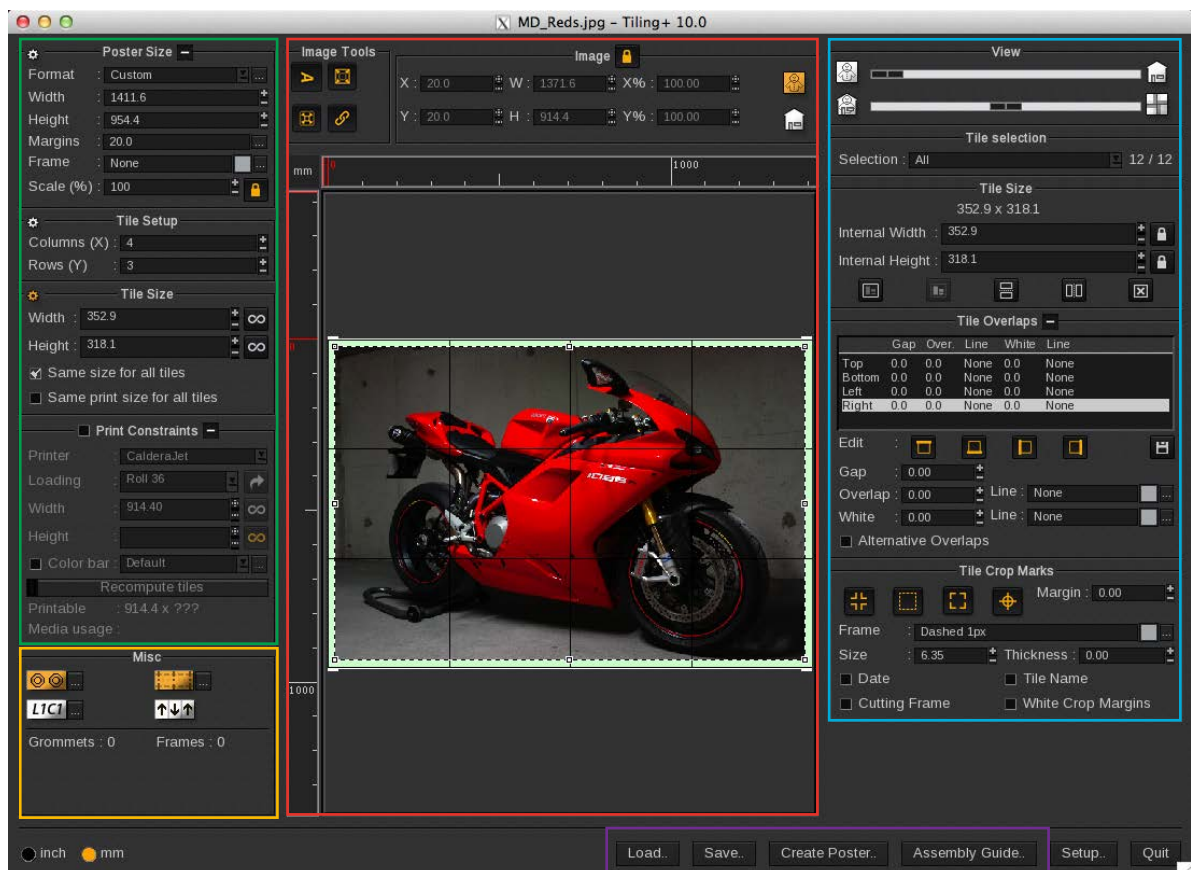
Available in **GrandRIP+** and **VisualRIP+**, the **Tiling+** module allows you to create multi-tiled prints.

Tiling+ can be used in many diverse cases such as printing posters meant to be pasted on 4x3 meters advertisement panels, preparing pictures to be put on panels for a stand (in the case of an exhibition), bus wrapping and many more.

Overview

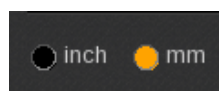
The **Tiling+** window can be divided into five parts:

- **Global poster setup** (global size, tile size, printing constraints); left column
- **Image parameters and preview**; center part
- **Tile edition** including the overlap and white parameters and crop marks; right column
- **Addition of effects and complementary elements** (grommets, frames, labels, flip-flop effect); bottom left of the window
- **Poster finishing** (save, creation of the assembly guide, etc.); bottom right of the window

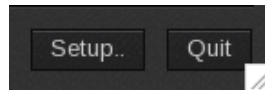


NOTE: **Tiling+**, like **Caldera's** other software, possesses an active help that displays in a tooltip details about the element.

The measure and display units that will be applied are indicated in the bottom left part of the window. You can choose between inches and millimeters, the dimensions are then automatically recalculated.

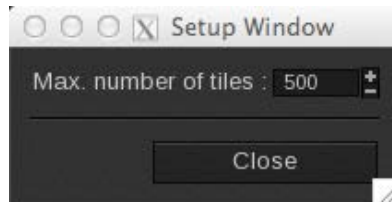


Tiling+ has two buttons located at the bottom right of the window:



- **Quit** closes the window.
- **Setup...** opens the following pop-up where you can setup the maximal number of tiles that can be created per poster.

Having a huge number of tiles has very negative impact on **Tiling+** interface performance.



Global setup

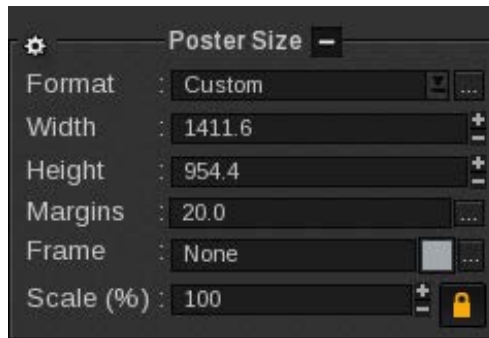
The global setup is the first thing you need to take care of. It can be divided into four parts:

- Poster Size
- Tile Setup
- Tile Size
- Print Constraints

The screenshot displays the 'Global Setup' interface, organized into four distinct sections:

- Poster Size:** Includes settings for Format (Custom), Width (1411.6), Height (954.4), Margins (20.0), Frame (None), and Scale (%) (100).
- Tile Setup:** Includes settings for Columns (X) (4) and Rows (Y) (3).
- Tile Size:** Includes settings for Width (352.9) and Height (318.1), with checkboxes for 'Same size for all tiles' (checked) and 'Same print size for all tiles' (unchecked).
- Print Constraints:** Includes settings for Printer (CalderaJet), Loading (Roll 36), Width (914.40), Height, and Color bar (Default). It also features a 'Recompute tiles' button and a status bar showing 'Printable : 914.4 x ???' and 'Media usage :'. A lock icon is present next to the Scale (%) field.

Poster size



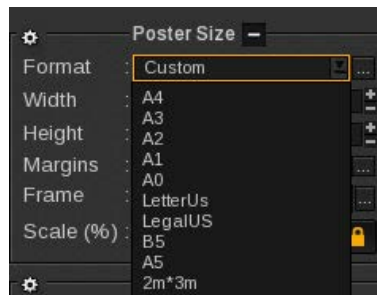
This part allows you to define the size of your poster including margins and a frame around the image.

Format

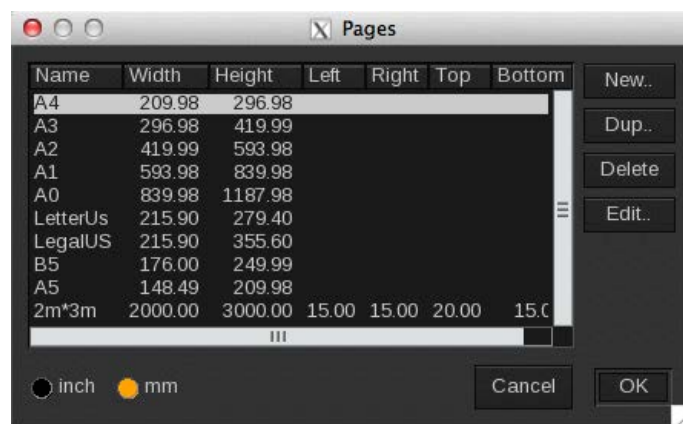
Choose your poster format among those which are already setup or create a new page format.

If the width, height or margins are changed in the main window, the format will change to "custom".

To choose a preset format, use the following drop-down menu:



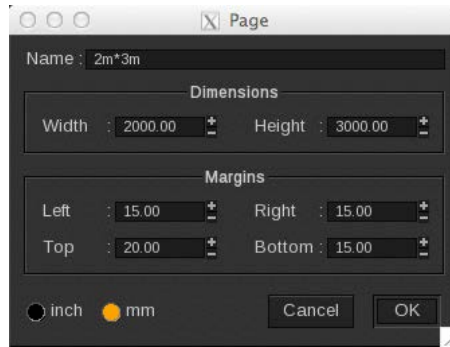
To add formats to the list, click on the **[...]** button, the following window opens and allows you to manage the preset formats.



Use the buttons to:

- **New...:** create a new page
- **Dup...:** duplicate an existing page (the page creation window opens already filled with the original format information, so you only have to change the name in order to create the new format)
- **Delete:** the page is removed from the list
- **Edit...:** edit the selected format

A page format is composed of a **name**, a **width**, a **height** (its only pages, you cannot create rolls) and **margins** (left, right, top and bottom).



View of the format creation pop-up. Be careful, only margins can be set to zero.

Width and Height

These two values indicate the poster’s dimensions, including the margins.

The **width** and the **height** are defined in the format. You can edit them manually; in this case, the **Format** will switch to *Custom* mode.



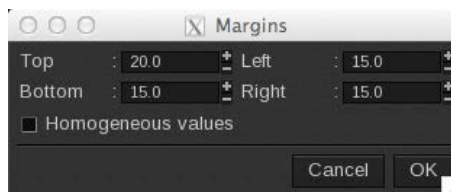
Margins

These are the margins of the poster and will be indicated in green in the poster preview.

By default, the image will not cover the margins. However, nothing prevents you from manually placing the image above them.

There are two way of editing these margins:

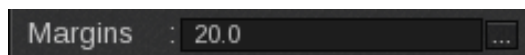
- Click the **[...]** button to display the margins edition window:



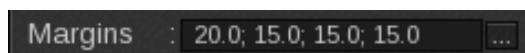
You can indicate a different value for each margin: **Top**, **Bottom**, **Left** and **Right**. The “*Homogeneous values*” tool set all the margins to the highest one. You can then increase or reduce all the margins uniformly.

NOTE: These numbers are expressed in the measure unit selected at the bottom of the **Tiling+** window, i.e. inches or millimeters.

- Directly type the values you want to apply in the **Margins** field.
 - If you indicate a single number, all margins will have the same value.



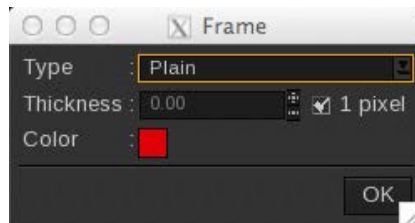
- You can also specify every margin by separating them with a “;”. Margins are always considered as being in this order: Top, Bottom, Left and Right.



Frame

You can add a frame to your poster, whether it has margins or not. A frame is a line drawn between the margins and the inner part of the poster. It can be used for cutting or positioning purposes, indicating where the poster needs to be folded, etc.

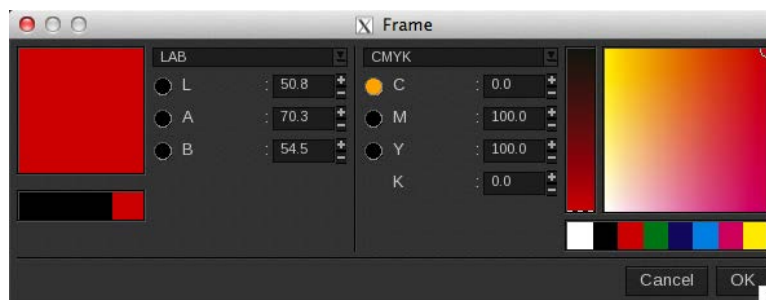
Click the **[...]** button to edit the frame settings.



- First, choose the line **Type** that will be used:
 - *None*: no frame
 - *Plain*: solid line
 - *Dashed*: dotted line
 - *Edges*: only the beginning and the end of each line will be printed
 - *External*: like *Edges* except that only the part outside of the image is printed, in the crop marks area
- Then define the line **thickness**:
 - Either check the *1 pixel* box, the line will automatically be 1-pixel thick
 - Or enter directly the value in the field. (If *1 pixel* is activated, you will have to uncheck it first.)

NOTE: values are expressed in the measure unit selected at the bottom of the window, i.e. inches or millimeters.

- Finally, choose the color. Double-click on the colored area to open the color selector.
 - You can choose your color in the following color spaces: *LAB*, *XYZ* or *HSB* on the left or *RGB*, *CMYK* or *GREY* on the right.
 - Enter the value or picked it with the pipette then click on **Ok** to validate it.



Scale

The **scale** indicates the poster size that based on the size of the image to print. For instance, if you type 200 in this field, the poster will then be modified to be 200% of the image size.

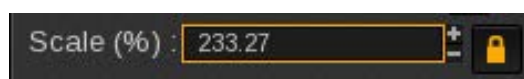
Margins are not included in the scale calculation.

The poster total size corresponds to:

$$\text{Image size} * \text{scale} + \text{margins}$$

The image is loaded in real size by default except if the adjustment tool has been selected for the image. According to that, each time you change the image, the scale will change with it.

The padlock, located next to the scale, allows you to lock the scale.

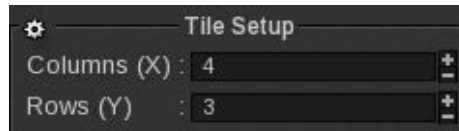


With this option, every time you change the image, it is the poster size that is changed to adapt itself to the scale and not the scale that changes to fit the poster size.

This tool is useful in workflow mode; it allows you to create posters with flexible sizes though adjusted to the image.

Be careful, when the automatic calculation is applied to the Poster size, even if the padlock is activated, the poster size can be changed independently from the current image. On the other hand, if you change the image, the poster size will then be changed accordingly to the scale constraints. (See Automatic calculation on the next page to get further information.)

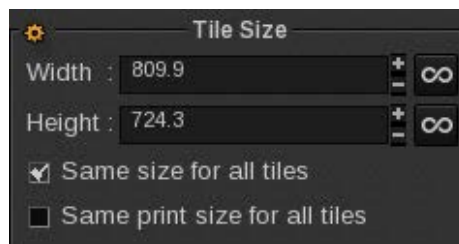
Tile setup



This area is used to define the amount of tiles that make up your poster.

- **Columns (X)**: number of columns, horizontal axis
- **Rows (Y)**: number of lines, vertical axis.

Tile size



Width & Height

The **width** and **height** fields allow you to define the size of your tiles.

If you print on a roll, you can also set an unlimited size for one of these fields (or both): simply click on the infinite symbol placed after the **width** or the **height** field.

If an unlimited length is set, the number of tiles linked to this orientation will automatically be 1.

Same size for all tiles

If you activate the "Same size for all tiles" option, **Tiling+** will recalculate the dimensions of your tiles so that they all have the same size. The tile size will be calculated using the following method:

$$\text{Width} = \text{poster's width} / \text{Columns (X)}$$

$$\text{Height} = \text{poster's height} / \text{Rows (Y)}$$

If this box is not checked, the tiles size will be that of the input in the **Width** and **Height** fields, and a smaller tile might be created at the end of the row and/or the column.

Same print size for all tiles

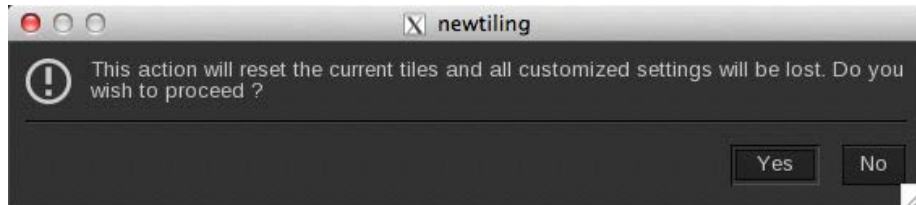
The "Same print size for all tiles" option will cause all the tiles to have the same external size, including overlaps. This can be helpful for example when used with **NestOba** feature together with a XY Fotoba cutter.

Handmade changing



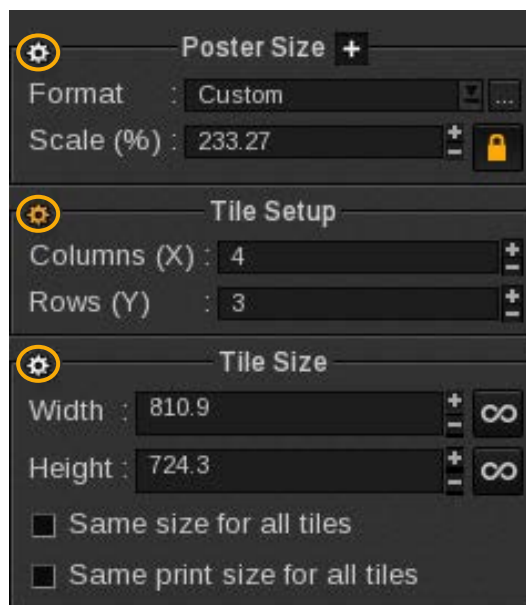
If a red asterisk appears next to the name of this area, it means that the tiles have been edited manually (by changing the size of a tile, redefining overlaps...).

From this moment on, if you perform any other change that would cause the tiles to be calculated again, a pop-up window will ask you if you want to validate this action. If you choose to go on, then all the changes that have been manually performed will be lost, and the default values of your tiles will be restored.



Automatic recalculation

You most certainly have noticed a small cog-shaped symbol in front of the names of the previous parts: *Poster size*, *Tile setup* and *Tile size*. It indicates that the parts highly depend on each other.



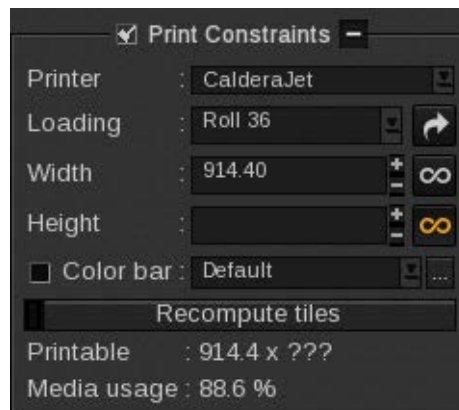
This symbol which is orange when it is activated, is in fact used to point at an element that has to be automatically recalculated.

For instance, if it is activated for the *Poster Size* area, and you change the number of tiles in *Tiles Setup*, **Tiling+** will then recalculate the poster size (on the other hand, it will not modify the dimensions of the tiles, since that area was not marked with an active symbol).

As soon as you edit an area that was already in automatic recalculation mode, this very action is then applied to another area, according to a well-defined order:

- If the active and modified zone is *Tile setup*, then the recalculation will be on **Tile size**.
- If the active and modified zone is *Tile size*, then the recalculation will be on **Tile setup**.
- If the active and modified zone is *Poster size*, then the recalculation will be applied to one of the two other areas, depending on the oldest date input there; it would recalculate the oldest values.

Print Constraints



In order to use this section, you first need to activate it by checking its box. The arrow at the top opens or closes the additional parameters: width, height and color bar

This function allows you to define a constraint linked to the printer on which you are going to print your poster; this constraint is also linked to the media. Indeed, if you need to divide a poster into tiles to print it, it is often because the poster itself would be too big to be printed on a single roll's width. Therefore, using a constraint allows you to print on the total width of your roll, in order to make your print cost-effective by avoiding a waste of paper.

Printer

Choose the **printer** in the drop-down list. Only printers displayed in the application bar are available here. The printer's settings (loading, page formats, etc.) will be the same as if you were to run it in the print module.

Loading

Loading corresponds to the type of media in the printer. The formats available are the ones that are defined in the printer settings. Once you have chosen one of the formats, **Width** and **Height** are set to its dimensions. If you edit these manually, the loading will switch to *Custom*.

The small arrow next to the load allows you to modify the orientations of the tiles by switching the height and the width values.

It's used to print the tiles in the other orientation when the poster is larger than higher (be careful, in this case, you might need to make a 90° rotation of the image).

The infinite symbol, next to width and height, is activated when a roll type of media is chosen.

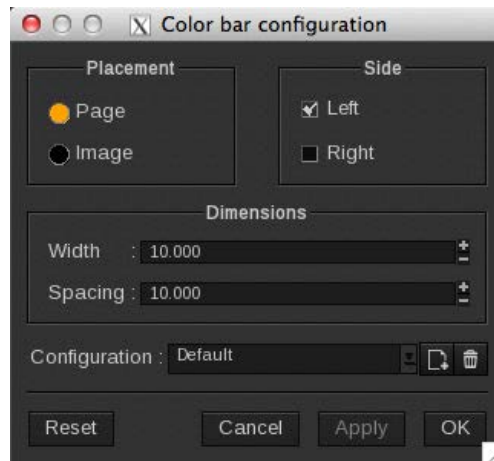
Color bars


This functionality allows you to add color bars (aka color stripes or gutters) along the side of the print. Colors are then printed during the whole process even if the image does not contain all of them everywhere. The goal is to have the printer spitting ink at all times to prevent abrupt density variations or nozzle clogging.

To activate the color bars, check the option then select the configuration you want to use.

Color bar configurations are shared with all **Caldera** modules. So, if you create a new configuration in **Tiling+**, it will be available in the print module and vice-versa.

To create a color bar configuration, simply click the **[...]** button, the following window opens:



- Choose the **placement** of the color bars, either next to the margin (*page*) or next to the *image*.
- Select the **side(s)** where the bars will be printed. If you select both left and right, the bars will be printed twice. You cannot unselect both sides.
- Then indicate the **dimensions** including the total **width** of the bars (the unit is the module's one) and the **spacing** between the bars and the image or the page depending on the placement.
- You can then save your new configuration by clicking the button: 

If you change the current configuration, a star appears in front of the configuration name meaning the changes have not been saved yet.

To change your current configuration name, click on the saving button. A pop-up will ask you for a new name.

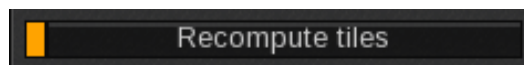
To delete a configuration from the list, select it then click on the trashcan.

- The buttons:
 - **Reset**: reset the default parameters (the ones from the example)
 - **Cancel**: close the window without saving the changes
 - **Apply**: save the changes without closing the window
 - **Ok**: save the changes and close the window

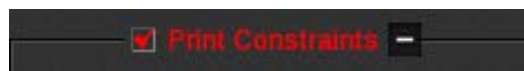
Recompute tiles

The changes made in the loading fields are not immediately reflected on the tile size or on the poster size itself; you need to click first on **Recompute tiles**.

However, it is possible for this recalculation to be done automatically, by clicking the button located next to **Recompute tiles**, the button then appears like this:



Be careful, if the name of the print constraints area becomes red and starts to flash, it means that printing is currently impossible, probably because there is an incompatibility in your settings: at least one of your tiles cannot be printed on the media with the defined conditions.



To solve this problem, click on **Recompute tiles** in order to obtain new dimensions.

Information

A few pieces of information are displayed at the bottom of the print constraints setup area: **Printable** and **Media usage**.

Printable

This corresponds to the size of the loaded media. The physical margins of the printer are not included in it. In reality, this data indicates the maximum size of the tiles that make up your poster, by taking into account all additional elements, such as overlaps and crop marks.

When the media is of roll type, one of the components does not have a fixed size and the printable area took the following shape: "894.4 x ????" for example where "???" represents the undetermined roll length.

Media usage

This information indicates how efficiently the media is used in the current configuration of your poster. It is displayed in percentage.

By selecting various media in the loading menu, you can check how cost-effective your print is. The higher this percentage, the most efficient the use of the media.

Image and preview

This area is divided into three sections:

- The image tools
- The part about the image size and position
- The preview

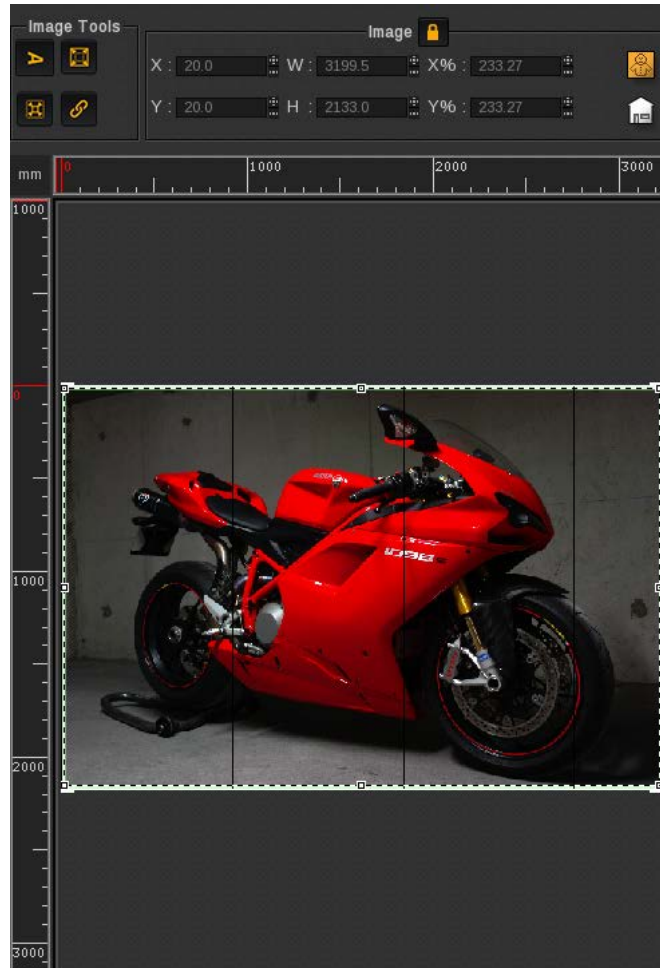
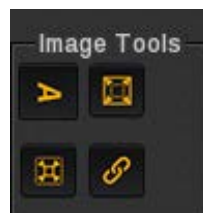


Image tools



These tools are used to apply rotations or adjustments to the image placed on the poster. They are identical to the ones you can find in the page configuration of the print module.

Image orientation

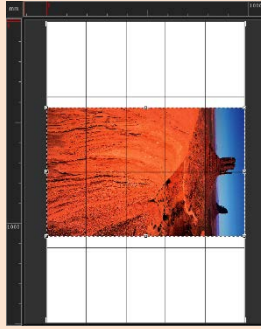


This button can be unfolded to give you access to several traditional rotation options. Below all tools with examples using a portrait and a landscape oriented image.

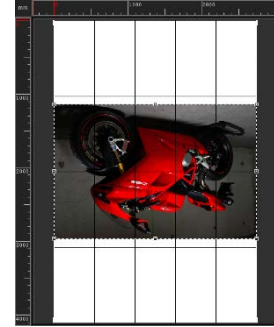
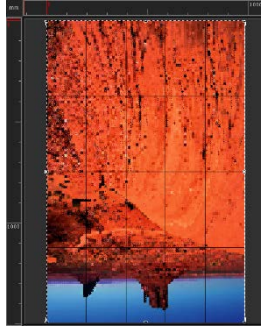
Tool	Explanation	Portrait example	Landscape example
	Automatic orientation depending on the poster size		
	Portrait orientation		
	Landscape orientation		
	Original orientation of the image		



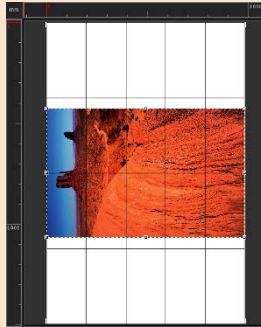
Rotation at **90° right** from the image's original orientation



Rotation at **180°** from the image's original orientation



Rotation at **90° left** from the image's original orientation

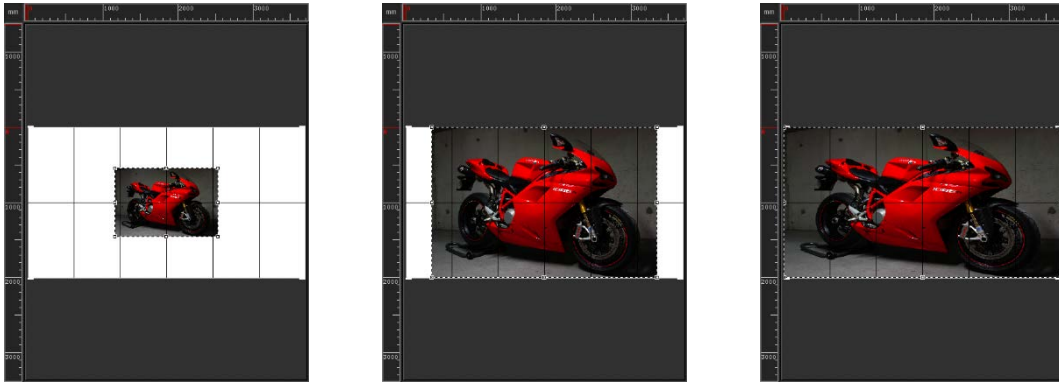


Enlarge



This function allows you to increase the size of the image in the poster to its maximum (margins not included).

If the original proportions of the image (see below) are not preserved, the image is then stretched to cover the all poster.



250% of the image then enlarged with the preservation of the original proportions (center) and without the preservation (right)

Center



This button centers the image on the page. When deactivated, the image can be placed manually on the poster.

Original proportions



This button keeps the original ratio of the image so it cannot be stretched on the poster.

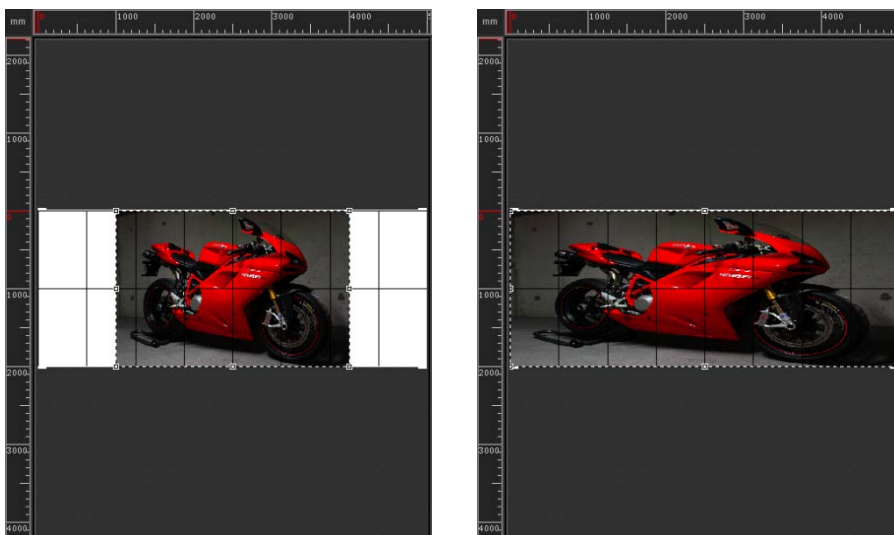
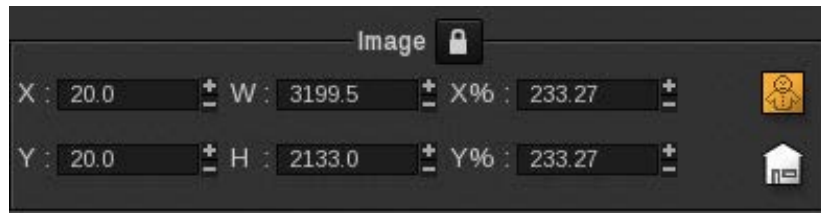


Image with the original ratio preserved (left) and one without preservation (right)

Image



The following points allow you to change the size and the position of your image:

- **X** and **Y**: position of the image relatively to the margins
- **W** and **H**: width and height of the image. If the image original ratio tool is activated, when you change one of these values, the second one will automatically move as well.
- **X%** and **Y%**: scale of the selected image in percentage.



The padlock next to the session locked the image setups when it is activated. You then cannot move or resize it whether by using the mouse or fields described above. When you run **Tiling+**, the image is locked by default.

Background image

You can add a background image to use it as reference and will not be part of the generated poster.

To add a background image to the poster, hold the Control key while dropping an image in **Tiling+**.

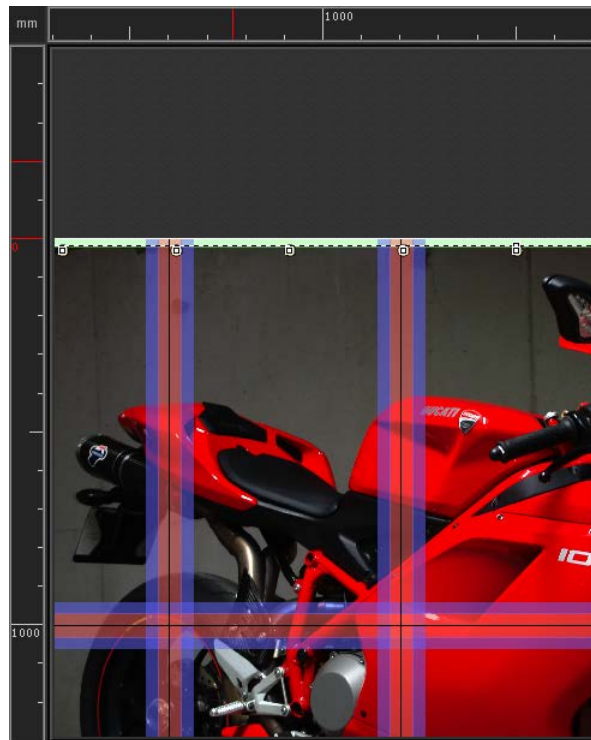
The following buttons allow you to select which of the background or foreground image will be modified by the **Image tools** and the **Image** fields.

- : foreground image selection (the one that will be tiled and print)
- : background window selection

In the two following examples, two images are placed on the preview: a landscape with thunder at the foreground and a bus at the background.



Preview



In this part of the main window, you can preview all the changes (scaling, addition of overlap, number of tiles...) applied to your poster and its image.

When it is possible to click on/modify part of the preview, the cursor of the mouse will take the shape of a small hand.

The following actions belong to all **Caldera's** preview tools. So they can be used in the display or in the printing page set up as well.

Zoom in, *zoom out* and *scroll the image*: actions available in every **Caldera** preview module to move into the preview.

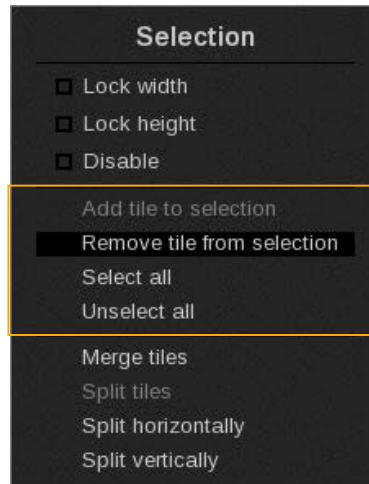
- *Zoom in*: while the Ctrl key is pressed, use the right mouse button or the mouse scroll up to zoom in.
- *Zoom out*: while the Ctrl key is pressed, use the left mouse button or the mouse scroll down to zoom out.
- *Scroll the image*: while the Ctrl key is pressed, keep the mouse scroll pressed as well then move.
- *Reset*: Alt + R combination. The display is reset to default.

Tile section

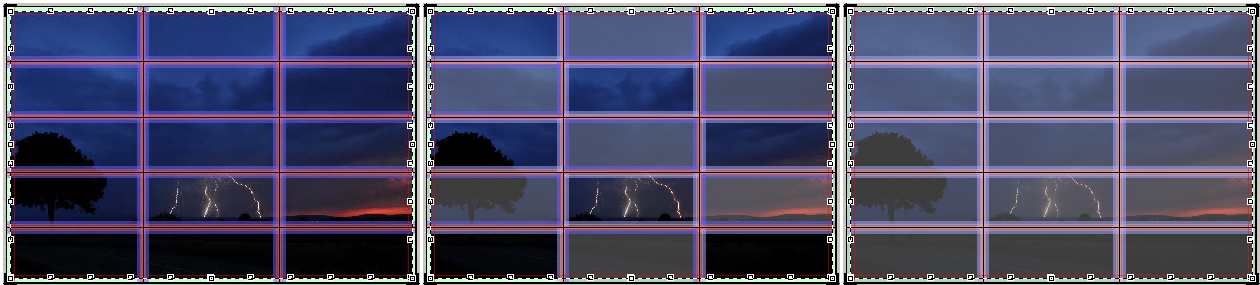
The tile(s) selected on the preview are the tiles on which changes will be applied (overlap, gap, etc.).

By default, all tiles are selected, to deselect the picture or a tile, just click outside of the tiles in the preview area. You can click and then draw a selection box in order to include several elements to the selection. Every tile that is touched by the box will be included in it. Keeping the SHIFT key pressed while selecting allows you to add or remove elements from the current selection.

A right-click on a tile allows you to open the Selection menu where you can add or remove a tile from the selection or select or deselect all tiles.



The two others set of functionalities will be described in the « Tile Size » section of the following chapter.



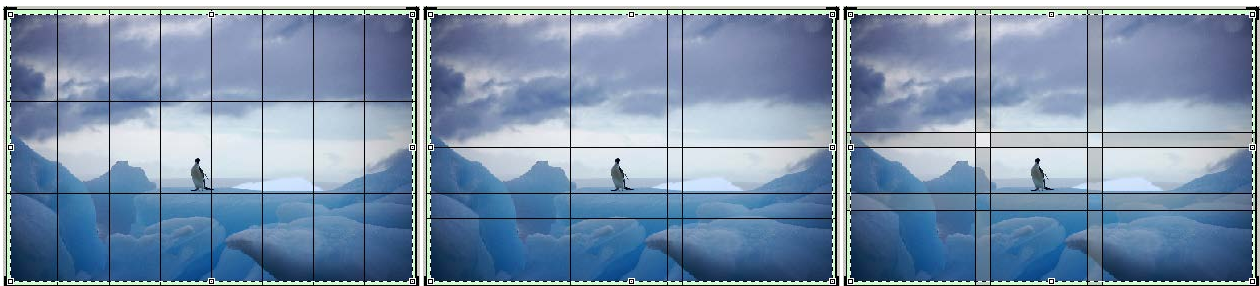
Examples: Poster fully selected; half selected; no selection

Handmade tile changes

You can change the tiles directly in the preview. Be careful, though, if you do so, tiles won't have identical sizes. Select a line and move it to move or resize the tile. You can also move an intersection of lines to resize several tiles at the same time.

If you drag the edge of the poster, a new tile will be created.

To delete a tile, just drag its line towards the edge until it disappears (or drag it until reaching another line; both lines will become one).



Examples: poster created using the tile configuration then two examples of handmade posters

If you use this method, you may encounter a slight resistance when trying to move a line. This signals that one of the tiles that will be modified through your action has reached its maximum limit, and that another tile is about to be created on the edge of the poster. This prevents you from accidentally creating additional tiles. You will experiment the same resistance when a tile reaches a small size (in this case, it means that if you go on, then your tile will disappear).

If you have defined some print constraints, they will define the maximal size of your tiles.

Tiles edition

The tiles edition is divided into five parts:

- The view
- The tile selection
- The tile size
- The tile overlaps
- The tile crop marks



In the case of the size of the tiles, as well as of the dimensions of the overlaps, white areas and gaps, the displayed values mirror the selection, whether the latter is made up of one or several tiles.

Be careful, if the selected tiles have different values, these values won't be displayed at all.

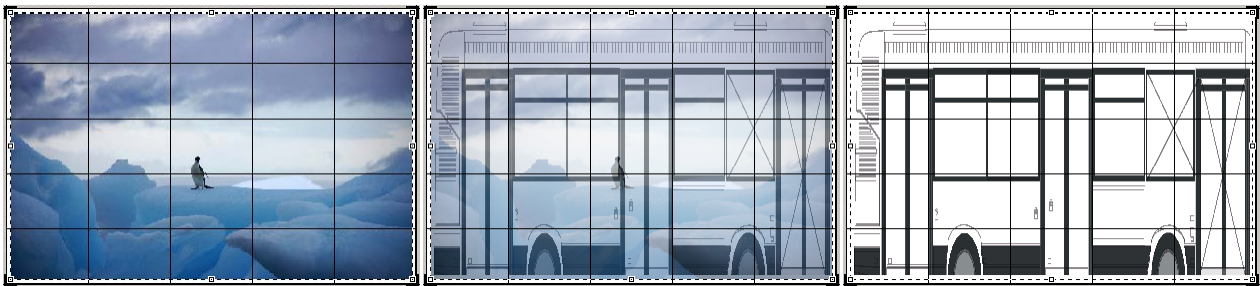
By the way, an empty field does not forbid you to put in some value. If so, the new value will be applied to all selected tiles.

View



This option is used to customize the display of the poster.

The first cursor adjusts the display of the foreground and background images. If the cursor is placed completely on the left, only the main image will be visible; conversely, if the cursor is placed completely on the right, only the background image will be visible.

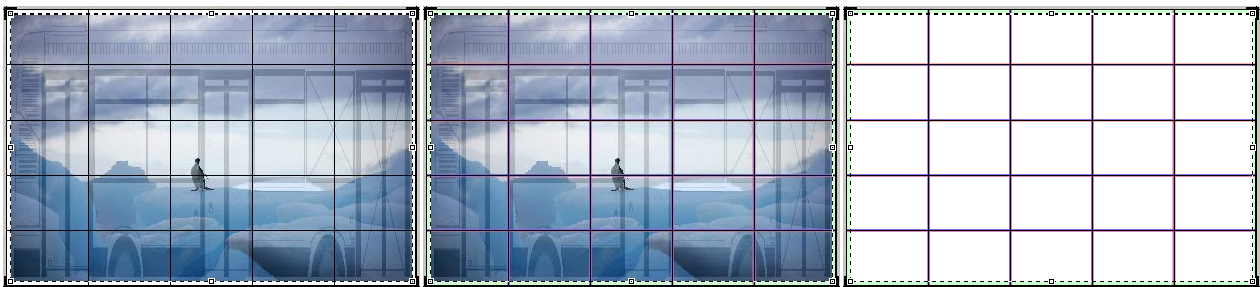


Examples, cursor to the: left, middle and right

The second cursor adjusts the display of the image and the overlap, gaps and white marks.

Here, the “image” corresponds to the combination of the foreground and the background images as decided with the cursor.

If the cursor is placed completely on the left, only the image on the poster will be visible; conversely, if the cursor is placed completely on the right, the image will be hidden, but the overlap, white and gap marks will be visible.

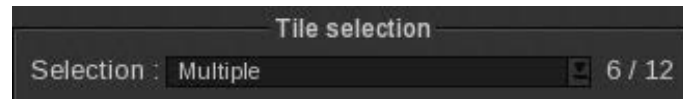


Examples, cursor to the: left, middle and right

By default, the cursors are placed in the middle. This way, both the image and the overlaps are visible.

A click on the button at the end of the line move the cursor nearer to it by stopping in the middle if it was closer to the other part of the line.

Tile selection



This area gives you access to a dynamic tile selector. You can select tiles by:

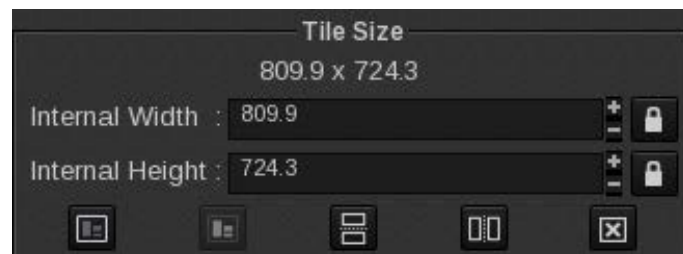
- Column (named *Column 1*, *Column 2*, etc. from left to right of the poster)
- Row (name *Row 1*, *Row 2*, etc. from top to bottom)
- Select a tile individually. Tiles are named L*C* like *L2C2* where L means line (row) and C means column.

You can also select all the tiles by using the “*All*” button.

It is also possible to select tiles directly in the preview (see previous chapter). If you selected tiles from several levels (different row or column), the “*Multiple*” label is displayed in the **Selection** field like in our example.

The numbers displayed right next to the Selection menu are in fact the number of tiles selected in relation to the total number of tiles. In our example, 6 tiles have been selected of a total of 15 tiles.

Tile size



This area of the window displays the values of the whole selection of tiles.

Under the **Tile Size** are shown two details:

- The *external size* of the selected tiles. This size takes the overlap into account.

Only identical sizes are displayed; if the height is not identical, for example, only the width will be shown and if both height and width are different for the selected tiles, “multiple values” is displayed instead of the external size.

- The selected tiles *location*. In our example only a tile has been selected and it's the L1C4 tile.

If a line or elements from the same line are selected, it will be indicated alone. The same principle is made about columns. If elements are from different columns and rows, nothing is displayed about their location.

Internal dimensions

Internal Width and **Height** correspond to the tile itself, without overlaps, as seen on the poster preview.

If the selected tiles have different sizes, the field that is different will be empty. You can put a value in it and it will be applied to the selected tiles.

The two lock-shaped icons next to each field allow you to lock the tiles to prevent their size from being modified. If the tiles are locked, then you cannot resize them directly or indirectly (resizing a tile by moving another file, for instance). You can also lock a multiple session. The locks can be set tile by tile: in the same poster, you can therefore define the first tile as being only vertically editable, the second tile as being only horizontally editable, and so on.

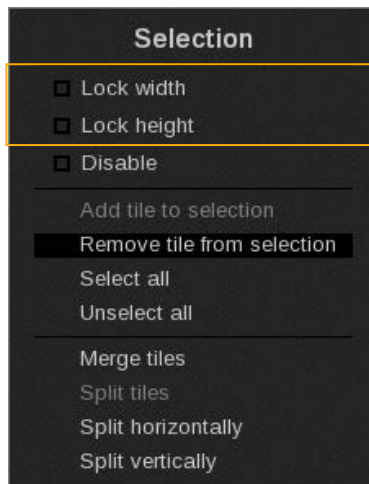
The tiles that have at least one component locked appear in pink on the preview when there are not selected.



When a selection's dimensions are changed and it impacts locked tiles, the following pop-up shows to inform you that only unlocked tiles will be modified. Be careful, if the changes have to be done on the width while the tile is locked on the width, the column will not change.



You also can lock a tile width and/or height by making a right click on it and select the proper action on the list.



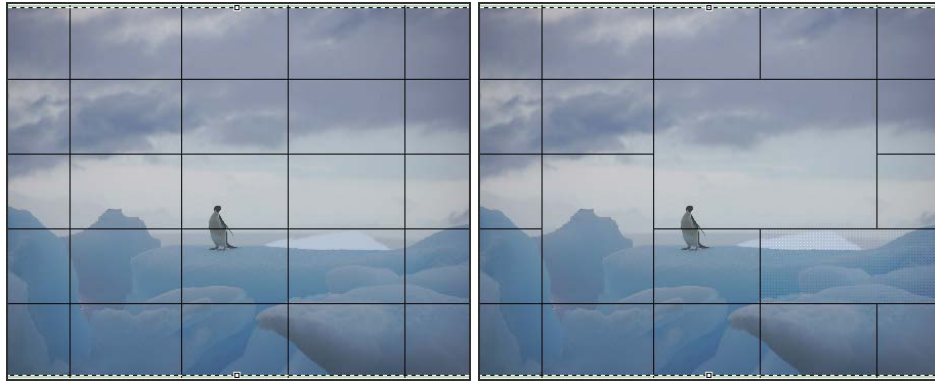
Merge/Split/Disable



This buttons allows you, once the tiles are selected, to split, merge or disable them.



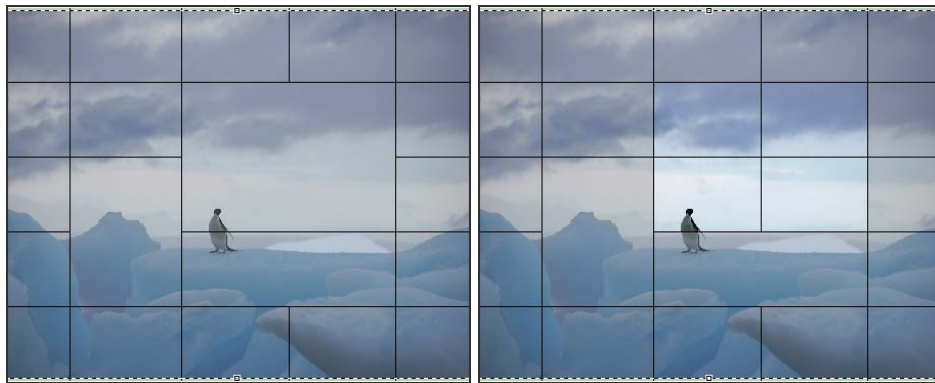
This button allows you to merge tiles. They must be side by side and their merge has to have a rectangle shape and not an odd non regular one. You also must select at least 2 tiles to activate the button.



Before and after tiles merge.



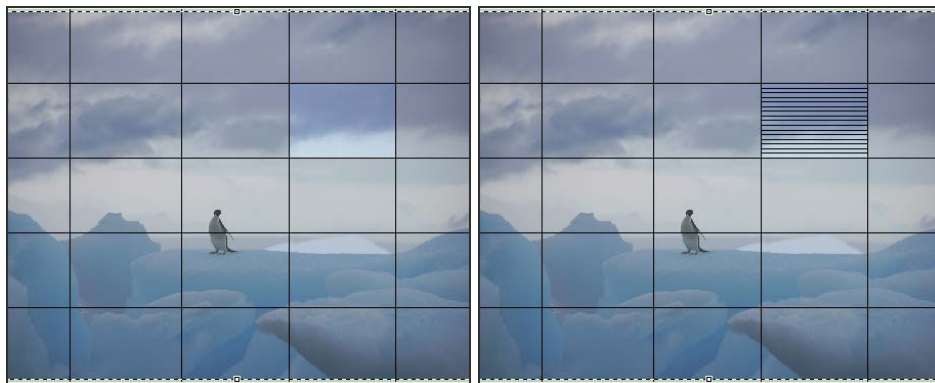
This button allows you to split the selected tile (it must be a merge of several tiles). The division complete the grid that is created by the tiles.



Before and after the tile split. We can see that the division complete effectively the grid.



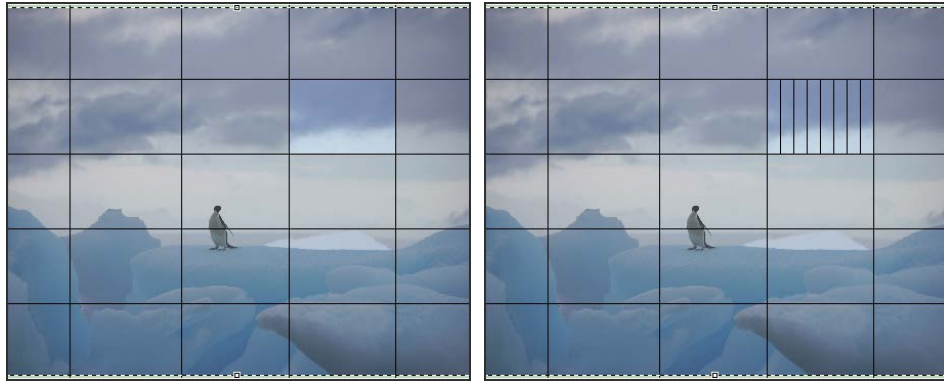
This button allows you to horizontally split on or several tiles in two.



Example of a tile split several times. When you split a tile, you automatically select the two tiles you've just create. If you redo the split, you see four tiles and so on.



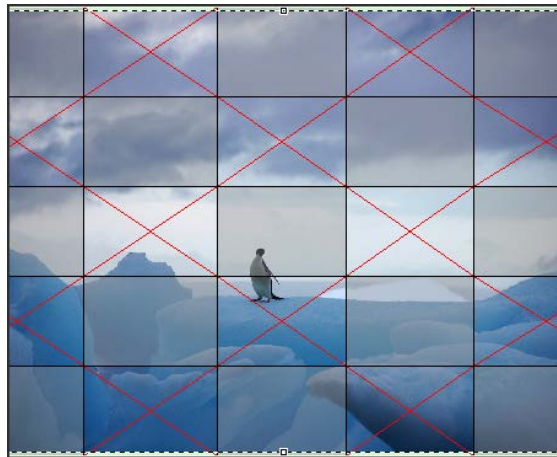
This button allows you to vertically split on or several tiles in two.



Example of a tile split several times. When you split a tile, you automatically select the two tiles you've just create. If you redo the split, you see four tiles and so on.

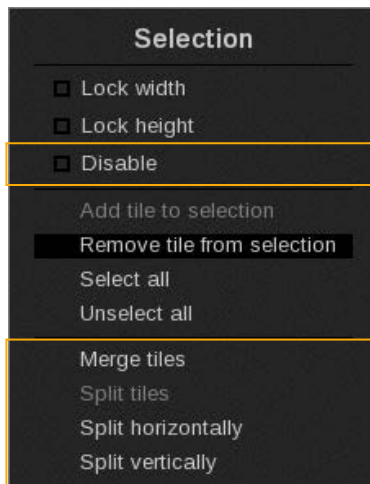


Disable the selected tiles. These tiles will not be generated during the poster creating process. They will not be printed. A click on this button activate or disable the tile.

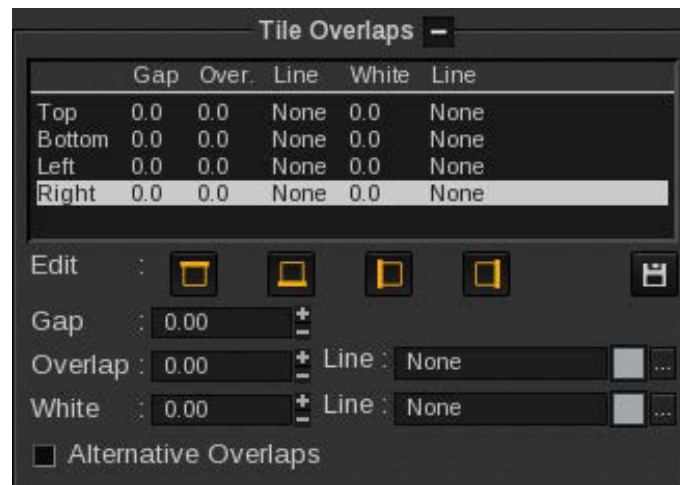


The disabled tiles appears with a red cross on the preview.

If you make a right click on one or several tiles, you can see and do the merge/split/disable actions on the selected tiles.



Tile Overlaps



Overlaps are useful to prevent the occurrence of white areas when joining the various tiles making up your posters, or to make easier the assembling or the pasting of the tiles (certain types of glues can indeed dissolve the inks, thus becoming less efficient). This part of the window therefore allows you to define overlaps for your tiles, but also to include a white area if needed, or to place a gap between them.

Be careful, changes made in this section are applied to the selected tiles only so tiles can have different gap or overlap values.

The table is the only thing you can see when you minimize the **Tile Overlap** section (using the arrow), it indicates you, for each selected tiles, which gap, overlap and white that will be applied and the type of line used to figurate it on the poster impression. The table is only informative; you cannot change values directly in it.

Edit



The four icons correspond, respectively, to an overlap/gap/white on the top, bottom, left and right side of the selected tiles. The **Edit** setting specifies the side of the tile on which the values of the input fields located below will be applied. Activated borders are highlighted in orange; on our example, changes will only be applied on the right border. To activate or deactivate a border, just click on the icon.

Saving the values

There are default values for the overlaps, the gaps and the white (initially they are of 0). However, they can be modified. Just click on the floppy icon next to the **Edit** part. The current values will become the new default values (and will remain so even if you close the software).

Be careful, if the "mult" label appears in one of the fields of the summary area, it means that the selected tiles have different overlap/gaps/white dimensions. In this case, clicking the floppy icon will not save the values: indeed, this function can only record unique values.

Gap



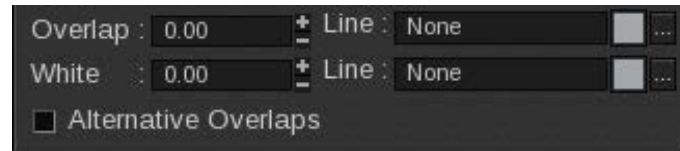
Here you can define if spaces between the tiles of the poster must be placed. The unit is the one you have choose for the module. The value will automatically be recalculated if you change the unit.

This is particularly useful if you want to hang your tiles on panels that are not very close to each other, for instance (notably in the case of a metal bar between two panels). In this case, the **Gap** function will delete a small part of the image between each tile (this part corresponds to the width of the bar), so that your image, once hung up and seen from a certain distance, keeps all its visual coherence.

A gap can be created on a tile or centered on two tiles; in this case, you will have to select for instance, the *Left* and *Right* icons, or the *Top* and *Bottom* icons, in the **Edit** part of the **Tile Overlaps** area, and apply half the gap on each side.

NOTE: if you define a gap between two tiles, there is usually no need to apply overlaps, since the gap is above all meant to create a hole between certain parts of the stand support (for instance, poles between panels). Nevertheless, such configuration is possible.

Overlap and White



Generally, you want an overlap that will let a thin band of the image appear (the aim here is to make the positioning easier, and to prevent white areas from appearing), followed by a large part without ink (it will be used to apply glue or welds).

Normally, you will never choose to apply an overlap or white on the four sides of a tile.

However, it is possible to apply overlap and white on the four sides of a tile.

In fact, your overlaps are to be set depending on the direction in which you want to paste your tiles. If you want to glue your poster from left to right and from bottom to top, you will have to set overlaps and/or white areas on the bottom and right sides of the tiles. Conversely, if you want to glue your poster from left to right and from top to bottom, you will have to put the overlaps on the bottom and right sides of the tiles.

Please note that by using **Tiling+**, you can create posters that can be pasted in any direction.

Once the tile is printed, it will thus contain part of its neighbor tiles, corresponding to the overlaps. This is why the size at the moment of printing is always larger than the size of the tiles as it has been defined.

Alternative Overlaps

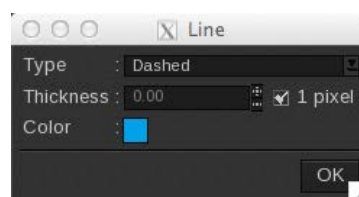
If the *Alternative Overlaps* option is activated, adjacent tiles will then have the same overlap on both sides of their common edge, and the line will be drawn at a place different from the regular one,

Line

The **Line** option allows you to define how the overlap or white part will be indicated on the poster.

The blue and red marks showing the overlap and the white on the preview (see next page) are not reported on the poster. To get visible marks on the poster, you need to define a line.

Click the **[...]** button to edit the line settings.

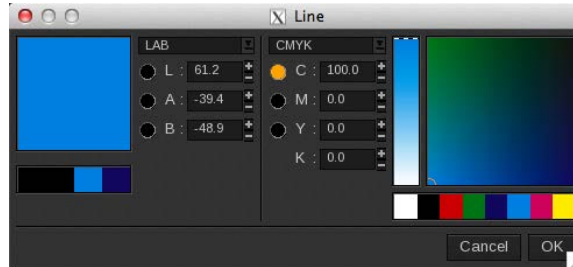


- First, choose the line **Type** that will be used:
 - *None*: no line
 - *Plain*: solid line
 - *Dashed*: dotted line
 - *Edges*: only the beginning and the end of each line will be printed
 - *External*: like *Edges* except that only the part outside of the image is printed, in the crop marks area
- Then define the line **thickness**:
 - Either check the *1 pixel* box, the line will automatically be 1-pixel thick

- Or enter directly the value in the field. (If *1pixel* is activated, you will have to uncheck it first.)

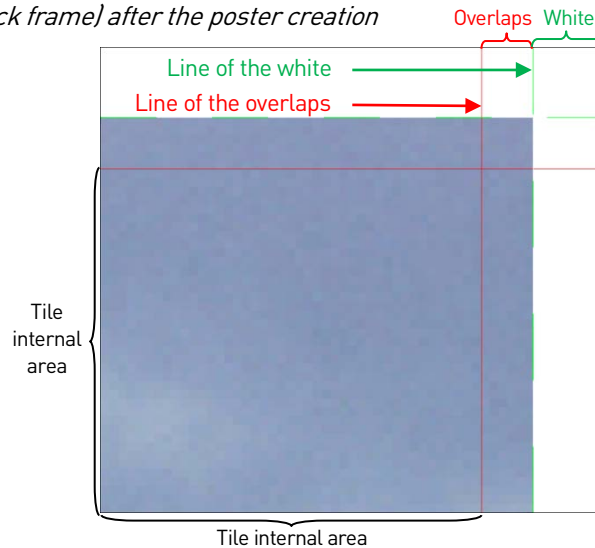
NOTE: values are expressed in the measure unit selected at the bottom of the window, i.e. inches or millimeters.

- Finally, choose the color. Double-click on the colored area to open the color selector.
 - You can choose your color in the following color spaces: *LAB*, *XYZ* or *HSB* on the left or *RGB*, *CMYK* or *GREY* on the right.
 - Enter the value or picked it with the pipette then click on **Ok** to validate it.



The line of the overlap shows the limit between the image on the tile and the overlap containing a part of the neighboring tile. The line of the white shows the limit between the overlap and the white area.

Example of a tile (the black frame) after the poster creation



Preview



On the poster preview, overlaps will appear by default in red and white areas in blue. Both are represented outside of the tiles, since they correspond to parts of the picture located on contiguous tiles.

Do not be surprised if the overlaps/white areas do not appear on the edges of the poster in the preview, even if they are shown in the summary. This is normal, since there is nothing to print on an edge. The only usefulness of these values is to make the global edition of the overlaps easier.

The lines do not appear on the preview as well but they will be printed on tiles.

Tile Crop Marks



In this area, you can choose the type of the crop marks as well as the information you want to see printed on each of your tiles.

Contrary to the others sections, this one's changes are made on all tiles and not only the selected ones.

Crop marks

This section displays the various types of marks available (these marks are the same ones as in the *Print* module). You can activate or deactivate one by clicking on it. When they are orange it means that they are activated. You can apply one, several or none at all.

Crop marks signification:



Standard: standards marks are placed on each corner of the tile



Frame: draw a continuous frame around each tile



Corner: marks are placed on each corner of the tile (these marks are not the standards)



Target: targets are placed at mid-height and mid-width of the page (cross shape)

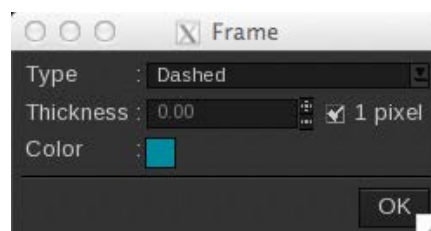
The three fields below are linked to these elements:

- **Margin:** distance between the printed part of the tile and the mark
- **Size:** length of the line used for the mark
- **Thickness:** thickness of the line used for the mark

Frame

This is a line drawn around each tile, which signals the separation between the tile and the crop marks.

Click the [\[...\]](#) button to edit the frame settings.

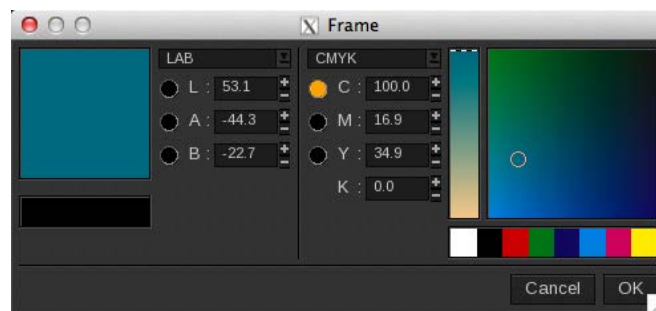


- First, choose the line **Type** that will be used:
 - *None:* no frame
 - *Plain:* solid line

- *Dashed*: dotted line
 - *Edges*: only the beginning and the end of each line will be printed
 - *External*: like *Edges* except that only the part outside of the image is printed, in the crop marks area
- Then define the line **thickness**:
- Either check the *1 pixel* box, the line will automatically be 1-pixel thick
 - Or enter directly the value in the field. (If *1 pixel* is activated, you will have to uncheck it first.)

NOTE: values are expressed in the measure unit selected at the bottom of the window, i.e. inches or millimeters.

- Finally, choose the color. Double-click on the colored area to open the color selector.
- You can choose your color in the following color spaces: *LAB*, *XYZ* or *HSB* on the left or *RGB*, *CMYK* or *GREY* on the right.
 - Enter the value or picked it with the pipette then click on **Ok** to validate it.



Additional information

Other kinds of information can be added to your tiles when they are printed. They will be placed out of the tile, in the crop marks margin.

- **Date**: add the poster creation date (not the printed date). It is printed at the right-top of the image.
- **Tile Name**: add the tile name (L1C3 for example)
- **Cutting Frame**: a frame is placed around your tiles, in case they would have to be cut by a cutting peripheral using **Caldera**'s Print-to-Cut workflow. The contour's name is: "CutContourFrame".
- **White Crop Margins**: in the print module, the crop marks margins are always white; in **Tiling+**, part of the image may appear in them if you wish so. Therefore, if this option is not activated, the picture will appear behind the crop marks; if it is, the margin will be white.

If the cutting is not very accurate, this may prevent the apparition of white areas.

Misc

The misc session is divided into four parts, each of which gets its own button. The parts are:

- The grommets management
- The frames management
- The labels management
- The Flip-Flop effect



These options are located at the bottom left of the **Tiling+** window.

To activate or deactivate an option, just click on it. If it is orange, it means it is activated.

Under the buttons are displayed the number of **grommets** and **frames** that are actually setup for the poster.

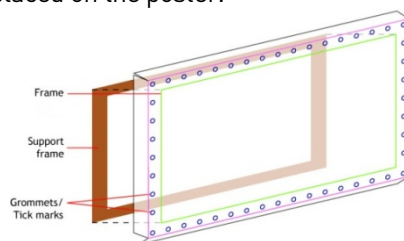
Grommets



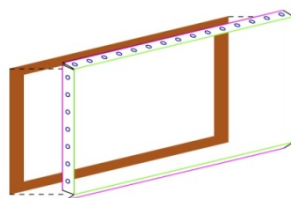
This section manages the adjunction of grommets to the poster. The marks it allows you to create, on the print itself, are used as reference points for the placing of grommets on your poster.

Grommets are used when printing wall maps for example.

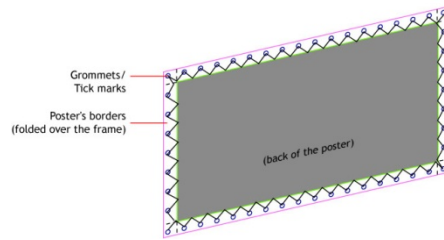
The three schemas below show more precisely how such marks can be used. The first one displays the grommets placed on the poster.



The second one shows you how to fold the poster.

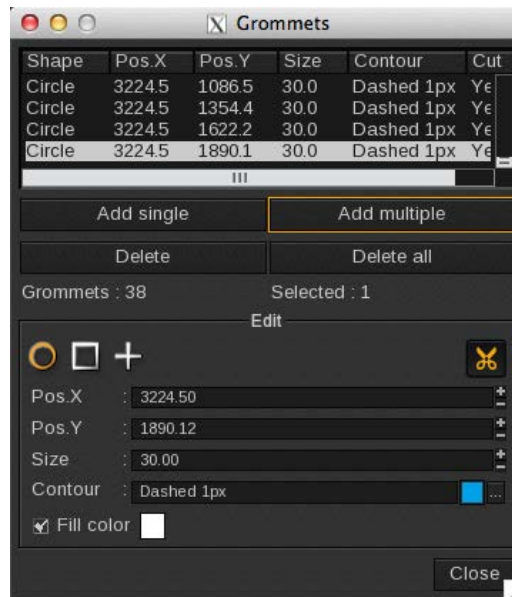


As for the third one, it shows you the poster as seen from behind, once it is folded on the frame.



Grommets management

The [...] button allows you to open the grommets management window:



Grommets addition

To add a grommet, click on **Add single**. A new grommet appears on the poster with the parameters of the last selected grommet.

Delete one or several grommets

To delete one or several grommets, select them in the list (press Ctrl) then click on the **Delete** button.

The **Selected** field shows you how many grommets are selected and how many will be deleted when you click the button.

If you want to delete all grommets, click on **Delete all**.

Grommet edition

To edit a grommet, select it in the list. Its values will automatically fill the **Edit** part. There you can change the values and see the modifications on the list and on the preview.

You can edit several grommets using the same method: select them in the list, their common settings will appear in the edit part. If their X and/or Y positions are different, the fields will be display in grey.

By default, when a grommet is created, it is selected to let you change its values if you want to.

Each grommet has the following settings:

- A **shape** that has to be chosen between the *circle*, the *square* and the *cross*.



There is no need for all grommets to have the same shape or to have the cut activated.

- A **cut contour** that can be activated or not. If you add a cut contour, the grommet's shape will not be printed anymore.



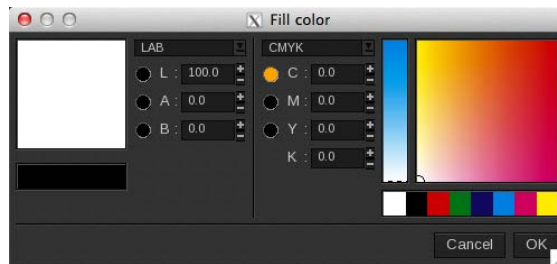
- An **X** (horizontal) and **Y** (vertical) **position** that indicated the location of the grommet center.

If the poster has margins, the grommets will automatically be placed in the middle of the margins if their size allows it.

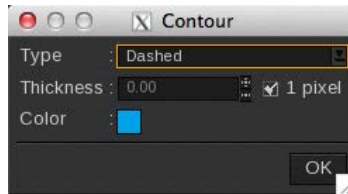
- A **size** that corresponds to:
 - The diameter, for round grommets
 - The length, for square and cross grommets

The size is indicated in the module's unit (mm or inches).

- A **fill color**. This option is available only for "squares" and "circles". By default, only the contour of the shape is printed on the poster, the inside remains transparent. You can choose to fill the shape and choose the color by clicking on the colored square. It opens the following pop-up:



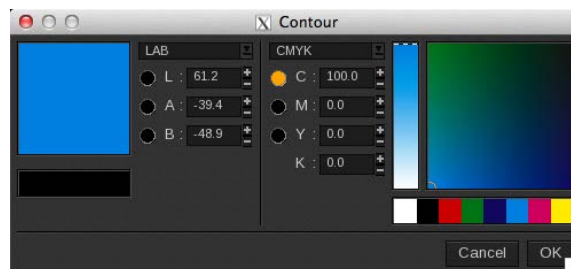
- A **contour** that is used to print the grommet mark on the poster. To edit the contour settings, click on the [...] button. The following pop-up opens:



- First, choose the line **Type** that will be used:
 - *None*: no contour
 - *Plain*: solid line
 - *Dashed*: dotted line
- Then define the line **thickness**:
 - Either check the *1 pixel* box, the line will automatically be 1-pixel thick
 - Or enter directly the value in the field. (If *1 pixel* is activated, you will have to uncheck it first.)

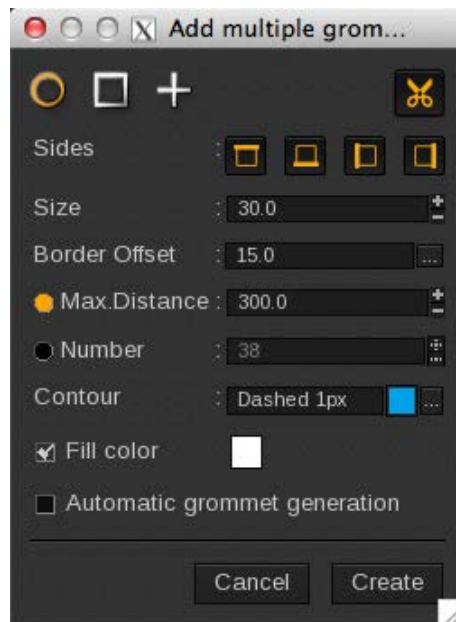
NOTE: values are expressed in the measure unit selected at the bottom of the window, i.e. inches or millimeters.

- Finally, choose the color. Double-click on the colored area to open the color selector.
 - You can choose your color in the following color spaces: *LAB*, *XYZ* or *HSB* on the left or *RGB*, *CMYK* or *GREY* on the right.
 - Enter the value or picked it with the pipette then click on **Ok** to validate it.



Adding multiple grommets

The **Add multiple** button allows you to define the grommets to place on the poster all at once. A new window will then open:



To add multiple grommets, set up the following fields:

- Choose a **shape** between *circle*, *square* and *cross*.
- Activate or deactivate the **cut contour**.
- Choose the sides where grommets will be added



On this example, grommets will be added only on the top and on the left sides of the poster.

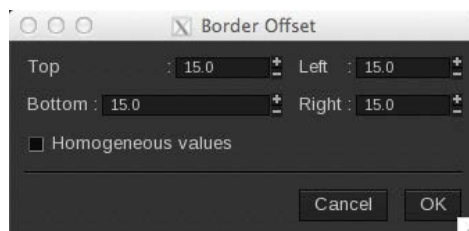
- The **size** that corresponds to:
 - The diameter, for round grommets
 - The length, for square and cross grommets

The size is indicated in the module's unit (mm or inches).

- The **border offset** that indicates the distance between the border of the poster and the grommets.

Margins are included in the global size of the poster so if the offset is smaller than the margin size, the center of the grommet will be in the margin.

The **[...]** button opens the following pop-up to define the specific offset of each side.



Values are then reported in the grommets window like the poster's margins order: top, bottom, left then right.

- The **Max distance** represents the longest distance that can exist between two grommets, from center to center. The distance can be shorter but never longer.
- The total **number** of grommets.

If a maximal distance is set, the number of grommets is not available. Indeed, the number of grommets will depend, in this configuration, on the poster size. Conversely, if the number of grommets is activated, the max distance cannot be set.

- The grommets **contour**. To edit the parameters, click on the **[...]** button.
- The **fill color**. This option is available only for “squares” and “circles”. By default, only the contour of the shape is printed on the poster, the inside remains transparent. You can choose to fill the shape and choose the color by clicking on the colored square.
- The **automatic grommet generation**. This option allows you, when the poster size is changed, to automatically regenerate the grommets with the current parameters.

If the option is not activated, a new poster size will delete all grommets.

Once all of these parameters have been set, click on **Create** to place the grommets on the poster. The grommets thus created will be shown in the list, and you will be able to edit them individually, just like the grommets created one by one.

Preview



On the preview, whatever shape has been chosen, grommets marks are always represented by a yellow circle with a little white square representing their center.

If the zoom level is too low, you will still be able to view your grommets as small squares, which correspond in fact to their centers.



On the preview, you can move them manually on the poster. This change will automatically be reported in the grommets management by modifying the **Pos. X** and **Pos. Y** fields of the element.

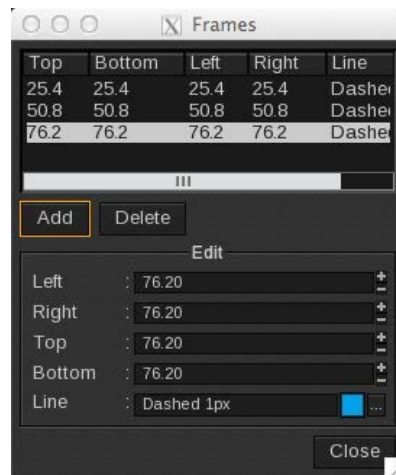
Frames



These are generic frames, which can be placed anywhere on the poster and whose functions are varied, depending on your needs. The lines making up these frames go from one edge of the poster to the other.

Frame management

The **[...]** button opens the frame management window:



Add a frame

To add a frame, click on the **Add** button. A new frame then appears with higher values than the previous one.

Delete a frame

To delete a frame, select it in the list then click on the **Delete** button.

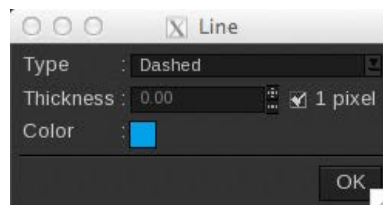
Edit a frame

When you want to edit a frame, select it in the list. Its values automatically appear in the Edit part. There, you can modify the values and see their changes in the frame list and on the preview. By default, when a frame is created, it is selected so you can directly change its values if you want so.

Each frame has the following elements:

- The Left, Right, Top and Bottom distances that define the frame position from the poster borders.
- A line that is used to represent the frame.

Click the **[...]** button to edit the line settings.

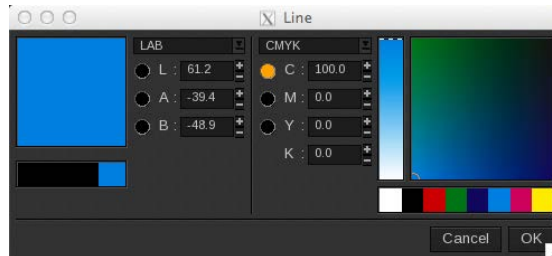


- First, choose the line **Type** that will be used:
 - *None*: no line
 - *Plain*: solid line
 - *Dashed*: dotted line
 - *Edges*: only the beginning and the end of each line will be printed
- Then define the line **thickness**:
 - Either check the *1 pixel* box, the line will automatically be 1-pixel thick

- Or enter directly the value in the field. (If *1pixel* is activated, you will have to uncheck it first.)

NOTE: values are expressed in the measure unit selected at the bottom of the window, i.e. inches or millimeters.

- Finally, choose the color. Double-click on the colored area to open the color selector.
 - You can choose your color in the following color spaces: *LAB*, *XYZ* or *HSB* on the left or *RGB*, *CMYK* or *GREY* on the right.
 - Enter the value or picked it with the pipette then click on **Ok** to validate it.



Preview



Whatever types and color of lines you have chosen; frames will be displayed with a red line on **Tiling+** preview.

The frames cannot be moved with the mouse in the image preview.

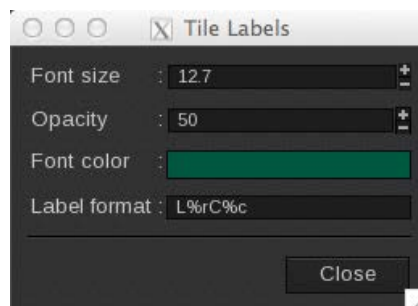
Tile labels



This button adds labels to the tiles when they are printed.

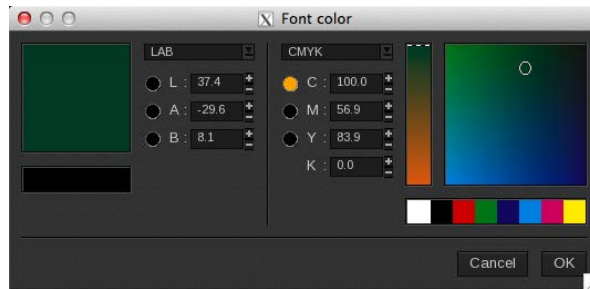
The labels are preferably always placed in the overlaps. Indeed, the number of the tiles being printed with the crop marks; they are therefore not available anymore after the tiles have been cut. This labeling function thus allows you to know which tiles you are currently dealing with.

By clicking on the **[...]** button, the following window opens:



Here, you can change this information:

- **Font size:** There is no restriction with the font size. By default, it is set to 12.7.
- **Opacity:** text opacity in percentage. The default value is 50%, you can go from 1% (transparent) to 100% (opaque).
- **Font color:** Choose the text color. Double-click on the colored area to open the color selector.
 - You can choose your color in the following color spaces: *LAB*, *XYZ* or *HSB* on the left or *RGB*, *CMYK* or *GREY* on the right.
 - Enter the value or picked it with the pipette then click on **Ok** to validate it.



- **Label format:** enter the text you want to display on each tile. You can add the following variables:
 - %n = poster *name*
 - %r = the tile *row* number
 - %c = the tile *column* number
 - %t = the *tile* number

By default, the label format is L%rC%c (L1C1, L1C2, etc.).

With the same method, just place one of the variables in the text so it will be replaced by its value in the print. For example:

Tile number %t from %n poster corresponding to L%rC%c on the plan

It will be printed, for the third tile of the first line:

Tile number 3 from IceTones.jpg poster corresponding to L1C3 on the plan



In this example the text is written with a very big size and will be printed on the image area of the tiles.

Flip-Flop effect



Flip-flop active

This buttons allows you to activate/deactivate the Flip-flop functionality, which consists in generating each second tile rotated by 180°.

This rotation can be useful when the printer has a non-homogenous output, darker on the left than on the right for example. The flip-flop effect will smooth the visual breaks that can be seen after the assembly.

In the example below, the gradient made by the printing has been emulated very strong to schematize the flip-flop effect utility.

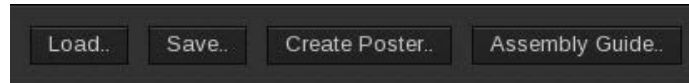


Printing and assembly of the three tiles without (left) and with (right) the flip-flop effect.

Finalizing the poster

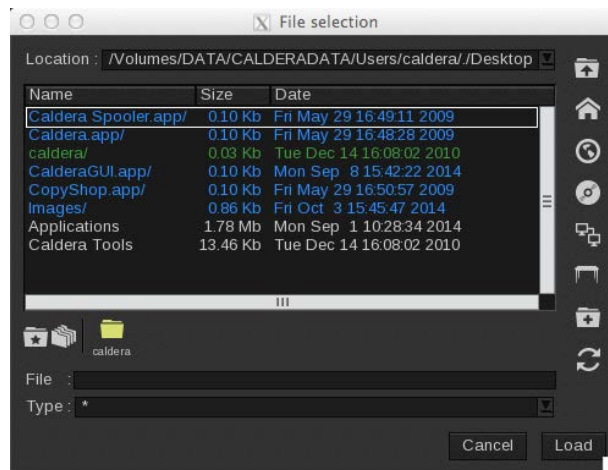
The poster finalization is represented by 4 buttons:

- Load and Save of the current configuration
- The poster creation
- The assembly guide creation



Load/Save

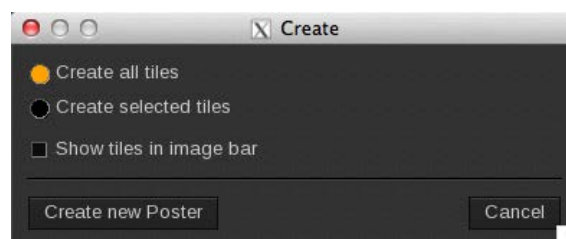
These buttons respectively load an existing configuration or save the configuration you have just set. When you click on **Load...** or **Save...**, the file selection pop-up opens to allow you to search and **Load** an existing configuration or **Save**, in the opened folder, the current configuration.



NOTE: It is also possible to import configurations saved in the old Tiling module.

Poster creation

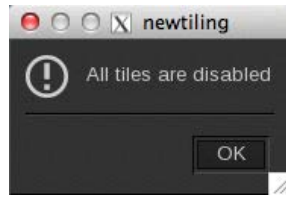
The poster creation allows you to create, for each tile, images that are automatically load in the image bar and then can be printed. By clicking on the **Create Poster...** button, you open the following window to choose the poster creation conditions.



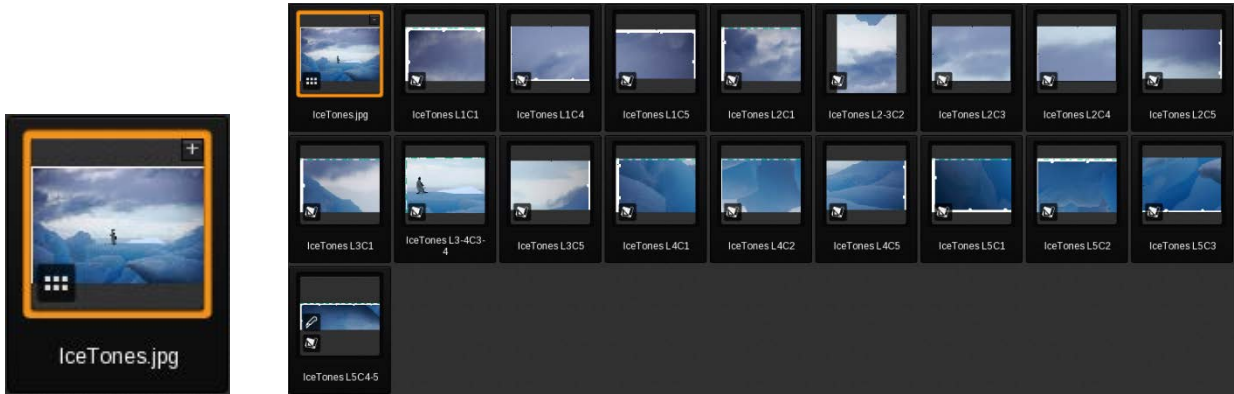
You can choose between:

- **Create all tiles:** it will send all the tiles of the poster that are not disabled in the Image bar
- **Create selected tiles:** only the tiles that you have actually selected in the preview and that are not disabled will be created.

In both cases, if all the selected tiles or all the tiles are disabled, you will not be able to create the poster and the following message will be displayed:

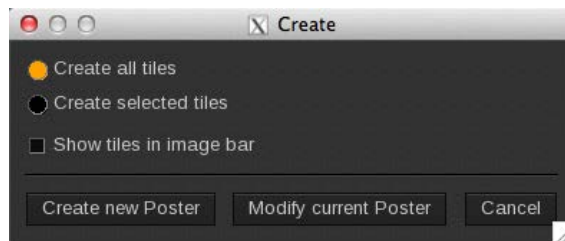


When you click on **Create new poster**, a thumbnail of the whole poster is created in the image bar with a little "+" on the top corner right. It indicated that it can be open to display the tiles. Each tile has the COMP label and is processed like a composite image. When only one tile is created, the poster thumbnail is not created with it.



The option *Show tiles in image bar* will automatically opens the poster thumbnail to directly display the tiles in the image bar when there are created.

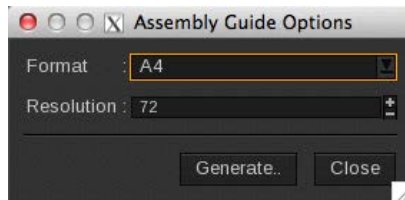
The poster creation does not close **Tiling+**. You are then able to do all the change you want on the poster. After that, if the previously created poster is still in the image bar, when you click on **Create Poster**, you can see a new button: **Modify current Poster**. If you click on it, it will replace the previous poster by the new one.



Assembly guide

The assembly guide is a PDF file where all the poster and tiles information is written. White and overlap details are also indicated here.

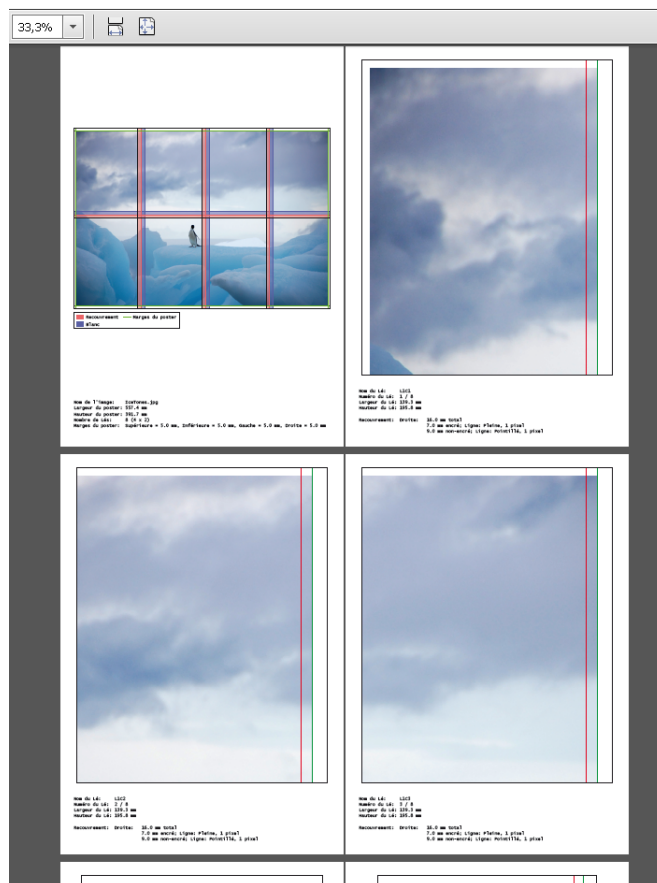
You can easily create it by clicking on the **Assembly Guide...** button. It opens the following pop-up:



Here you can choose:

- The page **format** between: *A4*, *A3*, *LetterUS* and *LegalUS*
- The pages **resolution** in dpi. By default, the resolution is set at 72dpi.

Then click on **Generate** then select the location where you want to save the PDF file.



View of an assembly guide first pages

Print and Workflow

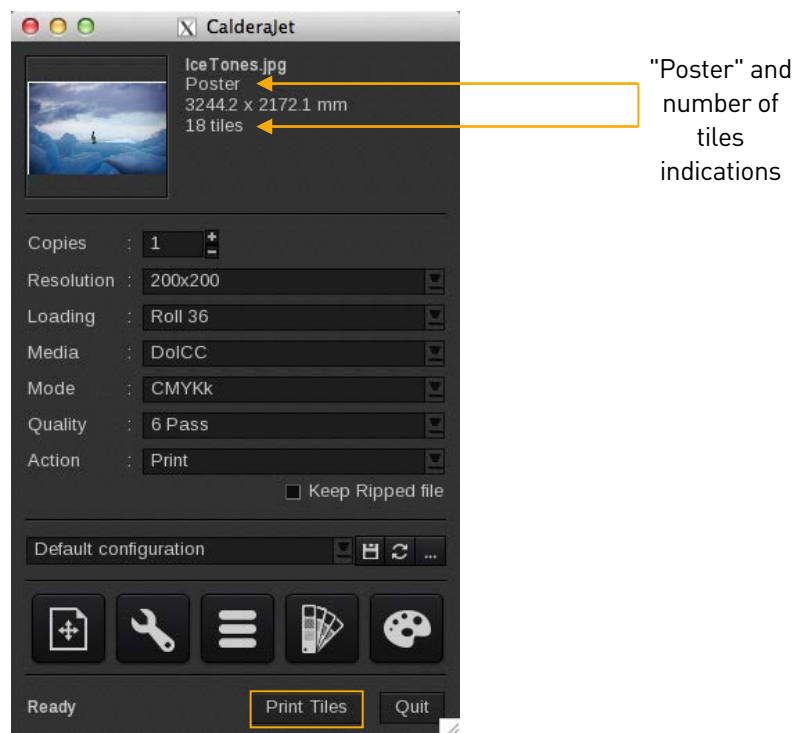
In this section will be quickly described the print of **Tiling+** tiles and the use of the module in workflow mode.

Tile printing

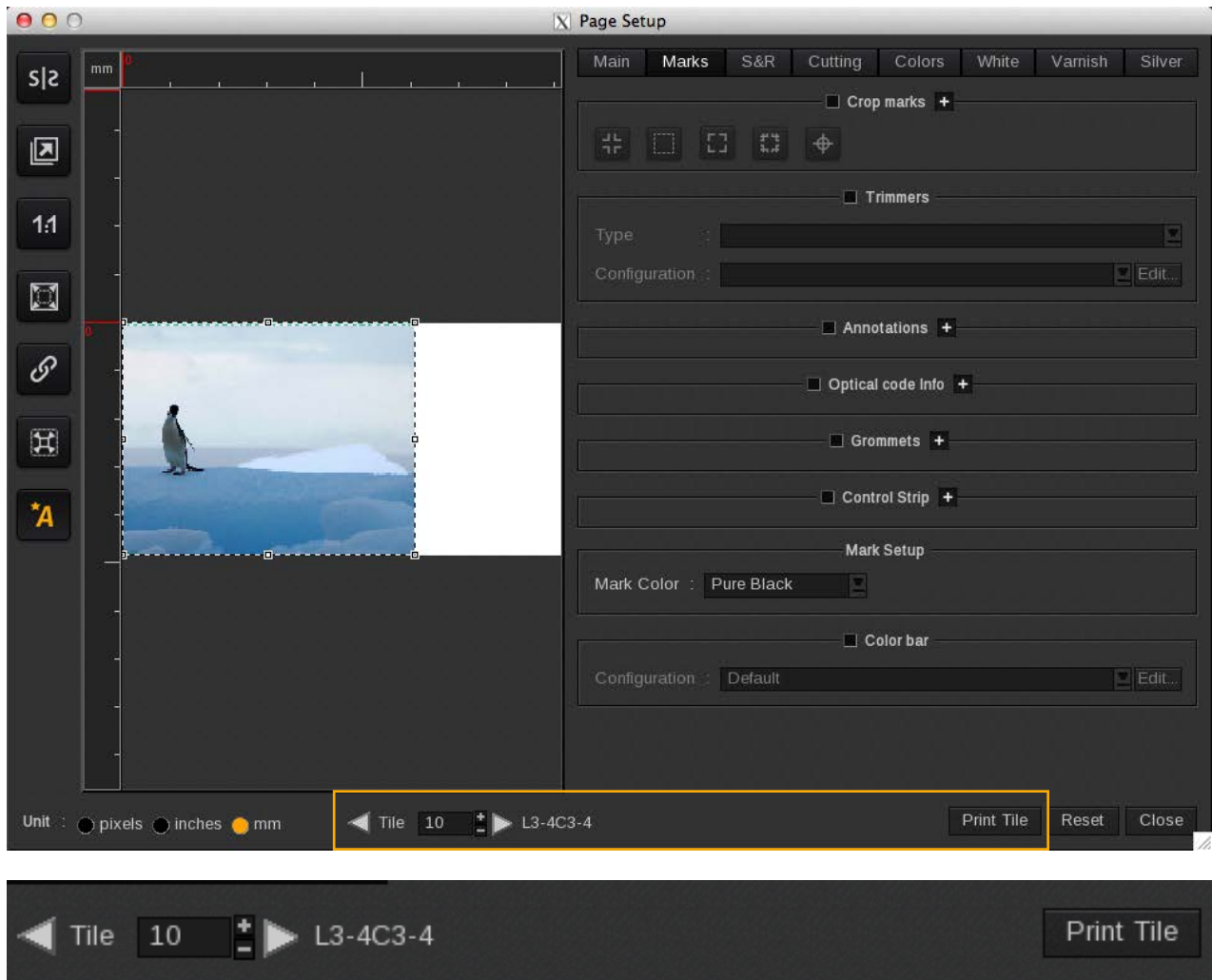
To print the tiles you can:

- Select the tiles one by one from the image bar. Each tile will be treated like a regular image file.
- Select the poster thumbnail and drop it in the print module.

In the second case, you will see, under the image name, the label Poster and the number of tiles it contains. The Print button is also changed to **Print Tiles** to remember you that all tiles will be printed if you click on it.

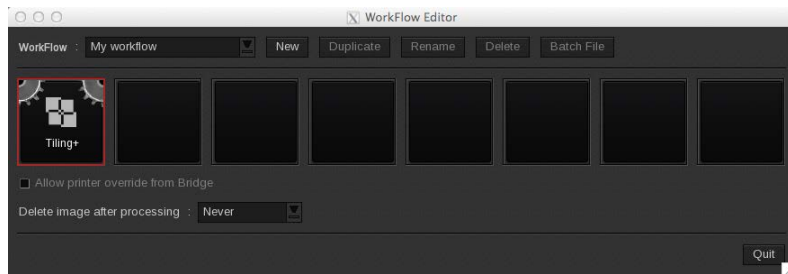


You can also print a specific tile, instead of printing them all at once. To do so, open the configuration window of the print client, and choose a tile thanks to the buttons at the bottom. Then print the tile by clicking on **Print Tile**.



Tiling+ in WorkFlow mode

You can integrate **Tiling+** in **Caldera** workflow: just drag and drop it from the application bar to the workflow.

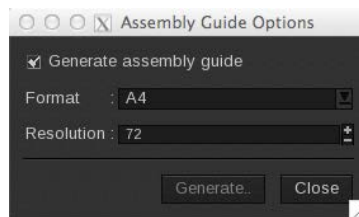


You can then set up the module by double-clicking on its icon. The configuration window is the same but you will not see an image in it. However, you can set the poster size depending on the image size as well by using the scale tool like explained in the global configuration chapter.

Among the little changes, two are linked to the poster finalization regarding the assembly guide and the poster creation.

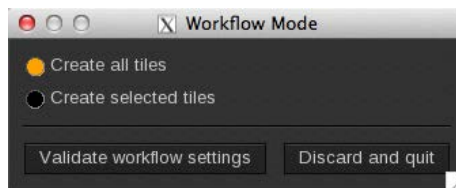
Assembly guide

To specify the creation of an assembly guide, click on the **Assembly Guide...** button in the **Tiling+** module then make sure that the *Generate assembly guide* option is activated. You can then continue to setup Tiling+ in your workflow.



Saving the parameters

Once you have set all parameters, to save these changes and program the poster creation, simply click on **Quit**. The following pop-up opens; it is particular to the workflow mode.



Choose to create all tiles or only the selected ones then validate the workflow settings. You can also simply discard the configuration and quit the window.

Once the module is set, the cogwheel up to the module activate itself and start to turn.

