Galaincha

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Transforming the way
Carpets are
designed,
produced and **marketed.**

Beginner's Guide

Alternative Technology

Computer graphics
innovation for
custom carpets

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support@galaincha.com.np

About Galaincha

Galaincha is a powerful custom rug designing software. It is the solution for carpet designing, producing simulated renderings and preprocessing. It is an extremely user friendly software that can be instantly mastered by designers with prior graphics software knowledge. Even business owners with no prior graphics software expertise will be able to use its major features for customization, illustration and production details with ease.

Prerequisite

You will be notified if any prerequisite to run Galaincha software is missing. Please install the required component and login again in that case. If you are running Galaincha for the first time, you will be asked to install it. Please confirm to proceed.

## Minimum system requirement for Galaincha

You mean system requirement? Here is the system requirement for running Galaincha program.

The minimum system requirements:

• Windows XP (SP2 or later),
  or Windows Vista, Windows 7, Windows 8
  or Windows Server 2003 (SP1 or later),
  or Windows Server 2008
• .NET Framework 3.5 SP1
• 500 MHz processor (Recommended: 800 MHz or faster)
• 256 MB of RAM (Recommended: 512 MB or more)
• 1024 x 768 screen resolution
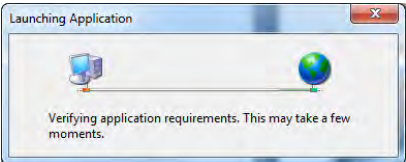• 200+ MB hard drive space

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Running Galaincha online

• Using Internet Explorer, please go to http://www.galaincha.com.np
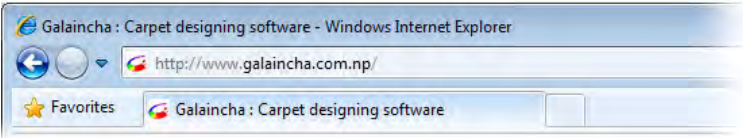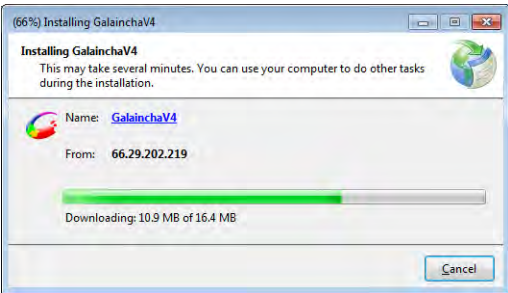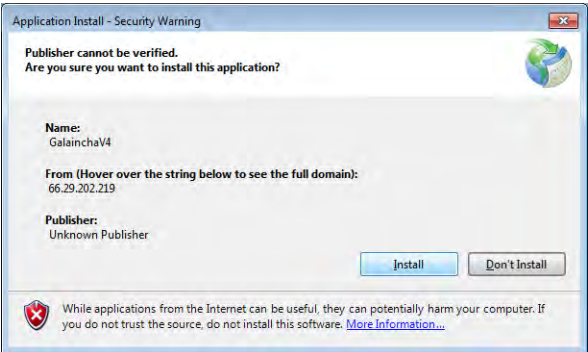

Enter your user name and password, and click on Login button (or press Enter).

• Launching Window

You will be notified if any prerequisite to run Galaincha software is missing. Please install the required component and login again in that case. If you are running Galaincha for the first time, you will be asked to install it. Please confirm to proceed.
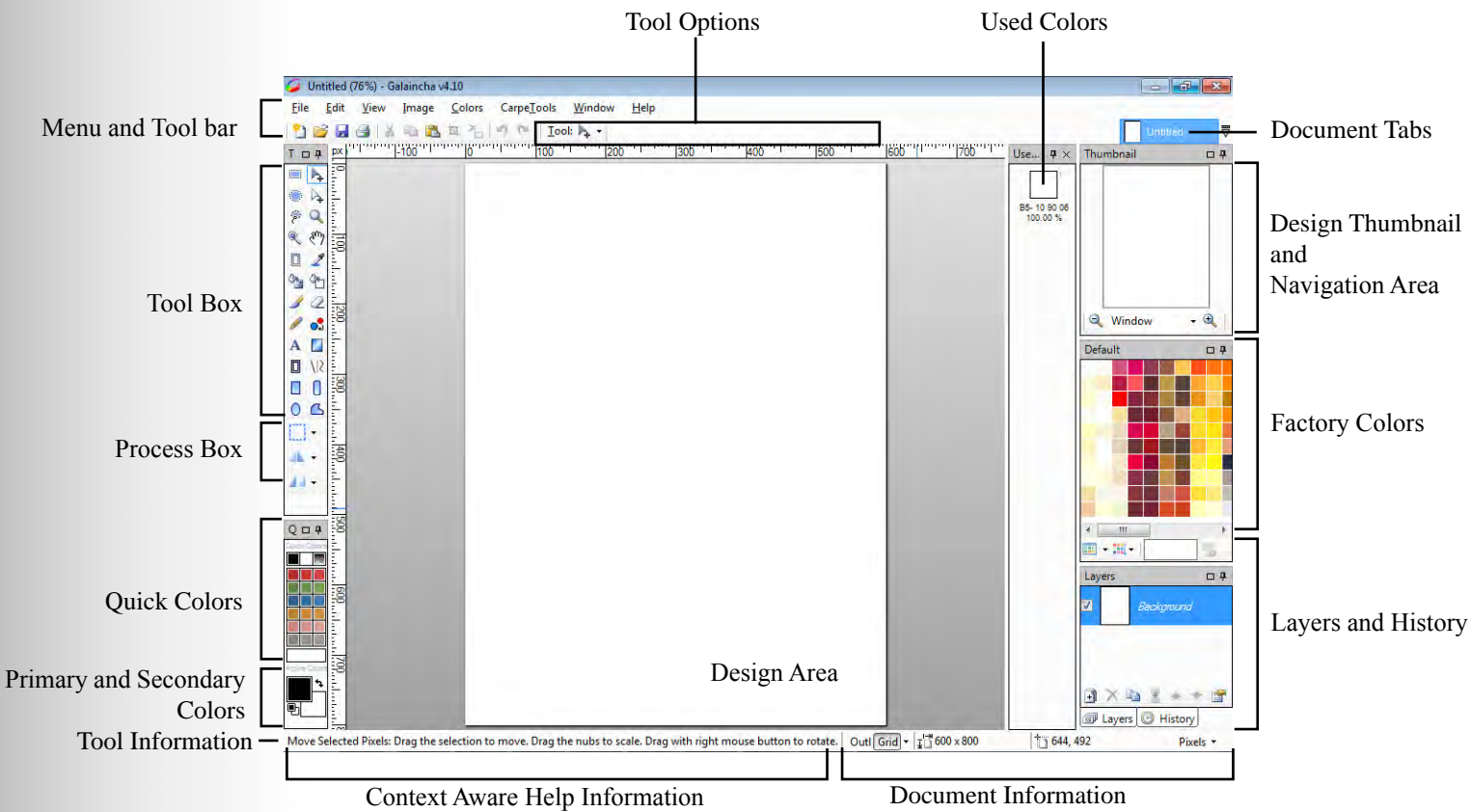

Galaincha will be downloaded and installed automatically. You can see the progress of the download.
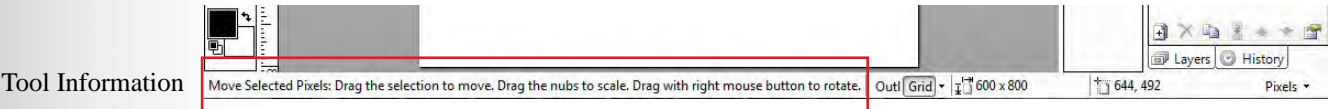Galaincha will start automatically after the download is complete.

• Splash Screen

Galaincha Interface

Galaincha Working Area

Menu and Tool Bar	:	contains menu and tools organized according to the tasks.
Toolbox	:	contains tools for drawing and editing.
Tool Options	:	provides more options of the active tool.
Tool Information	:	displays instructions for using the active tool.
Process Box	:	contains preset method of selecting, mirroring, and repeating.
Quick Colors	:	is customizable palette for storing regularly needed colors.
Design Thumbnail and Navigation area	:	is a convenient feature for graphically moving from one part of design to another.
Design Colors	:	displays colors that have been used in the active design.
Factory Colors	:	contain the user's own custom color database along with color names.
Layer and History	:	lists all layers used in a design, and record of the current working session.
Editing Area and Status Bar	:	shows static information about the design-dimension of design and units used.
Used Colors	:	shows all colors used in the current design along with their names and coverage.
Status Bar	:	shows context aware help information and document information.
Document Tab	:	shows the design name.

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[A] Selection tools

▦ Rectangle Select (S)

◉ Ellipse Select (S)

⬡ Lasso Select (S)

✺ Magic Wand (S)

▯ Border Select (S)

➤ Move Selected Pixels (M)

➤ Move Selection (M)

[B] Painting tools

✦ Color Picker (P)

🖌 Paint Bucket (F)

🖐 Outline (F)

🖊 Paintbrush (B)

◗ Eraser (E)

✏ Pencil (P)

❖ Selective Color (R)

[C] Drawing and type tools

▦ Gradient (G)

▣ Border (O)

\|？ Line / Curve (O)

▯ Rectangle (O)

▯ Rounded Rectangle (O)

○ Ellipse (O)

◿ Freeform Shape (O)

A Text (T)

[D] Navigation tools

🔍 Zoom (Z)

🖐 Pan (H)

Tool Box

A

B

C

D

Tool Options
The options bar appears on the menu bar at the top of the work area. The options bar changes as you select different tools. Some settings in the options bar (such as Brush width) are common to several tools, and some (such as Fill setting for the Paint Bucket tool) is specific to one tool.

Active Tool   Tool Tip

Available Options (for Active Tool)
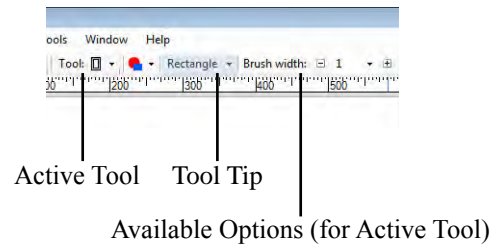
• Opening designs

Go to File > Open (Ctrl+O)

*A dialog box appears so that you can select any of your files to open in Galaincha Software. You can open various types of image files like JPEG, GIF , BMP, PNG etc and also Carpet File (*.ctf used in previous versions) and Carpet File Extended (*.ctfx). Various valid file types can be viewed by selecting the combo box of files of type like below.*
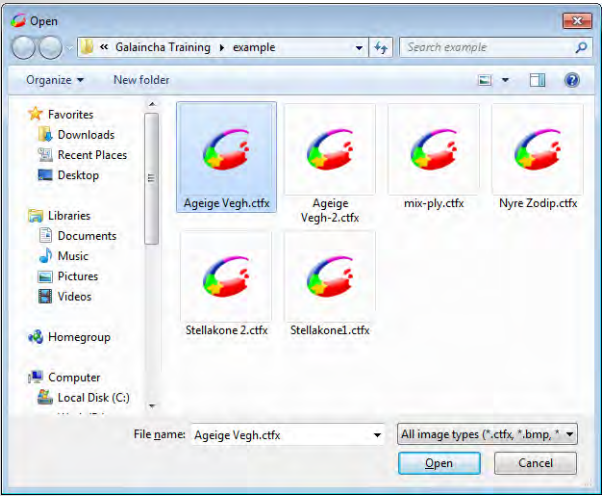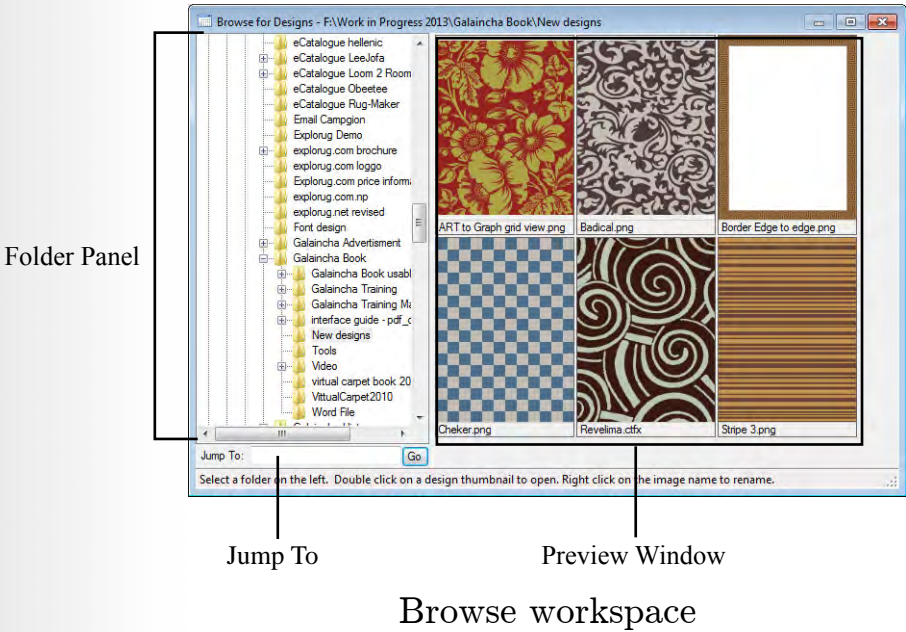
The image you opened will appear in a new window

• Browse designs
Go to File > Browse (Alt+Ctrl+O)

Galaincha Browse will assist you to locate the image files in effortless approach. You can right away preview the designs in thumbnail view and browse them without need of opening individual files.

Folder Panel

Jump To   Preview Window

Browse workspace

Folder Panel   :   Folder Panel shows the folder hierarchy. Use it to navigate the folders.
Jump To   :   Type the folder hierarchy into Jump To box and you can quickly jump to the destination folder.
Preview Window   :   Display a preview of the files present in the selected folder.

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Acquring Images from Scanner

- **Go to File > Acquire > From Scanner or Camera**

This features can be used to acquire pictures from scanner or camera directly in to the Galaincha software.
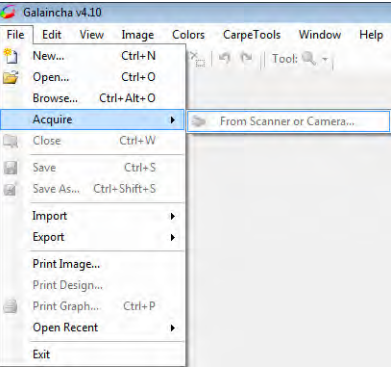
- **File > Close (Ctrl+W)**

To close the current working window or design. This doesn't close all the windows or the designs that are opened at that time. If the design is not saved then dialog box appears to inform to save or not to save the current working design.
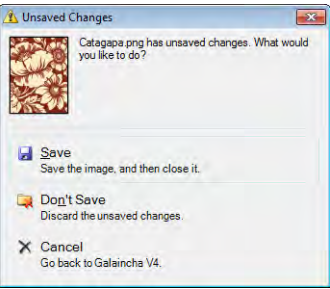
- **File > Exit**

Use this to exit Galaincha Software. You will be asked to save your changes if you have not done so. If you have many designs that have unsaved changes, you will be asked for confirmation first.
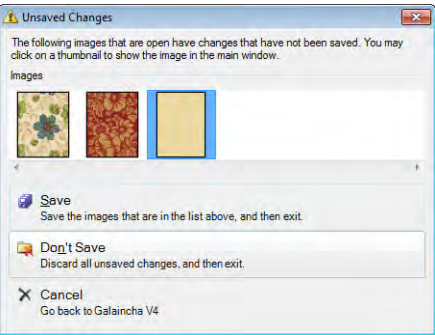
Saving Designs

- **File > Save (Ctrl+S)**

This allows you to save your document file in any format you want. The main feature about it is that it suggests you the favorable and unique name for your design so that you don't have to think of the name for your newly created document.
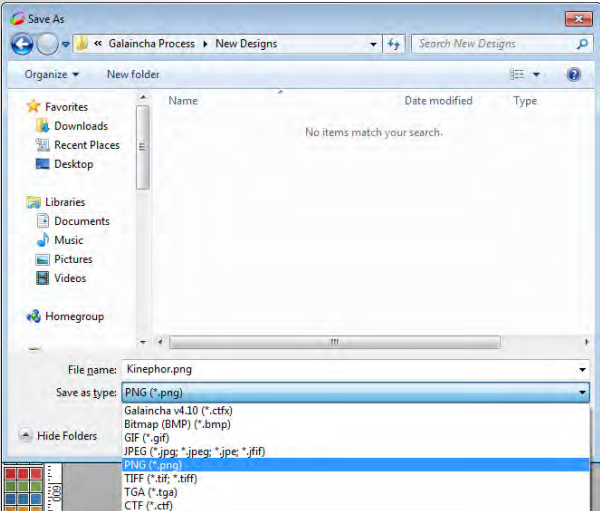
- **Go to File > Save As (Ctrl+Shift+S)**

This allows you to save your document file in any format you want. The main feature about it is that it suggests you the favorable and unique name for your design so that you don't have to think of the name for your newly created document.
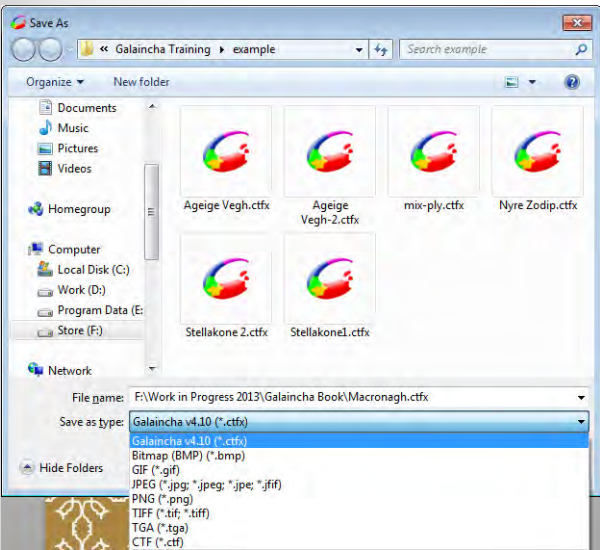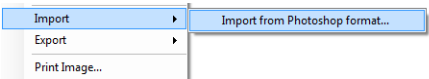
- **File Format:**

You can choose file format, click on the down-facing arrow next to the box labeled Save As Type

After you save your image for the first time, you can continue to save it throughout your Galaincha session by clicking on the File menu and selection Save (Ctrl+S)

Working with Files
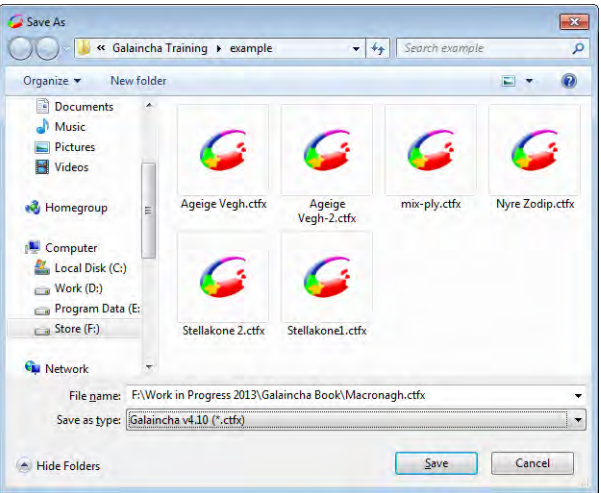
- File > Import

You can import any Photoshop file format(.psd) into the Galaincha Software directly. The main feature of this function is it also renders the layers of the photoshop file(*.psd) files.*

Import	▶	Import from Photoshop format...
Export		
Print Image...		

- File > Export

You can also Export the current document or any Carpet File (.ctf or *.ctfx) into Photoshop compatible file format (i.e. *.psd). This also renders all the layers in the current file and you can edit or modify that file into Photoshop.*

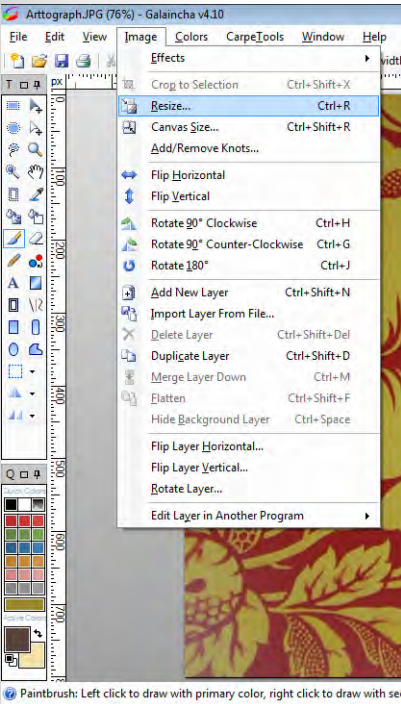| Import | ▶ | |
| Export | ▶ | Export to Photoshop format... |
| Print Image... | | |
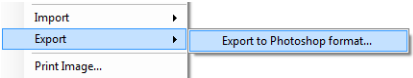
- File > Open Recent

This feature allows you to view and access your recent files that had been opened in the Galaincha Software lately. Illustrated below, the Open Recent menu allows you to quickly access the last 8 designs you have opened with Galaincha. Each design is accompanied by a thumbnail to help you quickly located it visually. There is also a command, "Clear this list," that allows you to quickly clear the list.
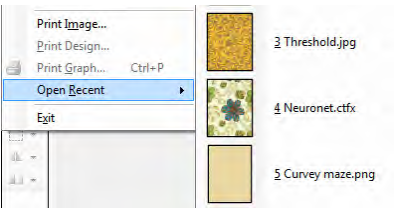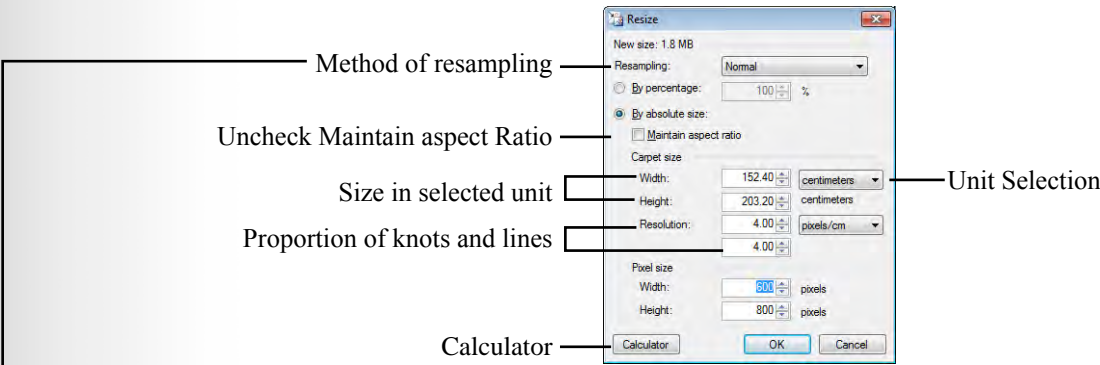
Resize

- Go to Image > Resize (Ctrl+R)

This command lets you change the size of the design. In the process, the design is either stretched or shrunken to the size you specify. You may specify a relative percentage to resize the image by, or you specify the absolute pixel or print size that you desire. If the "Maintain aspect ratio" option is checked, then typing a new Width value will maintain a proportional Height value, and vice versa. If you choose to modify the print size of an design, the pixel size will be based on the resolution, which defaults to 96 pixels per inch, which is the same as 37.8 pixels per centimeter. For example, if you specify the design to be 1 inch wide, and the resolution is 96 pixels/inch, then the design will be resized to be 96 pixels wide.

The Resize window will appear

Method of resampling

Uncheck Maintain aspect Ratio

Size in selected unit — Unit Selection

Proportion of knots and lines

Calculator

Antialiased	:	When you resize any photographic image, it is used.
Detailed	:	To resize design with minimal distortion and retain small details, it is used.
Normal	:	Normal resize is a resize method like in other programs. It will distort your image so you may have to rework on it.
Smart	:	When you want to resize design which does not have any kinds of outlines in motif, this option is used.

Art to Graph

• Go to Carpetools > Clean > Art To Graph
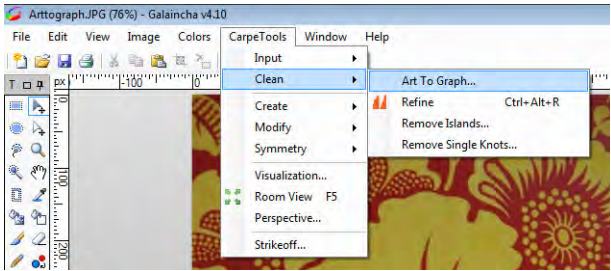
Groups similar colors in the design

Selected Colors - right click to remove
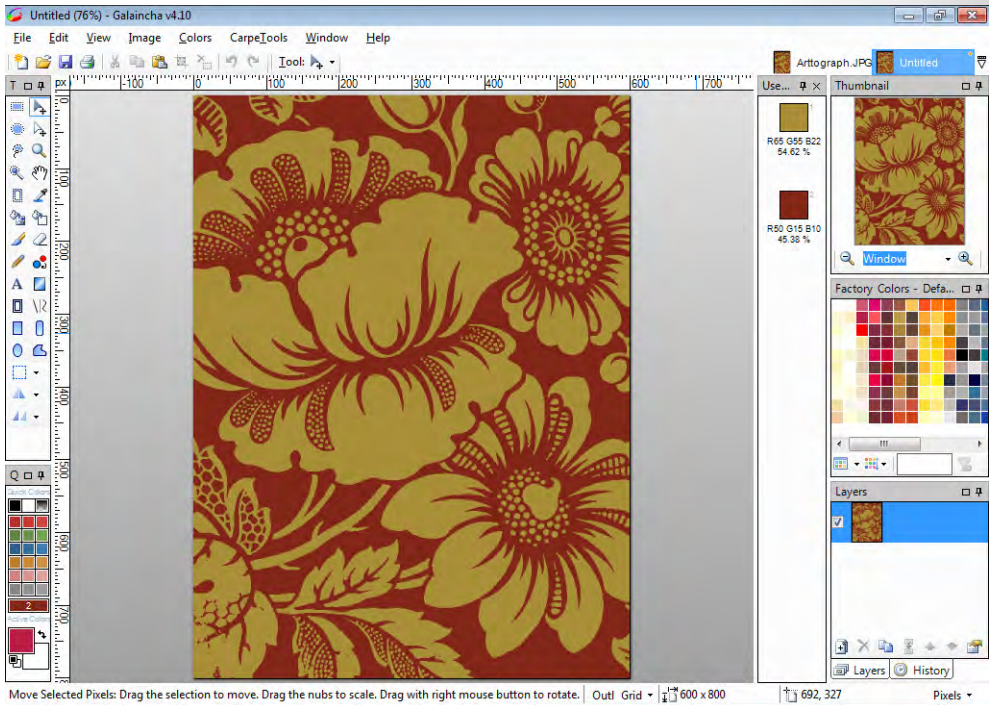
number of colors to select automatically

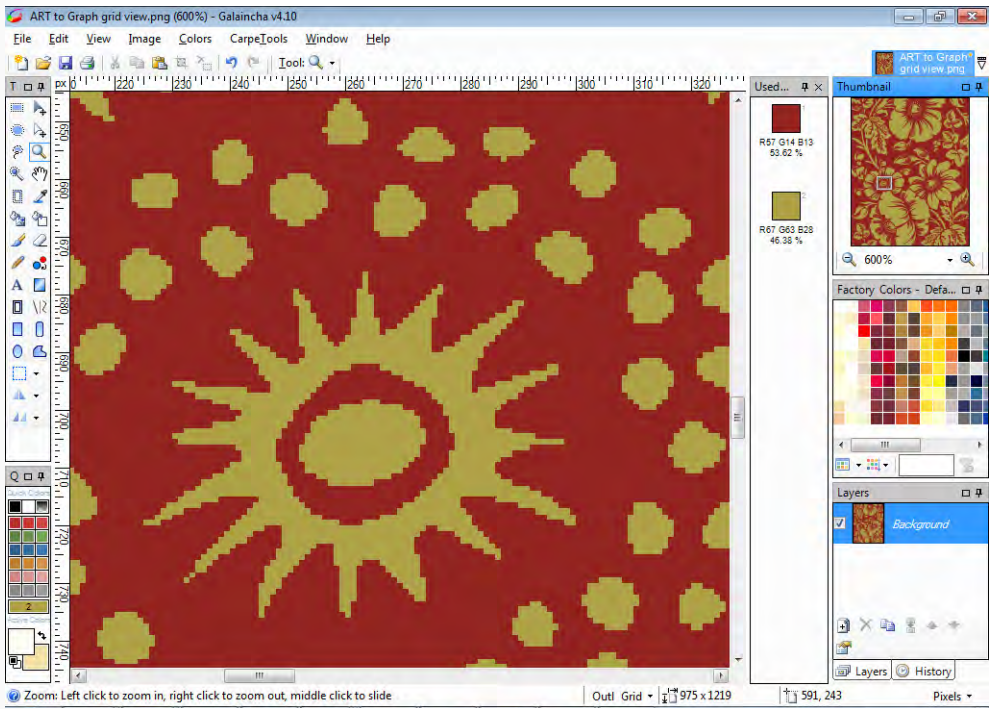Specify the required size of the final output

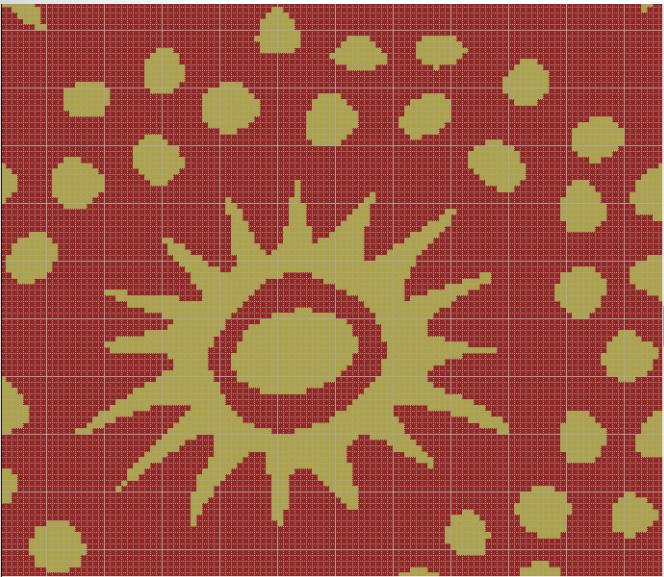Color Value

Zoom view of the design
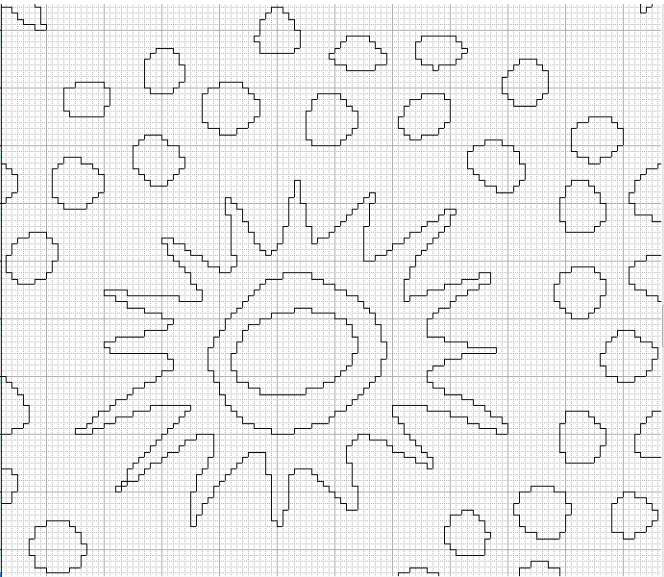
Original Image

Image after Art to Graph

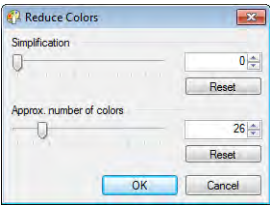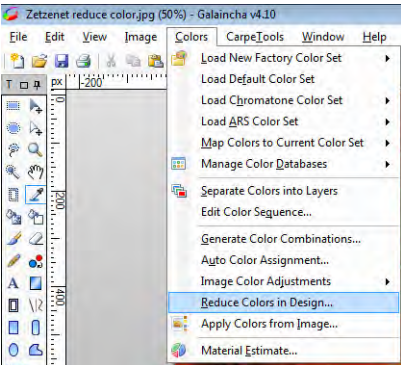Processed artwork


Normal View

Grid view

Grid view in outline

Reduce Color

• Go to Color > Reduce Colors in Design

Photographic image uses numerous colors which is practically not possible to weave. The image needs to be processed such that the design has weavable number of colors


When you open a design (File > Open) or click on Open icon from icon bar, Galaincha software will immediately warn you that the design is not weavable as it contains numerous numbers of colors in Used Colors bar. It will also give you an option that you can Reduce Colors or Trace Drawing. Click on Reduce Colors and change the value of Simplification to 0 with Approx. number of colors to 26.
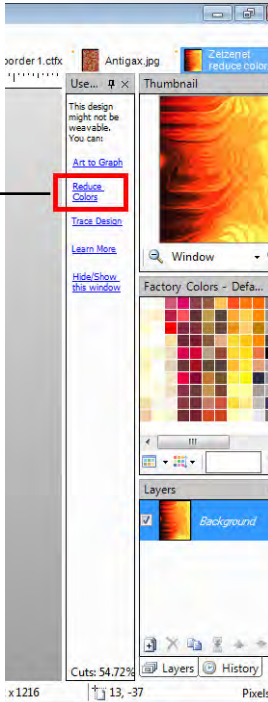
After clicking OK, you have now reduced the numerous colors into just 26 colors. You can further reduce the number of Used Colors by replacing similar looking colors. Simply drag the color that you want to use in the design over the replaceable color
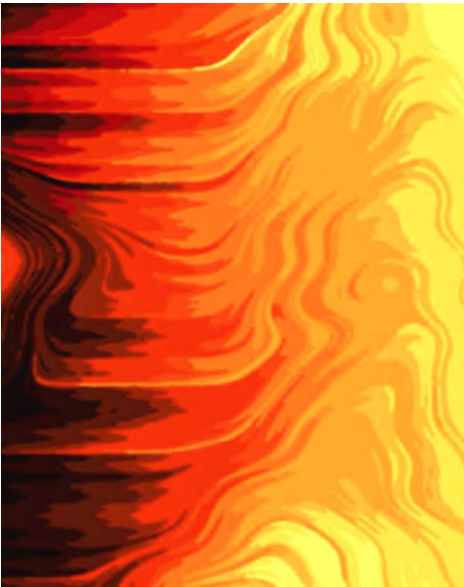

Original Image
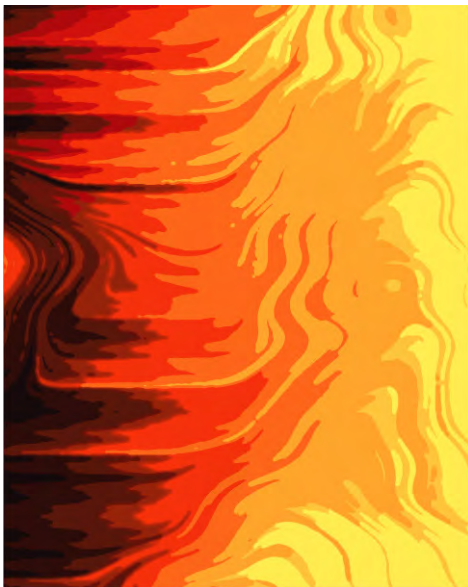
Design After Reducing Color

Threshold

• Colors > Image Color Adjustments > Threshold

Threshold converts the image into a two color design depending on whether the original color value lies within or outside the threshold range. Threshold is a very important command that is often used to prepare scanned RGB or RGB a images for vectorization or use as guide layers in the creation of drawings. It can be used with raster data designs to set off ranges of values that may then be used for subsequent analysis or as selection masks.
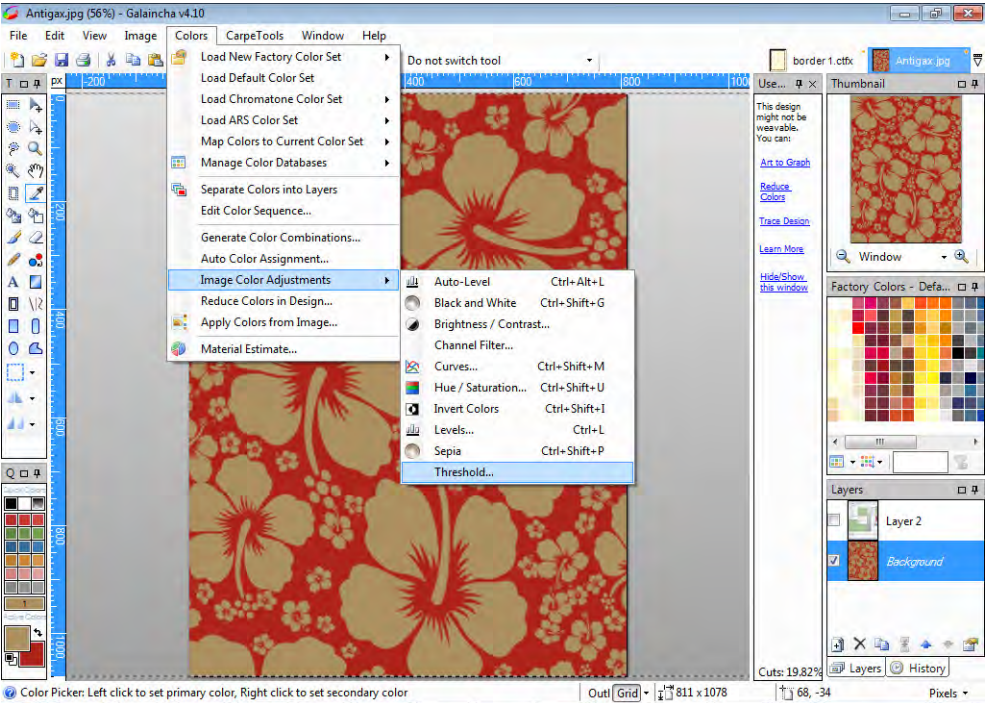
Double click on the Primary Color to open the Color Selection Dialog.
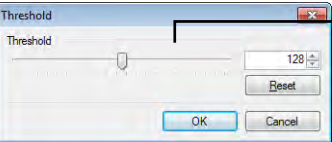
By moving this crusier you can verify the design.

The output after applying Threshold
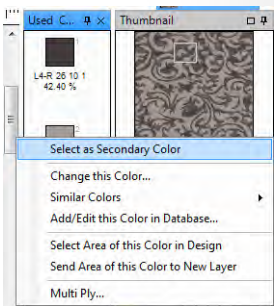
Choosing Primary and Secondary Colors

Galaincha allows selecting two colors as Primary and Secondary. Most operations use the Primary Color. When two colors are required, for example, for the Multi-Ply effect, the Secondary Color is used. Most drawing tools use Primary Color on left click and Secondary color on right click.
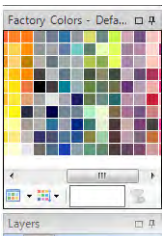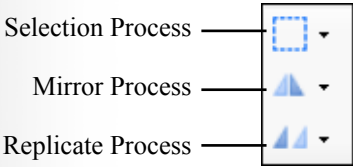
Color after selection of secondary color

Color Palate

Selection of secondary color from used color box

The primary and secondary colors can be set from different locations. In Available Colors, left-click to select the primary color and right-click to select the secondary color. In Used Colors and Quick Colors, click to select the primary color and right click and choose Select as Secondary Color from the context menu to set the color as secondary color.
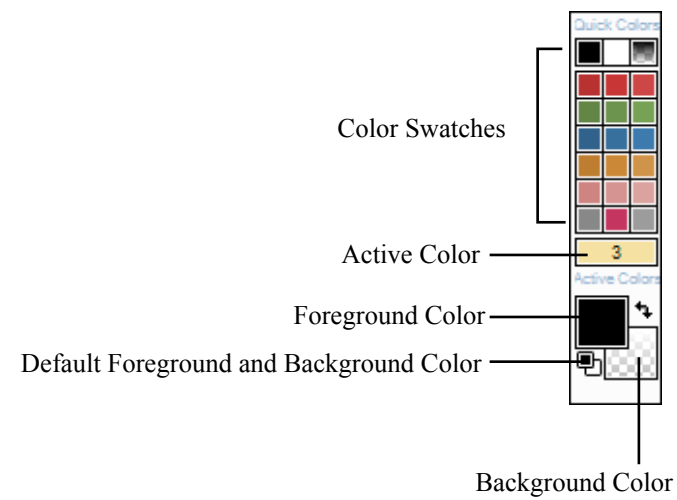
You can also double click on the Primary Color and Secondary Color to open the Color Selection dialog from which you can select the color. The color picker tool can be used to select the primary and secondary colors. Left click to select primary color and right click to set secondary color.

Selection Process
Mirror Process
Replicate Process

	Select All	Horizontal Opposite	Horizontal – N*/AS*/F*
	Left Half	Horizontal Immediate	Vertical – N*/AS*/F*
	Right Half	Horizontal Hinged	Border– N*/AS*/F*
	Top Half	Vertical Opposite	Entire– N*/AS*/F*
	Bottom Half	Vertical Immediate	Brick– N*/AS*/F*
	Top Left Quarter	Vertical Hinged	*N*Normal	AS* Auto Spacing	F* Flip*
	Top Right Quarter	Diagonal Opposite	
	Bottom Left Quarter	Diagonal Immediate	
	Bottom Right Quarter	Diagonal Hinged	
	Full Circle	All Opposite	
	Full Ellipse	All Hinged	

Shaded area is the one that will be selected.

• Quick Color

Color Swatches

Active Color

Foreground Color

Default Foreground and Background Color

Background Color

• Add Color to Swatch

With the help of Color Picker, pick the color that you want to add in swatch. The desired color will be the Foreground Color and then drag and drop the foreground color to swatch.
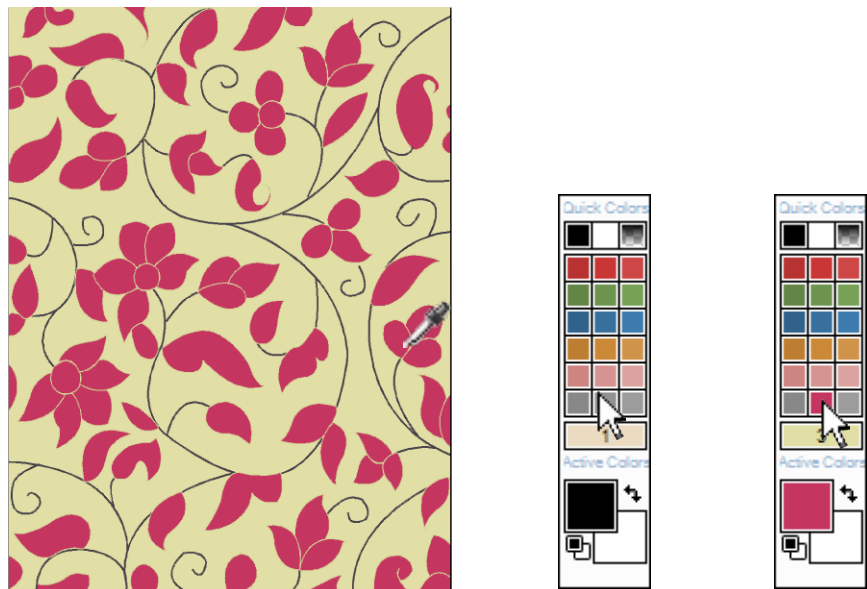
Color selected from image (left), dragging the foreground color to swatch (center), the color is now replaced (right)

• Design Colors

Color

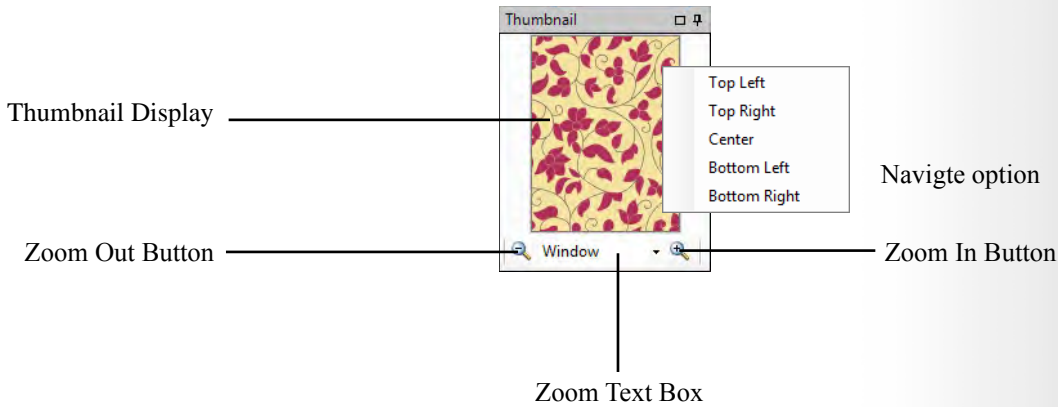Color Name

Percentage Coverage
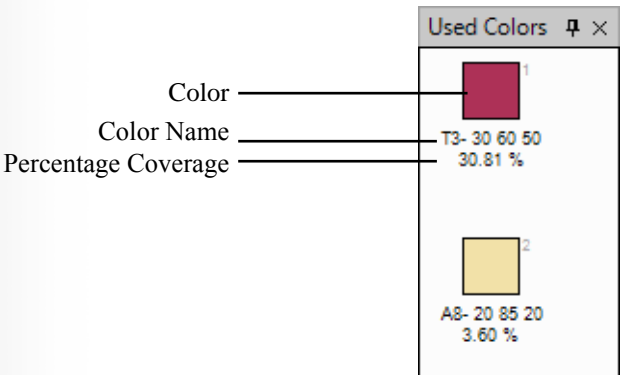
• Color Combination

You can automatically generate color combinations based on your own color set. You can change the base color and select different schemes available in the software.
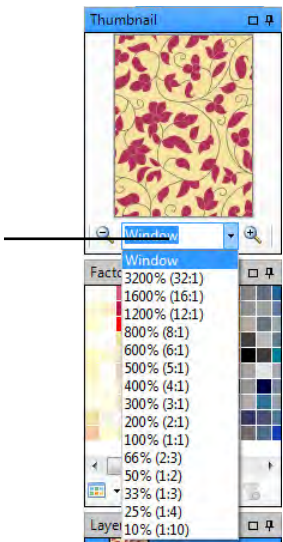
• Design Thumbnail

Thumbnail Display

Navigte option

Zoom Out Button

Zoom In Button
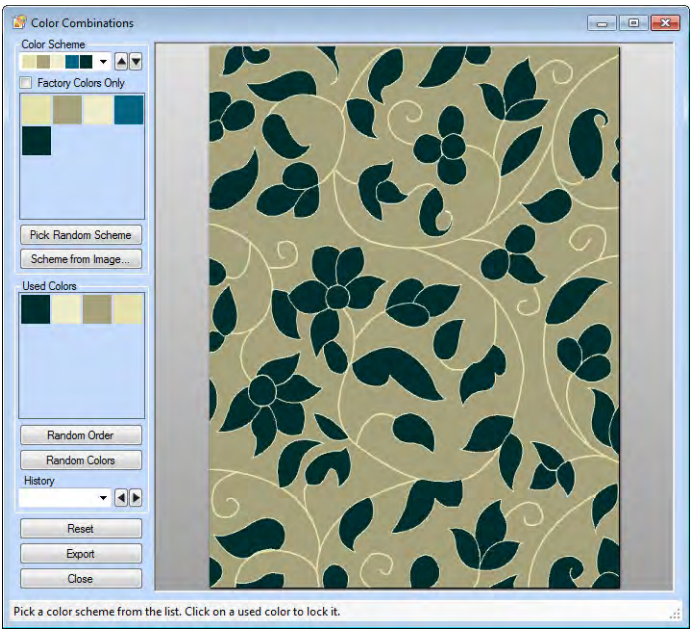
Zoom Text Box

• Zoom Text Box

You can manually type the value of zoom that you want view or you can select the pre-defined values from the list.

• Factory Colors

Color set

Manage color

Search Color

Sort Color

The set of colors that is seen in Factory Colors window can be re-arranged in multiple ways.

• Layers

Layers

Selected Layer

Layer Thumbnail

Add New Layer

Layer Properties

Delete Selected Layer

Selected Layer (Up/Down)

Merge Layer Down

Duplicate Selected Layer
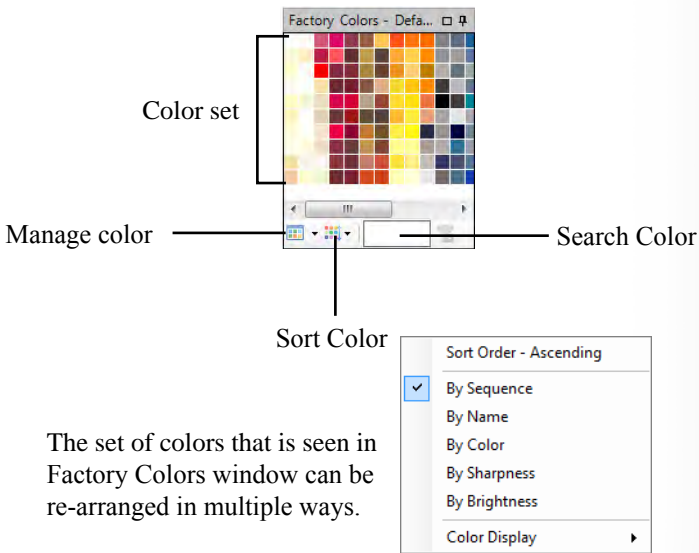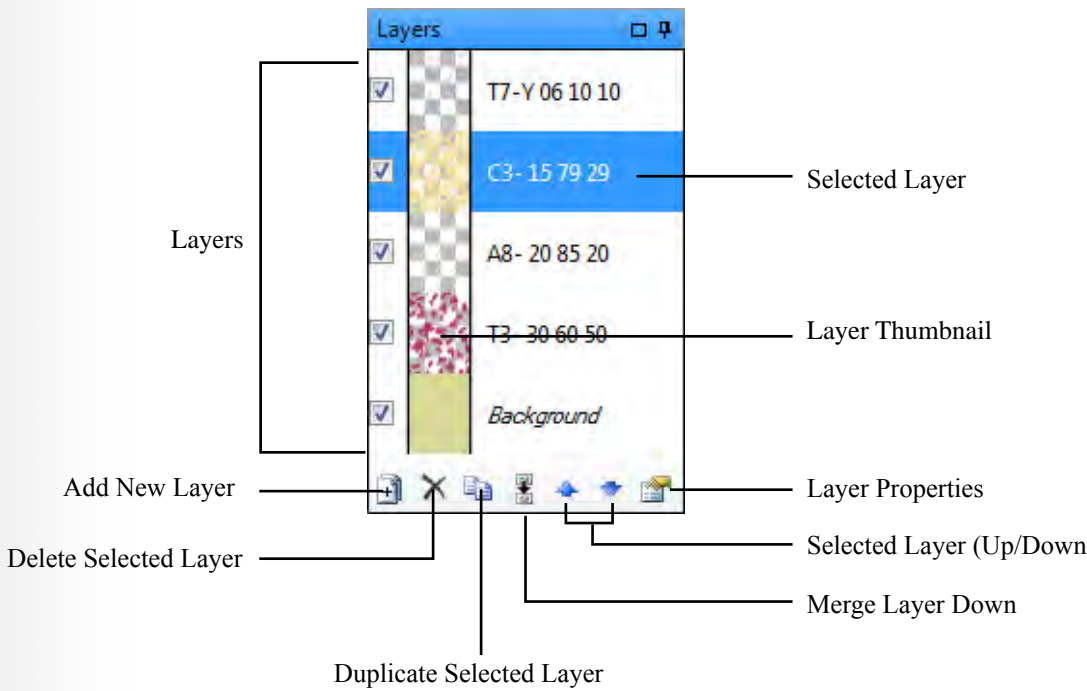
• Layer properties

Double click on a layer or layer properties icon to get addition layer properties like: name, blending mode and opacity.

• History

You can use the History to jump to any recent state of the design created during the current working session. Each time you apply a change to a design, the new state of that design is added to the palette.
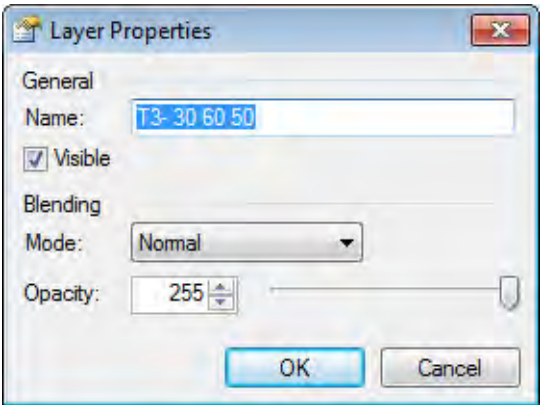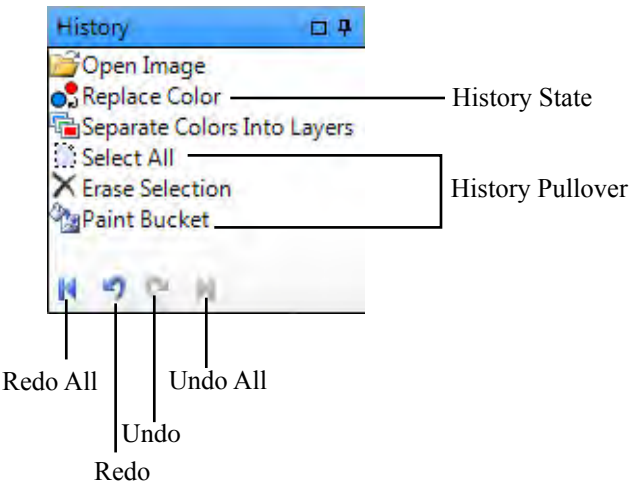

Redo All

Undo All

Undo

Redo

History State

History Pullover

Once you close and re open the design, all states from the last working session are cleared. The initial state of the design is displayed at the top, and new states are added to the bottom of the list. That is, the oldest state appear at the top of the list, and the most recent one at the bottom. Each state is listed with the name of the tool or command used to change the design. By default, when you select a state, the states below it are dimmed. This way you can easily see which changes will be discarded if you continue working from the selected state.

• Editing Area and Status Bar

As you move the mouse in the editing area, the cursor tracker at status bar at the bottom will show you the knot and line you are in, how far you are from the origin in terms of the current unit and the page that you are currently in. The Toggle Buttons are switches used to either turn on the Ruler / Grid in the work area or turn them off. The other information is static information about the carpet – The unit used and the dimensions of the carpet in terms of the Knots and Lines.

Available Units

Toggle Buttons

Cursor Tracker   Unit Used

Design Dimension

Ruler

Grid
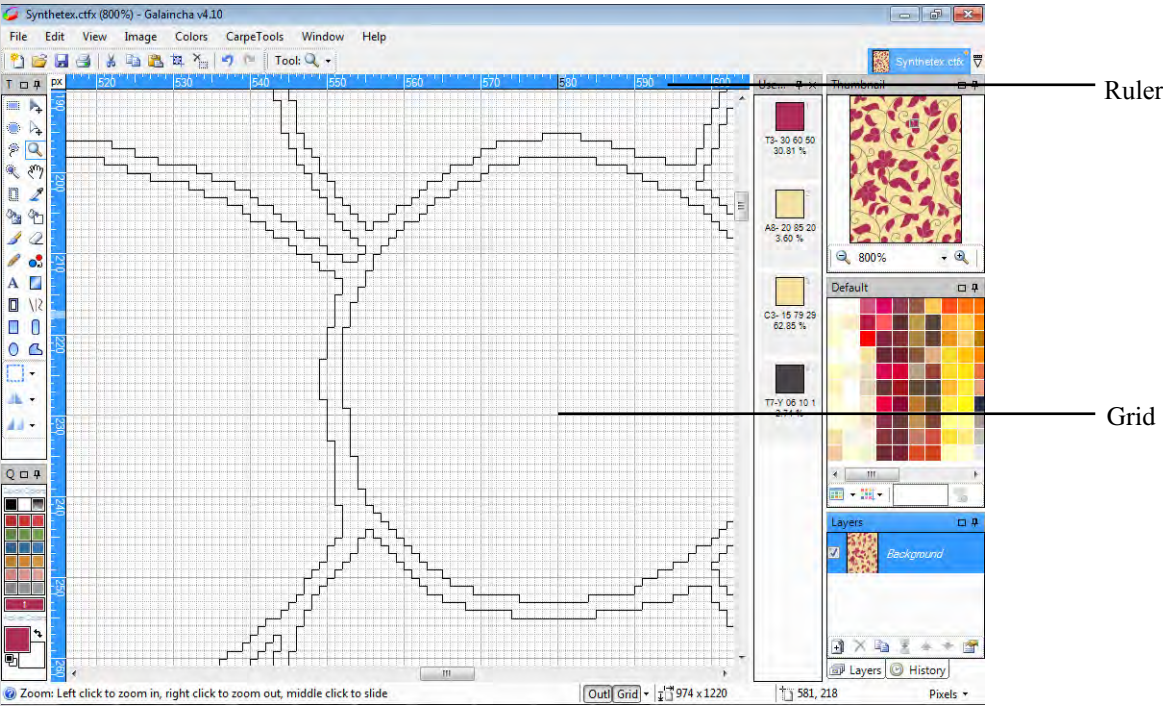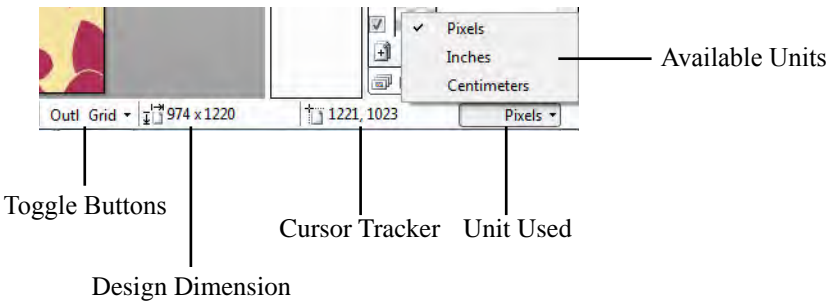
Refine

- CarpeTools> Clean> Refine (Ctrl+Alt+R)

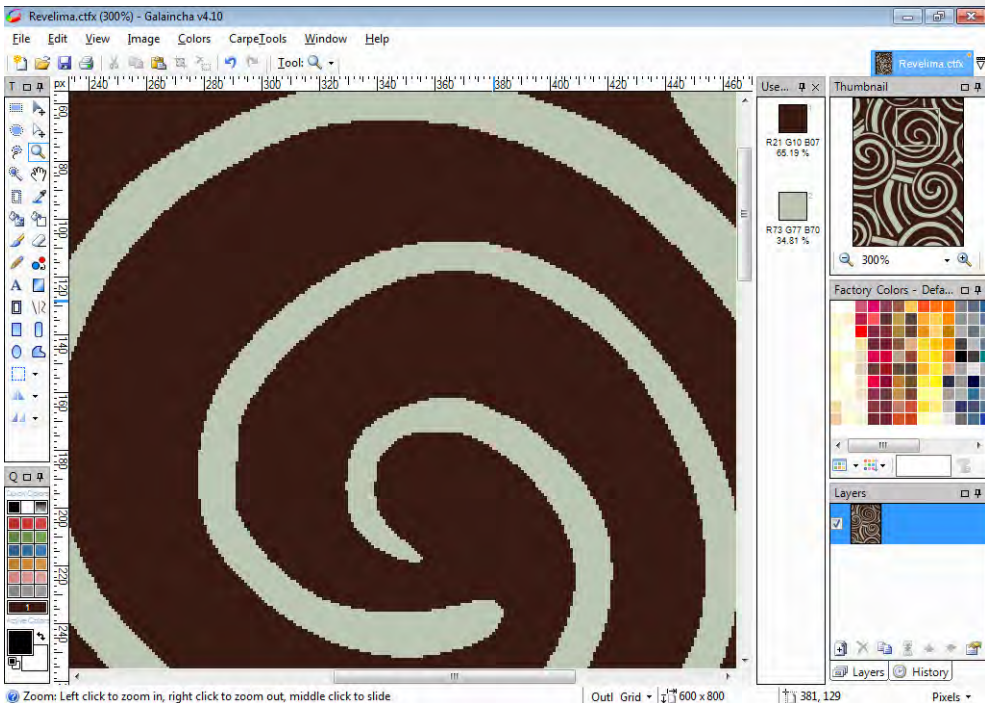*This tool is mainly used to smooth the curves and edges of the designs. This tool can be used after performing Art to Graph/Threshold/Reduce Color. If the design have zig zag curves then it can be made smooth by using this tool.*
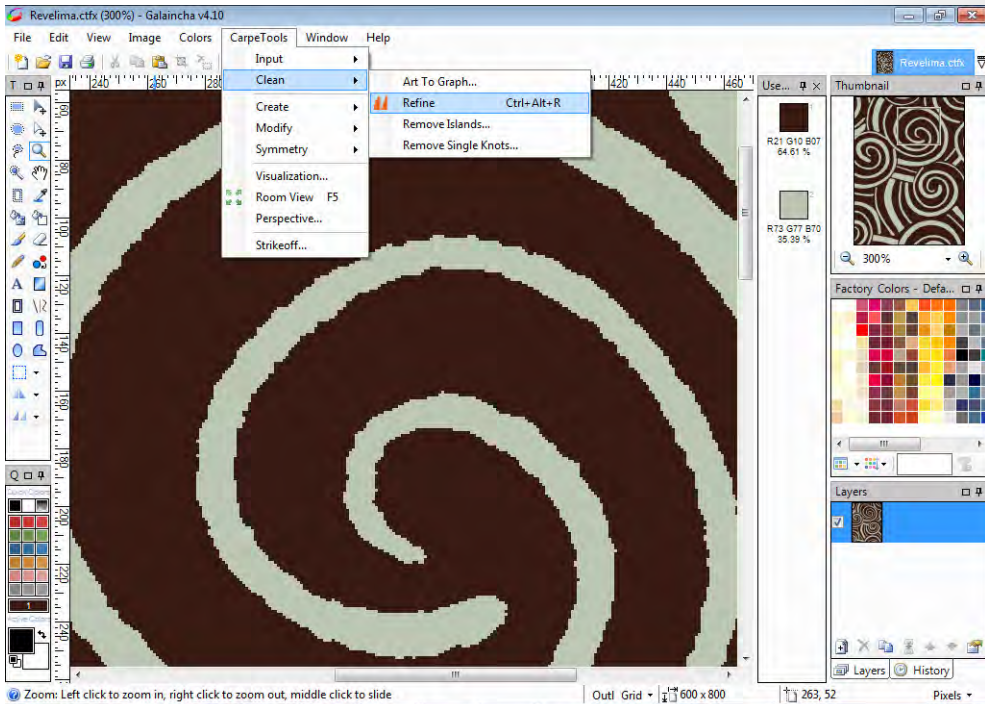
Original design

The output after applying Refine

Remove Island

- Go to CarpeTools > Clean > Remove Islands

This tool is important in the processing phase of the carpet.

While cleaning, there may be small areas of color (islands) which have to be removed. Such a situation may arise after doing Art to Graph or Threshold or Reduce Color. You can specify the size of the areas to be removed, and whether all colors need to be processed or just the selected color.
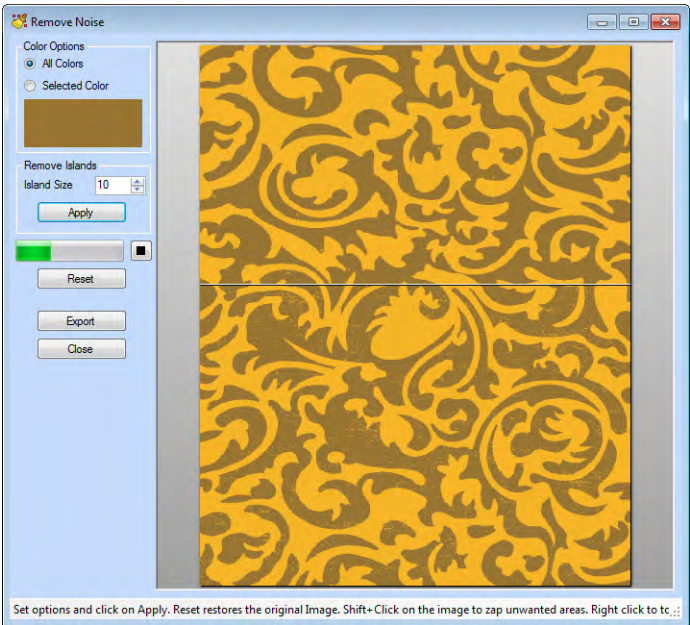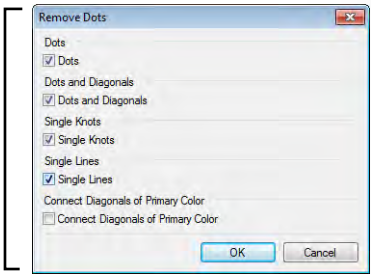

Artwork before applying Remove Islands

The output after applying Remove Islands

Remove Single Knot

• Go to CarpeTools > Clean > Remove Single Knots

This tool is similar to Remove Islands but it removes unwanted single knots from the designs.

You can apply different options to remove the single knots.

Artwork before applying Remove Single Knots

The output after applying Remove Single Knots

Handmade Effects

• Go to CarpeTools> Modify> Handmade Effect

This can be helpful for you if you want to create designs which looks like handmade. By using this effect, your design looks like handmade. The curves and lines are made less smooth .
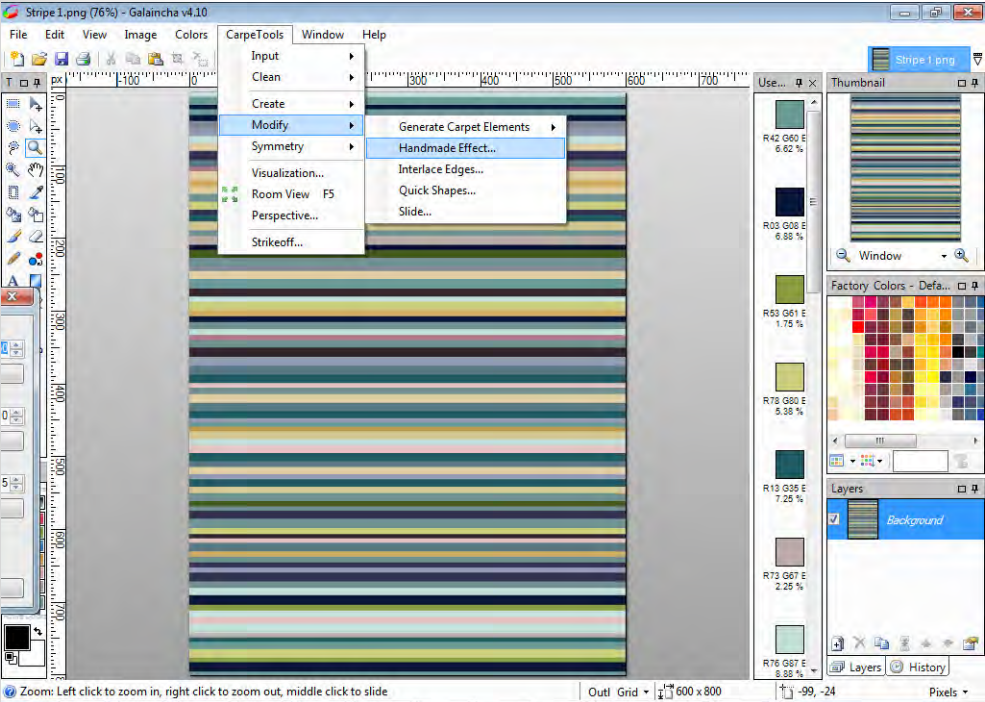
Without Handmade Effects

You can change the scale, the intensity and the roughness for making the handmade effect design from the current design.

After Applying Handmade Effects

Stripes Creation

• CarpeTools > Create > Geometric > Strips

You can create Vertical or Horizontal Stripes using this tool.
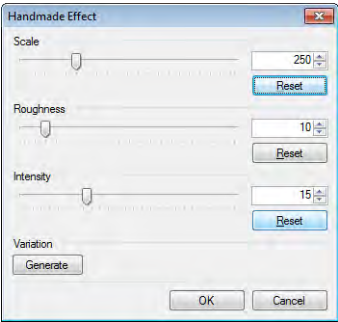*This tool creates Stripes of selected width of active colors (Primary and Secondary color).*
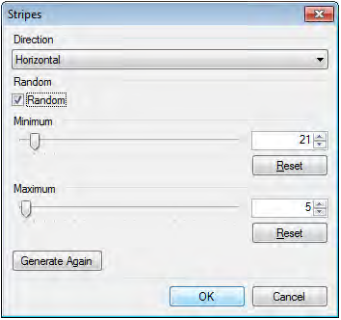
We can specify create strips of fixed width or random width.
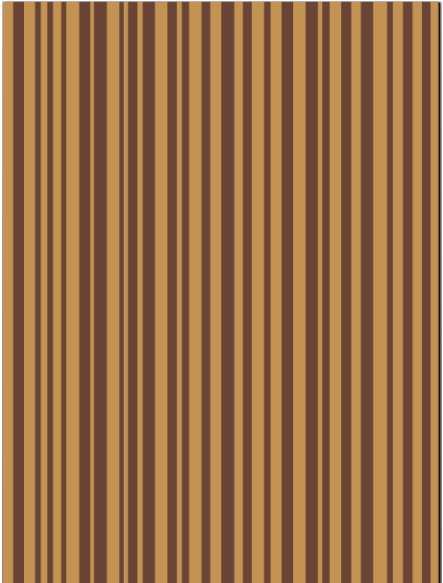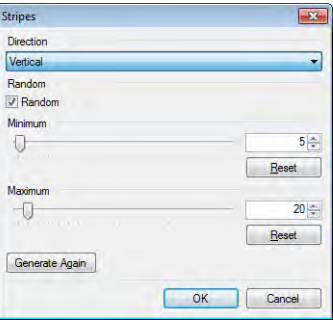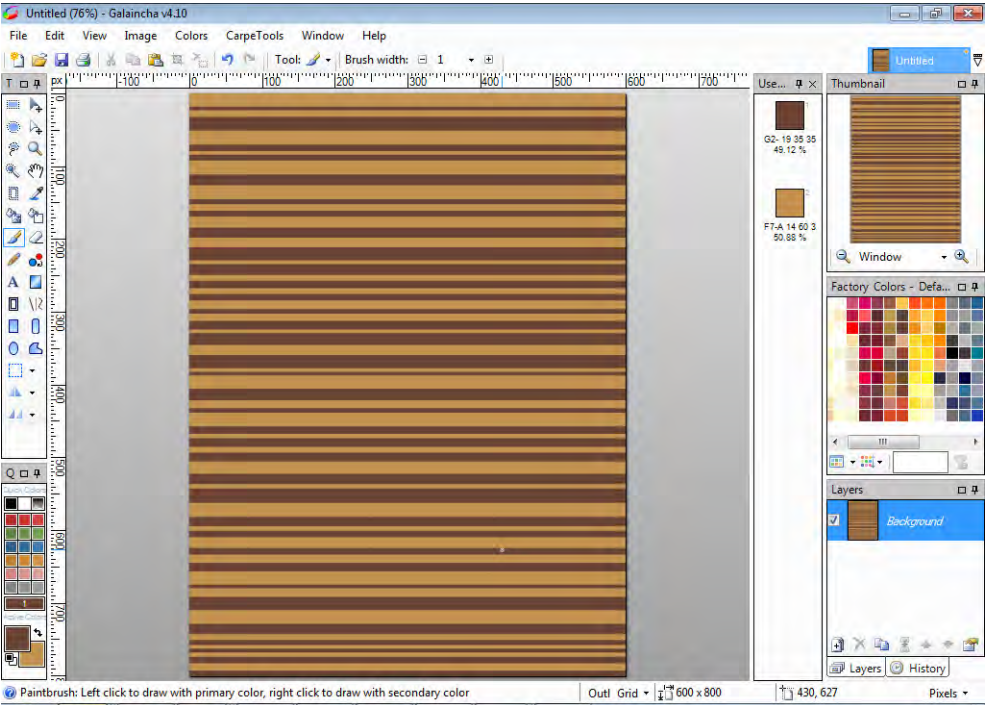
Checker Board

• Go to CarpeTools > Create > Geometric > Checkerboard

If you want to create two color checkerboard design, then this tool will help you.
This tool creates checkerboard of the active colors (Foreground and background color).

We can specify the height and width of each box and also left and right position of the checkerboard

Greek Key Border

• Go to CarpeTools > Create > Geometric > Greek Key Border
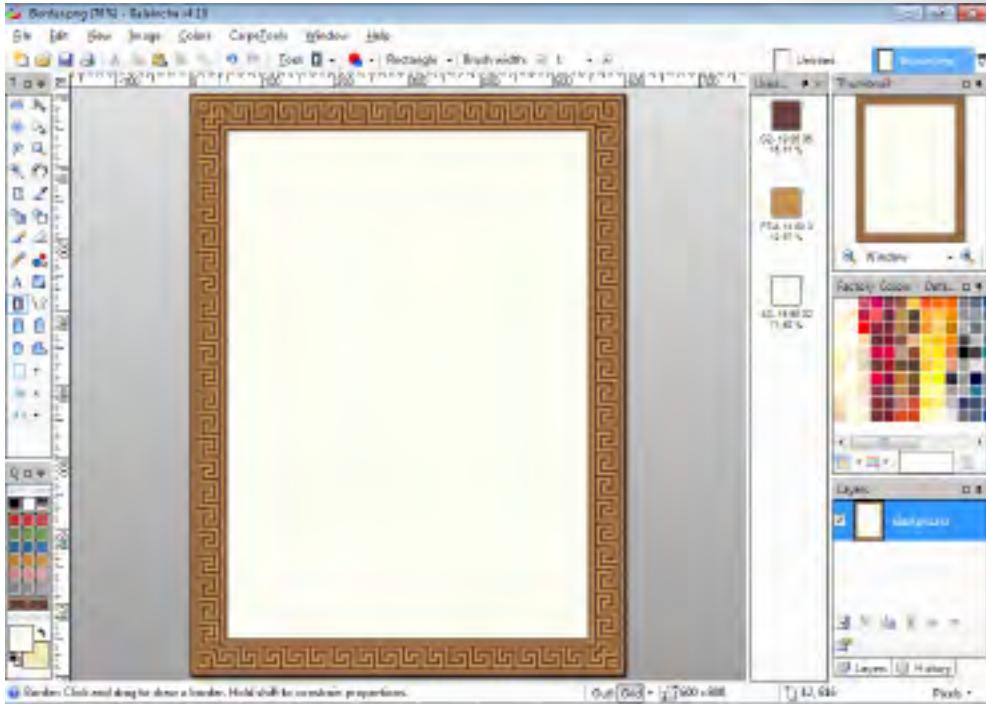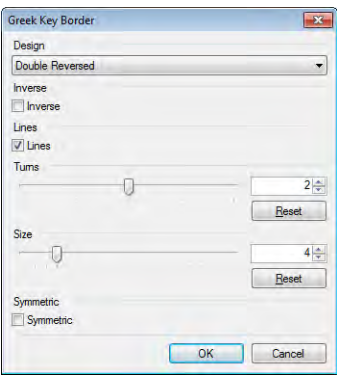
You can also choose different border option.
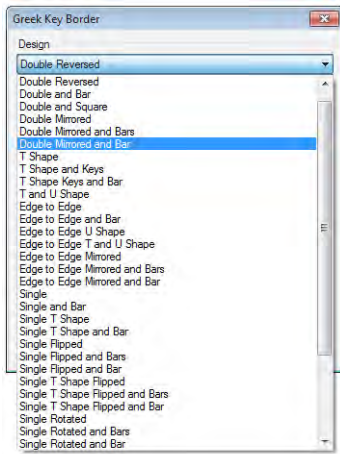
———— Different types of border ————

| *Double* | *T-Shape* | *Edge to Edge* | *Single* | *Cross* |

Contour

• Go to CarpeTools > Create > Irregular > Contour

It is a powerful tool to create Abstract designs.
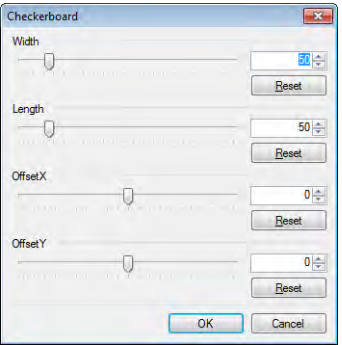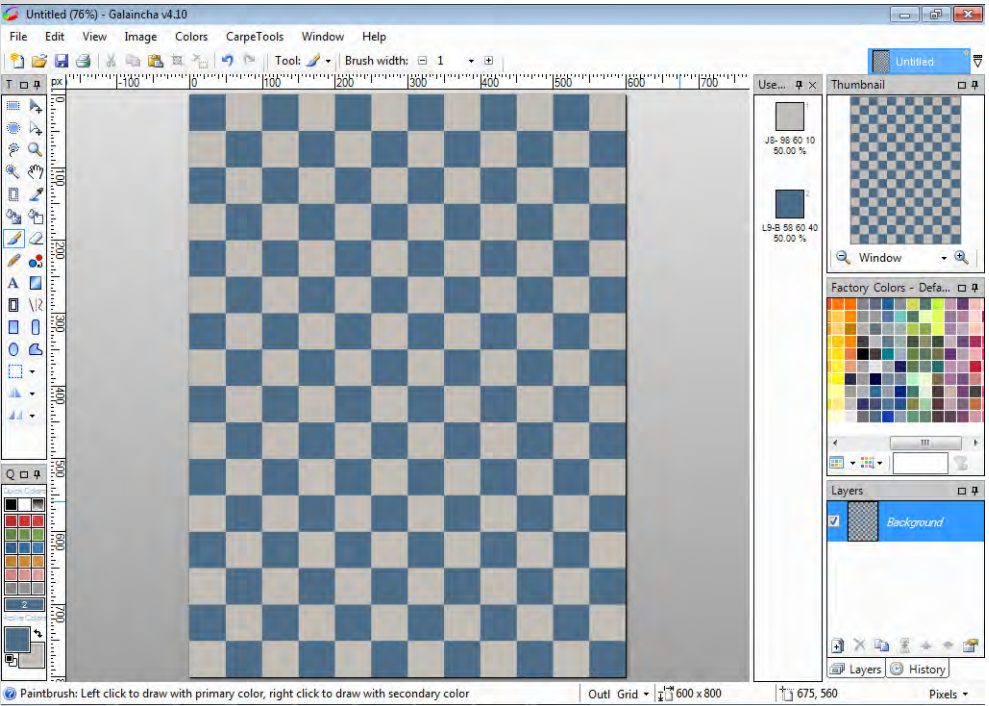*This effect is created by the blend of foreground color and background color. As with clouds effect, when you apply this effect, the design on the active layer is replaced. Generally contour effects is applied to create effects as shown below.*

Different designs can be created by changing the scale (the size of the contour pattern), Roughness (roughness of the pattern ,or the edges and the Steps (layers of the contour)
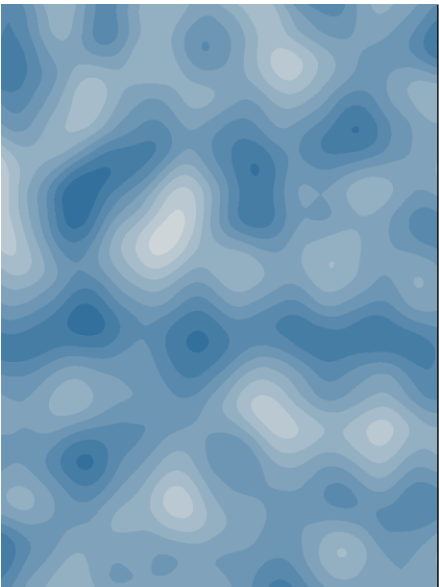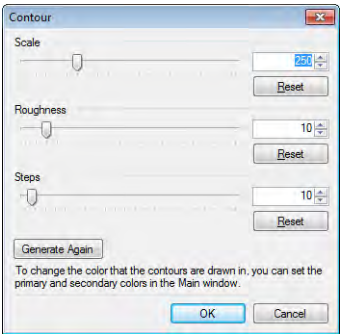
Maze

• CarpeTools> Create> Irregular> Maze

If you want to create Maze like design then you can create it by using this tool. This tool creates maze of foreground color and the background of maze is the background color. Like clouds and contour, when you use this tool, the design in the active layer is replaced.
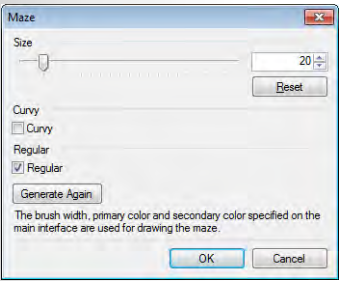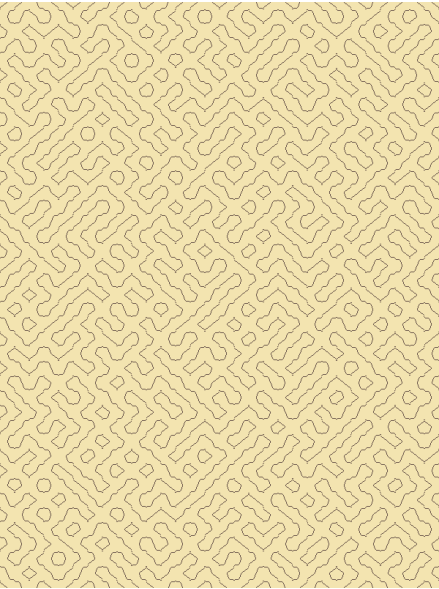
Normal Maze Design · Curvy Maze design

• Go to CarpeTools > Visualization

Visualization is another mostly used tool in Galaincha software. This function helps you to visualize your design as a finished carpet. It shows the real output of the design that you had currently created. So using this function you can see how your design is going to look like when it is ready.

Also you can select the type of material (wool, silk, loop and custom) and also select high pile and low pile according to your needs for each color or material.
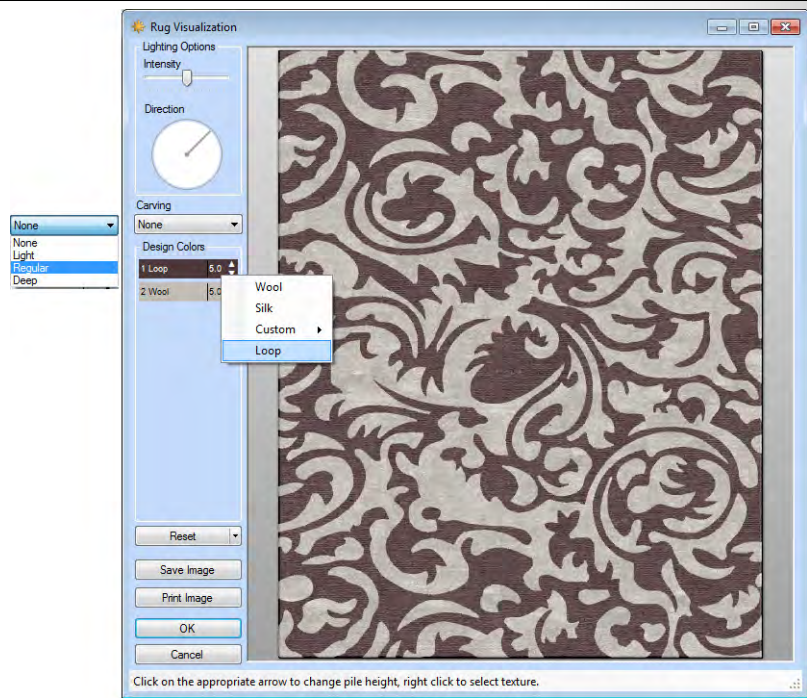
Above shown is the 3D-simualation controller of the carpet. By using this you can specify each material to each color in your design and also you can not only set high pile or low pile but also the actual size of high pile or low pile.

Also to make the carpet more accurate as the actual carpet we can select the carving (including trimming) as None, Light, Regular and Deep.

To select the material to each color, right click on the color displayed on the left hand side and select the material (Wool, Silk or Loop) and the high pile and low pile by clicking on the arrows with the colors. (up arrow for high pile and down arrow for low pile)

Visualize the different texture as you assign

Realistic visualization in Cut Option

Realistic visualization in Silk

Realistic visualization in Loop and Silk

Realistic visualization in Custom texture

Visualization in Different Texture in Same Color

Hold **Ctrl** key then drag and drop a color over another to merge color and send into different layer.
This option is useful to have same color but into different layers and textures.
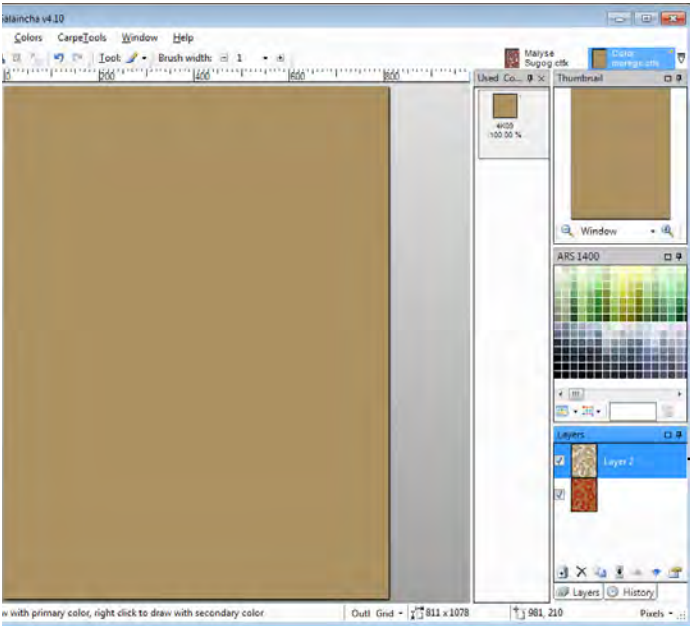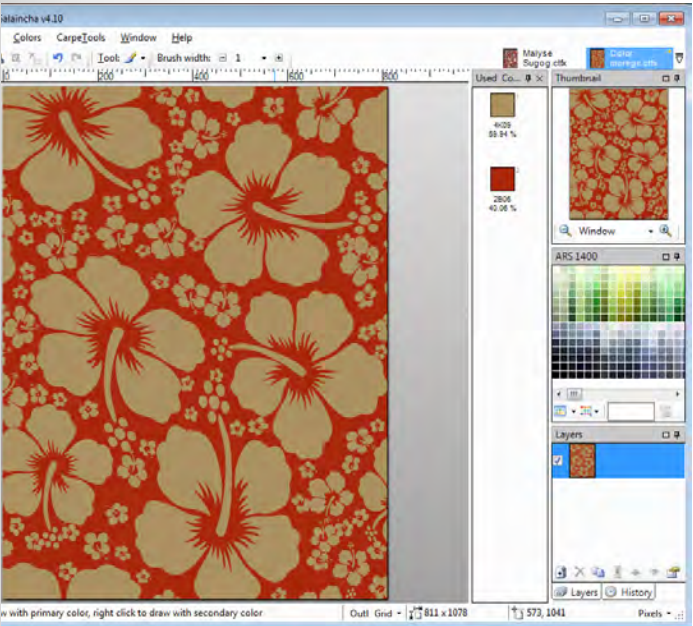
CTRL + Dragging the color over another sends the color into new layer and merge into single color.

Visualization in same color and different texture

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support@galaincha.com.np

Strike Off

• Go to CarpeTools > Strikeoff

Size of the Strike Off is limited to 60 cm by 60 cm.

Colors in the designs, but not in the specified strikeoff area are indicated by a cross

Move this square to specify the strikeoff area
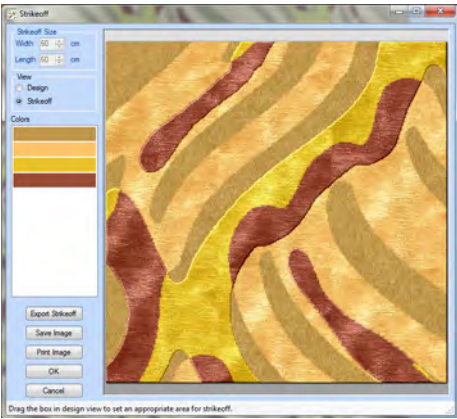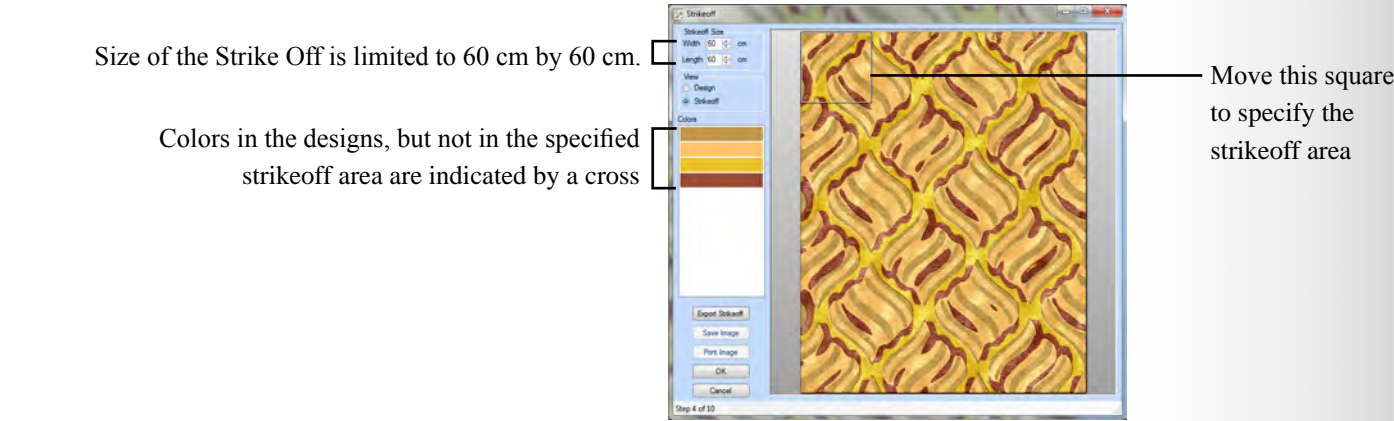
Strike Off view of selected area

Full view of the strikeoff

RoomView

Open the design

• Go to CarpeTools > Visualization (F5)

This is another new function that is included in the new Galaincha software. By using this function you can see your design in the real room environment. That means you can visualize how your finished carpet is going to look like when it is actually used in the real room.

Viewing in Room

For the more rooms

Save current view

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Design Plate

• Open the design
Go to File > Print Design

Design Name

Size

Scale

Customize option for the Design Plate

Design

Color with material information

You can also save the Design Plate

Logo

Print Graph

• Go to File > Print Graph (Ctrl+P)

This is another important function in Galaincha Software which helps you to print the graph of the active design in corresponding rows and columns. Printing graph is very important in carpet manufacturing process. This is mainly useful in the weaving process. By this a graph of the documents can be obtained which is ordered in rows and columns.

Printer Settings

Graph

Grid

Printer Settings

Defination Box

Graph Preview

Print Graph Window

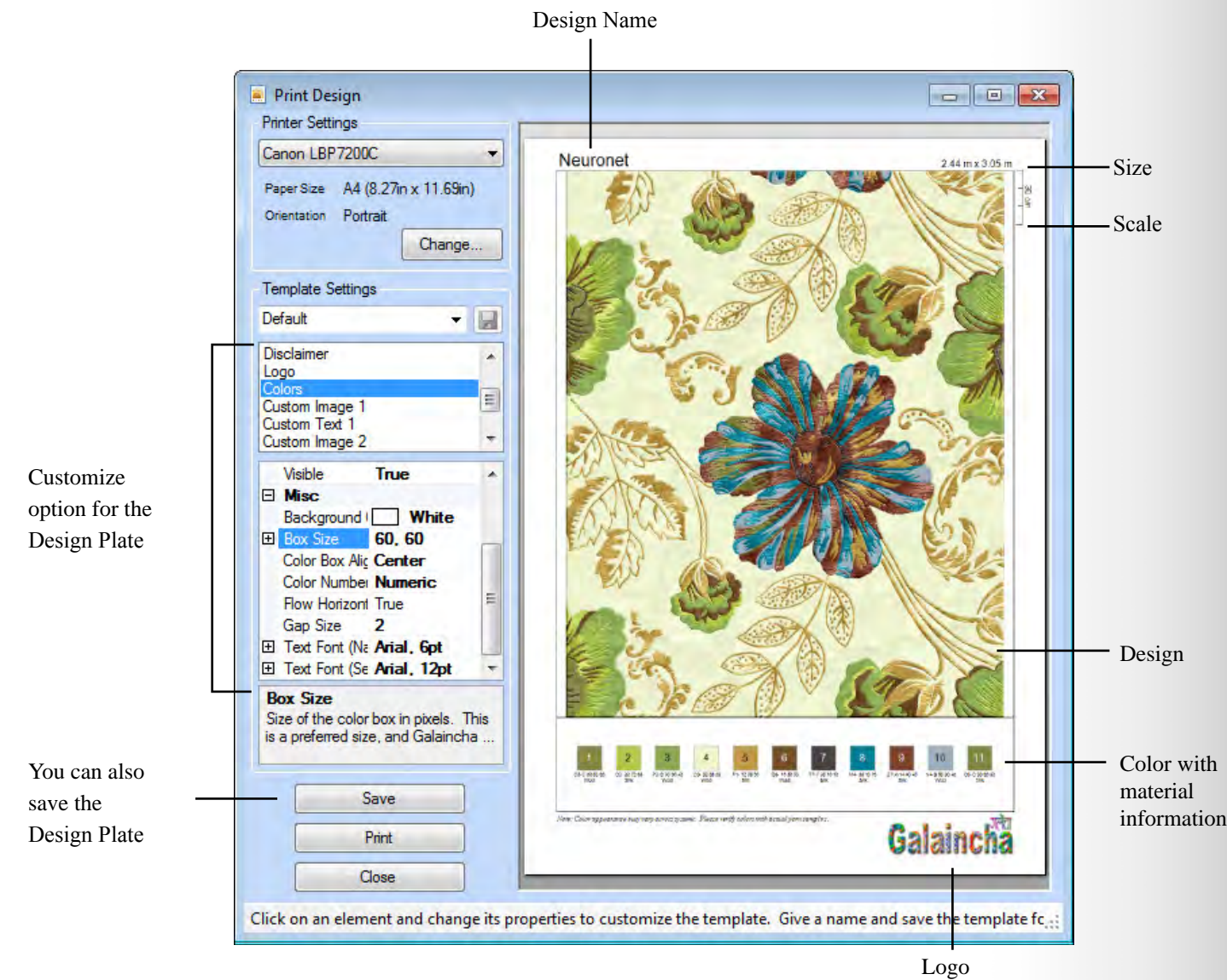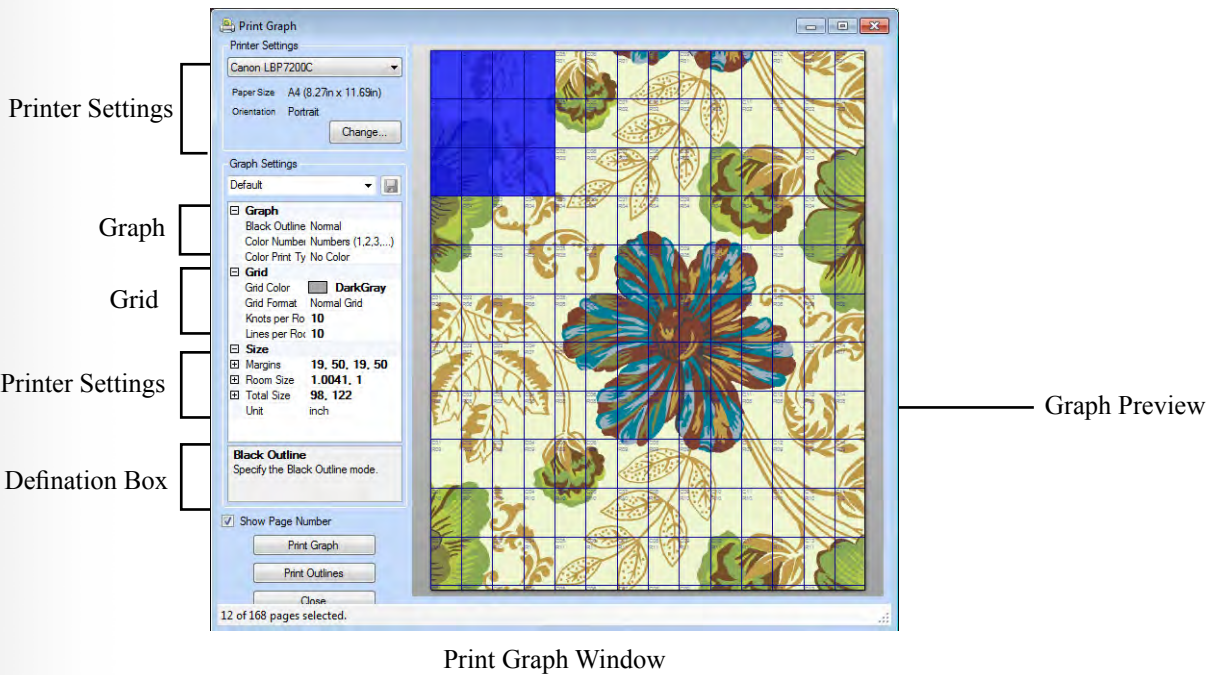Printer Settings: You can change the printer name and its settings by clicking on Change button. You can print the entire design fitting into the current paper, size, or you can print the design in its actual size. Or at any resolution appropriate for your graph

Graph: You can specify whether you want to print black outline as thick, normal or none. If you want Color Number in numbers, alphabets or without numbering. Similarly, define the color print mode from Color Print Type as Full Color, Color Outline or No Color.

Grid: You can specify whether and how to show Grid for the design. Change Grid Format to No Grid if you want to turn it off.

Size: You can specify knots and lines per room to be used for printing the graph. The Room Size for Print and the Rooms per Page allow you a very flexible method of specifying your printout dimensions.

Defination Box: Display description of the active Graph Settings.

Graph Preview: One cell of the grid is equivalent to one page of the printout. If you click on a cell then it will turn into the blue cell meaning the ones that will be printed. You can select any page by clicking on the cell or multiple pages by dragging. If you want to select all cells for print then press Control +A (Select All).
Click on a blue cell to deselect it, so that it won't be printed.
Right clicking on a cell results you to see page view.

Print Graph
To Select Cells, Ctrl + left click mouse button or drag along the required Cells. You can right-click on particular Cells to zoom it. Please note that only the selected cells gets printed so you have to select the required cells before printing. If you have to print all Cells then you can select all cells by pressing Ctrl+A.

• Print Graph (Ctrl+P)
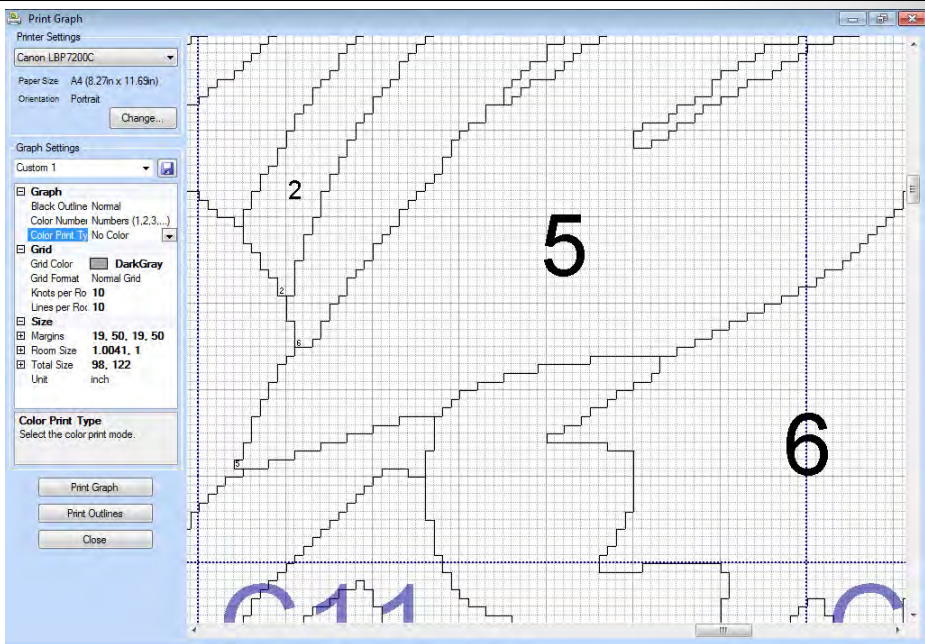
Black outline with color no.
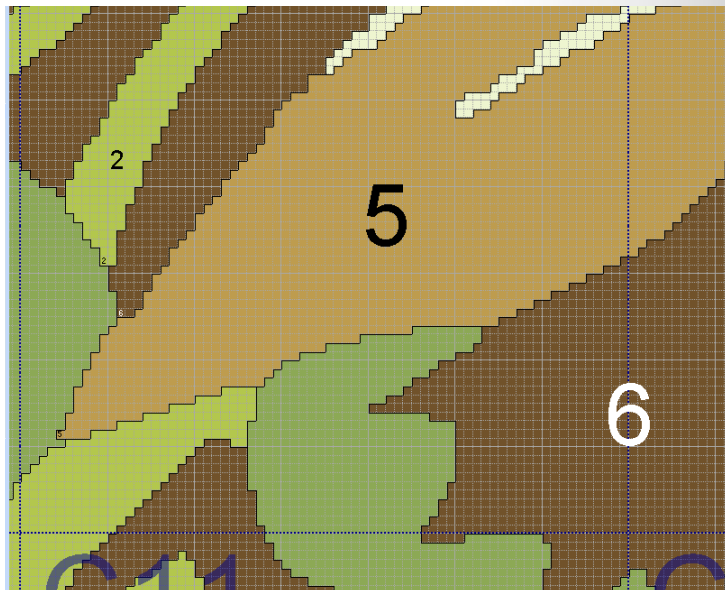
Full Color Graph
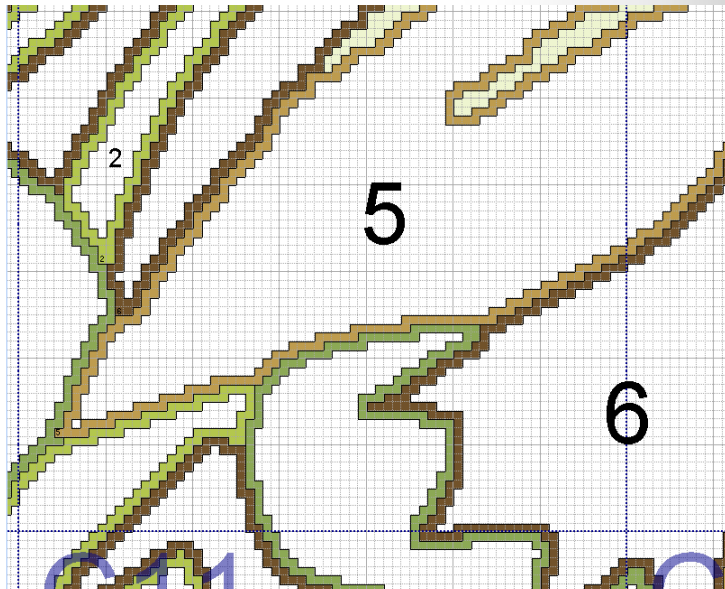
Color outline graph

Material Estimation

• Go to Colors > Material Estimate

This tool is most important and mostly used tool in the Galaincha Software. By using the Material Estimate function we can know how much yarn is to be used, wasted and other information before the actual production process takes place.

Galaincha software estimates the consumption details of the raw material to be used in a particular design in color wise breakdown. The Material Estimate enables you to know the percentage of consumption material beforehand to project the cost of the custom rug. Go to menu Colors, select Material Estimate .

The Material Estimate window shows you the carpet information and estimation information. It gives you the size and quality, and the total weight of carpet based on your production environment. You can print this information too.
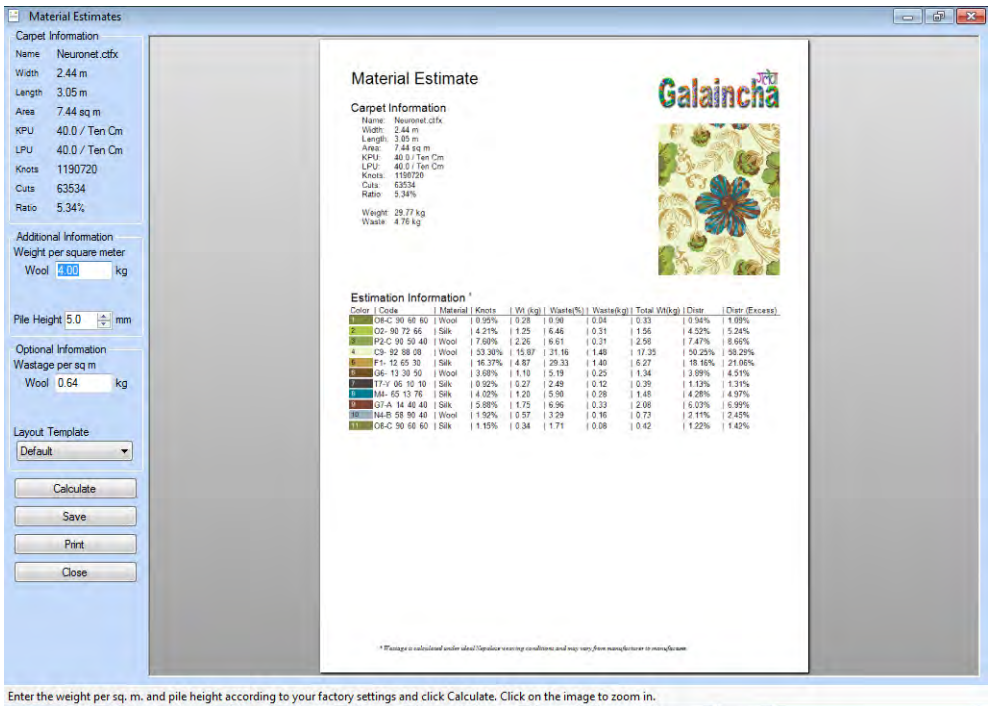
Galaincha V4 Shortcuts

Key for Working with Image

Result	Key
Create New File	Ctrl + N
Open File	Ctrl + O
Close File	Ctrl + W
Save File	Ctrl + S
Save As	Ctrl + Shift + S
Print Graph	Ctrl + P
Image Resize	Ctrl + R
Canvas Resize	Ctrl + Shift + R
Crop Selection	Ctrl + Shift + X
Rotate 90° Clockwise	Ctrl + H
Rotate 90° Counter Clockwise	Ctrl + G
Rotate 180°	Ctrl + J

Key For Viewing Image

Result	Key
Cycle Forward Through Documents	Ctrl + Tab
Cycle Backward Through Documents	Ctrl + Shift + Tab
Zoom to Window	Ctrl + B
Actual Size (100%)	Ctrl + Shift + A
Zoom In/Out	Ctrl + +/-
Zoom to Selection	Ctrl + Shift + B
Switch to Hand tool (When not in text edit mode)	Ctrl + Spacebar
Scroll up or down 1 screen	Page Up or Page Down
Scroll left or right 1 screen	Shift + Page Up or Page Down
Move View to Extreme Left or Extreme Right	Home or End
Show Image List	Ctrl + Q

Keys for Using Layer Palette

Result	Key
Add New Layer	Ctrl + Shift + N
Display Layper Properties	Double-click Layer
Merge Layer	Ctrl + M
Flattern Layer	Ctrl + Shift + F
Delete Current Layer	Ctrl + Shift + Del
Duplicate Current Layer	Ctrl + Shift + D

Key for Selection and Editing

Result	Key
Select All	Ctrl + A
Deselect	Ctrl + D
Add to Selection	Ctrl + Left Click
Subtract from Selection	Right Click
Exclude Overlapping from Selection	Ctrl + Right Click
Invert Selection	Ctrl + I
Constrain Marquee to Square or Circle *(If not other selection are active)*	Shift Drag
Select Area of Similar Color	Shift + Left Click
Invert Area by Similar Color	Ctrl + Shift + Left Click
Copy Selection	Ctrl + C
Cut Selection	Ctrl + X
Copy Merge	Ctrl + Shift + C
Paste	Ctrl + V

Key For Using Brush Tool

Result	Key
Increase Brush Width	]
Decrease Brush Width	[
Width in 5 increments	Ctrl + [or]

Keys for Using Color

Result	Key
Select Current Color as	Left or Right Click Color
Primary/Secondary Color *Select Color from First Row to Sixth Row*	1-6
Swap Primary and Secondary Color	X

Keys for Image Color Adjustment

Result	Key
Auto Level	Ctrl + Alt + L
Black and White	Ctrl + Shift + G
Curves	Ctrl + Shift + U
Invert Colors	Ctrl + Shift + I
Levels	Ctrl + L
Sepia	Ctrl + Shift + P

Alternative Technology