Using Paint Draw Photo Digitizer

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Introduction:

Paint Draw is a dedicated website to providing quality photo realistic digitized photos for hobbyists and professional paintings applications from images. The digitized photo allows picture to be painted to a photo realistic painting with colour book levels of effort. The digitized photos can be used by professionals for stunning results or hobbyists for quality results first time.

Digitized Paintings Photos:

Photos to be digitized can be of any size and complexity. By default 1000 pixel mesh 24 image reflect on floor plan as 1 meter size. However, scales can be introduced to resize the photo, better yet the required size can be preset before digitizing where 2 meter artwork or product material required photo to be resized to 2000 pixel mesh 24 before digitizing. Mesh is the number of paint pixels per inch length.

The digitized photo is a standard colour book colour page where is handled like any other colour book page to be painted given the fact to painting only photo realistic and high quality. Sample digitized photos are available to download while any photo required to be digitized to a colour page can be ordered to be processed of any type On demand from Paint Draw website. A colour page will be referred to as Pattern throughout the document.

Digitized photos 'Tiled Image' can be modified by any image manipulation software like Windows Paint for a new digitized photo or pattern to be regenerated by Paint Draw.

Contours refer to lines and fills of pattern where constellation refer to contours grouped by same colour.

Selecting A Photo To Be Digitized TO Pattern:

Any photo of any material can be digitized to pattern, however, photo sizes need to be higher than 1000 pixels for a better quality results. The digitized photo is optimized where minimal dithering added to the Tiled Image where the photo version of the pattern yield exact looking photo compared to the original. Therefore, minimal spaces are made large enough for easy painting yet small enough to meet quality requirement when dither is applied where in case of applying canvas to the Tiled Image where the photo version of the pattern generated.

Painting On Ceramics:

It is also possible to print a flipped pattern on transfer paper where applied afterwards to ceramic tiles or plates especially when carved or embossed where ceramic printers can not function. Follow transfer paper recommendation regarding printers used. Flat tiles can be printed using transfer paper when not yet glazed where embossed afterwards then painted to pattern before glazed to suit bathroom or kitchen walls or exterior none slip floors or swimming pools embossed surfaces.

Easy Paint:

You can paint your photorealism portrait given the fact easily with Paint Draw following only these easy steps:

• Order a pattern using the form at Contact page on Paint Draw website.

• Print your pattern to a canvas at your local stationery shop to scale of 1mm to 1pixel of your original photo size where 1000 pixels means 1 meter size.

• Stretch canvas to frame of your choice.

• Blend your paints using online RGB to paint convertors available on the internet listed below.

• Enjoy a true painting experience using 'Art View' available free to download from Links page on Paint Draw Website for swift painting.

Order Your Pattern:
You can order your pattern of choice by uploading your favourite photo at Contact page on Paint Draw website or select from patterns already listed at Patterns page.

Print Your Pattern:
You can print your pattern to a canvas at your local stationery shop to scale of 1mm to 1pixel of your original photo size where 1000 pixels means 1 meter size. The pattern file to print is Border Dot.bmp which is 11 times size of the original file so real print scale would be 11 pixels per 1 mm for 1 meter size painting.

Stretch Canvas To Frame:
You can stretch canvas to frame of your choice yourself where many websites show how to do that or you can have your local arts supplies shop to do it for you.

Mix Your Paints:
You can blend your paints using online RGB to paint convertors available on the internet like Virtual Paint Mixer (MXR) from Golden Artist colors Inc., link https://goldenpaints.com/mixer or for other vendors Paint Maker from Sensuallogic link http://sensuallogic.com/paintmaker or Real Paint from AI4res link http://ai4res.com/realpaint or similar software. Please note CMY blends at Palette Index File below are typical conversions of RGB to CMY values and not practical values and apply only if a vendor may to exist that can confirm their supply on that account.

Use Art View:
Use Art View a free to download utility software available at Links page on Paint Draw website for swift painting.

Pattern Suit Contents:

Digitized photo comes with all what is necessary to enable the pattern to be used, where the files are as the following:

Original.bmp

Original file is the original image processed to pattern.

Tiled.bmp

Tiled is the processed file from original to pattern with no canvas effect added needed as local dither. So Tiled.bmp is a viewable pattern photo as a photo in any photo viewer.

Tiled Canvas.bmp

Tiled Canvas is the processed file from original to pattern with canvas effect added needed as local dither and to mimic the final painting look. So Tiled Canvas.bmp is a viewable pattern photo as a photo in any photo viewer.

Tiled Map.bmp

Tiled Map is the processed file to pattern from Original Image with components borders added. So Tiled Map.bmp is a viewable pattern file as photo in any photo viewer only borders boundaries of constellations and contours added.

Border.bmp

Border is the pattern borders of processed file to pattern from Original Image. Border image can be printed on canvas or drawing paper to any size for transparent paint on white canvas or white drawing paper where dots need to be avoided.

Border Dot .bmp

Border Dot is the pattern borders of processed file to pattern from Original Image only with connections to the contours or constellations of same colour. Border Dot image can be printed on canvas to any size for none transparent paint on canvas.

Palette Index.txt

Palette Index file lists the colours used in pattern with their colour codes and dye information.

Product Information.txt

Pattern own details of size, effort required, number of colours used, serial number and processing engine version number for reference.

Using Digitized Pattern Suit Files:

Digitized pattern files supplied provide complete information required to be used for painting. They include the pattern data and information and corresponding photos. These files can be displayed by a computer, laptop, tablet or a hand held device or printed on paper for a hardcopy reference. The files comprise of:

Pilot Files:

These files support pattern file itself used for painting by providing sizing and statistics details and colour palette as follows:

Product Information File:

Product Information file supplies the size of pattern where painting in width and height at 'Painting Width' and 'Painting Height' in pixels so the painting frame and canvas can be set accordingly. Final size of painting depends on size of pattern print on canvas selected to the painter given the fact preference due to Mesh size selected.

The file also supply the number of colours used at 'Palette Count' where dye used for painting can be purchased or shop CMYWB blended.

The file also includes a measure of effort required 'Painting Effort' where higher the measure the denser the painting details is. The measure is based upon how often colour change per paint line for all possible lines where start painting a colour is considered an event and end painting a colour on same draw line is considered an event where also a brush stroke where more events corresponds to more effort placed.

The file also include the product serial number 'Pattern Serial Number' and the processing engine version number 'Release Engine'.

Palette Index File:

Palette Index file lists the colours used in the pattern of total number referred to by 'Palette Count' in the 'Product Information' file. Each colour assigned a number starting from 1 ending to 'Palette Count' number placed at Product Information file.

Each colour have its own section in the 'Palette Index' file separated by '---------------' where first to start is the colour number followed on same line by the 'Pixels Count' number that represent the total number of photo pixels using that colour regarding in the whole pattern file in Tiled.bmp photo file which is the image version of the pattern file itself.

Each Colour is presented by the following formats:

HTML colour code format #RRGGBB value in hexadecimal referred also as 'Hexadecimal Format'.

RGB format where 'Red' and "Green" and 'Blue' values.

CMY format for Cyan and Magenta and Yellow values.

CMYK format for Cyan and Magenta and Yellow and (K) for Black values.

CMYW format for Cyan and Magenta and Yellow and White values.

CMYB format for Cyan and Magenta and Yellow and Black values.

CMYWB format for Cyan and Magenta and Yellow and White and Black values.

These formats are used to select the right colour or dye blend to be used whenever required whether to select a material or to dye or paint a finished product yet to select a colour to dye it is strongly recommended to follow dye vendor instructions for the dye blend using only the three first formats where HTML code or RGB code or CMY code including amount of white or black added. Do not use CMYK format unless your dye vendor specifically permit it to his usage specifications and methods. The other formats include the direct effective volumetric values of white and black where can be used if dye vendor assign volumetric white and black dye measure to be added with CMY. In case black and white amount added may not be either CMYK or direct effective volumetric that even may vary in this case between dye vendors then it is advised to follow dye vendor recommendations where a good practice in all cases anyway. Electronic colour testers and mixers and precision weight measures are available to prepare the dye or test the finished colour.

A colour entry or record in Palette Index file is like follows,

```
----------------------------------------
Colour 5             Pixels Count = 103
HTML Colour Code = #DBD3B0
Red  = 219       Green  = 211         Blue  = 176
Cyan = 0.14117646  Magenta = 0.17254901  Yellow = 0.30980390
Cyan = 0.00000000  Magenta = 0.03652968  Yellow = 0.19634701  (K) Black =
0.14117646
Cyan = 0.14117646  Magenta = 0.17254901  Yellow = 0.30980390  White =
0.69019610
Cyan = 0.00000000  Magenta = 0.03137255  Yellow = 0.16862744  Black =
0.14117646
Cyan = 0.00000000  Magenta = 0.03137255  Yellow = 0.16862744  White =
0.69019610  Black = 0.14117646
----------------------------------------
```

Digitized Pattern File:

The digitized pattern file is Border Dot.bmp file that can be opened by any image manipulation software like Windows Paint or similar software. The file consists of pattern border details with dots

at centre of each border pixel connected to its contour or constellation belonging to. Border Dot file can be printed on canvas to any size at your local stationary shop using wide format printers and all need is given the fact apply even amount of paint to any constellation or contour of same connected group and their related fillings in order to achieve professional results.
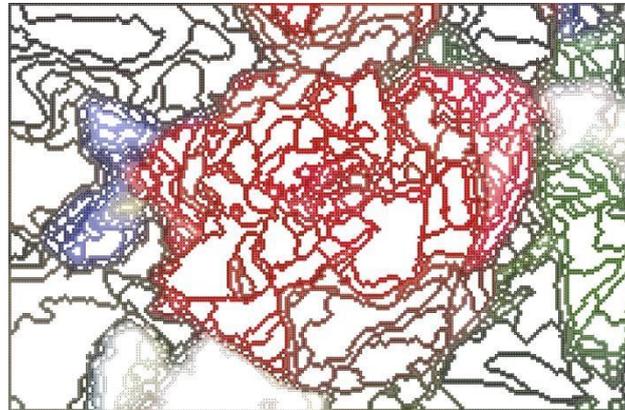

Border Dot Image

Looking at pattern details the dots at centre of pixels and their connections are clear to see. Mesh is self defined after selecting printing size where pattern size in pixels of original image divided by printed canvas size in inches.
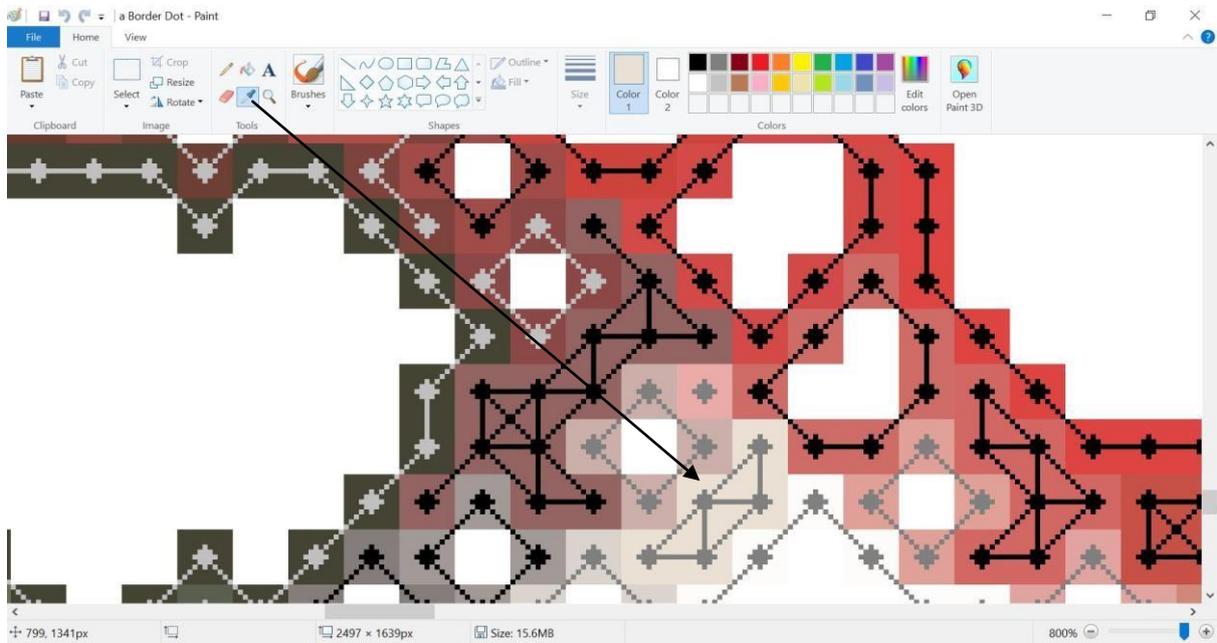
Determining A Constellation:

When pattern opened by Windows Paint software it appear like the following after Zoom. It can be seen that pixels are arranged when same colour to a connected constellations or contours with filings inside. All same connections and fillings are of same colour.
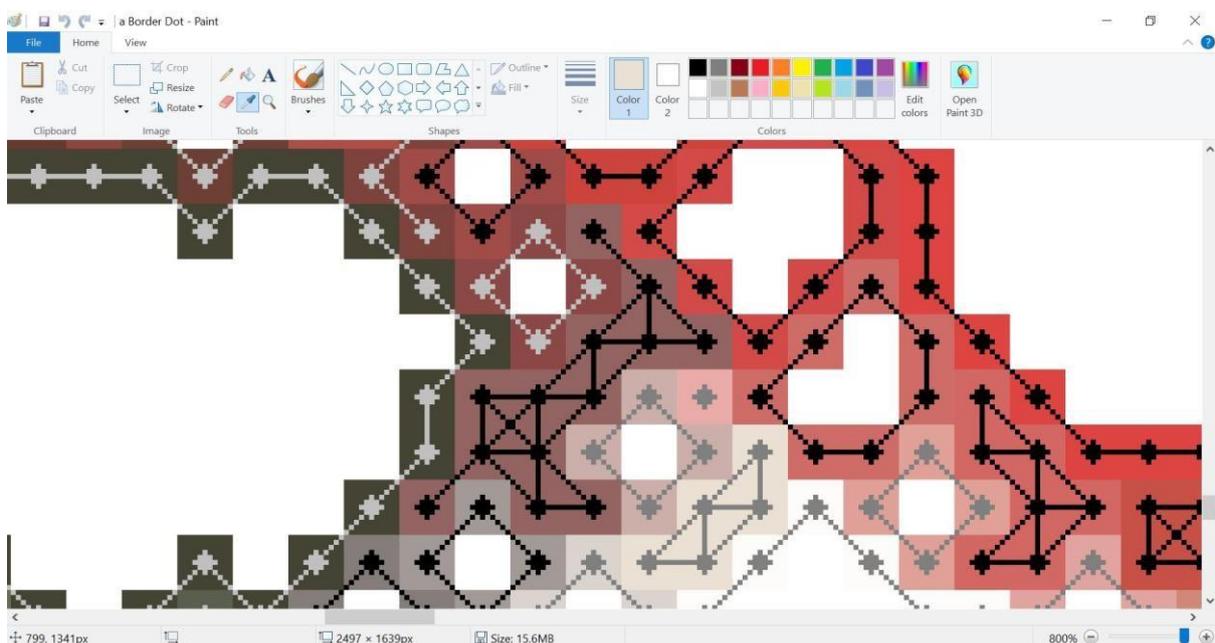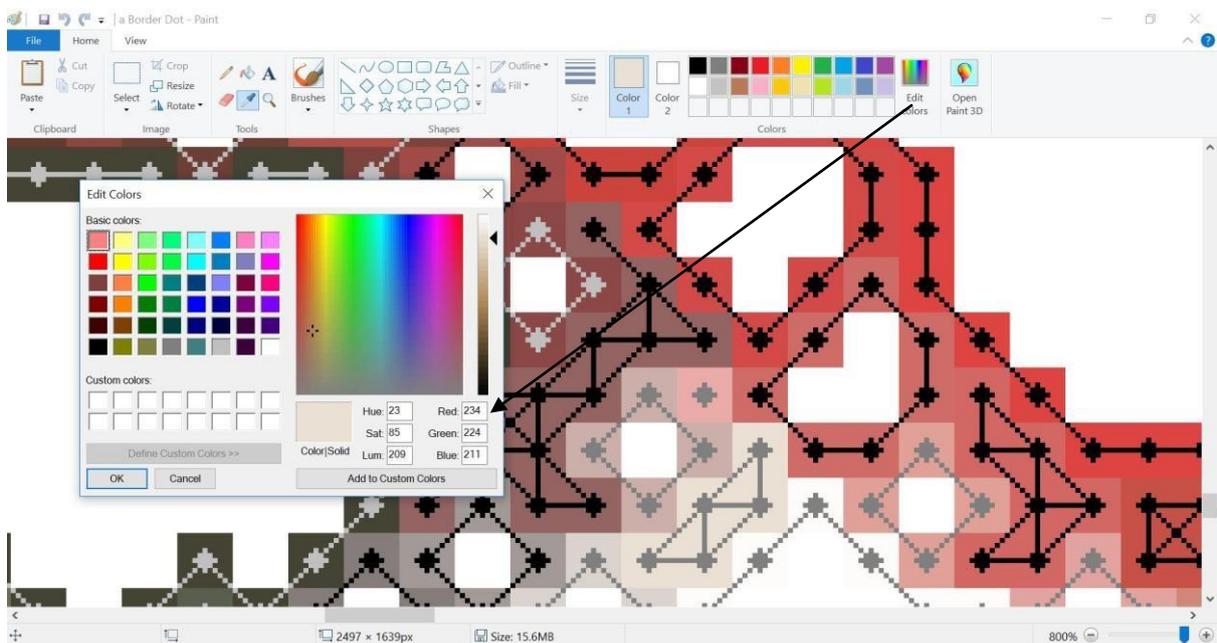
Determining The Colour Of A Constellation:

A colour of constellation can be determined by using Windows Paint Pick tool where a pixel colour is selected.

RGB Values Of A Selected Colour Of A Constellation:

RGB values of colour of constellation can be determined by using Windows Paint Edit Colors tool where a pixel colour selected is displayed in RGB format.

When RGB values of selected colour are determined then CMYWB values for oil and acrylic and water colours tubes or CMYK values if paint is transparent to white canvas if the dyes vendor specifically allows it to his specifications of usage and methods are retrievable from the Palette Index file to be blended to the amount required. Fillings are of same connected pixels constellation by can be also verified by using Tiled Map.bmp image at related constellation position and also via Tiled.bmp image at same constellation location traced by vision. Please note that Border Dot.bmp file is 11 times the size of other image files therefore it is best to locate and constellation visually at Tiled Map.bmp file to locate the constellation which is a straight forward task. Tiled Map.bmp and Tiled.bmp are same size for pixels location if further verification of colours inside fills related is required which is easier for Tiled.bmp since location now is straight pixel location from Tiled Map.bmp file. However, pixel colour information and associated fills is always sufficient from Border Dot.bmp file for the constellations and related fills inside.

Image files:

Image files are the images apart from Border Dot.bmp that allow support and assistance to Border Dot Image when painting by providing any information required for painting. Image files also allow the compare of painting to original image before actual painting take place. These images are as follows,

Original Image:

Original photo that is digitized to pattern. The photo is used as reference to the digitized pattern canvas photo placed beside to compare quality of the pattern generated where alike. The best pattern file to compare with the original photo is the 'Tiled Canvas' image since provide minimal local dithering and mimic the final painting look on canvas.

Original Image

Tiled Image:

Tiled image is the image of the pattern data of the image as photo. So it is how the pattern true look is like except for adding the real life effect where canvas effect is yet to be added when the final look is to be developed. The image is direct interpretation of the pattern file generated however canvas effect is required to be added on this image to meet the expected look and feel of truth behind what pattern file does deliver.

Tiled Image

Tiled Map Image:

Tiled Map image is the image of the pattern data of the image only borders added on top to define the constellations and contours boundaries. So it is how the pattern file will look like except for boundaries of digitized pattern photo also visualized to assist locating the pattern contours and constellations pattern file consist of and the fills colours inside a constellation if any.
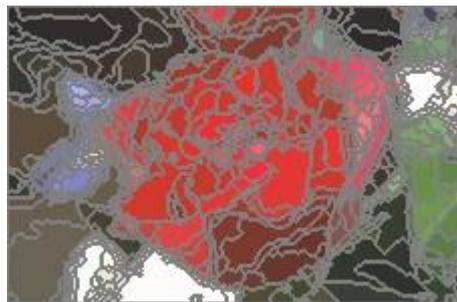
Tiled Map Image

Border Image:

Border Image is the image of borders only to their true colours to assist defining the constellations and contours with their consisting colours. Border Image is identical to Border Dot image only where dots not added and smaller size by factor of 11 where Border Dot image is used for print on canvas for easy trace of constellations and contours. Border image can be printed on canvas instead of Border Dot image for transparent colours painting where dots need to be avoided on canvas.
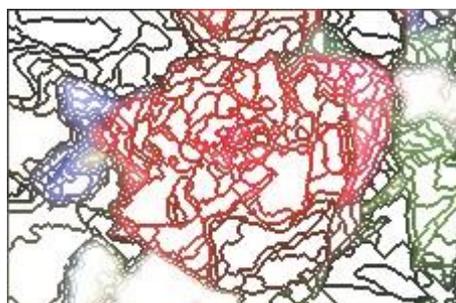
Border Image

Tiled Canvas image is the image of the pattern data of the image only canvas effect added to mimic a real feel and look of a pattern file as painting itself. Canvas provide local dithering that present how alike the pattern to the original image.

Tiled Canvas Image

Comparing Images:

In order to build a comparison of a pattern file to the real photo, the Tiled Canvas image is the one to be selected to compare with the Original image both supplied with the pattern suit after purchase and before final purchase for consent for the purchase. The Tiled Canvas image mimic the final pattern digitized photo look and feel as painting so what to compare with the original image.

Original Image   Tiled Canvas Image

Why Paint Draw Digitizer Choice:

A digitized image need to pass the interpolation test of comparing the original photo to the pattern dithered photo which is the Tiled canvas image. However, it also must include practical separation of image components so can be painted practically. This separation is made by maximizing size of minimal components used as margins between image sections to more than dots size without sacrificing the pattern interpolation given the fact first.

Paint Draw does both where excellence in quality of convergence plus true practicality when it comes to image segmentation to its best where image can be segmented where not possible if margins made of small dots as prime prospective of the pattern transformation result. The reason Paint Draw is the choice for both epic quality and outstanding practicality.

Pattern File Montage:

Pattern file can be altered by substituting pixels due to preference by neighbouring colours manually using many free software available like Windows Paint on Tile.bmp image or similar software. Pixels altered can be because not required at that place or adding enhancement to the image by removing noise parts or by adding new detailing.
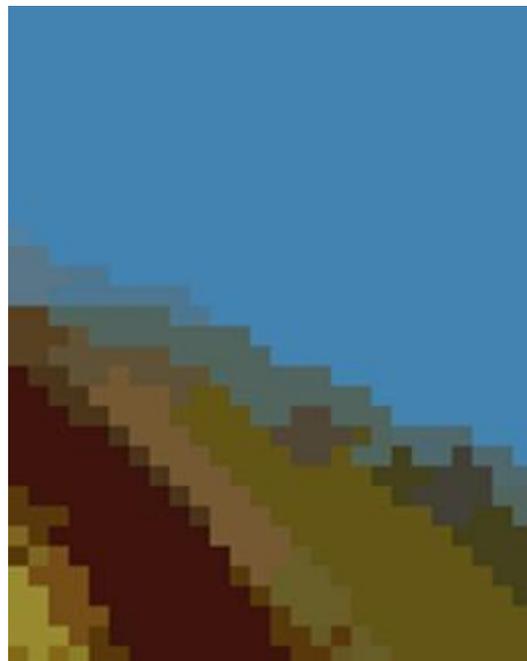
Paint Draw provide processing altered Tiled.bmp Image service on request where new pattern is generated with new changes included.

Placing Alterations On Tile Image, Montage:

If alterations need to be made to pattern using the Tile.bmp image then they are to be placed and the new Tile image emailed in .bmp format to Paint Draw for processing to new pattern file. The process to apply the alterations to the Tiled image file can be made using Windows Paint or similar image manipulation software.

Tile Image Before Montage   Tile Image After Montage

Unwanted pixels such as noise elements can be removed or new pixels introduced as many as required using selected image manipulation software editing tools where can be emailed to Paint Draw after all alterations met. Tiled Image need to be saved strictly in .bmp format.

Using Pattern Suit:

Painting a photo on canvas using oil pigments requires an artist. Paint Draw makes this task to anyone capacity to make a photo realistic painting to any photo of the family or any photo of choice with professional results first time. Professional painters deliver better results but hobbyists can deliver close results yet in excellence where any can do where most to observe is amount of pigments placed to be evenly throughout the painting as general rule.

Digitization an image to optimal sections allowing where to select placement of pigments make the task to be an ordinary task rather artistic task first. What digitizing really does in effect is turning an image to a jigsaw first where each contour or constellation is in effect a jigsaw component making the whole effort a jigsaw task first rather artistic task. Paint Draw digitizing allow the follows:

Quality where optimal evident by the canvas applied where local dithering that is identical to original. The more identical the canvas image is to the original is where the digitization confirmed to be optimal.

Practical where any section of the digitized photo can be harvested using finite selections only since now a jigsaw practically while spaces between sections are made of least lines ever possible within interpolation scope placing quality ahead to allow practical yet quality photo realistic painting of selections acquired.

Flexible since Paint Draw has full management and complete control of the digitization process of a photo then maximum options are kept placed for the professional painter for industrial applications to make his selections since nothing worse than lack of options when needed other than achieving the most ease of task to reduce time and costs while interpolated redundancies are removed by the digitizer at maximum while jigsaw items are generated evident by canvas image compare to original where what removed only help the selection process since meant not affecting quality of constellations and contours generated given the fact first.

Putting all together means a painter can paint a photo as a jigsaw material first where any can do since now a colour book painting task where no need to artists unless exception results acquired to do that while what to paint is to anyone own artistic vision acquired through general task painting not professional artistic work since now a jigsaw where art meets anyone capacity to deliver a painting of what to paint yet artists do deliver better results and consultation for commercial production.

Create Architectural Photo Realistic Carpets:

Carpets and paintings given the fact either or both compliment the architectural experience by providing matching carpets and painting solutions to serve a function of an architectural space.

Carpet Pat is a mirror site of Paint Draw for carpets patterns for architectural carpets solutions. Carpet Pat supply photo realistic quality digitized hand weaved carpets patterns and links to international carpets weaving firms. Carpet Pat use the same Paint Draw in house digitization engine.

Please refer to Carpet Pat website for more details, http://carpetpat.host22.com

Create Architectural Photo Realistic DXF File:

Paintings and architectural or CNC applications given the fact either or both compliment the artistic experience by providing flexibility of options for architects and interior or exterior designers to complete a solutions to serve a function of an architectural space.

DigitalXF is a mirror site of Paint Draw for DXF solutions. DigitalXF supply photo realistic quality digitized DXF files for AutoCAD and AutoDesk applications. Paint Draw use the same DigitalXF in house digitization engine. Proficiency using AutoCAD is required to paint using DXF files where not the case using Paint Draw where only using Windows Paint software needed. Please refer to DigitalXF website for more details, http://digitalxf.host22.com

For a serious hobbyist and a more professional artist DigitalXF allow a far better access to a same pattern information using AuoCAD via DXF file where Windows Paint software avoided. The DXF file is one to one pattern identical to Paint Draw Border Dot.bmp yet AutoCAD offer far superior capability handling the pattern. It is the default process to go for Paint Draw Border Dot.bmp option yet for a more advanced results AutoCAD provide a platform of choice for complete experience.

DigitalXF digitize photo realistic vector images to AutoCAD DXF files that can be printed on canvas using wide format printers available to any size. Constellations and contours are assigned in Blocks where only Tiles_Contours layer of the DXF file is need to be printed of canvas where dots added to preference and constellations and contours traced directly via AutoCAD.
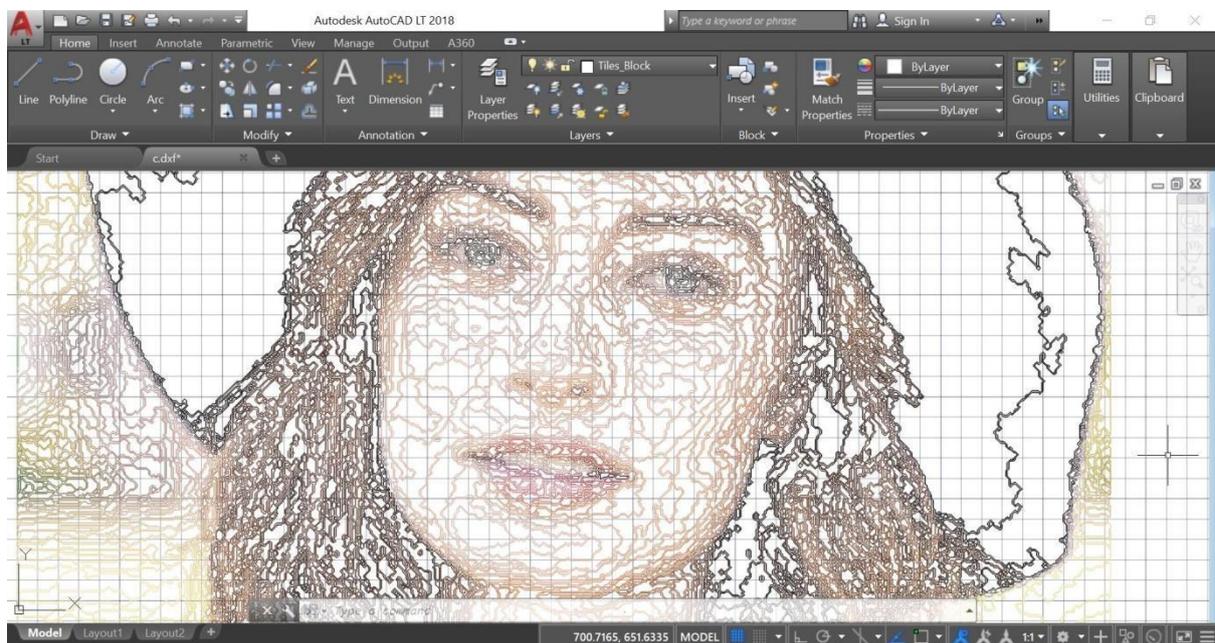
DXF Constellations And Contours For Canvas Print

Finally render the lines and fill the hatches with even paint to their colour codes at DXF Suit where to anyone capacity to deliver it similar in effect again to any painting book material.