Use a new tool to explode quilt blocks!

This is a follow-up to the [original article](#) that appeared at the DoYouEQ website a while back. That procedure suggests the use of Adobe Illustrator or similar vector program to explode elements of the quilt.

In this article I suggest the use of a free program called [Inkscape](#). This tool handles images in ways very similar to Illustrator; for example, grouping of image elements is done with the command CTRL-G, just like in Illustrator!

Figure 1 on the right is the quilt I will use how to show how Inkscape will explode my quilt.

To avoid repetition, I will start at the point where the printed PDF file is imported into the vector program.

Fig. 1: My EQ7 entry into the
[Quilted in Honor](#) Quilt Design Challenge.

> *Definition: In this article I define "explode" as follows: An "exploded drawing" shows (some of) the parts slightly pulled apart; the purpose is to show how they are to be assembled.*

Open the PDF in Inkscape

1. Launch Inkscape, and select File | Open.
2. The dialog box in Figure 2 opens:
3. To ensure good quality of the image imported:
   - Dial in 200 (very fine) in the import settings precision (#1 in the image).
   - De-select the option to Replace PDF fonts, (#2 in the image) unless you need the text.
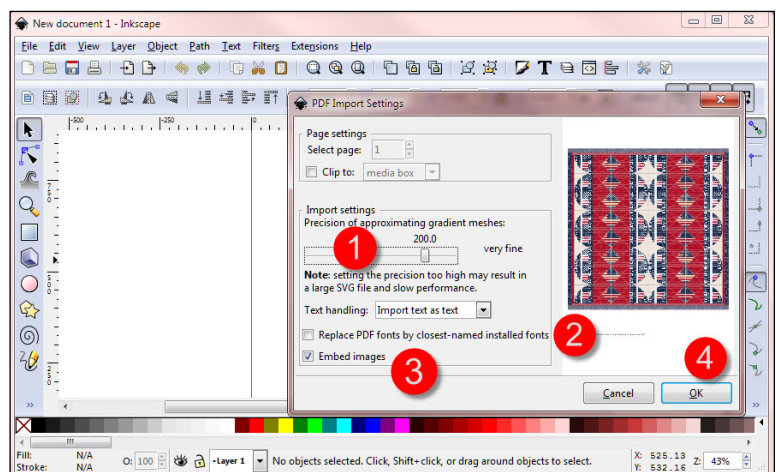   - The Embed images option must be selected (#3). Click OK (item #4).

Fig. 2: Document import settings.

4. See Figure 3 on the right. Now we will change the size of the "canvas" around the imported image, to make room for the elements of the exploded quilt as we move them around. To do this, click on File | Document Properties, and specify dimensions greater than the image file itself.
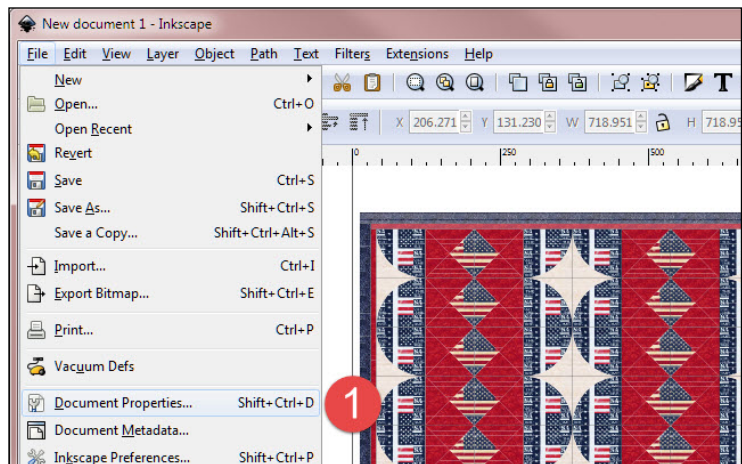
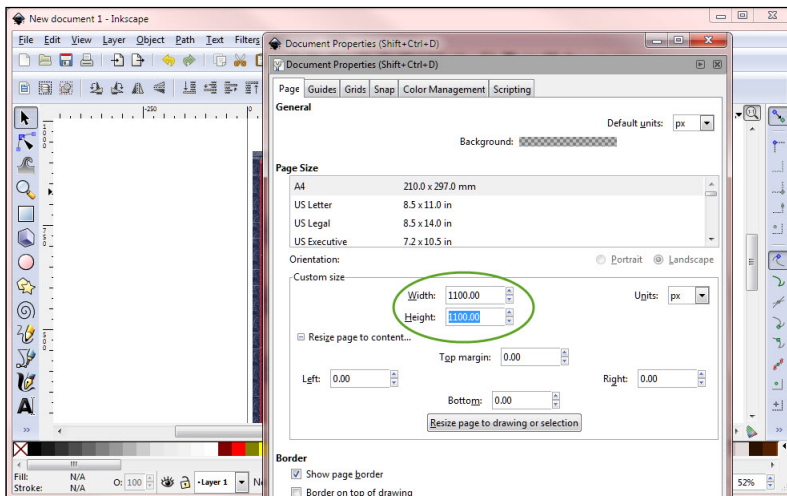Fig. 3: Document properties to change canvas size.

5. In this case I specify a new document size of 1,100px by 1,100px.
6. It is always a good idea to have plenty of "work surface", to allow us to explode as many elements as we wish to illustrate.

Fig. 4: Specify "canvas" larger than quilt image

7. Click on the image, and select Ungroup (#1 in Fig. 5, right).
8. Once the components of the quilt have been ungrouped, we can use the area highlighted with #2 in Fig. 5, plus all areas around the quilt, to move them around.
9. It might be necessary to Select All (CTRL-A on Windows) and Ungroup again, to be able to remove the text.
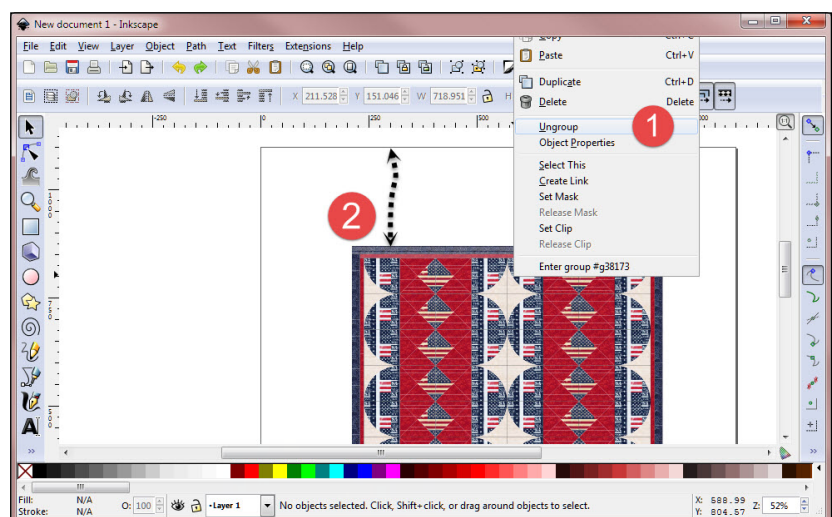
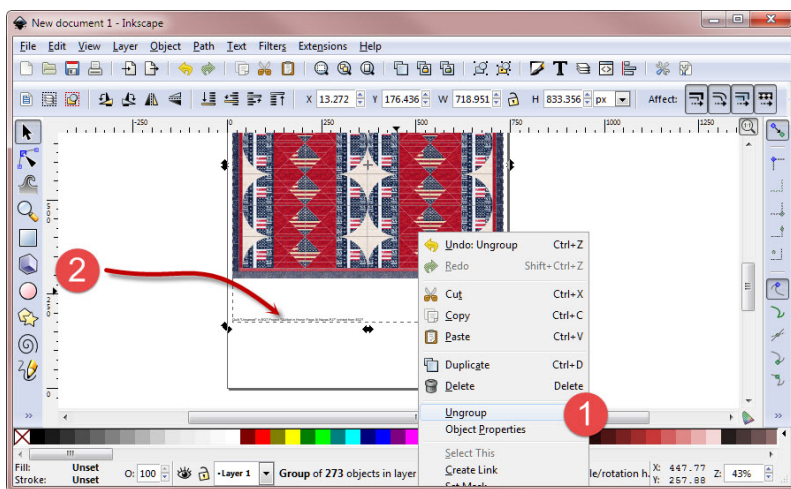Fig. 5: Ungroup, to remove borders and to be able to move elements around.

Fig. 6: First, ungroup to separate all text.

10. If an element cannot be selected, it is possible that the specific element must be ungrouped from the rest (#1, Fig. 6).
11. If not yet Ungroup(ed), the text and the quilt image will be selected with a single click. This is normal behavior in Inkscape. See #2 in Fig. 6, left.

12. Also, if right-clicking on the image, the Ungroup function will appear in the menu.
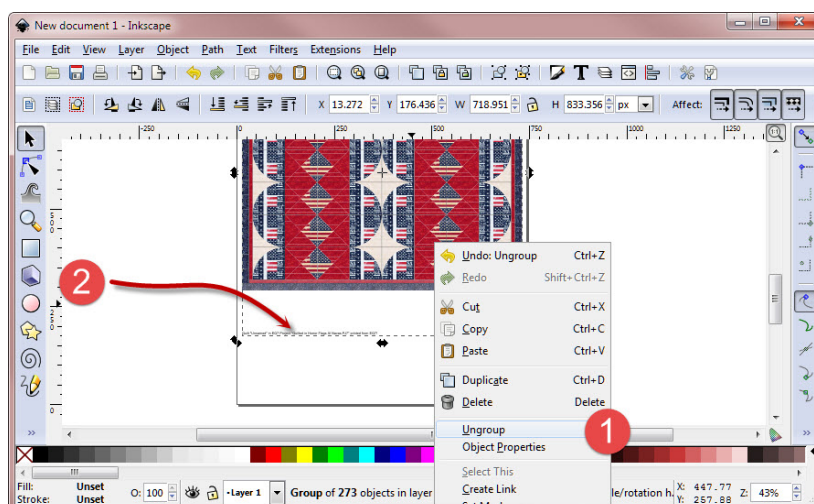13. Click on Ungroup - #1 in Fig 7.
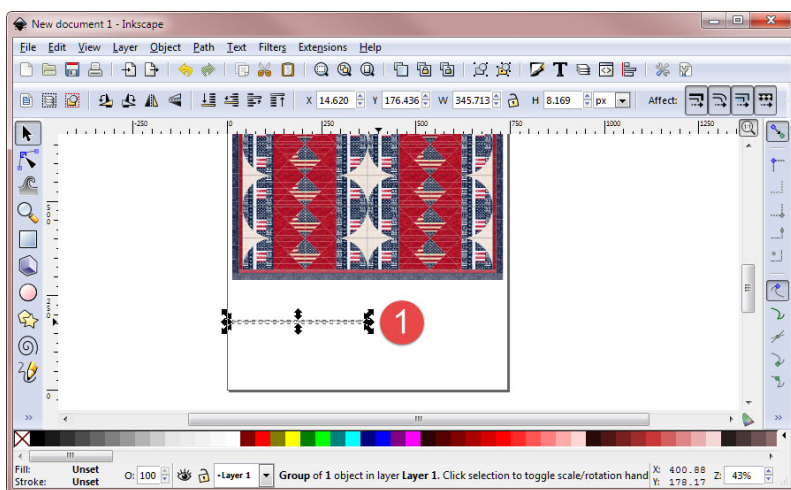

Fig. 7: Ungroup, to remove all text.

Fig. 8: Select and delete text.

14. As Fig. 8 on the left shows, the text ONLY can now be selected (highlighted with the #1 in the red circle).
15. Delete.
16. Now only the quilt image remains. We will proceed to explode some of the blocks.

17. On Fig. 9 on the right, the border is selected by clicking on it.
18. If more than one border is part of the design, explode the borders one at a time and place on the clear area above the quilt.
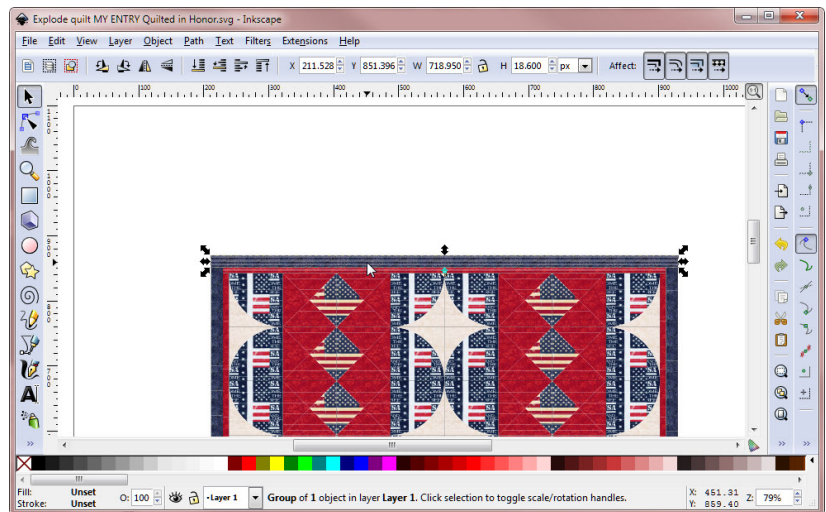
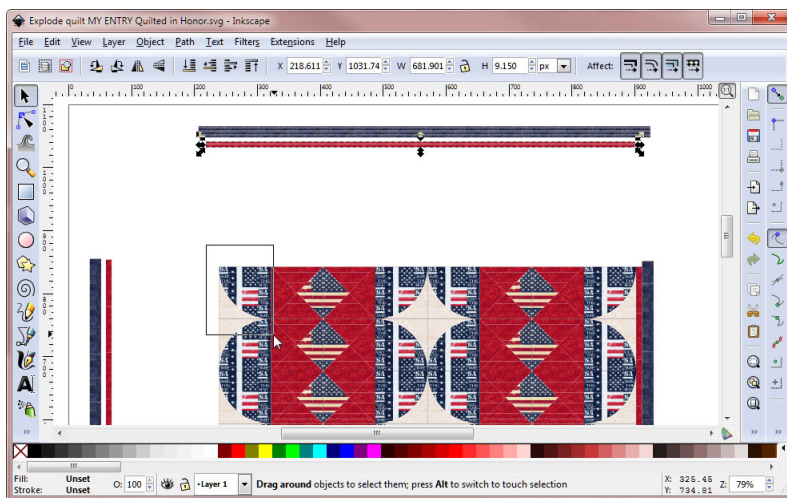

Fig. 9: Select the border to move.

Fig. 10: Select one border block at a time. to move the pieces carefully,.

19. Image 10 on the left shows the top 2 borders, and also the 2 left borders, have been separated from the quilt blocks.

20. Move some of the blocks as needed.
21. Click and drag around one entire block at a time. Once selected, the block and the patches that make it up will move together.
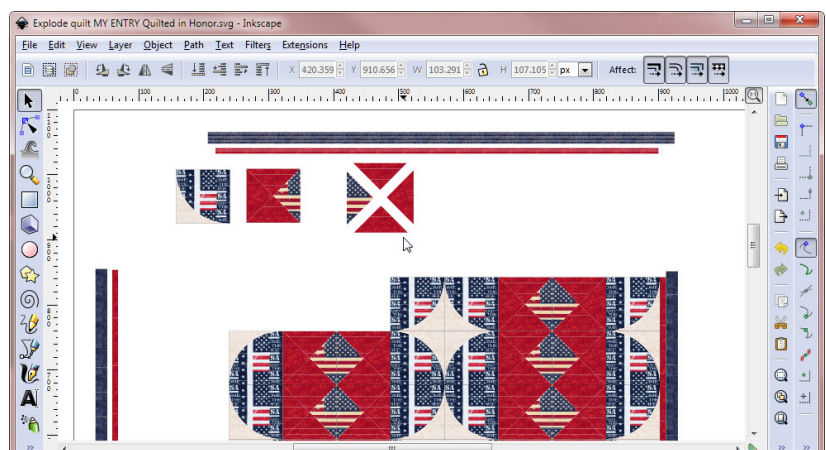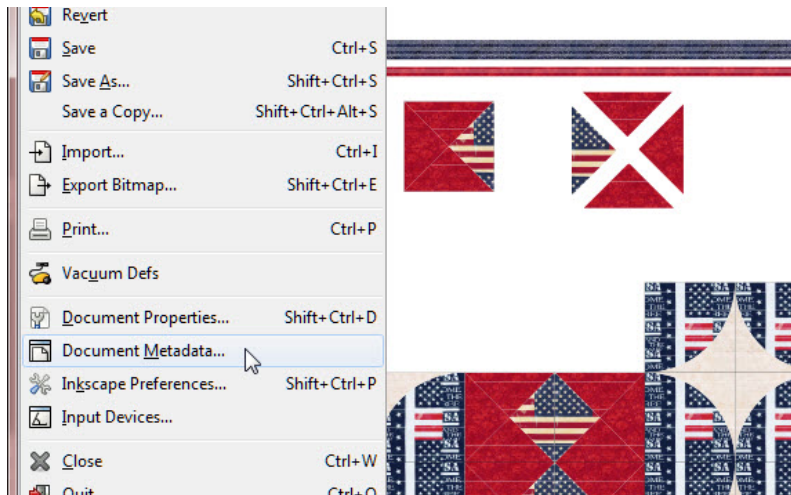22. Move other blocks as needed to illustrate a point.

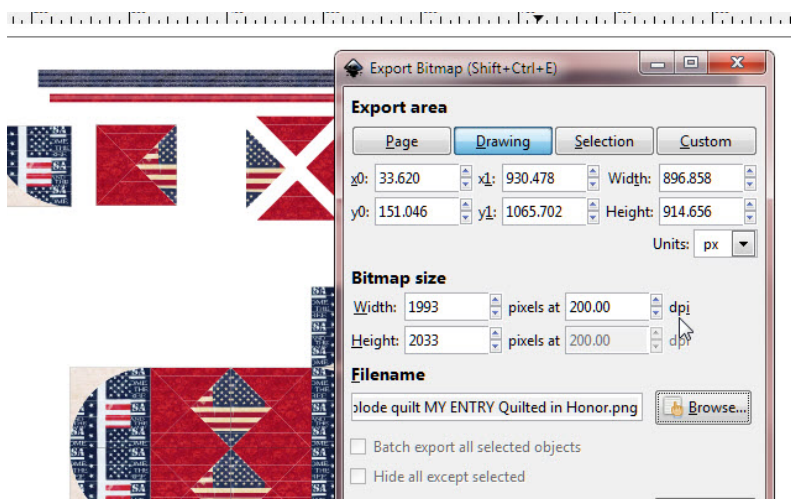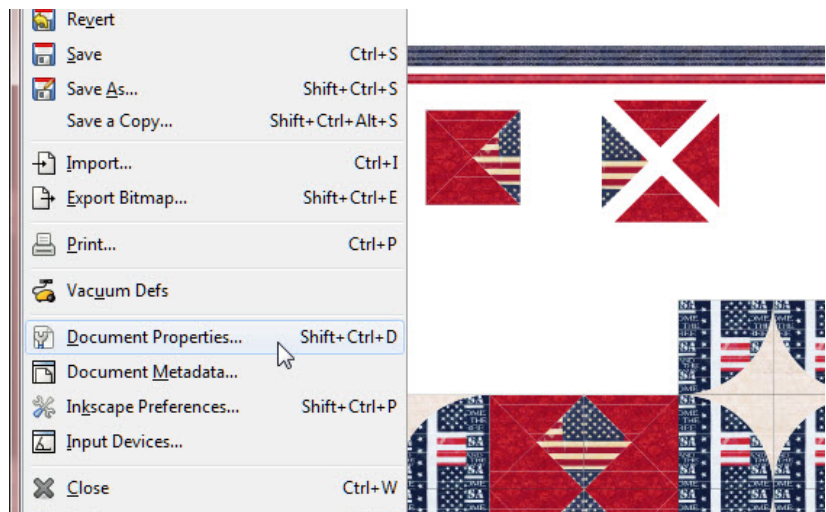
Fig. 11: PDF block patches exploded.

23. A little housekeeping is in order, to save all work to this point, and to let others know they have a right to use the images created, etc.:
- Save the document, to allow editing at a later time.
- Set licensing properties as needed, to allow others to use the image using Creative Commons or other license of your choosing.
- Export the image at high resolution, for use in a publication, etc.

In the figure at left the arrow points to the **File | Document Metadata**. Click on this to fill out the document title, Date, Creator, Rights, etc.

The figure on the right shows how to select the **File | Document Properties**, to change size of the "canvas" we are working on, the guides, snapping properties, etc.

The image on the left shows how to define the resolution of an image exported for publication. For example, some publications require 300DPI. Select **File | Export Bitmap** to change this.