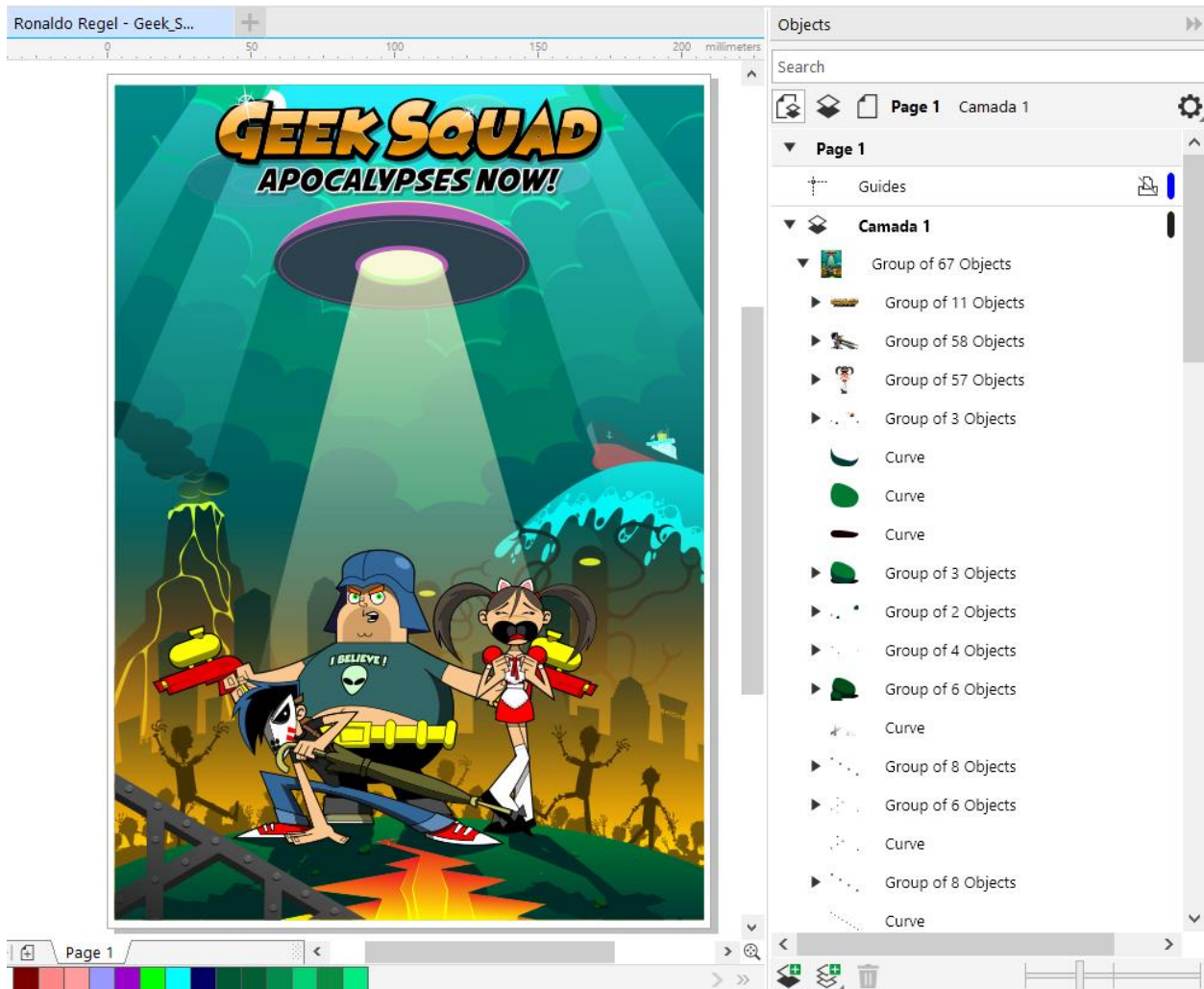# Publishing to PDF for Print Output

PDF/X is a subset of the PDF ISO standard, designed to facilitate graphics exchange. This standard includes a series of print-related requirements that go above those of standard PDF files.

Whereas previous CorelDRAW versions supported PDF/X-3, CorelDRAW 2019 now supports PDF/X-4, with new features that include layers, transparency, OpenType fonts, and more. This ensures easy output of files that are compatible with the widest range of devices and comply with the latest print-industry standards.
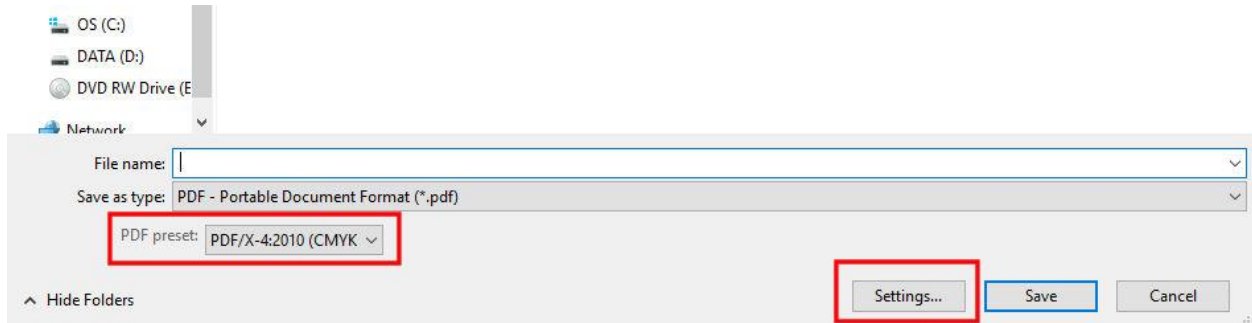
We are using this artwork by Ronaldo Regel to demonstrate the publish to PDF workflow. This document contains several layers and has many objects with transparent fills.
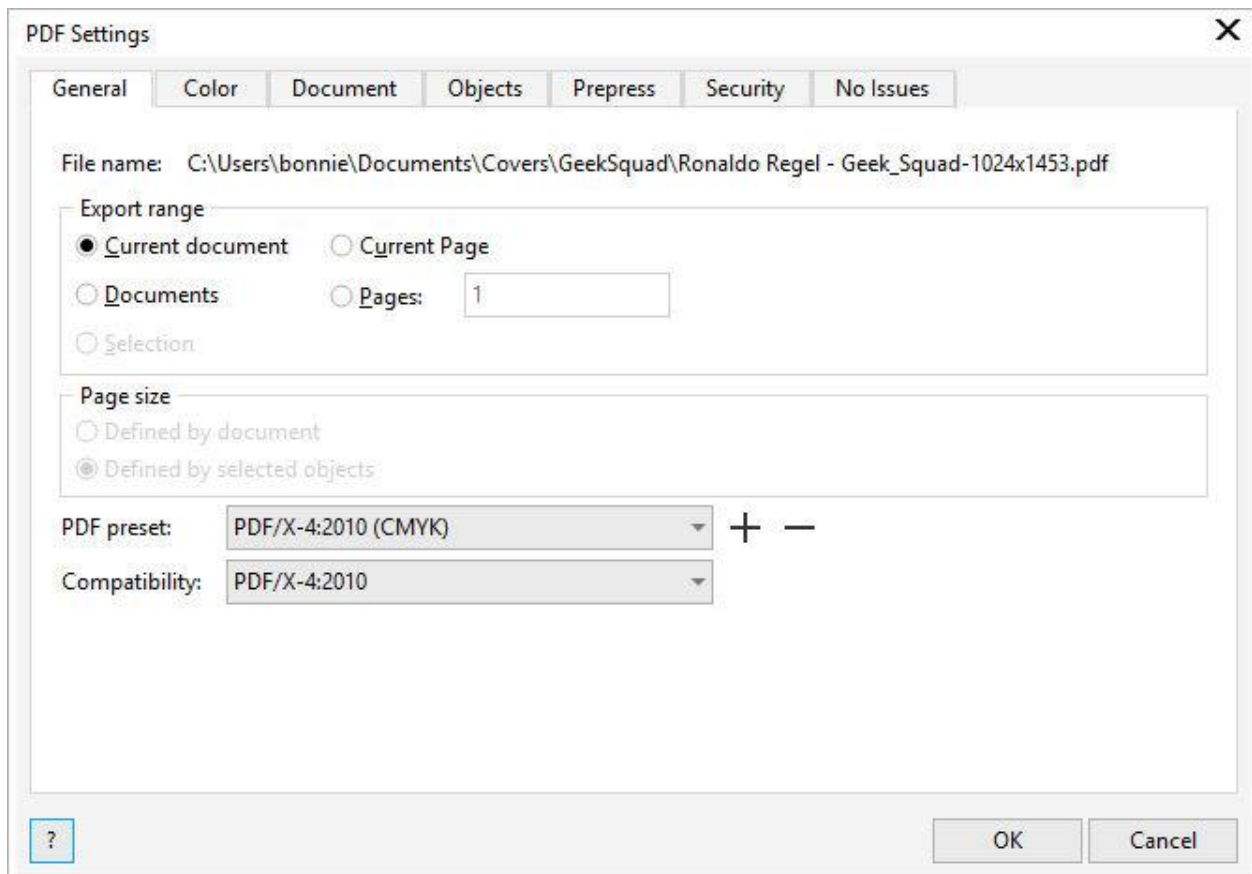
Export to PDF can be done from **File** > **Publish to PDF** or via the **Publish to PDF** icon.

In the **Publish to PDF** window, the **PDF Preset** dropdown list now includes PDF/X-4:2010 CMYK. Click the **Settings** button at the bottom of the **Export** window to see the options for this preset.

Let's review some notable features in the **PDF Settings** window.

On the **General** tab:

- **Export Range** can be used to export the current document or page, or multiple documents at once, provided the documents are all currently opened.

- Adjusting the **PDF preset** and **Compatibility** options will dictate what options are available on the other tabs in the **PDF Settings** window.

Color tab:

- Here you can choose CMYK or Grayscale color output.

Document tab:

- Here you can generate thumbnails.

Objects tab:

- Includes options to reduce PDF size with bitmap compression, text and line art compression, or downsampling.

- You can also embed fonts to control how the text is output.

Prepress tab:

- Here you can set the **Bleed Limit** and enable **Printer's marks** such as crop marks and registration marks.
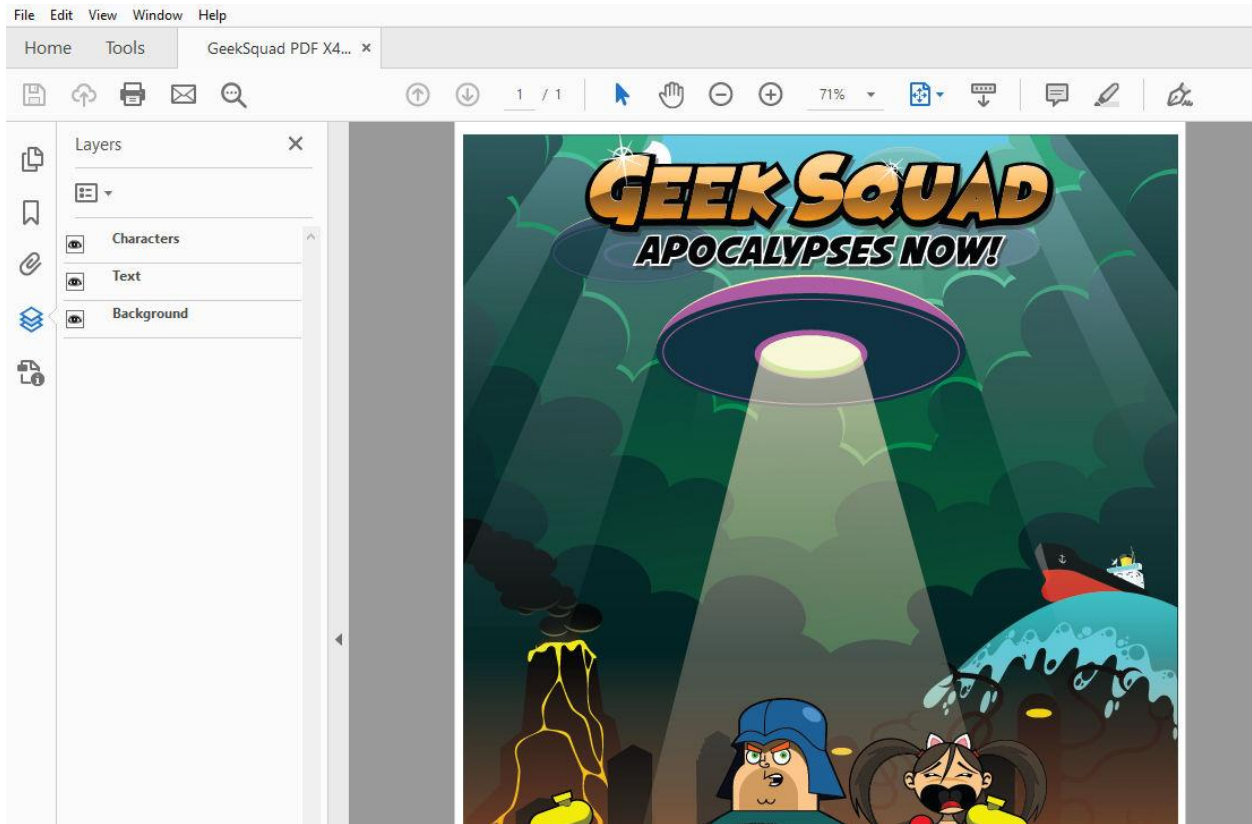
Security tab:

- With the PDF/X-4 compatibility settings shown in our demonstration, security settings are not available.

- Other compatibility settings, such as Acrobat DC for example, allow you to set both an open and permissions passwords.
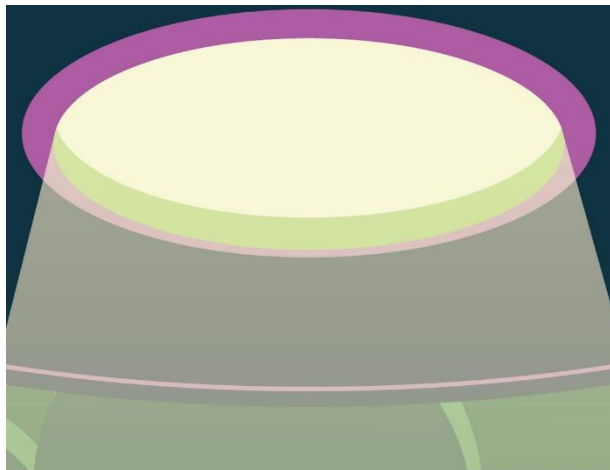
Now let's have a look at the Publish to PDF results using the PDF/X-4 format, compared to the PDF/X-3 format.

File Size: After publishing to PDF/X-4, the file size for the PDF document is less than 1 MB. Using the PDF/X-3 preset, the resulting file size is over 6 MB.
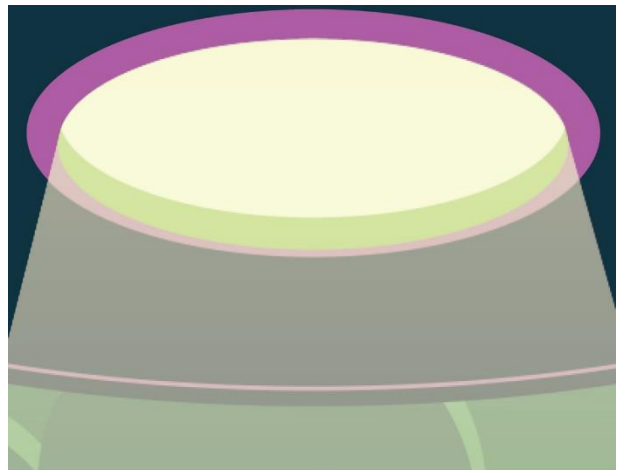
Layers: When we open the PDF/X-4 document in Adobe Reader, the layers can be turned on and off. There are no layers available in the PDF/X-3 document.

Transparency: In the PDF/X-4 document, the transparent fills are exported perfectly even when zoomed in very closely. In the PDF/X-3 document, the quality of the transparency is lower, and the edges are not as crisp. This is because previous PDF/X versions converted transparent areas to bitmaps at a set resolution, whereas PDF/X-4 preserves transparent objects in vector format.

PDF/X-4

PDF/X-3