Hi,

Attempt to improve the screenshot-creation process

Problem: the Blender docs contain many (annotated) screenshots. Updating these screenshots because of UI changes is difficult, especially if they are annotated (arrows, text, …). Most of the time, it requires the complete recreating of the Blender model with the specific user interface (zoom level, …), and re-adding the annotations.

Possible solution: each image in the docs has an accompanying blend-file that contains all the info to (re)create the screenshot. So, for each image in the docs, there are two files: xxx.blend and xxx.png.

Steps to (re)create the doc-image

* Create a blend-file with two scenes. Let’s call them “source-scene” and “final-scene”.
* Prepare the source-scene to create the screenshot; choose the correct workspace, zoom level, …. It’s good practice to run Blender in full-screen mode (Window > Toggle Window Fullscreen). This will remove the private file-location path in the header. The Resolution Scale (Edit > Preferences > Interface) can be set to 1.5 to have larger menu-texts, icons, …
* Take a screenshot of the desired item with your favorite screen-grabber; eventually the complete main window with the menu Window > Save Screenshot. It’s imperative NOT to change anything (zooming, moving, adding/removing panels, …) AFTER the screenshot was made. Otherwise, it will be hard to recreate the image with the annotations at the correct location.
* Switch to final-scene. Add an “image as plane” with the screenshot as source. With an addon “Image Paste” this could be done from the copy on the clipboard. Enable Automatically Pack Resources (File > External data). The screen-shot file will be packed within the blend-file and can thus be removed from your hard-disk.
* Enable the Render Region and Crop to Render Region in the Output panel of the Properties editor to crop the render output to the desired area of the screenshot.
* To annotate: add 3D Text objects for text and Grease Pencil objects for other shapes (arrows, boxes, …) Some common shapes (arrows, dashed lines, boxes, ...) could be created/saved in a seperate blend-file (functioning as a library) and re-used in later projects (menu File > Append.
* Render final-scene and save the render as a png-file with the same name as the blend-file.
* If anything has to be changed/updated later-on:
* Due to a change in the UI: open the blend-file in the correct Blender-version, rename “source-scene” to “scene-old”, add a new source-scene (eventually as Full Copy of scene-old) , and repeat step 2 and 3. Change the source path of the image-as-plane object (from step 4) to point to the new screenshot.
* Due to a change in the annotations: repeat step 5 - 7 with the correct info.

I’m still experimenting about the best way to add images (or animations) to the docs. I think that one of the major issues with images is the problem of updating (especially these days with the faster pace of development). And this problem gets much worse if you add some ornaments to the screenshot (such as text, arrows, …), which in my view every image should have.

I would like to propose a new kind of workflow that could be a solution and also will empower Blender even a little more. Can you give me some feedback on it?

[Right now, I’m using svg-images (with a bitmap of the screenshot embedded). So, if the embedded image has to change (due to blender change in interface), you can simply create a new screenshot and paste it in. Or if the text/arrows/… have to change, you can only update those. The SVG approach has also some disadvantages: file size, difficult to animate or add interaction; cfr user-controlled slide show of images.

The images for the Blender docs will be made within Blender. For each image, there exists a blend-file and a png-file.

The Blend file contains a scene that is especially prepared to create the screenshot (correct workspace, panel layout, added objects in the scene, …). Special attention should be given to the resolution of the Blender-window on the monitor. This should be standardized (eg. 1920 x 1080) so that other users (with other monitors) could recreate this scene easily. [In the accompanying blend-file, this scene is called scene, has the VSE setup in Sequencer & Preview with removal of all other windows. The resolution is set to 1920 x 1080.]

With the screen grabbing app of choice, a screenshot is made and copied on the clipboard. With a free addon (ImagePaste: <https://github.com/Yeetus3141/ImagePaste>), this image could be easily pasted as an image on a plane. Be sure to enable the File > External data > Automatically pack external resources).

In a second scene (called Annotate in the example), this image as plane is inserted. The camera and lightning/or shading should be in place and remains the same for other screenshots. Different screenshots could be placed in consecutive frames.

Text could be added with the 3D Text object. Arrows and other ornaments could easily be added with a Grease Pencil object.

If everything is OK, a render output path is specified and a png (or png sequence) is rendered in the same folder of the blend-file and with the same name.

If anything has to be changed later-on, this could be done in the blend-file with overwriting of the previous render. It should be even possible to store previous Blender-versions doc-images (call the scenes annotate-2.92, annotate-2.93, …).

I’ve tried this workflow with the accompanying example. Right now, there are still a few issues and questions. If you find this a viable approach, I could work on it further. What do you think?