

# PostmasterGS Stamp Album Page Generator for Scribus v1.04

## I. Overview and Installation

1. **Overview.** The PostmasterGS Stamp Album Page Generator (PMGSSAPG) for Scribus is a script that's designed to automate the insertion of frames, photos, and text onto stamp album pages. The script allows the user to build a frame to display the stamp, insert a photo within the frame, and surround it with up to four text boxes of custom text. The stamp data and settings are stored in an OpenOffice Calc (ooCalc) spreadsheet. The script also allows you to load stamp scans in Fiji photo editor, then it will autorotate them, crop them, and measure the stamp dimensions for later use in the page generator.

*Feldpost Airmail*

18 April 1942



Mil A x

Smooth gum

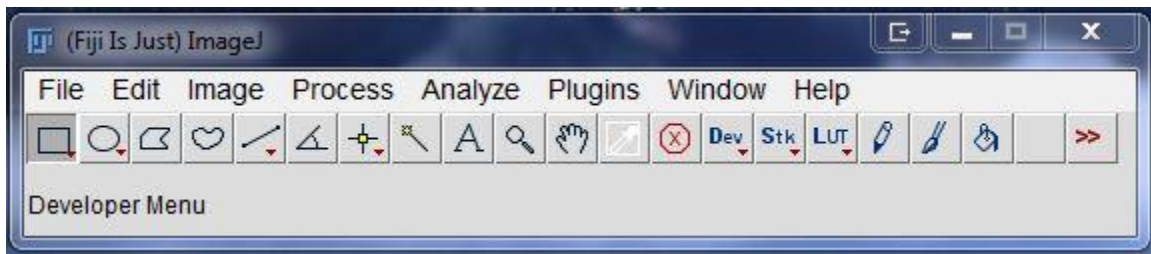
2. **System Requirements.** PMGSSAPG v1.04 requires:
  - a. **Scribus.** Tested with v1.4.2 (PC) and v1.4.1 (Mac).  
<http://wiki.scribus.net/canvas/Download>
  - b. **OpenOffice.** Tested with v3.4.1 (PC & Mac).  
<http://www.openoffice.org/download/>
  - c. **Fiji.** Tested with v1.47u (PC & Mac) (optional, unless using the v1.04 feature that automatically aligns the stamp image, crops it, and measures the stamp size.)  
<http://fiji.sc/Downloads>
    - i. If you're installing Fiji for the first time, it will require several updates on its initial run. These are automatic, and shouldn't take more than a couple minutes.
  - d. **Java SE.** Tested with JRE-7u25 (PC & Mac) (optional, unless using the v1.04 feature that automatically aligns the stamp image, crops it, and measures the stamp size.)  
<http://www.oracle.com/technetwork/java/javase/downloads/jre7-downloads-1880261.html>
    - i. Depending on what version of Java you have installed, Fiji may also prompt you to install Java SE. On a Mac, just click on the prompt and it downloads and installs automatically. On a PC, you may need to go to Oracle's website and download the Java Runtime Environment (JRE).
  - e. **Known Issues.**
    - i. Previous versions of this script for Microsoft Publisher have supported grayscale photos. Scribus currently only supports grayscale through the in-program menus. As soon as Scribus adds the ability to convert the photos to grayscale via code, a new version will be released enabling that feature.
    - ii. The feature that measure the dimensions of a stamp from the stamp scan requires the resolution (dpi/ppi) in which the image was scanned. Unfortunately, due to limitations in the current software, this value must be manually set in the script file. All the more reason to scan in a single resolution...

### 3. Installation.

- a. The installation package consists of five files:
  - i. **PMGSSAPG\_scribus104\_batchSS.ods.** This is the ooCalc spreadsheet for storing the stamp data and settings.
  - ii. **PMGSSAPG\_scribus10\_batch.txt.** This is the text file which temporarily stores the stamp data exported from ooCalc prior to its import into Scribus.
  - iii. **PMGSSAPG\_scribus10\_settings.txt.** This is the text file which temporarily stores the stamp box design settings exported from ooCalc prior to its import into Scribus.
  - iv. **pytSAPG.py.** This is the Python script that performs the import.
  - v. **PMGSSAPG\_.py.** This is the Fiji/Jython script that performs the image rotation, cropping, and measuring.
- b. The first three files (**i.-iii.**) must be in the same folder.
- c. Open the Python script (**iv.**) in Notepad or similar text file editor and change the filepaths at **lines 22 and 24** to reflect the correct path to the two text files (**ii.** and **iii.**).
  - i. On a PC, they should be in a format like this --  
"C:\Users\Jed\Documents\Stamps\PMGSSAPG\_scribus10\_setting.txt"
  - ii. On a Mac, they should be in a format like this --  
"/Users/Jed/Documents/Stamps/PMGSSAPG\_scribus10\_settings.txt"
- d. The Fiji/Jython plugin (**v.**) must be in the plugins subdirectory of the Fiji installation.
  - i. On a PC, this will be something like \fiji-win64\Fiji.app\plugins\
  - ii. On a Mac, you'll likely need to open the Applications folder, then Control-click on Fiji and select Show Package Contents, then place the file in the plugins folder.
  - iii. You must also edit a couple initial settings in this file, as you did with the other script file. Open the file in a text editor and change the path at **line 25** to reflect the folder where you placed **i.-iii.** above. Note that if on a PC, the backslashes in the path need to be double backslashes. The doubling is only required in this script (**v.**), not the previous one (**iv.**).
  - iv. Due to a limitation in the current software, you must manually set the resolution of the stamps you're measuring with the Fiji at **line 32**. If you're going to be measuring stamps scanned in at varying resolutions, I recommend you make a shortcut (PC) or alias (Mac) to this file and place it on your Desktop or somewhere where it's easy to open, rather than buried in the Fiji installation, because you'll need to edit **line 32** every time you change resolutions. Hopefully, this will be resolved by v1.05.
  - v. The first time you open Fiji, the plugin should be installed and show up on the Plugins menu as **PMGSSAPG**. If it doesn't appear, close Fiji, check the placement of the file, then re-open Fiji.

## II. Image Rotation, Cropping, and Measuring

1. **What it Does.** This feature allows you to load a scan of a stamp in Fiji, then the script will attempt to rotate the stamp to the correct orientation, crop the image, then measure the overall stamp dimensions. These dimensions can then be automatically loaded into the ooCalc spreadsheet during the page generation portion of the script, preventing you from needing to manually measure each stamp.
2. **Running the Plugin.**
  - a. To run the plugin, open Fiji.



- b. Select **Plugins** on the toolbar, then **PMGSSAPG**. Fiji will pause for a couple seconds, then bring up a File Open dialog box. Select the stamp scan you would like to work with.
    - c. The plugin will rotate, crop, and measure the stamp. The algorithm is in the beta stage, so results may vary. Here are a few tips:
      - i. The accuracy of the rotation is best if the stamp is close to upright (max 30°-35° of tilt).
      - ii. Use a black background. The algorithm has difficulty separating the white edges of a stamp from a white background, and it produces wildly inaccurate results.
      - iii. The accuracy suffers if the perf holes are uneven or if a perf is abnormally long compared to its neighbors. I'm working on a more accurate algorithm, hopefully for v1.05.
    - d. The plugin will then present you with a File Save dialog box to save the image. I recommend you save the stamp to the folder you would like it to reside permanently, as the feature which automatically inserts the stamp dimensions into the ooCalc spreadsheet utilizes the filepath you select at this point to read the stamp dimensions and insert them into the spreadsheet.

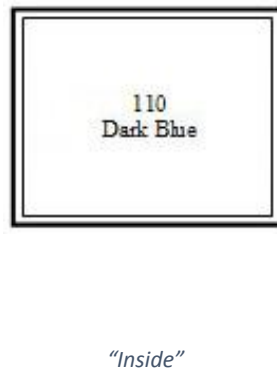
### III. The Spreadsheet

#### 1. Understanding the Spreadsheet.

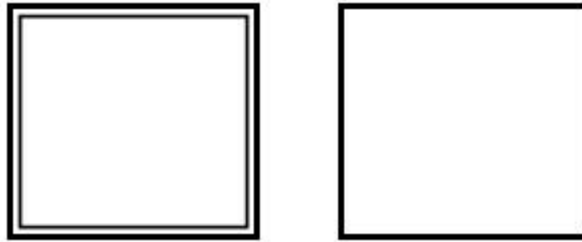
- a. Open the spreadsheet in ooCalc. You'll see five tabs.
  - i. **Settings.** This tab contains the settings that control the appearance of the resulting text box.
  - ii. **Fonts.** This tab contains a list of fonts installed on your computer.
  - iii. **Dimensions.** This tab contains stamp dimensions generated by the Fiji/Jython plugin.
  - iv. **Feldpost.** This is sample data.
  - v. **Theresienstadt.** This is sample data.

#### 2. Settings Tab. Below is a brief explanation of the options on the Settings tab.

- a. **Style.** Switch between three styles of stamp box. **"Outside"** inserts a frame and up to four text boxes, with a photo. **"Inside"** inserts a frame with a single text box in the center. **"Outside/Inside"** inserts a frame with up to three text boxes outside the frame, and a photo and one text box (Catalog) inside the frame.



- b. Frame.** This section controls the appearance of the frame into which the stamp is to be inserted.



*Double Frame & Single Frame*

- i. Double Frame.** Allows for insertion of a double-lined frame, as opposed to a single-lined frame.
  - ii. Double Frame Spacing.** Controls the spacing, in millimeters, between the inner and outer frames in a double frame.
  - iii. Outer Frame Thickness.** Controls the width, in points, of the outer frame (single and double frame).
  - iv. Inner Frame Thickness.** Controls the width, in points, of the inner frame (double frame only).
- c. Padding (Stamp to Frame).** Set the distance between the top and bottom of the stamp, and the left and right sides of the stamp, respectively, and the frame. Note that this does not control the spacing between the *photo* and the frame, but rather *the stamp itself* and the frame.
- d. Margin (Frame to Text).** Set the distance, in millimeters, between the outer frame and any surrounding text boxes.
- e. Vertical Spacing.** The vertical distance, in millimeters, between text boxes when two or more text boxes are positioned on the same side of the frame.



*Vertical spacing between "Mi 1 A x" and "Smooth gum"*

- f. "Outside/Inside" Spacing.** If using the "Outside/Inside" style, controls the vertical spacing between the photo and the single text box inside the frame.

- g. **Text Boxes.** The add-in allows the user to insert up to four text boxes. On the Settings tab, these text boxes are labeled as *Title*, *Date*, *Catalog*, and *Caption*. As the options for these four text boxes are identical, they will be discussed here as one.

**NOTE: If using the “Inside” style, you are limited to a single text box inside the stamp frame. The Catalog text box settings control the appearance of the single text box. All other text boxes are disabled.**

- i. **Include.** This value determines whether the text box is *on* or *off*. If a text box is *off*, any data entered in the rest of that text box’s settings will be disregarded by the script.
- ii. **Percentage of Frame Width.** Sets the text box width as a percentage of the overall frame width. For example, if the user wanted the text box to be the same width as the frame, this box should be set to *100%*. If, however, the user wanted the text box to be slightly wider than the frame, *150%* would be a more appropriate option.



This is a demonstration of the function of the text box's "Percentage of Frame Width" setting.



This is a demonstration of the function of the text box's "Percentage of Frame Width" setting.

*Percentage of Frame Width set to 100% (left) and 150% (right).*

- iii. **Font.** Sets the font of the text box. The fonts are pulled from the list of installed fonts on the “**Fonts**” tab.
- iv. **Font Size.** Sets the font size.
- v. **Text Alignment.** Set the text alignment within the text box to left, center, right, or justified.
- vi. **Global and Individual Styles.** In Scribus, it’s possible to link text boxes to a particular predefined **character style**. If this is done, editing the settings of the predefined **character style** (accessed using the F3 key) changes the settings of all text boxes linked to that style. For example, if a series of text boxes is linked to a **character style** named “Title”, editing the font of the **character style** “Title” changes the font of all linked text boxes.

The “Global” / “Individual” selection for each text box controls whether the text boxes you insert are linked to a **character style** (“Global”) or not (“Individual”). If a text box is inserted as “Individual”, its style will not change upon editing the master **character styles**. Instead, to change its settings, they must be individually edited.

Also, when “Global” is selected, the master **character style** settings in the document are changed to reflect the settings exported from the spreadsheet. In other words, if you

insert a Title text box with a “Times New Roman Regular” font of size 12 and a “Global” setting, all Title text boxes in the document which are linked to the master Title **character style** will be changed to “Times New Roman Regular” 12.

**h. Photo.** The *Photo* option allows the user to insert a photo within the stamp frame.

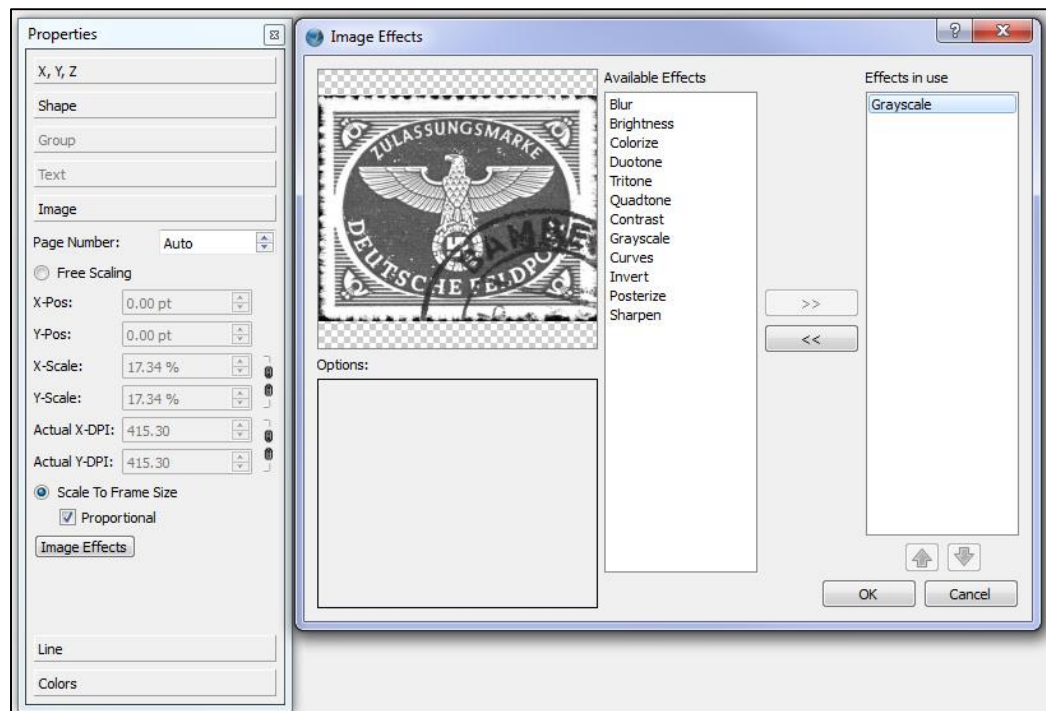
- i. Include.** Turns the photo *on* or *off*.
- ii. Grayscale.** Inserts a grayscale photo, as opposed to a full-color photo.  
**(NOT YET SUPPORTED DUE TO LIMITATIONS IN SCRIBUS)**



*Grayscale (left) and full-color (right) photos.*


**WORKAROUND:** To manually change a photo to greyscale in Scribus:

1. PC: Select the photo and hit **Shift-Control-G** to ungroup; or Mac: Select the photo and hit **Shift-Command-G** to ungroup
2. Click off of the group to clear the selection.
3. Left click to select just the photo.
4. Hit **F2** to bring up the **Properties** window
5. Select the **Image** section, then click **Image Effects**.
6. In the **Image Effects** window, select **Grayscale** and hit the >> button.



*Manually changing the photo to grayscale*



- iii. **Size Ratio.** Sets the size of the photo as a percentage of the actual size of the stamp. This allows the photo to be shrunk slightly so as to avoid it being visible behind a stamp mounted with a hinge or a clear hingeless mount.
- i. **Layout.** These options determine where the text boxes are placed in relation to the stamp frame.
- 3. **Font Tab.** The **Font Tab** contains a list of all fonts installed on your computer. This list should be refreshed on first use of the spreadsheet by clicking the **Refresh Fonts** icon on the **PMGS Toolbar**. This list provides the font names for the **Font** input boxes on the **Settings** tab. 
- 4. **Dimensions Tab.** The **Dimensions Tab** stores the dimensions of stamps run through the Fiji/Jython plugin. Anytime you run more stamp scans through Fiji, click this button to import their dimensions into the spreadsheet.
- 5. **Sample Data Tabs.** These tabs contain sample data.
- 6. **Important Limitations in Using the Spreadsheet.** The spreadsheet is designed such that the user can keep data permanently in the spreadsheet, with separate tabs for different collecting areas, etc. There are a few limitations, however.
  - a. **New Columns.** The user can add new columns to the spreadsheet. New columns must not, however, be inserted between **Columns A** and **H**. When the data is exported from ooCalc to the text files, it is in a very specific order and format. Scribus then uses the columns to determine what data goes in what blanks. The addition or deletion of columns between **A** and **H** will throw off the export and lead to unpredictable, incorrect results.
  - b. **New Worksheets.** The user can add new tabs to track other collecting areas. However, to create a new tab, the user should delete the data from a sample tab or copy an existing tab and delete the existing data, not create a new, blank tab. Again, this is to preserve the very strict formatting requirements of the export/import process.
- 7. **Using the Spreadsheet.** The spreadsheet has a custom toolbar at the top with several options.



*PMGS Toolbar*

- a. **Refresh Fonts.** See 3. above.
- b. **Load Dimensions.** See 4. above.
- c. **Reset Includes.** Resets the **Include?** on all entries on all tabs to **FALSE**.
- d. **Export.** Exports the settings and selected stamp data to the text files for import into Scribus.
- e. **Insert Photo.** Opens a dialog box which allows the user to select a photo. Upon selection, the path to the photo is inserted in the active cell. This prevents the user from having to manually enter the filepath to any photos. If the stamp you select is also one which was previously run through Fiji and imported into the **Dimensions Tab**, the **height** and **width** will autofill as well.



#### IV. Scribus

1. **Open.** Open Scribus to an existing or new document.
2. **Running the Script.** Select the page on which you want the stamp boxes inserted, then select **Script, Execute Script**, and select the script file (**pytSAPG.py**). After running the script once, it should show up under **Script, Recent Scripts**, making it slightly easier to call the script again without re-selecting the file.

#### Version History.

- v1.0 (20130619)** - Initial release.
- v1.01 (20130621)** - Fixed minor errors in placement of text boxes in certain combinations.
  - Fixed bug with measurements if document was using units other than points.
  - Added ability to tie text boxes to custom character styles.
- v1.02 (20130622)** - Fixed minor errors in placement of text boxes in certain combinations.
  - Added ability to use “Outside/Inside” style boxes.
- v1.03 (20130622)** - Added ability to set vertical spacing between photo and interior text box when using “Outside/Inside” style boxes.
- v1.04 (20130706)** - Added Fiji/Jython script to rotate stamp scans, crop them, and return the stamp dimensions.