Manual/help contactsheet v1.2

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Abstract

A python script that generates a contactsheet or index print containing a configurable number of images. Multiple sheets are generated, the filename can also be included. The script supports various types of image types and paper sizes.

Contents

1   Working with contactsheet

What is contactsheet? Contactsheet is a python script that generates a contactsheet or index print containing a configurable number of images. If there are more images than will fit on the page, new contactsheets are created. Also, the image name to the images are printed.

Figure 1 shows an example how such a contactsheet looks like. Each image is with an adjustable margin around the image[1] and symmetrical put in a minipage. The size of a minipage depends on the number of pictures per row. The filename to the image are centered printed. If the filename is very long, the filename scaled so that it falls within the minipage.

Figure 1: Example of contactsheet.

One of the possibilities that this plugin is capable of is making an overview of 'all'[2] photographs, drawings, etc. that resides on a system or in a directory located. Remember that there should be enough space for the contactsheets. To make searching after a image easier it is possible to generate a corresponding directory list of imagenames. This file is to consult with each wordprocessor and printable.

If the plugin is started then the following popup window appears (Figure 2). In the following paragraphs we will discuss all elements of this popup. The figures stand mentioned at the paragraphs.

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[1] For artistic purposes it can be put to 0. Due to rounding errors may occur that there is one pixel between two images.

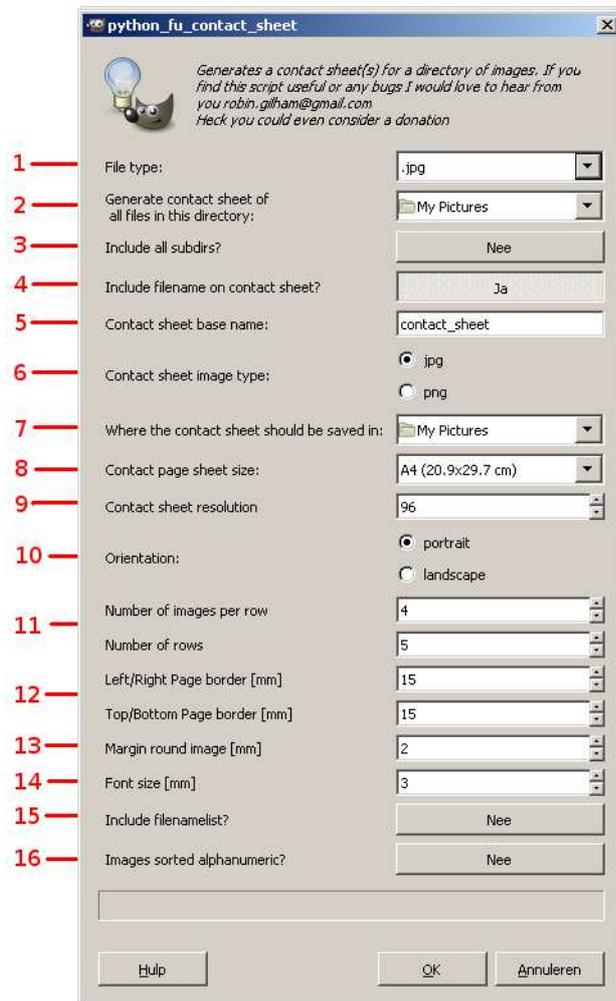[2] Only the registered image types, see also paragraph 1.1.

Figure 2: Interface window of contactsheet.
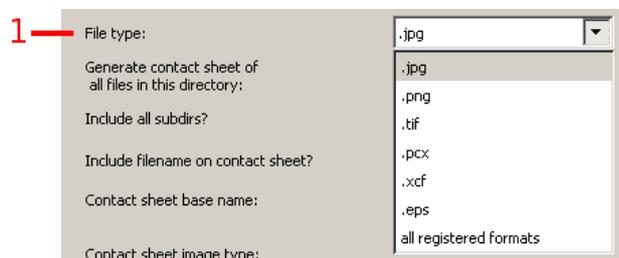
1.1 File type (1)

Figure 3: Interface window of contactsheet: file type.

Here you can select the image type of the images on your contactsheet, see figure 3. Image type .JPG is the default setting. The following types are supported:

- .jpg or .jpeg

- .png

- .tif or .tiff

- .pcx

- .xcf

- all registered formats

The selection 'all registered types' select all types at once. Note that the images can be read by GIMP, if not the plugin will stop.

1.2 Generate ··· this directory (2)

Select the directory where your images are, see figure 4. The last line in this menu allows you to 'surf' through your directories. Networkdrives should first be assigned a driveletter before they appear in the menu. You recognize them by the network icon, see figure 4.
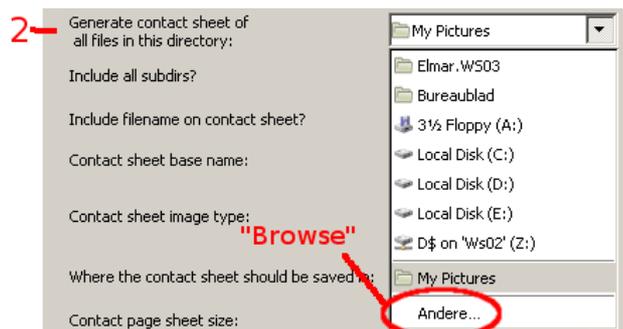

Figure 4: Interface window of contactsheet: directory choice.

1.3 Include all subdirs (3)

Select this option if you want to have a complete overview of the images of the selected image type in the selected directory and all subdirectories. By default, the option is off. This selection allows you to produce a complete overview of all (registered) images on your system.

1.4 Include filename on contactsheet (4)

Select this option if you want the image name under the image. The name is centered under the image. Default setting is on. The size of the text box where the file name is placed is selected by Fontsize, see paragraph 1.14. The text box is put below the minipage and has a maximum width of the minipage itself. The image name is centered in the box placed. If the name is longer than the text width, the name will be scaled so that the name in the text box fits. For long names, this can mean that they can be unreadable, you need here to watch. See also paragraph 1.14.

1.5 Contactsheet base name (5)

Enter the name under which the contactsheet is saved. Added to the name is a counterpart that can run from 000 to 999. Default is set to 'contact_sheet'.

1.6 Contactsheet image type (6)

Select whether the contact page as a '.JPG' or as '.PNG' type is saved. Default is set to '.JPG'.

1.7 Where the contactsheet should be saved in (7)

Choose which directory your contactsheet(s) will be saved in, see figure 5.
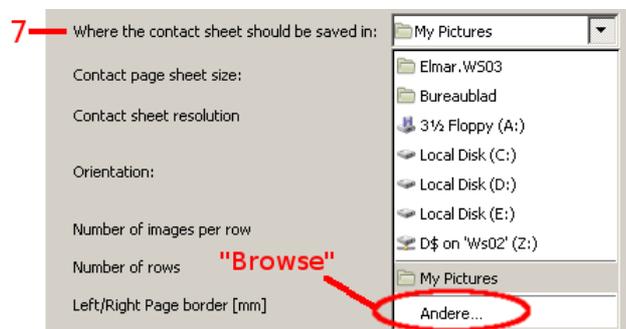
Figure 5: Where the contactsheet should be saved in.

1.8 Contact page sheet size (8)

Select the paper size of the contactsheet where you want to place your images, see figure 6. Default is set to A4.
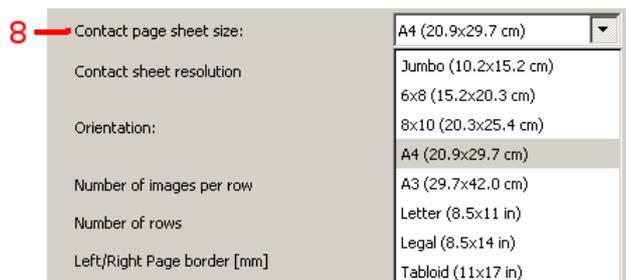
Figure 6: Interface window of contactsheet: pagesize.

1.9 Contactsheet resolution (9)

Select the desired resolution of the contactsheet should be formatted. A higher resolution provides better print quality but also a (much) larger file. For an overview the default setting is sufficient, for a quality print choose the highest resolution. The resolution can be established between 72 and 300 dpi, default is set to 96 dpi.

1.10 Orientation (10)

Select whether you want to portrait mode or landscape mode to use the contactsheet. Default is set to portrait.

1.11 Number of images per row/Number of rows(11)

Set the number of images per row. Each image is scaled and balanced in a square minipage loaded. The size of the mini page depends on the paper size, the number of images per row and the left/right margin. The image will be (symmetrically) scaled to the longest side fits within the size of the mini page taking into account any white margin see paragraph 1.13.

The number of rows is bounded by the size of a column of minipages (with eventually an image name) and the available paper size. If more rows are specified than actually fits, the actual number of rows is used otherwise the appropriate number of rows that is specified. Both the number of rows as the number of images per row can be set between 1 and 32. By default, the number of images per row is set to 4, the number of rows to 5.

1.12 L/R and T/B Page borders (12)

Set the page margin. If you have a printer that does not print to the edge, then set at least the range in which the printer can print. Margins can be set between 1 and 32 mm. Margins default setting are 15mm.
Note. The actual top margin consists of two parts. Namely

- the given top border (default = 15mm)

- and fontsize (default = 3mm).

The top row of images begins at a distance of 18mm from the top. This additional margin is needed for the page number to print and is always present. See also chapter 2.

1.13 Margin round image (13)

You can resize the white margin around the image. The white margin can be set between 0 and 10 mm. Default is set to 2mm. Note. The final horizontal distance between two images is twice that margin. For the vertical distance you have eventually add the lettersize if selected.

1.14 Fontsize [mm] (14)

Here you can change the letter height. It is the height of a textbox in which a scaled text is placed. The letter height can be set between 2 and 5 mm. By default, this height is set to 3mm. Depending on the length of the image name, the size of the text vary. This text can be made so small that it becomes unreadable. In that case, you can do two things.

1. shortens the name or image or

2. choose less images per row.

1.15 Include filenamelist (15)

This option creates a text file under the same name as the contactsheet base name but with the extension .TXT. You can open this text file with any text editor. In this text file, each image with its directory, which this image is included. This option will be used if you want a overview of a directory, which in turn is divided into several subdirectories. Default is off. The text file is in the same directory as the contactsheets.

1.16 Images sorted alphanumeric(16)

If you choose to sort than the images will be placed on alpha numeric order on the contactsheet. Default is set to off. Note the sorting routine distinguishes between capital and non-capital letters. First, the uppercase and then the lowercase letters. In other words, the 'H' is for 'a'!!

2 Contactsheet page layout

Figure 7 gives the schematic layout of the page where the images are placed.
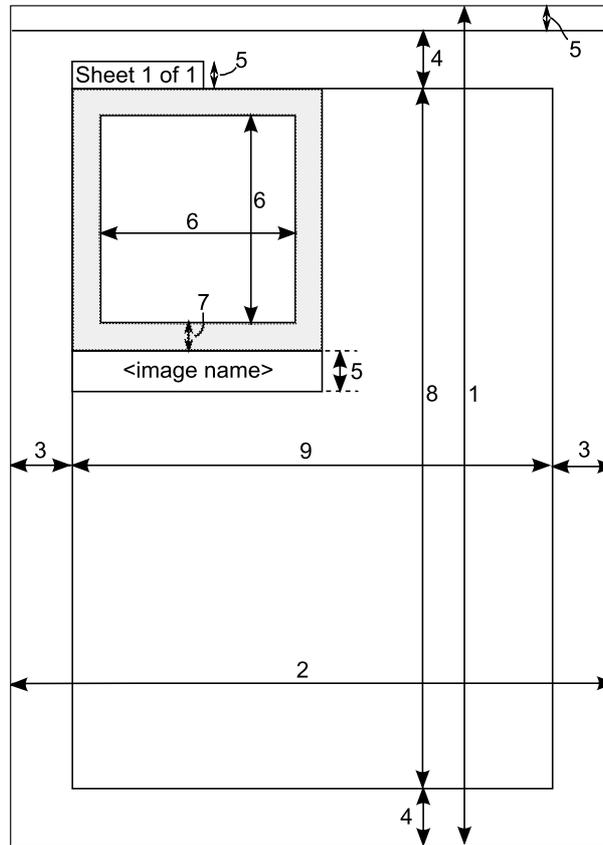
Figure 7: Format of the page layout.

1	Contact page sheet size (h)	6	Image size
2	Contact page sheet size (w)	7	Margin round image
3	Left/Right page border	8	Canvas height
4	Top/Bottom page border	9	Canvas width
5	Fontsize		

The size of a mini-page is the value of (6) added to (7). These mini-pages are placed in the canvas area. The width (and hence the height) of a mini-page is the canvas width divided by the number of images per row.

The sheet number is always left on top (outside) the canvas area.

3 Modify the default settings

It is possible to change the default settings so that it meets your needs to your most used paper. For that you will change the defaults experiment with all settings until you are completely satisfied, then change the default settings.

How do you change the defaults. Open contactsheet.py with an ASCII editor. Do this not with eg Word, Open Office or WP but use notepad, WinEdt or another text editor. At the end of this file, you will find the following code[3]. Note that the code looks something different, this has to do with the layout of this paper. Do not change the text when the language module (contactsheet.mo) is installed!

```
========== start code ================
register (
  .
  .
  [
  (PF_OPTION, "file_type"   ,_("File_type:_"), 0 ,
        [".jpg", ".png", ".tif", ".pcx",".xcf", _("all_registered_formats")]),
```

For another default type then .jpg, change the 0 to 1 for .png, 2 for .tif, 3 for .pcx, 4 for .xcf and 5 .all.

```
  (PF_DIRNAME, "location",  _('Generate_contact_sheet_of\n_all_files
_____in_this_directory:_'), ""),
  (PF_BOOL, "all_subdirs", _("Include_all_subdirs?_"), False),
  (PF_BOOL, "inc_filename", _('Include_filename_on_contact_sheet?'), True),
```

Change True in False and vice versa if you want to have other defaults.

```
  (PF_STRING, "contact_name",   _('Contact_sheet_base_name:_'), _('contact_sheet')),
```

Change contact_sheet in the name you prefer.

```
  (PF_RADIO, "contact_type", _('Contact_sheet_image_type:_'),
        ".jpg", (("jpg", ".jpg"), ("png", ".png"))),
```

Change, not standing in brackets, ".jpg" in ".png" if you prefer this type for your contactsheet.

```
  (PF_DIRNAME, "contact_location", _('Where_the_contact_sheet_should
_____be_saved_in:_'), ""),
  (PF_OPTION, "contact_size", _("Contact_page_sheet_size:_"), 3,
          ["Jumbo_(10.2x15.2_cm)",
           "6x8_(15.2x20.3_cm)",
```

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[3]For unknown reason, the space given as a flat pan (⊔) in this code; the line length had to manually be appropriate.

```
            ”8x10 ⌄ (20.3 x25.4 ⌄cm)”,
            ”A4⌄ (20.9 x29.7 ⌄cm)”,
            ”A3⌄ (29.7 x42.0 ⌄cm)”,
            ”Letter ⌄ (8.5 x11 ⌄ in )”,
            ”Legal ⌄ (8.5 x14 ⌄ in )”,
            ”Tabloid ⌄(11 x17 ⌄ in )”]) ,
    (PF_SPINNER, ”dpi”, ⌄(”Contact ⌄sheet ⌄ resolution”) , 96 ,(72 ,300 ,1)) ,
```

Change 96 in a different value between 72 and 300. To change paper size you should contact
the makers. Well you can change the default 3 (= A4) into a number between 0 (Jumbo) and
7 (Tabloid).

```
    (PF_RADIO, ”orient”, ⌄(”Orientation :”) , ”port”, (( ⌄(”portrait”) , ”port”) ,
            ( ⌄(”landscape”) ,”land”))) ,
```

Change, not standing in brackets, ”port” in ”land” orientation if you prefer.

```
    (PF_SPINNER, ”num_col”, ⌄(”Number ⌄of ⌄images ⌄per ⌄row”) , 4, (1 ,32 ,1)) ,
    (PF_SPINNER, ”num_rows”, ⌄(”Number ⌄of ⌄ rows”) , 5, (1 ,32 ,1)) ,
```

Change 4 and/or 5 in the desired value between 1 and 32.

```
    (PF_SPINNER, ”PageBorderLR”, ⌄(”Left/Right ⌄Page ⌄border ⌄ [mm]”) , 15, (1 ,32 ,1)) ,
    (PF_SPINNER, ”PageBorderTB”, ⌄(”Top/Bottom ⌄Page ⌄border ⌄ [mm]”) , 15, (1 ,32 ,1)) ,
```

Change 15 and/or 15 in the desired value between 1 and 32.

```
    (PF_SPINNER, ”mmThumb_Margin”, ⌄(”Margin ⌄round ⌄image ⌄ [mm]”) , 2, (0 ,10 ,1)) ,
    (PF_SPINNER, ”mmFont_Size”, ⌄(”Font ⌄size ⌄ [mm]”) , 3, (2 ,5 ,1)) ,
```

Change the 2 in the desired value between 0 and 10, change the 3 in the desired value between
2 and 5.

```
    (PF_BOOL, ”Dump_Filename_list”, ⌄(’Include ⌄filenamelist ?’) , False) ,
    (PF_BOOL, ”Sorted_Images”, ⌄(’Images ⌄sorted ⌄alphanumeric ?’) , False)
```

Change False in True and vice versa if you want to have other defaults.
=========== end code ===============

If you've made the changes save the file and test the whole. If everything is satisfactory, you
now have the whole plugin put to your own hand.
Warning: do not change the rest of the code without you know what you are doing!

4 Installatie plugin

4.1 Packages needed

After you have downloaded the plugin, for windows user the following four packages are needed for the plugin to work. For Linux users only python is needed. Pay attention for the version of pygtk, pyobject and pycairo, it should match the versionnumber of python.

The following additional packages are required.

1. **python** website: http://www.python.org/ → Download section

2. **pygtk** website: http://www.pygtk.org/ → Download section

3. **pygobject** website: http://www.pygtk.org/ → Download section

4. **pycairo** website: http://www.pygtk.org/ → Download section

4.2 Windows users

The plugin works on the following system:

- Windows XP pro SP3

- GIMP v2.6.6

- Python version 2.6.2c1 (r262c1:71369, Apr 7 2009, 18:44:00)

- pygtk-2.12.1-3.win32-py2.6

- pygobject-2.14.2-2.win32-py2.6

- pycairo-1.4.12-2.win32-py2.6

Note for installation on Windows.

1. First install Python → restart

2. Install pygtk, pygobject, pycairo → restart

3. (Re)install GIMP

4. Install language pack (contactsheet.mo) in the GIMP locale directory

   ```
   [drive]:\Program Files\GIMP-2.0
            \share\locale\[your language dir]\contactsheet.mo
   ```

5. Install your plugin (contactsheet.py) in:

   ```
   [drive]:\Documents and Settings\[user]\.gimp-2.6
            \plug-ins\contactsheet.py.
   ```

   The plugin is now only available for you.

It's possible that you have to set your LANG environment system variable. Open control panel → system → system properties → environment Variables → add system variables: LANG with value [your language code] (mine is 'NL').

4.3 LINUX users

1. Install python

2. Copy the script contactsheet.py to /home//.gimp-2.6/plug-ins/

3. make the script executable with chmod +x /home//.gimp-2.6/plug-ins/contactsheet.py

4. Translations, not certain how to do this with linux yet, will update when figured out.

4.4 MAC users

At the moment no information is available.