Managing Photos with F-Spot

The biggest advantage of digital photography over the traditional photography is that there are no limits on the number of photos you can take. In traditional photography, there is a cost involved in developing every photograph. Also, you had to spend a lot of money on the film rolls. These photos and film rolls are too difficult to maintain as they are very susceptible to natural changes. With the invention of digital photography, all these problems have disappeared. The zero cost-per-copy of digital photography is what made photography approachable for everyone and not just a rich man’s hobby. However, as taking photos became cheaper, the ability to quickly find out the photo that you want from an ocean of photos is cumbersome. Hence, a photo management software is an indispensable application for anyone who owns a digital camera. We will see about F-Spot, a nice photo management software that is bundled with openSUSE 11.1.

F-Spot is the default photo management application for the GNOME desktop in openSUSE 11.1.

This application is written using Mono. F-Spot is developed with the support for Plugins system and so it is highly customizable. This is the best photo management software suited for both a novice user, who wants to maintain a photo collection and also for a power user, who wants to do image modifications. F-Spot provides basic image manipulation operations that even a non-technical user can manipulate photos easily.

F-Spot supports a lot of image formats like: Figure 1 shows a screenshot of the F-Spot application opened. We will cover the various parts of the F-Spot application in this article.

- JPEG
- GIF
- PNG
- BMP
- SVG
- CR2
- NEF
- PEF
- RAW
- TIFF
- ORF
- DNG
- CRW
- PPM
- MRW
- RAF

Photo Labels

F-Spot uses labels to organize photos so that you can conveniently access them in any way you want. Labels based classification provides you a lot of flexibility. A single photo can have more than one label associated with it. This is very efficient than organizing photos in normal folders where a photo can belong to only one folder. For instance, if you prepare a nice lasagna for your anniversary and took a pic-
ture of it, you can label the photo as Food, Anniversary, Family, Personal and later get the photo using any of the label names. In case you are using plain folders, you will have to confuse between which folder you can use to store the photo. Anniversary or Food?

The concept of Labels has been there for a long time but perhaps made widely well-known owing to the popularity of GMail. Even though labels are very powerful, flexible and more usable, some people still prefer to have hierarchical tree-like views for organizing their photos. F-Spot supports this hierarchical labels also. As you can see from Figure 1, “Kerala 2008” is a top level label and “Elephant” is a sub-label which is hierarchically below “Kerala 2008”.

As you can see from Figure 1, the labels are listed in the left pane. Clicking on a label name will show you all the photos that are associated with that label. You can see the matching photos on the right side pane. If you click on another label, you will get to see all the photos that have either of the two labels. On the right side pane, there is a Close button, which can be pressed to clear the label filter and show all the photos belonging to all the labels. In Figure 1, you can see this labels filter and the Clear button on the blue shaded area in the right pane.

**Browse Mode**

The default mode in which F-Spot opens is the browse mode, where you can see all the photos that are managed by F-Spot. The toolbar at the top of the application tells you which mode you are seeing the photos in. The browse mode shows you simple thumbnails of images, letting you to easily identify the photos you are looking for. You can notice a tracker in the right bottom of the screen in Figure 1. This tracker lets you decide the size of the thumbnail images. By clicking and dragging this dragger, the thumbnails size will increase / decrease letting you set a comfortable thumbnail size.

The status bar in the bottom which has the thumbnail size tracker, also shows the status information of how many images you are viewing currently; i.e., how many images in your collection satisfy your label conditions.

You can navigate within the images in the browse mode using the arrow keys. Other navigation keys like page-up, page-down also works fine. Home key will take you to the first image in the thumbnails list. End will take you to the last image. The navigation is as straightforward as you look for files in your file browser, such as Nautilus.

Below every image is a tiny version of an icon for all the labels associated with that image. So, as you can see from the image, if an image has more than one label associated with it, it will have more than one icon in the bottom.

**Full Screen & Slideshow**

As you can see from the toolbar, Full screen and slideshow are the other set of modes available. In full screen mode, the picture you have selected in the thumbnails will appear in full screen. But the full screen mode knows about the order in which the images are organized. So, even when you are in full screen, you can keep on using the arrow keys and navigate to the neighboring images. Like many other GNOME applications, you can use the [F11] key also to go to this mode.

Slideshow is a slightly advanced version of full screen mode where zero user interaction is required. As the name suggests, this mode will do a full screen slide show of the images that you see as thumbnails. There are a lot of effects that are added when images transition from one to another. Some of the transitions include fade effects, slide effects, roll over etc. If you have a good graphics card configured, you should be getting a lot of lovely and aesthetic transition effects in the slideshow mode. This mode lets you enjoy your photos sitting back relaxed in your sofa.

**Timeline Widget**

As you can see from Figure 1, there is a timeline widget in between the thumbnails area and the toolbars.

Figure 2. Import Photos

Figure 3. Edit Tag
This shows a bar chart of how many photos of your collection belong to which time line. So, if you want to find out the photos that you took during last June when you went on yacht-ing, it can be done by choosing the right time in this timeline widget. This widget can also be used to interpret some statistical information as you want to derive out of your frequency of photo shooting.

The dates shown are not based on the time in which they are imported but calculated out of the meta data in the images. So, it is the time in which these photos are shot. So, even if you import your old photos, you can see the time line widget showing the correct time for these photos.

The widget contains a small sub widget that resembles a window. This window can be clicked and dragged. By moving this small window, you can view photos that are taken during the window-ed time frame.

**Rotate Left & Right**

As you can see from Figure 1, there are two comfortable toolbar buttons which let you rotate your images. Most of the modern day cameras detect if the photo is shot with a vertical or horizontal position and stores images relatively. But your old photos still will have skewed images. You can use these options to rotate and see the photos as it should be seen.

**Hidden Tag**

This is a special tag that is used to selectively hide images. Images which have this tag will not be shown by default in the thumbnails collection or the full-screen modes. You have to explicitly click on this hidden label to see its contents. This mode is useful in a lot of cases. A wildlife photographer friend of mine has a lot of images. Some of the images are very gory, showing vulgar things like blood. These will be the photos of a kill, by the wild animals. So, by safely associating the Hidden tag to these photos, he can safely showcase his collection to children (and everyone) without ever having to show any controversial things. This hidden tag is also used by some of my journalist friends.

Just like any other tag, you can include the Hidden tag in search and other operations. Unless you explicitly include this tag, none of the photos belonging to this will ever be shown.

**Ratings**

Even though users have a lot of photos, there will be some specific photos, which will be very popular. F-Spot provides ability to rate your photos. You can leave a photo unrated, or choose a 1-star rating or a maximum of 5-stars rating. As you can see from Figure 1, the top left photo has a 5 star rating.

To set a rating to a photograph, you right click on an image and in the context menu, the bottom most item will be Rating. You can click on one of the 5 stars and easily assign a rating for the picture.

**Histogram & Meta Data**

In the bottom left corner in Figure 1, you can see a histogram of the image distribution and an image-information box. This image information will provide you with all the meta information about the image. Some of the useful information are like:

- name of the file,
- original resolution of the image,
- the date and time in which the photo is taken,
- exposure settings.

**Importing Photos**

To work with F-Spot, you need to import your photos. F-Spot can directly import photos from your digital camera. You can also import photos from your file-system. By default, F-Spot makes a copy of all the photos you import, and store these copied photos under ~/Photos. If you want, you can change this default storage location via Edit -> Preferences.

You can bring the importer dialog, either by clicking on the Import toolbar icon or the menu item, Photo -> Import. With openSUSE 11.1, if you plug in a digital camera, under the GNOME desktop, it should automatically launch F-Spot and help you import the photos.

As you can see from Figure 2, while importing the photos, you can choose to attach labels. This bulk labeling will be very useful. For instance, if you are back from a vacation to Paris, you can plug in your digital camera, which will launch this importer dialog, and in the labels section you can type: “Paris 2009”. All the photos will be imported
to F-Spot and automatically be labeled as “Paris 2009”. Here after, whenever you want to see your Paris trip photos, all you need is just a single click.

If you have already stored the photos in a different folder and would not prefer F-Spot to copy the photos to ~/Photos, you can uncheck the second checkbox so the images won’t be copied. This way you can use F-Spot to just manage your photos, while continuing to store photos wherever you want. The location could be anything like your mass USB Storage device or a windows partition etc.

F-Spot importer features a duplicate image detector also. So, you don’t have to worry about having multiple copies of the same image.

The Include subfolders option helps you to traverse into the subdirectories under the directory you chose, and search for images in those child folders also.

There is a experimental plugin for Mozilla Firefox which will help you to import pictures from your browser to F-Spot. Since it is an experimental plugin as of now, (when this article is written), you need to register for an account and then use it. If you have this plugin enabled, you can import photos into F-Spot as you surf web-pages.

F-Spot uses sqlite databases for storing the information about your photos. You can find this sqlite database in ~/.gnome2/f-spot/photos.db. If you prefer to have your sqlite database somewhere else, you can use the -b option while launching F-Spot to specify the alternate sqlite location.

**Label Icons**

As you can see in the left pane in Figure 1, every label has a label icon. You can change the icon of any label as you wish. All you need to do is, right-click on the label and select Edit Selected Tag... This will bring you with a label editor. Here, you can change the icon used for the label and also the label’s name. This is shown in Figure 3.

As you can see from Figure 3, we have edited the “Kerala 2008” label. You can change the name of the label to whatever you want, say, “Kerala Trip 2008”. This causes all photos that had the label “Kerala 2008” to have this new label “Kerala Trip 2008”.

The icon for this label shows a red color clock. If I want to change this icon, all I need to do is to click on the icon. It will bring up the icon chooser as shown in Figure 4.

Here you can see a photo which you can set as the icon for this label. There is a spin button which you can click to cycle between all the pictures that have this label. In this way, you can set any picture in that label, as the icon image for that label. This is more like an album cover, which you can set with a picture from the album.

However, F-Spot allows you to set other external pictures also as an icon. If you click on the button below the thumbnail, you get a file browser, from where
you can choose the image that you want to set as the icon for the label.

F-Spot offers you a set of built-in icons which also can be used in case you prefer them. If you want your label to not have any icon at all, use the No Image button. This ensures that your label will not have any icon.

Icons are meant to be small. So, setting a full image for an icon may not make it look good. So, you might prefer to set a small part of the image as the icon. For instance, if you have a label called Horse race, you might want to set the image of a horse’s face alone for the icon instead of the full horse body. This is very simple to achieve. In the thumbnail that is displayed, click and drag a rectangle, which will help you to select a part of the image. When you press Ok in the dialog, this selected part will be used as the icon for the label. This is explained in Figure 5.

Now that we have changed the Label name from “Kerala 2008” to “Kerala Trip 2008” and also the label icon, we will see how the changes are reflecting in the F-Spot window. This is shown in Figure 6.

As you can see from Figure 6, both the label and the label icons are changed. However, all the hierarchical children that the label had earlier, will remain the same.

If you closely observe Figure 1 and Figure 6, you can notice that the icon size for labels has increased in Figure 6.

You can change the size for label icons from: View -> Tag Icons -> Hidden (or) Small (or) Medium (or) Large. Changing this setting will increase or decrease the icon size for all the labels.

### Editing Images

Your curiosity might have made you to wonder at what this Edit Image toolbar button is. We will be explaining about this mode now. F-Spot lets you do some basic photo editing operations. The photo editing capabilities of F-Spot are not as powerful or feature-rich as GIMP or Adobe Photoshop, but for most of the common user operations, F-Spot will be satisfactory.

In the thumbnails, if you double click on an image or press the Enter key selecting an image, you go to the Edit Mode. Whenever you try to edit an image in F-Spot, you are actually working in a duplicate copy of the original image. So, you can restore your original image any time you feel your formatting has actually caused problems.

If you want to have a single image with different styles, say one with a Green Tint, another with a Blue Tint etc., you can manually create a different version for the same image via: Photo -> Create New Version. Figure 7 shows an image that is opened in the edit mode.

As you can see from Figure 7, the left pane which used to display the labels in the browse mode is now replaced with a set of operations which can be performed in the image. We will be explaining some of these basic photo editing operations.

### Cropping Images

Sometime it might happen that you have far more information in a photograph than what is important. You might want to cut and remove a lot of things, so there are less things in the photograph to not distract the users from what the image is meant to show. You can use the crop tool in this case to select the regions of an image which you want to be visible. When you crop images with F-Spot, you will be editing the copy of the original image. So, your original photo remains safe.

### Straighten Images

It is not possible to take photo always using a camera which is mounted on a tripod. It is an infeasible option to carry your tripod for all your vacations. At times the person holding the camera may not be holding it in a perfectly straight line horizontally. These images will be slightly tilted. The straighten image tool can be used to rotate such photos and make them appear as a sane rectangle.

### Red Eye Reduction

Most of the modern day cameras come with the ability to fix up the red-eye problem. However, these are not 100% reliable yet and not many people turn on this mode. Also, red eye problem could exist in your old images. F-Spot helps in fixing this problem. You can fix multiple red eyes in one go. You have to click your mouse in the image and drag your mouse. It will form a rectangular selection. You expand the selection such that it fits in the areas where you want to fix the red eyes. Then you press the Red eye Reduction button. It will fix the red eye issue. You don’t have to exactly select the red eyes. It is enough if your selection stops before the lips.

### Desaturate

You can use this option to make the image look like a black and white photograph. Certain images look well...
when they are in black and white. They become mystic when done so.

**Sepia**
You can use this option to make your image resemble an old day photograph.

**Soft Focus**
If you want to selectively sharpen some area while blurring the rest of the image, you can use this option. This comes in very handy when you are making screenshots and you want to highlight only one thing. Also, it can be used to highlight your kid’s face in a photograph filled with so many kids.

**Auto Color**
You can use this option to balance the color levels in your image. Many cameras do a bad job in automatic white balance and you can use F-Spot to fix the issue on your behalf.

**Image Comments**
You can add textual notes to images. You can do this in the big text box that is below the image. You can later search for the image using this textual note. For instance, we have added the text: “New World Kings – Photo taken by Lakes” in the image. You can find this in the bottom of the Figure 7. Later I can search for this particular image, from the browse mode by using the / key. This is shown in Figure 8.

Figure 8 is also an example of how I have used the crop tool to chop parts of the image that I don’t want to project.

**Wallpaper & ScreenSaver**
You can change your system wallpaper and screensaver from your F-Spot UI itself. To set any of your F-Spot photo as your system’s wallpaper, select the image and choose: Edit –> Set as Background.

To set your F-Spot images as the screensaver for your machine, goto Edit –> Preferences and you will have an option to choose F-Spot as your screensaver. You can also choose to decide if you want to show all images for the screensaver or restrict it to any of your labels.

As discussed earlier, the Preferences dialog is the place where you can set, which folder should be used to import the photos.

**Removing Images**
It so often happens that we will have some images which will be blurred or out of focus etc. When we import the photos from a digital camera, all the photos get imported. And then we find that some photos are useless and will want to remove them alone. If you press [Shift] + [Del] or choose Remove from Drive menu while selecting the image, the image will be permanently destroyed.

There could be times, at which you will want F-Spot to not track some photos but still will prefer to have the photos somewhere in the disk. In this case, you can use the [Del] key or the Remove from Catalog option.

**Adjusting Time**
Sometimes before taking photographs, you might have forgotten to set the time in your camera. Or during an international trip, you might have forgotten to change the timezone. In such scenarios, all the photos that you shoot with your camera will have a wrong meta information for the time-taken. You can adjust the creation time for all these photos in a single stroke, by selecting all such photos and choosing, Edit –> Adjust Time...

**Plugins**
F-Spot comes with a rich set of plugins. The plugins are called Extension in F-Spot terminology. If you want to see what extensions are installed, or to get new extensions or to disable any existing extensions, choose: Edit –> Manage Extensions which will give the Extensions Manager dialog as shown in Figure 9.

As you can see from Figure 9, the extensions are grouped by categories. Plugins which are enabled are displayed normally. Plugins which are installed and not enabled are shown in grey. In my setup, as you can see from Figure 9, Beagle service extension is enabled whereas Facebook Export extension, under Export category, is just installed and not enabled.

The right side pane provides options to enable / disable these extensions. You can also uninstall extensions from here. Clicking on the Information button will launch a dialog showing the description provided
To install new extensions, you need to configure repositories. You can do so by pressing the Repositories button. By default, F-Spot official extensions repository is added. If you want to add any other custom repository, you can use this.

Once the repositories are added, you can search for new extensions that are not installed by pressing the Install Extensions button. This will refresh the repositories and get the latest plugins from which you can select which ones to mark for installation.

**Exporting Photos**
What good are photos if you cannot share them with your kith and kin! F-Spot provides options to share your photos to a variety of destinations. The most commonly used ones are to export to:

- Flickr,
- Picasa,
- Facebook,
- Smugmug,
- Zooomr.

F-Spot can also export photos in Gallery format, static HTML pages, and in plain directories + files format. You can also e-mail photos straight from F-Spot. Photo -> Send by email will let you do this. The default mail application in your GNOME desktop will be used for this purpose.

**Advanced Editing**
For advanced editing of photographs, like adding layers, adding special effects to selected areas and other highly skilled advanced photo editing operations, you need to use GIMP, which is GNOME’s Image Manipulation Program. F-Spot facilitates you to launch GIMP with any image you want. Right click on an image and you will have an option to edit the image in GIMP.

F-Spot is probably the best photo management software on Linux. Since it is developed in C# / Mono and in a pluggable architecture, any normal computer programmer can easily extend it any way he / she wants, by writing his / her own extensions. Thus it satisfies technically oriented users. Lots of times photos are taken without proper zooming. So cropping is a very basic aspect of photo editing. F-Spot helps in getting this easily done. For instance, look at Figure 10 and Figure 11. Figure 10 is a very wide view and hence wastes a lot of background space. Figure 11 is a cropped image so that only the people are focused and hence the photo looks better.

It is because of improved usability features like this that we would whole-heartedly recommend F-Spot to anybody who wants a nice photo management software, irrespective of their computer skills.