

Overlay Text on a Gif via Tectia SSH Client

Use of This Document

The purpose of this document is to provide a how-to guide on how to use basic commands within bash in order to overlay a custom text over a gif. As a tutorial and a how-to guide differ, this document was made with the assumption that the user already has some experience with an SSH Client like Tectia, and would not need assistance in its download, or how to navigate the program's file explorer, or the file explorer of their own personal computer. Just as a recipe for a cake may seem confusing to someone who has never cooked, that same recipe may seem comprehensible to someone who understands basic cooking fundamentals.

In university, I gained a fundamental understanding of the Unix Command line, enough for my interaction with code within the framework. As such, I worked on this as it would be a great addition to my portfolio. As the fundamentals were now in my toolset but overall concepts about bash scripting is something I lack, this how-to guide works as it does not aim to explain the concepts, but rather provide the steps of action and allow for some flexibility, i.e., the user's decision of gif, the number of frames it may contain, and the names of their directories.

Where to Start

To begin the process of achieving text on your gif image, there are some things that will need to occur for the sake of keeping all your files in order.

On the terminal, your setup will include entering into bash and creating a directory to hold the contents from gifsicle (whose contents will be discussed as you progress).

```
$ bash

//Note: The directory name "mainfile" can be named anything
$ mkdir ~/mainfile/
$ cd ~/mainfile/
```

Your current directory is now the 'mainfile'. Here, you will retrieve an open-source code called gifsicle from Github. This will be done with the 'wget' command, which is a program command that can retrieve content from the web. Once obtained we will unzip.

```
wget https://github.com/kohler/gifsicle/archive/master.zip

unzip master.zip
```

When downloaded, you need to configure the software for compilation and use 'make'.

```
$ cd gifsicle-master           //enter the directory
$ autoreconf -i
$ ./configure
$ make
$ cd                           //back to home directory
```

Now, back in your home directory, you need to create a new directory which will ultimately hold your customized gif and its frames.

```
mkdir final/           //Note: The directory name "final" can be named anything
```

Enter the new directory with the 'cd' command

```
cd final/
```

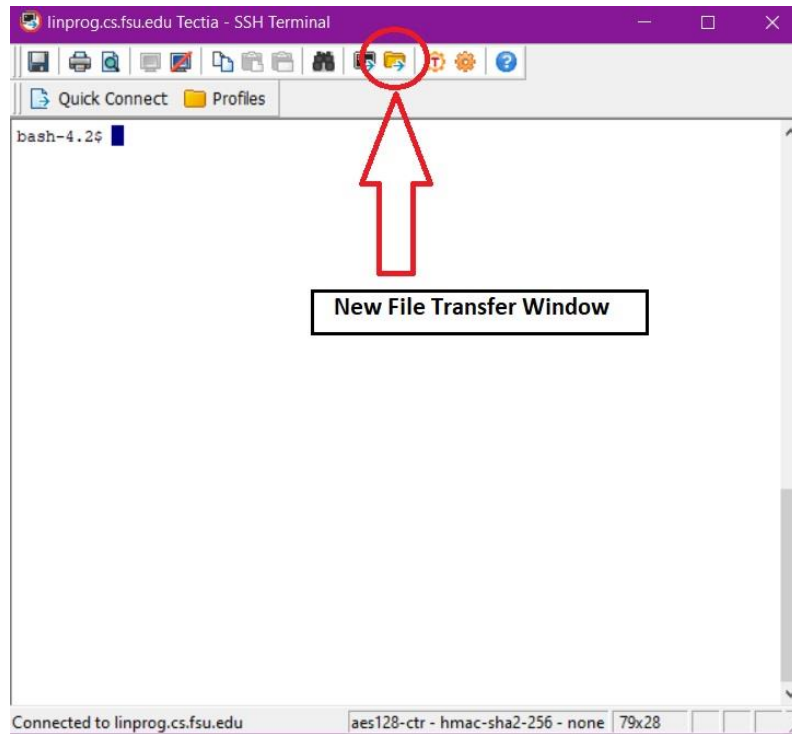
Grabbing the gif File Frames

If your goal is to not use the given gif frames, then obtaining your own gif and using GIF to frame converters on the internet such as

- Ezgif.com
- Gifgifs.com

Use the 'New File Transfer Window' to place your gif-frame file into the 'final' directory in the SSH client.

If you want to make use of the default gif frames for this how-to guide, refer to the Project Downloads question on FAQ at: <https://fire6754.journoportfolio.com/#/>



- ([Press here to learn to navigate the file explorer within SSH](#))

Wrapping Up

Now that you've placed your gif-frame folder within your 'final' directory, make note of its name. In the given scenario, it will be named as 'frame'.

Now, create a new directory within the 'final' directory that will hold the gif frames with overlaid text.

```
mkdir newgif
```

Enter the original frame directory.

```
cd frame/           //this is the original gif-frame directory
```

Now for the exciting part. You will replace the 'YOUR CAPTION' string to any string you desire.

```
for name in frame.gif.* ; do echo $name; convert ${name} -gravity South -pointsize 25  
-fill white \ -annotate +0+40 "YOUR_CAPTION" ../newgif/${name}; done
```

Now enter the new frame directory we created

```
cd ../newgif
```

Now in the gif you created, place it in its order in accordance with its frame count. In the given case it will be 350 frames. If you used your own gif, the frame count is found in the 'frame' directory, by the amount of frame files listed.

```
var="";for((i=0;i<=350;i++));do next=$(printf "crab-nebula.gif.%04d" "$i"); var="$var $next"; done
```

Now, you can great your file, where ANYNAME will be the name of the gif created

```
~/mainfile/gifsicle-master/src/gifsicle -l --colors 256 -U $var > ANYNAME.gif
```

To locate the source of your gif, navigate to your 'newgif' folder. There it can be drag to whichever folder you desire.

Congratulations! Your new gif should resemble the gif you see below, however, it may hold your own text.

