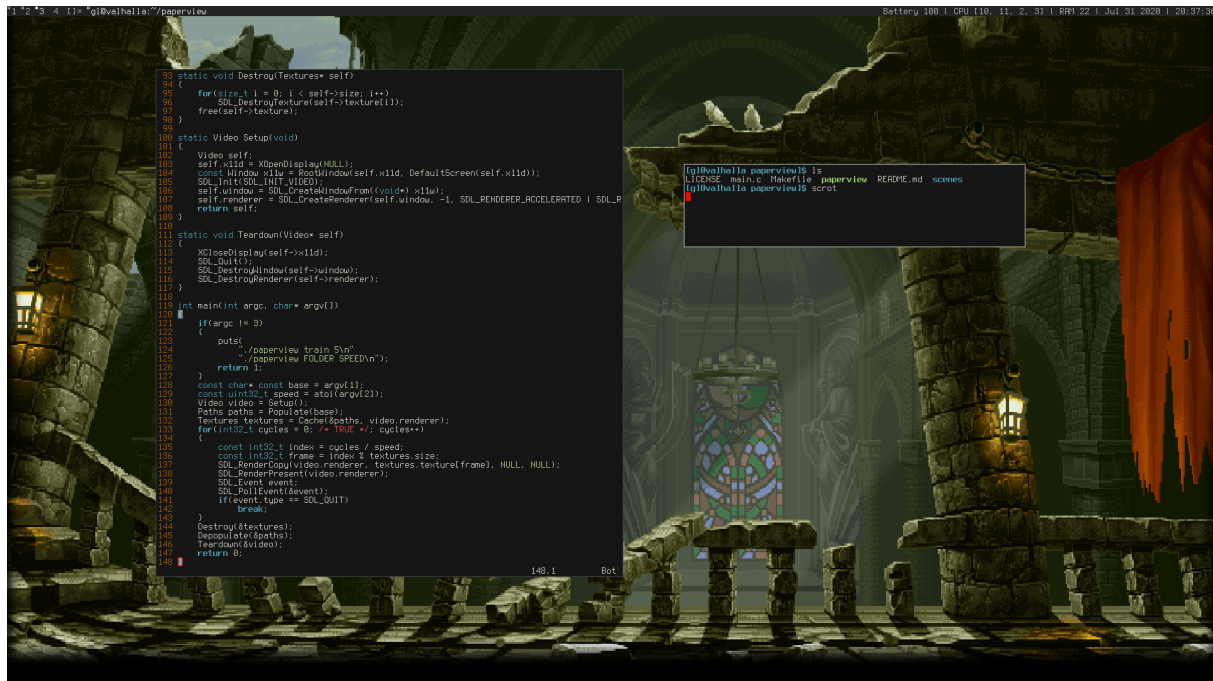


---

## PAPERVIEW

Paperview is a high performance animated desktop background setter for Linux and X11.



Video of the above screenshot: <https://www.youtube.com/watch?v=6ZTiA885bWM>

## Build

```
1 make # NOTE: SDL2 is required
```

## Single Monitor Use

```
1 ./paperview FOLDER SPEED
```

A lower SPEED number will result in a faster frame rate. Only BMP files are supported.

## Multi Monitor Use

Paperview supports any number of monitors with its dynamic parameter list:

```
1 ./paperview FOLDER SPEED X Y W H FOLDER SPEED X Y W H # ... And so on
```

---

The values X, Y, W (width), H (height) are integers and represent a rectangle with pixel dimensions specifying where the wallpaper animation will be placed. For instance, with a 1366x768 monitor on the left and a 1920x1080 monitor on the right, the following command will animate the left monitor with a cat animation, and the right, a river animation:

```
1 ./paperview \  
2 ~/scenes/cat 5 0 0 1366 768 \  
3 ~/scenes/river 5 1366 0 1928 1080
```

## Running Background Daemon

Append an (&) to a paperview command to have it run as a background process. Eg:

```
1 ./paperview FOLDER SPEED &
```

To stop this background process, use `killall`:

```
1 killall paperview
```

## Creating Custom Scenes

Creating a custom BMP scene folder from a GIF requires imagemagick. For example, to create a castle scene folder from a castle.gif:

```
1 mkdir castle  
2 mv castle.gif castle  
3 cd castle  
4 convert -coalesce castle.gif out.bmp  
5 rm castle.gif
```

## Random Animated Wallpapers at Startup

Assuming a scenes folder containing a number of scene folders is present in the home folder, run the following snippet as a background process within `.xinitrc` before running `startx`, or simply execute it after X11 is running:

```
1 while true  
2 do  
3     scene=$(ls -d ~/scenes/*/ | shuf -n 1)  
4     timeout 600 paperview $scene 5 # See Multi-Monitor Use above for  
        multiple monitor support  
5 done
```

---

## Performance

Running on a Thinkpad X230 from 2012 at 1920x1080 and 60fps with an integrated Intel GPU:

```
1 intel_gpu_time ./paperview castle 5
2
3 user: 1.904135s, sys: 0.357277s, elapsed: 100.458648s, CPU: 2.3%, GPU:
  11.7%
```

## Known Issues

Picom, Compton (and possibly other compositors) seem to already write to the base root X11 window which may overwrite the render done by paperview.

## Alternatives

Alternatively, if SDL2 is a problem, or if you are on Windows, two workarounds are currently available:

### Pure X11 (without SDL2)

<https://gist.github.com/AlecsFerra/ef1cc008990319f3b676eb2d8aa89903>

### Windows 10

<https://github.com/TrAyZeN/sdl-wallpaper>