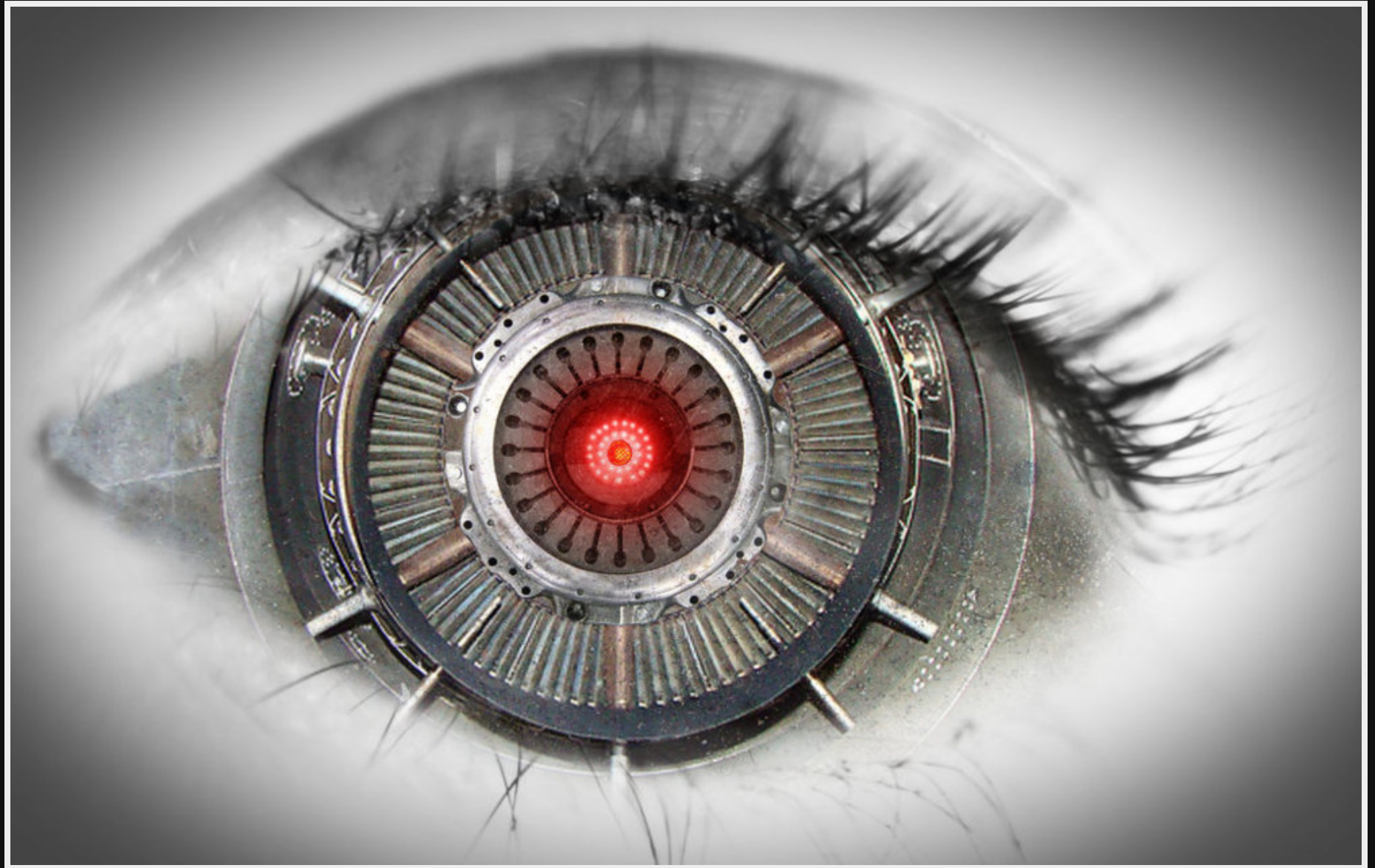


**20150629-
electric_eye**

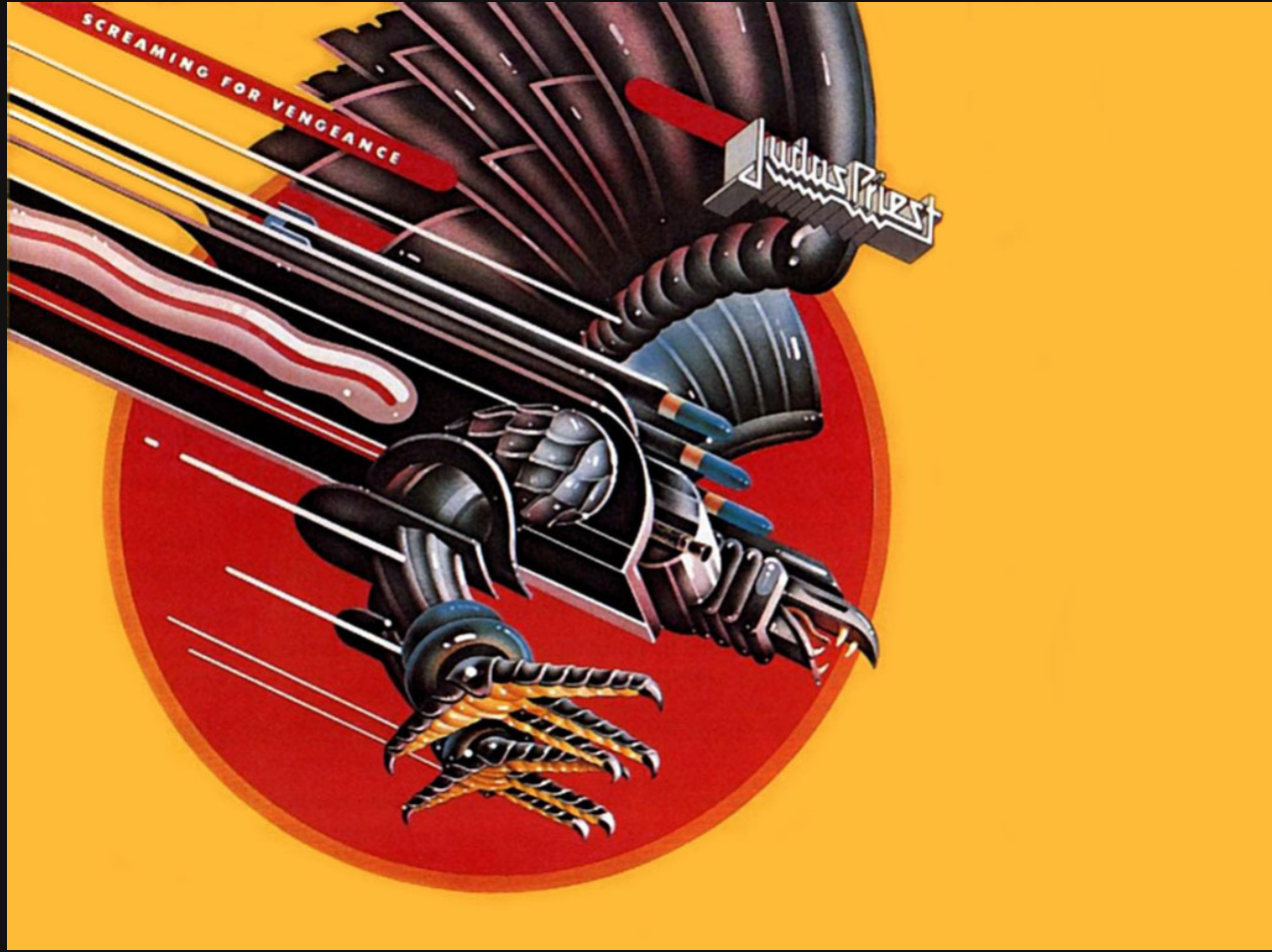
Michael Pope

michael@dtcorp.com.au

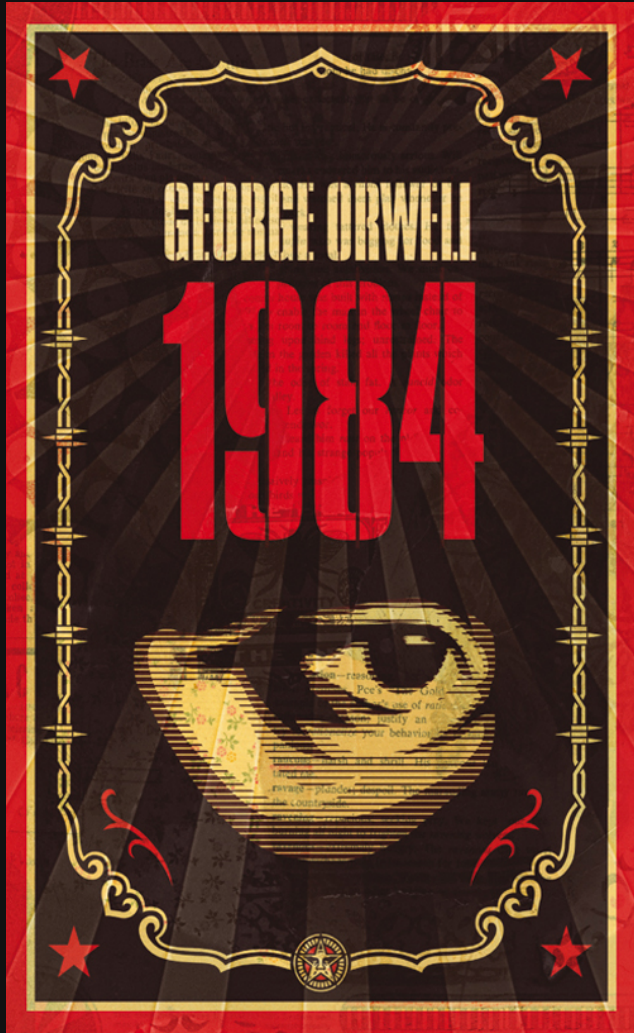
Electric Eye



Why the name?



AND...



Why?

- Current NVR software sucks
- Specifically Dlink DNR-322L is broken
- Motion software didn't work for my cameras
- Zoneminder didn't work also
- Better resolution

Hardware

Inside Cameras	Dlink DCS-5222L
----------------	-----------------

Outside Camera	DLink DCS-7010L
----------------	-----------------

How it works?

- Uses VLC to do recordings
- Records multiple cameras using multiple VLC at once
- Manages these processes
- Records small chunks of variable duration

Language used

- ruby
- Plugins
 - methadone (structure)
 - construct (yaml)
 - Open4 (process management)

Installation

1. Install VLC

```
sudo apt-get install vlc
```

2. Install Ruby

```
sudo apt-get install ruby
```

3. Install electric_{eye}

```
gem install electric_eye
```

Configuration

1. Set path

```
electric_eye
```

2. Add camera

```
electric_eye -a Reception <  
url>
```

Result

- Files that look like this

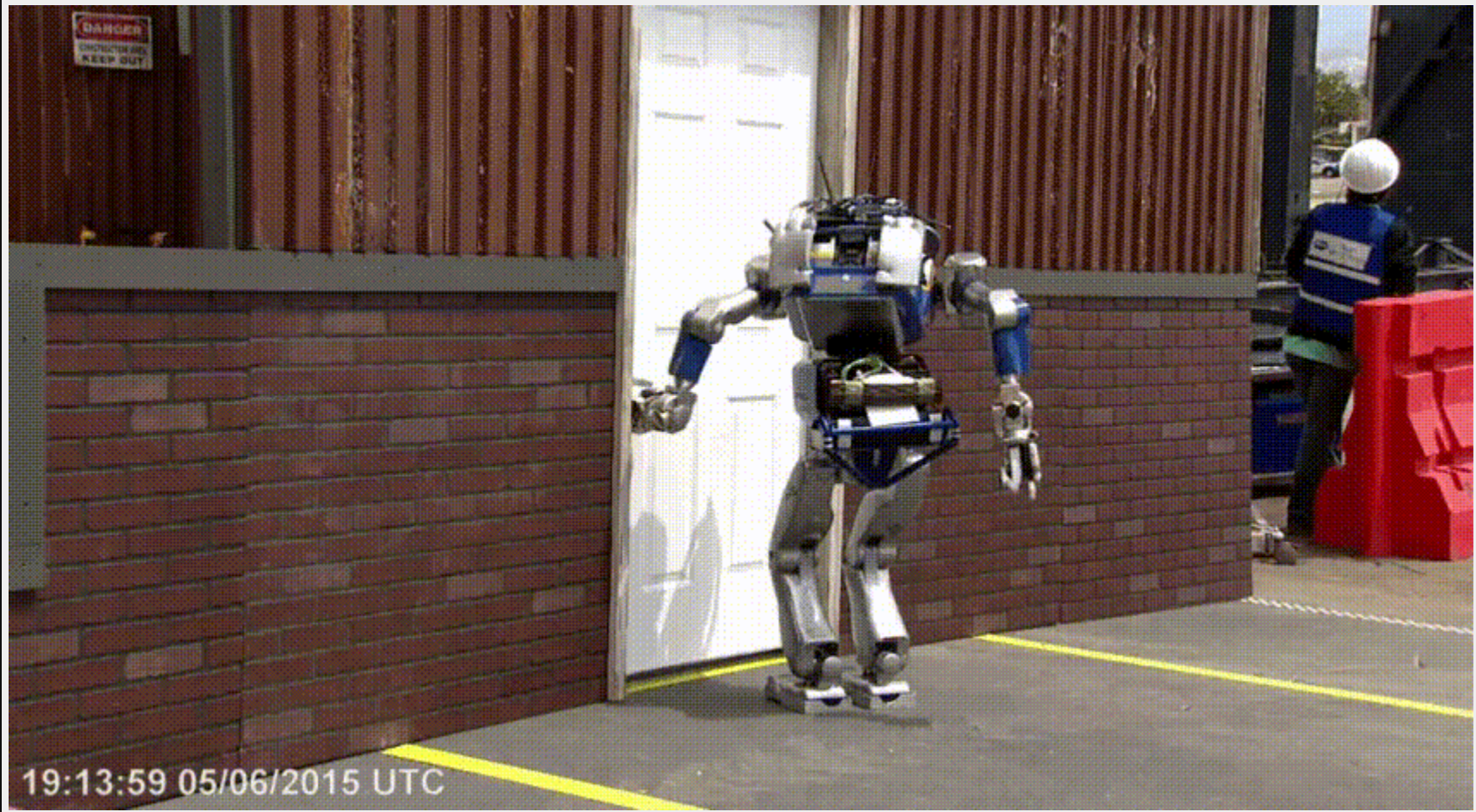
```
/media/data/recordings/reception/<YYYYMMDD-reception.  
jpeg>
```

- 60 day roll over (optional cron job)

Documentation

- Access the help menu multiple ways
 - no arguments
 - -h -help
 - wrong options
- Created UNIX style man pages using gem-man & ronn
- Can use alias which checks gem man first ``alias man='gem man -s'``

DEMO



Demo notes

1. Setup phone as IP camera
2. Setup tethering on phone
3. Connect computer to phone
4. Connect via browser
5. Add to electric_{eye}

```
electric_eye -a phone http://<IP Address>:8080  
/video
```

6. Start recordings & show output

```
electric_eye -s
```

7. Stop recordings
8. Show documentation

```
electric_eye -h
```

OR

```
gem man electric_eye
```


Future

- Post recording motion detection
- More tests
- Validation on input fields
- Integrated clean up
- Record from different programs eg: raspicam

References

- Book: 'Build Awesome Command-Line Applications in Ruby' by David Bryant Copeland
- https://github.com/map7/electric_eye
- <https://github.com/davetron5000/methadone>
- <http://www.videolan.org/vlc/>
- <https://www.ruby-lang.org/en/>

Credits

- <http://www.judaspriest.com/>
- https://en.wikipedia.org/wiki/Nineteen_Eighty-Four
- <http://www.popularmechanics.com/technology/robots/a15907/best-falls-from-darpa-robot-challenge/>

Questions

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