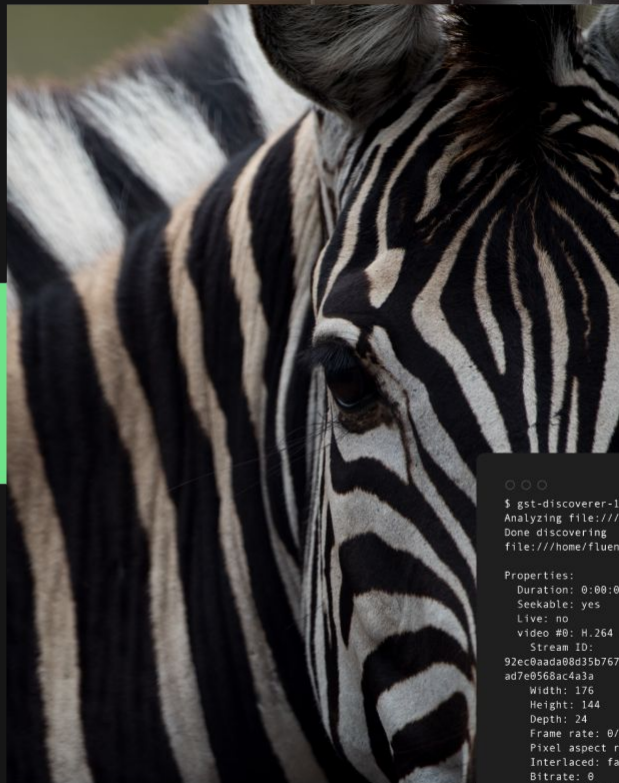


Flumes

A Coruña, September 2023

Michalis Dimopoulos



```
○ ○ ○
$ gst-discoverer-1.0 AUD_MW_E.264
Analyzing file:///home/fluendo/Videos/AUD_MW_E.264
Done discovering
file:///home/fluendo/Videos/AUD_MW_E.264

Properties:
Duration: 0:00:00.000000000
Seekable: yes
Live: no
Video #0: H.264 (Constrained Baseline Profile)
Stream ID:
92ec0aada08d35b7679f87a98465b4cf955fbad11d2c8535cead7e8568ac4a3a
Width: 176
Height: 144
Depth: 24
Frame rate: 0/1
Pixel aspect ratio: 1/1
Interlaced: false
Bitrate: 0
Max bitrate: 0
```

Index

Motivation

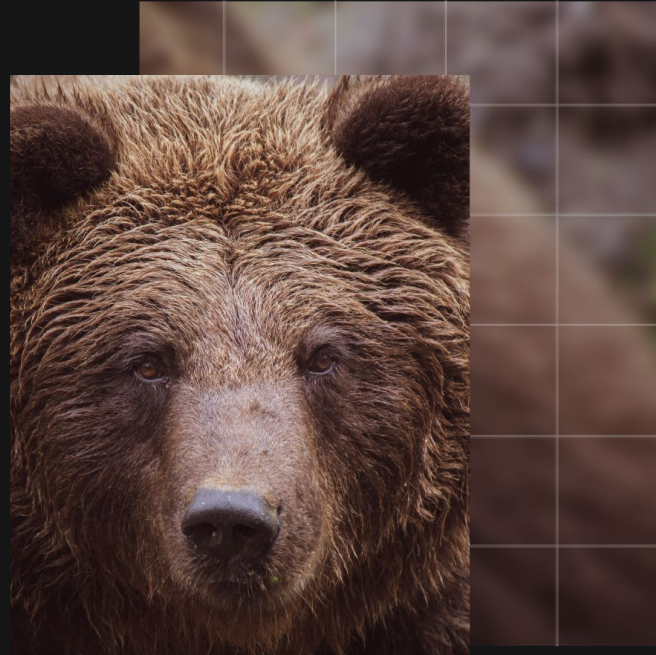
Multimedia collection | CI testing extension

Architecture

General | Flumes | Fuse

Motivation

Multimedia collection | CI testing
extension



| Multimedia collection (past)

- Multimedia files in all corners of our storage space
 - Scattered & decentralized
 - Remote access dependent on client OS
 - Lack of established test suites
 - Confusion between development and QA teams

| Multimedia collection (present)

- Files united under one roof
 - Single path in shared storage
 - No manual analysis and categorization
 - 24/7 path monitoring
 - Keep track in a database
 - Automated triggering of database update upon changes in path

| CI testing extension (present)

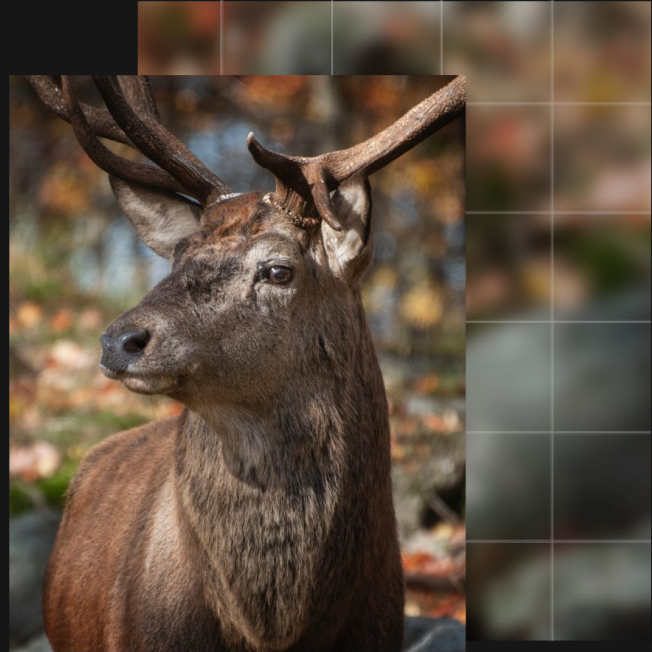
- Test files have to be available and maintained on each CI host runner
 - Discrepancies between hosts leading to unnecessary CI errors
 - Duplication of information
 - Size of raw video can be huge (even when duration is small)
 - End-to-end encoder testing not scalable

CI testing extension (future)

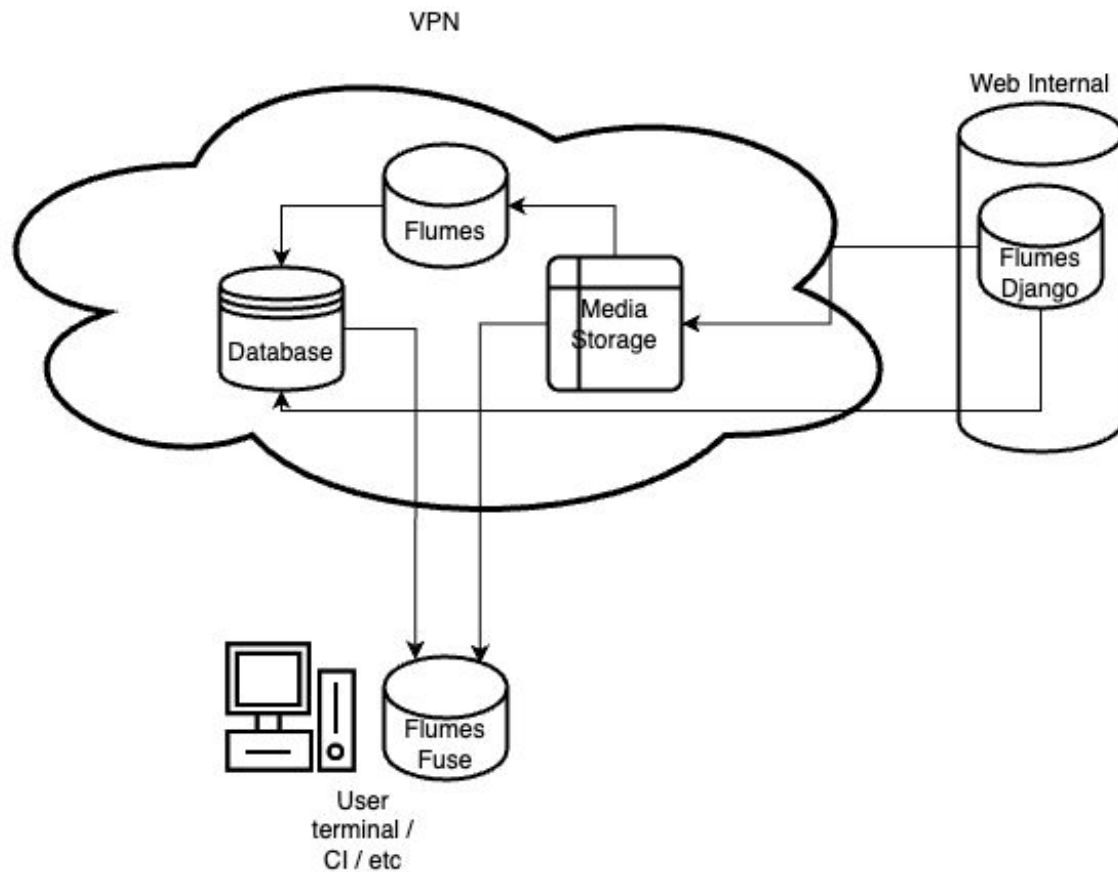
- Centralised test file collection mounted as local filesystem on CI runners
 - On-demand access to test files
 - Always up-to-date with central database
 - Enable scalability in CI test workflows
 - Access from within dockerised environments
 - Partly randomised regression test runs

Architecture

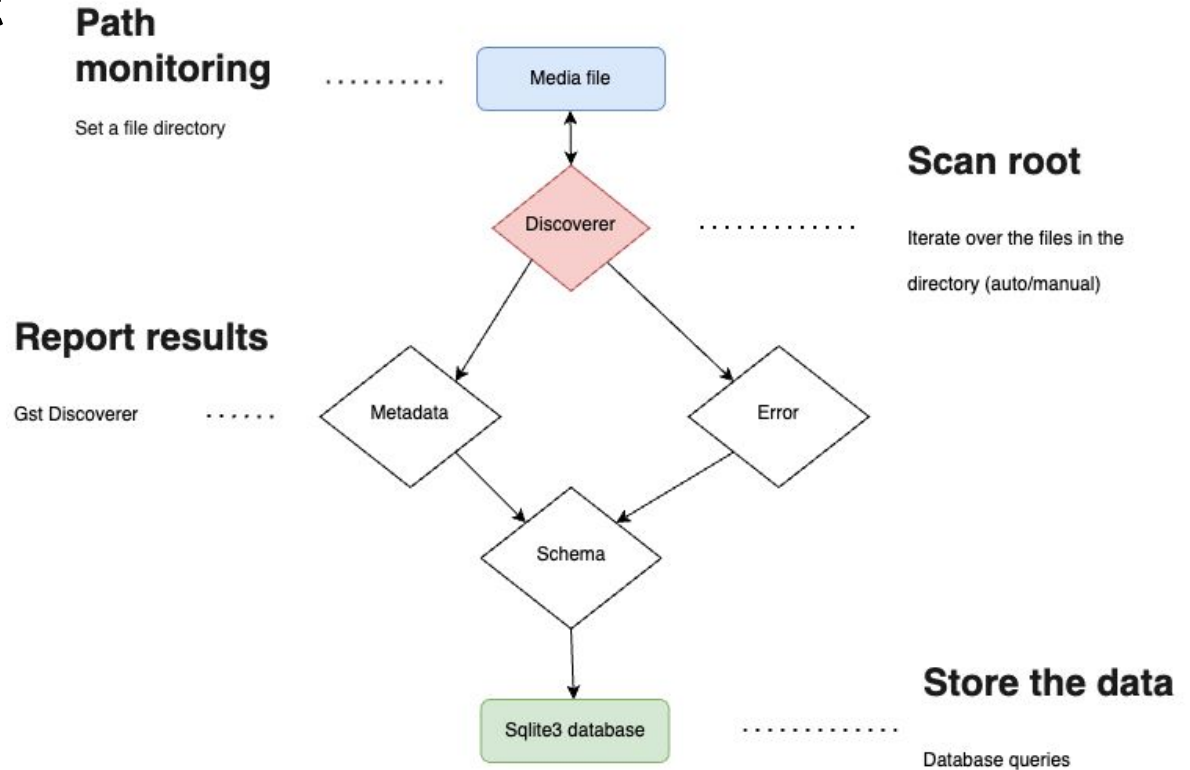
General | Flumes | Fuse



General



Flumes component



Fuse component

Getting from Flumes

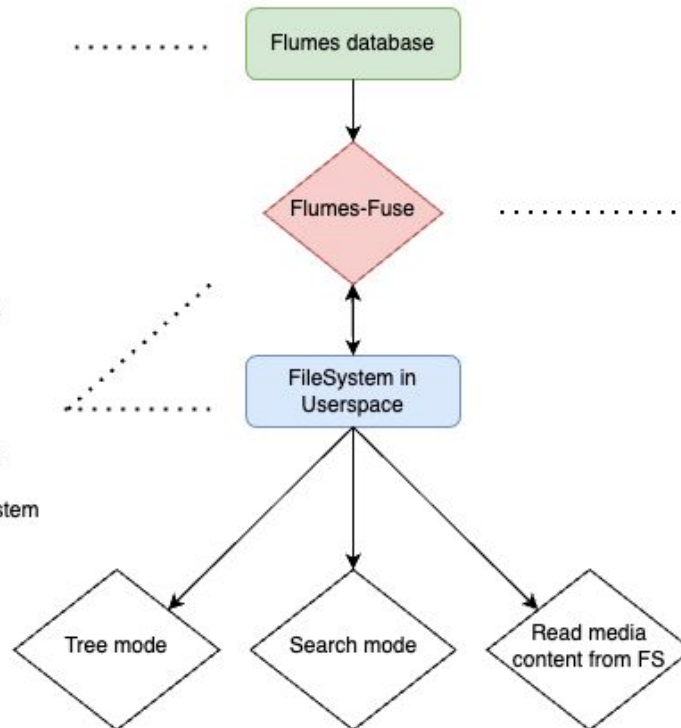
Flumes database

Navigate over Flumes

Read fields, relationships and generate queries in the filesystem

Manage the database

Mount the corresponding database and display queries



Thank you!

Questions?



References

- Flumes: <https://github.com/fluendo/flumes>
- Flumes-Fuse: <https://github.com/fluendo/flumes-fuse>
- Flumes-Django: <https://github.com/fluendo/flumes-django>