

Raven Compass

Software tool for acoustic data management



Raven team



Ben Thomas
Lead Software
Developer



Kate Reed
Software
Developer



Sha Wang
Software
Developer



**Michael
Pitzrick**
Research
Support
Specialist

Raven Pro

- Raven Pro is very difficult to maintain
- Software architecture limits what we are able to do
- Confusing for new users
- Most users only need a few features
- Workflow could be much faster and easier



Raven Workbench



Raven Compass (data management)



Raven Expedition (LTSA)



Annotation tool



Machine Learning / Detection tool

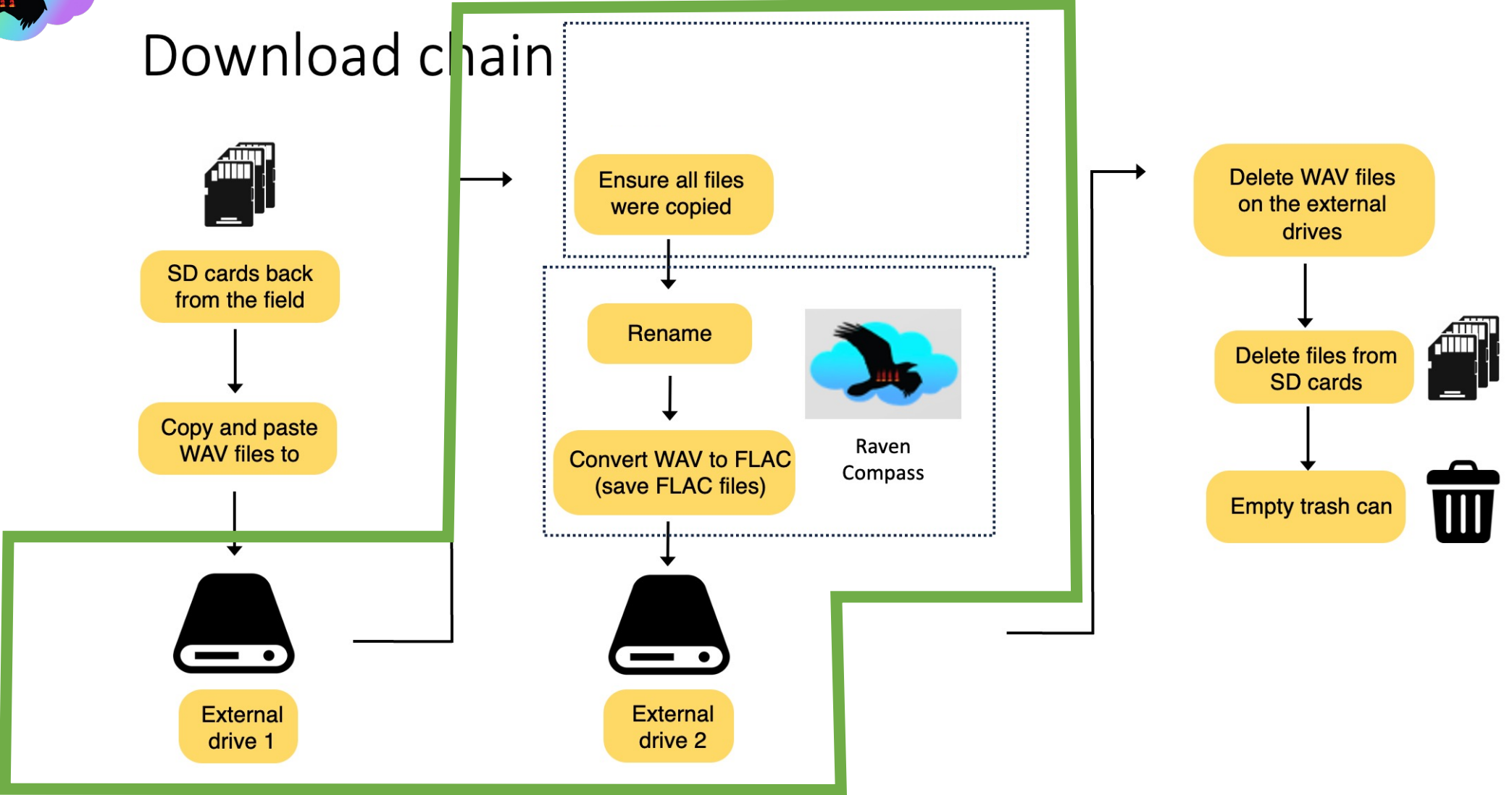


Detailed signal analysis tool



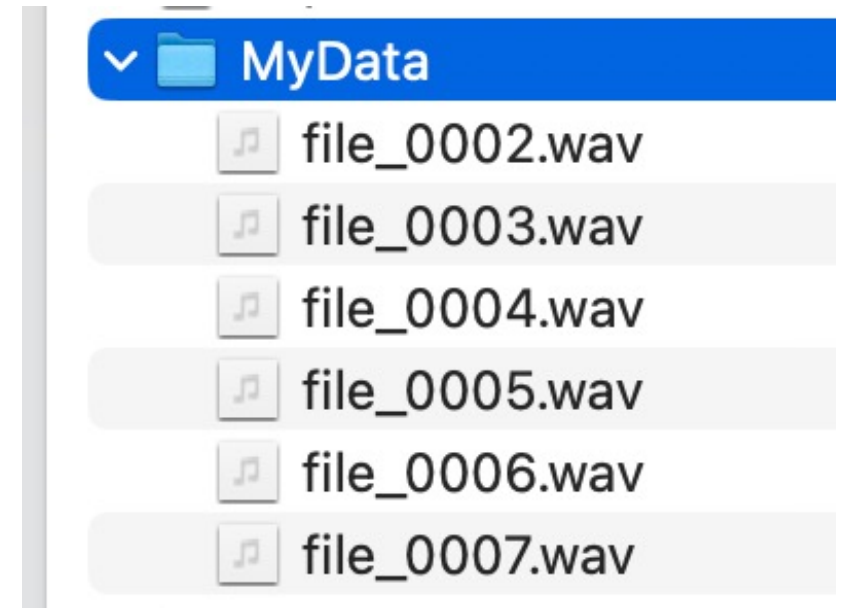


Download chain





- What project was this from?
- Where is file_0001.wav?
- Which recording device did this come from?
- Was this from Brazil, or Ben's work in Colombia?
- What sample rate was this?





- Software was developed at the Yang Center
- Data from 30 years ago was taking up too much space
- Used by us to help manage our > petabyte of data
- Organize data in a consistent and safe way
- Compression saves storage space (and \$\$)



Lossless!



Original



Compression

Lossy
(MP3, Ogg,
AAC, MWA)

Decompression



Lossless
(FLAC)





Demonstration



☐ KLY Center project format

☒ Create project folder structure

Project ID: S1047, 76085, etc.

Deployment ID: Area and number. SSW15, NZ01, etc

Deployment Site: S01, M05_multi, etc.

Recorder ID: RH406, SWIFT29, etc.



- Project_Deployment_WAV
 - Project_Deployment_Site_Recorder
 - ProjectDeployment_Site_Recorder_20200406
 - ProjectDeployment_024K_Site_Recorder_20200406_030000Z.wav
 - ProjectDeployment_024K_Site_Recorder_20200406_031500Z.wav