Trustworthy and Fully Functional Data Intensive Parallel Astronomical Pipelines

Designed for remote data processing of small telescopes located at inaccesible sites.

P118

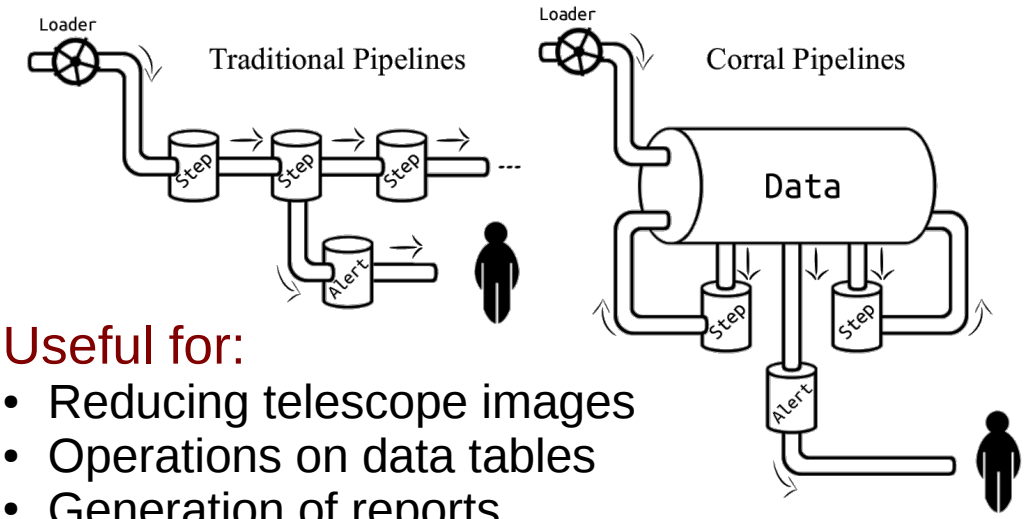
Features:

- MVC model to *MSA*
- On top of SQLAlchemy (dialect agnostic)
- Full python implementation
- Quality report and autodocumentation
- Data parallelism and multi processing capabilities

Quality Assurance Index

$$QAI = \frac{\Theta \times \Lambda_{Cov} \times R_{PT}}{\gamma}$$

$$\gamma = \frac{1}{2} \times \left(1 + exp\left(\frac{N_{SError}}{\tau \times N_f}\right)\right)$$



Useful for:

- Reducing telescope images
- Operations on data tables
- Generation of reports
- Monitoring remote hardware
- Works at small environments (laptops)
- Works in big environments (clusters)
- Prototyping larger data processing software
- Automating small processes with DB's

Check it @ghithub/toros-astro/corral

build passing | License BSD 3-Clause | python 2.7 | python 3.4 | python 3.5 | pypi package 0.3 | docs latest

Simply `~$ pip install corral-pipeline`

arxiv: 1701.05566