

ARC Control Tower for users

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Motivation

- aCT provides additional job management features and workflows with several clusters
- Use aCT as a replacement for ARC client
- Make installation and usage as user-friendly as possible

Other alternatives:

- arcrunner

Interface

arcsub

actsub.py

arcstat

actstat.py

arcget

actget.py

arcclean

actclean.py

...

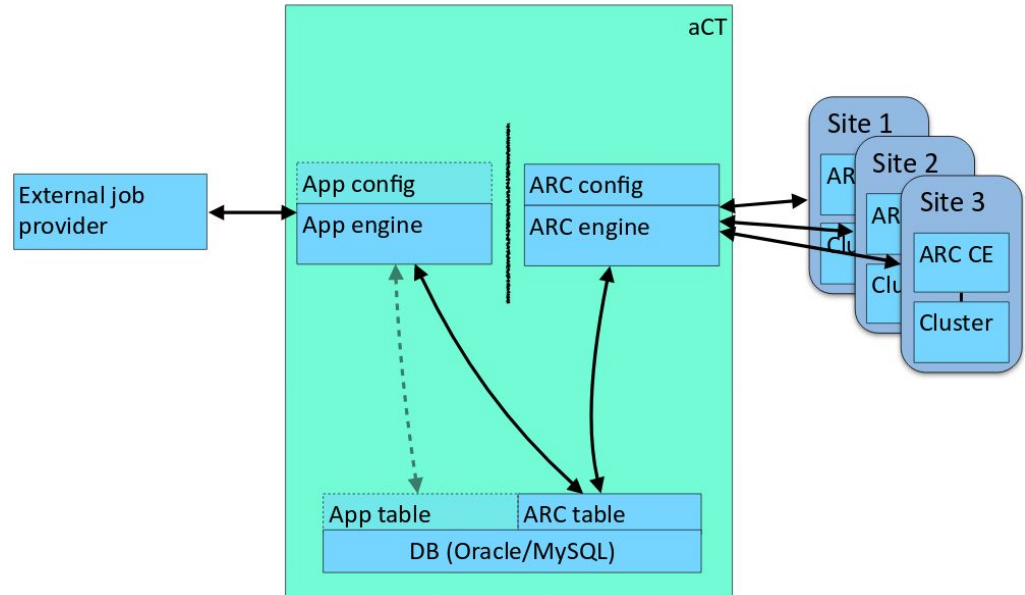


Replacing ARC client commands with an equivalent set of aCT client commands.

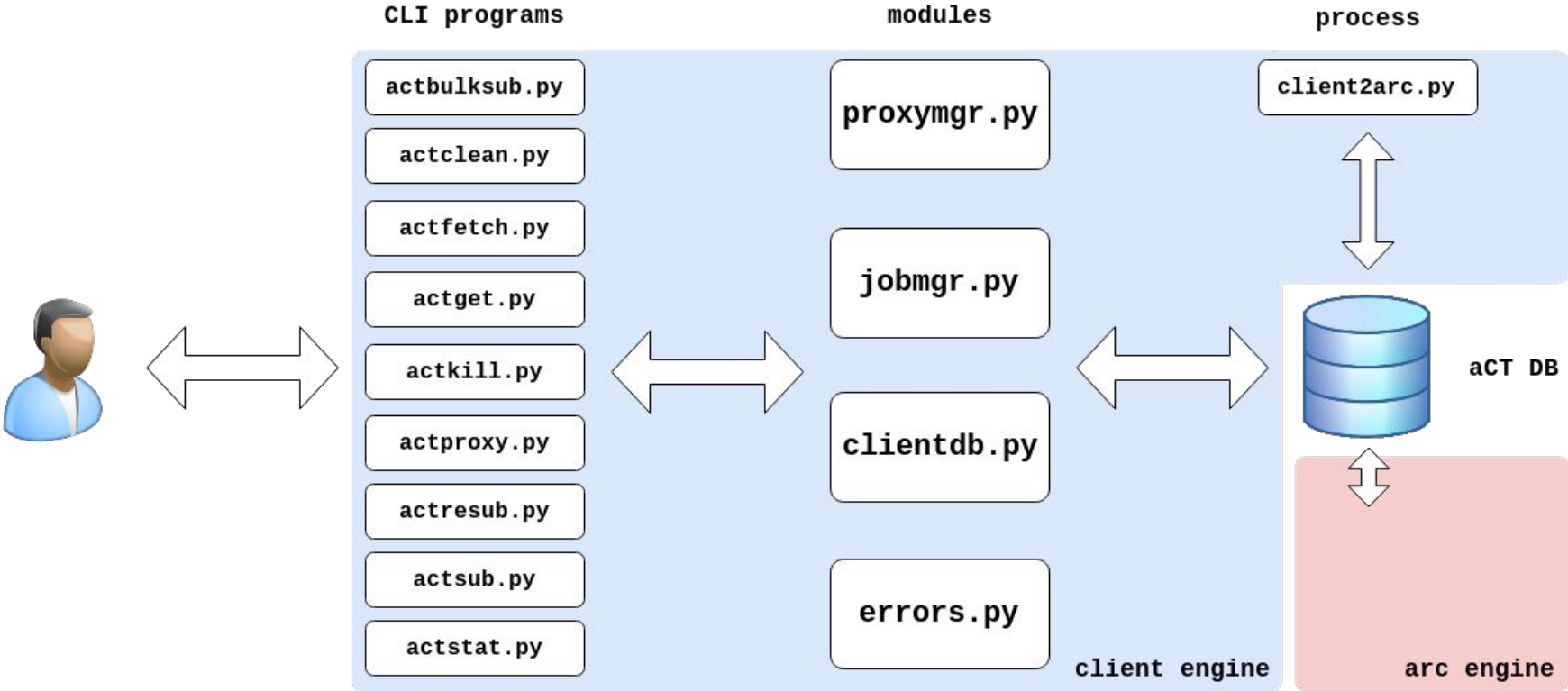
There is no direct ARC-CE communication from the client side.

Architecture

- Client interface implemented as another application engine for aCT
 - Replacing ATLAS engine with user one
- Dedicated table in DB for jobs submitted through client interface



Implementation



Installation and running

Dependencies:

- MySQL server (for now)
- ARC Client
- Python2 (with pip to enable user space installation)

Python virtual environment:

- PYTHONPATH
- PATH
- config path
- mysql.connector (fixed version, to be investigated...)

Source and installation:

- <http://www-f9.ijs.si/~jakobm/aCT.zip>
- README

Future dev and ideas ...

- migrate DB code to SQLAlchemy
- package aCT for common package managers (RPM, APT, ...)
- container support for job execution
- web monitoring interface (django?)
- REST interface for remote clients
- multi-user service (fairshares)
- (simple) workflows
 - job dependencies
 - data dependencies
- data management
 - stage in/out to aCT
 - data organization

DEMO