

Implementing COBaID/TARDIS in Wuppertal

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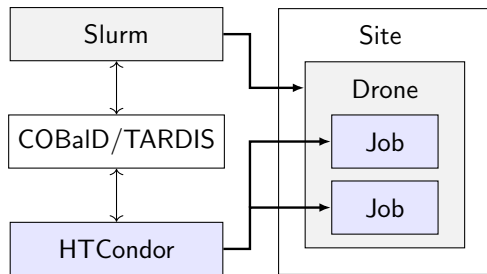
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COBaID/TARDIS in Wuppertal

Goals:

- Make (local) Slurm resources available to GridKa
- Make the setup process as easy as possible
- Provide a test environment
- Integrate accounting



- (nearly) all settings in one config file
- Using Docker Compose to house
 - COBaID/TARDIS
 - TIG Stack
 - (HTCondor CM, CCB, Sched)
- Buildscript for drones
- Be able to choose between VMs/containers for drones

Simple Workflow:

```
$ vim .env
$ vim cobald/config.yml
$ vim cobald/tardis.yml
$ ./build.sh -c
$ docker compose [...] up
```

- Use Singularity containers as drones
- Pilot jobs will start Singularity containers as well
→ need for nested containers.
- Discussion on namespaces ongoing.
Will likely deactivate net namespaces
- Run script in drone to monitor usage

- Use Vagrant + Ansible to build virtual cluster
- Automatically installed:
 - Slurm
 - BeeGFS
 - CernVM-FS
- Pulls in COBaID/TARDIS setup as submodule
- No need for nested virtualization

Workflow:

```
$ vagrant up
$ vagrant ssh sub
$ cd /vagrant/cobaldtardis
$ ...
```

- Pilot jobs are called by scriptwrapper, which calls additional scripts from /cvmfs/atlas.cern.ch/, containing

```
[ -n "$ATLAS_LOCAL_AREA" -a -s $ATLAS_LOCAL_AREA/setup.sh.local ] && \  
source $ATLAS_LOCAL_AREA/setup.sh.local
```

This allows for local overrides in the pilot script wrapper (thanks to Manuel Giffels, Oliver Freyermuth):

- Set frontier server
- Can set Panda queue, resource, site.
Question: Can we configure accounting here?

Monitoring

Local monitoring of drones by Axel Niclot (PhD student).

- TIG Stack
- Data from COBaID/TARDIS and drone-local scripts



Possibility for shared repository?

Summary and Outlook

- COBaID/TARDIS setup nearly done
- EGI accounting with AUDITOR
- Control Panda accounting by local override in pilot script wrapper