

Munich ATLAS Belle II Computing Meeting

Report on COBald/TARDIS Deployment on LRZ

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COBalD/TARDIS

Goal

- make use of opportunistic resources for HEP applications
- developed at KIT, [tutorial](#) with general introduction available

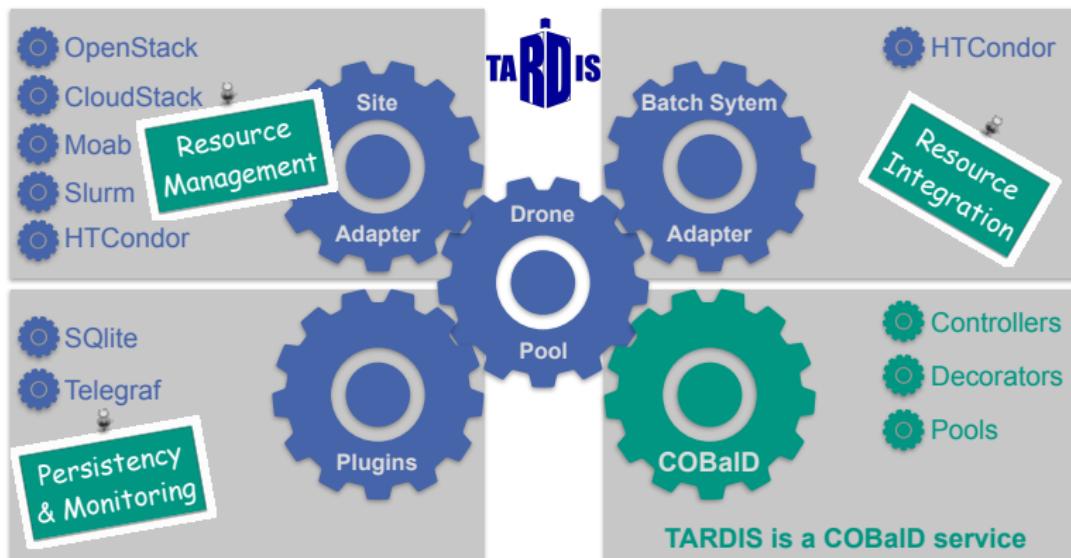
COBalD - the Opportunistic Balancing Daemon

- generic core service/framework, with some [documentation](#)
- general purpose controllers to handle resource pools

TARDIS - Transparent Adaptive Resource Dynamic Integration System

- opportunistic HEP resources
- acquisition (e.g. cloud, batch) and integration (e.g. VM, container)

Components of COBaID-TARDIS



Well defined abstract base class interfaces to all components available!

COBAlD/TARDIS at Munich?

potential pools of resources to include: LRZ Cloud and C2PAP

C2PAP

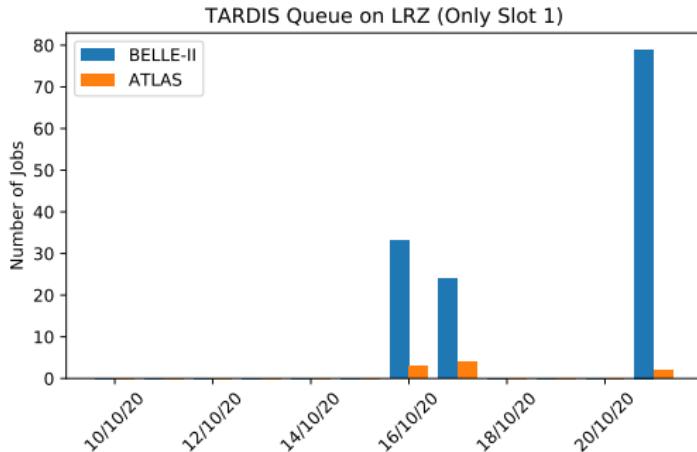
- only sensible after transition to slurm as batch system (planned for march)
- suggestion to follow “Compute Site in a Box” approach from Bonn
 - integrate tier 3 resources into single entry point
 - fully automated deployment with Puppet

LRZ Compute Cloud

- handed test account (max 40 VCPUs) to Manuel Giffels for COBAlD/TARDIS setup
- created four VMs (10 slots each) with images including HT Condor Client

COBaID/TARDIS on LRZ Cloud

- quick and successful setup by Manuel
- running Belle-II and ATLAS jobs since end of January



- ATLAS jobs (DE-TARDIS) can be monitored using BigPanda
- asked James about monitoring of Belle-II jobs
 - TARDIS job distribution invisible to DIRAC
 - plan to setup monitoring with grafana
- he kindly retrieved information about jobs (Belle-II and ATLAS) from their HTCondor central manager (10.02.20–21.02.20)

Summary

- integration of opportunistic resources using COBaID/TARDIS
- setup on C2PAP so far not sensible due to lacking support of current batch job manager
 - will change with C2PAP update (probably in march)
- test-wise usage of resources from the LRZ Compute Cloud
- handled remotely by Manuel at KIT
- potentially to be transferred into a local TARDIS installation, when available