Pyglidein – Improvements and Enhancements

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How Pyglidein works

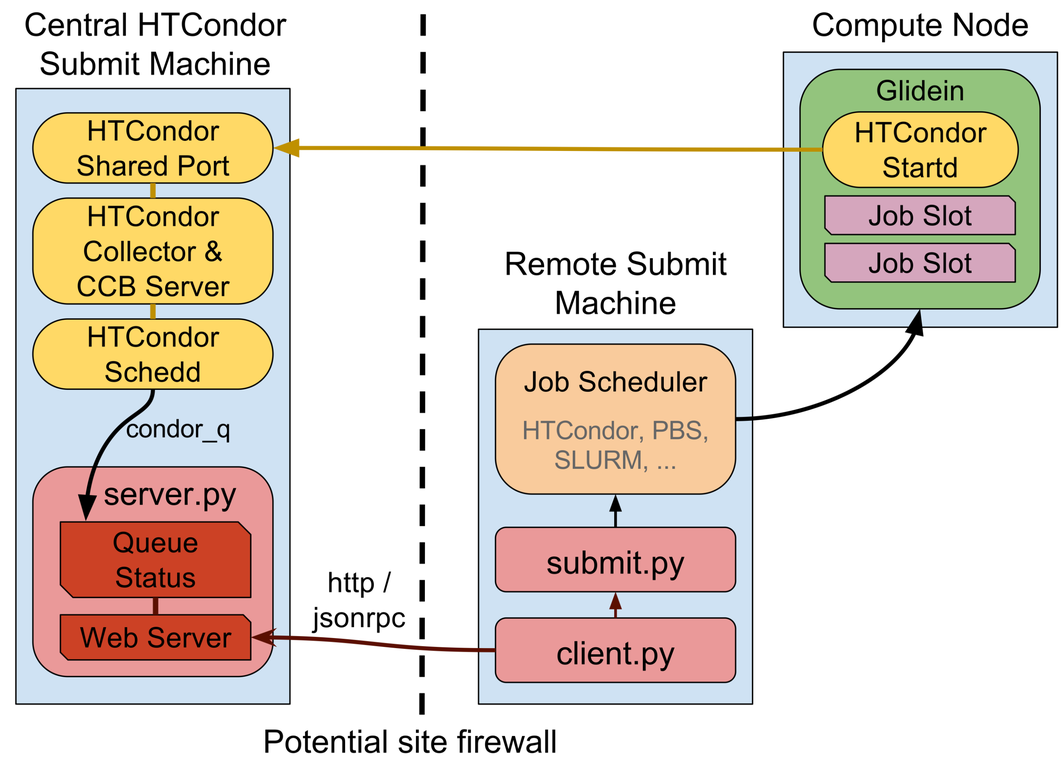
Operates on the pull model – workaround for incoming firewalls, two-factor auth

HTTP server for job queue status

Remote client:

- Runs on cron
- Gets idle job info from server
- Submits glideins to local batch system

Glideins connect to main HTCondor pool at UW-Madison



New feature enhancements

Monitoring

- Improved HTCondor monitoring for the whole pool:
  - Send condor queue, history, status to ElasticSearch
- Send Pyglidein server and client metrics to Graphite
- Live graphing in Grafana

Integration testing

- Docker containers to test multiple batch system schedulers

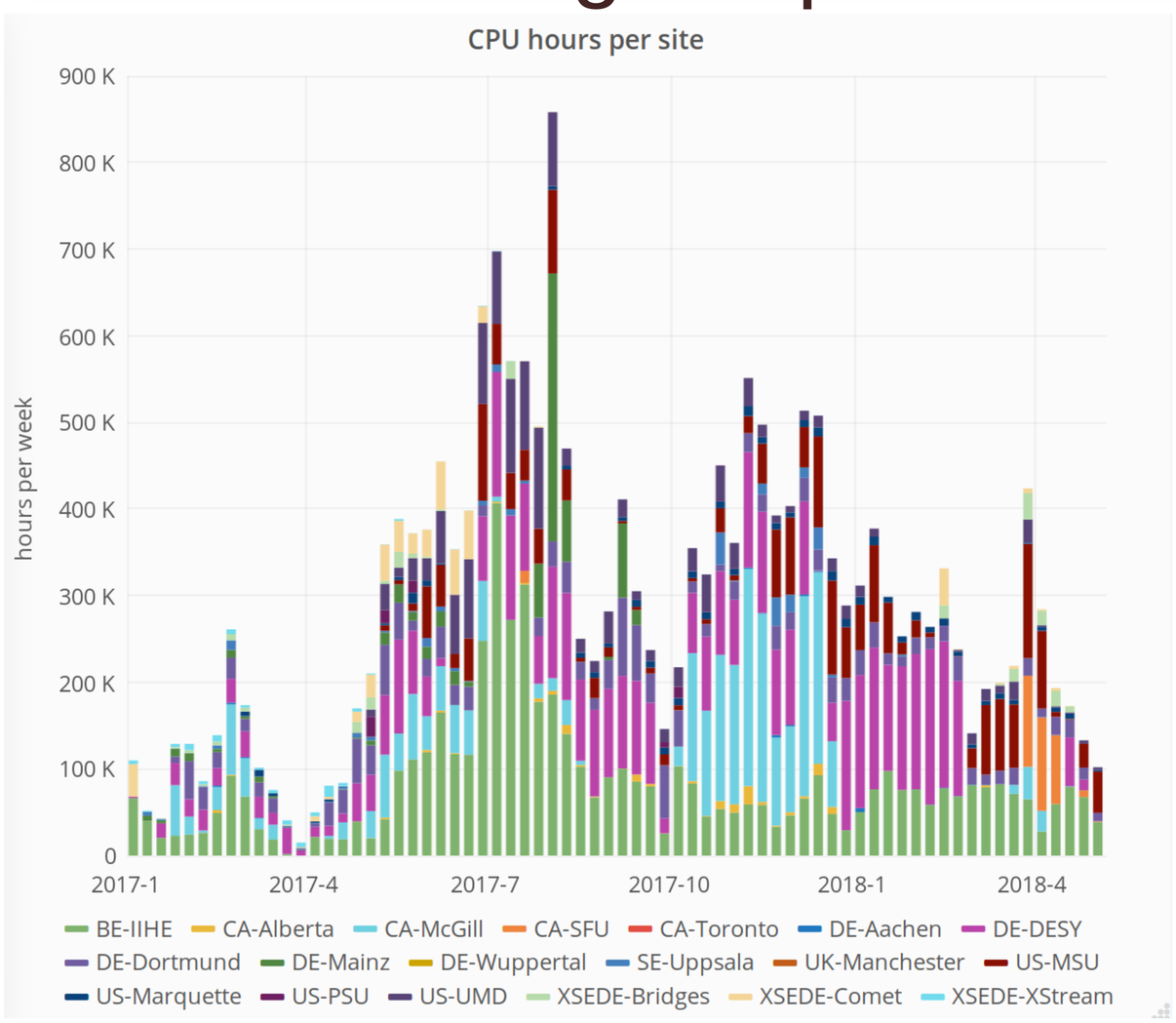
Logging

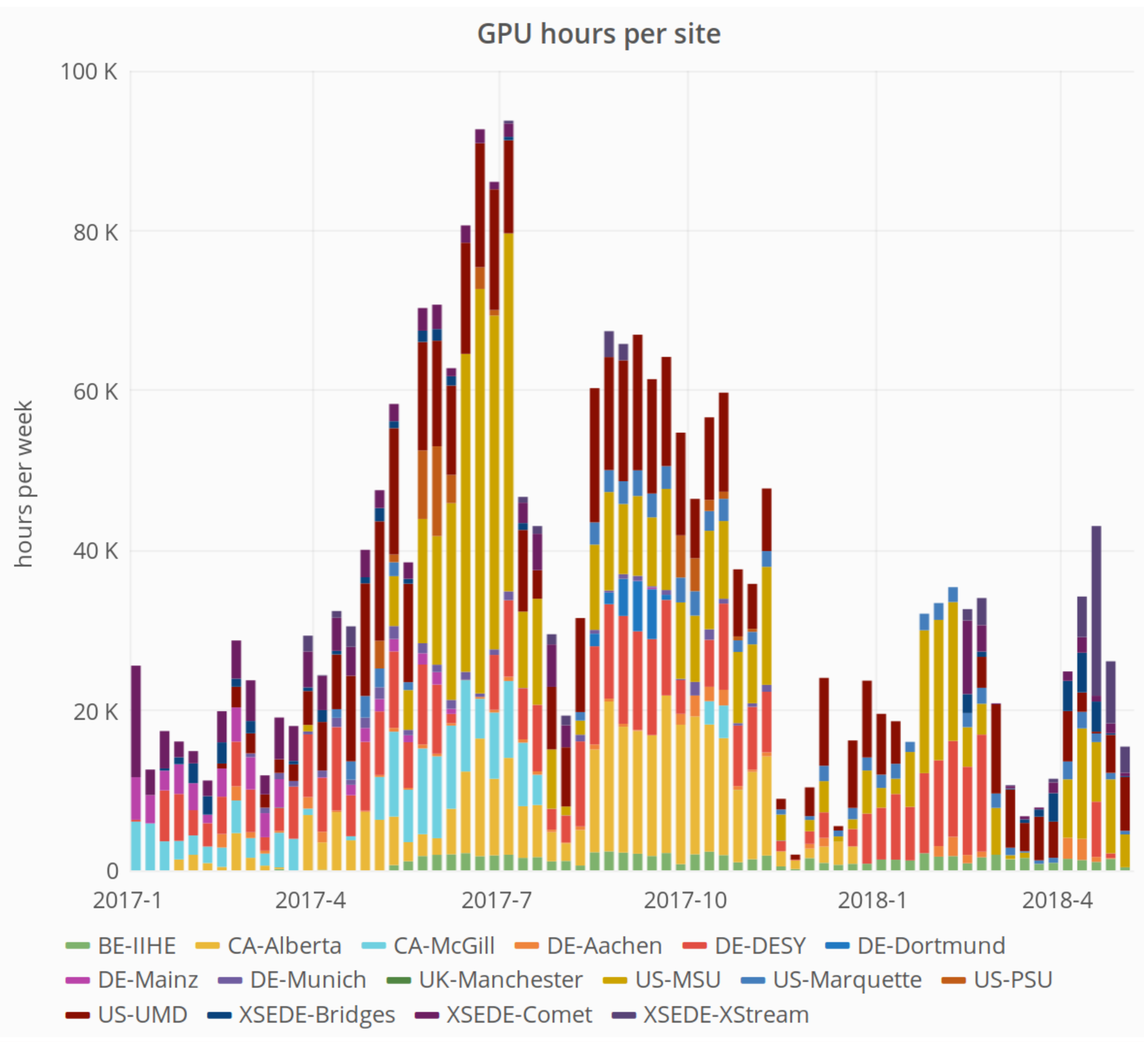
- Glideins can copy their log directory to S3 every 5 minutes
- Enabled only when debugging

Pre-checks

- Condor startd runs checks at startup to verify a good node
  - Tests for CVMFS, OpenCL, GridFTP transfer to Madison
- Test results added to classads for jobs to reject node

Practical usage experiences





github.com/WIPACrepo/pyglidein