HTCondor-CE: What's Next?

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Beyond the Open Science Grid

- Historically, HTCondor-CE was a product of the Open Science Grid (OSG) as a replacement for the venerable GRAM Gatekeeper
 - Most of the OSG transitioned from GRAM → HTCondor-CE ~2014
 - After initial development flurries, the software has stabilized (7 releases in the past year)
 - Installed at a few non-OSG (CC-IN2P3, CERN) sites with the help of experts
 - With the announced retirement of CREAM CE, some EGI sites have shown interest
- Now, we build one version for the OSG and an "OSG-free" version for the HTCondor Yum repositories
 - Most OSG references are gone
 - But some features (HTCondor-CE over SSH, HTCondor-CE View) are still tied into the OSG ecosystem

First Class in HTCondor

- Part of the HTCondor code base
 - Unifying the Batch GAHP/BLAHP: HTCondor and OSG Software teams maintain slightly different versions of this piece of the software stack
 - Making HTCondor-CE a resulting build artifact of the HTCondor build process
 - HTCondor-CE as a configuration template?
 - i.e. use role : ComputeElement
- Configuration revamp: HTCondor-CE originally written with HTCondor 8.1.x configuration in mind!
 - Simplified security configuration
 - Cleanup config kept to support old versions of HTCondor

Using HTCondor Features

A wishlist:

- Allow pilots to make use of Condor-F for sites with little/no network connectivity
- HTCondor-CE is based on GSI authentication but Globus dropped support for the open source project*, SciTokens could be a potential replacement
- HTCondor is exploring data transfer over HTTP, what would it take to do the same with the Batch GAHP/BLAHP?
- Improve monitoring in the HTCondor-CE View with Schedd monitoring

^{*} A community-supported fork is maintained by the Grid Community Forum (https://gridcf.org/)

Documentation

- Move the documentation from the HTCondor Wiki to Read the Docs (https://readthedocs.org/)
- Add documentation for LCMAPS/Argus and APEL accounting configuration
- Information service configuration in the OSG is handled by automatic configuration but needs to be documented for non-OSG use
- Document the Hosted CE installation for use by other grids