

# Token Transition Status and HTCondor-CE Future

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# Token Transition Status

- Detailed timeline: <https://htcondor.org/news/plan-to-replace-gct-in-htcss/>
- SCITOKENS authentication supports both the WLCG and SciTokens profiles
- Sites in the OSG Consortium completed the transition to accepting token-only glidein submission
- See Jaime's talk later about refreshing tokens

# Token Transition Status

- HTCondor 10.0.0 binaries will no longer depend on the Grid Community Toolkit
  - No more GSI authentication method
  - X.509 proxy delegation still works, e.g. for use by the job for remote storage access
- **March 2023** end of HTCondor 9.0.x support, the last release to support the Grid Community Toolkit

# Improving Token Support

- Planning the addition of a token mapping callout
  - HTCSS will verify signatures and validate the JWT
  - Add the ability to specify a callout for mapping purposes
  - Potentially useful for supporting EGI Check-In tokens and site specific logic
- Non-blocking token authentication

# Improving Token Debugging

- Token-based capabilities are more stringently controlled by collaborations vs VOMS roles
- Tool for admins to generate impersonation tokens accepted by their CE for testing and troubleshooting purposes
- <https://opensciencegrid.atlassian.net/browse/HTCONDOR-1115>

# Job Router Transforms

- “New” job router syntax is fully supported in HTCondor-CE
  - Routes split into different configuration variables
  - Defaults split into pre and post route transforms
  - If /else /endif blocks
  - Transform macros and temporary variables
- See HTCondor Week 2021 for more details:  
<https://agenda.hep.wisc.edu/event/1579/contributions/23068/>
- Starting to plan the timeline for deprecating the old syntax:  
drop it in 10.1.x?

# Configuration Testing

- `condor_transform_ads` for testing specific individual job transforms (still need to add `condor_ce_transform_ads`)
- HTCondor-CE development container
  - <https://github.com/htcondor/htcondor-ce/blob/V5-branch/tests/containers/README.dev.md>
  - Contains working local HTCondor and Slurm installation
  - Contains test user with SciToken and X.509/VOMS creds
  - Useful for testing configuration changes before prod

# APEL Accounting

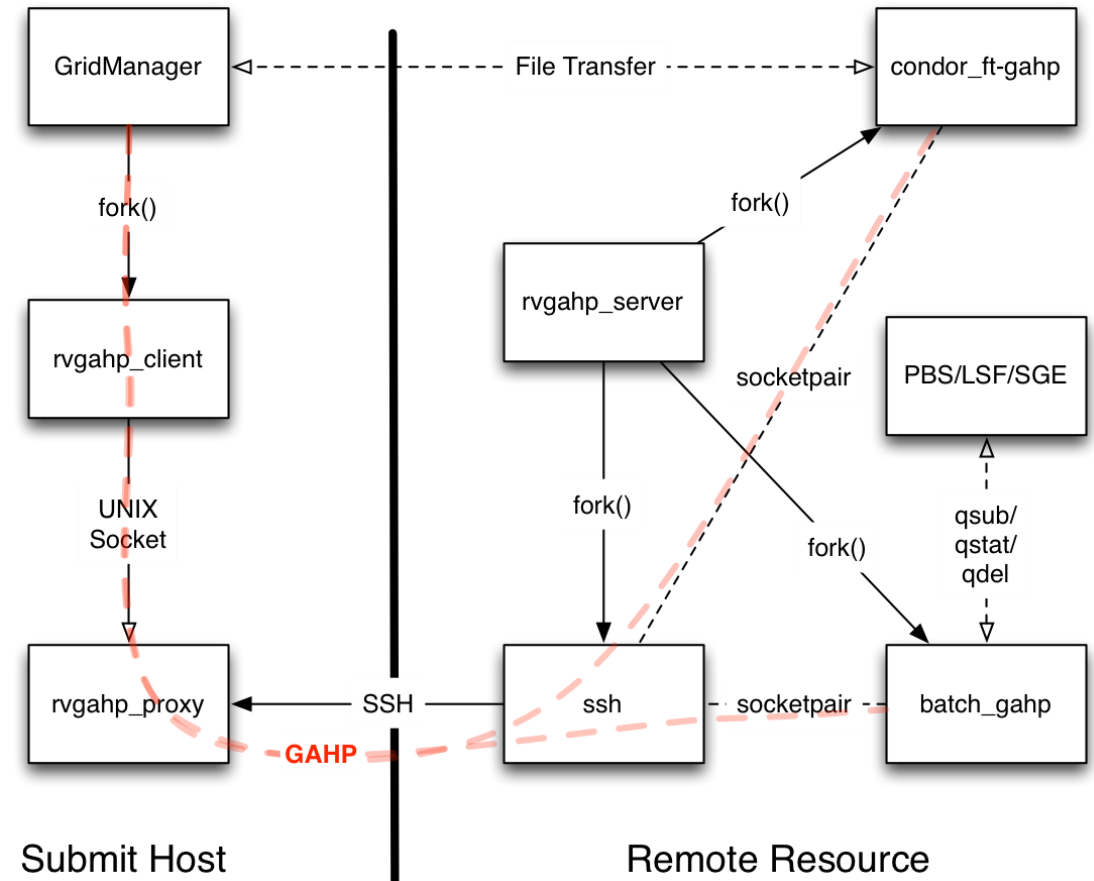
- Added support for multiple scale factors
- Improved ease of configuration
- See Max's talk for more details
- Seeking a new documentation home for these contributions



# SSH Submission with MFA

- HTCSS supports remote job submission over SSH, utilized heavily by OSG Hosted CEs
- Some sites, particularly HPCs, require multi-factor authentication
- Reverse GAHP adds the ability to open an SSH connection from the site to the remote Compute

Entrypoint (or Access Point)



From <https://github.com/juve/rvgahp>

# Updating Security Defaults

- Alignment of HTCondor-CE AUTHENTICATION, ENCRYPTION, and INTEGRITY defaults with HTCondor
  - <https://github.com/htcondor/htcondor-ce/pull/552>
- Expected to be transparent to admins but we will target a new major HTCondor-CE version
- Should we increment the version (6.0.0) or aim for alignment with HTCondor (10.0.0)?

# Questions?

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