



AMERICAN SCIENCE CLOUD

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Update on AmSC

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[AmSC Documentation](#)

[Genesis Homepage](#)

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U.S. DEPARTMENT
of ENERGY



Genesis Mission RFA Awardees

Looking for information about AmSC onboarding or using the MAG (Model Access Gateway)?

[Visit User Docs](#)



Reference information locations are solidifying

- <https://genesis.energy.gov/>
- <https://amsc.energy.gov/>
 - <https://docs.amsc.energy.gov/>
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! INFO

AmSC access is currently available only to Genesis RFA Phase I teams that have been approved for MAG access. Please do not proceed with the instructions below until the project PI has completed the "Genesis RFA Phase I Teams: Genesis Resources Planning Questionnaire" and received confirmation that they are awarded a MAG exploratory project. AmSC will then contact the project PI with onboarding instructions once the project is approved for MAG.

Currently only for Genesis RFA teams.



AmSC is open for business

IRI - Integrated Research Infrastructure

- [ALCF](#), [NERSC](#), and OLCF have build REST APIs that use long-lived tokens for system interfacing:
 - Scheduler & Storage Interactions

Inference Services

- [ALCF](#), NERSC, and [OLCF](#) are offering tokens for science.
 - At ALCF, [Tara](#) (a 2.6k H200 system) will soon be online for the dedicated purpose of LLM serving. Our Sophia system has already been serving tokens for six months.

Federated ID

- This currently works for AmSC services, think OpenMetadata Service, MLflow, ClearML, MAG (Model Access Gateway), etc.
- While the technical needs are in place for the HPC sites, policy discussions are still on going.



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This will feel piecemeal for a while, but we've come a long way in one year. We are still moving forward as fast as we can.



AmSC Services Coming Soon

Data Integration

- All DOE data can be logged in the OpenMetadata Service, which acts as a catalogue of data files and collections that are hosted throughout DOE sites.
- These entries can be used to trigger data transfers between sites.
 - Starting with Globus Transfer, the moving to integrate other services (xrootd, rucio, [<enter-your-favorite-here>](#)).

Model Integration

- [Weights and Biases](#): Tracking Model Training
- [MLflow](#): AI Model Catalog and Experiment Tracker
- [ClearML](#): AI Experiment Workflow Management

Model Access Gateway

- Supply of Industry and DOE LLM tokens

Programmatic API

- REST API & Python API

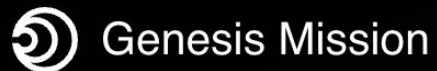


Federated ID Status

- Currently have 11 ID sources integrated:
 - 9 National Labs + ALCF & OLCF
 - Remaining labs are in development
 - This allows members of those institutions to login to AmSC Services using their existing credentials.
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- Integration with IRI is still under development.
 - Cyber Policies being iron out between lab leadership.
 - To get the ball rolling we may begin with a more restrictive posture and take more time for policy to catch up to the Federation.



AmSC Timeline



- Genesis RFA Phase 1 Teams being onboarded now with the goal of MAG, HPC resource usage in October.
- Phase 2 announcements expected within a month.
- AmSC Year 2 starts soon and will transition from a development phase to an operational phase.

