NSF Campus Cyberinfrastructure PI and
Cybersecurity Innovation for Cyberinfrastructure PI Workshop
September 23 – 25, 2019 | Minneapolis, MN

Quad Chart for: *E-CAS Exploring Clouds for Acceleration of Science*

Challenge Project Seeks to Address:

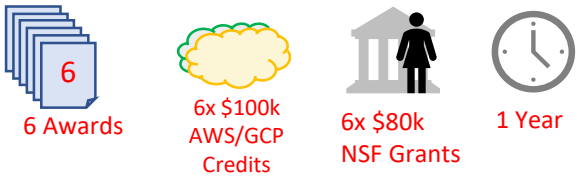
- Investigate the viability of commercial clouds for leading-edge research computing and computational science supporting a range of academic disciplines
- Leverage the novel capabilities of cloud heterogeneous hardware resources and platforms, such as CPUs, GPUs and FPGAs, for scientific applications and workflows .
- Achieve the best time-to-solution for scientific applications and workflows using cloud computing.

Deliverables:

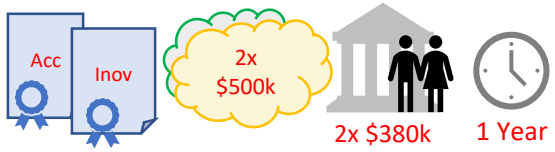
- Facilitate review process and sub-award administration.
- Identify common issues across projects and cloud providers
- Identify gaps and limitations in provider capabilities
- Document patterns in software stacks and deployment practices.

Phase 1 – sponsored by AWS & GCP Credits & NSF Grants

2 projects AWS
2 projects on CGP
2 projects multi-cloud +AWS/GCP
Most projects also using XSEDE and Campus Compute allocations



Phase 2 – Funded by NSF grants



2x NSF Grants =< $880k each including staff and overheads for 1 year

Scientific Impact or Broader Impact:

- Demonstrator of new technologies and multi-cloud integrations
- Access to the newest technologies including GPUs, FPGAs and Machine Learning platforms
- Supporting development of 6 individual science projects
- Developing learnings for future computational research platforms using commercial clouds.

Metadata tag:

https://internet2.edu/ecas

Updates at:
Internet2 TechEx2019, New Orleans

Full phase 1 review workshop:
Internet2 Global Summit 2020