NSF Campus Cyberinfrastructure PI and Cybersecurity Innovation for Cyberinfrastructure PI Workshop

October 3-4| Albuquerque, New Mexico

NSF Program: CC*

Program Area: OAC(Datanet) **Award Number:** *1659300*

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Project Title: National Cyberinfrastructure for Scientific Data Analysis at Scale (SciDAS)

SciDAS

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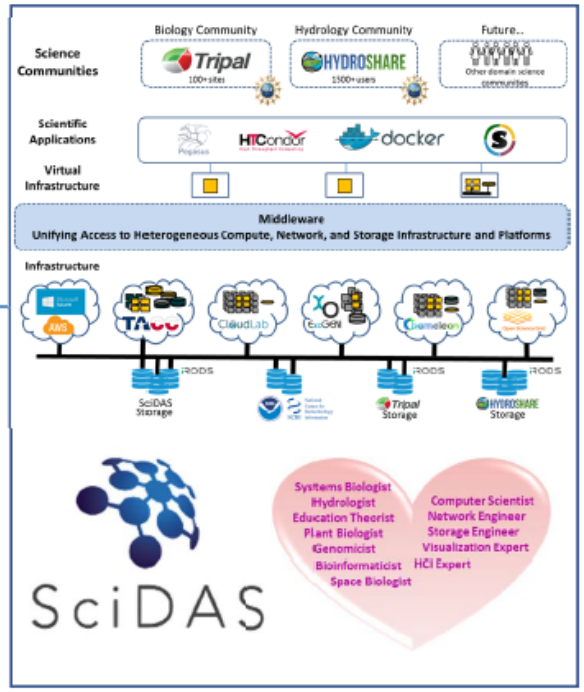
Quad Chart for: National Cyberinfrastructure for Scientific Data Analysis at Scale (SciDAS)

Challenge:

Computer scientists & engineers build amazing systems, but **domain scientists are having problems scaling up** their data-intensive scientific applications: nodes break, storage/RAM/CPUs are finite, total compute time is uncertain.

Solution:

Embed **active end users** moving and processing petabytes of data within agile cyberinfrastructure developer teams. **Glue existing subsystems** that discover domain data, manage **fluid data movement** across advanced networks, launch comfort-zone scientific applications, and improve flexibility and accessibility to national and global resources.



Scientific Impact:

- Compute-centric: Enable scientific workflows across multiple, highly interoperable and cross-discoverable CI.
- Network-centric: Enable seamless integration of networked infrastructure including Clouds, DMZ and National CI.
- Data-centric: Enable seamless integration of heterogeneous data and data sharing infrastructure for active domain communities via Tripal and Hydroshare.
- Informatician-centric: Developed for users who know how to troubleshoot. Turnkey solutions are unrealistic at the terascale at this time.

Metadata tag:

scidas.org