Advancing scientific discovery through a national network of Advanced Cyberinfrastructure (ACI) Research and Education Facilitators (ACI-REFs).

https://aciref.org

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Background and Context

National – HPC as Demand Driver
- Labs, Centers, PACI, TeraGrid, XSEDE, OSG

Campus Computing Demand Growing in Parallel
- MRIs, CRIs, Start-Up Packages
- Condo and Co-lo Approaches
- Big Data Driving New Communities

University based research computing operations thin on people

ESPECIALLY user-facing people

Result
- Training and education gap between resources and researchers – high barrier to entry without human assistance
  - ...and the barriers become higher as we bring in new communities

Takeaway: We Need People!
Answered Need: The ACI-REF Project (People)

Goal: Seed investments in user-facing people – facilitators – at campuses to:
  
  • Assist researchers in taking advantage of advanced computing resource investments, especially at the local campus level; and
  
  • Build inter-institutional collaborative networks of knowledge to share expertise across campuses.
$5.3M NSF Award supports the project leadership team and 2 Facilitators for each of the 6 partner sites for 2 years.

PI: Jim Bottum, Clemson

Project Leadership:
• James Cuff, Harvard (PI Chair)
• Maureen Dougherty, USC
• Gwen Jacobs, Hawaii
• Paul Wilson, Wisconsin
• Tom Cheatham, Utah
• Barr von Oehsen, Clemson

Facilitator Lead: Bob Freeman, Harvard

Chief Scientist: Miron Livny, Wisconsin

...in NCE, planning phase 2
• Add in technical & resource sharing
• Diversify ACIREF’s capabilities / experience
ACI-REF Best Practices of Facilitation

What is an ACI-REF, and What Activities Exemplify Facilitation?

Introduction and Main Ideas

Major Activities of Facilitation

Definitions

Appendix

Contribute

Acknowledgements

Learn more about the ACI-REF program
Challenges:

• We all have different approaches, styles, funding models, experience, ...

• How to scale / grow (RCN → CaRC)?

• Collaboration with other organizations (XSEDE CC, regional entities, CASC, …)

• Sustainability

• Workforce development / identity?

• How to elevate visibility and importance of facilitation on campuses and nationally?