Broadly Available Compute Cycles

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L&S IT Office
Historical Research Computing

- CPU scavenging for Physics Einstein@Home project
  - Top 10 contributor 2007-2010
  - Installed on 636 L&S instructional computers
- Ad-hoc CPU scavenging efforts for faculty in Economics and Political Science departments.
- Various local dedicated research group clusters
“Computing is now ubiquitous in research. Virtually every scholarly discipline has a computationally-oriented wing, and there are countless research areas where the state-of-the-art is driven by advances in computing. To advance its research agenda and ensure the success of the new research clusters, UWM must invest in the cyberinfrastructure which supports those activities.”
High Performance Computing Service

- 108 active accounts in support of grant funded research
- Unique model of College level facilitator driven support
- Glowing reviews of the level of support offered to UWM researchers
- Presented to Midwest Educause 2011

- Currently precludes independent graduate and undergraduate level research.

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Digital Future Proposal

• Rededicate CPU scavenged resources to broadly available grid
• Partner with UITS/CEAS on Ed. Tech funded Instructional Cluster
• Offer same level of support to graduate and undergraduate programs
• Allow for the utilization of research computing resources within curriculum to investigate real world problems
  • Pilot begins in Spring ’12 in Economics and Math
• Better prepare existing students and better recruit potential students
Undergraduate HPC experiences

“Thanks to this experience, my transition to graduate studies at Colorado State University was effortless... My experience with high performance computing on the cluster at UWM gave me quite a head start here at CSU, and I am very grateful for having had that opportunity.”
Graduate HPC experiences

“You need to have the practical experience and opportunity to put it to use. Hands down without the exposure to HPC I would not have been considered for the position at NCAR (National Center for Atmospheric Research).”