



Information Technology Committee Meeting

SURA Board of Trustees Meeting
Friday, November 7, 2008

Real and Virtual IT Committee Meeting

- Session was well attended (29 attendees)
 - ◆ 13 people on-site
 - ◆ 16 people remote (voice and webcast)
- Agenda
 - ◆ Reviewed and Approved 3 Board Resolutions
 - ◆ Strategic Planning Overview
 - ◆ Program Overview
 - ◆ Federal Funding Overview
 - ◆ JLab Lattice QCD HPC Case Study and Tour
 - Robert Edward, Chip Watson, Roy Whitney

IT Steering Group Composition

Resolution 09-03 (Proposed) IT Committee Steering Group Appointments

WHEREAS THE INFORMATION TECHNOLOGY COMMITTEE Steering Group is comprised of members of the SURA Board of Trustees and extended members of the full IT Committee who may or may not be Trustees; and,

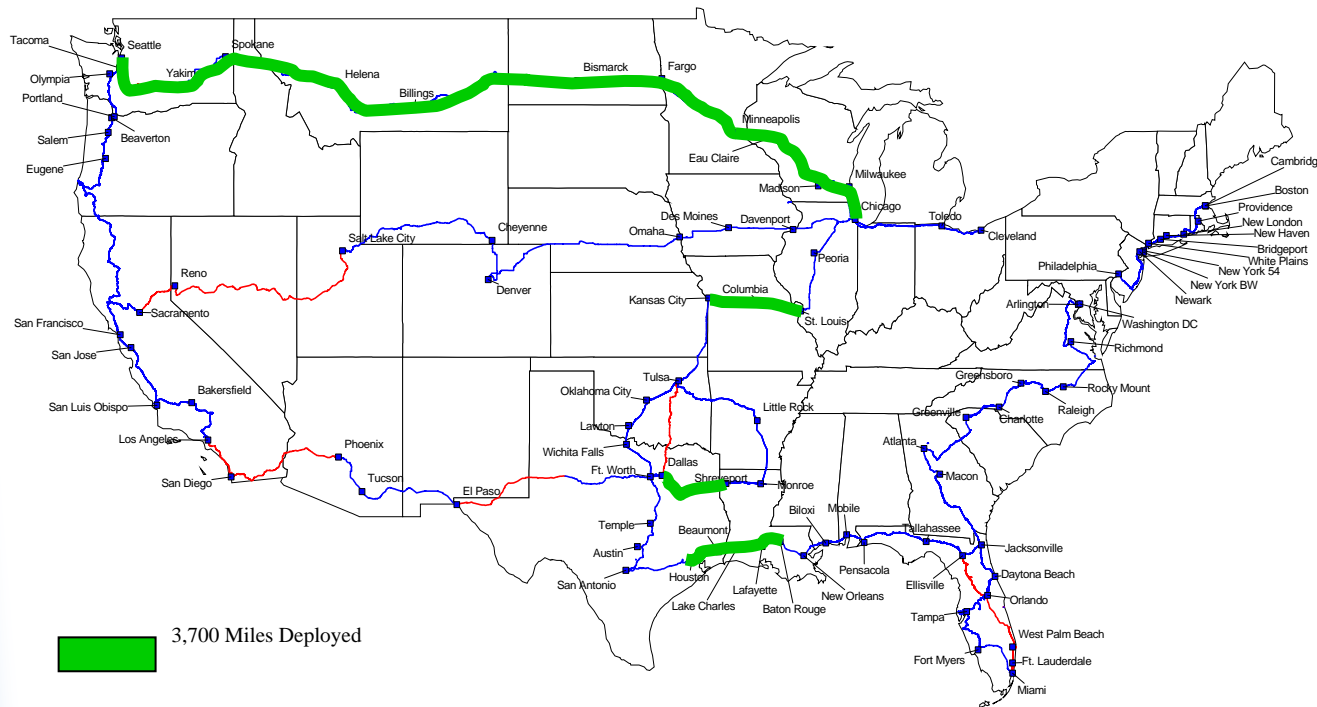
WHEREAS THE SURA BOARD OF TRUSTEES shall elect the members of steering groups of its Committees;

NOW, THEREFORE, BE IT RESOLVED that the SURA Board of Trustees elects the following members of the SURA IT Steering Group for the terms specified:

- ◆ David Lambert (Georgetown) IT Committee Chair, *ex-officio*
- ◆ John Mullin, Georgia Tech, Trustee thru 2009
- ◆ Sara Graves, UAH , new member thru 2009
- ◆ Richard Newman, Florida Tech, Trustee thru 2010
- ◆ Marc Hoit, NC State, new member thru 2010
- ◆ J.L. Albert, Georgia State, renewing Trustee thru 2011
- ◆ Brian Voss, LSU, renewing member thru 2011
- ◆ Don Riley, UMd, SURA Fellow, President's Designee

AT&T Fiber Program Resolutions

AT&T Fiber Deployments



Program completed Sept. 30, 2008

- 5 Yr Agreement
- Ended Sept. 30, 2008
- Implemented by:
 - LONI
 - LEARN
 - MoreNet
 - NERO
 - PNWGP
 - NTNC
- 3,700 miles deployed
- Two Resolutions
 - Thanking AT&T
 - Thanking GEO/IEEAF



Resolution of the *Southeastern Universities Research Association* Regarding the Success of the AT&T-SURA Agreement

WHEREAS AT&T made available, at no cost to SURA and the nation's R&E community, 6,000 miles of dark fiber network in an agreement announced December 16, 2003; and

WHEREAS these assets were intended to help develop advanced network services and enable grid computing initiatives in support of advanced research that would not be possible using a commercial network; and

WHEREAS advanced optical networks enable computing facilities, scientific data repositories and shared applications, allowing researchers to more rapidly solve complex problems, conduct computer-intensive research or analyze vast amounts of data; and

WHEREAS, SURA and AT&T's efforts through this program have provided researchers and students across the country and particularly in the difficult to reach institutions in the northern tier of the US (institutions located between Chicago and Seattle) with advanced network services that would not have been possible otherwise; and

WHEREAS, a total of 3,697 miles were deployed through this agreement by SURA to regional optical networks, including the Louisiana Optical Network Initiative (LONI) with 284 miles (Longview - Shreveport & Beaumont - Baton Rouge), the Lone Star Education and Research Network (LEARN) with 244 miles (Dallas - Longview & Houston - Beaumont), the Network for Education and Research in Oregon (NERO) with 294 miles (Eugene - Portland), the Missouri Research and Education Network (MOREnet) with 566 miles (Kansas City - St Louis) and the PNWGP / Northern Tier Network with 2455 miles (Seattle - Chicago); and

WHEREAS, the National LambdaRail architecture was transformed by the SURA-AT&T influence resulting in the creation of major SURA region optical networking organizations (the Louisiana Optical Network Initiative, Florida LambdaRail and the Lone Star Education and Research Network); and

WHEREAS, the contribution of this five year partnership will continue to foster excellence in research and strengthen the scientific and technical capabilities of the nation and of the Southeast – SURA's central mission.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Trustees of the Southeastern Universities Research Association (SURA) expresses its gratitude to AT&T and to the partnerships forged with the regional optical networks that benefited from this agreement.



Resolution of the *Southeastern Universities Research Association*

Regarding Contributions by Geographic Network Affiliates International (GEO) and the Internet Educational Equal Access Foundation (IEEAF) to the Success of the AT&T-SURA GridFiber Agreement

WHEREAS Geographic Network Affiliates International (GEO) and the Internet Educational Equal Access Foundation (IEEAF) were instrumental in securing the AT&T donation of dark fiber assets to SURA through the SURA-AT&T GridFiber Agreement, and

WHEREAS GEO and IEEAF have thereby significantly contributed to SURA's central mission to foster excellence in research and strengthen the scientific and technical capabilities of the Southeast and the nation,

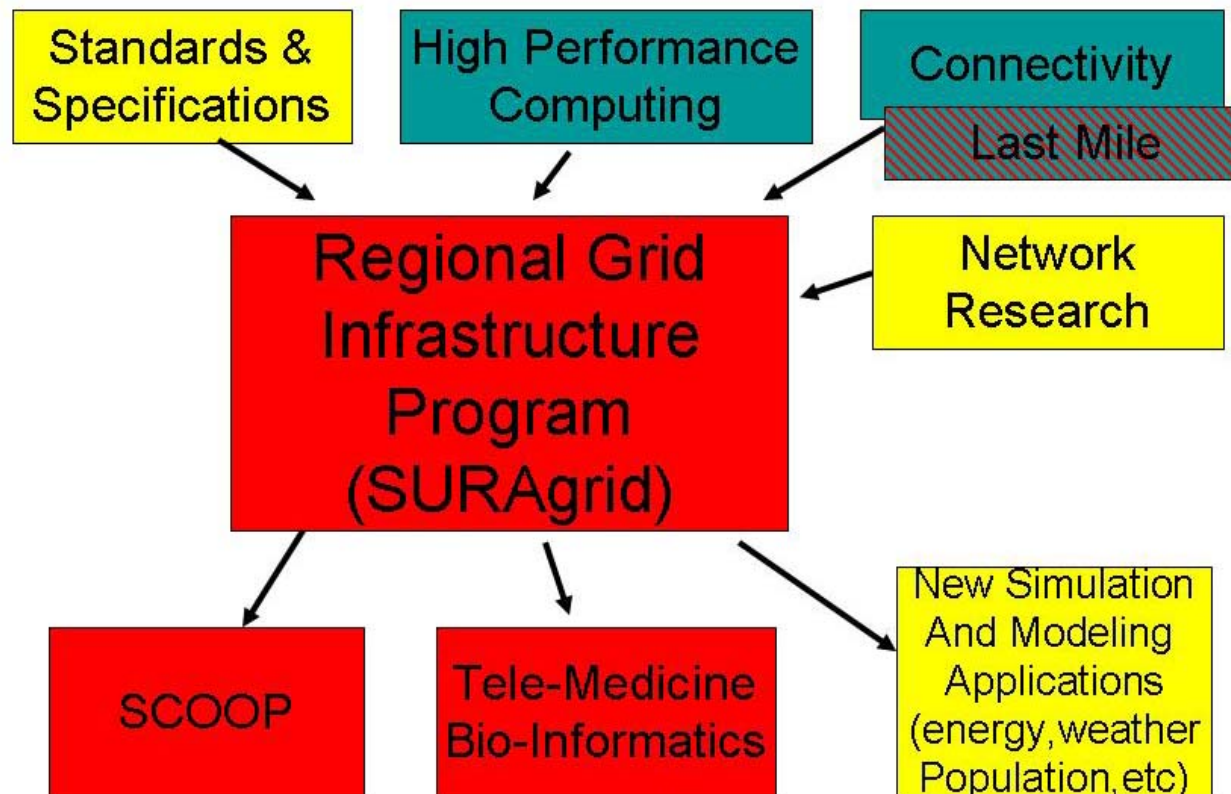
NOW, THEREFORE, BE IT RESOLVED, that the Board of Trustees of the Southeastern Universities Research Association (SURA) expresses its gratitude to Ed Fantegrossi, Chair and CEO of GEO, and the IEEAF.

SURA IT History

- IT Committee expands to include member CIOs
- Formed Leadership IT Steering Group (ITSG)
- Hired staff - Created Program Fund - Started Regional Infrastructure Initiative
- AT&T Agreement – NLR Engagement – AWave
- Developed IT Strategic Plan
- Focused on regional network and HPC infrastructure

Revised IT Strategy: *It's All About Grids*

November 2005



SURA IT Strategy Revisions

2008

Formed
SURA IT Strategic Planning Group
Initiated by IT Steering Group
the Strategic Planning Group includes CIOs,
VPRs, Research Computing Leaders and
Researchers

Applied data driven
approach to planning

SURA region and membership profile
created, highlighting the
cyberinfrastructure capabilities is
completed by SURA staff.

Regional Insights

- Geography is important
 - ◆ 37% of the US population
 - ◆ 10 EPSCoR states
 - ◆ 95% of the nation's HBCUs
 - ◆ 22% of the nation's Hispanic Serving Institutions (HSIs)
- SURA region has built a strong base of advanced networks and HPC
- SURA members are major contributors to regions CI capabilities
- Majority of agency funds coming into the region are from NIH and NASA
- Should we pursue opportunities that don't fit the traditional SURA targets
- High number of HBCUs in region, but low involvement in SURA.
- Underutilizing national HPC resources

Strategic Planning Meeting Atlanta, GA

August 2008

- Preparation included SURA region data analysis
- Vetting of concepts for major new initiatives for SURA IT
- Outcome fell short of aggressive goals for several reasons:
 - ◆ Need to effectively engage with researchers in the region that can utilize CI services
 - ◆ National networking community in flux (I2, NLR, TeraGrid re-competition (TeraGrid XD) ...organizational change abounds)
 - ◆ Economic uncertainty (pressure of reduced institutional budgets)
 - ◆ Strong demand for CIOs to focus on campus issues (security breeches, disaster recovery, copyright protection, campus HPC infrastructure...)
- Resulted in a set of shorter term incremental recommendations

Conclusions/ Future Direction

Leverage SURAgrid community activities and plans by:

- Focusing on improving the ability of researchers in the SURA region to **access and use** local, regional and national CI services. Consider creating a SURA Research Advisory Council.
- Develop a program targeted at **lowering the barriers** to the use of local, regional and national CI services by underserved communities (MSIs, HBCUs, EPSCoR) (leverages SURAgrid community activities).

Leverage SERON community activities by:

- Investigating ways to leverage state and regional political priorities and engage with corporate partners to **improve the use** of CI services in support of research, emergency response and disaster recovery.

Next Steps

- **Link** broad SURA IT direction with existing SURAgrid strategic plan and SERON project goals
- **Revisit** SURA IT strategy in 6 – 12 months to adjust for:
 - ◆ Changing economic conditions
 - ◆ New funding opportunities
 - ◆ Changing political environment
 - ◆ International drivers

Closed Meeting With

- ◆ SURA IT Program Overview – Gary Crane
- ◆ Federal Funding Overview – Sue Fratkin
- ◆ JLab Lattice QCD HPC Case Study
 - Robert Edward, Chip Watson, Roy Whitney
- ◆ Tour of JLab HPC Machine Room