



Welcome

Conference Bridge: 800-377-8846

Access Code: 14421498

Monday WebEx Meeting Number: 806 764 581

Password: allhands

Link: (very long – see agenda)

- 08:00 – Gather (coffee provided)
- 08:30 – Governance Overview – Jim
  - Strategic Plan
  - By-Laws
  - Participation
- 09:15 – Site Report Highlights
- 10:00 – Break
- 10:15 – Tech Talk – New PKI authentication process – Allen/J-P
- 12:00 – Lunch (provided)
- 13:00 – User Experiences
- 13:30 – Technical Session
  - History of R on Sura Grid - Steve
  - Replication of process using Octave - Steve
  - Example of getting the code to run - Steve
  - RPM installfest. - Steve
- Discussion / Q&A

- Jim Lupo – LA St. U.: Chair (May 2014)
- John-Paul Robinson – U. AL-Birmingham (May 2014)
- Byunggu Yu – U. D.C. (May 2014)
- Steve Johnson – TX A&M (May 2014)
- Phil Smith – TX Tech. U.: Co-Chair (May 2013)
- Bill Gruszka – GA St. U. (May 2013)
- Gary Crane – SURA Liaison

- Bill and Phil have accepted nomination to repeat on the SGC.
- A call for vote will be sent out after this meeting.
- Issues with participation by voting leads that will be a topic for later discussion.

- Revised Strategic Plan
- Formal By-Laws replacing formation documents.
- Established SURAGrid Virtual Organization within OSG.

Will summarize the first two bullets, and the SGVO will be the focus of most of the technical discussions during the meeting.

- **Previous plan ran from 2008 – 2012.**
- **Reflects changes in SURAGrid cyberinfrastructure model:**
  - **SURAGrid was pursuing a custom grid – too much reinventing the wheel.**
  - **Open Science Grid (OSG) Virtual Organization (VO) is good fit.**
- **Rational:**
  - **Leverage support infrastructure**
  - **Leverage identity management services.**
  - **Allow reach beyond SGVO specific services.**
    - **Same methods can be used for none-SGVO sites.**



## Strategic Plan Goals

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1. Develop tools to gauge SURAGRID community participation.
2. Implement policies and procedures for application Users.
3. Develop and implement the coordination policies and agreements for application Enables.
4. Develop policies and procedures for Resource Suppliers.
5. Encourage strategic partnerships and shared use of community, regional and national resources.

- Vote on Plan was called for in December 2012.
- 12 of 20 Voting Leads voted in favor, with none against.
- Considered passed with just over 50% majority.
- At same time, SGC was reduced from 9 to 7 members.

This raised some questions within the SGC as to membership, voting, determining majorities and such.



- In the attempt to answer such governance questions, the controlling documents were reviewed in detail.
- Three separate documents related to the formation of the SURAGRID defined the formal structure and were vague on many details.
- SGC pursued creation of a set of By-Laws for the SGC, using the formation documents as a basis.
- Main goals were to:
  - Codify membership status
  - Identify rights and responsibility
  - Provide guidance on SGC size and changing member status.

- An acceptance vote was called for in February 2013, noting that the SGC would cast proxy votes if members did not respond.
- Voting was closed in March, with 11 Voting Leads in favor, and none against.
- The By-Laws are considered approved.

It is disconcerting to note that only 13 members participated in either or both of the votes.

- Define 3 Membership Classes: Contributing, Participating, Partnership.
- Define responsibilities for each class – allow SGC cast proxy votes in the event a Contributing member fails to respond to a call for vote.
- Sets function and size of the SGC. Language to minimize churn at election time.
- Sets process for changing the By-Laws on vote required to approve changes.

- Required of all Contributing Members annually.
- Site rep can speak to slide as I bring them up.

Voting Lead: Bill Gruszka, [billgruszka@gsu.edu](mailto:billgruszka@gsu.edu), 404-413-4469  
Staff Support: Neranjan Edirisinghe Pathiran, [neranjan@gsu.edu](mailto:neranjan@gsu.edu), 404-413-4441  
Websites: <http://technology.gsu.edu/research-computing>

## Activities (May 2012 – May 2013)

- 1. Georgia State currently has a Linux cluster available to the grid. We will soon decommission this cluster, as we have recently deployed newer, high-performance computing systems. The new cluster should be available as a SURAGrid resource in the next few months.**
- 2. Our resources consist of an IBM P-7 (AIX), a Linux Cluster (Batch) and a LINUX Cluster (interactive and soon to be batch). Currently, the batch Linux cluster is exposed to the Grid.**
- 3. Support for our systems is an important priority. We now have a dedicated support person in place, replacing a staff retirement in June. Among the first responsibilities of our new support staff is getting on the SURAGrid so we can extend that knowledge to our research faculty.**
- 4. Research areas : Dynamical Neuroscience, Cancer (atomistic and microscopic) , Semiconductor (topological insulators, IR-detectors, nano-plasmonics ) , Renewable Energy.**
- 5. Our local resources have a high utilization rate and are current near full capacity. We do have demand for grid computing; we will conduct training sessions (workshops / user group meetings ) and build strong research computing community.**

## Plans (May 2012 – May 2013)

- 1. Overall, IS&T (the central IT support organization) will be reaching out and increasing its engagement with researchers. Part of this engagement should lead to an increased use of SURAGrid as more researchers become familiar with its resources and the methods of access.**
- 2. In the coming year, it is our intent to expose our new Linux cluster to the SURAGrid and make those resources available to the community. We will also engage our researchers and guide them to the SURAGrid.**
- 3. One dedicated staff member, and several other staff members who are available as needed, support the researchers.**
- 4. Our demand would mainly be atomistic simulation of biological systems. (NAMD and Amber). We also have huge computational demands for parallel computations (parameter search in neuroscience).**
- 5. We are initiating user group meetings, which will become the main platform for SURAGrid training. We wish to conduct short workshops on parallel and distributed computing and this will also help us to interact with researchers on SURAGrid.**
- 6. We have migrated to the OSG certificate authority and will be actively recruiting researchers to extend user access to OSG/SURA resources.**



Voting Lead: James A. Lupo, [jalupo@cct.lsu.edu](mailto:jalupo@cct.lsu.edu), 225-578-8899  
Staff Support: Sys-Help, [sys-help@loni.org](mailto:sys-help@loni.org), 225-578-0900  
Websites: <https://www.hpc.lsu.edu>

## Activities (May 2012 - May 2013)

1. Last of LSU and LONI IBM Power5 systems were retired.
2. New 440 node Dell cluster, QDR IB, 400TB Lustre file system, Intel E5-2670. 3 head nodes (64GB ea.), 382 compute nodes (32GB ea.), 1 1TB node, 8 in ScaleMP SMP configuration with 2TB total. 50 with 64GB and dual NVIDIA M2090.
3. Hiring problems limiting available support staff.
4. Support the SURAGRID mailing list.

## Plans (May 2013 - May 2014)

- Upper level commitment to contribute hardware support, but identifying support staff has been an issue.
- Usage now requires an allocation, complicating matters.

**Voting Lead:** Steve Johnson, [steve@math.tamu.edu](mailto:steve@math.tamu.edu), 979-845-4267  
**Staff Support:** Mathematics Help Desk, [help@math.tamu.edu](mailto:help@math.tamu.edu)  
**Websites:** <http://calclab.math.tamu.edu>, <http://brazos.tamu.edu>

## Activities (May 2012 – May 2013)

## Resources

- **TAMU\_BRAZOS** – hybrid AMD/Intel, IB/GigE.320 cores available to SURAGrid via “grid” queue.
- **TAMU\_Calclab** – Dell Optiplex Desktops.900 cores available to SURAGrid during off hours.

## Support

- Installation and configuration of R and Octave on SG resources
- Documentation of installation processes on SG wiki
- RPM Install Fest
- Governance Committee member
- Liaison to OSG



## Plans (May 2013 – May 2014)

- **Contributed Resources - same**
- **Support**
  - **Updates to R and Octave**
  - **Implement a Status web page**
  - **Generalize and simplify SG software management**
  - **Explore meta-schedulers and workflow managers**
  - **Job submission and tracking via web**
- **Research**
  - **Two potential projects from Mathematics**
  - **One potential project from Chemical Engineering**

**Voting Lead:** Philip Smith, philip.smith@ttu.edu, 806-742-4350  
**Staff Support:** Jerry Perez, jerry.perez@ttu.edu, 806-834-6929  
**Websites:** <http://www.hpcc.ttu.edu>

### Activities (May 2012 – May 2013)

- 1. TTU HPCC with TTU Center for Biotechnology and Genomics developed and taught a graduate level Intro to High Performance Computing and as taught in the fall of 2012 and Spring of 2013. Students learned about the TTU HPC cluster Hrothgar and the campus desktop grid TechGrid. The class was well attended.**
- 2. Trouble shot and deployed instructions to install new OSG RPM packages replacing the SURAGrid “one button install” Pacman installation package. There were many bugs but they were found and reported to the OSG.**
- 3. New SURAGrid Certificates procedure using Digicert certificates has been published and tested. These certificates replace the expired DOE certificates. Instructions to acquire new SURAGrid certificates have been published here: [https://docs.uabgrid.uab.edu/suragrid/Requesting\\_Personal\\_Certificates](https://docs.uabgrid.uab.edu/suragrid/Requesting_Personal_Certificates)**
- 4. Research: Working with Climate Modeling group to expand their R application “step down” to work on SURAGrid. Three members of the research group have received their new Digicert certificates. Test runs have been successful. The challenge is to have the “step down” application submit script submit thousands of runs at once.**

## **Plans (May 2013 – May 2014)**

- 1. Add more TTU users to SURAGRID. R users are low hanging fruit.**
- 2. Update Pacman installation to OSG RPM installation on TTU clusters Weland and Antaeus.**
- 3. Create new documentation to reduce time to grid enable user's applications.**
- 4. Partner with SURAGRID members to build momentum to maintain constant usage of SURAGRID resources.**

Voting Lead: John-Paul Robinson, [jpr@uab.edu](mailto:jpr@uab.edu), 205-975-0124  
Staff Support: UAB IT Research Computing, [support@vo.uabgrid.uab.edu](mailto:support@vo.uabgrid.uab.edu)  
Websites: <http://docs.uabgrid.uab.edu>

## Activities (May 2012 – May 2013)

1. Activity: no SURAGrid VO associated OSG compute time
2. Resources: Campus compute fabric not shared via OSG  
868 core commodity cluster with 3 hardware generations
3. Support: SURAGrid Wiki <http://docs.uabgrid.uab.edu/suragrid>
4. Research: Molecular docking workflow on campus Condor and OSG  
[http://docs.uabgrid.uab.edu/wiki/UAB\\_Condor\\_Report](http://docs.uabgrid.uab.edu/wiki/UAB_Condor_Report)
5. Outreach: UAB Research Computing Day  
<https://docs.uabgrid.uab.edu/wiki/2012>
6. Other items: April 2013 - Implement OpenStack + Ceph Research Cloud  
<http://blogs.uabgrid.uab.edu/jpr/2013/03/were-going-with-openstack>

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## **Plans (May 2013 – May 2014)**

**Community Building: Support OSG submit node for UAB users to encourage OSG adoption**

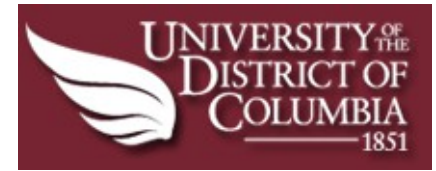
**Contributed Resources: Contribute compute nodes to OSG to support transparent job submission**

**Operational Support: Continue hosting SURAGrid wiki**

**External Funding: Partial grant offset for research associate  
Developing storage charge model for Gigabyte-Month billing**

**Corporate Partnerships: Dell and Inktank Supported OpenStack Research Cloud  
Continued Exploration of Internet2 NET+ services**

**Other plans: Explore SGE-to-OSG direct job translation**



Voting Lead: Byunggu Yu (on sabbatical) and Dong Jeong, [djeong@udc.edu](mailto:djeong@udc.edu)  
Phone: 202-274-7455

Websites: <http://csitcloud.udc.edu>

### Activities (May 2012 – May 2013)

**Resources:** UDC Cloud (<http://csitcloud.udc.edu/>)

**Research:** Big Data analysis on network traffic data

**Outreach:** Community outreach has not been performed successfully due to limited interests on cloud computing.

**Other items:**

FutureGrid project (SGVO Cloud Options Working Group formed in 2012)  
Collaboratively working with the NIST SAJACC workgroup.

### Plans (May 2013 – May 2014)

**Community Building:** A survey is going to be performed to build a community outreach.  
<http://www.surveymonkey.com/s/XC2TQF3>

**Contributed Resources:** Operation and support of UDC Cloud

**External Funding:** About \$90K for Big Data Analysis from DOD

**Other plans:** Based on the survey result, possible future directions of the COWG will be determined.

**Voting Lead:** Erik Deumens, [deumens@ufl.edu](mailto:deumens@ufl.edu), Phone 352-392-6980  
**Staff Support:** Yu Fu, [yfu@hpc.ufl.edu](mailto:yfu@hpc.ufl.edu), Phone 352-392-7850  
**Websites:** <http://researchcomputing.ufl.edu>

### **Activities (May 2012 – May 2013)**

- 1. Internet2 Innovation Platform: UF is first site to complete all 3 reqs.**
- 2. Provided compute and storage resources to OSG, mostly LHC-CMS related.**
- 3. Total campus capacity 24,000 cores and 5 PB of storage for research.**
- 4. Support SSERCA statewide collaboration submitted NSF 13-528 proposal for storage.**
- 5. Research MRI grant funded upgrade of Science DMZ from 20 Gbps – 200 Gbps.**
- 6. InCommon certification in place**

### **Plans (May 2013 – May 2014)**

- 1. Community Building: Implement Eduroam.**
- 2. Contributed Resources: Contribute to OSG.**
- 3. Operational Support: Explore distributed storage iRODS across the state**
- 4. External Funding: NSF 13-528 pending**



**Voting Lead:** Shawn McKee, smckee@umich.edu 734 764-4395  
**Staff Support:** Bob Ball, ball@umich.edu 734-936-1029  
**Websites:** <https://www.aglt2.org/wiki/bin/view/AGLT2/WebHome>

## Activities (May 2012 – April 2013)

- 1. Community Building:** Long-time member of OSG
- 2. Contributed Resources:** Access to 5000 core cluster, 100 job slots typically available but more with some interaction with us about user requirements.
- 3. Operational Support:** Via our standard Tier-2 support
- 4. Research Applications:** Main applications are LHC/High-energy Physics

## Plans (May 2013 – April 2014)

- 1. Community Building:** Continue participating in OSG
- 2. Contributed Resources:** Continue providing access for SURAGrid to Tier-2
- 3. Operational Support:** Via standard Tier-2 support
- 4. External Funding:** Funding from NSF and some from University
- 5. Other plans:** Willing to test new options with other SURAGrid members





**Voting Lead:** Gary Crane, [gcrane@sura.org](mailto:gcrane@sura.org), 315-597-1459  
**Staff Support:** Linda Akli, [akli@sura.org](mailto:akli@sura.org), 202-408-2417  
**Websites:** [www.suragrid.org](http://www.suragrid.org); <http://www.sura.org/programs/it.html>

## Activities (Sept. 2012 – May 2013)

- **Community Building:** Participated on SURAgrid Governance Committee, participated in updating SURAgrid strategic plan.
- **Contributed Resources:** SURAgrid Website; Conference Bridge; WebEx, Mailing Lists
- **Operational Support:** Managed mailing lists; posted materials to SURAgrid Website; hosted Spring SG All Hands meeting.
- **Research Applications:** No application deployment activity.
- **Outreach:** Solicited UMiami participation in XSEDE Campus Bridging Early Adopters Program.

## Plans (May 2013 – Fall 2013)

- **Community Building:** Provide liaison with SURA IT Committee and other SURA programs.
- **Contributed Resources:** SURAgrid Website; Conference Bridge; Mailing Lists
- **Operational Support:** Continue SURAgrid Governance Committee participation; and contribute to an updated SG Strategic Plan.
- **External Funding:** No proposals currently identified.
- **Corporate Partnerships:** No active corp. partnerships.

## **Break**

Will leave the line open. Back in ???

Technical Talk on PKI will follow.

## PKI Presentation Placeholder

# Lunch

The line will remain open. Will reconvene at 12:45

## User Experiences Place Holder



## Technical Session Place Holder



## Open Discussion Session

## End of Monday Session

Note we start at same time, 0830, on Tuesday, but the WebEx information changes.

Tuesday WebEx Meeting Number: 806 372 756

Password: allhands

Link: (very long – see agenda)



## Welcome

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Link: (very long – see agenda)

- **08:00 – Gather (coffee provided)**
- **08:30 – Cloud Working Group Report – Interactions with FutureGrid**
- **09:00 – Round Table on Growing SURAGrid**
  - **Funding Opportunities?**
  - **Mutual Support?**
  - **Sustainability?**
  - **Community Outreach?**
- **12:00(?) - Adjourn**



# Participation Summary

Spring Meeting and Participation Summary			17 May 2013	Annual	Voting	
	Contributing Members	Name	Email	Report	By-Laws	Strat. Plan
1	University of Alabama at Birmingham	John-Paul Robinson	jpr@uab.edu	*	*	*
2	University of Arkansas	David Chaffin	dchaffin@uark.edu			
3	University of Central Florida	Sergio Tafur	stafur@ist.ucf.edu			*
4	University of the District of Columbia	Byunggu Yu	byu@udc.edu	*	*	*
5	University of Florida	Erik Deumens	deumens@qtp.ufl.edu	*	*	*
6	George Mason University	Chaowei Yang (Phil)	cyang3@gmu.edu			
7	University of Georgia	Jason Stone	jstone13@uga.edu			
8	Georgia State University	Bill Gruszka	billgruszka@gsu.edu	*	*	*
9	University of Kentucky	Eric Grulke	egrulke@engr.uky.edu		*	
10	Louisiana State University	James A. Lupo	jalupo@cct.lsu.edu	*	*	*
11	Louisiana Tech University	Zeno Dixon Greenwood	greenw@phys.latech.edu			
12	University of Miami	Joel Zysman	jzysman@med.miami.edu			
13	University of Michigan ATLAS Computing Center	Shawn McKee	smckee@umich.edu	*	*	*
14	Norfolk State University	(vacant)				
15	Old Dominion University	Ruben Igloria (??)	rigloria@odu.edu (bounces)			
16	University of South Carolina	Paul Sagona	sagona@cec.sc.edu			*
17	Southeastern Universities Research Association	Gary Crane	gcrane@sura.org	*	*	*
18	Texas A&M University	Steve Johnson	steve.johnson@math.tamu.edu	*	*	*
19	Texas Advanced Computing Center	Melyssa Fratkin	mfratkin@tacc.utexas.edu		*	*
20	Texas Tech	Philip Smith	philip.smith@ttu.edu	*	*	*
21	University of Virginia	Jim Jokl	jaj@virginia.edu			

- Declining participation, reflected in the previous slide, is a major concern for the SGC.
- Strides have been made over the last 2 years:
  - Governance documents: Strategic Plan / By-Laws
  - New resource modeling leveraging Open Science Grid Virtual Organization support.
  - User authentication process in place and working.
  - Multiple systems available now for use.
- How do we reinvigorate and move forward?

- Traditional HPC has a progression model that moves researchers from modest local resources (group, departmental) to mid-range (campus, state) to national leadership class (NSF XSEDE), with common concepts and minimal relearning between steps.
- The SURAGrid Virtual Organization approach can offer the same growth potential for serial, high-throughput computing now that XSEDE has added OSG as an available resource.
- Focus should be on using SGVO resources to meet research demands, and serve as a training platform to help researchers eventually use leadership class resources when the need arises.

- The monthly community call could be used to explain this view.
- The call could provide the forum needed to help users get on board. What is learned within the SGVO should be applicable, with minimal adjustments, to operating at the national level.
- Present as a growth path, not a lock-in to some prescribed computational capability level.
- It is clear that “use cases” should be developed, along with adequate training materials.
- The XSEDE Campus Champion program could be leveraged as a way of engaging a formal connection between SURAGRID campuses and XSEDE.
- Message needs to reach SURA members, not just SURAGRID members.

- Bootstrap process
  - Contact, or become (!), the XSEDE Campus Champion at your institution.
  - Identify an application to start with – SGVO has started with R and Octave for its development focus.
  - Concentrate on learning to function in a Condor environment.
  - Start running jobs – do some real production work – evaluate when, and if, to move to greater capabilities.

- A draft position statement to focus future efforts:
  - A major outcome for the SURAGRID Spring 2013 All-Hands Meeting is a resolution by the SGC to issue a statement of its future vision of the future direction SURAGRID should follow.
  - “The SGC recognizes that several problems which have plagued SURAGRID have been resolved through its formation of an Open Science Grid Virtual Organization, including user authentication and resource provisioning. With XSEDE now providing allocations to OSG for serial workflows, the SGVO represents a way-point on a growth path that could lead researchers to operating on XSEDE. This growth path will be the guiding factor for future decisions on SGVO development.”
- The draft statement needs to be refined then sent out. Interest and resulting changes in participation are critical to determining future activity.



- Jim Lupo – LSU
- Gary Crane – SURA
- Bill Gruzska – GSU
- Steve Johnson – TAMU
- Jerry Perez – TTU
- John-Paul Robinson – UAB
- Chad Tatum – GSU
- Surangan Edirisinghe – GSU
- Dong Jeong – UDC
- Gurchanran Khanna – UDC
- Christopher D'Angelo - UDC