**Future Grid Report November 23 2009**

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**Introduction**

I note **“All subaward documents are complete and ready for NSF to review”** as documented in Operations and Change Management Committee report below.

Preparation and execution for SC09 has occupied a lot of people during the last reporting period. Fox gave two presentations <http://grids.ucs.indiana.edu/ptliupages/presentations/FutureGridOverviewNov18-09.ppt> on FutureGrid.

This report is the fourth for the project and now continues with status of each committee. More information can be found at <http://www.futuregrid.org/committees> which has links for each committee.

**Operations and Change Management Committee**Operations Committee Chair: Craig Stewart, Executive Director
Change Control Board Chair: Gary Miksik, Project Manager

**Subaward Documents**

All subaward documents are complete and ready for NSF to review. Here is the link to the zip file that contains all subaward documents:

<https://www.slashtmp.iu.edu/public/download.php?FILE=gmiksik/75342yT2zJ0>

**ISSUE:** NSF Award Specific FATC states: “B. Written approval for the issuance of any sub-awards, including purchase orders for computing, data storage equipment or network services over $200,000, must be obtained from the NSF Grant Officer based on notification, by the NSF Program Officer, of the receipt of satisfactory sub-award documentation.” In this report, we have sent each completed subaward document. Do we need to be providing more, or something else?

**Travel**

**ISSUE:** NSF gave IU an additional $100,000 in travel money, which is listed on the IU NSF 1030 as “domestic travel”. Our Contracts folks believe all to be “participant support” travel, as it was not subjected to any indirect cost assessment. If IU SRO persists, then no IU travel can tap those dollars. We believe otherwise, and have asked for the assessment of indirect cost against these dollars to be waived, so that those travel dollars can be used by IU for necessary FutureGrid travel. Is our reasoning correct?

**Insurance on Equipment**

We are working on two issues, both related to insurance: the IBM iDataPlex going to the University of Florida and the IBM iDataPlex going to University of Chicago. In both cases, the question of insurance coverage has come up, since IU is actually purchasing this equipment. The question that affects insurance coverage is whether ownership of this equipment will be formally transferred to Florida and Chicago or not

**Performance Committee**

Chair: Shava Smallen

In the last couple of weeks, the Performance Analysis Committee continued to develop an architecture document for performance monitoring and tools. In particular, work was done to develop milestones and identify dependencies for the benchmark framework. The group also worked on various SC’09 activities. Specifically, SDSC/UCSD created a FutureGrid poster for their SC’09 booth and gave a brief talk about their performance related activities in their booth on Tuesday, November 17th. This led to two potential collaborations: the Magellan project at LBL, who is interested in collaborating with us on our benchmarking activities, and IPM, which is a profiling tool. Nick Wright, a developer for IPM, wants to help us to install and provide support for IPM on FutureGrid resources. Also, Robert Henschel attended the SPEC benchmark meeting at SC’09 and clarified how to run the benchmarks on FutureGrid resources in order to comply with SPEC’s licensing restrictions.

The performance committee held one conference call on November 12th to discuss progress and explore the use of the TACC’s proposed distributed messaging system within the performance activities. During SC’09, the committee also met to learn more about Vampir and synchronize on activities.

**Software Committee**

Chair: Gregor von Laszewski

We have started to build subgroups as part of the software committee and identified the Security group and the Experiment Management group as two of the groups that we need to formulate. We had an intense discussion about OpenID that was continued as part of the OGCE workshop in Portland where we meet Frank Siebenlist to discuss his approach for ESG. Although the OpenID is probably a very good choice for FutureGrid in general, there are only a number of limited tools available that may not yet support creation of virtual groups. Furthermore, we have identified jiran and redmine as potential candidates for tracking tasks in the project. We prepared material and presentations for FutureGrid. A FutureGrid like Life science application was demonstrated at SC09 showing the type of application we need to support.

Due to SC09 many of the group activities were interrupted during that week. However we conducted a lot of outreach activities, such as meeting with LBNL to discuss about the Magellan project. Representatives from SUN pointed out to us: "This is one of the most interesting and best projects they have seen at SC".

**System Administrator & Network Committee**

Chair: David Hancock

The status has not significantly changed since the last report. We're getting updates from vendors on the orders placed with DDN, Cray, and IBM. The Dell order is still pending but TACC anticipates hardware will arrive in December. SDSC has placed an order with Incentra (Sun reseller) for more disk for the same price, 96TB instead of 72TB. Cray anticipates delivery of the XT5m on or before December 15.

**Training, Education and Outreach Services Committee**

Chair: Renato Figueiredo

Florida has been improving the virtual cluster appliance image to support self-configuration of machine lists through the multicast DNS (mDNS) framework and pre-configured SSH keys. This will serve as a basis for a variety of cluster applications where users will be able to automatically detect all nodes within their virtual cluster and create node configuration files for frameworks such as MPI and Hadoop. They also had activities in preparation for SC09; Purdue for instance had a demo in their booth highlighting the IPOP self-configuring virtual network used in our educational appliances to create ad-hoc virtual Condor pools across various exhibits on the show floor.

**User Requirements Committee and FutureGrid User Advisory Board (FUAB)**

Chair: Andrew Grimshaw

Names for advisory board are being collected. Currently 10 outside early users have registered on the FutureGrid website.

At the Indiana Booth, we demonstrated use of FutureGrid style system (iDataPlex running xCAT) in performance comparisons of MapReduce on Linux and Windows. This is our first very very early user!

**User Support Committee**

Chair: Jonathan Bolte

**Tasks ongoing and completed**

* Published modified framework pages for collecting content.  We received recommendation for table presentation of hardware information.  This is now under discussion.
* Provided developers with style sheet and code to install FGKB
* Received approval for footer text for FutureGrid document
* Published SOW for User Support Committee on committee pages

**Tasks for next period**

* Create process for submission of content for FGKB and advertize the process (carryover)
* Establish process for exchange of tickets among ticket tracking systems currently in use at IU.
* Arrange a meeting with Global Network Operations to discuss workflow
* Collect information about task management used at partner sites
* Decide on initial interface for FGKB (carryover)

**Blockers**

* None reported