

NSF CC-NIE Working Group Meeting

May 19, 2014

Agenda

Time: 3:30-4:30pm, May 19, Monday

Location: Physics building, Conference room 403B

Agenda:

1. Notes from CC-NIE PI meeting
2. Status of measurement infrastructure
3. Update from CEN
4. Status of Science-DMZ equipment at Storrs
5. Update from UCHC
6. Next step
7. Open discussion on other issues

Minutes

Present:

UConn: Bob, Bing, Richard (Jones)

CEN: Scott

UCHC: Ann, Jeff D., Peter (O'Neill)

1. Notes from CC-NIE PI meeting

Bing briefly describes what she learned from CC-NIE PI meeting. Several other universities have similar plans as that at UConn. Also we can learn from universities that have similar network architecture and are ahead of us in science DMZ deployment (e.g., North Carolina State University).

2. Status of the monitoring infrastructure

An undergraduate student from UConn, Reynaldo, will work with us on perfSONAR monitoring infrastructure this summer. Reynaldo started today and will work for 13 weeks during the summer.

3. Update from CEN

CEN has been installing the Ekinops DWDM optical equipment with the Ekinops team. The equipment is expected to start working next week. CEN is also close to finalizing the transaction for exchanging the 40G equipment that UCHC is interested in. We have a signed agreement with Internet2 for the 100G AL2S circuit in Hartford! The connection is expected to be set up in 3 months.

4. Status of Science-DMZ equipment at Storrs

Bob has looked into the access switch for Richard's lab. His current plan is to use a Cisco switch (3750?). He has also tested the optical cable (providing 10Gbps connection) to Richard's lab. The cable works in multi-mode (if budget allows, may consider upgrade it to work in single-mode because the university's long-term strategic plan is to get rid of multi-mode).

We are close to decide the science DMZ router. Plan to use 8x10Gbps fan out. Plan to trade 10Gbps blades with CEN or UCHC. Next step: update PO and send it to purchasing.

5. Update from UCHC

Jeff D. has been setting up perfSONAR nodes (encountered some firewall issues). The network gear is ready to be installed. The setup of OpenScience Grid encountered some software issues that need some time to solve.

6. Next step

Richard describes the result of the 2nd data challenge (the data challenge is terminated on 5/9). The data challenge utilized a total of 6M wall-clock CPU hours (of them, 2.8M CPU hours provide deliverables), producing 5B events and 10TB of data. The team achieves the goal of 10B events (with the contributions from Jefferson lab, U. of Florida, and CMU). OpenScience Grid remains to be the frontrunner that produces most of the data despite many difficulties (sites going down to install patches because of Heartbleed at the very beginning of the data challenge; new 256-bit certificates lead to compatibility issues and require software update at SE; also encountered problem at contributing sites (e.g., NAT problems at Purdue)).

Next data challenge will be in August 2014. Main goal is to improve efficiency (the current efficiency is around 50%). Bottlenecks in the 2nd data challenge are networking issues (dropped network connections; SSL negotiation problems), which will be debugged and solved (just as the simulation software problems were discovered during the 1st data challenge and solved afterwards).

7. Open discussion on other issues

Briefly discussed "Tech Park Industry Partnerships ." It is good to keep in mind when collaborating with industrial partners.

"Dear Colleagues,

We are excited to announce a new initiative to support Tech Park industry partnerships. The University of Connecticut plans to invest \$40 million in equipment matching fund to grow industry sponsored research, federal grants, innovation and job creation.

Our initial investments have already created important collaborations and investments from industry including the [\\$7.5M GE Partnership for Advanced Materials](#), [\\$10M UIC Partnership for Systems Engineering](#), [\\$5M Fraunhofer Center for Energy Innovation](#), and the [Pratt & Whitney Additive \(3-D\) Manufacturing Innovation Center](#), and the [CHASE Center for Hardware Security](#).

For the upcoming year, we plan to make an initial investment of \$10M as cost-share for equipment for faculty proposals in the area of advanced manufacturing & materials, systems engineering and science, biomedical devices and biotechnology. Funds will be committed as a 50% match for equipment on federal, state and industry proposals that demonstrate strong industry collaboration.

Details of the proposed competition will be shared shortly but we wanted to inform the faculty with this exciting opportunity.

Best,

Larry Silbart, Vice Provost for Strategic Initiatives

Jeff Seeman, Vice President for Research

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