

REAP Working group meeting 5/14/03
Salon I Ballroom, Hilton Executive Tower, Portland, OR

Present: John Byrd (LBNL) , Stuart Henderson (SNS), Steve Peggs (BNL), Tom Pelaia (SNS - for John Galambos), David Rice (Cornell/Chair), Karen White (JLAB participant), Ferdi Willeke (DESY) (2nd half of meeting):Fulvia Pilat (BNL), Nan Phinney (SLAC)

Agenda:

Additions/changes to agenda

REAP Working Group overview

Projects Underway:

Web page (<http://www.lepp.cornell.edu/icfa/reap/>)

Database - Remote Ops projects (*add MVL to agenda*)

Accessible webcast seminars

Newsletter

Projects Planned:

Workshops

Database - Remote Ops papers and publications index

Internet based workshops

Overview of the REAP working group: (D. Rice)

Approved by ICFA in February 2003

Mission statement:

To promote collaborative accelerator physics experiments carried out using the evolving techniques of remote operation. It is intended that web based communication and collaborative decision making will be an important part of the effort.

23 members so far - mostly from HEP accelerator labs. Membership will be expanded to include representatives from other labs with interests in remote operations. While most members are from US labs at this time, CERN, DESY, Frascati, KEK, BEPC, BINP are also represented. Members primary responsibility is to be liaisons between the working group and others at their lab, with information flow in both directions.

Projects Underway:

(DR) web page is up. At this time it has a couple of announcements and list of members.

Additions will come soon. <http://www.lepp.cornell.edu/icfa/reap/>

(F. Pilat) Database - only a couple of contributions have been received so far. All members are strongly encouraged to send information on remote operations projects at their laboratories to pilat@bnl.gov. (see announcement on REAP web page above)

One of the new remote operations projects is the Multipurpose Virtual Laboratory (MVL) proposed as a component of the Coordinated Accelerator Research in Europe (CARE) proposal.

F. Willeke presented an overview of the MVL project.

MVL rose from DESY's focus on high gradient cold LC development efforts and the interest in GAN remote operations. DESY has been involved in several remote operations projects during the

past few years. MVL is a component of the CARE proposal made in response to encouragement from ESGARD (<http://esgard.lal.in2p3.fr>)- for project proposals from the European community.. MVL will be a mobile tool supporting accelerator institutions included in group. It will support virtual instruments, plug&play instruments, and supply video/audio techniques to capture the on-site lab environment. The project will need to work with lab control systems - deal with varying software, firewalls, etc.

If external users are taking part in operations as consultants, experts, experimenters, and/or interested parties, then the leader of operations must be aware of their presence. MVL can provide the information, but the accelerator control system must accommodate and communicate this information. This feature must be implemented in the existing accelerator control systems. Total budget €5M request €2.8 M from EU.

Partners are DESY, GSI, FHG, ELETTRA, CEA, INFN-Milano, INFN-Roma, INFN-Frascati FHG (Fraunhofer Gesellschaft – Institut für Graphische Datenverarbeitung is a government supported enterprise specializing in computer graphics and A/V systems)

Integrating A/V, remote control, remote instrumentation capabilities together is new concept.

Phase 1 will be to assemble equipment, phase 2 to apply and find what needs to be refined.

The proposal was submitted mid April, in review phase now. 2nd half June each project will be negotiated. Mid June will know whether is funded. If the EU does not fund the project, it may lose some collaborators but core labs will continue.

There will be a workshop in November, 2003. Hosted by Trieste. A collaboration meeting will take place next week. (see below for further discussion on workshop)

Question - what is impact on the commercial partner FHG's participation if EU does not fund the project? Video technology would be more modest without EU funding.

Question - is there a connection to experimental community? Implicitly through labs

Discussion of Remote Operations projects:

FP - working group/BDP should make statement supporting remote experiments to take back to laboratory.

DR - could get a statement from ICFA endorsing remote operations.

N. Phinney - proposals handled differently by different labs - a statement from ICFA probably will not help in getting remote operations support. At SLAC, some accelerator physics studies are proposed and approved as formal experiments.

DR - motivation should come from doing good accelerator physics and bringing in more resources to lab, not just for developing remops activities.

?? - need to spend some time developing remops methods so it's ready when needed.

S. Peggs - there is support for maintaining US instrumentation at LHC at CERN. MVL will provide the existence proof for remote controllability.

S. Henderson - proscription of remote ops at SNS needs to be addressed.

DR - all should work to dispel impression that remote operations means turning over total control of machine - nearly all remote operations for the immediate future will be experiments carried out on limited scale working with subsystems, readouts in conjunction with onsite operators.

Testing and maintenance of subsystems is good remops candidate.

Accessible Webcast Seminars:

DR - Project to establish guidelines for webcasting seminars in a format easily accessible by broadest spectrum of platforms and network bandwidth.

Typical participant equipment requirement would be pc/mac/Unix workstation with web browser and streaming media client (Real Networks - readily available for pc/Mac/Linux). An instant messaging client is preferred for communication back to speaker but email would work.

Software is available to present high resolution window of PowerPoint slides synchronized with audio and video. Another option is to download pdf file of slides in advance and participant advances pages appropriately.

The ease of participation as audience will not only encourage sites with limited resources to join, but facilitate joining from home if a seminar is webcast at an inconvenient hour.

An internal (to lab) test was done last week at Cornell with Presentation Maker software (SoftTV.net) and Real Media Streaming Server (Helix Universal Server). The secure instant messaging system developed by LBNL (www-itg.lbl.gov/Collaboratories/pcce.html) was used very effectively to communicate with speaker via a session chair. All went well except for a 20 second delay to the webcast that would make interaction with the speaker more difficult. This is being investigated.

While hardware commitment to originate a webcast is relative modest (few \$hundred), a \$2000-\$4000 investment in software may be needed. A quick survey of those present suggested this would not be a major impediment at their lab.

Development plans will include further tests at Cornell with a "worldwide" webcast describing the system to take place in the next month or two. Following this other labs would be encouraged to schedule webcasts of seminars describing their remote ops activities. This will hopefully encourage others to join - at least as audience - leading to weekly webcast seminars on a variety of accelerator physics topics. A web page would be then set up for listings of events and archiving of webcasts.

Workshops: The planned workshop in November at Trieste, primarily for MVL discussion, could be expanded to include remote operations at other laboratories. Previous discussions among the organizers of the 2002 workshops suggested that reports on the status of ongoing and planned remote operations experiments could be interesting roughly a year after the last workshop at Shelter Island. F. Willeke will discuss with the MVL collaborators the possibility of expanding the scope of the Trieste workshop.

There are two types of workshops sanctioned by ICFA - a "Workshop" which requires advance ICFA approval and proceedings publication, and a "mini-Workshop" that requires only panel approval with no other restrictions. The Trieste workshop would be a "mini-Workshop."

The remaining topics were not covered due to lack of time.

Please send questions and comments on these notes to David Rice, dhrl@cornell.edu