

CalREN-XD/HRP Workshop 2008, Calit2@UCSD

Opening Remarks • September 15, 2008

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Chair, CalREN-XD/HRP Committee**

For the last several months, the XD/HRP committee and many others that you see here today have been focused on bringing this workshop to fruition. But it's important for you to know that this has truly been a long time coming. From the very beginning, when CENIC was first formed better than 10 years ago and we proposed the CalREN-2 network, we incorporated the notion that a part of the network should be devoted to cutting edge, experimental work that didn't necessarily fit within the boundaries of a traditional, though very high-performance, network.

Some of you may recall that the very first implementation of CalREN-2 provided an OC-12 ATM circuit to each of the campuses, in addition to the OC-12 Packet Over SONET circuit. The purpose of the ATM circuit was to allow campuses and researchers to experiment with network technologies and procedures distinct from the operational network. As you may also know, this capability was not well advertised, and was even less well utilized.

In the second and current design of CalREN-2, dark fiber was the basis for the design and each campus had a limited ability to provision 1 and 10Gb/s waves from the campus to CENIC and possibly beyond. This capability has proved a bit more popular, though still somewhat limited in its flexibility and reach. Nonetheless, the demonstrations you will witness today and tomorrow are able to leverage this existing capability to do things we couldn't do 10 years ago with the original network.

Perhaps even more important than the ability to run the wonderful demonstrations you will see, we want to share with you the very real plans for dramatically improving the ability of CENIC to deliver wave services, for experimental use, to the campuses. My message to you is: this is a potentially disruptive yet enabling change to the campuses and the researchers that utilize high-performance networks. That is, it will take close cooperation between the campus IT and network staffs and the individual researchers to be successful, secure, and not harm the existing campus networks.

Well, that's really the genesis for this conference. We intentionally targeted a mixture of both campus CIOs and administrators, and researchers. To the CIOs and administrators consider this expansion of the network a strategic advantage to your campus. I say that because like a one-of-a-kind scientific instrument or lab facility you might have on your campus, this additional network capability will be unique to California. You should use this as leverage to attract and retain the faculty you desire as well as an opportunity to build out network delivery options on you campus.

To the researchers, a similar idea applies: you will have access to a unique technological device that can enable new ways of performing research and collaboration that were impossible previously. You may be able to compete for grant funding with a unique competitive advantage. So you should seek out the appropriate campus administrators, if they're not here today, and

develop a partnership that allows you to use the resources while doing so in a way allows the CIOs to sleep at night.

So what is it we're really trying to accomplish with this workshop?

Well, we want to achieve several goals and in a way, this could be considered a pep rally for California researchers who use high performance networking to enhance or facilitate their research:

- We want to promote the notion that we collectively are the national leaders in applying this technology to our practical applications, observatories, instruments, and experiments. This is not meant to be boastful rhetoric, but it would be useful to spread this through a grassroots effort to apply the technology;
- We want to stimulate researchers to think of new ways to attack their problems with new high-performance network tools in mind;
- We want stimulate CIOs to consider how this will impact their campus and what need to be done to enable delivery of these services to appropriate locations on their campus;
- We want to stimulate the researchers and CIOs to work together to solve last-mile and other local issues;
- We want to spread this technology to all of the research campuses of CENIC; and
- We'd like to show off *your* application at a similar workshop next year.

How are we going to accomplish these goals?

The most obvious tools that jumps out from the program are the demonstrations; we have a number of them, in a variety of disciplines; we hope the setting here is intimate enough that all of you will be able to interact with the demonstrators, try to understand what they are doing and how they are doing it, and consider whether these techniques could be applicable to your own work.

Part of the program is devoted to case studies where the speakers will dissect things they have done and let you know in concrete ways what needs to be accomplished, what works ,and perhaps what doesn't work.

Finally, one thing that I'd like to point out, notably for its absence, is the lack of corporate sponsorship for this conference. That was intentional on CENIC's part. We want to stimulate frank, earnest discussions about what people are doing, how they are accomplishing it, and what they are using. While we value our relationships with our vendors, at the same time we want to remain somewhat vendor-agnostic. That's not to say we're technology-agnostic, we're not. We've very technology- and standards-driven.

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