

# Questions for the ERSUG Meeting, January 1997

Questions and RAK responses by Ricky Kendall

NERSC responses by Bill Kramer

## 1. Videoconferences

NERSC: NERSC believes the use of videoconferencing for both collaboration (User Group) and Distance Learning (Training) is critical to its mission of providing services independent of location. Over the past 6 months, we have identified several major issues with the videoconferencing infrastructure that need improvement. What works well for 2 or 3 connections does not work as well for 8. NERSC is actively working with ESnet to reduce these limitations. NERSC also will pursue other avenues of disseminating video material (like the MBONE and videotape) to mitigate some of these limitations.

### a) Monthly ERSUG Videoconferences.

*Do users think the monthly ERSUG videoconferences are working and should they be continued?*

RAK: From my perspective these are convenient and work well for getting issues to the user community and reporting the status of NERSC operations. They should be continued.

NERSC: NERSC values the interaction and believes it will be more effective as time goes on. However, we can handle issues and make reports in a more organized manner. For example, we could provide multiple avenues for suggested agenda items in email notices sent a week in advance and on a web page, and afterwards, a better summary of the meeting on the web.

### b) Training Videoconferences

*Do the users think the training videoconferences are working and should they be continued?*

RAK: From my perspective the training sessions are not working due to the quality of the slides and the nature of videoconferencing. I would suggest these be put on hold until a resolution of the problems is in place.

NERSC:

"Distance Learning" is an important component of NERSC's mission, and indeed many major organizations are actively trying to achieve NERSC's current level of service. Nonetheless, NERSC training does have issues with the present videoconferencing infrastructure. Many of the NERSC staff were not involved with video training in the past, and must learn what works and what does not. NERSC can improve the slide quality and will endeavor to get hardcopies for the broadcast available at the sites.

NERSC is working with ESnet and LBNL to improve overall quality and effectiveness of the videoconferences. For example, ESnet is installing a new hub, and NERSC has reservations in place to accommodate 15 conference sites all the time, thus eliminating one of the procedural problems we have been experiencing. NERSC will also investigate other broadcast medium (e.g. web, MBONE) in parallel with continuing and improving the video training. Of course, the training sessions will be available on videotape as well.

### c) General Videoconference Questions

*How many connections are possible? What kind of connections are possible? What are the plans (both in functionality and time tables) to augment what we now have? Is this an ESnet responsibility?*

NERSC: As mentioned above, a new hub is being installed this month, and NERSC has already scheduled its time slots. This should provide connections for all the 1997 backbone sites and enough to add all the sites with ExERSUG members and some others.

*What about the quality of slides/presentations?*

RAK: During many of the training sessions, the slides were unreadable. Even for the legible slides, the speakers kept moving the slides as they talked, causing the videoconference system to update the picture, which makes the slides unreadable for a few seconds. For the training to continue via the videoconference medium this must be resolved, as well as the connection quality.

NERSC: We will actively and quickly improve the camera direction and slide quality to make them more readable. This feedback is very helpful to us. NERSC will provide access to hardcopy slides before the conferences, either by publishing them on the web or by faxing them. NERSC is pursuing creating a better broadcast facility here at LBNL to improve these areas as well.

## 2. Web Pages

*A few users have expressed their dislike of the Buffer going away, being replaced by various WWW pages. They liked having a monthly update in their hands with the kinds of articles that show users/NERSC staff solving problems on the various systems.*

RAK: The number of users who really want the Buffer style update is small. The cost savings of not sending the Buffer or equivalent out via US mail is significant. In my mind a monthly, organized series of WWW pages is far superior. It would be good to have the monthly WWW pages also available in a single postscript or PDF (read with a freely available program called acroread) file. This should be accessible from the NERSC WWW pages and an anonymous ftp site. With this all users could obtain the ps or PDF files and print a hard copy. The information would still be there, just not mailed on a monthly basis.

NERSC: The idea of providing timely and accurate information is critical to NERSC service. The suggestion for monthly WEB pages is good. NERSC is also planning to reintroduce a bi-monthly publication (6-8 pages) that will have the dual role of highlighting new things, and marketing the NERSC facility and the science done by its clients. This publication will have less technical detail than the BUFFER, and far less repetitive information, both of which can be more appropriately presented on the web.

### **3. Review of Grand Challenge Projects funded at NERSC**

Horst Simon will discuss this at the meeting.

### **4. SPP in production mode**

*Are there enough resources available to do SPP computing in the traditional production mode?*

RAK: There are and have been enough resources to do some SPP computing during production scheduling. The limiting factor is the throughput and memory. With large memory queues available (> 80MWords) on the J90s, codes should be able to run.

NERSC: The NERSC focus for the past several months has been on the T3E. Improved scheduling of J-90 jobs has been deferred until the MPP is in service, due to limits on staff resources. NERSC will work as soon as possible to improve the scheduling of large jobs, including SPP type jobs.

*The throughput of big jobs is still problematic. Why not more than one job? What can be done about this?*

RAK: Right now there is only one job at a time using the 200MW queue (This may have changed but I think I am right). Can we increase this? Are we able to dedicate more resources to this kind of computing after the 4th J90 is online?

NERSC: The answer above applies - but the 4th J-90 does not add resources, since the memory and CPUs will be split from 3 to 4 boxes. I/O speed and capacity will increase.

### **5. The Future of SAS**

*What are the plans to upgrade/augment the SAS system at NERSC (plans, budget, time-frame, technology)? This system are important to the user community for many things (WWW, TeX, Maple, etc.)*

RAK: I personally use SAS a great deal. I would like to see it survive. I would like the ability to launch C90/J90 production jobs from this system, thus reducing the interactive load on the C90/J90. I have no formal response to the question.

NERSC: The current SAS system is in the process of being updated. NERSC has not developed any other position on SAS, in part due to the priority of other activities. The SAS role needs to be reevaluated, and suitable SAS requirements developed. NERSC believes the requirements may have informally changed over the years, and has heard a variety of desired attributes for such a system from users. We need to determine what people think SAS is, what is actually done on the system, and what role it should have in the future NERSC System Architecture. NERSC will work with ERSUG to refine the requirements and determine a defined role and future for the SAS systems by the next ERSUG.