Research Computing Survey

Description and Needs for Your Research Computing

1. Please briefly describe your research program and what kind of research computing you currently do (remember our broad definition of research computing here).

2. What would you like to do (in terms of research computing) that is now unfeasible?

3. Do you have enough computing power to conduct your research?

4. Do you have enough bandwidth for your research?

5. Do you have a need to backup your research computing data and/or software? What is the estimated size of your data?

6. Are there specific support tasks that you need which are not being met?

7. How mobile is your research? What are the implications of this? Do you need support in the field?

8. Do you consider yourself highly knowledgeable (or an expert!) in any specific research computing area(s)? Please specify.

External Funding Prospects

9. Have you been disadvantaged within the past five years in getting research funding because you did not have the computing technology resources (equipment, infrastructure, training, staff support) to be competitive? If yes, can you give an example? Does this disadvantage still exist?

10. Approximately how much (in dollars) of your grant-funded research money has underwritten your own research computing infrastructure and research software in the past three years? Do not count standard office computers.

11. Approximately how much (in dollars) of research related computer equipment has the University cost-shared on your behalf in the past three years? Do not count standard office computers.

ISU Positioning for Research Computing

12. What can your College or Department do to improve the research computing infrastructure for your own research?

13. What can the University do to improve the research computing infrastructure for your own research?

14. What, in your view, are the waves of the future with regard to research computing and communication technologies?

15. Is ISU well positioned for the future in terms of research computing? Please explain.

16. Please describe any examples of occasions in the past three years when your colleagues at other institutions had effective access to research computing or communications technology that you did not.

17. How important are the following to your research? The weighting scale is 1 to 10, with 1 being most important.
    a. Wireless networks
    b. Access and collection of large data sets
    c. Database creation and management
    d. Data mining (searching large datasets for new information)
    e. Virtual reality / Visualization of data
    f. Terascale computing / high performance computing
    g. Parallel processing
    h. Access grid, teleconferencing, other collaboration technologies
    i. Other (please specify)

Training Opportunities for Research Computing

18. What types of short courses or instructions would you be interested in?
    a. Computer Tools for Research and Data Analysis
    b. SAS or SPSS or S-Plus & R
    c. Survey Technologies
    d. LaTEX for Beginners - A Brief Introduction
    e. Introduction to Unix
    f. Other (please specify)

Possible categories to help you think of additional questions or missing categories:

- Hardware Resources
- Software Applications
- Infrastructure (networking, bandwidth, etc.)
- Mini-courses / Instructional Service
- Consulting (specify areas needed)

Distributed on Tuesday May 31, 2005 via the ISU facultymemos and staffmemos listservs:

A new Research Computing Subcommittee has recently been created as part of the revised IT governance structure at ISU. Our first major task is to identify the ISU research computing user community. We are defining "research computing" quite broadly (see examples below), but please note that it is distinct from standard desktop computer support.

If you identify yourself as requiring or supporting research computing, or are interested in getting into this area, please send a quick reply to kelccynd@isu.edu. We will then contact you to learn about your specific needs, interests, and/or expertise.

Possible categories of research computing include the following:

- Computationally intensive calculations (number crunching)
- Managing large data sets
- Database creation and management, including online surveys and other data capture
- Computer-guided instrument control and data collection
- Data analysis
- Visualization
- Access grid, teleconferencing, other collaboration technologies
- Short courses on research computing topics
- Other computational tasks needed to support your research, beyond your desktop computer

Please pass this request on to graduate students and others as appropriate. We look forward to hearing from you!

Thanks,
Cyndy Kelchner
Chair, Research Computing Subcommittee
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