How to Submit a 2016 ERCAP Request

Clayton Bagwell
NERSC Account & Allocation Support

August 21, 2015
ERCAP

“Energy Research Computing Allocations Process”
ERCAP Application Deadlines

http://www.nersc.gov/users/accounts/allocations/deadlines
# ALLOCATION PROPOSAL (ERCAP) APPLICATION DEADLINES

<table>
<thead>
<tr>
<th>Award Type</th>
<th>ERCAP Submission Open</th>
<th>ERCAP Submission Deadline</th>
<th>Award Decision</th>
<th>Allocation Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Startup and Education</td>
<td>Ongoing</td>
<td>Ongoing</td>
<td>Within 3 weeks of applying</td>
<td>18 months from award (but must be renewed for the next allocation year)</td>
</tr>
<tr>
<td>Production (DOE awarded) for the rest of allocation year 2015</td>
<td>Ongoing</td>
<td>Ongoing</td>
<td>Within 4 weeks of applying (pending sufficient DOE reserves of time)</td>
<td>through January 11, 2016</td>
</tr>
<tr>
<td>All continuing projects must be renewed for 2016. New projects may apply after the deadline.</td>
<td>August 4, 2015</td>
<td>September 21, 2015</td>
<td>December 11, 2015</td>
<td>January 12, 2016 - January 9, 2017</td>
</tr>
</tbody>
</table>
Who can apply? Anyone who’s work supports the DOE Office of Science Missions

https://www.nersc.gov/users/accounts/allocations/overview/
ALLOCATIONS OVERVIEW AND ELIGIBILITY

Allocations Overview

Most allocations of NERSC computer time and archival storage are awarded by DOE and managed by NERSC. There is no monetary charge to the project that receives the award. The awarded research groups are given project accounts, known as repositories (or repos), with a given amount of computing hours and an archival storage allocation. Resource usage (computer time or archival storage) is charged against the repository, like a withdrawal from a bank account. Once the account is exhausted, users can no longer charge against that account.

NERSC supports several allocation programs:

<table>
<thead>
<tr>
<th>Allocation Type</th>
<th>% of DOE Allocation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOE Production</td>
<td>60%</td>
<td>Awards are made by DOE program managers in the six offices of science and SBIR. Applicants need to be part of a research project funded by the DOE Office of Science or show that their work meets the DOE mission.</td>
</tr>
<tr>
<td>ALCC</td>
<td>10%</td>
<td>ASCR Leadership Computing Challenge: a DOE program run by ASCR to promote areas of interest to DOE. See the ALCC web page.</td>
</tr>
<tr>
<td>NERSC Director’s Reserve</td>
<td>10%</td>
<td>This is for projects selected by the NERSC Director.</td>
</tr>
<tr>
<td>Education, Startup</td>
<td>N/A</td>
<td>Small awards made by NERSC from NERSC overhead time.</td>
</tr>
</tbody>
</table>
Applying for your first allocation:

http://www.nersc.gov/users/accounts/allocations/first-allocation

https://nim.nersc.gov/newpi.php
APPLY FOR YOUR FIRST NERSC ALLOCATION

Initial Steps Needed to Apply for Your First NERSC Allocation

All work done at NERSC must be within the DOE Office of Science mission. See the Mission descriptions for each office at Allocations Overview and Eligibility.

Prospective Principal Investigators without a NERSC login need to fill out two forms:

1. The online ERCAP Access Request Form. If you wish to designate another person to fill out the request form you may designate a "PI Proxy" on this form.
2. Complete and submit the online Computer User Agreement form.

Once we receive your agreement form and activate your account, you will receive an email with a link that will allow you to set your initial password. That link will expire if not used within 72 hours. If the link has expired, you will need to call NERSC Account Support at 1-800-666-3772 menu 2, or 510-486-8612, to obtain a temporary password. You can call at any time, 24 x 7, and somebody will be here to assist you.

Startup Allocations

Many new NERSC projects begin with a Startup allocation, particularly if they are new to HPC or are not yet ready to run production codes on thousands of CPU cores. Startup awards are limited to 50,000 MPP hours (Cray XT4 equivalent hours) and are good for up to 18 months.
ERCAP Access Request Form for new PIs and PI Proxies

If you are completely new to NERSC and wish to make an allocation request as a new Principal Investigator (PI), please select and complete the appropriate boxes below. If you already have a NERSC user name and wish to become a PI, please log into NIM, click on "ERCAP requests" in the NIM Main Menu, and follow the subsequent instructions.

You also have the option of nominating a PI Proxy. A PI Proxy can fill out a request on behalf of a PI. In order to add a Proxy, please fill out the optional Proxy information section below.

When you are done, please click on Submit Request at the bottom of the page.
You must also fill out and submit the NERSC Computer User Agreement Form.

After the Account Support Office has received both this form and the Computer User Agreement Form they will contact you about your NIM login name and password.

### PI's Information

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI's First Name</td>
<td></td>
</tr>
<tr>
<td>PI's Last Name</td>
<td></td>
</tr>
<tr>
<td>PI's NERSC Username</td>
<td></td>
</tr>
<tr>
<td>(If user does not have a NERSC username, enter a preferred username.)</td>
<td></td>
</tr>
<tr>
<td>PI's Citizenship</td>
<td>Not Specified</td>
</tr>
<tr>
<td>PI's Email Address</td>
<td></td>
</tr>
<tr>
<td>PI's Telephone</td>
<td></td>
</tr>
<tr>
<td>PI's Organization</td>
<td>UNKNOWN: Not Yet Set</td>
</tr>
<tr>
<td>(If your site is not listed, click here to add it)</td>
<td></td>
</tr>
<tr>
<td>PI's Mail Stop (optional)</td>
<td></td>
</tr>
</tbody>
</table>

### Optional: nominate a Proxy for this PI

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PI Proxy's First Name</td>
<td></td>
</tr>
<tr>
<td>Middle Initial</td>
<td></td>
</tr>
<tr>
<td>PI Proxy's Last Name</td>
<td></td>
</tr>
<tr>
<td>Proxy's NERSC Username</td>
<td></td>
</tr>
<tr>
<td>(If user does not have a NERSC username, enter a preferred username.)</td>
<td></td>
</tr>
<tr>
<td>Proxy's Citizenship</td>
<td>Not Specified</td>
</tr>
<tr>
<td>Proxy's Email Address</td>
<td></td>
</tr>
<tr>
<td>Proxy's Telephone</td>
<td></td>
</tr>
<tr>
<td>Proxy's Organization</td>
<td>UNKNOWN: Unknown</td>
</tr>
<tr>
<td>(If your site is not listed, click here to add it)</td>
<td></td>
</tr>
<tr>
<td>Proxy's Mail Stop (optional)</td>
<td></td>
</tr>
</tbody>
</table>
NERSC Electronic Computer User Agreement form

The following is a list of general computer use policies and security rules that apply to individual users of NERSC. Further information on NERSC security policies and practices can be found on the NERSC Computer Security page. Principal investigators are responsible for implementing these policies and procedures in their organization and ensuring that users fulfill their responsibilities.

User Accountability
Users are accountable for their actions. Violations of policy may result in applicable administrative or legal sanctions.

Resource Use
Resources provided by NERSC are to be used only for activities authorized by the Department of Energy (DOE) or the NERSC Director. The use of NERSC resources for personal or private benefit is prohibited. NERSC resources are provided to users without any warranty. NERSC will not be held liable in the event of any system failure or loss of data. NERSC resources cannot be used for any military or defense use or application, or to facilitate any transaction that would otherwise violate U.S. export control regulations.

Passwords and Usernames
A user identifier known as a username and password are required of all users. Passwords must be changed at NERSC’s request. All passwords must conform to NERSC guidelines, which are found in Getting Help/passwords. Passwords must not be shared with any other person and must be changed as soon as possible after an unacceptable exposure, suspected compromise or by direction of a NERSC staff member.

Notification
Users must notify NERSC immediately when they become aware that any of the accounts used to access NERSC have been compromised. Users should promptly inform NERSC of any changes in their contact information.

Software and Data

Attestation
I have read this NERSC Computer User Agreement and understand and accept my responsibilities in the use of NERSC resources.

Your Initials: 

I attest that I am not a citizen of Cuba, Iran, Syria or Sudan who will be using NERSC resources while residing and/or working in one of these countries.

Your Initials: 

Can’t read it? Refresh the Image

Please enter the characters you see in the image above (not case sensitive).
# ERCAP Access Request Form for new PIs and PI Proxies

If you are completely new to NERSC and wish to make an allocation request as a new Principal Investigator (PI), please select and complete the appropriate boxes below. If you already have a NERSC user name and wish to become a PI, please log into NIM, click on "ERCAP requests" in the NIM Main Menu, and follow the subsequent instructions.

You also have the option of nominating a PI Proxy. A PI Proxy can fill out a request on behalf of a PI. In order to add a Proxy, please fill out the optional Proxy information section below.

When you are done, please click on Submit Request at the bottom of the page.

You must also fill out and submit the NERSC Computer User Agreement Form.

After the Account Support Office has received both this form and the Computer User Agreement Form they will contact you about your NIM login name and password.

## PI's Information

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>PI's First Name:</td>
<td></td>
</tr>
<tr>
<td>PI's Last Name:</td>
<td></td>
</tr>
<tr>
<td>PI's NERSC Username:</td>
<td></td>
</tr>
<tr>
<td>(If user does not have a NERSC username, enter a preferred username.)</td>
<td></td>
</tr>
<tr>
<td>PI's Citizenship:</td>
<td>Not Specified</td>
</tr>
<tr>
<td>PI's Email Address:</td>
<td></td>
</tr>
<tr>
<td>PI's Telephone:</td>
<td></td>
</tr>
<tr>
<td>PI's Organization:</td>
<td>UNKNOWN: Not Yet Set</td>
</tr>
<tr>
<td>(If your site is not listed, click here to add it)</td>
<td></td>
</tr>
<tr>
<td>PI’s Mail Stop (optional):</td>
<td></td>
</tr>
</tbody>
</table>

## Optional: nominate a Proxy for this PI

<table>
<thead>
<tr>
<th><strong>Field</strong></th>
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</tr>
</thead>
<tbody>
<tr>
<td>PI Proxy's First Name:</td>
<td></td>
</tr>
<tr>
<td>PI Proxy's Last Name:</td>
<td></td>
</tr>
<tr>
<td>PI Proxy's NERSC Username:</td>
<td></td>
</tr>
<tr>
<td>(If user does not have a NERSC username, enter a preferred username.)</td>
<td></td>
</tr>
<tr>
<td>PI Proxy's Citizenship:</td>
<td>Not Specified</td>
</tr>
<tr>
<td>PI Proxy's Email Address:</td>
<td></td>
</tr>
<tr>
<td>PI Proxy's Telephone:</td>
<td></td>
</tr>
<tr>
<td>PI Proxy's Organization:</td>
<td>UNKNOWN: Unknown</td>
</tr>
<tr>
<td>(If your site is not listed, click here to add it)</td>
<td></td>
</tr>
<tr>
<td>PI Proxy's Mail Stop (optional):</td>
<td></td>
</tr>
</tbody>
</table>
Please sign in

NERSC Username:  
NIM Password:  

Reset your NIM password. | Forgot your username? | Sign in as Staff

Log In


Reset your NIM password using the link above. If you have problems resetting your password, contact Account Support at the number below.

For Account problems/questions, contact:
NERSC Account Support: 1-800-66-NERSC (menu option #2) or 510-486-8612.

For Program problems/questions, contact:
NERSC Consultants: 1-800-66-NERSC (menu option #3) or 510-486-8611, consult@nersc.gov
Welcome to the NERSC Information Management (NIM) system. Use this interface to find information about NERSC users and repositories. Authorized managers can also modify information and create or review allocation requests. Staff-only options are in gold.

Last NIM login on 06/04/2013 14:02:37
Your password will expire on 12/01/2013

NERSC System Status: MOTD

MPP Available Repo Balance
HPSS Available Repo Balance
Repo 7-day Report

ERCAP requests
Refresh list
<table>
<thead>
<tr>
<th>Request Title</th>
<th>Year</th>
<th>Click to renew for 2016</th>
<th>Click to edit</th>
<th>Click to download</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test project/repositories</td>
<td>2016</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>CRD Advanced Computing for Science Department Guest Accounts</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>NERSC High Performance Computing Department Training Accounts</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>NERSC Operations Staff Accounts</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>NERSC Cray Staff Accounts</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>NERSC Staff Accounts</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>NERSC Center Vendor Accounts</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>NERSC Center Guest Accounts</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
<tr>
<td>NERSC overhead account for users with no active repo</td>
<td>2015</td>
<td>Renew</td>
<td>Edit</td>
<td>Download PDF</td>
</tr>
</tbody>
</table>
Start a Request for a new Project

If you wish to continue a project to the next year allocation year (2016), click on the "Renew" link next to the project's title above. Many informational fields will be carried forward into your 2016 request, so you will not have to retype them. Use the 'Start a Request for a new Project' link for NEW projects only. Starting a new request will require a new user list (i.e. add existing users to the new project/repository, etc.) and filling in ALL the information fields.
What type of request would you like to start?

- A new request for the remainder of 2015 (ends Jan 13, 2016)
- A new request for 2016 (starts Jan 14, 2016)

Start new ERCAP request
1. Principal Investigator

Name  Phone  Email
Pi, Test  510-486-8612  support-notice@lbl.gov

2. Other Authorized Preparers - Preparer will be designated a PI PROXY  Note: Link to add an additional preparer will not display until after the initial project information is saved.

3. Senior Investigators

Test Senior Investigator 1
Test Senior Investigator 2

4. Project Title

Test Project

4.1 URL for a relevant web page describing your project

Enter ONLY ONE URL per line using the format:
http://www.nersc.gov

www.nersc.gov

(4000 characters maximum)

4.2 Image representing your project

(NOtte: You can add your image after saving your ercap request)

(When you upload a new image, it will not be visible here until you refresh the page.
For renewed projects that previously had uploaded an image, this image will display after the project overview is saved.)
5. Project Name
   TestProject

6. Project Class
   - Select Startup or DOE Base Funding unless you know that your project falls under another specific class
   DOE Base Funding

7. Sponsoring Site
   - If this field is blank, start typing in the name of your site and select the appropriate site from the list. If your organization does not show up on the list, click the link below to submit the information for your organization
   USA: Lawrence Berkeley National Lab - NERSC

If your site is not listed, click here to add new organization.

8. Science Category
   Computer Science

9. DOE Office and Program
   ASCR - Computer Sciences

Save Project Overview Q1-9
You have started a new ERCAP request. Please click any tab to continue.

| Project Overview | DOE Funding | Q10-11 | Project Description | Q12-14 | Resources Requested | Q15-18 | PDSF | Code Description(s) | Q20 | Data & Analytics | Q21-22 | Other Info | Q23-25 | Submit Request | Show Complete Request |
|------------------|-------------|--------|---------------------|--------|---------------------|--------|------|---------------------|------|---------------------|--------|------------|--------|--------------|--------|----------------|------------------------|

**ERCAP 2016 Request:** 89039  
**PI:** Test Pi  
**Last updated:** 21-AUG-2015 (Not Yet Finished)

**Test Project**

The Project Overview Q1-9 form has been saved successfully.
**Test Project**

Save Project Overview Q1-9  You MUST click the "Save" button here or at the bottom in order to save your work before selecting another tab.

1. Principal Investigator

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pi, Test</td>
<td>510-486-8612</td>
<td><a href="mailto:support-notice@lbl.gov">support-notice@lbl.gov</a></td>
</tr>
</tbody>
</table>

2. Other Authorized Preparers - Preparer will be designated a PI PROXY  Add a preparer (PI Proxy)

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIPROXY, Test</td>
<td>510-486-8612</td>
<td><a href="mailto:support-notice@nersc.gov">support-notice@nersc.gov</a></td>
</tr>
</tbody>
</table>

3. Senior Investigators

| Test Senior Investigator 1 |
| Test Senior Investigator 2 |

4. Project Title

Test Project

4.1 URL for a relevant web page describing your project

Enter ONLY ONE URL per line using the format:
http://www.nersc.gov

www.nersc.gov

(4000 characters maximum)

4.2 Image representing your project

Select to upload a project image file

(When you upload a new image, it will not be visible here until you refresh the page.
For renewed projects that previously had uploaded an image, this image will display after the project overview is saved.)
How project images are used:

http://www.nersc.gov/live-status/now-computing/
Your image will not be viewable until vetted
4.1 URL for a relevant web page describing your project
Enter ONLY ONE URL per line using the format:
http://www.nersc.gov

www.nersc.gov

(4000 characters maximum)

4.2 Image representing your project
(When you upload a new image, it will not be visible here until you refresh the page.
For renewed projects that previously had uploaded an image, this image will display after the project overview is saved.)

![Image](image_url)

Change Image  Remove Image

5. Project Name

TestProject
10. Is this project funded by the DOE Office of Science?

- Yes, this project has direct grant support from the DOE Office of Science
  - Who is your DOE Program Manager?

- DOE Office of Science Grant Number(s) (List all that apply)

- If you also intend to use NERSC resources to support research that is not funded by the DOE Office of Science, list the funding agencies and grant numbers.

(4000 character maximum)

0 characters entered. 4000 characters remaining.
12.2 Long Project Description

Longer project descriptions may be attached as a PDF file.

Select to upload PDF attachment  (Maximum size: 20 MB)
No (If "No", complete only the following section of this question.)
This project is funded by:  (complete boxes for all that apply)
- DOE, other than Office of Science (enter grant number(s) and source of support)

(4000 character maximum)
0 characters entered.  : 4000 characters remaining.

- Work for others at DOE laboratory (enter grant number and sponsor)

(4000 character maximum)
0 characters entered.  : 4000 characters remaining.

- Other funding agencies (enter grant number(s) and name of agency)

(4000 character maximum)
0 characters entered.  : 4000 characters remaining.

- Other Funding (e.g. University department)

(4000 character maximum)
0 characters entered.  : 4000 characters remaining.

- Describe the project’s relevance to the DOE Office of Science mission.
Describe the project’s relevance to one of the six Office of Science program offices and explain how your project’s research supports that mission. Projects that can demonstrate alignment with a program office mission are much more likely to receive awards.

(4000 character maximum)
0 characters entered.  : 4000 characters remaining.
11.1 Does this project intend to make use of any information (software or data) subject to the following legal controls on use?

- Classified or controlled military or defense information
- Export controlled or ITAR (International Traffic in Arms Regulations) information
- Personally identifiable information
- Protected health information
- Proprietary information
- None

11.2 If this project is given a NERSC award, I agree to monitor the usage associated with it to ensure that, to the best of my ability to
11.2 If this project is given a NERSC award, I agree to monitor the usage associated with it to ensure that, to the best of my ability to determine, usage is for the project described here.

- Yes
- No

11.3 For continuing projects: I have audited the MPP and/or HPSS usage associated with this project, and to the best of my ability to determine, all usage was for the project specified.

- Yes
- No
- N/A - New Project

Save DOE Funding Q10-11
12. Project Description

Describe the research you are performing or will perform with NERSC resources.

12.1 Project Summary: provide a brief summary easily understood by people outside of your field (i.e., at a Scientific American level of sophistication --- Required).

What will this project accomplish? What is the significance of this work?

(4000 character maximum) 0 characters entered. : 4000 characters remaining.

12.2 Long Project Description

Longer project descriptions may be attached as a PDF file.

Select to upload PDF attachment  (Maximum size: 20 MB)
13.1 Accomplishments Summary
Summarize in terms easily understood by people outside of your field the accomplishments made by this project using NERSC resources in the previous year. Explain why your results are important and how the use of NERSC resources allowed you to meet your research objectives.

(Startup requests need not fill in this field.)

(4000 character maximum) 0 characters entered. : 4000 characters remaining.

13.2 Long Accomplishments Description
 Longer accomplishments description may be attached as a PDF file.

Select to upload PDF attachment (Maximum size: 20 MB)
14. Publications Resulting From the Use of NERSC Resources - Enter in the order authors, title, journal

14.1 Refereed Publications
Enter only publications that have been accepted and are in press or published. Do not include publications entered here last year.

(4000 character maximum) 0 characters entered. : 4000 characters remaining.

14.2 Other publications to support this request.
Use this area for submitted as well as other types of publications.

(4000 character maximum) 0 characters entered. : 4000 characters remaining.
**Test Project**

**Save Resources Requested Q15-18** You MUST click the "Save" button here or at the bottom in order to save your work before selecting another tab.

<table>
<thead>
<tr>
<th>15. Computational Resources</th>
<th>Alloc Type</th>
<th>Repo</th>
<th>Hours Used 2015</th>
<th>Hours Requested 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.1 MPP Systems: Edison &amp; Cori</td>
<td>Startup</td>
<td>m2247</td>
<td>0</td>
<td>50,000</td>
</tr>
<tr>
<td>15.4 Genepool (Joint Genome Institute researchers only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.7 Project Directories</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td>Alloc Type</td>
<td>Repo</td>
<td>Project Directory Name</td>
<td>Storage Used 2015</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>-------</td>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>m2247</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>15.8 Archival Storage</td>
<td>Startup</td>
<td>m2247</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource</td>
<td>Alloc Type</td>
<td>Repo</td>
<td>SRUs Used 2015</td>
<td>SRUs Requested 2016</td>
</tr>
<tr>
<td>----------</td>
<td>------------</td>
<td>-------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>10</td>
<td>Terabytes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.9 Scratch Space</td>
<td>How much HPSS archival storage do you need?</td>
<td></td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td>How much scratch space will your project need?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Show SRU Calculator**
HPSS CHARGING

NERSC uses Storage Resource Units (SRUs) to help manage HPSS storage. The goal is to provide a balanced computing environment with appropriate amounts of storage and adequate bandwidth to keep the compute engines fed with data. Performance and usage tracking allows NERSC to anticipate demand and maintain a responsive storage environment. Storage management also recognizes storage as a distinct resource in support of an increasing amount of data intensive computing. Storage management and the quota system are intended to encourage efficient usage by the user community.

SRU Management

SRUs are reported and managed through the NERSC Information Management (NIM) system. If a user is out of SRUs in all of their HPSS repositories that user will be restricted so that they can no longer write data to HPSS (although they will continue to be able to read data).

Users can check their HPSS SRU balances by logging in to the NIM and clicking on their "Account Usage" tab.

Calculating a User's SRUs

Three measures of use are used in computing SRUs:

1. Number of files stored (files)
2. GB of space used in the archive (space)
3. GB of I/O transferred (I/O)
**SRU CALCULATOR**

**About SRUs**

You can use this form to estimate your mass storage charges (in SRUs).

SRUs are calculated on a daily basis. Enter your estimated daily average number of files and data storage and your yearly estimate of data transferred to and from the HPSS system. Click on Calculate and your SRU charge will appear in the light blue boxes.

### Enter average daily values for the allocation year

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of files</td>
<td>10,000</td>
</tr>
<tr>
<td>Amount of data stored (GB)</td>
<td>85</td>
</tr>
</tbody>
</table>

### Enter total HPSS I/O for the allocation year

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data transferred (GB)</td>
<td>170</td>
</tr>
</tbody>
</table>

**This is your estimated SRU charge**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average per month</td>
<td>102.54 SRUs</td>
</tr>
<tr>
<td>Per Year</td>
<td>1,231 SRUs</td>
</tr>
</tbody>
</table>

**Annual estimates:**

- Number of Files: 0
- GB of space used in the archive (space): 0
- GB of I/O transferred (I/O): 0
<table>
<thead>
<tr>
<th>Resource</th>
<th>Alloc Type</th>
<th>Repo</th>
<th>SRUs Used 2015</th>
<th>SRUs Requested 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.8 Archival Storage</td>
<td>Startup</td>
<td>m2247</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**How much HPSS archival storage do you need?**

**15.9 Scratch Space**

**How much scratch space will your project need?**
16. Brief Justification for Resources Requested Above
(4000 character maximum)  0 characters entered.  4000 characters remaining.

17. Events or Deadlines Affecting Computational Needs Through the Year
Please describe any time(s) this coming allocation year that you expect will spike your demand for resources.
(4000 character maximum)  0 characters entered.  4000 characters remaining.
18. Real-Time Computing Needs

Does your project require real-time computing resources?
(For example does your project require immediate access to computing resources because it is connected to a live experiment.)

☐ Yes  ☐ No

Save Resources Requested Q15-18

18. Real-Time Computing Needs

Does your project require real-time computing resources?
(For example does your project require immediate access to computing resources because it is connected to a live experiment.)

☐ Yes  ☐ No

* If you answer Yes above, please explain:

(4000 character maximum)  0 characters entered.  4000 characters remaining.
ERCAP 2016 Request: 89039

PI: Test Pi

Last updated: 21-AUG-2015 (Not Ye

This page is for PDSF users only. You should skip this section unless you have prior approval for a PDSF project. The PDSF is a special-use physics system hosted by NERSC.

Test Project

Are you authorized to use the PDSF system?  Yes  No

Or

ERCAP 2016 Request: 89039

PI: Test Pi

Last updated: 21-AUG-2015 (Not Ye

This page is for PDSF users only. You should skip this section unless you have prior approval for a PDSF project. The PDSF is a special-use physics system hosted by NERSC.

Are you authorized to use the PDSF system?  Yes  No

19.1 PDSF Repos

No PDSF repos for 2016

Save PDSF information

You MUST click the "Save" button here or at the bottom in order to save your work before selecting another tab.

Do you need a new repo (project account)? PDSF projects must be approved.

Yes  No

If yes, please enter your experiment name (3-8 characters):

Save PDSF information
This page is for PDSF users only. You should skip this section unless you have prior approval for a PDSF project. The PDSF is a special-use physics system hosted by NERSC.

**Test project/repositories**

Are you authorized to use the PDSF system?  
Yes  No

### 19.1 PDSF Repos

Select the repositories you want to renew for 2016, then click the arrow below to renew them.

<table>
<thead>
<tr>
<th>Repository</th>
<th>Renew?</th>
</tr>
</thead>
<tbody>
<tr>
<td>testpdsf</td>
<td></td>
</tr>
</tbody>
</table>

No PDSF repos for 2016

Please renew your request before filling out the rest of the fields on the page.

Save PDSF information  You MUST click the "Save" button here or at the bottom in order to save your work before selecting another tab.

Do you need a new repo (project account)?  PDSF projects must be approved.

Yes  No

If yes, please enter your experiment name (3-8 characters):

Save PDSF information
19.2 PDSF uses a "sponsored" model. How does your project plan to fund your PDSF usage (compute and storage)?

(4000 character maximum) 0 characters entered. : 4000 characters remaining.

19.3 How many total CPU hours do you need for the coming year (please describe your codes on the codes tab)?

Hours (Integer value only)

19.4 Describe any special characteristics of your workflow (e.g. non-conforming)

(4000 character maximum) 0 characters entered. : 4000 characters remaining.

19.5 How much experiment specific storage do you need?

Terabytes (Integer value only)
20. Code and Application Descriptions
You should complete a copy of this page for each of your project's most frequently used codes and applications. Each code will appear on a separate tab (under the main set of tabs.) Click on the "Add another code" tab to pull up a blank copy of this page for each new code.

<table>
<thead>
<tr>
<th>Code Name</th>
<th>WhoBU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code Description</td>
<td>15 characters entered.</td>
</tr>
<tr>
<td>Determines user</td>
<td></td>
</tr>
<tr>
<td>URL for code description</td>
<td><a href="http://www.personID.org">www.personID.org</a></td>
</tr>
<tr>
<td>Machines to be used</td>
<td>Edison</td>
</tr>
<tr>
<td>Percent of allocation</td>
<td>50 %</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------</td>
</tr>
<tr>
<td>What is the maximum number of nodes the code can use?</td>
<td>256</td>
</tr>
<tr>
<td>What is the typical number of nodes used by this code in production runs?</td>
<td>8</td>
</tr>
<tr>
<td>If you run serial jobs, how many simultaneous jobs would you like to run? For PDSF users: how many simultaneous jobs do you plan to run?</td>
<td>100 number of serial jobs</td>
</tr>
<tr>
<td>How do you perform I/O?</td>
<td>✓ Files shared between processors  ☐ One file per processor or node</td>
</tr>
<tr>
<td>Programming Languages Used</td>
<td>✓ Assembler  ✓ C language  ✓ C++  ✓ Fortran77  ✓ Fortran90  ✓ Fortran95  ✓ Fortran 2003+  ✓ Java  ✓ Python  Other: ShellScript, Other Programming</td>
</tr>
<tr>
<td>Parallel Programming Models Used</td>
<td>✓ MPI  ☐ OpenMP  ☐ PGAS  ☐ Posix Threads  Other:</td>
</tr>
</tbody>
</table>
### 21. Data & Analytics

#### 21.1 Which I/O formats/libraries, databases, workflow tools, and data transfer tools does your work require at NERSC?

- [ ] Fireworks
- [x] Globus Online
- [x] GridFTP
- [ ] HDF5
- [x] MongoDB
- [x] MySQL
- [ ] NetCDF
- [x] PostgreSQL
- [x] Raw Binary
- [x] ROOT
- [x] SciDB
- [ ] Swift
- [ ] Text (ASCII, CSV)
- [ ] Tigres

**Other:** Cassandra, GraphLab, Hadoop, Omero, Other NoSQL, Of

#### 21.2 Which imaging tools, data analytics frameworks, and data visualization tools does your work require at NERSC?

- [x] Fiji
- [x] MATLAB
- [ ] OMERO
- [ ] Paraview
- [x] Python
- [x] R Language
- [x] ROOT
- [ ] Spark
- [x] UV-CDAT
- [x] Vist
- [x] VMD

**Other:** ADIOS, Catalyst (Paraview), CDAT, Climate Data Operations
22. Data Sharing

22.1 Do you need to share data or access NERSC compute resources over the web? If so, describe any special resources you may need, such as software, data storage, and/or bandwidth requirements. (4000 character maximum)

How much data do you expect your project to move to NERSC from external sources? 0 Terabytes
Test project/repositories

Save All Rows You MUST click the "Save" button here or at the bottom in order to save your work before selecting another tab.

WARNING: If you change the Project Role of a User or a Project Manager to Deleted, that change will take effect immediately.

PI and Proxy role change requests should be submitted to NERSC Account Support.

testmpp#15 Project User Information and Roles as of 08/28/2015

<table>
<thead>
<tr>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
<th>Organization</th>
<th>Role</th>
<th>Next Year Status</th>
<th>Signed Policies</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADMIN, Test</td>
<td><a href="mailto:support@nersc.gov">support@nersc.gov</a></td>
<td>510-486-8612</td>
<td>NERSC</td>
<td>User</td>
<td>Keep</td>
<td>EXEMPT</td>
</tr>
<tr>
<td>Antypas, Katie</td>
<td>********@ibi.gov</td>
<td>510-486-9999</td>
<td>NERSC</td>
<td>User</td>
<td>Keep</td>
<td>ONFILE</td>
</tr>
<tr>
<td>Bagwell, Clayton</td>
<td>********@nersc.gov.gov</td>
<td>510-495-9999</td>
<td>NERSC</td>
<td>PI Proxy</td>
<td>Keep</td>
<td>ONFILE</td>
</tr>
<tr>
<td>User II, Test</td>
<td>*****@nersc.gov</td>
<td>510-486-9999</td>
<td>NERSC</td>
<td>User</td>
<td>Delete next AY</td>
<td>EXEMPT</td>
</tr>
<tr>
<td>Whitney, Cary</td>
<td>********@ibi.gov</td>
<td>510-495-9999</td>
<td>NERSC</td>
<td>User</td>
<td>Keep</td>
<td>ONFILE</td>
</tr>
</tbody>
</table>

I certify that the above user information is correct for all active users in this Project. (Note: You have already certified your user list. You can re-certify if there have been any changes.)

Save All Rows
### Test project/repositories

**23. Other HPC Support**
List High Performance Computing support for this project from outside NERSC that you currently have or expect in the next year. Also, indicate if you have applied for a DOE INCITE award.

- A-2-Q-23 - Other HPC Support: No INCITE award was applied for.

(Text field with 4000 character limit.)

---

**24. Additional Information** - If your project has special requirements that you would like NERSC to consider, describe them here.

Enter any additional information you would like the review committees to consider in support of this request.

- A-2-Q-24 - Additional Information: None at this time.

(Text field with 4000 character limit.)

---

**25. Feedback**
Use this space to provide feedback on ERCAP, the NERSC application/allocation process.

- A-2-Q-25 - Feedback: The ERCAP process is wonderful. And that Allocations Support guy euro is great!

(Text field with 4000 character limit.)
Test project/repositories

Save Submit Request  You MUST check the finished box and select the "Save" button in order to submit your request.

28. Submit Your Request
Choose Finished if you wish to submit your finished request. Only finished requests will be considered for awards.

✓ Finished: This request is finished and ready for review.

Save Submit Request
**Test Project**

**ERCAP Request #89172 for FY2016**

1. Principal Investigator

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pi, Test</td>
<td>510-486-8612</td>
<td><a href="mailto:support-notice@nersc.gov">support-notice@nersc.gov</a></td>
</tr>
</tbody>
</table>

2. Other Authorized Preparers - Preparer will be designated a PI PROXY

3. Senior Investigators

4. Project Title

   Test Project

4.1 URL for a relevant web page describing your project

5. Project Name

   TestPrjct

6. Project Class

   Startup

7. Sponsoring Site

   USA: Lawrence Berkeley National Lab - NERSC

8. Science Category

   Computer Science

9. DOE Office and Program

   ASCR - Computer Sciences
ERCAP Request #89172 for FY2016

1. Principal Investigator

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</table>

2. Other Authorized Preparers - Preparer will be designated a PI PROXY

3. Senior Investigators

4. Project Title

   Test Project

4.1 URL for a relevant web page describing your project

5. Project Name

   TestProj

6. Project Class

   Startup

7. Sponsoring Site

   USA: Lawrence Berkeley National Lab - NERSC

8. Science Category

   Computer Science

9. DOE Office and Program

   ASCR - Computer Sciences
Helpful URLs

http://www.nersc.gov/users/accounts/allocations/deadlines
http://www.nersc.gov/users/accounts/allocations/overview/
http://www.nersc.gov/users/accounts/allocations/first-allocation
https://nim.nersc.gov/newpi.php
https://nim.nersc.gov/CUA.php
https://nim.nersc.gov
Contact Information:

Accounts & Allocations:

accounts@nersc.gov
allocations@nersc.gov

Phone:

510-486-8612 or
1-800-66-NERSC opt 2