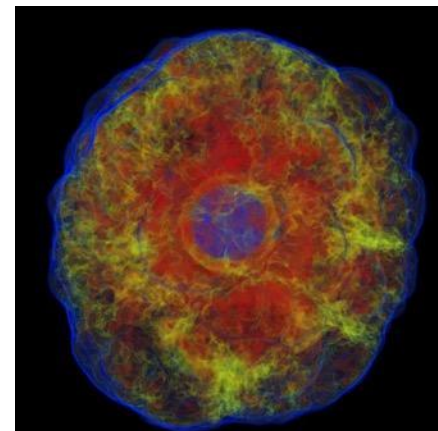
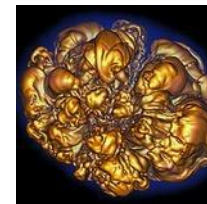
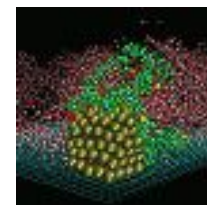
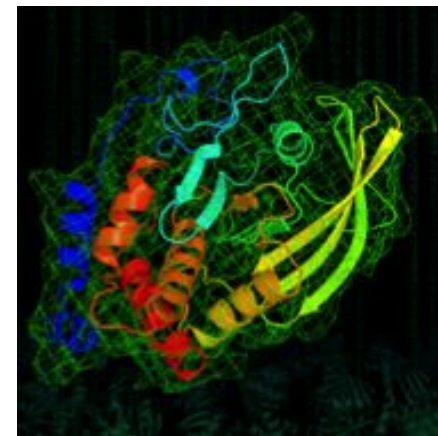
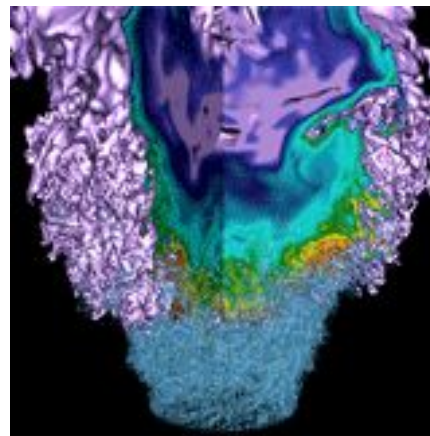


Accounts and Allocations



Clayton Bagwell
NERSC User Engagement Group

NERSC New User Training
March 21, 2018

Accounts vs. Allocations



There are two types of *accounts* at NERSC:

1. Your personal, private account
 - Associated with your *login* or *user name*
 - Provides *authentication* (personal identity) and *authorization* (which resources are accessible)
 - You can request an account on your own or your project's Principal Investigator (PI) or Proxy can request an account for you
 - Four primary account *roles*
 - PI, PI Proxy, Project Manager, User
2. A Project allocation account, or *repository* (aka *repo*)
 - Like a bank account you use to “pay” for computer time and archival storage
 - Managed by a Principal Investigator (PI) and (optionally) one or more PI Proxies.
 - All MPP users belong to at least one repo
 - An individual user may belong to more than one repository
 - But only one *default repo*

NIM – NERSC Information Management



- **Web-based tool for user and repo management**

- Check daily balance, change password, change login shell, update contact information, etc.

<https://nim.nersc.gov>



NERSC Information Management

Please sign in

NERSC Username:

NIM Password:

[Reset your NIM password.](#) | [Forgot your username?](#)

Log In

- **Drop-down menus**

USG TestAccount | [Logout](#) | [Change My Password](#)

Quick Search:



NIM Home	My Stuff ▼	Search ▼	Reports ▼	Actions ▼
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- Actions menu

- Change password, change default login shell, generate HPSS token, change default repo, opt in/out of MFA

- **Tabs**

Account Usage	Logins by Host	Unix Groups	Roles	Contact Info	Grid Certificates	SSH Keys
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USG TestAccount

Account Usage



Account Usage Summary

Resrc	Repo	User_id	Login	Login Type	User Hrs Used	User Charged	Avg CF	% Used	% Allowed	User Balance	Last Charged On	Base Repo?	Dflt Now?
MPP	mpccc	17931	dpturner	Authorized	6,219	6,178	1.0	0.1	10	993,822	08-SEP-13	Y	Y
MPP	matcomp	17931	dpturner	Authorized	1,430	1,430	1.0	0.0	1.0	228,570	05-SEP-13	N	N
MPP	usplanck	17931	dpturner	Authorized	447	447	1.0	0.0	5	384,553	03-SEP-13	N	N

Account Policies



- **All users must sign Appropriate Use Policy form**
 - This is incorporated into the Self-Service account request form
- https://nim.nerisc.gov/Appropriate_Use_Policy.php
- **Password policies**
 - Must change password every 6 months
 - **Do not share passwords**
 - **Do not email passwords**
- **Account locked after 5 consecutive login failures**
 - Login to NIM to clear login failures
 - If you have forgotten your password, there is a link on the NIM login page that will lead you through the process of resetting a password
 - Call NERSC Account Support for more help

Password Rules



- **Must contain**
 - *at least* eight characters
 - *at least* one each of:
 - UPPER-case letter
 - lower-case letter
 - numeric digit
 - “special” character (! @ \$ % ? & etc.)
- **Good**
j#K01vz\$euP@!udls
- **Bad**
P@ssw0rd
- **One possible method**
 1. computer security is very important for nersc users
 2. csivifnu
 3. C\$1v1fnu

Multi-Factor Authentication



- Provides an additional security layer to accessing NERSC
- Opt In/Out of MFA via NIM
- Generate token
- Online instructions
 - <http://www.nersc.gov/users/connecting-to-nersc/mfa/>

- PIs apply through ***Energy Research Computing Allocations Process (ERCAP)***
 - Accessed through the NERSC Help Desk at:
 - <https://ercap.nersc.gov>
 - Renew current projects annually, typically late summer
 - Science objectives, approach, and resource requirements
 - Computer time and archival storage space
 - Reviewed and awarded by DOE Science Offices
 - Most allocations are awarded in late Fall (December)
 - Allocation year starts in January
 - Small exploratory (startup) allocations are awarded throughout the year with DOE approval

Allocations Process - NERSC



- **Amount of MPP time available**
 - Approximately 9.23 billion MPP hours AY18
 - 80% to “DOE Base”
 - 10% to ASCR Leadership Computing Challenge (ALCC)
 - 10% to “Director’s Reserve”
 - NERSC Exascale Science Application Program (NESAP)
 - Exploratory (Startups), staff, Education, etc.

Running Out of Time



- **User**

- PI determines how much of the repo's MPP allocation each user can use
 - Either as a % of Total allocation or a fixed # of hours
- If user runs out of time
 - Submitted jobs go into the scavenger queue if repo cannot pay for job
 - Contact PI to increase percentage or # of hours

- **Repo**

- If repo runs out of time, PI should contact appropriate DOE Science Office Allocations Manager
 - Each Office typically holds a certain amount of time in reserve
- Any jobs submitted will run in scavenger (low priority)

Resources



- Self Help

<http://www.nersc.gov/users/accounts/>

<http://www.nersc.gov/users/accounts/user-accounts/>

<http://www.nersc.gov/users/accounts/allocations/>

<https://nim.nersc.gov>

https://nim.nersc.gov/nersc_account_request.php

<http://www.nersc.gov/users/connecting-to-nersc/mfa/>

<http://www.nersc.gov/users/accounts/user-accounts/how-usage-is-charged>

<http://www.nersc.gov/users/data-and-file-systems/hpss/hpss-charging/>

<https://ercap.nersc.gov>

Resources cont.



- **NERSC Account Support**
 - <http://help.nersc.gov>
 - accounts@nersc.gov
 - 1-800-66-NERSC, menu option 2 or 510-486-8612

- **NERSC Allocation Support**
 - <http://help.nersc.gov>
 - allocations@nersc.gov
 - 1-800-66-NERSC, menu option 2 or 510-486-8612

NERSC

Thank you.