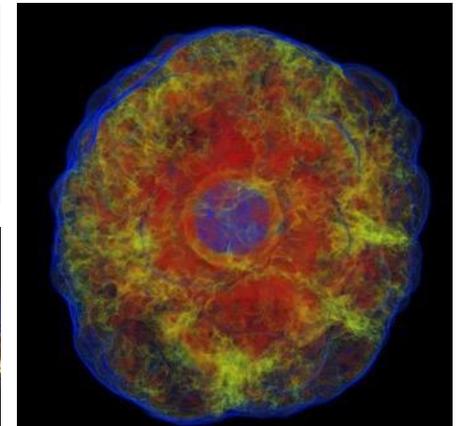
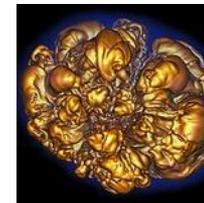
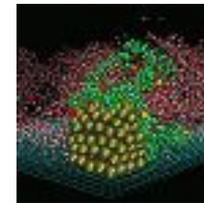
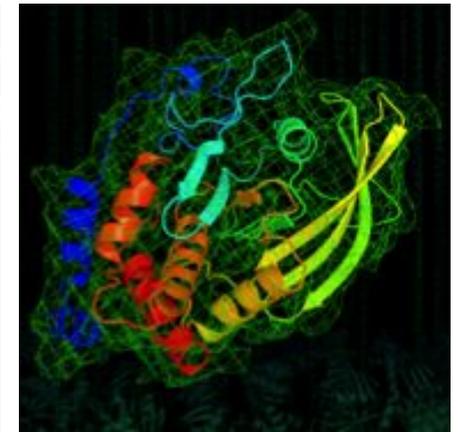
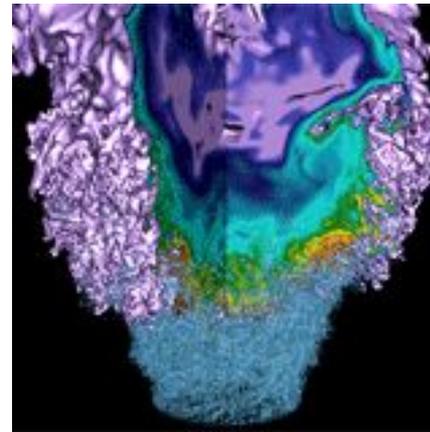


Accounts and Allocations



Clayton Bagwell
NERSC User Engagement Group

NERSC New User Training
January 25, 2019

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 Project Manager can request an account for you
 - Four primary account *roles*
 - PI, 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 Project Managers.
 - 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.nerisc.gov>



NERSC Information Management

Please sign in

NERSC Username:

NIM Password:

MFA (if applicable):

[Reset your NIM password.](#) | [Forgot your username?](#) | [Lost your tokens?](#) | [Sign in as Staff](#)

- **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

- **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 an 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
- Required for ALL users
- Generate token
- Online instructions
 - <http://www.nersc.gov/users/connecting-to-nersc/mfa/>

Generating a Token



FreeOTP (FreeOTP)

User	Serial Id	Token Description	Fails
	TOTP22856A68	my phone	0

OATH Soft Token | **OTP seed**

QR-Code for installing the OATH compatible Soft Tokens (FreeOTP, Google Authenticator and other apps using the 'otpath://' syntax).
This will be the only time you will be able to scan this code into your Google Authenticator (or similar app), or use the URL string below.
For other apps that require manual configuration, choose the "OTP seed" tab above.



otpath://totp/NERSC-[redacted]-TOTP22856A68?
secret=[redacted]
TOTP22856A68

- 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 AY19
 - 80% to “DOE Mission Science”
 - 10% to ASCR Leadership Computing Challenge (ALCC)
 - 10% to “Director’s Reserve”
 - NERSC Exascale Science Application Program (NESAP)
 - Exploratory, Education, staff, etc.

Quarterly Allocation Reductions



- **We encourage you to plan your computing usage and use your time consistently**
- **We withdraw time on a Quarterly basis for under-usage**
 - <http://www.nersc.gov/users/accounts/allocations/allocation-reductions/>

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

<https://ercap.nersc.gov>

<https://nim.nersc.gov>

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

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

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

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

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

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

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

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

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.