Agenda

• Account Types
• User Accounts
• Allocation Accounts
Accounts vs. Allocations

There are two types of accounts at NERSC:

- Your personal, private account
  - Associated with your login or username
  - 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 send you a link to request an account
  - Five primary account roles
    - PI, PI Proxy, Project Membership Manager, Project Resource Manager, and User

- 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 project/repository
    - But only one default project
Iris - Web Based Information Portal

- **Web-based tool for user and project management**
  - Check daily balance, change password, change login shell, update contact information, etc.
  - Manage Project membership and allocations
  - Run reports on

  [https://iris.nersc.gov](https://iris.nersc.gov)
Account Policies

- **All users must sign an Appropriate Use Policy form**
  - This is incorporated into the Self-Service account request form
    - [https://iris.nersc.gov/aup](https://iris.nersc.gov/aup)

- **Password policies**
  - Must change password every 6 months (will soon change to 1 year)
  - **Do not share passwords**
  - **Do not email passwords**

- **Account locked after 5 consecutive login failures**
  - Login to Iris to clear login failures
  - If you have forgotten your password, there is a link on the Iris login page that will lead you through the process of resetting a password
  - Email NERSC Account Support for more help
Password Rules

● **Requirements**
  ○ The password must register as either 'safe' or 'very safe' on a password strength meter that is provided.
  ○ There is no character complexity rule regarding inclusion of uppercase/lowercase letters, digits and special characters.

● **Good**
  j#K01vz$euP@!udls OR moocher-earflap-robin-overreach

● **Bad**
  P@ssw0rd

● **One possible method (old style)**
  ○ computer security is very important for nersc users
  ○ csivifnu
  ○ 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/](http://www.nersc.gov/users/connecting-to-nersc/mfa/)
Generating a Token

New MFA Token

<table>
<thead>
<tr>
<th>OATH Seed</th>
<th>OTP Seed</th>
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**QR-Code**

- **Url:** `otpauth://totp/NERSC-elvis-TOTP18941BFC?secret=`
- **Serial:** `TOTP18941BFC`
- **Authy Code:** 

**Note:**

- This code is for installing OATH compatible Soft Tokens (FreeOTP, Google Authenticator, and others using the `otpauth://f` 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.

**Buttons:**
- Add Token
- Backup Passwords
- Delete All Tokens

**Table:**

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<th>Description</th>
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Allocations
Allocations Process - PIs

- PIs apply through the *Energy Research Computing Allocations Process (ERCAP)*
  - Accessed through the NERSC Help Desk at
    - [https://ercap.nersc.gov](https://ercap.nersc.gov)
  - Renew current projects annually, typically late summer
  - Science objectives, approach, and resource requirements
    - Computer time, Community and Archival storage space
  - Reviewed and awarded by DOE Office of Science programs
  - 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 AY20
  ○ 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.
Running Out of Time

● **User**
  ○ PI determines how much of the project’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 overrun queue if project cannot pay for job
    ■ Contact PI to increase percentage or # of hours

● **Project**
  ○ If project runs out of time, PI should contact appropriate DOE Science Program Allocations Manager
    ■ Each Program typically holds a certain amount of time in reserve
  ○ Any jobs submitted will run in overrun (low priority)
Resources

- Self Help

https://ercap.nersc.gov
https://iris.nersc.gov
https://iris.nersc.gov/add-user
http://www.nersc.gov/users/accounts/
http://www.nersc.gov/users/accounts/allocations/
http://www.nersc.gov/users/accounts/user-accounts/
http://www.nersc.gov/users/accounts/user-accounts/how-usage-is-charged
http://www.nersc.gov/users/connecting-to-nersc/mfa/
https://docs.nersc.gov/filesystems/archive/#hpss-usage-charging
Resources cont.

● NERSC Account Support
  ○ [http://help.nersc.gov](http://help.nersc.gov)
  ○ accounts@nersc.gov

● NERSC Allocation Support
  ○ [http://help.nersc.gov](http://help.nersc.gov)
  ○ allocations@nersc.gov
Thank You and Welcome to NERSC!