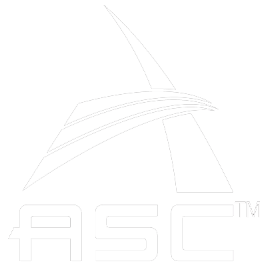
# Getting Started Guide for Predictive Science



Academic Alliance Program (PSAAP) Users

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**Contact**

Tim Fahey, Lawrence Livermore National Laboratory 925-422-4228

[fahey2@llnl.gov](mailto:blaiseb@llnl.gov)

## User Information for Lawrence Livermore National Laboratory

Point of Contact: Tim Fahey, 925-422-4228, [fahey2@llnl.gov](mailto:fahey2@llnl.gov)

### Available Machine Resources

[asc.llnl.gov/alliances/alliances\_resources.php](https://asc.llnl.gov/alliances/alliances_resources.php)

### Requesting an Account

See the “Requesting Tri-Lab Accounts” section at the end of this document.

### Essential Information for Livermore Computing (LC) Users

* [https://hpc.llnl.gov](https://computing.llnl.gov/)**:** Covers everything users need to know for using LC’s machines. Most pages are open to the world; those that aren’t require authentication via a valid LC account.
* [https://computing.llnl.gov/tutorials/lc\_resources](https://computing.llnl.gov/tutorials/lc_resources/)**:** A “getting started” tutorial that should be reviewed by all new users. Please distribute this URL to your center’s users also.

### Accessing LC Compute Resources

After account activation and receipt of LC’s OTP password token, users access LC's computers with SSH. More information: <https://computing.llnl.gov/tutorials/lc_resources/#Access>

### User Documentation

<https://hpc.llnl.gov/>, specifically <https://hpc.llnl.gov/training/tutorials/>

### User Hotline Support

* Phone, Email and Walk-in: Monday through Friday, 8:00 am–noon, 1:00–4:45 pm PST
* Off-hours and weekends support provided by LC Operations staff
* Technical assistance: 925-422-4531 or [lc-hotline@llnl.gov](mailto:lc-hotline@llnl.gov)
* Passwords, accounts, forms: 925-422-4533 or [lc-support@llnl.gov](mailto:lc-support@llnl.gov)

### Collaboration Tools

All LC users have access to these Atlassian collaboration tools:

* Confluence Wiki: <https://lc.llnl.gov/confluence>
* Jira Bug Tracker: <https://lc.llnl.gov/jira>
* Bitbucket Source Code Manager: [https://lc.llnl.gov/bitbucket/dashboard](https://lc.llnl.gov/stash)

### User Training

LC provides online tutorials, hands-on workshops (both on-site and off-site) and [seminars:](https://computing.llnl.gov/training) <https://hpc.llnl.gov/training/workshop-schedule>

## User Information for Los Alamos National Laboratory

Point of Contact: Rob Cunningham, 505-665-4444 x05704, [rtc@lanl.gov](mailto:rtc@lanl.gov) or [consult@lanl.gov](mailto:consult@lanl.gov)

### Available Machine Resources

[asc.llnl.gov/alliances/alliances\_resources.php](https://asc.llnl.gov/alliances/alliances_resources.php)

### Requesting an Account

See the “Requesting Tri-Lab Accounts” section at the end of this document.

### Essential Information for LANL High Performance Computing (HPC) Users

* All LANL user information is accessible via LANL cryptocard at: [portal.lanl.gov](https://portal.lanl.gov/)
* <https://hpctraining.lanl.gov/> is accessible in the Yellow (through portal.lanl.gov) with a cryptocard.
* [hpc.lanl.gov](http://hpc.lanl.gov/) covers everything users need to know for using LANL HPC clusters. This entire site requires authentication via a valid LANL cryptocard. Please pass this URL along to users of LANL at your center.

### Accessing LANL Compute Resources

After account activation and receipt of LANL OTP password token, users access LANL HPC clusters with SSH. To reach the LANL clusters:

* ssh to the firewall/gateway: wtrw.lanl.gov and authenticate with your username and Cryptocard passcode
* Use ssh to reach a front-end node:
* For additional information and assistance, contact User Support

### Computing Resources

<http://hpc.lanl.gov/summary_table>(requires cryptocard authentication)

### User Training

LANL provides online tutorials, hands-on workshops (both on-site and off-site) and seminars: [http://int.lanl.gov/projects/asci/training](http://int.lanl.gov/projects/asci/training/) (requires cryptocard authentication)

### User Support—ICN Consulting Office

* Phone, Email and Walk-in: Monday through Friday, 8:00 am–noon, 1:00–5:00 pm MST
* Off-hours and weekends support provided by LANL Operations staff
* Technical assistance: 505-665-4444 option 3 or [consult@lanl.gov](mailto:consult@lanl.gov)
* Cryptocard, accounts, forms: Frances Castellano, 505-665-1371, [fea@lanl.gov](mailto:fea@lanl.gov) or Michelle Montoya, michelem@lanl.gov, 505-667-4456

## User Information for Sandia National Laboratory

Point of Contact: Joel Stevenson, [josteve@sandia.gov](mailto:josteve@sandia.gov)

### Available Machine Resources

[asc.llnl.gov/alliances/alliances\_resources.php](https://asc.llnl.gov/alliances/alliances_resources.php)

### Requesting an Account

See the “Requesting Tri-Lab Accounts” section at the end of this document.

### Essential Information for SNL High Performance Computing (HPC) Users

* [http://hpc.sandia.gov](http://hpc.sandia.gov/) provides basic information about Sandia HPC systems; these web pages are open, though some links require authentication with the Sandia CRYPTOCard.
* [https://computing.sandia.gov](https://computing.sandia.gov/) covers everything users need to know for using Sandia's HPC clusters. This entire site requires authentication with a Sandia CRYPTOCard. Information for specific platforms can be found under the “Platforms” tab.

## Accessing SNL Compute Resources

After account activation and receipt of your Sandia SRN CRYPTOCard and/or Sandia ECN password, users access cluster login nodes with SSH.

To reach Sandia Restricted Network (SRN) platforms Eclipse or Attaway:

* Connect to Sandia Secure Restricted Network (SRN) via gateway: ssh <sandia-username>@srngate.sandia.gov
* Read the “WARNING NOTICE TO USERS” message; then enter your CRYPTOCard password
* From Welcome menu, select “kinit” to Acquire kerberos credentials and enter Kerberos password, then select “ssh” to establish an SSH connection
* Enter desired system name, e.g. “eclipse” or “attaway”
* A Workload Characterization (WC) ID is required to run batch jobs; request WC ID from your Sandia contact, and use it as your "account" for batch job submissions.

To reach External Collaborative Network (ECN)/Open HPC (OHPC) platform Solo :

* The access criteria for connecting to the External Collaborative Network (ECN)/Open HPC (OHPC) Solo cluster has been modified as of Monday, March 30, 2020. Remote Access to SRN and crypto card are no longer part of the ECN Capacity Clusters requirements. Solo was updated to allow direct ssh access from Sandia SON, OHPC and SRN networks using an ECN password rather than going through SRNGate using a crypto card (and includes Sandia VPN and DAAS connections for Sandia employees, PO Contractors and collaborators such as SARAPE).
* Connect to Solo cluster via SSH: ssh <sandia\_user\_name>@solo.sandia.gov or <sandia\_user\_name>@solo-login[1 or 2].sandia.gov (be sure to use your sandia username and not the username you are using on your local machine unless it is the same).
* Your ECN password is used to login to Solo and to access the ECN collaborate website.
* To ssh directly to solo from the Internet you must first provide us the IP address of the router/modem that is presented to the Internet when accessing sites from your home, school or office LAN. You can see that external address by going to www.myipaddress.com. This will not be the internal 192.168.X.X or 10.x.x.x IP address assigned to your local machine through your router or modem. Send your IP information to solo-help@sandia.gov. Once your IP is added to the access list you will be able to ssh directly.
* A Workload Characterization (WC) ID is required to run batch jobs; request WC ID from your Sandia contact, and use it as your "account" for batch job submissions.

Here is the link to the ECN website for Solo for more information (you will need your ECN password to access the website):

<https://collaborate.sandia.gov/sites/ecn_hpc_capacity_clusters/solo/SitePages/Getting%20Started.aspx>

If you need to reset your ECN password, go to: https://ecnpassword.sandia.gov/

1. click on "Get Temporary Password" link
2. Enter Username and Org (5 digit number using leading zero), click Get Temp Password button.
3. Check email for ECN temp password (good for one hour). Go back to ECN password tool and now click "Change Your Password".
4. Use ECN Temp Password to log on and get a regular ECN password (good for one year).

If you have any questions or problems, please feel free to let us know at solo-help@sandia.gov.

### Computing Resources

[computing.sandia.gov/platforms](https://computing.sandia.gov/platforms) (requires CRYPTOCard authentication)

### User Support—HPC OneStop

* Sandia HPC OneStop Portal at https://computing.sandia.gov (requires CryptoCARD authentication)
* Phone: Monday through Friday 8:30 am–4:30 pm Mountain, (505) 844-9328 or (505) 845-2243 Option 8
* Email: HPC-Help@sandia.gov
* Off-hours and weekends support provided by Sandia Operations staff for emergencies only

## Requesting Tri-Lab Accounts

All PSAAP accounts for Tri-lab compute resources must be requested through the web-based SARAPE account request system at <http://sarape.sandia.gov>.  Note that SARAPE requires login. Participating PSAAP centers will have a processing agent who will have login access. Your university processing agent will assist you in submitting the initial request. Most fields are self-explanatory, but some useful hints are provided below:

* **Step 2**: Requestor's Manager's Info: this pertains to your PSAAP center's designated SARAPE processing agent - that is, the person within your center who authorizes your center's account requests.
* **Step 3**: Select the Lab where you would like an account and the available machines will appear. If you mouse-over the blue “i” icon next to the machine name, additional information about that machine will appear.
* **Step 4**: Additional information: For the required "Justification" box, please indicate the name of your PSAAP center and what your work will pertain to.

Following completion of the form, your request will be reviewed by your center's SARAPE processing agent, and if approved, it will then be sent to the Lab(s) where you requested an account.  The review and approval processes at each Lab vary, but averages about one week for US citizens.  Non-US citizens are required to submit additional paperwork, initiated after the SARAPE request is received at the host site, and requires additional approvals.  Processing time for these also varies, between one and three months.

**Passwords/Tokens**

Each laboratory has its own tokens and/or passwords for access to its resources. If you have accounts at multiple sites you will receive them separately. After accounts are approved and issued, each laboratory has its own process for providing/sending your password and/or token.

**Training**

All laboratories require users to take online cyber security training on an annual basis. If this required training is not completed, machine accounts will be deactivated.

**Account Reauthorization**

All three laboratories require annual reauthorization of existing accounts. You will be notified via email regarding this process when your account renewal date approaches.