

Getting Started Guide for ASC Alliance Users

Lawrence Livermore National Laboratory User Information

LLNL Point of Contact: Blaise Barney 925-422-2578, blaiseb@llnl.gov

1. AVAILABLE MACHINE RESOURCES:

asc.llnl.gov/alliances/alliances_resources.php

2. ESSENTIAL INFO FOR LIVERMORE COMPUTING (LC) USERS:

- 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.
- 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.

3. GETTING AN ACCOUNT

Account Authorizer Only

Before Alliance users can obtain an account, the Alliance's Principal Investigator (PI) or Point of Contact (POC) needs to complete an "Authorized Signature" form:

computing.llnl.gov/forms/authorized_i.pdf

- Section A: leave the following boxes blank: Official User Name, UID, Regular LC User Name. If you have a DOE Clearance, enter the type, else leave blank. For Unclassified E-mail, enter your university email address.
- Section B: n/a
- Section C: all boxes
- Section D: check "ASC Alliance Authorizer"
- Section E: any additional information/preferences you would like to provide
- Section F: sign/date. If you want to have an alternate authorizer, they will need to complete this form also.

Questions?: LC Support: 925-422-4533, lc-support@llnl.gov.

US Citizens

Complete the online SARAPE form: sarape.sandia.gov to request a New Account. Mostly self-explanatory - a couple hints just in case:

- Step 1: Most boxes are self-explanatory.
 - For Unclassified E-mail, enter your university email address.
 - If you have a DOE Clearance, enter the type, else select "none".
 - For Requestor's Site, select your university.
 - For Resource Location, select Lawrence Livermore National Laboratory.
- Step 2: Account/Resource Name: Select Hera and/or uBGL. Be sure to select VPN also.
- Step 3: Sponsor's Name: Blaise Barney 925-422-2578 blaiseb@llnl.gov; Justification for Use: describe in sufficient detail the type of scientific work to be done by the applicant, being sure to note that it is part of the ASC Alliance program at your center.

- Step 4: Your Manager: this is the person at your site who oversees Alliance computer activity and account requests.

Complete two policy forms:

- computing.llnl.gov/forms/policies/briefing_i.pdf
- computing.llnl.gov/forms/policies/policies_i.pdf

Questions?: For SARAPE questions: Lilia Martinez: 505-845-7967, lmartin@sandia.gov. For questions about the two policy forms: LC Support: 925-422-4533, lc-support@llnl.gov.

Foreign Nationals

Complete the three forms listed for US citizens PLUS the form below. LC Support will followup with applicants after this initial form to complete additional forms and online training.

Foreign national data form: computing.llnl.gov/forms/blankforms/fn_blank.html

When describing why access is essential for the program's progress and success, be specific. An example is provided below.

James Bond is a Foreign National PhD student working under Prof. Q at XYZ University in the ASC Alliance Center for Integrated Simulations. Mr. Bond's area of expertise is in multi-phase flow simulations in gas turbine engines. In order to simulate the combustor of a real jet engine it is necessary to describe the position, motion and topology of the liquid fuel for more accurate results. Mr. Bond will be using our CDP code and refined level set method to simulate the whole primary and secondary breakup processes of liquid fuel injected into turbulent flow. Mr. Bond's access to the LLNL ASC computer resources will help ensure the success of the large scale computer simulations being performed as part of XYZ's ASC Alliance project.

Questions?: Contact Jan Nunes: nunes2@llnl.gov or 925-423-2931

One-Time Password (OTP) Token

After account approval, Alliance users will be mailed an OTP password token device. The OTP token device is used to authenticate with LC computing systems and certain web resources. See computing.llnl.gov/tutorials/lc_resources/#Access for details.

4. ACCESSING LC COMPUTE RESOURCES

After account activation and receipt of LC's OTP password token, users access LC's computers with SSH. More information:

computing.llnl.gov/tutorials/lc_resources/#Access
computing.llnl.gov/access

5. COMPUTING RESOURCES

The ASC Alliances are provided with allocations on a subset of LLNL's HPC clusters. As of January, 2012, these clusters include Hera, uBGL and uDawn. Detailed information about each machine can be found at the links below.

computing.llnl.gov/resources
computing.llnl.gov/tutorials/lc_resources/#Hardware

6. USER DOCUMENTATION

computing.llnl.gov
computing.llnl.gov/tutorials
computing.llnl.gov/documentation

7. 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.
- Passwords, accounts, forms: 925-422-4533 or lc-support@llnl.gov.

8. USER TRAINING

LC provides online tutorials, hands-on workshops (both on-site and off-site) and seminars:
computing.llnl.gov/training

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Los Alamos National Laboratory User Information

LANL Alliance HPC User Point of Contact: Rob Cunningham, rtc@lanl.gov, or consult@lanl.gov

1. AVAILABLE MACHINE RESOURCES:

asc.llnl.gov/alliances/alliances_resources.php

2. GETTING AN ACCOUNT

Complete the online SARAPE form: sarape.sandia.gov It is mostly self-explanatory - a couple hints just in case:

- Step 1: Most boxes are self-explanatory.
 - For Unclassified E-mail, enter your university email address.
 - If you have a DOE Clearance, enter the type, else select "none".
 - For Requestor's Site, select your university.
 - For Resource Location, select Los Alamos National Laboratory.
- Step 2: Account/Resource Name: Select any of Mapache, Cerrillos, Lobo.
- Step 3: Sponsor's Name: Rob Cunningham; Justification for Use: describe in sufficient detail the type of scientific work to be done by the applicant, being sure to note that it is part of the ASC Alliance program at your center.
- Step 4: Your Manager: this is the person at your site who oversees Alliance computer activity and account requests.

Questions on SARAPE: Lilia Martinez: 505-845-7967, Sarape-help@sandia.gov

Foreign Nationals

LANL Support (Lori/Frances) will follow-up with applicants after the initial request for an account. When describing why access is essential for the program's progress and success, be specific. An example is provided below.

James Bond is a Foreign National PhD student working under Prof. Q at XYZ University in the ASC Alliance Center for Integrated Simulations. Mr. Bond's area of expertise is in multi-phase flow simulations in gas turbine engines. In order to simulate the combustor of a real jet engine it is necessary to describe the position, motion and topology of the liquid fuel for more accurate results. Mr. Bond will be using our CDP code and refined level set method to simulate the whole primary and secondary breakup processes of liquid fuel injected into turbulent flow. Mr. Bond's access to the LANL ASC computer resources will help ensure the success of the large scale computer simulations being performed as part of XYZ's ASC Alliance project.

Questions on Foreign Nationals: Lori Kelley, 505-665-1517, lorik@lanl.gov; or Frances Castellano, 505-665-1371, fea@lanl.gov

One-Time Password Cryptocard

After account approval, Alliance users will be provided with an one-time password cryptocard device. The cryptocard is used to authenticate with LANL computing systems and web resources.

3. ESSENTIAL INFO FOR LANL HPC USERS:

- bear.lanl.gov/drupal : covers everything users need to know for using LANL HPC clusters. This entire site requires authentication with a LANL Cryptocard.
- <http://int.lanl.gov/projects/asci/training/Intro/>: A "getting started" tutorial that should be reviewed by all new users. Requires cryptocard login. Please distribute this URL as well.

4. ACCESSING LANL COMPUTE RESOURCES

After account activation and receipt of LANL cryptocard, users access LANL HPC clusters with SSH. To reach the LANL “Lobo” cluster:

- ssh to the firewall/gateway: `wtrw.lanl.gov` and authenticate with your username and Cryptocard passcode.
- Then, use ssh to reach a front-end node:
Lobo: `lo-fe1.lanl.gov`, `lo-fe2.lanl.gov`
Mapache: `mp-fe1.lanl.gov`, `mp-fe2.lanl.gov`
- For additional information and assistance, contact User Support (see below).

5. COMPUTING RESOURCES

http://bear.lanl.gov/drupal/summary_table (requires cryptocard authentication)

6. USER TRAINING

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

7. 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
- Cryptocard, accounts, forms: Frances Castellano, 505-665-1371, fea@lanl.gov; or Lori Kelley, 505-665-1517, lorik@lanl.gov

Getting Started Guide for ASC Alliance Users

Sandia National Laboratories User Information

Sandia Alliance HPC User Point of Contact: Karen Haskell, khaskel@sandia.gov

8. AVAILABLE MACHINE RESOURCES:

asc.llnl.gov/alliances/alliances_resources.php

9. GETTING AN ACCOUNT

Complete the online SARAPE form: sarape.sandia.gov It is mostly self-explanatory - a couple hints just in case:

- Step 1: Most boxes are self-explanatory.
 - For Unclassified E-mail, enter your university email address.
 - If you have a DOE Clearance, enter the type, else select "none".
 - For Requestor's Site, select your university.
 - For Resource Location, select Sandia National Laboratories.
- Step 2: Account/Resource Name: Select Glory and/or Ebird.
- Step 3: Sponsor's Name: Karen Haskell; Justification for Use: describe in sufficient detail the type of scientific work to be done by the applicant, being sure to note that it is part of the ASC Alliance program at your center.
- Step 4: Your Manager: this is the person at your site who oversees Alliance computer activity and account requests.

Questions on SARAPE: Lilia Martinez: 505-845-7967, Sarape-help@sandia.gov

Foreign Nationals

At this time, non-US citizens are not permitted accounts on Sandia's HPC computing resources.

One-Time Password Cryptocard

After account approval, Alliance users will be provided with an one-time password cryptocard device. The cryptocard is used to authenticate with Sandia computing systems and web resources.

10. ESSENTIAL INFO FOR SANDIA HPC USERS:

<https://computing.sandia.gov/platforms/tlcc>: covers everything users need to know for using Sandia's Glory cluster. This entire site requires authentication with a Sandia cryptocard.

11. ACCESSING SANDIA COMPUTE RESOURCES

After account activation and receipt of your Sandia cryptocard, users access Sandia HPC clusters with SSH. To reach the Glory cluster:

- Connect to Sandia Secure Restricted Network (SRN) via gateway:
ssh <username>@srngate.sandia.gov
- Read the "WARNING NOTICE TO USERS" message; then enter your cryptocard password
- From Welcome menu, select "3" to Acquire kerberos credentials

- Then enter “2” to establish an ssh connection
- Enter Glory login system name: glogin1 or glogin2
- 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 jobs

12. COMPUTING RESOURCES

computing.sandia.gov/platforms (requires cryptocard authentication)

13. USER SUPPORT – HPC OneStop

- Sandia HPC OneStop Portal at computing.sandia.gov
- Phone: Monday through Friday, (505)845-2243 Option 8, or (505)844-9328
- Email: HPC-Help@sandia.gov
- Off-hours and weekends support provided by Sandia Operations staff.

LLNL-WEB-412697

Privacy and Legal Notice: <http://www.llnl.gov/disclaimer.html>

For more information contact Blaise Barney blaiseb@llnl.gov