

# 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.html](http://asc.llnl.gov/alliances/alliances_resources.html)

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

- [computing.llnl.gov](http://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. Please pass this URL along to all LC users at your center.
- [computing.llnl.gov/tutorials/lc\\_resources](http://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](http://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](http://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](http://computing.llnl.gov/forms/policies/briefing_i.pdf)
- [computing.llnl.gov/forms/policies/policies\\_i.pdf](http://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](http://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

### **Virtual Private Network - Collaborator (VPN-C) Account and One-Time Password (OTP) Token**

After account approval, Alliance users will be provided with a VPN-C or VPN-B account and an OTP password token device. The VPN account is required in order to access the LLNL machines from a remote site. The OTP token device is used to authenticate with LC computing systems and certain web resources. See [computing.llnl.gov/tutorials/lc\\_resources/#Access](http://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 VPN-C and SSH. More information:

[computing.llnl.gov/tutorials/lc\\_resources/#Access](http://computing.llnl.gov/tutorials/lc_resources/#Access)  
[computing.llnl.gov/access](http://computing.llnl.gov/access)

#### **5. COMPUTING RESOURCES**

[computing.llnl.gov/resources](http://computing.llnl.gov/resources)  
[computing.llnl.gov/tutorials/lc\\_resources/#Hardware](http://computing.llnl.gov/tutorials/lc_resources/#Hardware)

#### **6. USER DOCUMENTATION**

[computing.llnl.gov](http://computing.llnl.gov)

[computing.llnl.gov/tutorials](http://computing.llnl.gov/tutorials)  
[computing.llnl.gov/documentation](http://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](mailto:lc-hotline@llnl.gov).
- Passwords, accounts, forms: 925-422-4533 or [lc-support@llnl.gov](mailto: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](http://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](mailto:rtc@lanl.gov), or [consult@lanl.gov](mailto:consult@lanl.gov)

### 1. AVAILABLE MACHINE RESOURCES:

[asc.llnl.gov/alliances/alliances\\_resources.html](http://asc.llnl.gov/alliances/alliances_resources.html)

### 2. GETTING AN ACCOUNT

Complete the online SARAPE form: [sarape.sandia.gov](http://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 Cerrillos, Coyote, 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](mailto: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](mailto:lorik@lanl.gov); or Frances Castellano, 505-665-1371, [fea@lanl.gov](mailto:fea@lanl.gov)

### One-Time Password (OTP) Token

After account approval, Alliance users will be provided with an OTP password token device (Cryptocard). The OTP token device is used to authenticate with LANL computing systems and web resources.

### 3. ESSENTIAL INFO FOR LANL HPC USERS:

- [bear.lanl.gov/drupal](http://bear.lanl.gov/drupal) : 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.
- <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 OTP password token, users access LANL HPC clusters with SSH. To reach the LANL “Lobo” cluster:

- a. ssh to the firewall/gateway: `wtrw.lanl.gov` and authenticate with your username and Cryptocard passcode.
- b. Use ssh to reach a front-end node: `lo1-fe.lanl.gov`
- c. For additional information and assistance, contact User Support (see section 6 below).

### 5. COMPUTING RESOURCES

[http://bear.lanl.gov/drupal/summary\\_table](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](mailto:consult@lanl.gov)
- Cryptocard, accounts, forms: Frances Castellano, 505-665-1371, [fea@lanl.gov](mailto:fea@lanl.gov); or Lori Kelley, 505-665-1517, [lorik@lanl.gov](mailto:lorik@lanl.gov)

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

For more information contact Blaise Barney [blaiseb@llnl.gov](mailto:blaiseb@llnl.gov)