



SEPTEMBER 17 , 2026 | OAK RIDGE TENNESSEE

Experimental Computing Laboratory (ExCL) Monthly Meeting

PRESENTED BY

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Advanced Computing Systems Research Section



U.S. DEPARTMENT
of **ENERGY**

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Policy Changes — High-utilization Systems

ExCL resources are seeing much higher utilization as our user base grows and more work is being done in the AI space. Unfortunately, this has led to resource contentions. After this meeting we are planning on applying the following policy change on faraday, hudson, and maxwell.

- Popular accelerator systems will be restricted to [interactive slurm access](#). This allows finer-grained allocation policies (e.g., allocate based on how many GPUs you need) and ease off-hour exclusive allocations when needed.
 - On these systems, the [pam_slurm_adopt](#) module will be used to limit SSH access to users who have a Slurm allocation on the node. Additionally, the SSH session will be constrained to the same resources as were allocated.
- See [Slurm | ExCL User Docs](#) for the updated Slurm documentation.

Example srun commands to allocate resources and connect to the systems:

```
srun -p nvidia --gres gpu:P100:2 --mem 128G -c 16 --pty bash
```

```
srun -p nvidia -w hudson --exclusive --pty bash
```

- See [Primary Usage Notes](#) for notes on recommended places to run jobs.

External Login Changes

The Department of Energy has mandated multi-factor authentication for ssh and web services (such as thinlinc) accessible from outside of the ORNL network envelope. Full details are not available at this time, but the process will look like

1. Access login.excl.ornl.gov via ssh
2. Receive a QR prompt
3. Configure Google/Microsoft/FreeOTP authenticator using the QR prompt
4. Use the authenticator-generated single use time limited key as your password into ExCL.

Full details on the process will be shared via excl-users mailing list when these changes are in place. Login-int.excl.ornl.gov will bypass this procedure but not be available from off-site.

We are modeling our login approach on a similar facility that is set up and documented by ITSD.

excl-help changes

ExCL is discontinuing the use of the Freshdesk application for ticket management as of the end of the day Thursday September 17. We do not derive enough benefit from Freshdesk to convert to a paid subscription when our free subscription terminates.

- Our primary ticketing site will be <https://www.excl.ornl.gov/support-request/>, which is also easily accessible from www.excl.ornl.gov and clicking on the Support Request tab. This sends us the request via email and feeds into todoist for tracking. All references throughout the documentation have been updated.
- The excl-help@ornl.gov mailing list will continue to be a mechanism to communicate with ExCL staff .
- There will be no change in the Slack group and informal contacts are still welcome.

Questions/Projects/Comments/Discussions

- Checkmk monitoring of cgroup resource limit counters for login limits.
 - Users are now able to view their resource use and limit counters using login-quota-check.
 - See [Access to ExCL # Login Server Quotas | ExCL User Docs](#).