LDMS USER GROUP MEETING

March 24, 2025

Agenda

- LDMSCON2025 News
  - Registration opens!
- Selected new features in v4.5.1
- Slurm Job ID tracking Discrepancy – Ben S.
- Q&A

LDMSCON2025 News

- **Date**: June 24 - 26, 2025
- **Venue**: David Rubenstein Forum, University of Chicago
- **Website:** https://sites.google.com/view/ldmscon2025/home
- 🔔 **Registration has opened!** 🔔
  - https://ldmscon2025.eventbrite.com
- **Accepting abstracts for presentations**
  - Submit via EasyChair: https://easychair.org/conferences?conf=ldmscon2025
  - Deadline: May 23, 2025

LDMSCON2025 - Registration on EventBrite

Early-bird: SAVE NOW! – Early bird rates end April 15, 11:59 CDT

	Early Bird	Regular	Late
Students**	$500	$500	$1,375
Members*	$925	$975	$1,375
Non-Members	$1,125	$1,175	$1,375
Remote	$600	$600	$600

CANCELLATION POLICY:

Cancellations on or before April 15: 50% refund minus $70 cancellation fee

Cancellations on or after April 16: No refunds

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LDMS V4.5.1 – Selected New Features

- LDMS Rails
  - Bundle LDMS transports together to reduce bottleneck and increase bandwidth and distribute set and stream message load among the bundled transports in the upper level aggregators
  - Per-rail data flow restriction (outstanding buffer bytes, or data rate, or both) in LDMS Rails to prevent unbounded buffer growth
- Multiple Configuration Plugins
  - Introduce new plugin interfaces to support multiple configuration plugins
- Logging infrastructure improvement
  - Enable users to control the log verbosity per subsystem, e.g., per plugin, update routine, storage routine
- IPv6 support in LDMS transport
- LDMS message (`ldms_msg`)

LDMS V4.5.1 – Additional Improvements

- LDMS Daemon Performance Monitoring
  - `ldmsd` statistics providing insights to daemon performance
  - Thread statistics in various levels (Zap, LDMS transport, `ldmsd` workers)
- Resource management
  - Exclusive thread feature for samplers that take longer to execute

LDMS V4.5.1 – Planned New Features

- In development
  - Event-based Storage: Draft PR1632
  - Readthedoc change: PR 1599
- Last day to submit PRs for new features – March 31 – next Monday

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Slurm Job ID tracking Discrepancy - Ben S. (cont)

Issue:

- LDMS captures JobIDRAW value (e.g., 200)
- Users see JobID (e.g., 100_*) in squeue and output files
- Users can't find jobs in LDMS database using familiar job IDs

Objective

- Ben would like to discuss how other sites handle this discrepancy and explore possible solutions with the community.

Slurm Job ID tracking Discrepancy - Ben S. (cont.)

Example:

E.g.: 200 is the JobIDRAW and what is in our LDMS job_id field, 100_* is what is shown to the user in squeue and their appended slurm output (I believe, need double check on this).

```
$ sacct –j 200
JobID     JobName  Partition      Account  AllocCPUS     State ExitCode
100_1     python_we+  batch       ########     36       FAILED  1:0
100_2     batch                   ########     36       FAILED  1:0
100_3     python3                 ########      1        FAILED  1:0
```

Q&A

Thank you!