LDMS USER GROUP MEETING

February 10, 2025

Agenda

- V4.4.5 Release Update
- V4.4.5 Changes
- Q&A

Release v4.4.5 Updates

- Testing completed
- Required patches:
  - 3 PRs from scale & resiliency tests (verified in the latest test run)
  - 1 PR for Docker build script:
    - Update Maestro and SOS versions
- Next steps:
  - Create v4.4.5 tag (after PR merge)
  - Build Docker images for v4.4.5

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V4.4.5 Changes

New Features:

- Support YAML configuration
  - Start ldmsd with -y <path to YAML config file>
  - man ldmsd_yaml_parser
- Introduce Peer Daemon Advertisement
  - man ldmsd_peer_daemon_advertisement
- Allow users to disable LDMSD Streams communication via `stream_disable`

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V4.4.5 Changes (cont.)

Important Notice:

- Expand prohibit characters in set names
  - Disallowed: control characters, double quotes, single quotes, backslash, characters values above 127
- Deprecate the -t command-line option

Improvements:

- Allow LDMSD continue startup on producer's hostname resolution failure
- Make prdcr_status report producer type
- Convert python scripts from python2 to python3
- Add Cython 3 support (still support Cython 0.29)
- ldmsd_controller improvements:
  - Support command completion without a connection to ldmsd
  - Normalize error handlings across commands

V4.4.5 Changes (cont.)

Bug fixes:

- Fix possible deadlocks and race conditions in LDMS
- Decomposition:
  - Fix 'fill' value handling
  - Fix the handling of lists of primitive value types
  - Make LDMSD cleanup rowcache after a configurable timeout
- Build scripts:
  - Fix libfabric build option

V4.4.5 Changes (cont.)

Various bug fixes and improvements in plugins:

- Sampler Plugins:
  - rdc_sampler
  - filesingle
  - blob_stream_writer
  - slurm_notifier
  - slingshot
  - json_stream_sampler
  - netlink
- Storage Plugins:
  - store_sos
  - store_csv

V4.4.5 Changes (cont.)

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Documentation:

- Expand decomposition man page
- Add documentation for the LDMS_DELETE_TIMEOUT environment variable
- Update netlink-notifier documentation
- Add the stats command documentation in ldmsd_controller and its man page

Q&A

- Chris asked about a path forward on the multi-instance changes
  - There are two active versions: PR1575 and PR1600
  - Chris created PR1600 as a modified version of PR1575
  - NOTE: the first PR on this topic was PR1324
    - PR1575 modified PR1324 according to discussions between Tom, Chris, and Narate
  - Tom suggested to merge PR1575 first since:
    - The work has been in development for more than 6 months
    - There are multiple changes on top of multi-instances. After we merge PR1575 and the work items on top of this one, we could make additional changes to the multi-instance
  - After merging PR1575 and the work items on top of this one, we could make additional changes to the multi-instance
  - Next steps:
    - Create pull requests of the changes that depend on the multi-instance patch
- Chris asked for feedback to his comment on PR1588
  - Meeting agreement:
    - Add documentation to the man page that says that the AVRO_SER stream encoding is Convergent Protocol 1
    - Adds an alias to ...AVRO_SER that is ...AVRO_CP1

Thank you!