LDMS USER GROUP MEETING

January 13, 2025

Agenda

- V4.4.5 Release Status
- Stream Authentication Workgroup
- Curated Metric Set
- Q&A

Release v4.4.5 Updates

- We are currently testing
- We planned to release v4.4.5 by the end of January

Stream Authentication Workgroup - Rescheduling First Meeting?

- Original date (Jan 20) is MLK day
- Do we need to reschedule it?
  - Yes
- Proposed new time:
  - Wed, Jan 22 @ 11 AM Pacific
- After the meeting, Nichamon will send out a poll to the User Group mailing list to get feedback on the new schedule and alternative time slots

Curated Metrics

Background

- Most available metrics are not meaningful without further processing
- For example:
  - Network
    - rx_bytes ⇒ Received byte rate
    - rx_errors & rx_dropped ⇒ Packet loss rate (rx_errors + rx_dropped) / rx_packets
  - Memory
    - MemAvailable ⇒ Available Memory Percentage (MemAvailable / MemTotal *100)
  - CPU usages (/proc/stat)
    - raw counters (nice, system, …) ⇒ CPU Utilization Percentage
- Currently, these calculations are repeatedly implemented by each LDMS site

Curated Metric Set

- A set of selected metrics that are meaningful and useful without additional analysis
- Each metric comes with documentation that includes:
    - Name and units
    - Precise definition
    - Derivation method
    - Expected interpretation guidelines

Note: Metrics are measures of quantitative assessment commonly used for comparing, and tracking performance or production

Curated Metric Meeting

- A meeting will be scheduled to go through an initial list of curated metrics
- If you want to join the meeting,
  - Raise your hand
- First meeting:
  - Thursday, Jan 16 @ 9 AM Pacific

Q&A

- ldms_ls format option: https://github.com/ovis-hpc/ldms/pull/1568
- ldms_ls output:
  - Ben S.: Provide summary with ldms_ls that provides what sets we have and which one are consistent and inconsistent
    - Tom: There is a config. command that provides a summary at some level but not as details as Ben S. wants
  - Chris: producer field isn't printed out
- yyjson
  - Reported by LBL: yyjson 2x faster libovis_json, and libjansson is slower than libovis_json

Thank you!