LDMS USER GROUP MEETING

FEBRUARY 27, 2023

AGENDA

- OVIS 4.3.11 Features
- OVIS 4.3.11 Schedule
- LDMSCON Announcement
- Q & A

OVIS 4.3.11 FEATURES

- OVIS Log Library
- Sampler Base Support for slurm2 sampler
- Avro-Kafka Store
- Moved all samplers to their own subdirectory

OGC

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OVIS LOG LIBRARY

- libovis_log that can be linked with any plugin or subsystem component

- Replaces the log function pointer that is currently passed around

- New plugins should use this API (e.g., avro_kafka_store)

- Existing plugins that lack logging (e.g. authentication plugins) will have logging added 1st

- Remaining subsystems will be migrated as needed/convenient

- Log levels maintained by "*subsystem*"

  - Subsystems are registered by plugin or other software component

- Log levels can be ORed together, higher levels are not strictly inclusive of lower levels.

  - Old log level labels are maintained for backward compatibility and behavior
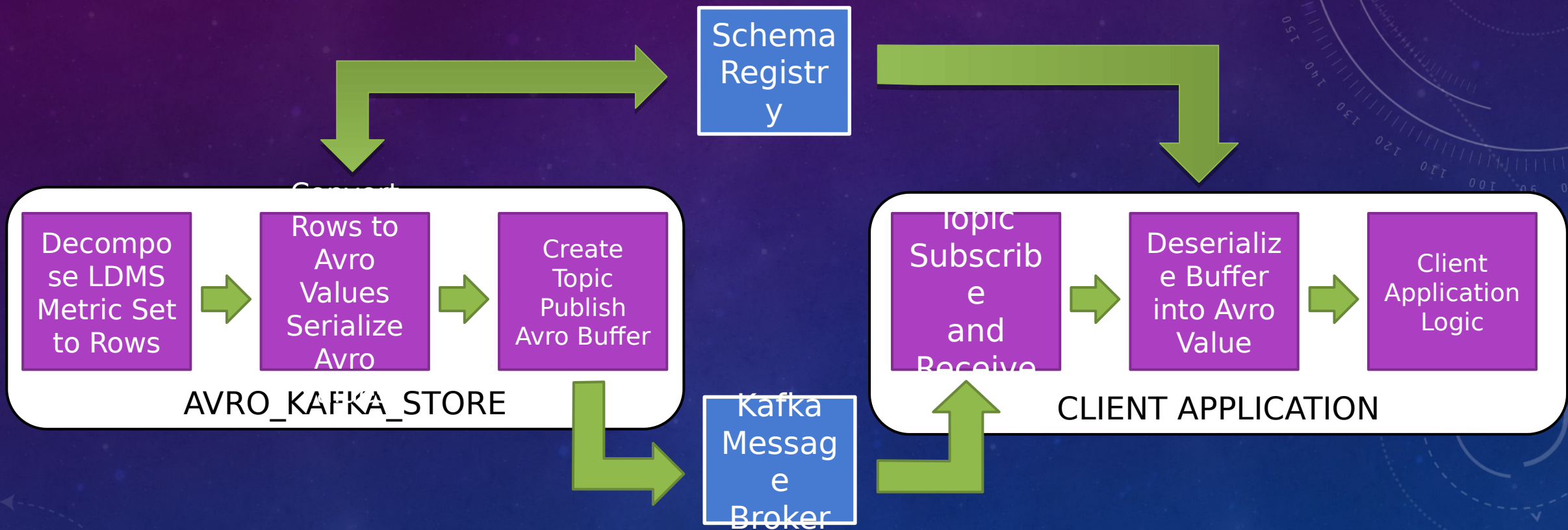
SAMPLER BASE SUPPORT FOR SLURM2

- Added support for the slurm2 sampler to the sampler_base library

- The last job in the job_list is used to populate the job_id field in samplers that link with sampler_base.o

- Also added convenience support for handling component_id

  - Skips to 1st digit in the component_id configuration value so that syntax like "component_id=${HOSTNAME}" will yield a numerical component_id for values like nid00063

  - Understood that this is for convenience and this approach will likely not work for sites monitoring multiple clusters and/or more complicated component_id assignment schemes

- Support for existing job samplers remains unchanged

AVRO-KAFKA STORE - OVERVIEW

- Employs metric set decomposition support to generate rows from LDMS metric sets

- Creates Avro schema from rows passed to the commit function

  - Registers these schema with the Avro schema registry service

- Creates Avro values from rows passed to commit function

- Uses schema to serialize Avro values into memory buffers

- Avro encoded buffers are published on the Kafka bus

- Topic name is the same as the schema name

- Key associated with message is populated from a configured row column

AVRO KAFKA STORE - DATA FLOW

OVIS 4.3.11 SCHEDULE

- Scalability Test
  - Start: 3/13
    - Only bug fixes will be accepted past this point
  - Finish: 3/20++
- G/A
  - March 27

02/28/2023 8

LDMSCON ANNOUNCEMENT

- When
  - Tuesday June 13 through Thursday June 15
- Where
  - Boston University Center for Computer and Data Sciences
  - 665 Commonwealth Ave, Boston, MA 02215
- What
  - https://sites.google.com/view/ldmscon2023

Q & A