AMI Status report

AMI team

Docker Container Metadata

- Preparations started to store the metadata as discussed in this document

- DB creation has been requested at CC-IN2P3

  - Expected to be ready next week (CERN replication not setup yet)

  - DB schema to be validated (see backup)

  - Which fields should be normalized ?

- Preparing dedicated AMI command to create/query/update containers

  - Easy scripting from python or REST

  - Creation command will return the unique container AMI-Tag

- Preparing web interface to query & browse containers

  - Prototype here

P-A Delsart

AMI & glance

- A Glance-AMI workflow was planned to link DS used in an analysis to a Glance ID in AMI

- Never really used in practice
  - Users never really used the AMI interface
  - Lack of direct integration in Glance web interfaces
  - Technical difficulties

- We propose (as already discussed) a new workflow based on AMI hashtags
  - AMI generates hashtag groups (a.k.a scope) for each analysis in Glance
  - Analysers can then tag their datasets
    - We'll provide python script examples & a web interface to do batch tagging
  - Then only 1 simple addition needed in Glance : a list of hashtags

Xsection & efficiency calculation

- Yet an other issue spotted
  - "Negative sum of weights" reported in evgen jobreport were **positive** values
  - Had to replace expression like "sumPosW+sumNegW" by "sumPosW-|sumNegW|"
- Fix implemented and all affected DS where corrected
- See ATLASAMI-218

P-A Delsart

Proposed SQL schema for container DB

```
CREATE TABLE "ATLAS_AMI_CONTAINER_01"."CONTAINER"
(
  "ID" NUMBER(*,0),

  "SCOPE" VARCHAR2(32 BYTE),                          -- contXXXX for partitioning --
  "NAME" VARCHAR2(256 BYTE),                          -- contXXXX.UNIQUEID.architecture.prodStep.AMIContTag where AMIContTag == letter + CONTAINER.ID

  "TYPE" VARCHAR2(64 BYTE),                   -- Normalization? (production, group production, user) --

  "CONTAINERTYPE" VARCHAR2(32 BYTE),         -- Normalization? (OCI, Docker, Singularity, ...) --
  "CONTAINERARCH" VARCHAR2(32 BYTE),         -- Normalization? (x86_64, power 9, GPU type (Nvidia, Intel, AMD), ARM, ...) --
  "CONTAINERPLATFORM" VARCHAR2(32 BYTE),     -- Normalization? (slc6, ...) --
  "CONTAINERCOMPILER" VARCHAR2(32 BYTE),     -- Normalization? (gcc62-opt, ...) --

  "PRODSTEP" VARCHAR2(32 BYTE),
  "AMITAG" VARCHAR2(32 BYTE),

  "SWRELEASE" VARCHAR2(64 BYTE),
  "DBRELEASE" VARCHAR2(64 BYTE),
  "DISTSWRELEASE" VARCHAR2(64 BYTE),         -- Normalization? (pilot, Harvester, ARC-CE, ...) --

  "VERSION" VARCHAR2(64 BYTE),                      -- To put info on patches. Nullable? --

  "COMMENT" VARCHAR2(4000 BYTE),

  "CREATED" TIMESTAMP(6) WITH TIME ZONE,
  "CREATEDBY" VARCHAR2(255 BYTE),
  "MODIFIED" TIMESTAMP(6) WITH TIME ZONE,
  "MODIFIEDBY" VARCHAR2(255 BYTE)
)
```