XALT Monthly Users Mtg Presentation 20230119

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1. Target machines for ALCF XALT2 tracing
   a. Current focus: Polaris
      i. Hardware: https://docs.alcf.anl.gov/polaris/hardware-overview/machine-overview/
      ii. Programming environments: https://docs.alcf.anl.gov/polaris/compiling-and-linking/compiling-and-linking-overview/
   b. Future focus: Aurora/Sunspot: https://www.alcf.anl.gov/support-center/aurora-sunspot
   c. Will use the ALCF BI warehouse for storing production XALT2 records
2. Overview of current XALT2 Polaris testing
   a. General Use (GU) configuration
      i. Will be deployed for all users
      ii. We do not want to capture executions that are a side effect of builds
   b. Ultra-Detailed Data (UDD) configuration
      i. Will be used on an ad hoc basis to help debug problematic job builds/runs
      ii. Capturing build side effects is desired
   c. Current work
      i. Finalizing GU config
      ii. Finalizing XALT2 record management: different approaches may be used to wrangle records for each deployment (at least initially)
         1. GU current thinking: write files to local node fs -> copy with filebeat into kafka -> BI
            a. The filebeat -> kafka -> BI route is currently used for ingesting other ALCF logging-type data
            b. Maybe eventually add a new XALT2 transmission feature via unix domain socket to convey data to filebeat (once filebeat supports unix domain sockets in production mode)
         2. UDD current thinking: write files to shared parallel fs, deleting files after X time period has elapsed; do not import into BI
3. Known issues
   a. Prodigious package production
      i. Really cool amount of detail can be collected. Have turned off pkg record generation for now in Polaris GU and UDD test deployments but plan to revisit in future
   b. The Polaris nvcc command execs a second nvcc command
      i. In response XALT2 produces two start run records (one for each nvcc command) but only a single end run record (for the second nvcc command)
      ii. Not a blocker for us
4. Questions & feedback