



OKS Configuration Update

Gordon Crone, Eric Flumerfelt, Giovanna Lehmann Miotto 20 March 2024

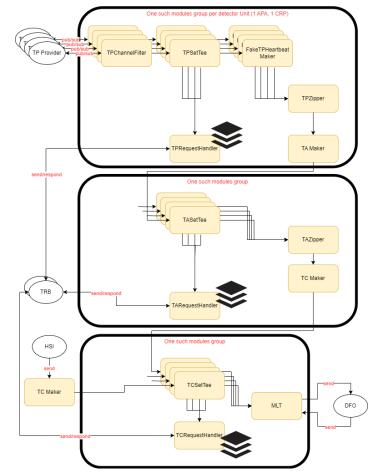
Integration Tests

- "integrationtest_drunc" plugin created in integrationtest repository branch feature/OKS
 - Test modules can select between integrationtest_drunc and integrationtest_nanorc
 - New module "integrationtest_commandline" added to default pytest plugins to capture common command-line parameters for both plugins
 - Currently, integrationtest_drunc actually runs NanoRC
- minimal_system_quick_test runs using static configuration
 - Many warning messages related to TPG, but all data file checks pass
- Other integration tests still require their own configurations
 - Working on configuration generation for various scenarios, trying to implement important parts of 'conf_dict' functionality by editing OKS database
 - oksconfgen utilities for generating and combining OKS databases



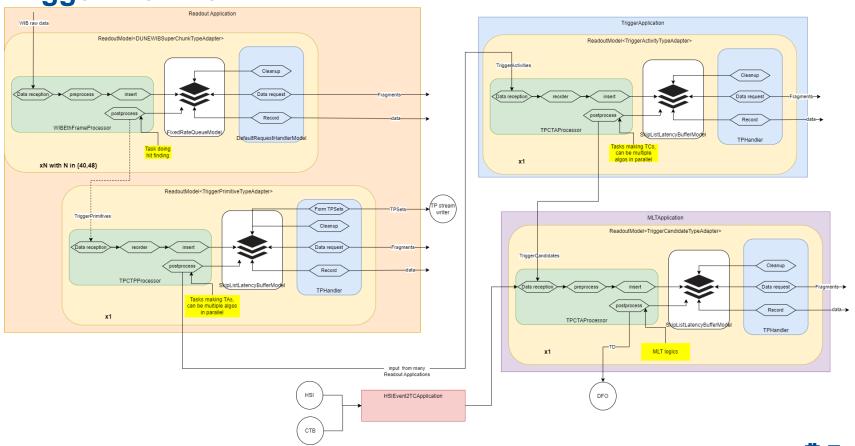
Trigger Workflow

- Updates to trigger path for v5.0
- Existing MLT app combines all parts of trigger path
- New arrangement allows for TriggerActivity and TriggerCandidate generation to occur in separate applications before transmission to MLT
- Practical result for testing is additional applications in trigger "segment" of OKS configuration
- See Giovanna's talks in DS/PP meetings



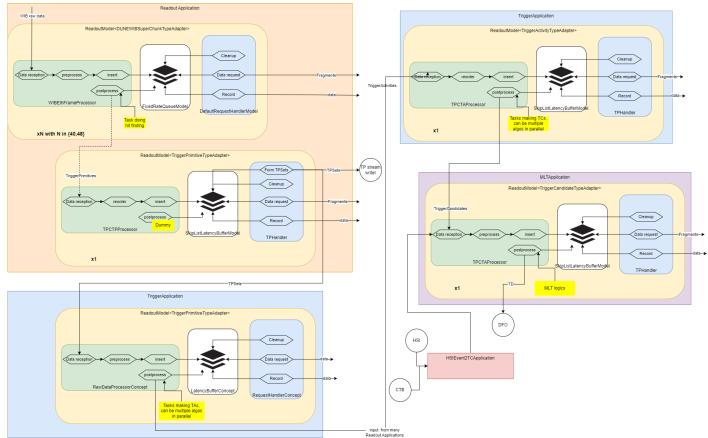


Trigger Workflow





Trigger Workflow





drunc Run Control

- Initial tests using drunc with OKS-based configurations
- Instructions on wiki: https://github.com/DUNE-DAQ/drunc/wiki/Testing-the-OKS-configuration



Approaching dunedaq-v5.0.0

- Tag Collection in progress, need developers to check their packages and tag
- Anticipate release build shortly after tags are available
- Two example configurations
 - test-session runs 1-3 RUs with 1-3 DF apps, using FakeCardReader to generate data from frames file
 - CRP4-session uses Hermes to communicate with real WIBs



dunedaq-v5.0.0 CoreSW Tasks

- When dunedaq-v5.0.0 is ready, we would like developers to assist in evaluating the functional state of the system
 - Test provided configurations and give feedback on any difficulties encountered
 - Prepare new, more complex configurations
 - Validate approach to the configuration description
 - SmartDaqApplications ingest configuration objects and create full applications
 - Provide overall feedback on user (un)friendliness
 - Complete transition of remaining DAQModules (ctbmodules, crtmodules, wibmod, sspmodules, daphnemodules)
 - Replicate and test NP04 and NP02 configurations

