INTT software rule

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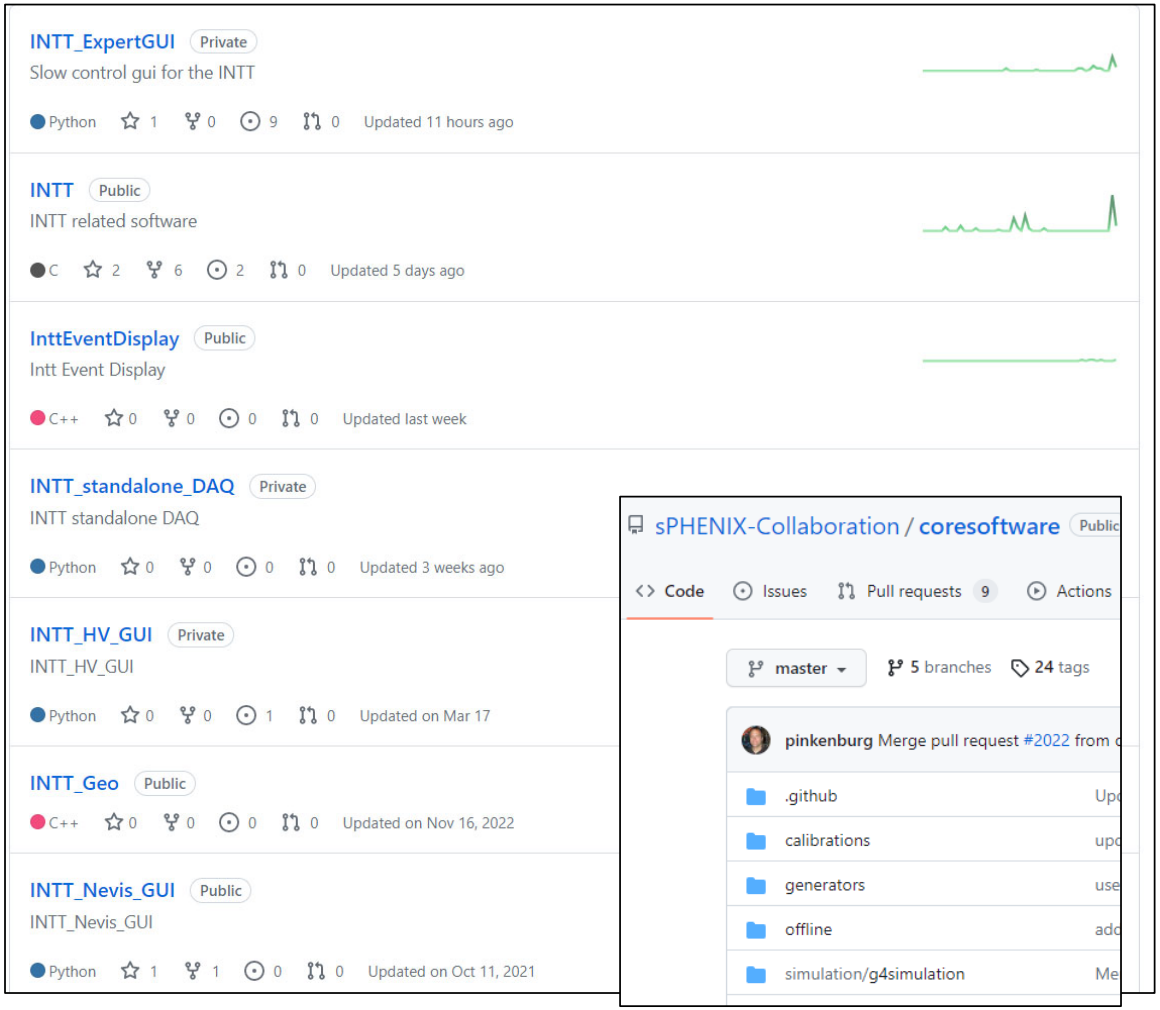
Introduction

- Thank you, all guys, for developing the software / commissioning work at BNL and the outside.
- There are a lot of software/codes/analysis macros developed used but not these codes are not well managed (I think)
  - We have been using GitHub
- It is good to re-organize the repositories in GitHub
  - The purpose is to gather the useful code in one place
  - Of course, you can keep your personal repository. Once you share your macros/codes for people, please copy them to the INTT repo.

INTT related repositories on GitHub

- Current INTT repos are listed
  - INTT is our main repo which contain the all codes
  - Others are the project related repo, Event Display, Expert_GUI, Geo, HV_GUI, and so on.
- “Coresoftware” is sPHENIX main repo which contain all the reco/sim software
- Our proposal is following



A plan for re-organize INTT repo

- “CoreSoftware”
  - INTT-Raw-DST-Converter
    - Offline/online Ch converter

- Analysis/Commissioning codes commonly used
  - Make directory the project by project under INTT/analysis
  - INTT/??? (analysis/テーマ毎)
    - Monitoring
    - Calibration monitor by Misaki
    - Analysis codes by ChengWei
    - DAC0 scan macro by Jaein
    - DAC scan by Yuka (same code but for the collision data)
- OnlineMonitor?
  - There must be official repo but I don’t know yet

- INTT_HV_GUI
  - HVGUI – PYTHON made by Joseph
  - Genki’s original code is moved to “obsolete”

- INTT/general_codes
  - Please use as your personal repo.
    - Everything you want
  - For example
    - Yuka’s DAC scan code for the ELPH beam analysis
    - Yumika’s efficiency analysis code for the cosmic ray data

standard convention rule (INTT hardware #)

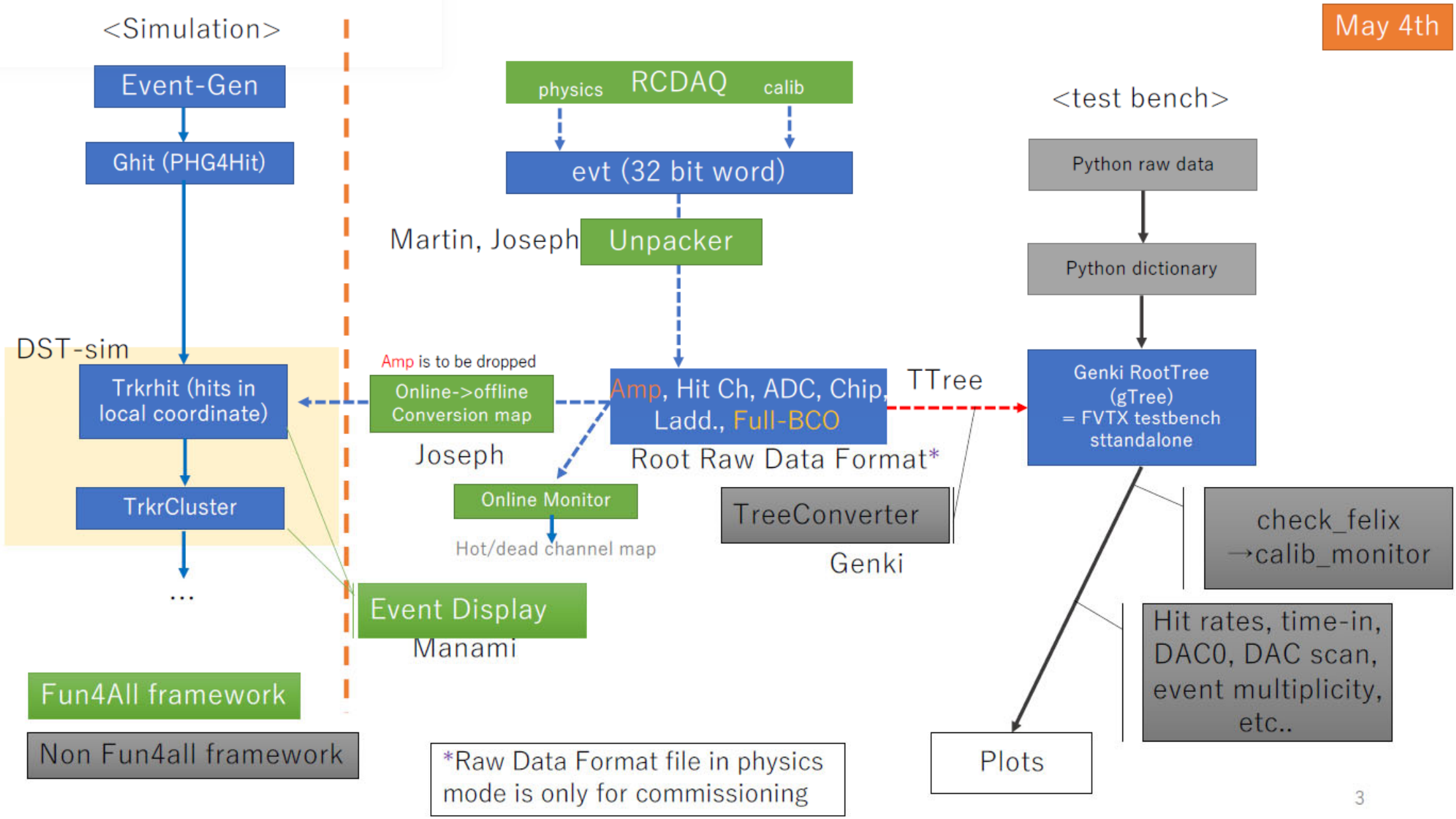
- Arm　# : 0-1 (0:South, 1:North)
- EBDC server #: 0-7 (represents INTT Felix server ID)
  - HostName : intt0, intt1, …, intt7
- Numbering for Barrel、layer, Ladder, ROC described in WIKI
  - https://wiki.sphenix.bnl.gov/index.php/INTT_Barrel
  - Barrel: 0-1
  - Layer: 0-1 (for each barrel)
  - Ladder #: 0-11(0-15)
    - B0: 0-11, B1: 0-15
  - ROC

- These numbers we should use the same definition for numbering
- Other new numbers and names will be determined on a case-by-case basis.

- All information should be kept in WIKI

INTT team@opc0 - GetFPHXParameterAddress added. It just provides a dictionary ... ··· ✓ beae782 5 days ago **309** commits

Channel_classification	estimate ADC comparator threshold and noise using error function http...	2 years ago
HV_LV/LV	Shell scripts for the LV operations (the switch and ladder power) wer...	5 months ago
Testbeam_G4_code	Simulation for the test beam experiment: Positions of INTT hits and s...	6 months ago
felix	- GetFPHXParameterAddress added. It just provides a dictionary of FPH...	5 days ago
general_codes	Genki\'s INTT control pannel application added.	last week
.gitignore	gitignore updated, some data files in ROOT format are not ignored.	2 years ago
README.md	README updated	10 months ago


<Simulation>
May 4th
Event-Gen
Ghit (PHG4Hit)
DST-sim
Trkrhit (hits in local coordinate)
TrkrCluster
...
physics
RCDAQ
calib
evt (32 bit word)
Martin, Joseph
Unpacker
Amp is to be dropped
Online->offline Conversion map
Joseph
Amp, Hit Ch, ADC, Chip, Ladd., Full-BCO
Root Raw Data Format*
TTree
Online Monitor
Hot/dead channel map
TreeConverter
Genki
Event Display
Manami
<test bench>
Python raw data
Python dictionary
Genki RootTree (gTree) = FVTX testbench sttandalone
check_felix →calib_monitor
Hit rates, time-in, DAC0, DAC scan, event multiplicity, etc..
Plots
Fun4All framework
Non Fun4all framework
*Raw Data Format file in physics mode is only for commissioning