TPC Commissioning - HLT aspects
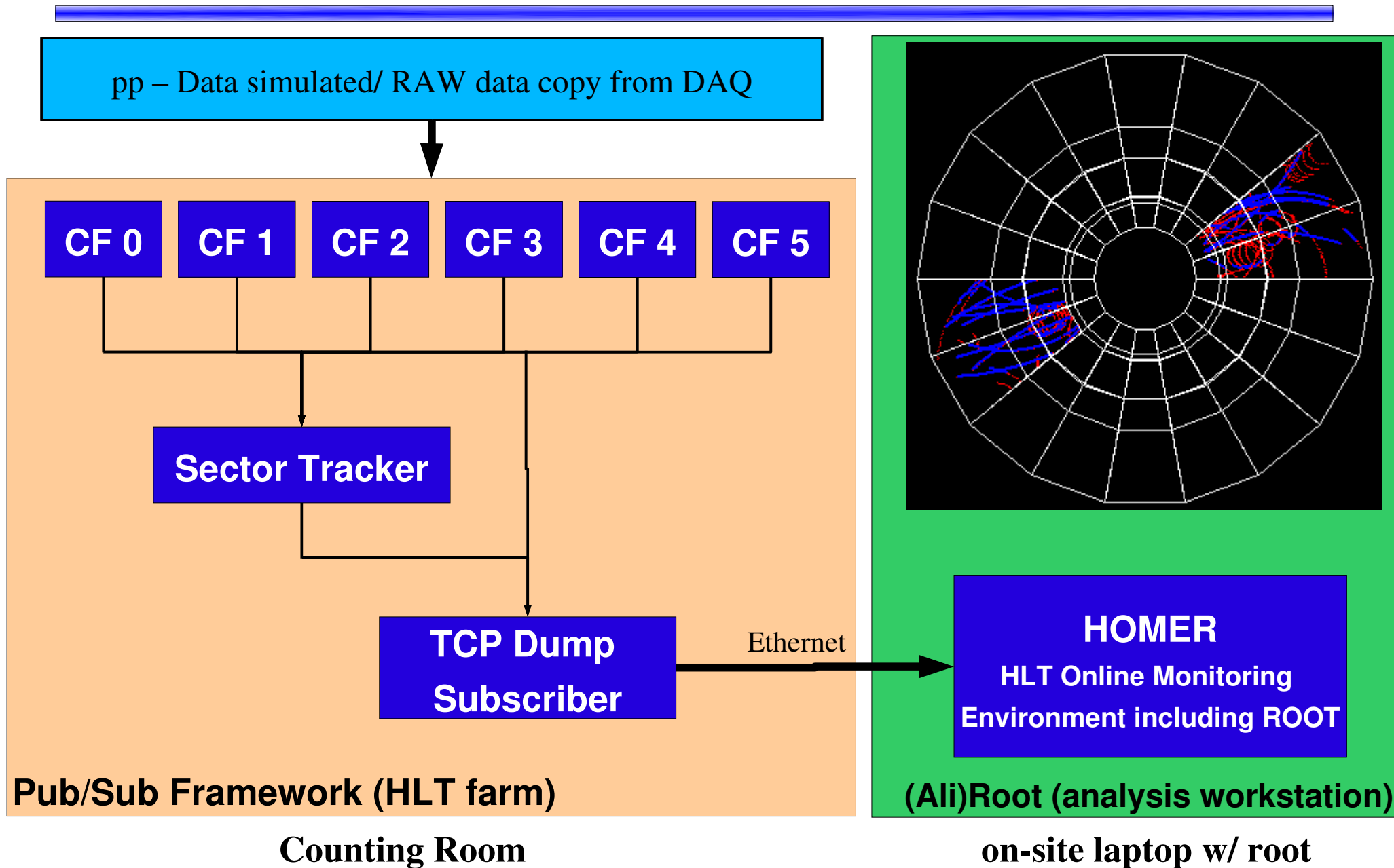
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TPC Front-end-electronics meeting, Cern, Nov 22,2005

Algorithms and Software

- Analysis components (Clusterfinder, Tracker, Track Merger) running on HLT cluster - full event reconstruction at full event rates possible

- tracking efficiency suitable for low multiplicity events – tracking of cosmics and laser tracks without any problem

- Reconstruction of all tracks

- Online Monitoring through Online Display

  - clusters, tracks, raw data

- customized histograms, residuals, dE/dx, ...

- new scheme integrates analysis components fully into AliRoot – easy development and usage of Offline Components

Current TPC test environment

pp – Data simulated/ RAW data copy from DAQ

| CF 0 | CF 1 | CF 2 | CF 3 | CF 4 | CF 5 |

Sector Tracker

TCP Dump Subscriber

Ethernet

HOMER
HLT Online Monitoring
Environment including ROOT

Pub/Sub Framework (HLT farm)

(Ali)Root (analysis workstation)

Counting Room

on-site laptop w/ root

Infrastructure

- infrastructure for two sectors provided

  - 6 FEP nodes (dual processor, 2 HLT RORCS each)

  - 3 Processing nodes

  - 15 DDL DIU + 2 SIU

- Network, Network switch and patch panel installation underway at CR2/3 – finished by end of 2005

- Support:

  - full installation of the system

  - 1 to 2 people for maintenance of the system and custom programming and setup available during commissioning period