

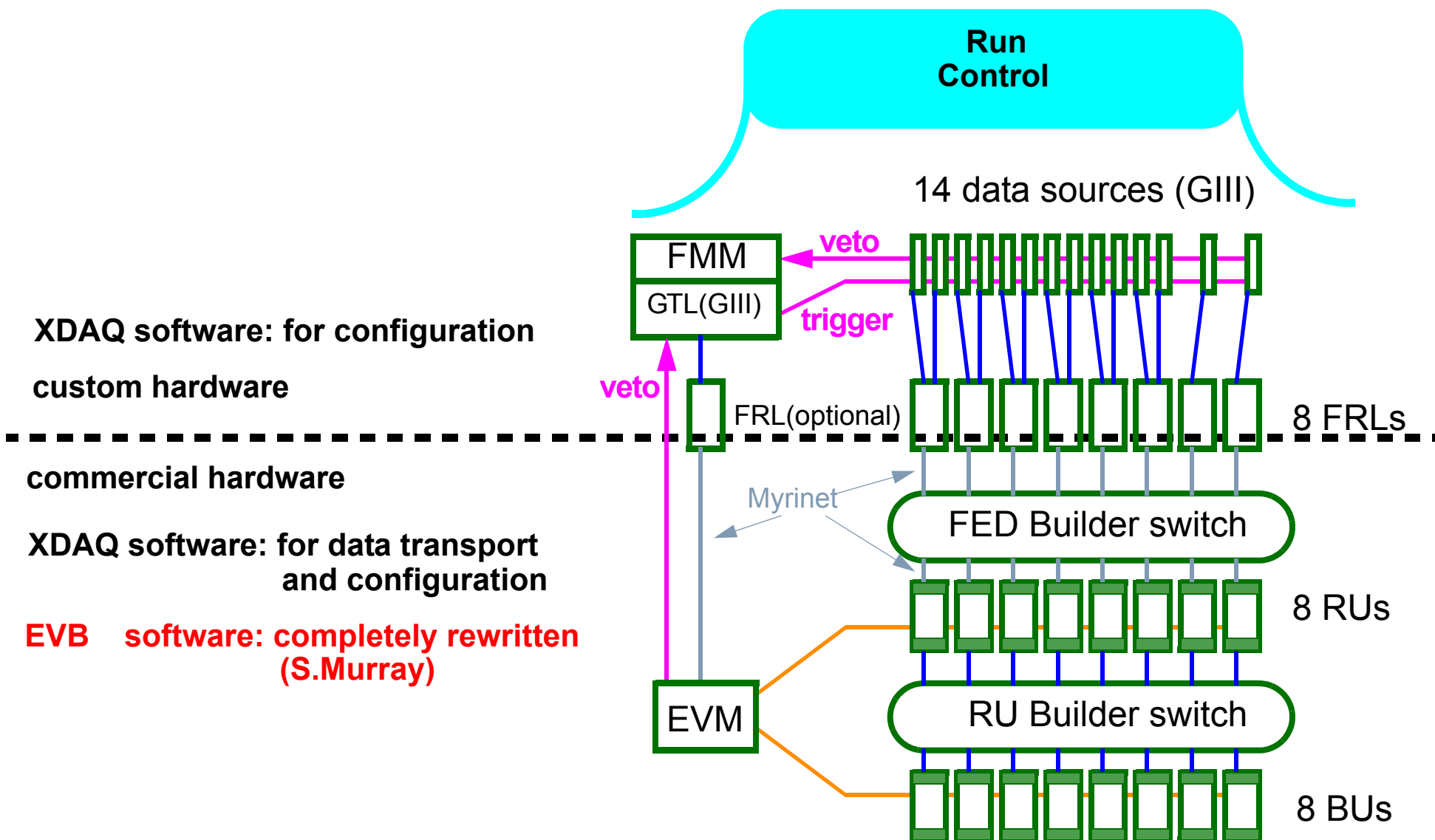
TDR Demonstrator / DAQ column

- Aim of the TDR Demonstrator
- Current status
- Interesting items for testbeam setups

Aim of the TDR Demonstrator

- Complete system with hardware components...
 - Data sources (GIII based, with SLINK)
 - 8 FRLs
 - 1 FED Builder
 - 1 RU-builder (downscaled version: 8x8)
 - 1 EVM
 - 1 Trigger emulator with throttling
 - later: 1 Filter farm
- ...and software components:
 - XDAQ based
 - new completely rewritten EVB-application (S. Murray).
should develop towards the final EVB-software.

TDR Demonstrator

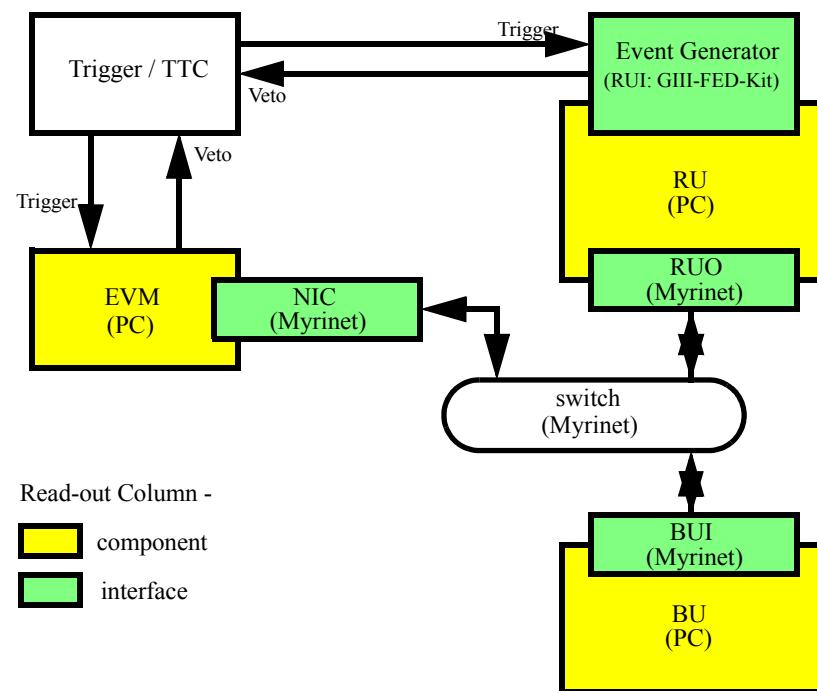


main activities forseen:

- Optimization
 - data transfer throughput
 - system robustness
 - RCMS system
- Measurements
 - performance for various configurations:
 - RU builder with Gigabit Ethernet or Myinet,
 - one or more functional units in one PC (e.g. 2 RUs or 2 BUs or 1BU,1RU per PC)
- Developments
 - Error handling recovery
 - aTTS system
 - DAQ-Doctor

Status: not very advanced yet...

- The new EVB software is available since ca. 3 weeks
- **Hardware setup:** a column EVB
 - Hardware Setup the same as for September review:
 - Data input (FEDKit and RUI) taken from previous column with minimal changes (allows performance comparison).
- **RCMS Control** of the column
 - RCMS prototype has been tested
 - Column setup was easy to configure
 - Scripting facility for automatic measurement series is currently being improved.
- **Status:**
 - Column runs but lacks stability ==> debugging phase goes on
 - No measurements yet



For reuse in testbeam/lab setups of detector groups:

- To bring a TTC based trigger into EVM
 - Additional hardware: 1 GIII, 1 TTCrx readout card
- Software
 - Readout class for TTCrx receiver board
 - Trigger interface to interface with EVB

