Detector Control System status: Low and High Voltage

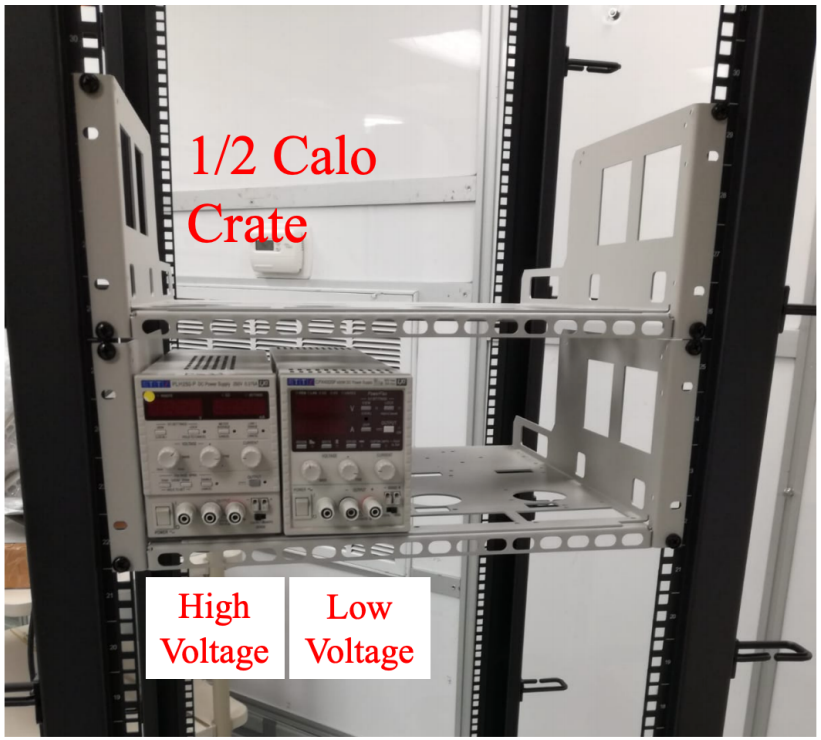
E. Diociaiuti, D. Hampai

Mu2e Italy Meeting

03 September 2020

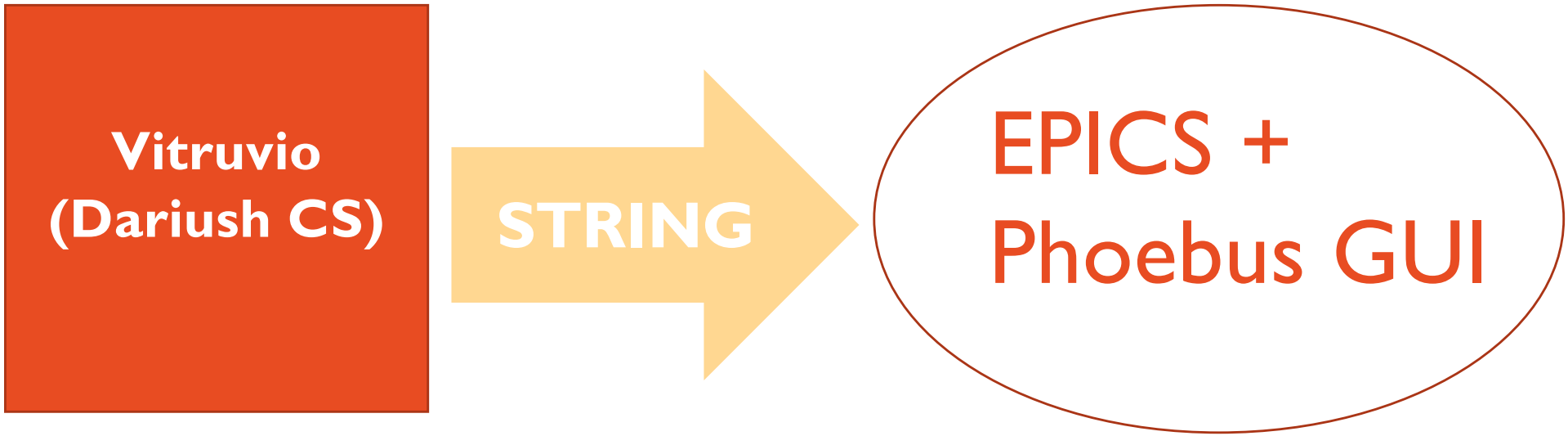
Status at FNAL

- At the moment at Sidet we have:
  - 10 HV power supply (TTi PLP250-P)
  - 40 LV power supply (TTi CPX400-P)
  - 1 switch ethernet (SG250-26-K9-NA)
- For each disk we will have:
  - racks 48 U size in the DAQ room
  - 20 HV modules providing 200 V
  - 20 LV modules providing 28 V

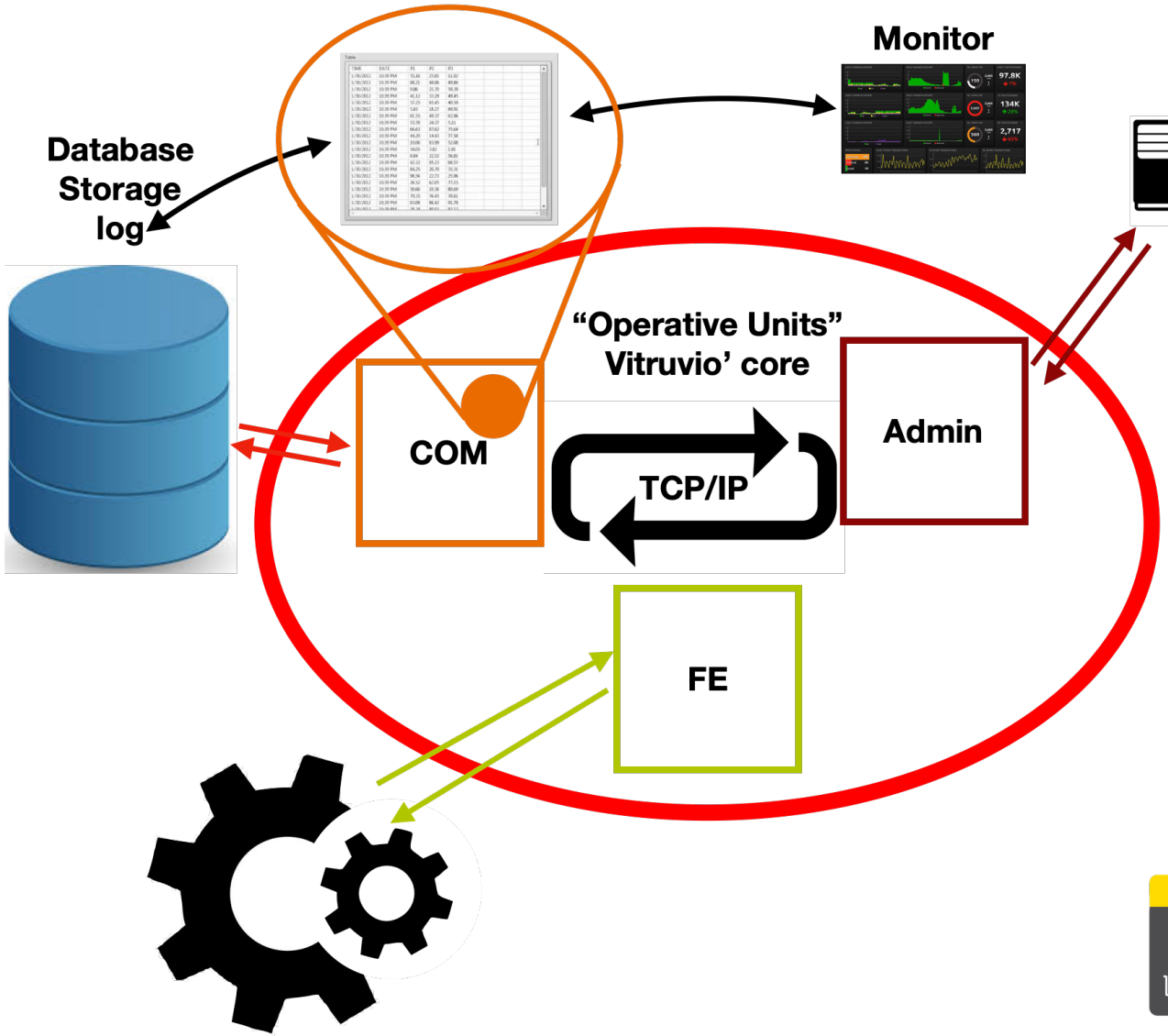


DCS – the project

- Vitruvio: Labview based control system (Dariush is developing it) connected with epics



Focus on Vitruvio

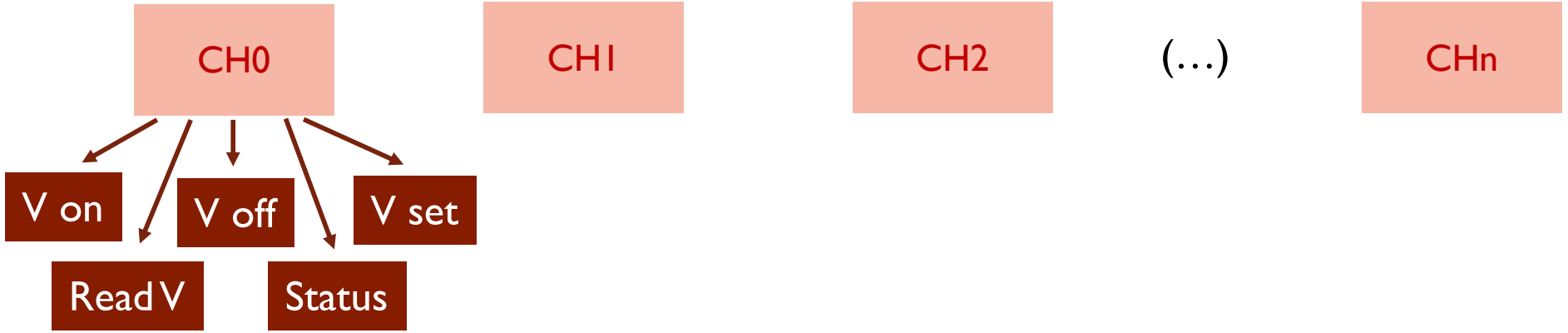


- System organized in boxes
- Each of them has a specific role
- Format to communicate with Vitruvio JSON

Focus on Vitruvio

- **Admin:** Interaction with the user
  - responsible for the starting/stopping/resetting of the whole system
- **Communication:**

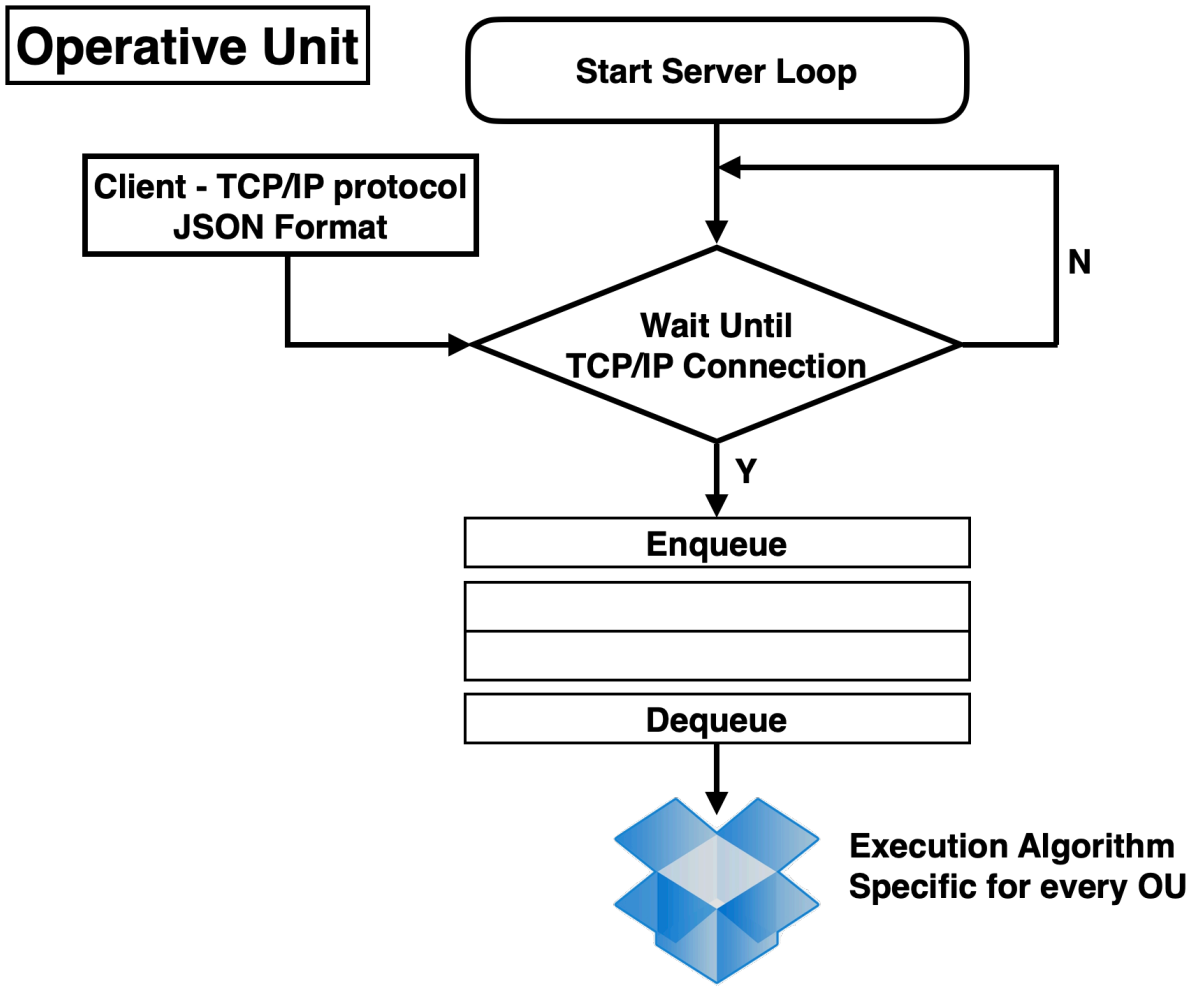
- **FE:**



Status @ LNF and next steps

- Optimizing Vitruvio to "talk" with the HV supplier that we have here (partially broken) [late today/tomorrow completed]
- In shipment 2 HV and 2 LV from FNAL, buying a switch ethernet
- Plan to prepare a smaller setup to use with the Module0_v2
- Work in progress:
  - Already installed EPICS+Phoebus locally
  - starting process of communication between Vitruvio and Epics
  - Preparing layout for Phoebus GUI
  - HV e LV supplies will be used as a test bench for the procedure

SPARE


Operative Unit
Start Server Loop
Client - TCP/IP protocol
JSON Format
Wait Until
TCP/IP Connection
N
Y
Enqueue
Dequeue
Execution Algorithm
Specific for every OU