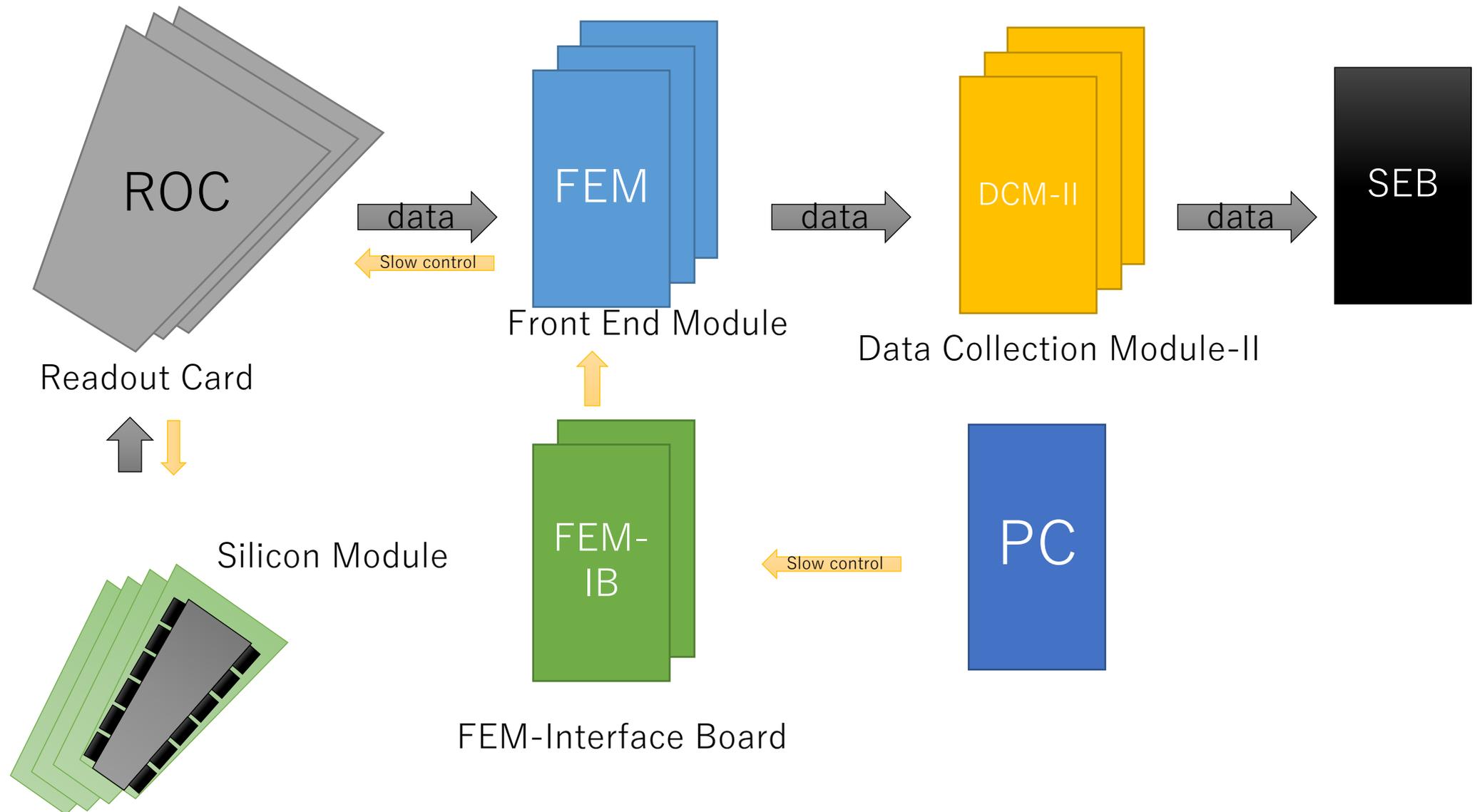


# BNL Test Bench DAQ Plan

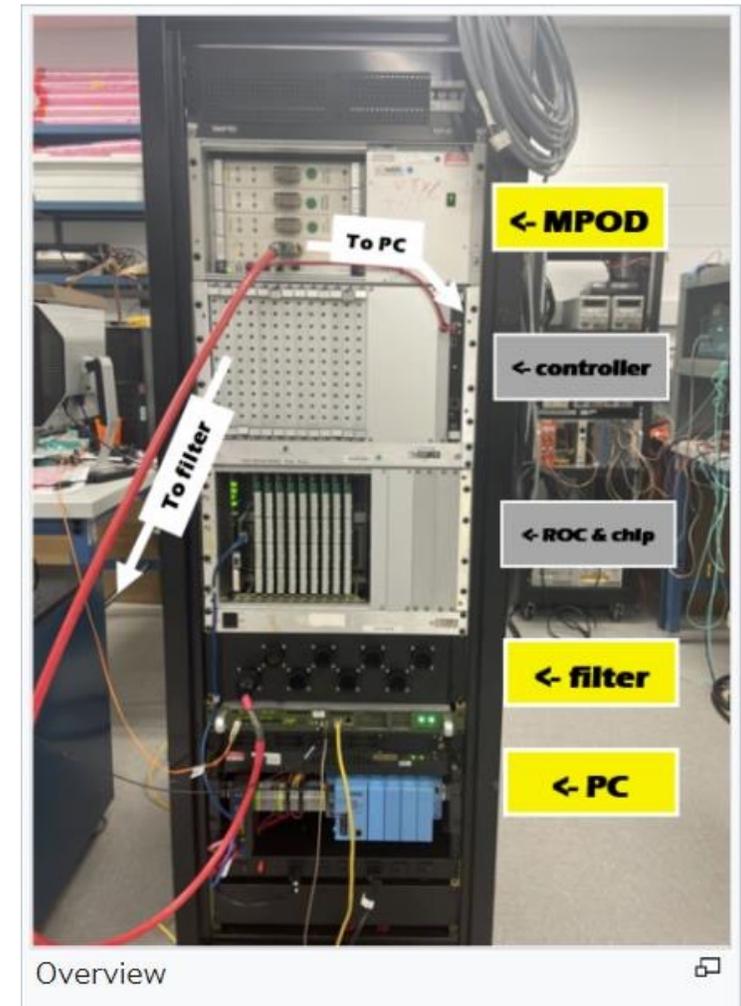
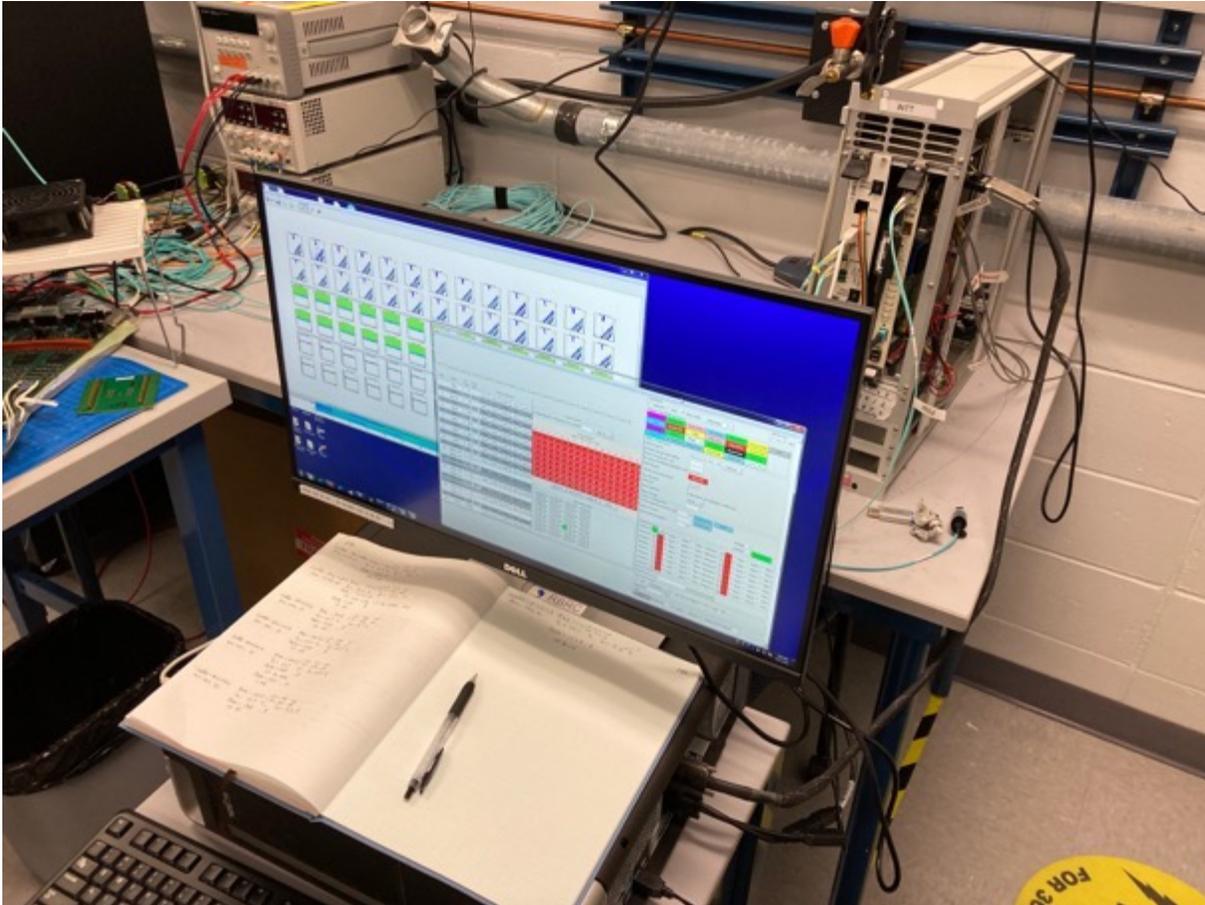
RIKEN/RBRC

Itaru Nakagawa

# FVTX Readout Chain

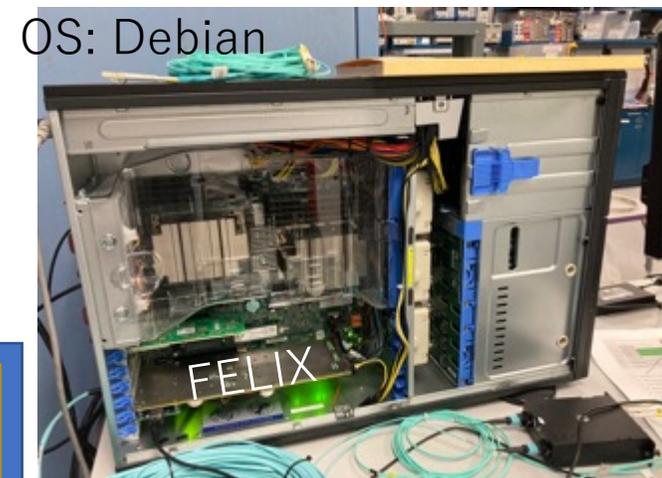


# Windows-7 Standalone

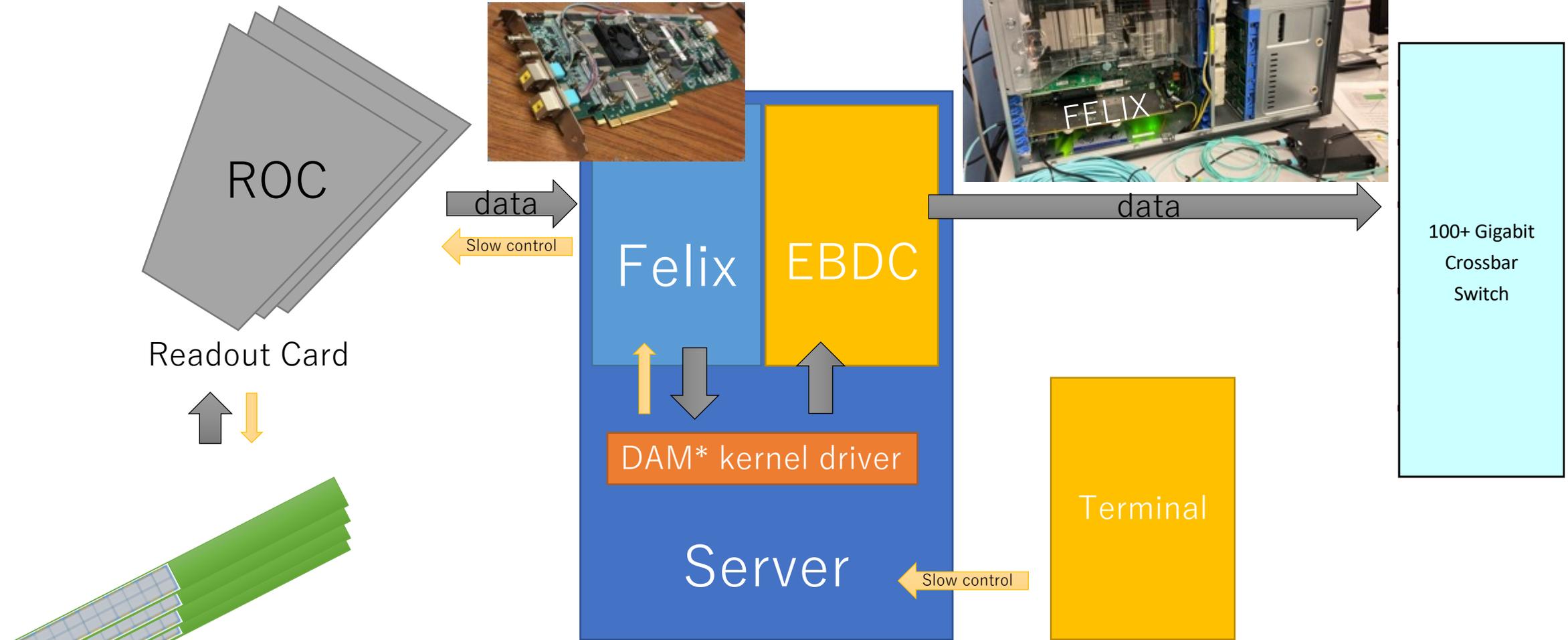


- Now the LV/Bias systems are upon running for the barrel ladder testing.
- Continue calibration data taking for barrel ladders with Windows-7 standalone until the 2<sup>nd</sup> Felix server is ready.

# INTT-Felix Readout Chain



OS: Debian



\*Data aggregation module (DAM) is the driver for FELIX board and was succeeded from TPC. Raul added INTT unique feature to it like slow control commands for example.

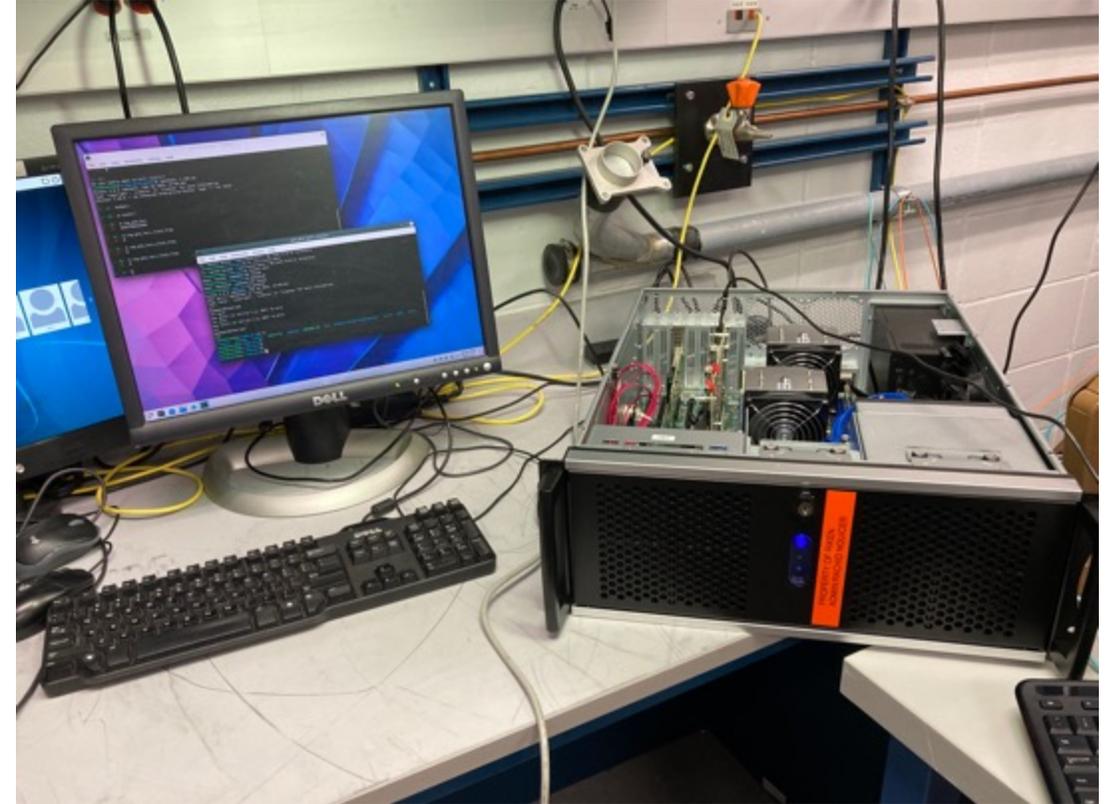
# Felix Servers

Felix Server-1



For Raul's development

Felix Server-2



For testing and software developments for INTT users

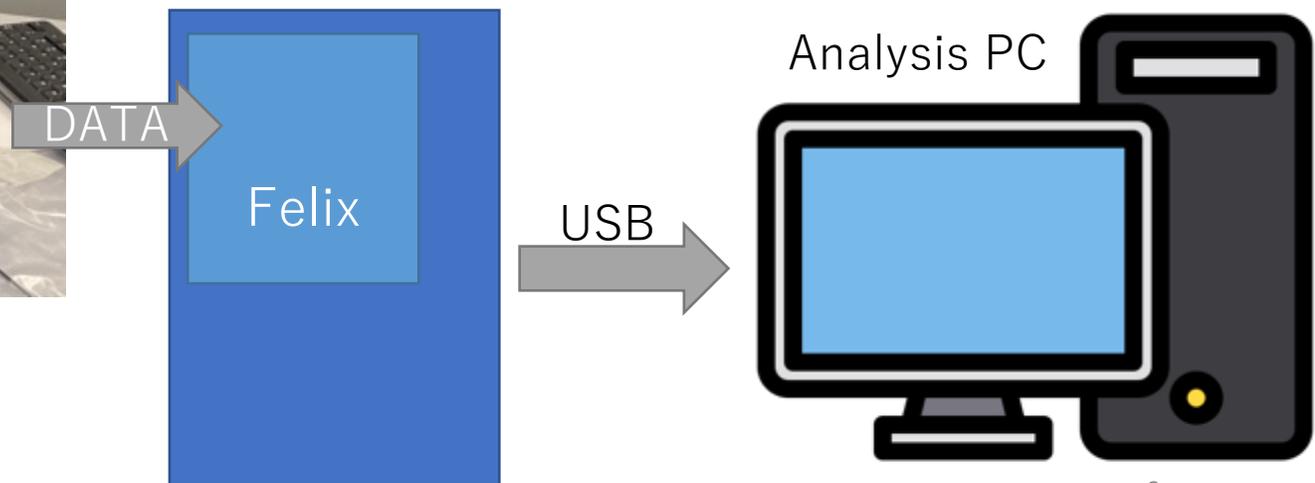
# Felix Server-1 Status

Felix Server-1

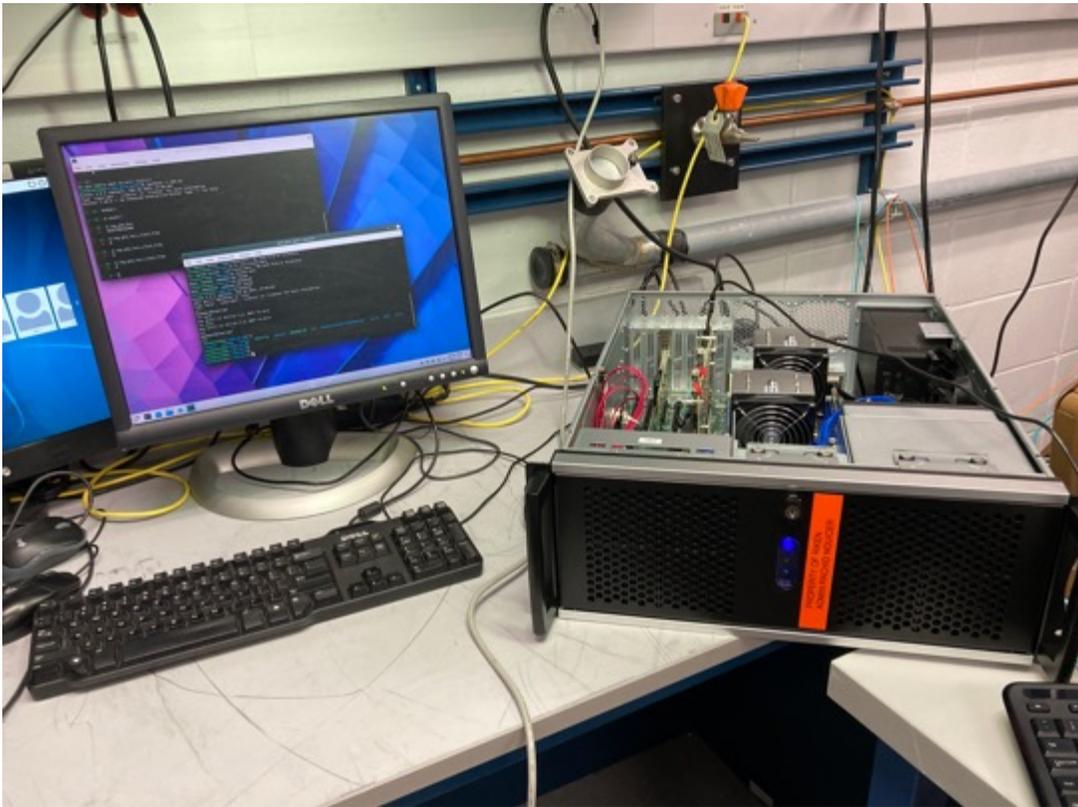


For Raul's development

- A python script w/o GUI
- Saved data in python dictionary format
- Transfer data via USB flash memory to other PC.
- Convert python dictionary format to root tree (via txt format) for the analysis.

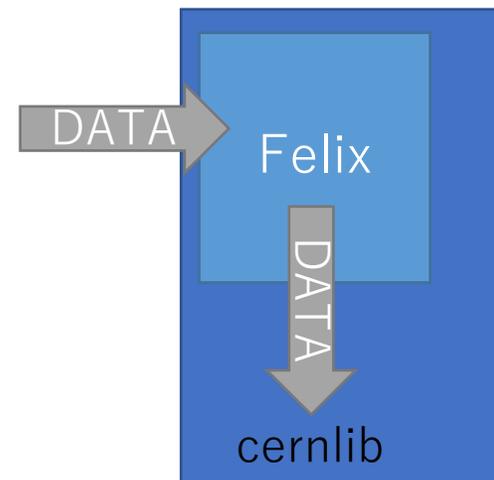


# Plan for the Felix Server-2



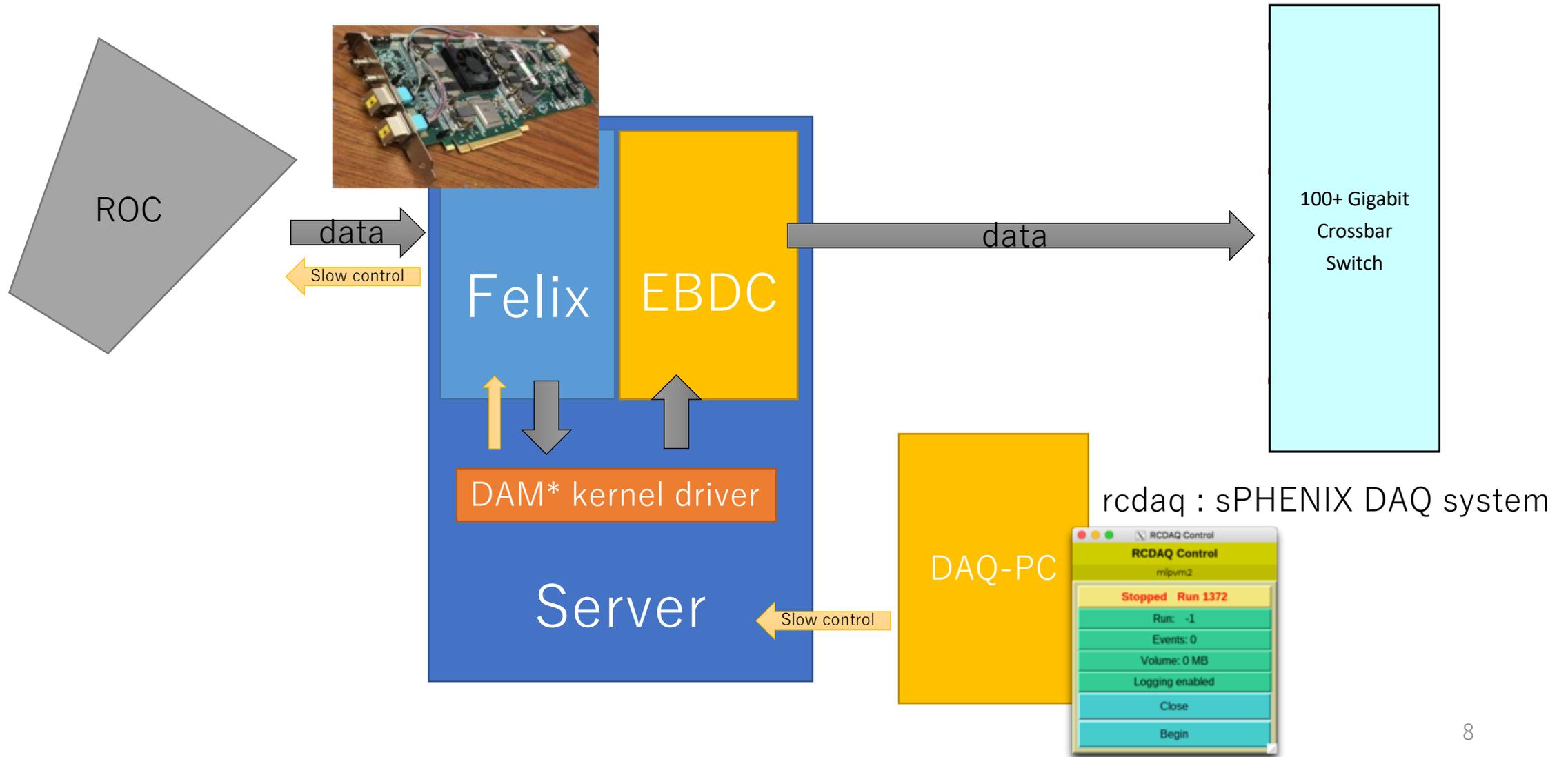
For testing and software developments for INTT users

- Simple data taking is ready as well as Felix server-1.
- KDE graphic interface is running. (server-1 is not yet available).
  - The Expert-GUI can be developed on this machine.
  - Data analysis can be done locally as long as necessary libraries are installed e.g. cernlib, etc.

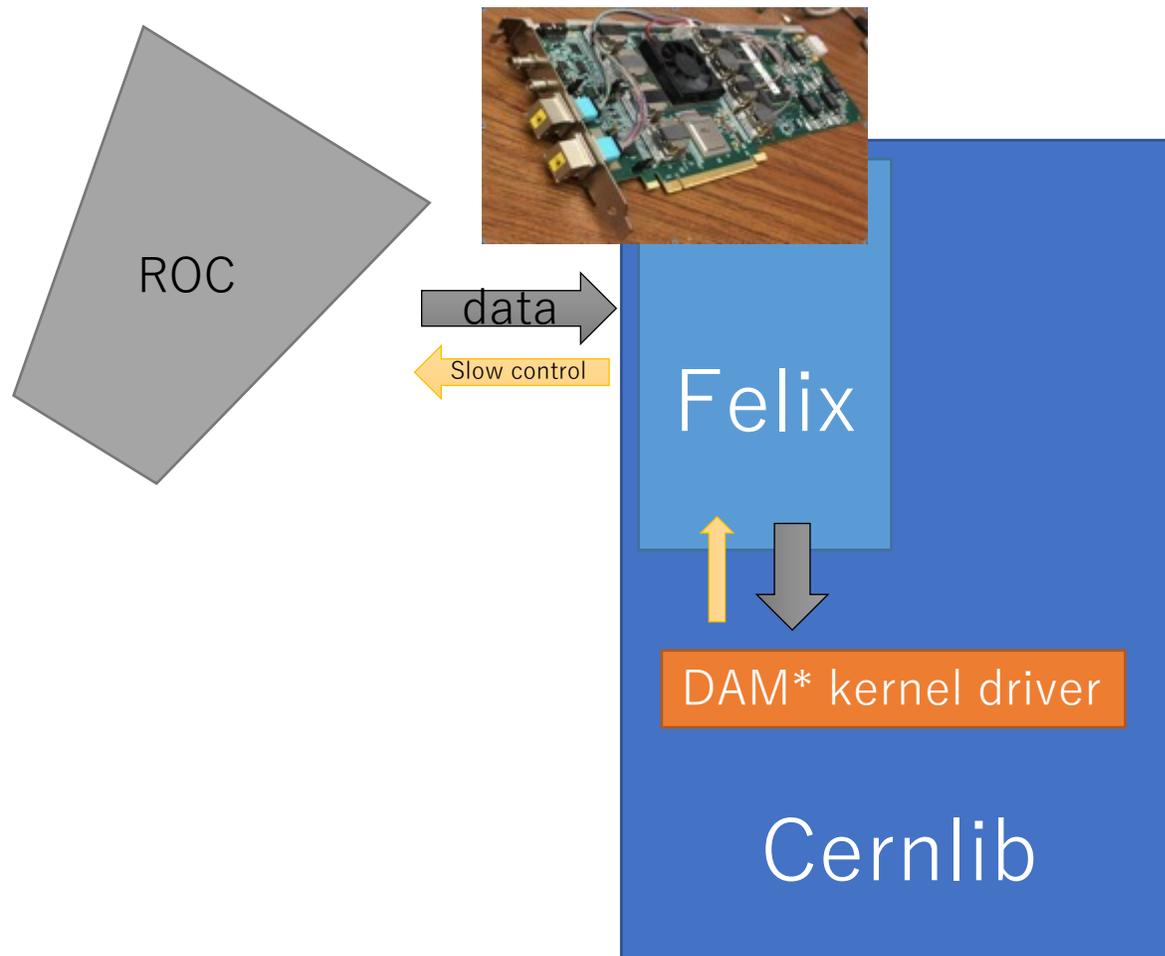


- Data format conversion
- Root analysis

# 1008 DAQ Configuration

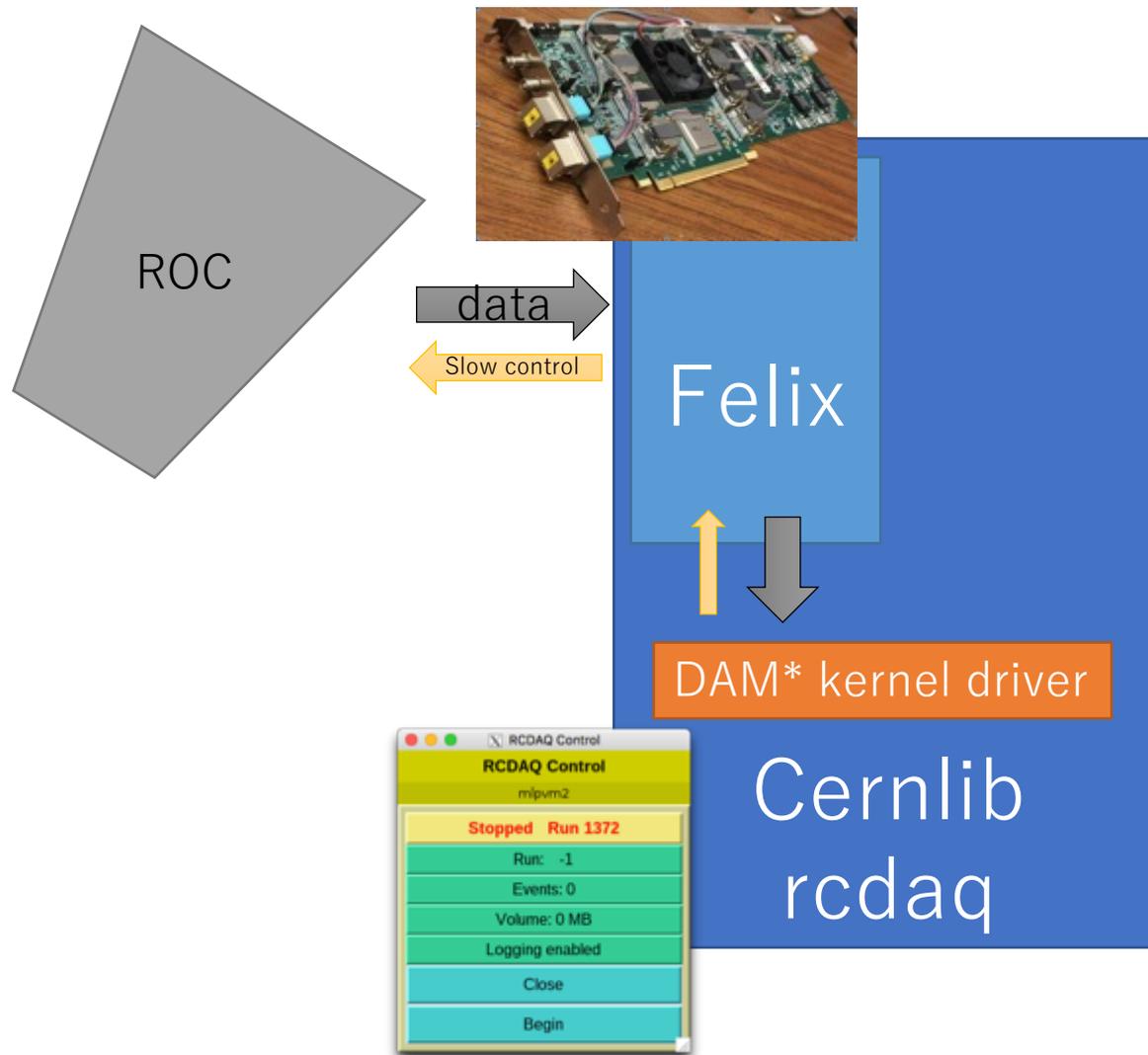


# Load map Towards 1008 DAQ Configuration



1. Install data format codes and cerlib to Felix server-2

# Load map Towards 1008 DAQ Configuration



1. Install rcdaq standalone once Raul+Martin make it ready.

On 2022/08/11 19:59, Martin Purschke wrote:

Hi Itaru,  
well, there is not such difference between "standalone" and other modes any longer - many RCDAQ instances will make up the sPHENIX DAQ.

Indeed, Raul and I have put the DAQ together and it "works" in the sense that whatever the FELIX spits out, RCDAQ takes. Raul made it clear that his firmware, and with it the internal data structure, are still very much subject to change. What I wanted to get done is grabbing the data from the FELIX into packets. What's in there isn't really decodable yet - no point as long as the internal structures are in flux. But you do get packets and all.

Bottom line, as soon as Raul is ready to go, the DAQ and I are ready to go.

# 1008 DAQ Configuration

