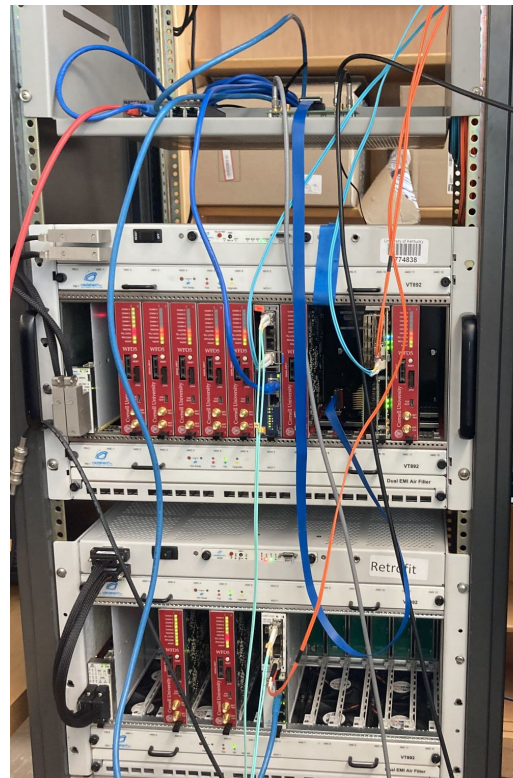


g-2 Modified DAQ Development Progress

- Added second crate to UKY test stand
- Debugged testbeam frontend software to handle multiple crates
- Can generate midas files with events built from multiple crates



UKY test stand MicroTCA crates

Additional Debugging

- “CCC: Run abort” alarm shortening runs
 - FC7/WFD5 “performance” evaluation runs(?)
- Sean analyzed test beam and UKY teststand performance data.
 - Bottlenecks are due to rare, long pauses between events
 - Yet to determine exact reason for pauses

Run Status

Run 205
Running

Start: Mon May 20 09:16:36 2024

Running time: 0h00m10s

Stop

Pause

Alarms: On

runStatusSequencer

Data dir: /home/installation_testing/online/

1716211000 09:16:40.258 2024/05/20 [mhttpd,INFO] Run #205 started

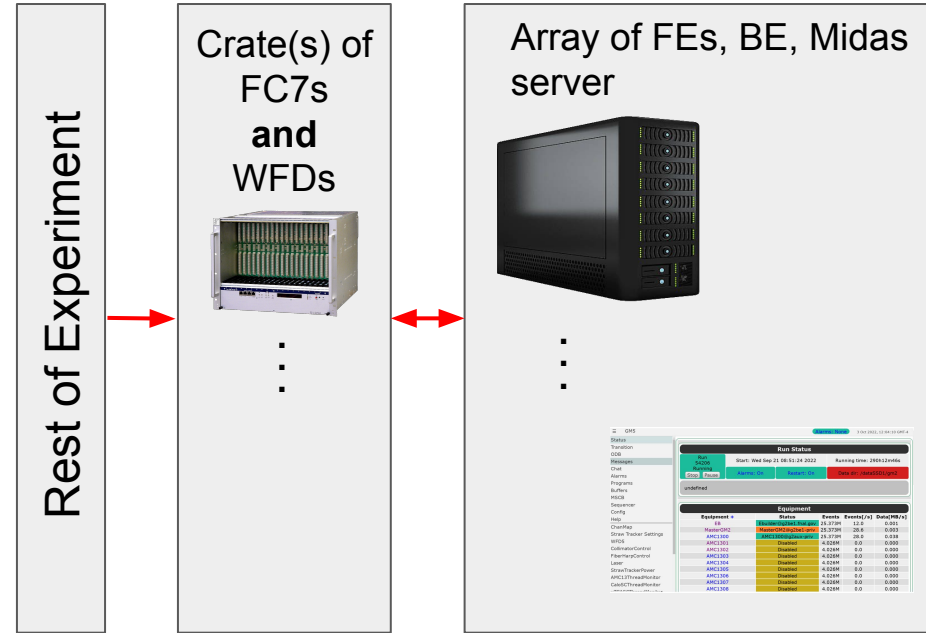
Equipment

Equipment +	Status	Events	Events[/s]	Data[MB/s]
MasterGM2	MasterGM2@localhost	11082	1999.7	0.208
AMC13001	AMC13001@localhost	12323	1999.7	17.957
AMC13002	AMC13002@localhost	12531	1999.7	17.845
EB	Ebuilder@localhost.localdomain	13298	2002.0	35.113

Midas Experiment running at 2kHz with multiple crates

g-2 Modified DAQ Development Outline

- Establish communication with all crate modules
- Finish hardware assembly
- Get frontend code and monitoring software running
- Add second crate to teststand
- Debug (increase) rate capabilities by optimizing frontend code
- Replace meinberg GPS trigger with parallel port triggers
- Write user manual for this DAQ



Simplified DAQ Diagram