CODA3 – Status update

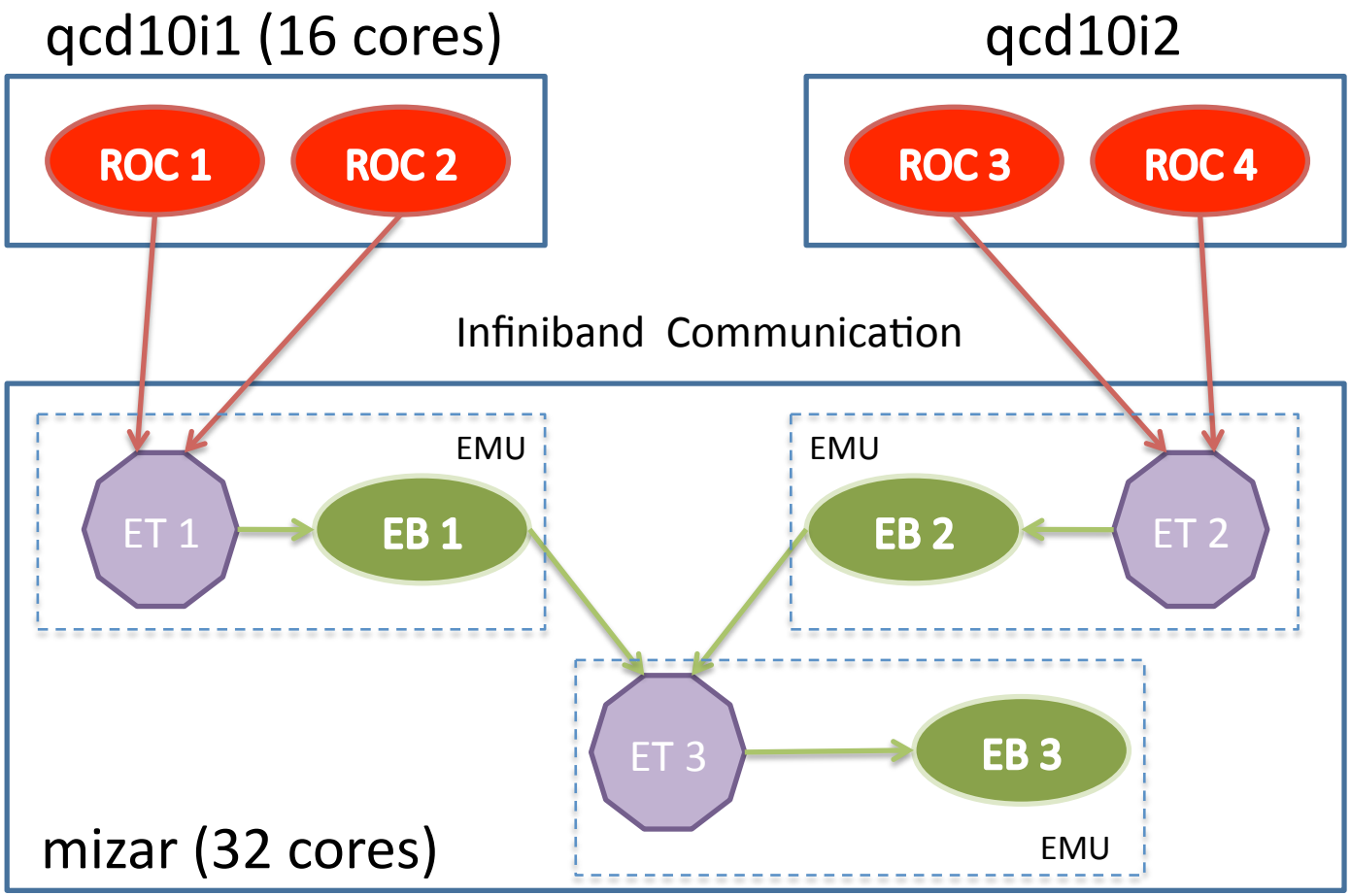
- The goal of the primary CODA 3 release is to provide a stable platform for Users to create and run simple DAQ systems:
  - Single stage Event building
  - Few crates (hardware restricted - up to 5)
  - Event blocking (support for high >100KHz rates)
  - Support for new hardware
  - Backward compatible with most existing hardware
- CODA 3 is a blend of multiple software packages with customizations. There are API's as well as certain communication "standardizations" that are under development. It is important that the release have these well defined to minimize later transitions to subsequent releases.
- The next slide lists all the defined requisite tools/components/tasks and a general status on each. A green or yellow status represent items that are OK or acceptable for use in a release. The red items still need some development before a release can be made.

Tool/package/task	Version	Status	Comments
AFECS runcontrol rcgui platform/COOL Database	1.4		Generally stable, updates necessary when changes to communications specifications are made.
Jcedit, db2cool	1.0		X-performance, user input, layout
cMsg	3.2		
ET	12.0		
evio	4.0		c, c++ file I/O library routines incomplete
EMU coda_peb (1st stage EB) coda_seb (2nd stage EB)	1.0		Performance issues, “Complex” configurations not well defined.
coda_roc	3.0		Vxworks broken, no remote access, not 64bit clean
Front-End Libraries	var		VME/DMA, **CRL** , SFI , TI , SD , FADC
RunControl <-> component communication specification	---		Component configuration, user<->component communication
Documentation	---		There actually is some, but…
Hardware Intel VME CPU TI (version 3) SD FADC	 --- V3 V1 V2		Firmware bug fixes for FADC, Some firmware features needed for TI (library updates after firmware fixes)

CODA 3 Status - continued

- All pieces (both hardware and software) are available at this time, but there are still tasks that have to be done to bring everything together. It requires some effort from all members of the DAQ group.
- Current tasks the DAQ group are working on that do not directly advance a CODA 3 release include:
  - Monte Carlo to Raw CODA event format conversion library
  - Event Dis-entagler
  - Online Farm control system
  - Trigger configuration and control system
  - Integrated Experiment Control system
  - Generic self-configuring readout lists
  - CLARA offline analysis framework
  - CLAS12 SVT detector electronics
  - General operations support for upcoming 6Gev Running
  - My long over-due vacation (so I don't lose my hours)

- We would VERY much like to get a release out this fall.



Through EB3 :
600 kHz event rate
400 MB/sec