Planning v5.2

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Present situation

- Fddaq-v5.1.0 released:
  - Contains the features for running with BDE, using fake-hsi or random-tc-generator or with simple TP based algos (prescaling)
  - Supports also FELIX readout (not tested with real detector)
  - Uses drunc as run control system, integrated with microservices needed for running at EHN1
  - Tested using automated tests as well as CRP4 and 5

- Several features were not included
  - Timing, CTB, sspmodules, daphnemodules and their OKS schema not complete
  - Changes in TP/trigger algorithms and metrics from fddaq-v4.X not ported
  - Handling of hw resources (pinning) only in its basic form (as fddaq-v4)
  - No k8s support from drunc

General Considerations

- Planning of fddaq-v5.2 should complete the transition to OKS, but also advance work on several fronts that have been put on standby for long
  - Proposing a "long" dev cycle
- CCM focus: drunc (+k8s?), opmon
- CoreSW focus: oks resources description (for pinning), factorizing TP algorithms out of fdreadoutlibs and porting changes from v4, appfwk updates from workshop incl opmon
- Trigger focus: fully validate new model, port algorithms and metrics changes from v4, port CTB, opmon updates
- Timing focus: complete OKS porting (linked with changing approach of central timing as a service??), opmon updates

For Discussion

fddaq-v5.2.0 TASK LIST

TASKS	OWNER	WG	NOTES	W30 Jul 22	W31	W32	W33	W34 Aug 19	W35	W36	W37	W38 Sep 16	W39	W40	W41	W42 Oct	W43	W44 Oct 28
port TDE readout support from v4	Alessandro	Core SW							100%									
sspmodules porting	Ron	Det ops							100%									
daphnemodules porting	Marco	Det ops							100%									
introduce daphne v3 support?	Alessandro	Core SW							100%									
complete timing implementation	Stoyan	Timing							100%									
complete hsi implementation	Stoyan	Timing							100%									
implement ctb in v5/oks	Marco	Trigger							100%									
create hw resources model for Readout	Roland	Core SW							100%									
establish model for generating correct pinning file from OKS	Roland	Core SW							100%									
implement pinning file generation	Roland	Core SW							100%									
Use callbacks for TPs exchange	Alejandro	Core SW					100%											
Port all WIB data processing updates from v4 (+ repackaging)	Alejandro	Core SW					100%											
adjust schema to have per plane TP handlers	Giovanna	Core SW					100%											
optimise handling/post-processing of unordered data	Roland/Giovanna	Core SW					100%											
implement generic pre-scaling / channel filetring	Artur	Trigger									100%							
fix operational monitoring for trigger (incl TPs)	Artur	Trigger									100%							
port relevant trigger changes from v4 (MLT + algos)	Artur	Trigger									100%							
support partial sequences of commands (e.g. start run from initial or configured)	A. Tapper	CCM				100%												
modify error propagation policies	A. Tapper	CCM	adjust schema to define default behavior upon error (ignore, go			100%												
use ERS for error reporting in run control	A. Tapper	CCM										100%						
unification of command API for controllers and appfwk	Eric	CCM										100%						
action plans in OKS and appfwk	Eric	Core SW	allow for parallel execution of commands for modules within one									100%						
Introduce new operational monitoring of apps and modules	Marco		Requires update on opmon backend but also scraping of info													100%		
network monitoring & dashboards	Marco/Roland	CCM	Retrieve data from network devices for debugging of network behavior					100%										
update integration and system tests	?																	
Update DB area for NP02 in EHN1	Giovanna	Det ops	To be vaildated against nightly															
Testing of nightly	?	SW Coord	On due date tags inserted into tag collector for pre-release build															
Deployment of rc-fddaq-v5.2.0 into EHN1	Bonnie?	F&I	microservices, etc…													100%		
Pre-release testing	?	SW Coord	On due date tags for final release build inserted into tag collector													100%		
fddaq-v5.2.0	John?	SW Coord																100%