

Progres in SVD slow control

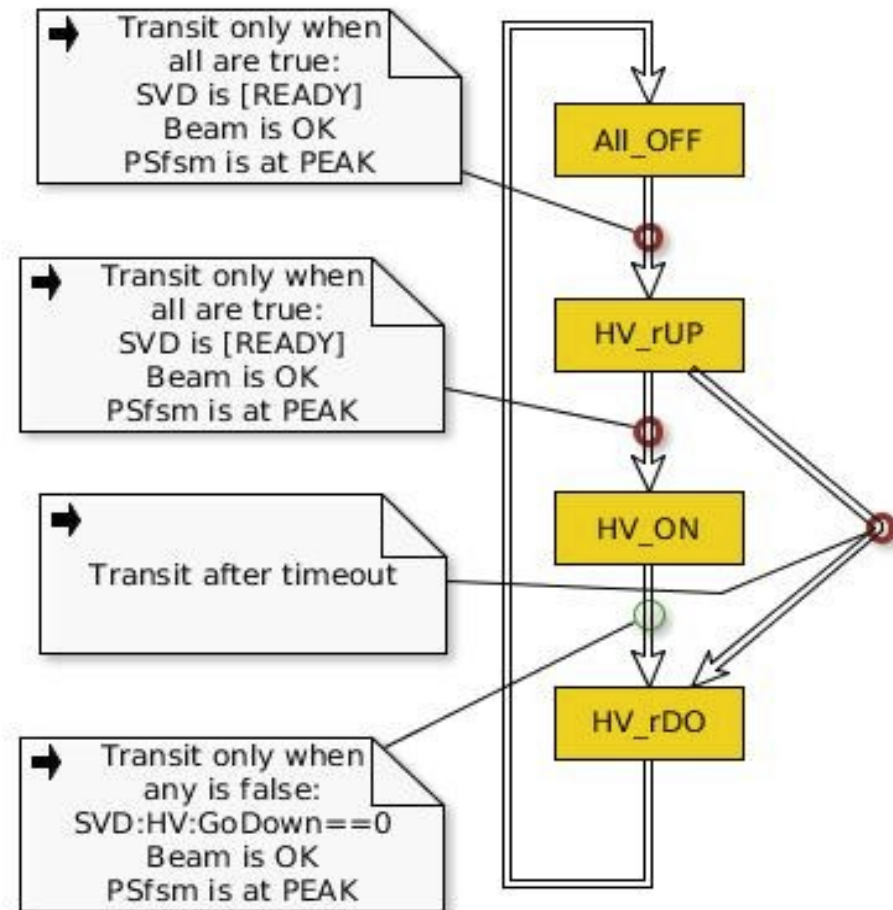
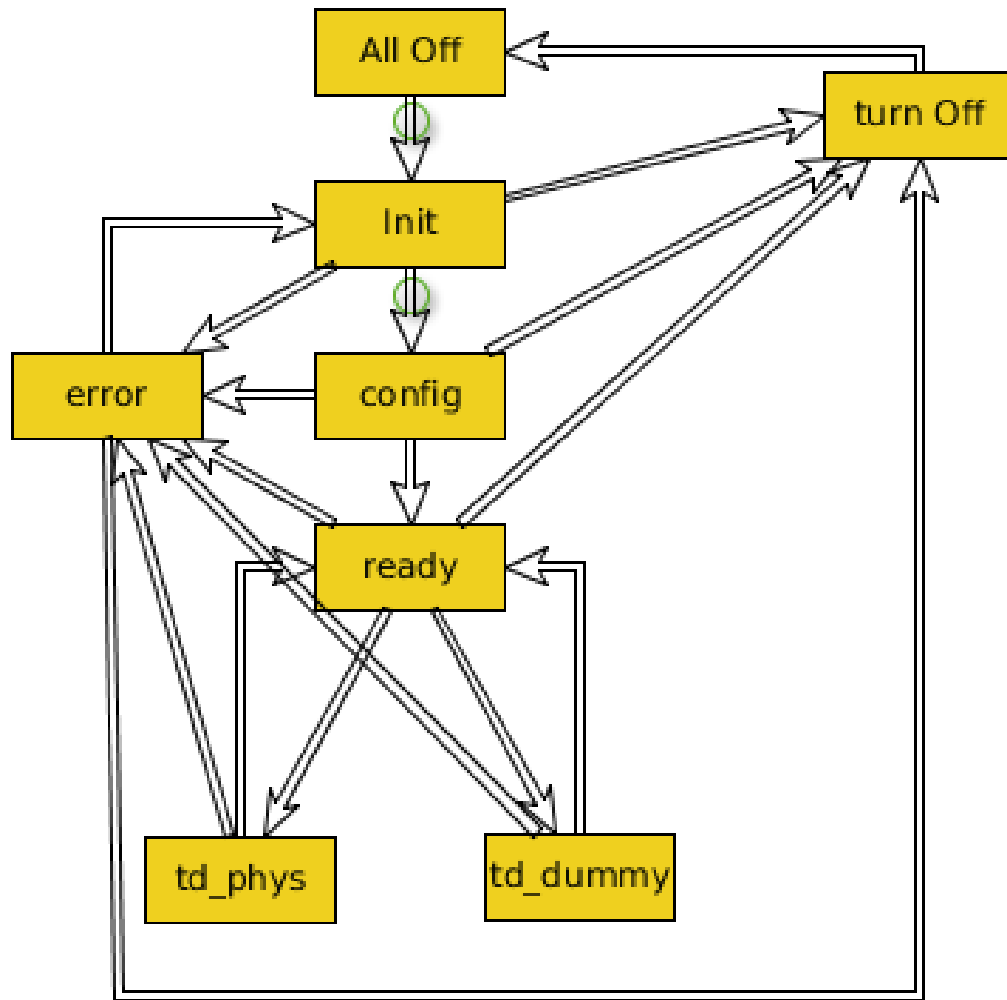
Szymon Bacher

Institute of Nuclear Physics, PAN Kraków
University of Science and Technology, Kraków

Currently targeted topics

- Startup procedure
- SVD-QM (quality monitor)
- NTC software

Startup procedure



For more data, refer to Twiki:

https://belle2.cc.kek.jp/~twiki/bin/viewauth/Detector/SVD/SVD_control

Current State of SVD-QM and FADC-CTRL

SVD-QM:

- ✓ Pedestal and noise run (raw data)
- ✓ Hardware run (raw data)
- ✓ Preliminary version of C-interface used for debugging w/o updating.
- × missing run types: FIR filter, ADC delay, internal calibration run, sixlet calibration run
- × reading remaining data formats (transparent, zero suppressed)

The development FADC-CTRL has not started yet.

For more data refer to Hao`s presentation from tomorrow.

NTC

- LabView software is being replaced with EPICS
- Preliminary software works, but needs to be reimplemented in more elegant way.
- More data on my tomorrows talk, and soon on TWiki

Thank you

Backup – startup sequence (1)

Action	Abbreviation	Prerequisite	master state transition	Extra Conditions	flag raised for MASTER RC
Turn on all the PCs running EPICS	SC_ON				
Turn on ENV monitors	ENV_ON	SC_ON			
Turn on Cooling	CO2_ON	SC_ON?			
Turn on DQM	DQM_ON	SC_ON			
Initialize FADC	FADC_INIT	LV_ON			
Turn on Low Voltage	LV_ON	ENV_ON&IB_ON			
Configure APV	APV_INIT	FADC_INIT			READY
Ramp UP HV	HV_ON	APV_INIT	PS(any->PEAK)	Beam is down or stable	
Turn on separation voltage	SEP_ON	HV_ON			
Take real data	Running	SEP_ON&DQM_ON	RC(READY->Running)		RUNNING
Take dummy data	RunNOP	APV_INIT&DQM_ON	RC(READY->RUNNINGwithNOPS)		RUNNINGwithNOPS

Backup – startup sequence (2)

Preparing for injection	Turn off separation voltage	SEP_OFF			
	Ramp DOWN HV	HV_OFF			
	//injection is allowed				
	Ramp UP HV	HV_ON	APV_INIT		Beam is down or stable
	Turn on separation voltage	SEP_ON	HV_ON		
Turning OFF	Turn off separation voltage	SEP_OFF		PS(PEAK->any)	
	Ramp DOWN HV	HV_OFF	SEP_OFF		
	Shut down APV	APV_OFF	HV_OFF?		
	Shut down FADC	FADC_OFF	APV_OFF		
	ramp down LV	LV_OFF	FADC_OFF		
	shut down DQM	DQM_OFF			
	Turn off Cooling	CO2_OFF	LV_OFF		
	Shut down all the PCs running EPICS	SC_OFF			