

GDL and VME/Server

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GDL firmware

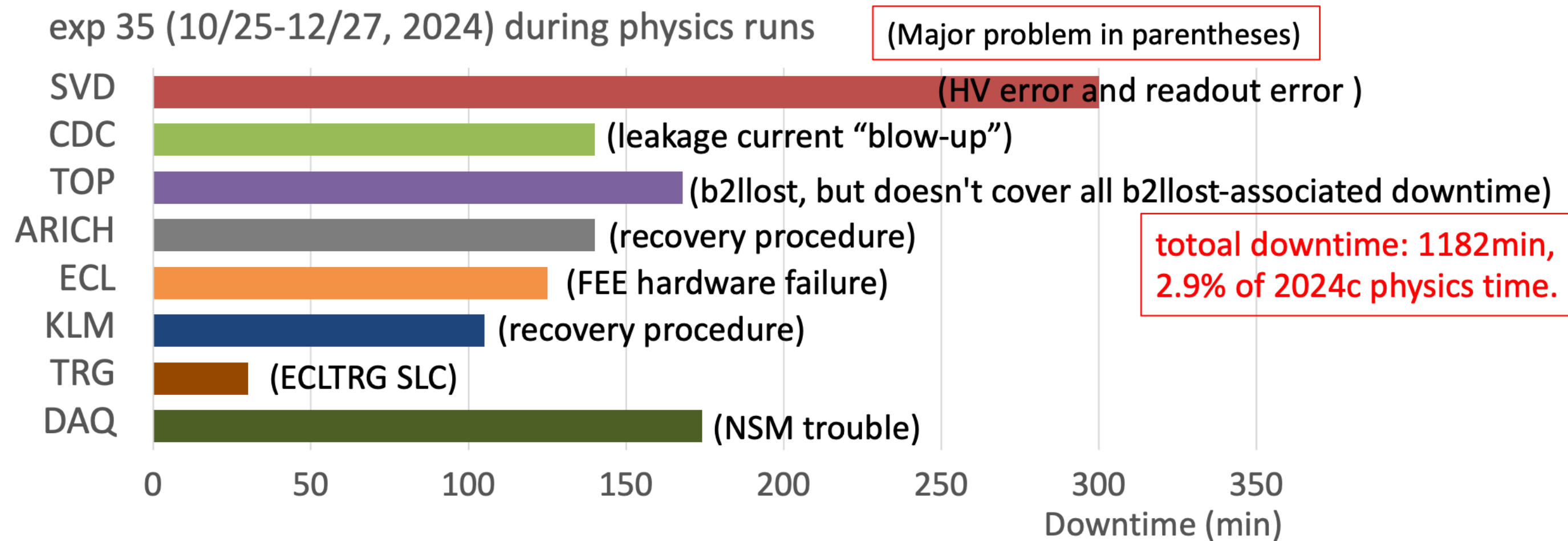
- gdl0101a
 - (samhem, shem) -> (ecl_taunn, ecltaunn)
 - mcs on srv2, not downloaded yet. Commit pushed.
- Pipelining timing decision module ongoing
 - In present logic, there is one timing decision module for a PSNM signal and the PSNM can block following PSNM signals, for ~230 nsec, if it does not have timing signal in the timing window.
 - In new algorithm
 - Many (< 20) Timing decision modules for all PSNM signals and perform timing decisions in parallel.
 - Control module picks up proper L1 signal.
 - GRL can do fine time tuning for ECLTRG signals for better timing resolution of the ECLTRG-related signals.
- Others
 - Refactoring the code
 - Widening the timing decision window. Depends on the progress of GNN.

GDL database

- Input/output bit names and prescale values for particular exp/run range
- Mingze is taking over this task
 - Instruction
- Countermeasure to avoid delay of payload submission
 - Make new payloads within a few weeks when we change GDL config
 - Generate meta data (for when the change happens) by hand

2024c Operation Summary

Major downtime



- In 2024c, TRG worked fine.
- Still room to improve SLC to detect and monitor errors

- Two issues regarding data production
 - Flagging Run quality and production of GDL payload caused delay
 - The progress will be included in operation summary in TRG weekly meeting

2024c TRG shift

=====		TRG Expert Remote	=====			
Institution	User		N.shifts	Shf.pts	Due(pts)	Frac(%)
Hanyang	Unno Yuji		27.00	32.00	22.97	139.34
Hawaii	Richard Peschke		22.00	22.00	22.97	95.8
IPHC	Matteo Maushart		15.00	26.00	22.97	113.21
JLU	Cheng Liu		24.00	25.00	22.97	108.86
	Jing Yuan		21.00	33.00	22.97	143.69
KEK	Hanwook Bae		35.00	36.00	22.97	156.76
	Taichiro Koga		23.00	27.00	22.97	117.57
	Yuxin Liu		19.00	29.00	22.97	126.28
Karlsruhe	Lea Reuter		35.00	35.00	22.97	152.4
	Isabel Haide		25.00	33.00	22.97	143.69
	Kai Lukas Unger		18.00	30.00	22.97	130.63
	Greta Heine		15.00	30.00	22.97	130.63
	Marc Neu		10.00	12.00	22.97	52.25
Korea Univ. (KU)	YongHeon Ahn		33.00	33.00	22.97	143.69
NTU-Taiwan	Hideyuki Nakazawa		23.00	25.00	22.97	108.86
Nankai	Youwen Xue		21.00	34.00	22.97	148.05
	Hanlin Zhang		8.00	12.00	22.97	52.25
Nara-Wu	Hisaki Hayashii		4.00	4.00	22.97	17.42
Pittsburgh	Kimika Arai		32.00	33.00	22.97	143.69
	Erfei Wang		18.00	36.00	22.97	156.76
Seoul	Lee, Hobin		29.00	33.00	22.97	143.69
Sydney	Anthony Craig Little		24.00	33.00	22.97	143.69
UTokyo	Zepeng Xu		20.00	25.00	22.97	108.86
XJTU	Yubo Li		4.00	8.00	22.97	34.83
	Xinyue Zhao		1.00	2.00	22.97	8.71
			506.00	648.00	666.00	97.30

Thank you for your cooperation !!

Replacement of VME board

- Motivation
 - Present VME board running with SL5. No more spares. Sometimes freeze by unknown reason.
- ~20 new VME board purchased
- RockyLinux9
 - Both boot server and VME CPU are RockyLinux9
 - VME: initramfs (a file) and filesystem for VME (on the boot server) are made with RockyLinux9
 - Boot server can be different OS, I guess
 - Can join monitor framework for CPU usage, helps understand freeze problem
- Progress
 - Succeeded in booting the boards following Nakao-san method
 - For access of UT3/UT4, software development needed
 - Compile of driver done

OS upgrade of Ehut trigger servers

	OS				
btrgsrv0, 1	SL6	Injection veto monitor			
btrgsrv2, 3	SL7	Main and backup			Booting VMEs File server for VMEs
btrgctr0, 1	SL6	ECLTRG and backup			Booting VME File server for VME

- Rack mount servers in Ehut
- No more support for SL6 and SL7

Which OS ?

	Old OS	New OS	Requirement
btrgsrv0, 1	SL6	Rocky8	ROOT, vivado_lab (?)
btrgsrv2, 3	SL7	Rocky8 or 9	
btrgctr0, 1	SL6	Rocky8	ROOT. vivado_lab

- Things to be considered
 - Cannot login to SL6 from Rocky9 and Rocky8 (maybe). bdaq is Rocky9.
 - Must upgrade all servers
 - ROOT and vivado_lab not available on RockyLinux9 but ok on RockyLinux8
 - Will be available in the near future, I guess.
 - Succeeded in booting new VME (Rocky9) from Rocky9. Maybe from Rocky8 as well.
 - In DAQ group, Rocky9 seems to be standard