

HEPscore status

D. Giordano (CERN/IT)

HEPiX Benchmarking WG

01 Feb 2023

Milestone reminder and Status

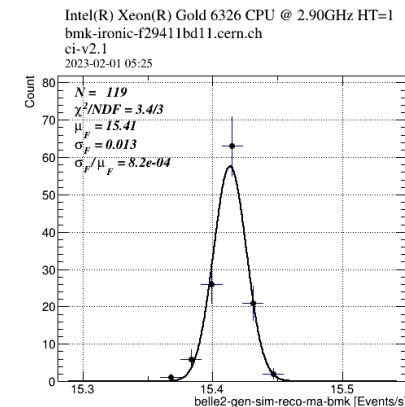
- ❑ 14th Feb. 2023 HEP Workloads frozen
- ❑ Recent workloads released with x86_64/aarch64 support
 - Belle2 gen-sim-reco
 - Alice digi-reco
- ❑ LHCb: intermediate workload released, new workload expected
 - See A. Valassi contribution for details

Validation of Belle2 gen-sim-reco MA

- ❑ Continuously tested for multiple days
- ❑ Server utilization as expected
- ❑ Spread $\lesssim 1\%$

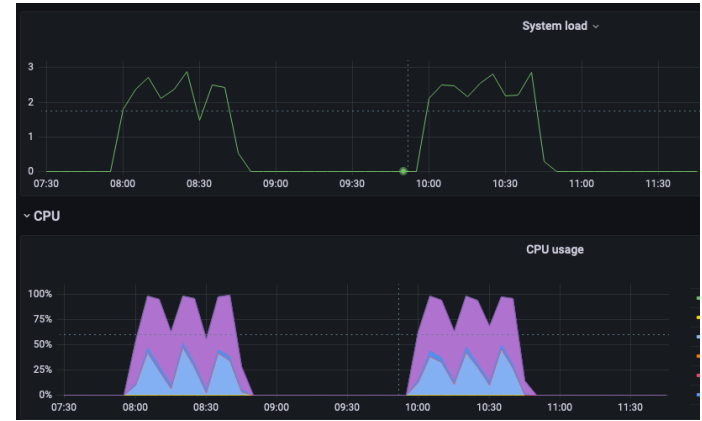


CPU ↑	Online CPUs	# Copies	# Threads/Copy	# Events/Thread	# reps	Count	p50	spread	Run 1 duration (s)
AMD EPYC 7302 16-Core Processor	0-63	64	1	50	3	92	14.8	1.04%	321
Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz	0-31	32	1	50	3	91	4.88	0.331%	508
Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz	0-47	48	1	50	3	92	7.19	0.336%	510
Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz	0-55	56	1	50	3	91	9.49	0.353%	450
Intel(R) Xeon(R) Gold 6130 CPU @ 2.10GHz	0-63	64	1	50	3	92	10.2	0.453%	471
Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz	0-63	64	1	50	3	91	15.4	0.286%	317

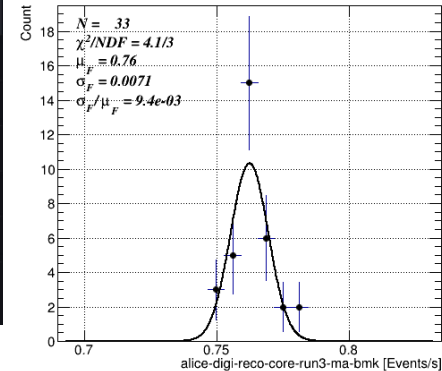


Validation of Alice digi-reco MA

- ❑ Continuously tested for multiple days
- ❑ Server utilization as expected
- ❑ Spread $\sim 3\%$



Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz HT=1
 bmk-ironic-f29411bd11.cern.ch
 ci-v2.0.1
 2023-02-01 05:25



CPU	Online CPUs	# reps	Copies	Threads/Copy	Events/Thread	Count	p50	spread	Run1 Duration (s)
Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz	0-63	3	16	4	10	33	0.762	3.60%	929
Intel(R) Xeon(R) Gold 6130 CPU @ 2.10GHz	0-63	3	16	4	10	35	0.510	2.43%	1364
Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz	0-55	3	14	4	10	35	0.492	3.50%	1212
Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz	0-47	3	12	4	10	35	0.370	2.86%	1418
Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz	0-31	3	8	4	10	35	0.241	3.80%	1435
AMD EPYC 7302 16-Core Processor	0-63	3	16	4	10	35	0.782	3.28%	922

HEPscore beta configuration

- ❑ Prepared a HS23_beta config with all the workloads but LHCb
- ❑ Validating it on the CERN servers (including ARM)
- ❑ When validated, will circulate instructions to TF operators
 - Could be delayed if meanwhile the LHCb container is made available

