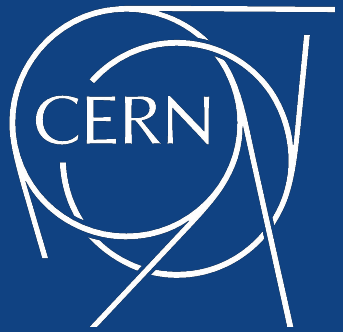
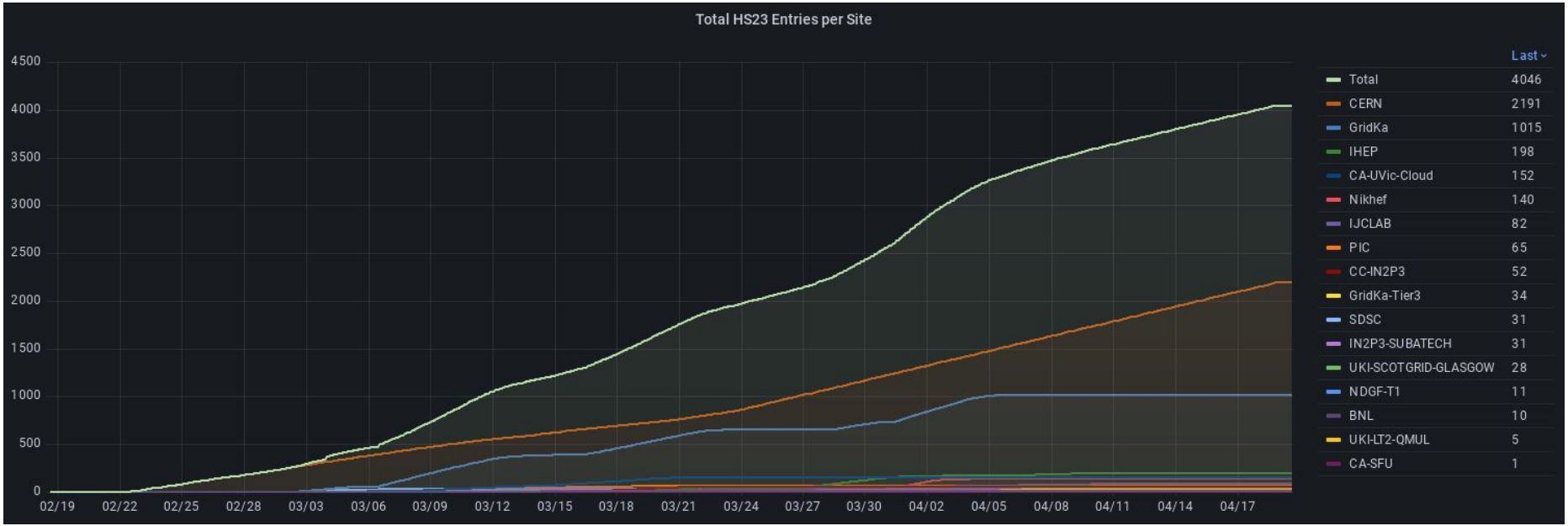

CERN

HS23 Campaign Status Update

Gonzalo Menéndez Borge
CERN IT

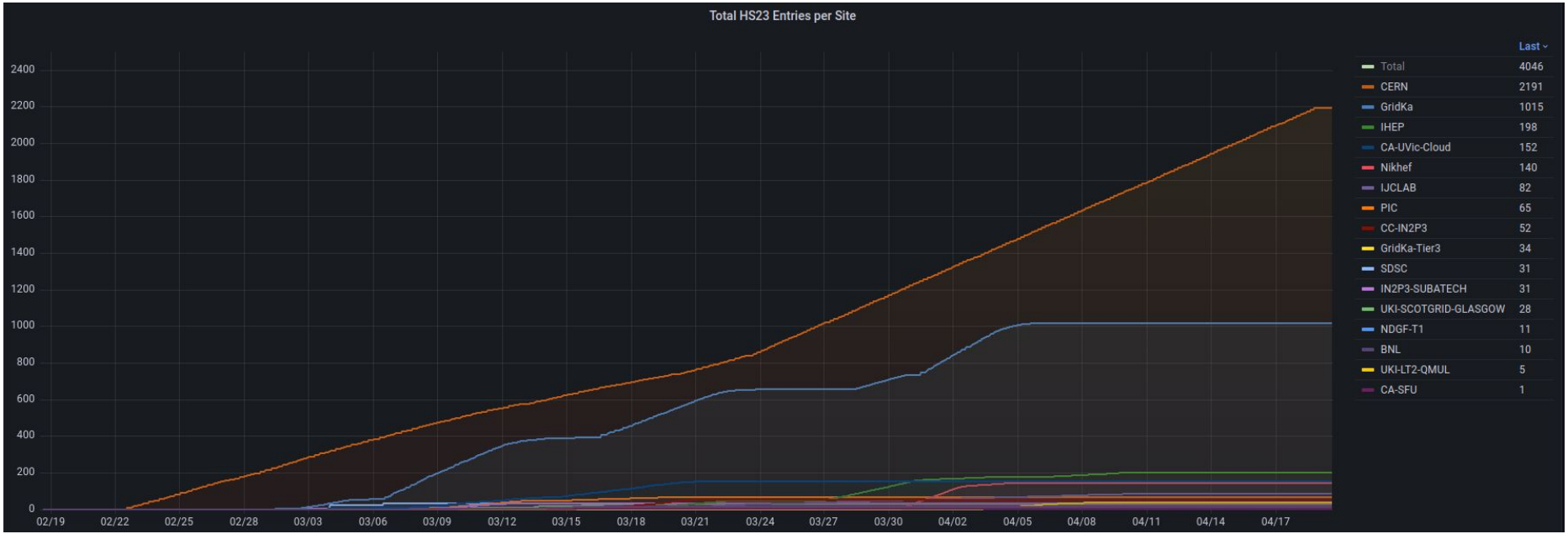
HEP-SCORE deployment TF
19 April 2023

Cumulative Entries I



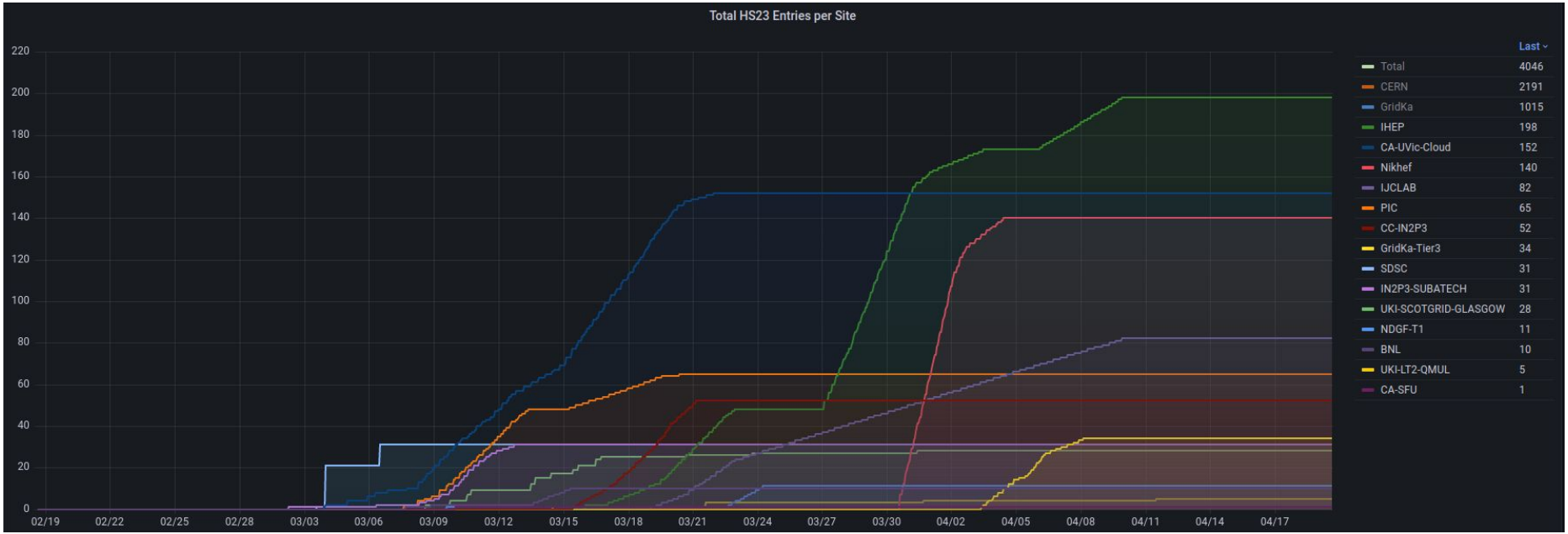
Total

Cumulative Entries II



All sites

Cumulative Entries III



Close-up

Success Rate I

CPU_Model	SMT_Enabled	Online_CPUs_list	Site	Successful	Failed	Total	Success Rate
Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz	0	0-31	CERN	209		209	1
AMD EPYC 7302 16-Core Processor	0	0-31	CERN	206		206	1
AMD EPYC 7302 16-Core Processor	1	0-63	CERN	171		171	1
Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz	1	0-31	GridKa	160		160	1
Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz	0	0-27	CERN	157		157	1
Intel(R) Xeon(R) Gold 5218 CPU @ 2.30GHz	0	0-31	CERN	157		157	1
Intel(R) Xeon(R) Gold 6130 CPU @ 2.10GHz	0	0-31	CERN	157		157	1
Intel(R) Xeon(R) Silver 4216 CPU @ 2.10GHz	0	0-31	CERN	157		157	1
Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz	0	0-15	CERN	154		154	1
Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz	0	0-23	CERN	154		154	1
Intel(R) Xeon(R) CPU E5-2660 v3 @ 2.60GHz	1	0-39	GridKa	120		120	1
Intel(R) Xeon(R) CPU E5-2665 0 @ 2.40GHz	0	0-15	GridKa	120		120	1
Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz	1	0-63	CERN	117		117	1
Intel(R) Xeon(R) CPU E5-2665 0 @ 2.40GHz	1	0-31	GridKa	116		116	1
Intel(R) Xeon(R) Silver 4216 CPU @ 2.10GHz	1	0-63	CERN	115		115	1
Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz	1	0-55	CERN	114		114	1
Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz	1	0-31	CERN	112		112	1
Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz	1	0-47	CERN	112		112	1
AMD EPYC 7742 64-Core Processor	1	0-255	GridKa	98	4	102	0.961
Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz	0	0-15	GridKa	80		80	1
Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz	0	0-15	GridKa	69		69	1
Intel(R) Xeon(R) Silver 4216 CPU @ 2.10GHz	1	0-63	IJCLAB	66		66	1
Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz	1	0-31	GridKa	61		61	1
Intel(R) Xeon(R) CPU E5-2660 v3 @ 2.60GHz	0	0-19	GridKa	60		60	1
AMD EPYC 7742 64-Core Processor	0	0-127	GridKa	59		59	1
AMD EPYC 7702 64-Core Processor	1	0-255	GridKa	50	3	53	0.943
Intel(R) Xeon(R) Gold 6130 CPU @ 2.10GHz	1	0-63	CERN	44		44	1
Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz	1	0-31	CA-UVic-Cloud	38		38	1

Success Rate II

CPU_Model	SMT_Enabled	Online_CPUs_list	Site	Successful	Failed	Total	Success Rate
Neoverse-N1	0	0-159	CERN	36		36	1
Intel(R) Xeon(R) CPU E5-2640 v3 @ 2.60GHz	1	0-31	PIC	32	1	33	0.970
AMD EPYC 7453 28-Core Processor	1	0-111	CC-IN2P3	27		27	1
AMD EPYC 9654 96-Core Processor	1	0-383	IHEP	26		26	1
Intel(R) Xeon(R) Gold 6238R CPU @ 2.20GHz	0	0-55	IHEP	26		26	1
AMD EPYC 7773X 64-Core Processor	1	0-255	IHEP	25		25	1
AMD EPYC 9654 96-Core Processor	0	0-191	IHEP	25		25	1
Intel(R) Xeon(R) Gold 6226 CPU @ 2.70GHz	1	0-47	CA-UVic-Cloud	25		25	1
Intel(R) Xeon(R) Gold 6338 CPU @ 2.00GHz	0	0-63	IHEP	24	1	25	0.960
Intel(R) Xeon(R) Gold 6248 CPU @ 2.50GHz	0	0-39	IHEP	23	1	24	0.958
Intel(R) Xeon(R) Gold 6258R CPU @ 2.70GHz	0	0-55	IHEP	24		24	1
AMD EPYC 7773X 64-Core Processor	0	0-127	IHEP	22	1	23	0.957
Intel(R) Xeon(R) Platinum 8362 CPU @ 2.80GHz	0	0-63	SDSC	21		21	1
AMD EPYC 7452 32-Core Processor	1	0-127	CA-UVic-Cloud	18	2	20	0.900
AMD EPYC 7551P 32-Core Processor	0	0-31	Nikhef	20		20	1
AMD EPYC 7551P 32-Core Processor	1	0-63	Nikhef	20		20	1
AMD EPYC 7702P 64-Core Processor	0	0-63	Nikhef	20		20	1
AMD EPYC 7H12 64-Core Processor	0	0-63	Nikhef	20		20	1
Intel(R) Xeon(R) CPU E5-2630 v3 @ 2.40GHz	1	0-31	CA-UVic-Cloud	20		20	1
Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz	1	0-47	Nikhef	20		20	1
Intel(R) Xeon(R) CPU E5-2680 v3 @ 2.50GHz	0	0-23	Nikhef	20		20	1
Intel(R) Xeon(R) CPU E5-2695 v3 @ 2.30GHz	0	0-27	CA-UVic-Cloud	20		20	1
Intel(R) Xeon(R) Gold 6148 CPU @ 2.40GHz	0	0-39	Nikhef	20		20	1
Intel(R) Xeon(R) Gold 5218 CPU @ 2.30GHz	1	0-63	CERN	19		19	1
AMD EPYC 7452 32-Core Processor	1	0-127	PIC	16		16	1
AMD EPYC 7702 64-Core Processor	1	0-255	IJCLAB	16		16	1
Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz	1	0-55	PIC	16		16	1
AMD EPYC 7702 64-Core Processor	0	0-127	GridKa	15		15	1

Success Rate III

Intel(R) Xeon(R) CPU E5-2670 v3 @ 2.30GHz	1	0-47	CA-UVic-Cloud	14		14	1
Intel(R) Xeon(R) Silver 4114 CPU @ 2.20GHz	1	0-39	CC-IN2P3	14		14	1
AMD EPYC 7513 32-Core Processor	1	0-127	UKI-SCOTGRID-GLASGOW	1	11	12	0.0833
AMD EPYC 7662 64-Core Processor	1	0-254	GridKa-Tier3	12		12	1
AMD EPYC 7302 16-Core Processor	1	0-63	CC-IN2P3	11		11	1
Intel Core Processor (Haswell, no TSX, IBRS)	0	0-23	NDGF-T1	11		11	1
Intel(R) Xeon(R) CPU E5520 @ 2.27GHz	0	0-7	IN2P3-SUBATECH	6	5	11	0.545
Intel(R) Xeon(R) CPU E5-2680 v4 @ 2.40GHz	1	0-55	GridKa-Tier3	11		11	1
Intel(R) Xeon(R) Gold 5118 CPU @ 2.30GHz	1	0-47	GridKa-Tier3	11		11	1
AMD EPYC 7742 64-Core Processor	0	0-127	SDSC	10		10	1
Intel(R) Xeon(R) CPU E5-2407 v2 @ 2.40GHz	0	0-7	IN2P3-SUBATECH	10		10	1
Intel(R) Xeon(R) CPU E5-2630 v4 @ 2.20GHz	1	0-39	IN2P3-SUBATECH	10		10	1
Intel(R) Xeon(R) CPU E5-2660 0 @ 2.20GHz	1	0-31	CA-UVic-Cloud	10		10	1
Intel(R) Xeon(R) Gold 6252 CPU @ 2.10GHz	1	0-95	BNL	10		10	1
AMD EPYC 7643 48-Core Processor	1	0-95	UKI-SCOTGRID-GLASGOW	7	1	8	0.875
not_available	0	0-79	UKI-SCOTGRID-GLASGOW	7	1	8	0.875
Intel(R) Xeon(R) CPU E5520 @ 2.27GHz	1	0-15	CA-UVic-Cloud		5	5	NaN
Intel(R) Xeon(R) Gold 6248R CPU @ 3.00GHz	1	0-95	UKI-LT2-QMUL	2		2	1
Intel(R) Xeon(R) Gold 6252 CPU @ 2.10GHz	1	0-95	UKI-LT2-QMUL	2		2	1
Intel(R) Xeon(R) Platinum 8260 CPU @ 2.40GHz	0	0-47	CA-SFU		1	1	NaN
AMD EPYC 7402 24-Core Processor	1	0-95	UKI-LT2-QMUL	1		1	1

Machines missing entries

CPU_Model	SMT_Enabled	Online_CPUs_list	Site	Successful	Failed	Total	Success Rate
AMD EPYC 7643 48-Core Processor	1	0-95	UKI-SCOTGRID-GL...	7	1	8	0.875
not_available	0	0-79	UKI-SCOTGRID-GL...	7	1	8	0.875
Intel(R) Xeon(R) Gold 6248R CPU @ 3.00GHz	1	0-95	UKI-LT2-QMUL	2		2	1
Intel(R) Xeon(R) Gold 6252 CPU @ 2.10GHz	1	0-95	UKI-LT2-QMUL	2		2	1
AMD EPYC 7402 24-Core Processor	1	0-95	UKI-LT2-QMUL	1		1	1
Intel(R) Xeon(R) CPU E5520 @ 2.27GHz	1	0-15	CA-UVic-Cloud		5	5	NaN
Intel(R) Xeon(R) Platinum 8260 CPU @ 2.40GHz	0	0-47	CA-SFU		1	1	NaN

Missing CPUs

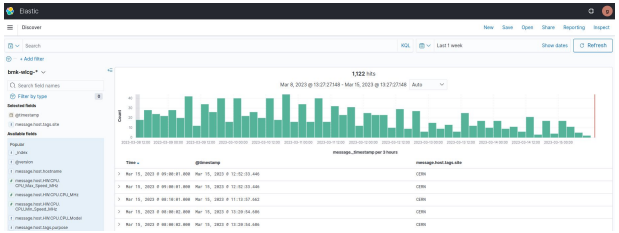
- CPUs appearing in past benchmark results which haven't run HS23
  - Please check if they are still around!
  - Especially interesting
    - Allow comparison vs past entries

Past CPUs missing HS23 — Last 2 years

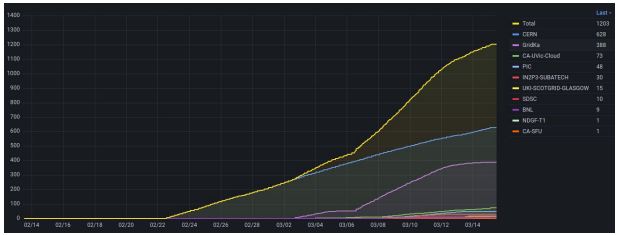
CPU_Model	Site
Intel(R) Xeon(R) Gold 6334 CPU @ 3.60GHz	CaltechLIGO
Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz	CaltechLIGO
Intel(R) Xeon(R) E-2374G CPU @ 3.70GHz	CaltechLIGO
Intel(R) Xeon(R) CPU E3-1240 v5 @ 3.50GHz	CaltechLIGO
AMD EPYC 7763 64-Core Processor	CaltechLIGO
AMD EPYC 75F3 32-Core Processor	CaltechLIGO
AMD EPYC 7573X 32-Core Processor	CaltechLIGO
AMD EPYC 7543 32-Core Processor	CaltechLIGO
AMD EPYC 74F3 24-Core Processor	CaltechLIGO
AMD EPYC 7313 16-Core Processor	CaltechLIGO
Intel(R) Xeon(R) Silver 4316 CPU @ 2.30GHz	CC-IN2P3
Intel(R) Xeon(R) Silver 4314 CPU @ 2.40GHz	CC-IN2P3
Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz	CC-IN2P3
Intel(R) Xeon(R) Gold 5320 CPU @ 2.20GHz	CC-IN2P3
Intel(R) Xeon(R) CPU E5-2680 v2 @ 2.80GHz	CC-IN2P3
Intel(R) Xeon(R) CPU E5-2650 v4 @ 2.20GHz	CC-IN2P3
AMD EPYC 7513 32-Core Processor	CC-IN2P3
AMD EPYC 7443 24-Core Processor	CC-IN2P3
AMD EPYC 7313 16-Core Processor	CC-IN2P3
Intel(R) Xeon(R) CPU E5-2630 v4 @ 2.20GHz	CCIPL-SUBATECH
Intel(R) Xeon(R) Gold 5118 CPU @ 2.30GHz	GridKa
Intel(R) Xeon(R) CPU E5-2630 v4 @ 2.20GHz	GridKa
Intel(R) Xeon(R) CPU E5630 @ 2.53GHz	GridKa
AMD Opteron(tm) Processor 6376	GridKa
AMD Opteron(tm) Processor 6174	GridKa
AMD EPYC 7713 64-Core Processor	GridKa
Intel(R) Xeon(R) Silver 4210 CPU @ 2.20GHz	IN2P3-SUBATECH
Intel(R) Xeon(R) CPU E5-2697 v4 @ 2.30GHz	INFN-T1
AMD EPYC 7351 16-Core Processor	INFN-T1

Process Summary

- Download our script from Gitlab
  - Make sure you have the latest version! (1.2)
    - Now printed at the beginning of the execution
- Use the new options to run it
  - ./run_HEPscore.sh -s SITE -p -c ./cert.pem -k ./key.pem
    - ./run_HEPscore.sh –help to see all options
- bmksend available to send results
  - bmksend -c {SUITE_CONFIG_FILE} {SUITE_RESUTS_DIR}
    - --dryrun option available to check the files to be sent
  - Recursively traverses the results dir(s)
  - Doesn't create duplicates! 😃



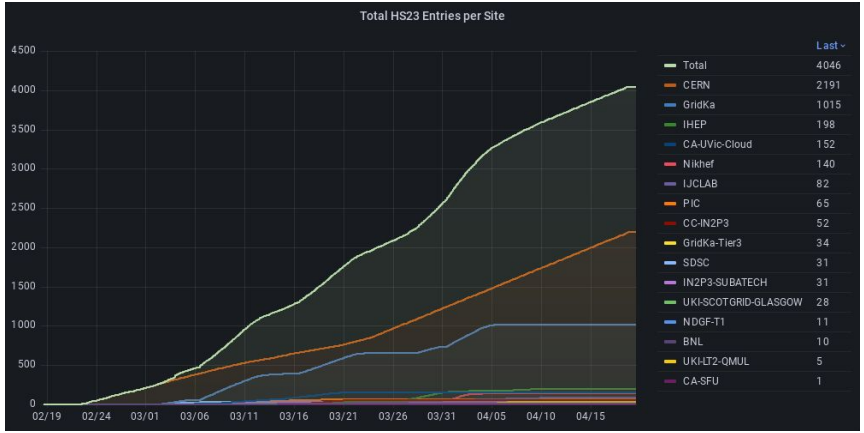
Kibana



Grafana

Campaign Summary

- Over 4000 entries!
  - 16 Sites
  - 77 machine configurations
  - Over 99% success rate overall!
    - Including failed runs that were solved
- Thank you so much for contributing! 😄
- Time to monitor now its real usage in production
  - Usage being promoted around the WLCG



Q&A