

ALICE-USA Operations

Monthly Status for February 2025

March 18, 2025



Availability and Reliability Reports

ALICE_CE(Jobs Running) x ALICE_VOBOX x AliEn::SE(tests)



Tier-2 Availability and Reliability Report

ALICE

February 2025

Federation Details

Availability Algorithm: @ALICE_CE * @ALICE_VOBOX * all AliEn-SE

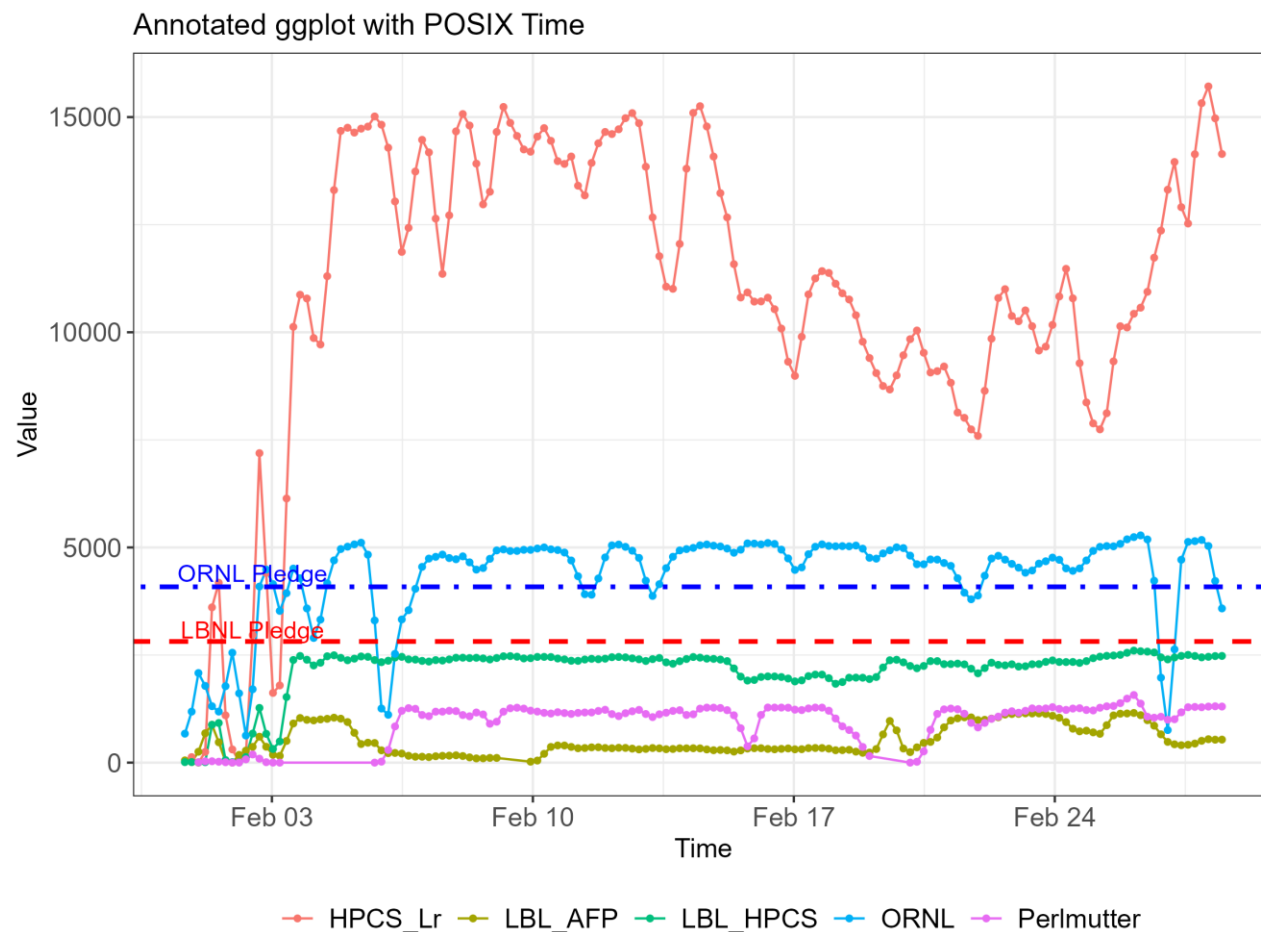
Color coding: N/A <30% <60% <90% >=90%

Availability History

Federation & Sites	Pledge CPU	Pledge Disk	Availability	Reliability	Unknown	Nov-2024	Dec-2024	Jan-2025
US-LBNL-ALICE	100900	10900						
LBL_HPCS			83%	83%	0%	91%	33%	89%
ORNL			100%	100%	0%	97%	85%	92%

Job Summary

- CEs
 - LBL-HPCS – **OK**
 - ORNL – **OK**
 - Lawrenceium – **OK**
 - Perlmutter – **OK**
 - LBL_AFP – **OK**
 - Needed to restore CVMFS a few times
 - Looks like some OOM makes it fail

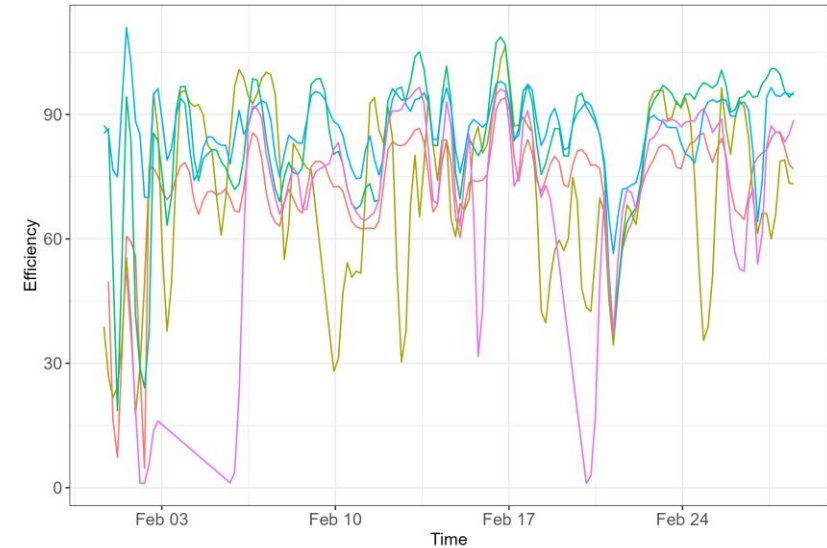


CPU Efficiency

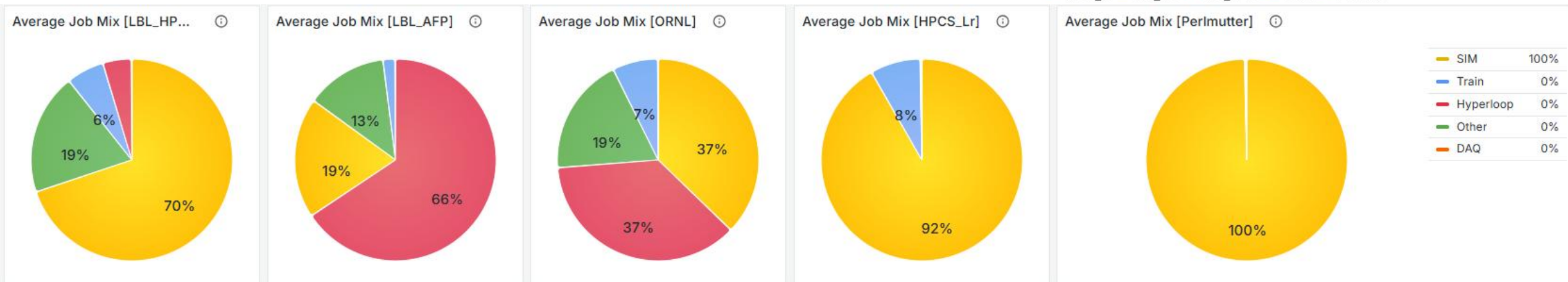
Target Efficiency is... no such thing anymore...

Jobs efficiency (cpu time / wall time)

	Series	Last value	Min	Avg	Max
1.	HPCS_Lr	83.6	62.69	79.98	89.72
2.	LBL_AFP	98.86	61.48	96.31	109.1
3.	LBL_HPCS	97.49	68.56	95.56	110.6
4.	NIHAM	91.55	66.39	91.7	100.2
5.	ORNL	98.63	77.31	92.97	99.77
6.	Perlmutter	94.08	38.9	81.53	96
7.	UPB	84.95	74.1	86.84	93.93
Total		92.74		89.27	

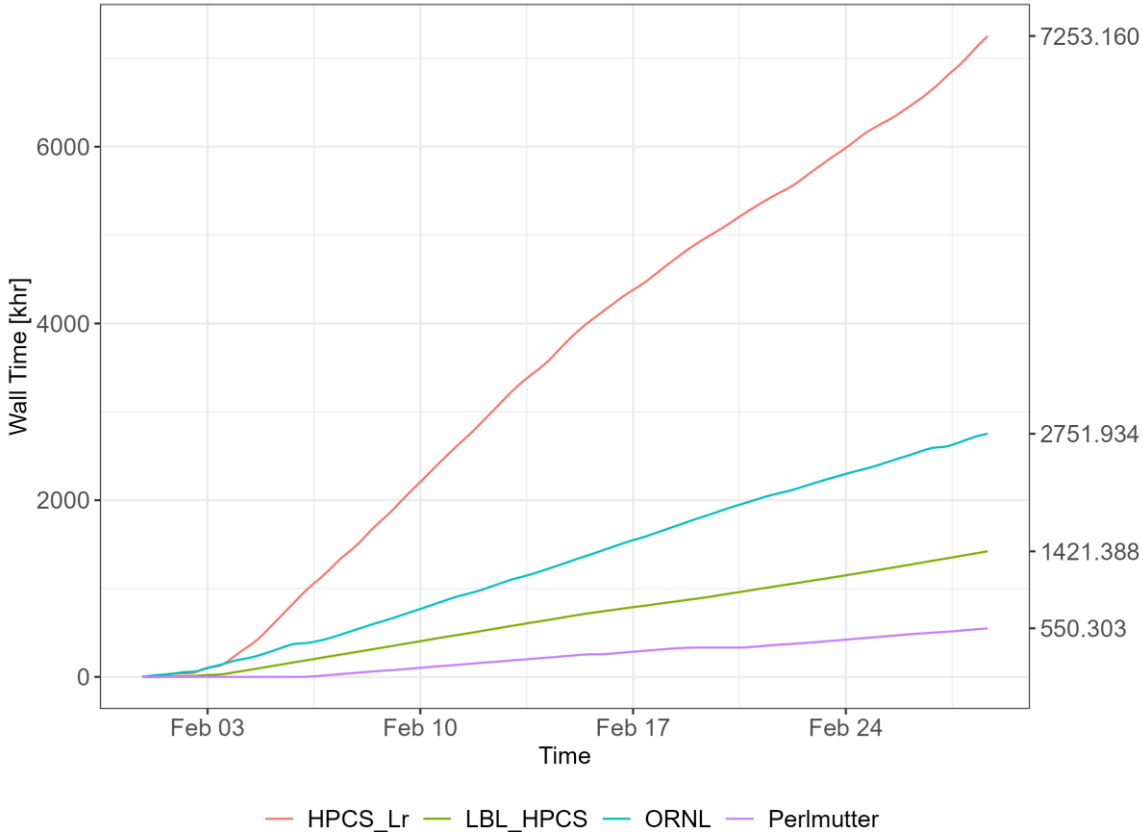


— HPCS_Lr — LBL_AFP — LBL_HPCS — ORNL — Perlmutter



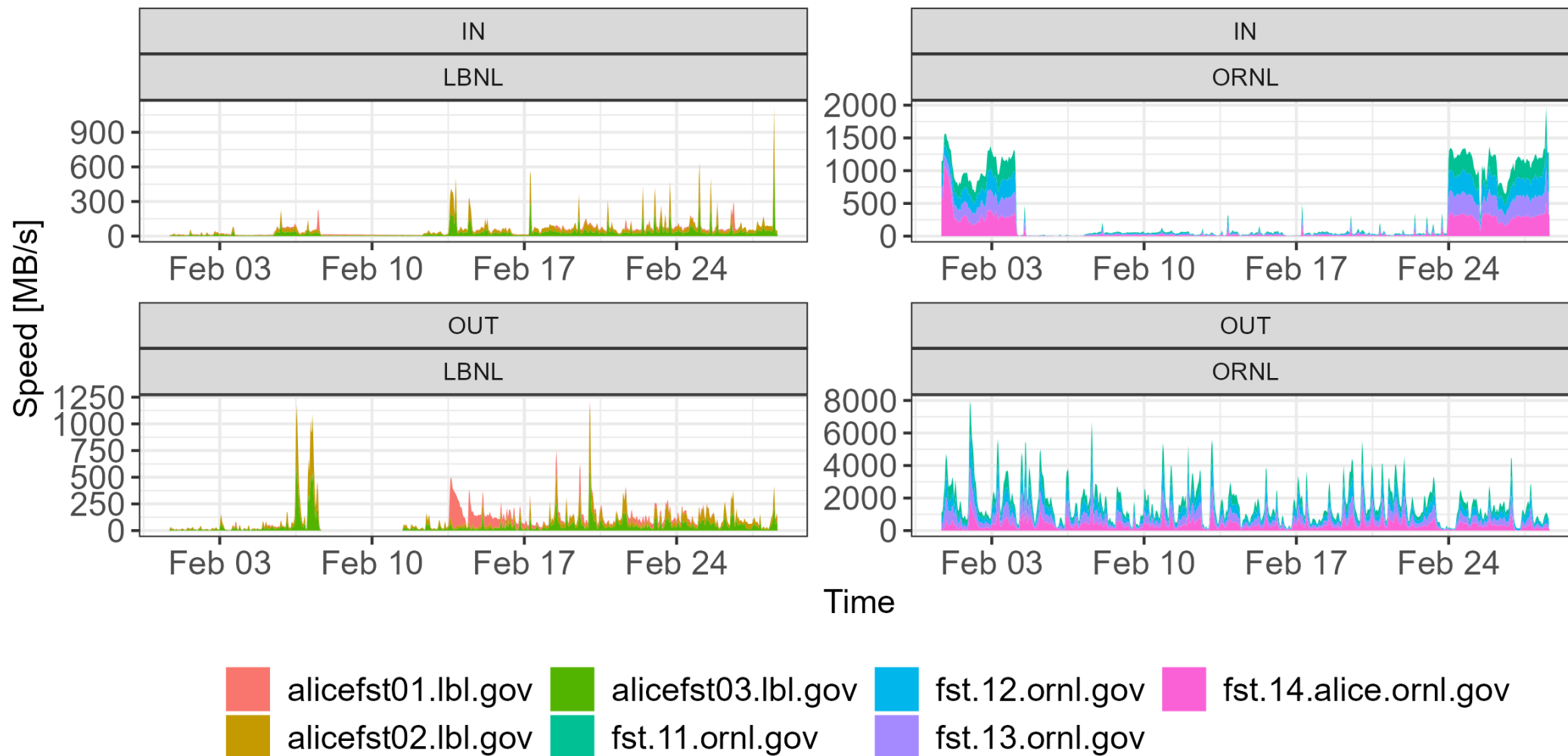
CPU Obligations		kHS06
ALICE-USA		100.9
LBNL HPCS T2		50.45
ORNL T2		50.45

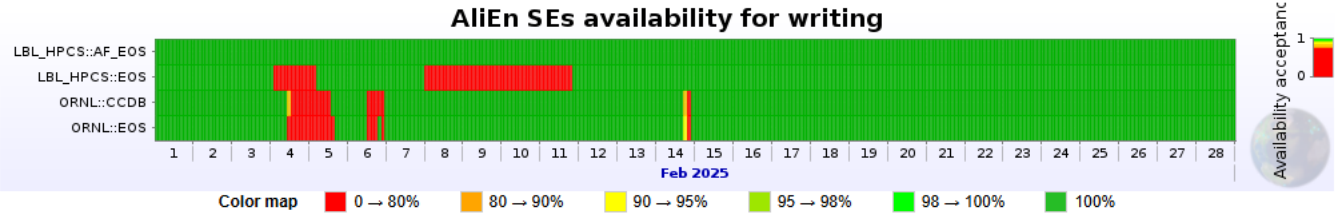
T2 Site	Monalisa (khr)	WLCG (khr)	%diff
HPCS_Lr	7253.00	13000.00	33.27
LBNL	1422.00		
ORNL	2751.00	3500.00	21.40
Total	11,426.00	16,500.00	30.75



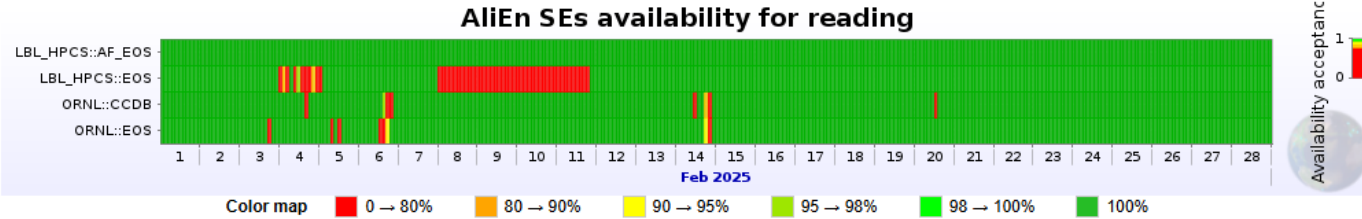
T2 Site and HPCS_Lr	CPU/Core [HS06/Core]	ALICE-USA Obligation [MHS06 x hr]	CPU Delivered [MHS23 x hr] (ML reporter)	CPU Delivered [MHS23 x hr] (WLCG reporter)	Delivered per Obligation [%] (ML reported)	Delivered per Obligation [%] (WLCG reported)
HPCS_Lr	12.0	33.90	87.04	156.00	256.7	460.1
LBNL	16.7		23.75		70.0	
ORNL	11.5	33.90	31.64	40.25	93.3	118.7
Total		67.80	142.42	196.25	210.04%	289.43%

Network Traffic at LBL and ORNL





Statistics						
Link name	Data		Individual results of writing tests			Overall
	Starts	Ends	Successful	Failed	Success ratio	Availability
LBL_HPCS::AF_EOS	01 Feb 2025 00:08	28 Feb 2025 23:29	684	0	100%	100%
LBL_HPCS::EOS	01 Feb 2025 00:16	28 Feb 2025 23:37	558	117	82.67%	82.72%
ORNL::CCDB	01 Feb 2025 00:06	28 Feb 2025 23:27	651	33	95.18%	95.14%
ORNL::EOS	01 Feb 2025 00:16	28 Feb 2025 23:37	641	34	94.96%	94.99%

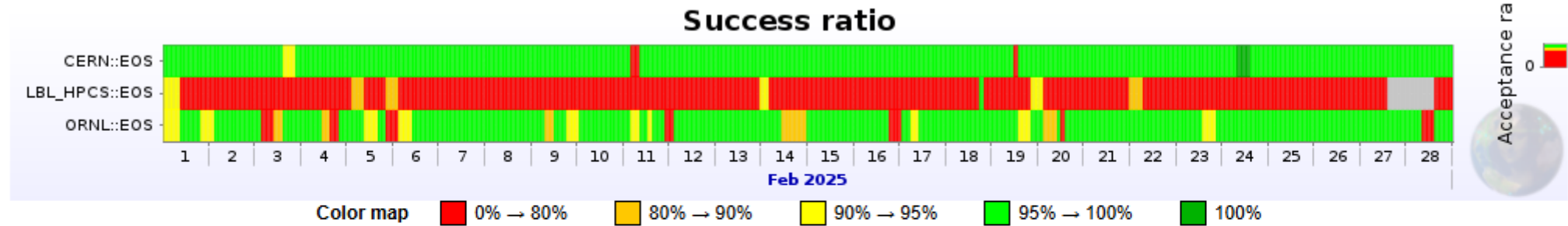


Statistics						
Link name	Data		Individual results of reading tests			Overall
	Starts	Ends	Successful	Failed	Success ratio	Availability
LBL_HPCS::AF_EOS	01 Feb 2025 00:08	28 Feb 2025 23:29	683	0	100%	100%
LBL_HPCS::EOS	01 Feb 2025 00:16	28 Feb 2025 23:37	571	104	84.59%	84.65%
ORNL::CCDB	01 Feb 2025 00:06	28 Feb 2025 23:27	677	7	98.98%	98.99%
ORNL::EOS	01 Feb 2025 00:16	28 Feb 2025 23:38	668	7	98.96%	98.97%

AliEn SE			Catalogue statistics (1024-base units)						Storage-provided information (1024-base units)					
SE Name	AliEn name	Tier	Size	Used	Free	Usage	No. of files	Type	Size	Used	Free	Usage	Version	EOS Version
1. LBL_HPCS - AF_EOS	ALICE::LBL_HPCS::AF_EOS	2	1.092 PB	1017 TB	100.8 TB	90.99%	919,535	FILE	1.092 PB	1.01 PB	84.55 TB	92.44%	Xrootd 5.7.1-3.el8.x86_64	
2. LBL_HPCS - EOS	ALICE::LBL_HPCS::EOS	2	4.348 PB	2.185 PB	2.163 PB	50.26%	71,494,947	FILE	5.38 PB	1.808 PB	3.573 PB	33.6%	Xrootd 5.7.1	5.2.31
3. ORNL - CCDB	ALICE::ORNL::CCDB	2	100 TB	6.026 TB	93.97 TB	6.026%	16,552,386	FILE	-	-	-	-		
4. ORNL - EOS	ALICE::ORNL::EOS	2	6.586 PB	4.197 PB	2.389 PB	63.72%	62,564,590	FILE	6.586 PB	4.317 PB	2.269 PB	65.55%		5.3.0
Total			12.12 PB	7.382 PB	4.742 PB		151,531,458		13.06 PB	7.135 PB	5.924 PB			

EOS: Success Ratio

- No changes with regards to the file access



Averaged metrics for the selected interval						
SE Name	Start	End	Success ratio	Corrupt ratio	Inaccessible ratio	Internal error ratio
CERN::EOS	01 Feb 2025 03:19	28 Feb 2025 21:57	99.11 %	0.43 %	0.44 %	0.02 %
LBL_HPCS::EOS	01 Feb 2025 03:20	28 Feb 2025 22:07	55.65 %	0.59 %	43.75 %	0.00 %
ORNL::EOS	01 Feb 2025 03:20	28 Feb 2025 23:26	95.50 %	0.16 %	4.33 %	0.01 %

Site Status Dashboard

ORNL, LBL, HPCS_Lr, Perlmutter	
Site name	VOBox and SE problems
ORNL vobox.alice.ornl.gov	Networking: low buffer size kernel parameters: wmem_max=208 KB only Networking: No IPv6 public address ALICE::ORNL::TEMP: ADD test fails since <i>31 Oct 2019 12:57</i> (for 5y 111d).
HPCS_Lr lrc-vobox.lbl.gov	Networking: No IPv6 public address
LBL_HPCS alice-vobox.lbl.gov	Networking: No IPv6 public address
LBL_AFP alice-afp.lbl.gov	Networking: too large buffer size kernel parameters: tcp_wmem_max=64 MB Networking: No IPv6 public address
Perlmutter alice-sfapi.lbl.gov	Networking: low buffer size kernel parameters: tcp_wmem_max=4 MB only Networking: No IPv6 public address CVMFS: old CVMFS version detected (2.10.0), please upgrade to 2.11.5.
5 sites	10 issues

Last Month

This month

Site name	VOBox and SE problems
ORNL vobox.alice.ornl.gov	Networking: low buffer size kernel parameters: wmem_max=208 KB only Networking: No IPv6 public address
HPCS_Lr lrc-vobox.lbl.gov	Networking: No IPv6 public address
LBL_HPCS alice-vobox.lbl.gov	Networking: No IPv6 public address
LBL_AFP alice-afp.lbl.gov	Networking: too large buffer size kernel parameters: tcp_wmem_max=64 MB Networking: No IPv6 public address
Perlmutter alice-sfapi.lbl.gov	Networking: low buffer size kernel parameters: tcp_wmem_max=4 MB only Networking: No IPv6 public address CVMFS: old CVMFS version detected (2.10.0), please upgrade to 2.11.5.
5 sites	9 issues