

ALICE-USA Operations

Monthly Status for October 2025

November 18, 2025



Availability and Reliability Reports

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



Tier-2 Availability and Reliability Report ALICE

October 2025

Federation Details

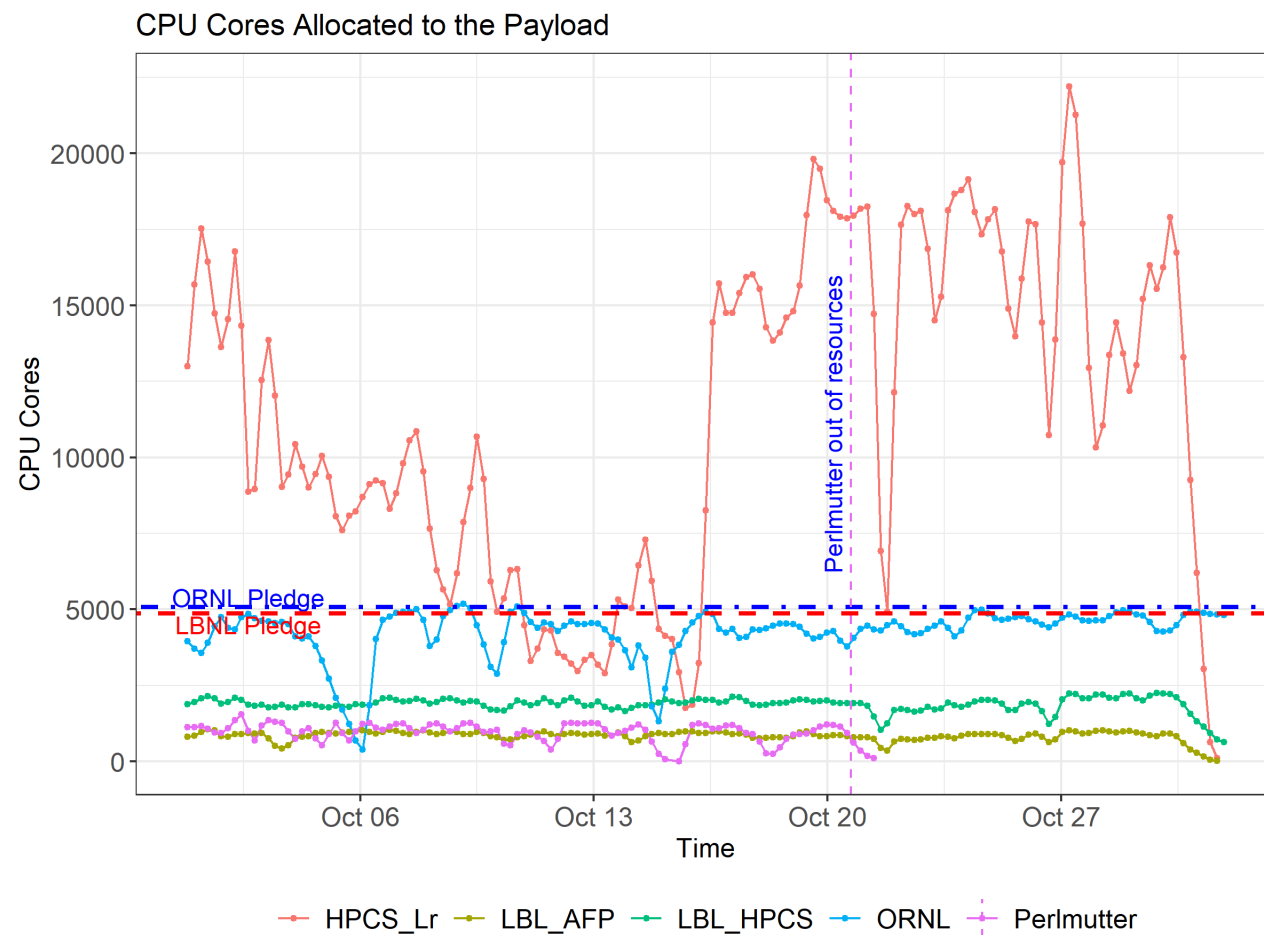
Availability Algorithm: @ALICE_CE * @ALICE_VOBOX * all AliEn-SE

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

Federation & Sites	Pledge CPU	Pledge Disk						
			Availability	Reliability	Unknown	Jul-2025	Aug-2025	Sep-2025
US-LBNL-ALICE	119700	13100						
LBL_HPCS			100%	100%	0%	100%	68%	60%
ORNL			100%	100%	0%	97%	94%	98%

Job Summary

- CEs
 - LBL-HPCS - **OK**
 - ORNL - **OK**
 - Some job cancellation is back (investigating)
 - Lawrenceium - **OK**
 - Just improvement after memory cleanup on the nodes
 - Perlmutter - **OK**
 - Ran out of resources and was turned off
 - LBL_AFP - **OK**

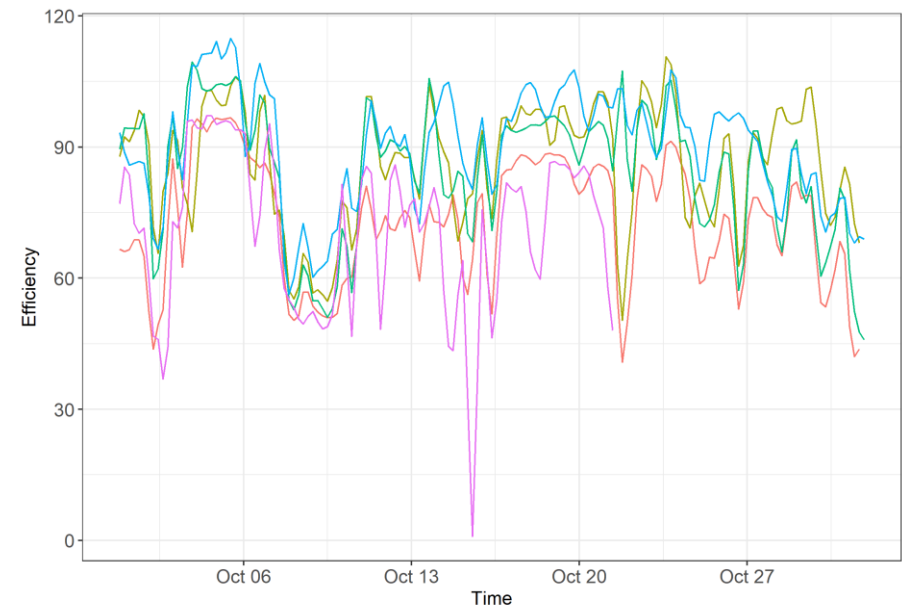


CPU Efficiency

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

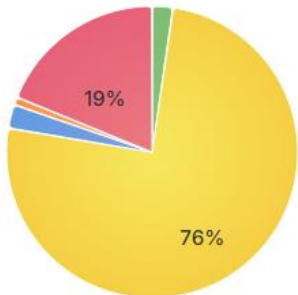
Jobs efficiency (cpu time / wall time)

	Series	Last value	Min	Avg	Max
1.	HPCS_Lr	46.48	0	72.92	105.4
2.	LBL_AFP	68.24	4.383	86.32	131.9
3.	LBL_HPCS	40.75	0	84.43	142
4.	NIHAM	70.92	0	80.15	107.5
5.	ORNL	64.53	1.837	89.98	125.4
6.	Perlmutter	37.72	0.019	70.32	123.9
7.	UPB	88.11	0	96.47	130.4
Total		59.53		82.94	

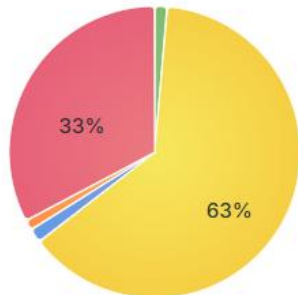


— HPCS_Lr — LBL_AFP — LBL_HPCS — ORNL — Perlmutter

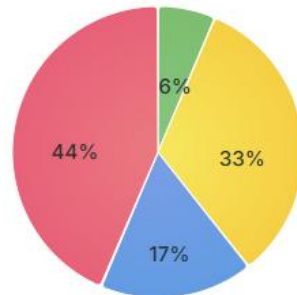
Average Job Mix [LBL_HPCS] ⓘ



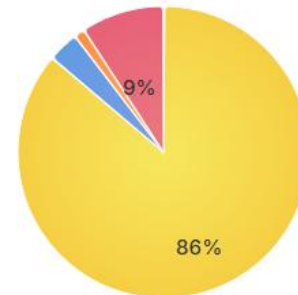
Average Job Mix [LBL_AFP] ⓘ



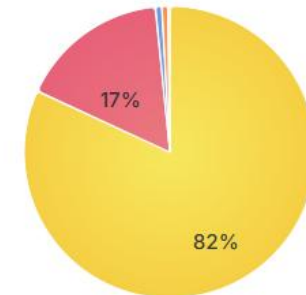
Average Job Mix [ORNL] ⓘ



Average Job Mix [HPCS_Lr] ⓘ



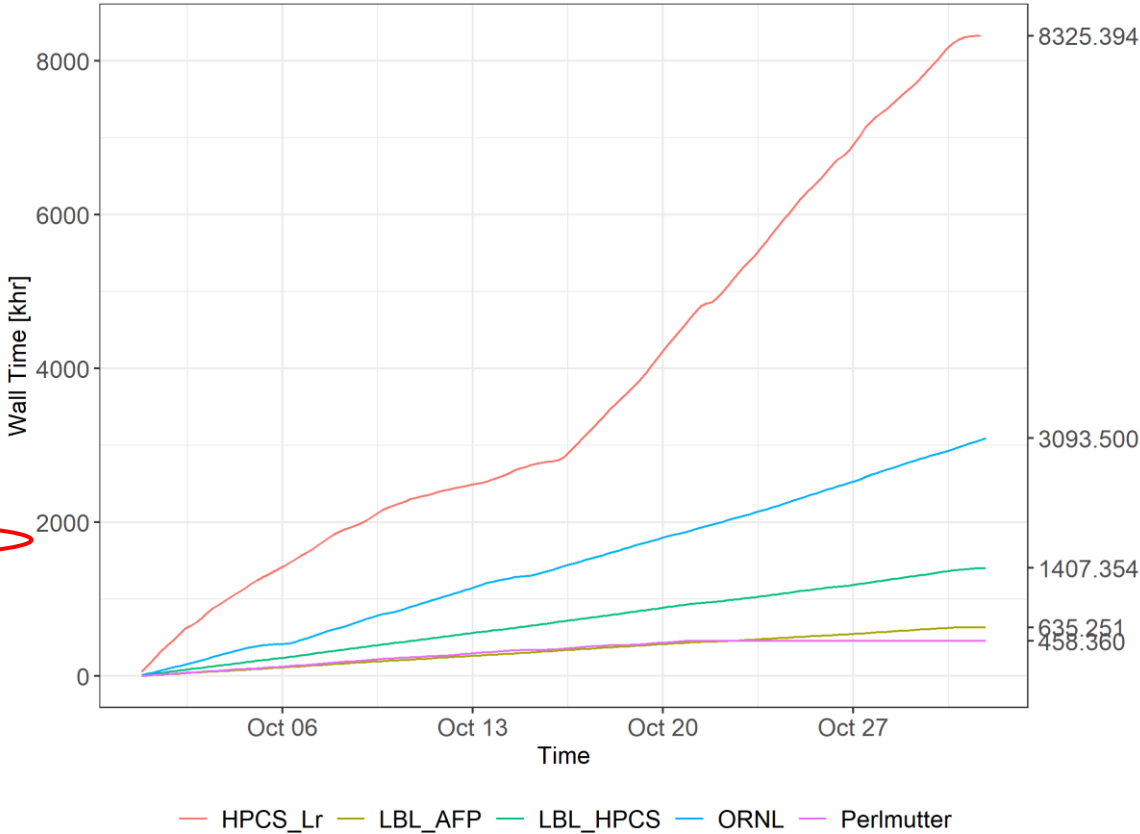
Average Job Mix [Perlmutter] ⓘ



SIM	82%
Hyperloop	17%
Train	1%
DAQ	1%
Other	0%

CPU Obligations kHS23	
ALICE-USA	116.8
LBNL HPCS T2	58.4
ORNL T2	58.4

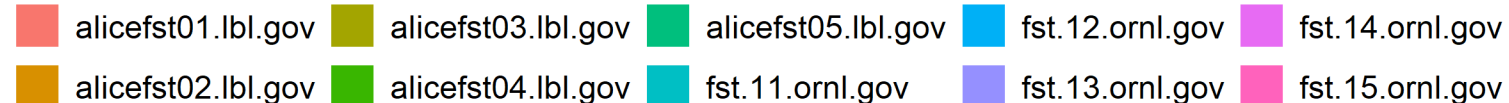
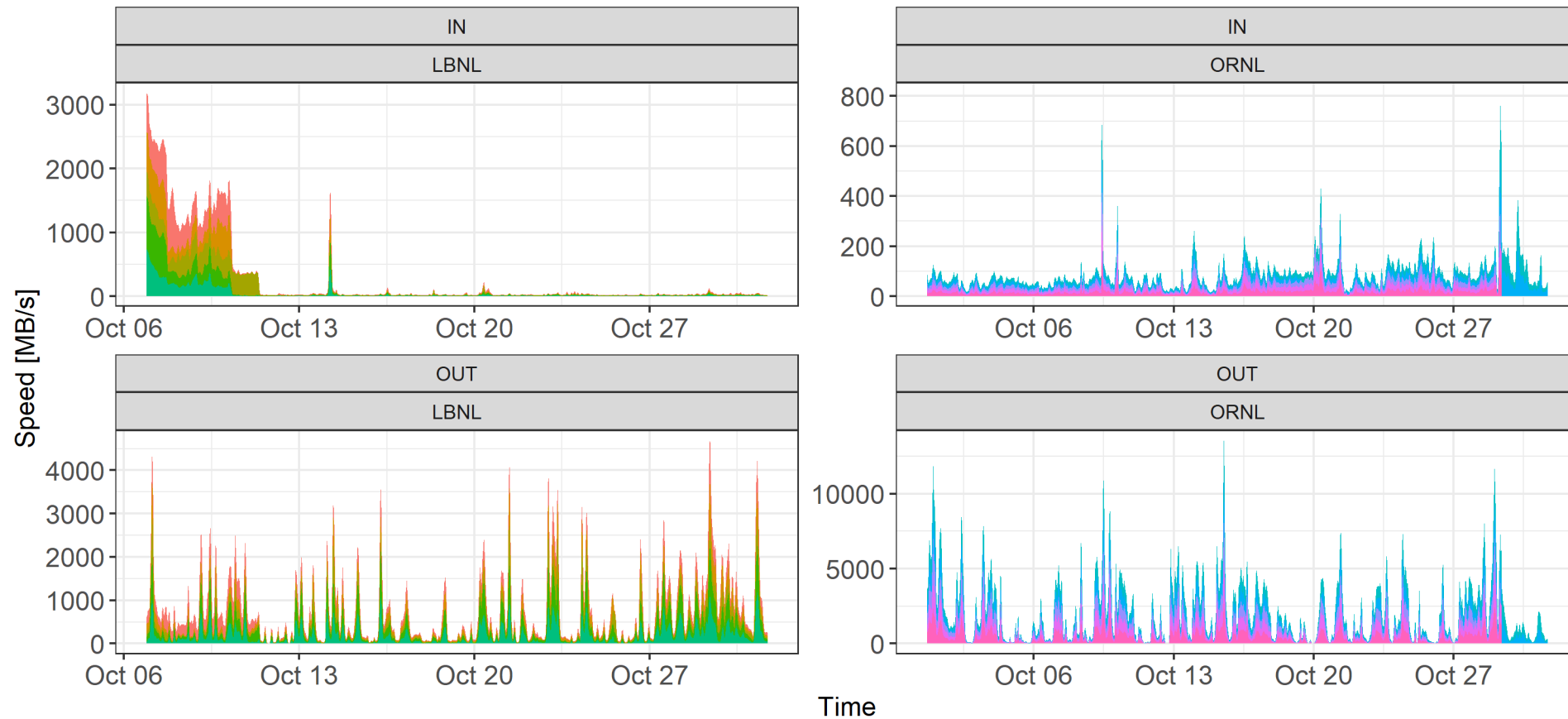
T2 Site	Monalisa (khr)	WLCG (khr)	%diff
HPCS_Lr	2098.90	538.00	-355.63
LBNL	240.40		
AFP	112.00		
ORNL	2360.60	3000.00	21.31
Total	4,811.90	3,538.00	(36.01)

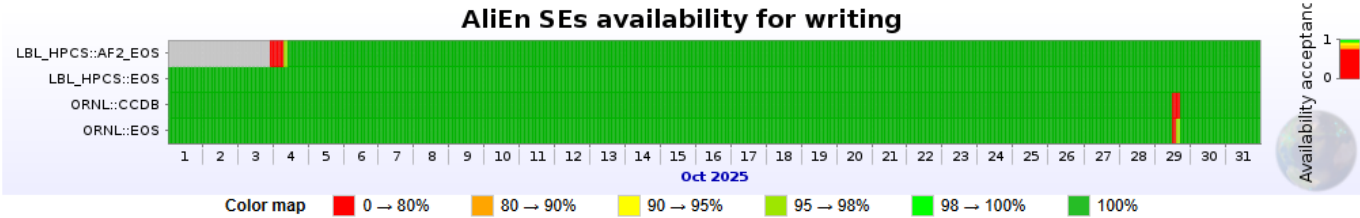


T2 Site and HPCS_Lr	CPU/Core [HS23/Core]	ALICE-USA Obligation [MHS23 x hr]	CPU Delivered [MHS23 x hr] (ML reporter)	CPU Delivered [MHS23 x hr] (WLCG reporter)	Delivered per Obligation [%] (ML reported)	Delivered per Obligation [%] (WLCG reported)
HPCS_Lr	10.0	17.70	20.99	5.38	118.6	30.4
LBNL	12.0		2.88		16.3	
AFP	12.0		1.34		7.6	
ORNL	11.5	42.05	27.15	34.50	64.6	82.0
Total		59.74	52.36	39.88	87.65%	66.75%

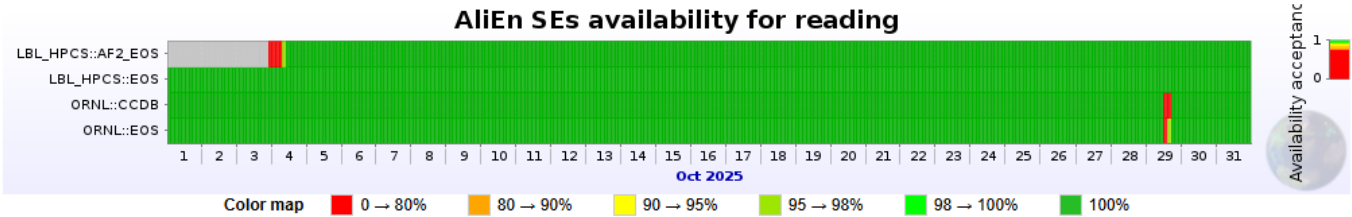
Network Traffic at LBL and ORNL

LBNL was down for power work and there was no data traffic





Statistics						
Link name	Data		Individual results of writing tests			Overall
	Starts	Ends	Successful	Failed	Success ratio	Availability
LBL_HPCS::AF2_EOS	03 Oct 2025 23:07	31 Oct 2025 23:04	668	9	98.67%	98.67%
LBL_HPCS::EOS	30 Sep 2025 23:41	31 Oct 2025 23:10	749	0	100%	100%
ORNL::CCDB	01 Oct 2025 00:30	31 Oct 2025 22:59	747	2	99.73%	99.74%
ORNL::EOS	30 Sep 2025 23:42	31 Oct 2025 23:11	748	1	99.87%	99.87%

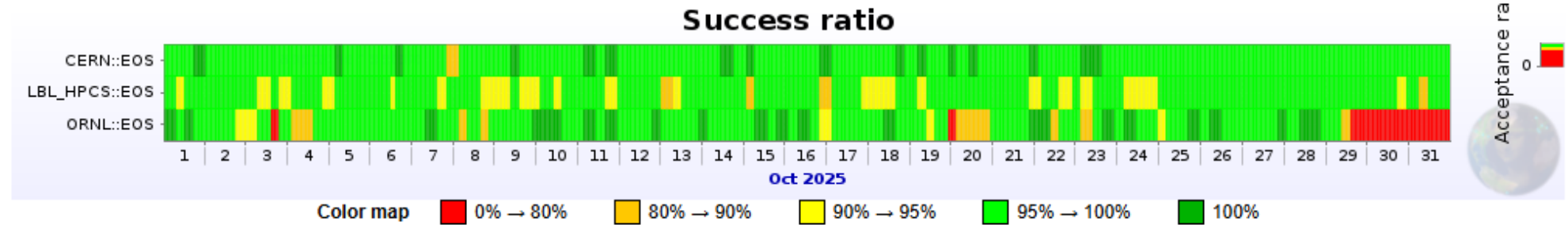


Statistics						
Link name	Data		Individual results of reading tests			Overall
	Starts	Ends	Successful	Failed	Success ratio	Availability
LBL_HPCS::AF2_EOS	03 Oct 2025 23:07	31 Oct 2025 23:04	668	9	98.67%	98.67%
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ORNL::CCDB	01 Oct 2025 00:30	31 Oct 2025 22:59	747	2	99.73%	99.74%
ORNL::EOS	30 Sep 2025 23:42	31 Oct 2025 23:11	748	1	99.87%	99.87%

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 - EOS	ALICE::LBL_HPCS::EOS	2	6.313 PB	5.55 PB	781 TB	87.92%	92,095,541	FILE	7.369 PB	6.469 PB	922.1 TB	87.78%	Xrootd 5.7.1	5.2.31
2. ORNL - EOS	ALICE::ORNL::EOS	2	6.586 PB	6.1 PB	497.5 TB	92.62%	70,440,745	FILE	5.275 PB	4.964 PB	318.6 TB	94.1%	Xrootd 5.8.3	5.3.15
Total			12.9 PB	11.65 PB	1.248 PB	90.32%	162,536,286		12.64 PB	11.43 PB	1.212 PB	90.42%		
1. LBL_HPCS - AF2_EOS	ALICE::LBL_HPCS::AF2_EOS	2	1.083 PB	915.9 TB	193.6 TB	82.55%	1,354,301	FILE	1.2 PB	915.9 TB	312.9 TB	74.53%	Xrootd 5.7.1	
2. ORNL - CCDB	ALICE::ORNL::CCDB	2	100 TB	8.162 TB	91.84 TB	8.162%	21,625,904	FILE	-	-	-	-	Xrootd 5.8.3	
Total				1.181 PB	924 TB	285.5 TB	76.4%	22,980,205		1.2 PB	915.9 TB	312.9 TB	74.53%	

EOS: Success Ratio

- Whenever this happens mgm restart seems to help
- Looks like at least two fsts at LBL are affected



Averaged metrics for the selected interval						
SE Name	Start	End	Success ratio	Corrupt ratio	Inaccessible ratio	Internal error ratio
CERN::EOS	01 Oct 2025 04:01	31 Oct 2025 19:42	99.66 %	0.02 %	0.30 %	0.02 %
LBL_HPCS::EOS	01 Oct 2025 04:03	31 Oct 2025 19:33	96.69 %	0.51 %	2.80 %	0.00 %
ORNL::EOS	01 Oct 2025 04:03	31 Oct 2025 19:34	92.73 %	0.13 %	7.13 %	0.00 %

Site Status Dashboard

Site	Comma-separated list of site name prefixes	public address	VOBox and SE problems	Remarks
HPCS_Lr lrc-vobox.lbl.gov			CVMFS : old CVMFS version detected (2.11.5), please upgrade to 2.13.2.	Last month average job efficiency was 69% .
ORNL vobox-alice.ornl.gov			Networking : IPv6 address: 2620:0:2b3d:100:0:0:1:3c ALICE::ORNL::PRE_EOS : ADD test fails since 21 Jan 2025 16:46 (for 272d 0.43).	Last month average job efficiency was 84% .
LBL_HPCS alice-vobox.lbl.gov			ALICE::LBL_HPCS::AF2_EOS reports more total space (1.2 PB) than declared in LDAP (1.083 PB), consider updating the LDAP value to 1319413953331 ALICE::LBL_HPCS::AF2_EOS reports more total space (1.2 PB) than declared in LDAP (1.083 PB), consider updating the LDAP value to 1319413953331 Networking : No IPv6 public address CVMFS : old CVMFS version detected (2.11.5), please upgrade to 2.13.2.	Last month average job efficiency was 77% .
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 2.13.2.	Last month average job efficiency was 65% .
LBL_AFP alice-afp.lbl.gov			Networking : No IPv6 public address CVMFS : old CVMFS version detected (2.11.5), please upgrade to 2.13.2.	Last month average job efficiency was 80% .
5 sites			10 issues	0 remarks

Last Month

This month

Site name	VOBox and SE problems
HPCS_Lr lrc-vobox.lbl.gov	Networking : No IPv6 public address CVMFS : old CVMFS version detected (2.11.5), please upgrade to 2.13.3.
ORNL vobox-alice.ornl.gov	ALICE::ORNL::EOS redirector ALICE::ORNL::EOS doesn't see all nodes, only 5.275 PB out of 6.586 PB total space is connected CVMFS : old CVMFS version detected (2.13.2), please upgrade to 2.13.3.
LBL_HPCS alice-vobox.lbl.gov	Networking : No IPv6 public address CVMFS : old CVMFS version detected (2.11.5), please upgrade to 2.13.3.
LBL_AFP alice-afp.lbl.gov	Networking : No IPv6 public address CVMFS : old CVMFS version detected (2.11.5), please upgrade to 2.13.3.
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 2.13.3.
5 sites	11 issues