

ALICE-USA Operations Monthly Status for January 2025

February 18, 2025



Availability and Reliability Reports

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



Tier-2 Availability and Reliability Report ALICE

January 2025

Federation Details

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

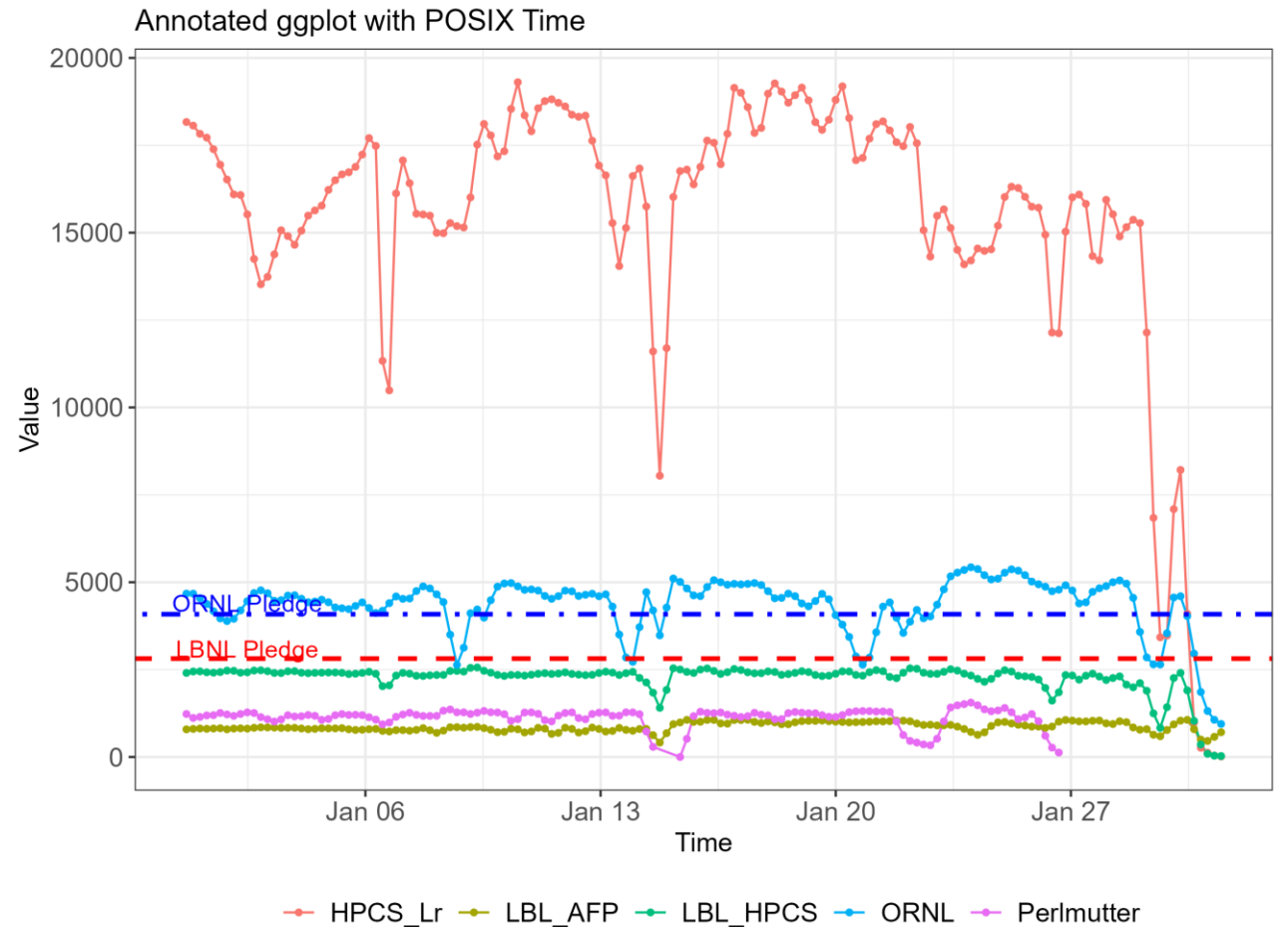
Color coding: N/A <30% <60% <90% >=90%

Availability History

Federation & Sites	Pledge CPU	Pledge Disk	Availability	Reliability	Unknown	Oct-2024	Nov-2024	Dec-2024
US-LBNL-ALICE	100900	10900						
LBL_HPCS			89%	89%	1%	85%	91%	33%
ORNL			92%	92%	1%	99%	97%	85%

Job Summary

- CEs
 - LBL-HPCS – **OK**
 - ORNL – **OK**
 - Lawrenceium – **OK**
 - Perlmutter – **OK**
 - LBL_AFP – **OK**
 - Needed to restore CVMFS at some point

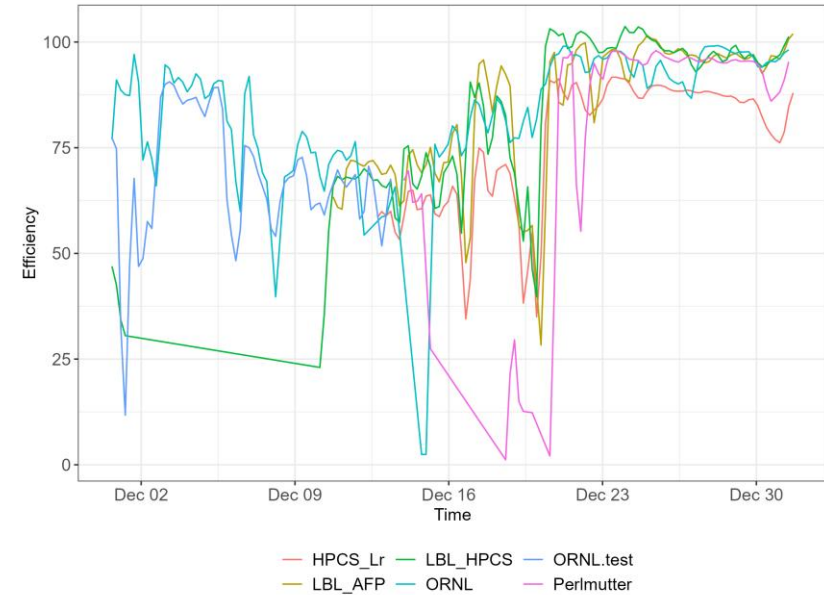


CPU Efficiency

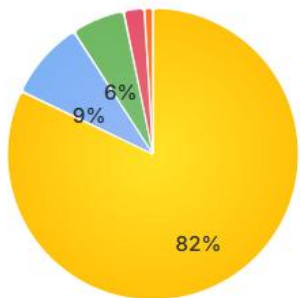
Target Efficiency is... no such thing anymore...

Jobs efficiency (cpu time / wall time)

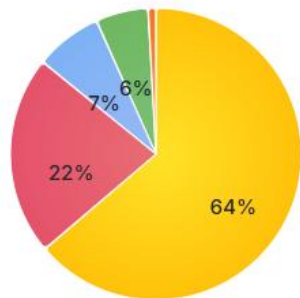
	Series	Last value	Min	Avg	Max
1.	HPCS_Lr	87.7	3.106	75.83	104.2
2.	LBL_AFP	101.2	0.746	83.93	209.4
3.	LBL_HPCS	100.5	3.187	82.37	150.2
4.	NIHAM	94.85	16.15	78.29	181.9
5.	ORNL	98.04	0.029	83.32	150
6.	ORNL-test	66.45	0.012	67.7	162.1
7.	UPB	91.7	0.126	76.2	97.9
Total		91.49		78.24	



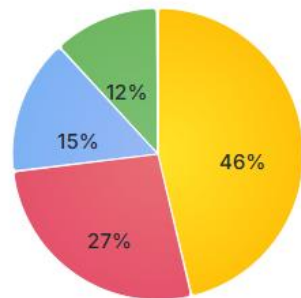
Average Job Mix [LBL_HPCS]



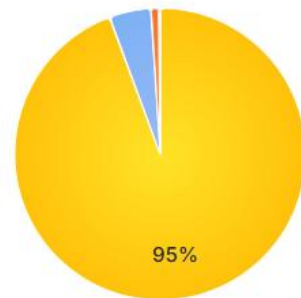
Average Job Mix [LBL_AFP]



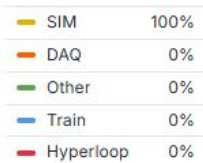
Average Job Mix [ORNL]



Average Job Mix [HPCS_Lr]

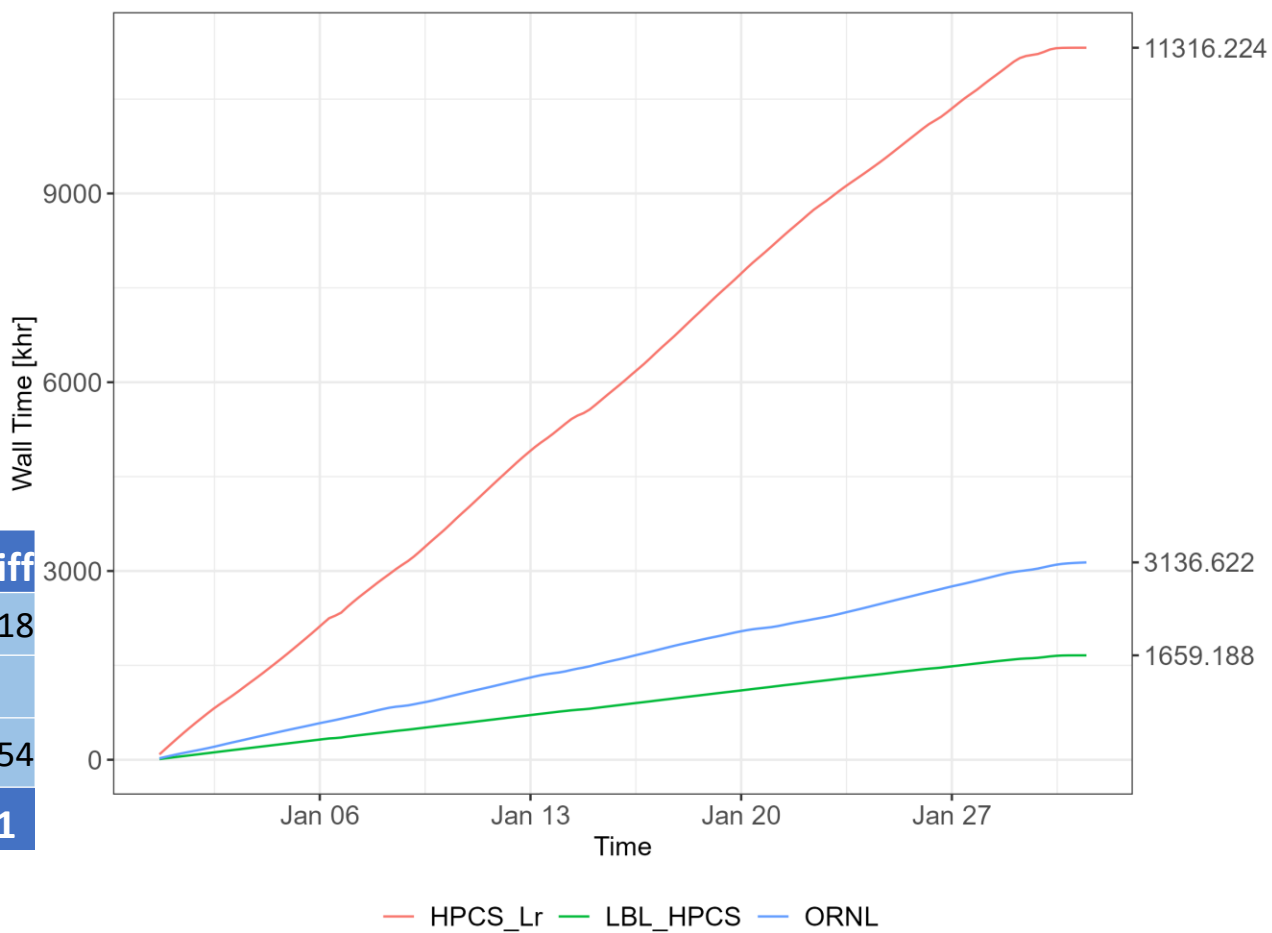


Average Job Mix [Permutter]



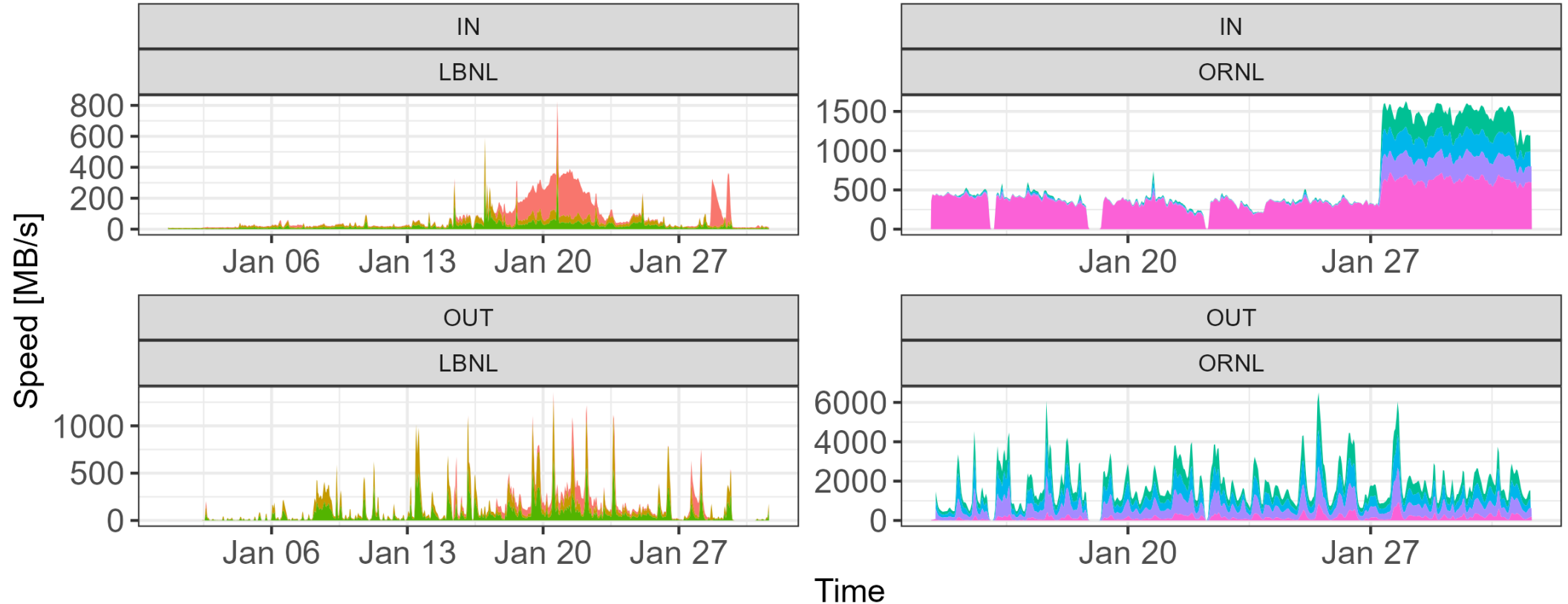
CPU Obligations		kHS06
ALICE-USA		100.9
LBNL HPCS T2		50.45
ORNL T2		50.45

T2 Site	Monalisa (khr)	WLCG (khr)	%diff
HPCS_Lr	11316.00	13000.00	0.18
LBNL	1660.00		
ORNL	3136.00	3803.00	17.54
Total	16,112.00	16,803.00	4.11



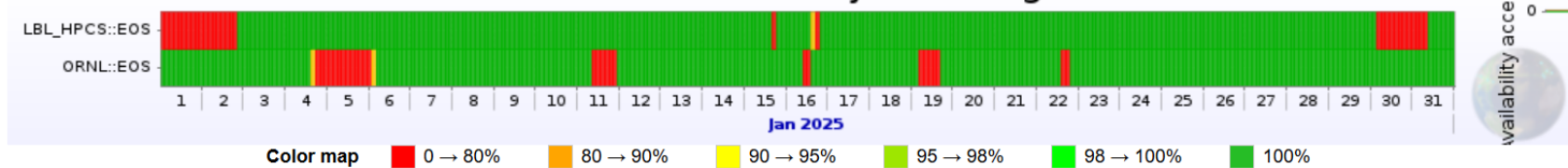
T2 Site and HPCS_Lr	CPU/Core [HS06/Core]	ALICE-USA Obligation [MHS06 x hr]	CPU Delivered [MHS23 x hr] (ML reporter)	CPU Delivered [MHS23 x hr] (WLCG reporter)	Delivered per Obligation [%] (ML reported)	Delivered per Obligation [%] (WLCG reported)
HPCS_Lr	12.0	24.22	96.05	144.60	396.6	597.1
LBNL	16.7		18.75		77.4	
ORNL	11.5	37.08	30.80	40.14	83.1	108.2
Total		61.30	145.60	184.74	237.53%	301.38%

Network Traffic at LBL and ORNL



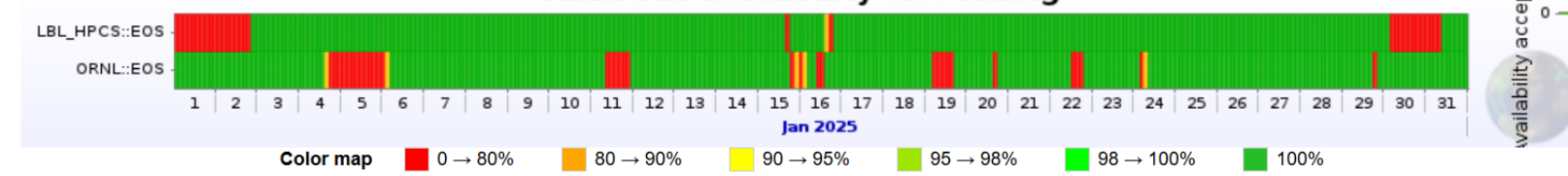
- alicefst01.lbl.gov
- alicefst02.lbl.gov
- alicefst03.lbl.gov
- fst.11.ornl.gov
- fst.12.ornl.gov
- fst.13.ornl.gov
- fst.14.alice.ornl.gov

AliEn SEs availability for writing



Statistics						
Link name	Data		Individual results of writing tests			Overall
	Starts	Ends	Successful	Failed	Success ratio	Availability
LBL_HPCS::EOS	31 Dec 2024 23:43	01 Feb 2025 00:16	669	77	89.68%	89.78%
ORNL::EOS	31 Dec 2024 23:41	01 Feb 2025 00:16	683	63	91.55%	91.57%

AliEn SEs availability for reading

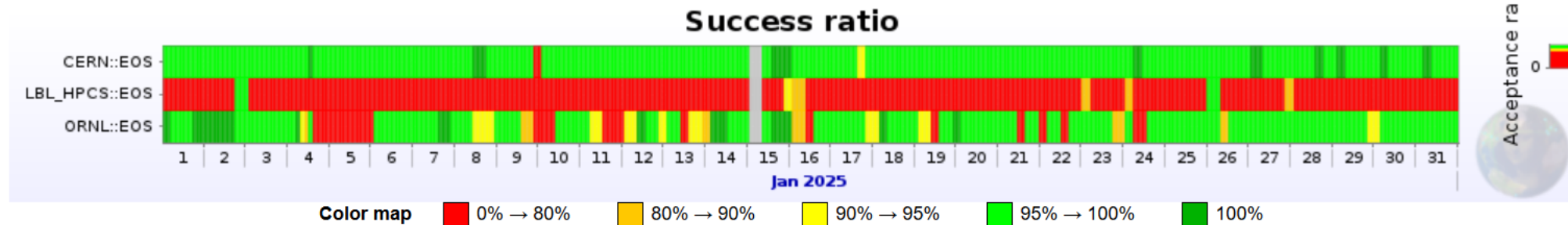


Statistics						
Link name	Data		Individual results of reading tests			Overall
	Starts	Ends	Successful	Failed	Success ratio	Availability
LBL_HPCS::EOS	31 Dec 2024 23:44	01 Feb 2025 00:16	669	77	89.68%	89.78%
ORNL::EOS	31 Dec 2024 23:41	01 Feb 2025 00:16	677	69	90.75%	90.76%

SE Name	AliEn name	Tier	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
1. LBL_HPCS - AF_EOS	ALICE::LBL_HPCS::AF_EOS	2	1.092 PB	1017 TB	100.8 TB	90.99%	922,825	FILE	1.092 PB	1.01 PB	84.4 TB	92.45%	Xrootd 5.7.1-2.el8.x86_64
2. LBL_HPCS - EOS	ALICE::LBL_HPCS::EOS	2	4.348 PB	2.081 PB	2.267 PB	47.86%	69,404,168	FILE	4.881 PB	2.235 PB	2.646 PB	45.8%	Xrootd 5.7.1
3. ORNL - CCDB	ALICE::ORNL::CCDB	2	100 TB	5.922 TB	94.08 TB	5.922%	16,128,626	FILE	-	-	-	-	
4. ORNL - EOS	ALICE::ORNL::EOS	2	6.586 PB	3.494 PB	3.092 PB	53.06%	61,258,680	FILE	6.586 PB	3.593 PB	2.993 PB	54.56%	
Total			12.12 PB	6.575 PB	5.549 PB		147,714,299		12.56 PB	6.838 PB	5.721 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 Jan 2025 01:16	31 Jan 2025 21:28	99.51 %	0.02 %	0.42 %	0.04 %
LBL_HPCS::EOS	01 Jan 2025 01:18	31 Jan 2025 21:18	60.46 %	0.68 %	38.86 %	0.00 %
ORNL::EOS	01 Jan 2025 01:18	31 Jan 2025 21:20	86.23 %	0.19 %	13.57 %	0.01 %

Site Status Dashboard

Last Month

ORNL, LBL, HPCS_Lr, Perlmutter	
Site name	VOBox and SE problems
HPCS_Lr lrc-vobox.lbl.gov	Networking: No IPv6 public address
ORNL vobox.alice.ornl.gov	Networking: No IPv6 public address ALICE::ORNL::TEMP: ADD test fails since <i>31 Oct 2019 12:57</i> (for 5y 83d).
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

This month

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