

Site report: CNAF

Francesco Noferini
INFN sez. Bologna

Come in molti altri siti durante l'emergenza sanitaria ci sono state diverse difficoltà nel *procurement* delle risorse (gare e forniture).

La situazione attuale dell'installazione delle risorse è la seguente:

DISCO (SE): 8.0 PB uso al 68% (+1 PB da dicembre 2021)

BUFFER (TAPE): 574 TB

Pledge 2020/2021 → 8.23 PB (a pledge da dicembre 2021)

HS06 pledge 2021 → 71400 HS06

Risorse delivered al CNAF (all VO) → -20% pledge (ultimo aggiornamento Nov21) → 240kHS06 in attesa nel 2022 (prossimo CdG al CNAF domani)

Risorse dedicate ALICE@CNAF

Computing:

- 2 vbox
 - ui01-alice → standard queue (HTCondor 9)
 - ui02-alice → multicore queue (HTCondor 9)

Piano di migrazione
a xrootd5 a inizio
2022 per CNAF::SE

Storage:

- Data servers
 - 8 (::SE) + 2 (::TAPE) xrootd (4.8.4) servers

Istanza di test
CEPH

What is this about?

Disk storage elements																								
CNAF		AliEn SE		Catalogue statistics						Storage-provided information						Functional tests				Last day add tests		Demotion		IPv6
SE Name	AliEn name	Tier	Size	Used	Free	Usage	No. of files	Type	Size	Used	Free	Usage	Version	EOS Version	add	get	rm	3rd	Last OK add	Successful	Failed	factor	add	
1. CNAF - CEPH_TEST	ALICE::CNAF::CEPH_TEST	1	1024 TB	7.89 TB	1016 TB	0.771%	218,993	FILE	1024 TB	2.53 TB	1021 TB	0.247%	Xrootd v5.3.2						16.12.2021 11:01	24	0	0	Test...	
2. CNAF - SE	ALICE::CNAF::SE	1	6.799 PB	4.456 PB	2.343 PB	65.53%	82,923,642	FILE	6.799 PB	4.692 PB	2.107 PB	69.01%	Xrootd v4.8.4						16.12.2021 11:17	24	0	0		
Total			7.799 PB	4.463 PB	3.336 PB		83,142,635		7.799 PB	4.694 PB	3.105 PB				2	2	2	2					1	

What is this about?

Custodial storage elements																								
CNAF																								
AliEn SE			Catalogue statistics						Storage-provided information						Functional tests				Last day add tests		Demotion		IPv6	
SE Name	AliEn name	Tier	Size	Used	Free	Usage	No. of files	Type	Size	Used	Free	Usage	Version	EOS Version	add	get	rm	3rd	Last OK add	Successful	Failed	factor	add	
1. CNAF - TAPE	ALICE::CNAF::TAPE	1	1.283 PB	10.36 PB	-	807.2%	6,682,819	FILE	521.6 TB	140.7 TB	380.9 TB	26.97%	Xrootd v4.8.4						16.12.2021 11:04	24	0	0	0	
Total			1.283 PB	10.36 PB	0		6,682,819		521.6 TB	140.7 TB	380.9 TB				1	1	1	1					1	

Xrootd: diversi lavori di ottimizzazione per controllare lo stato dei servizi xrootd (start/stop)

HTCondor: coda multicore da Mag21

Tape: trovata una cassetta guasta (Mag21). Dati ritrasferiti

CNAF::SE → problemi test a Feb21 (problema di permessi nei file di configurazione)

CNAF::TAPE → problemi dei reading test legati a una misconfigurazione (in periodo di inattività nei trasferimenti)

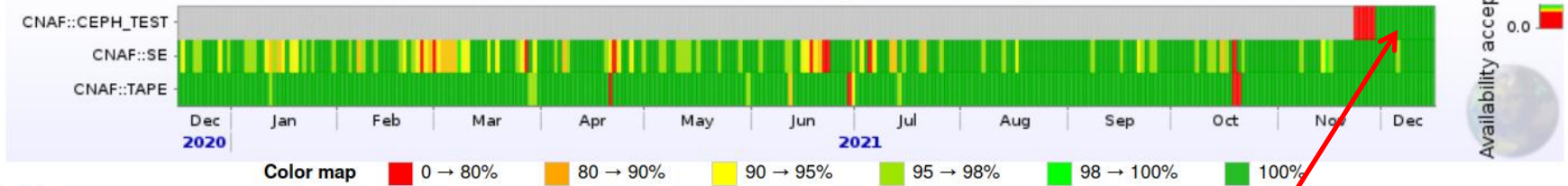
CEPH: creata nuova istanza su Monalisa per test apparato storage CEPH

Report disco



ALICE

AliEn SEs availability for writing

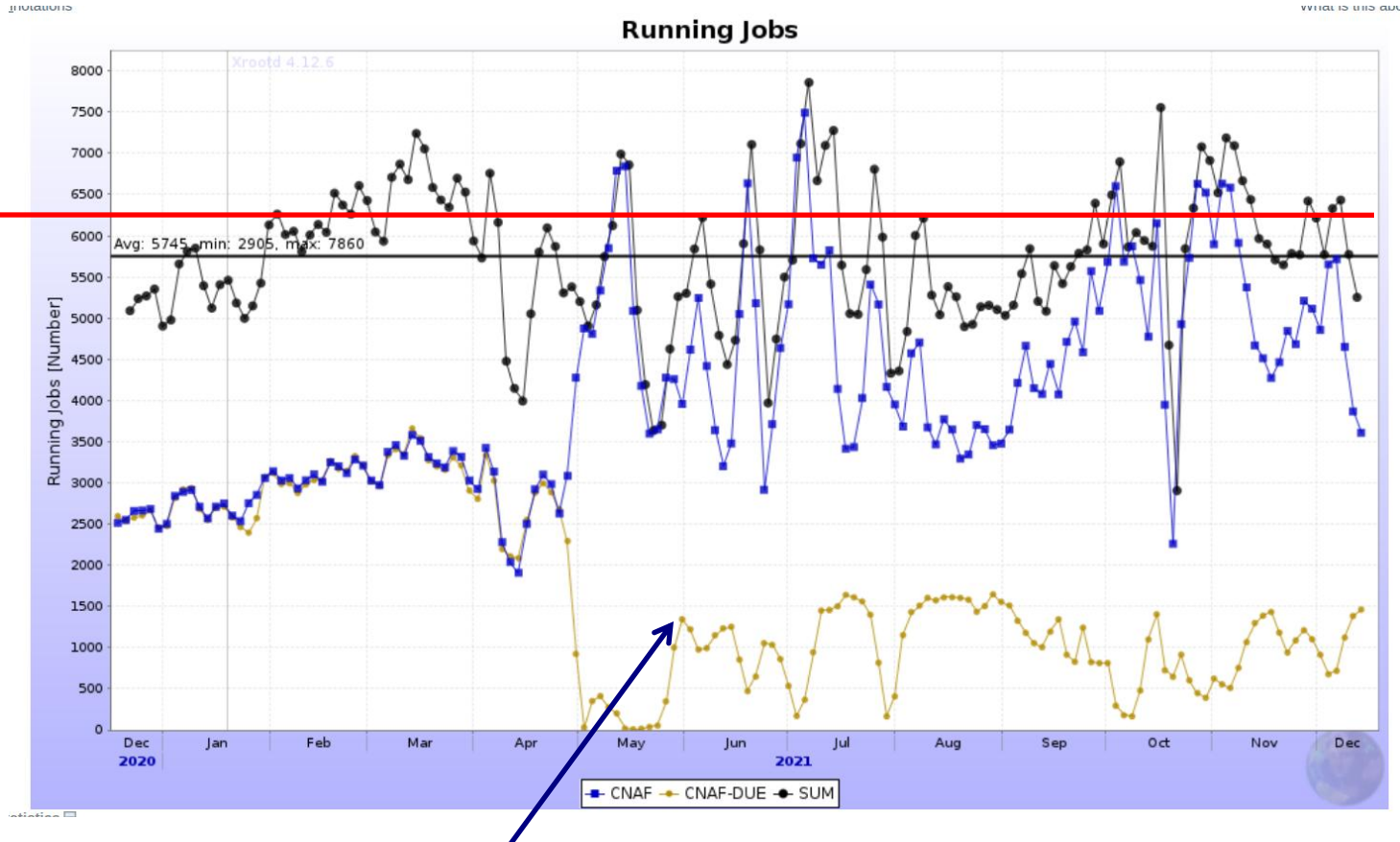


Statistics

Statistics						
Link name	Data		Individual results of writing tests			Overall
	Starts	Ends	Successful	Failed	Success ratio	Availability
⚠ CNAF::CEPH_TEST	24 Nov 2021 00:58	16 Dec 2021 12:01	413	132	75.92%	75.92%
⚠ CNAF::SE	16 Dec 2020 12:01	16 Dec 2021 11:17	8504	257	97.07%	97.11%
⚠ CNAF::TAPE	16 Dec 2020 11:46	16 Dec 2021 12:04	8734	68	99.23%	99.23%

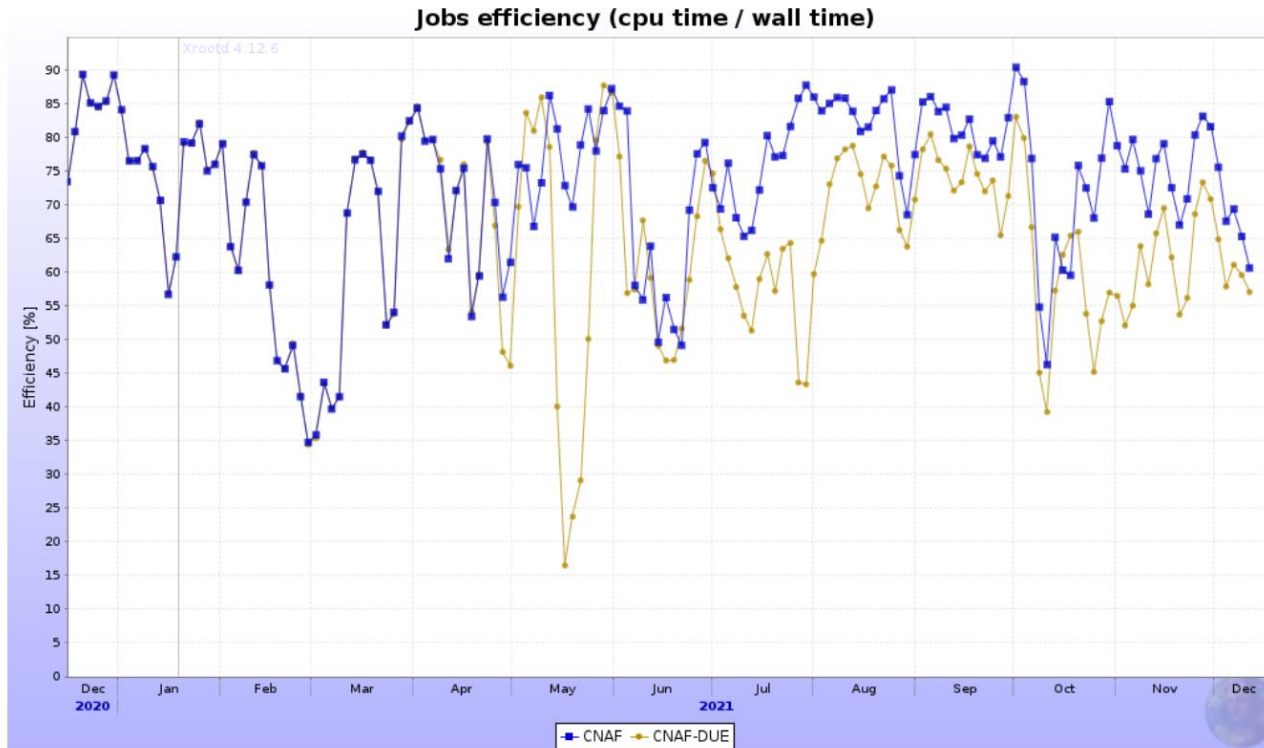
New entry (temporanea)

Report calcolo (I)



Setup multicore queue

Report calcolo (II)

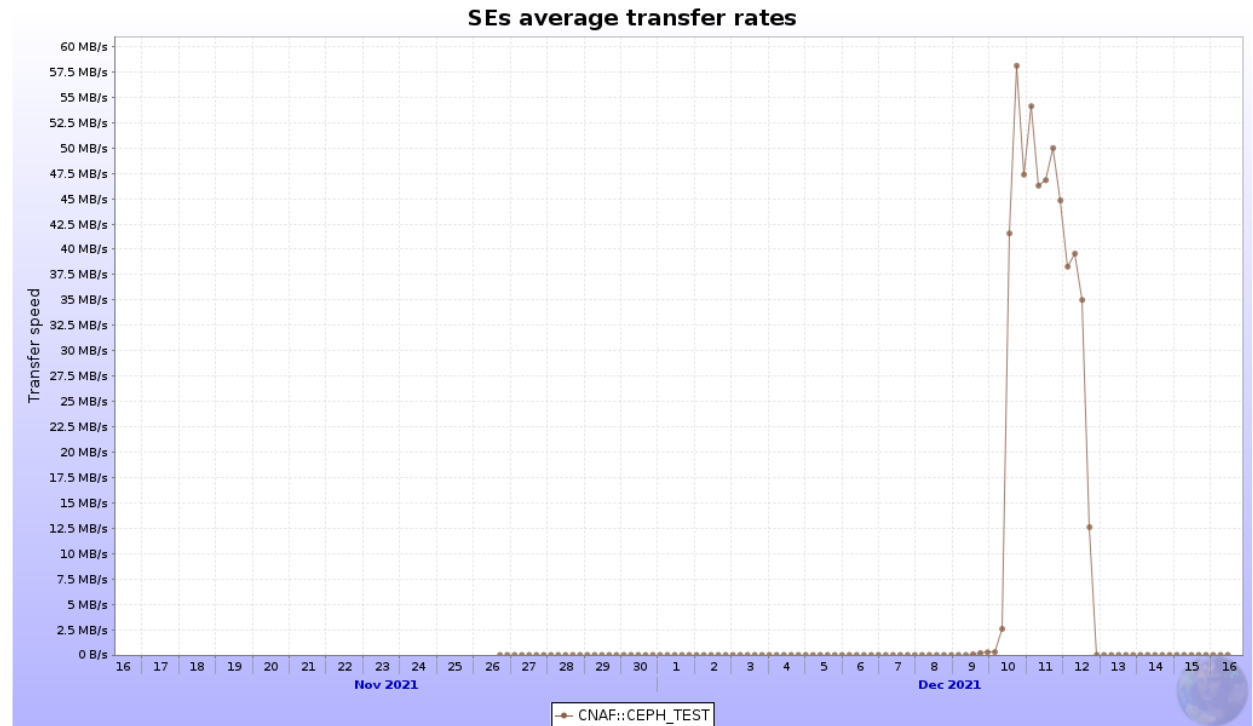


Jobs efficiency (cpu time / wall time)					
	Series	Last value	Min	Avg	Max
1.	■ CNAF	60.63	0	72.68	121
2.	■ CNAF-DUE	57.06	0	65.45	121.9
Total		58.84		69.06	

CEPH test

Latchezar/Maarten
hanno iniziato a
replicare dei dati
nell'istanza di test.

Inizieremo a
tracciare le
prestazioni (in
produzione) non
appena ci sarà un
numero significativo
di file.



SEs average transfer rates					
Series	Last value	Min	Avg	Max	Total
1. CNAF::CEPH_TEST	0 B/s	0 B/s	5.128 MB/s	353.2 MB/s	8.346 TB
Total	0 B/s		5.128 MB/s		8.346 TB