



# Overview of ATLAS Distributed Computing Monitoring



# Outline

- Importance of monitoring
- ATLAS distributed computing monitoring
- Data transfer overview
  - Distributed Data Management (DDM)
  - DDM Monitoring
  - ATLAS Data Replication Monitoring
  - Data Replication between sites
  - DDM Functional Tests
- Production & Analysis Job Monitoring
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  - Job Summary
  - Analysis Job Monitoring
  - Historical Views
- Site Monitoring
  - Site Status Board
  - AGIS - ATLAS Grid Downtime Calendar
- Central Services Monitoring
  - ADC DDM VOBOXES
  - Storage Space Monitor
  - LCG File Catalog
- Conclusions



## Importance of monitoring

- Powerful and flexible monitoring systems are required in order to maintain and improve a highly distributed system.
- It's required for users (ATLAS physicists), shifters, experts, site admins, managers.
- Monitoring computing activities are essential in order to
  - commission sites and services
  - estimate the quality of the infrastructure
  - identify inefficiencies and failures
  - predict future requirements
  - document resource consumption



# ATLAS Distributed Computing Monitoring (1)

This project serves as an umbrella for all software systems used by ATLAS DC.

## Activities:

- sites and services availability
- coordinates the monitoring of services for Monte Carlo Production
- data (re)processing
- physics groups and individual users jobs
- data export from CERN and data replication between sites

## Covers various needs:

- analysis users
- VO managers
- site admins
- production managers
- sites and services commissioning teams
- shifters
- experts



## ATLAS Distributed Computing Monitoring (2)

- Web tools provide real time and historical views for most part of activities in the scope of ATLAS.
  - developed using different sets of backend and frontend technologies

### Main components of the monitoring applications :

- data collectors
- data repositories
- user interfaces and APIs for data retrieval



## Data transfer overview

### Distributed Data Management (DDM)

- The core system consists of a **bookkeeping system** (dataset-based) and a **site services** to handle data transfers
- Dataset is a primary unit of data organization and replication:
  - logical entity with the unique name
    - e.g, data10\_7TeV.00152508.physics\_MuonswBeam.merge.ESD.r1297\_p161\_tid143553\_00
  - versioned collection of GRID files (physical entities)

Dataset subscribed to sites

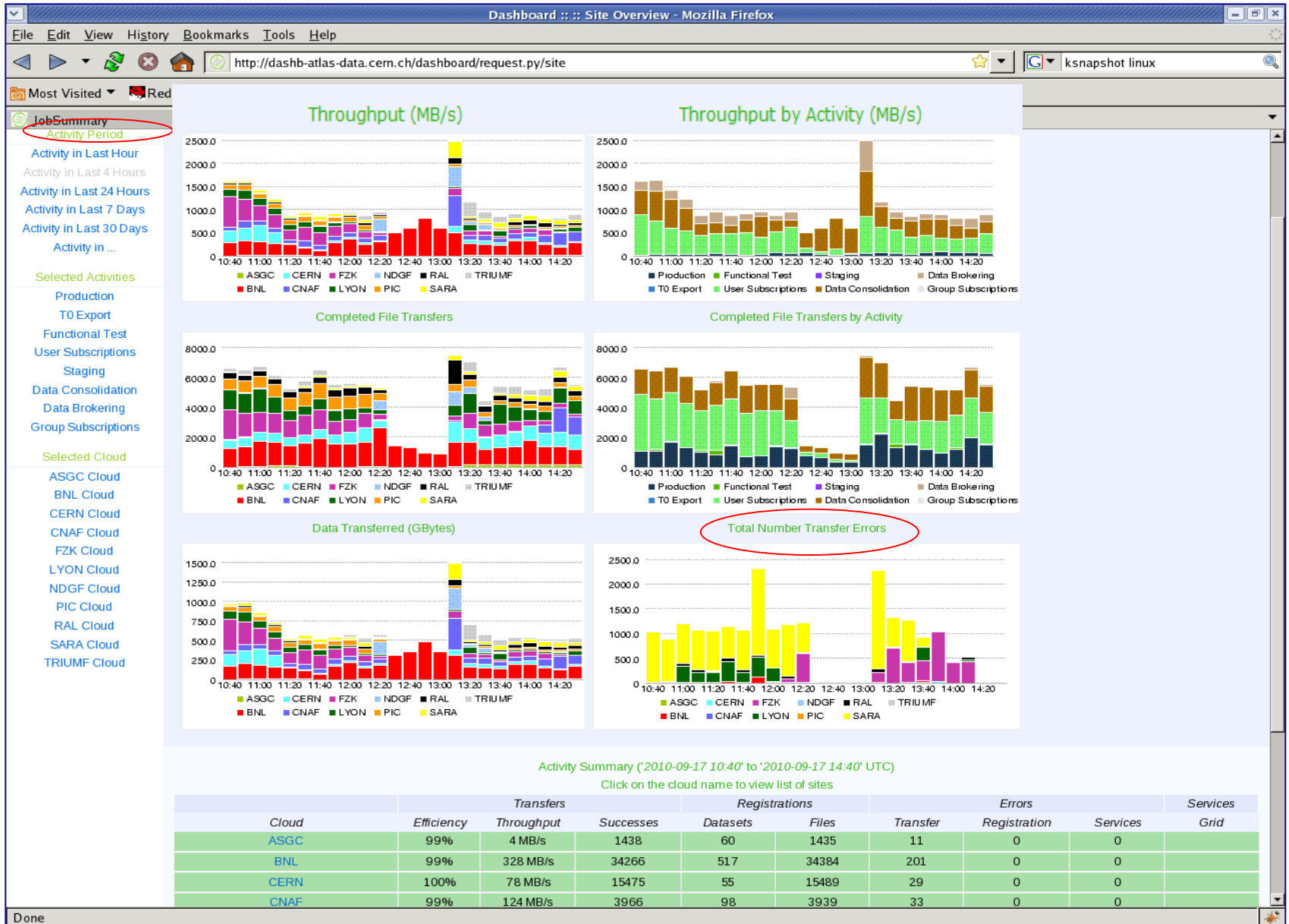
- Triggers transfer of all files to the site's storage system (SE)
- Central catalog tracks dataset content and sites' dataset content
- Higher level policy engines inject subscriptions into the system according to the ATLAS Computing Model



## DDM Monitoring

- Monitors transfers and finds failures
- Primary tool for quick analysis and Functional tests status
- Plays a central role in ATLAS computing operations
  - used by the shifters 24/7.
  - serves more than 1000 unique visitors per month
  - up to 25k pages are viewed daily.

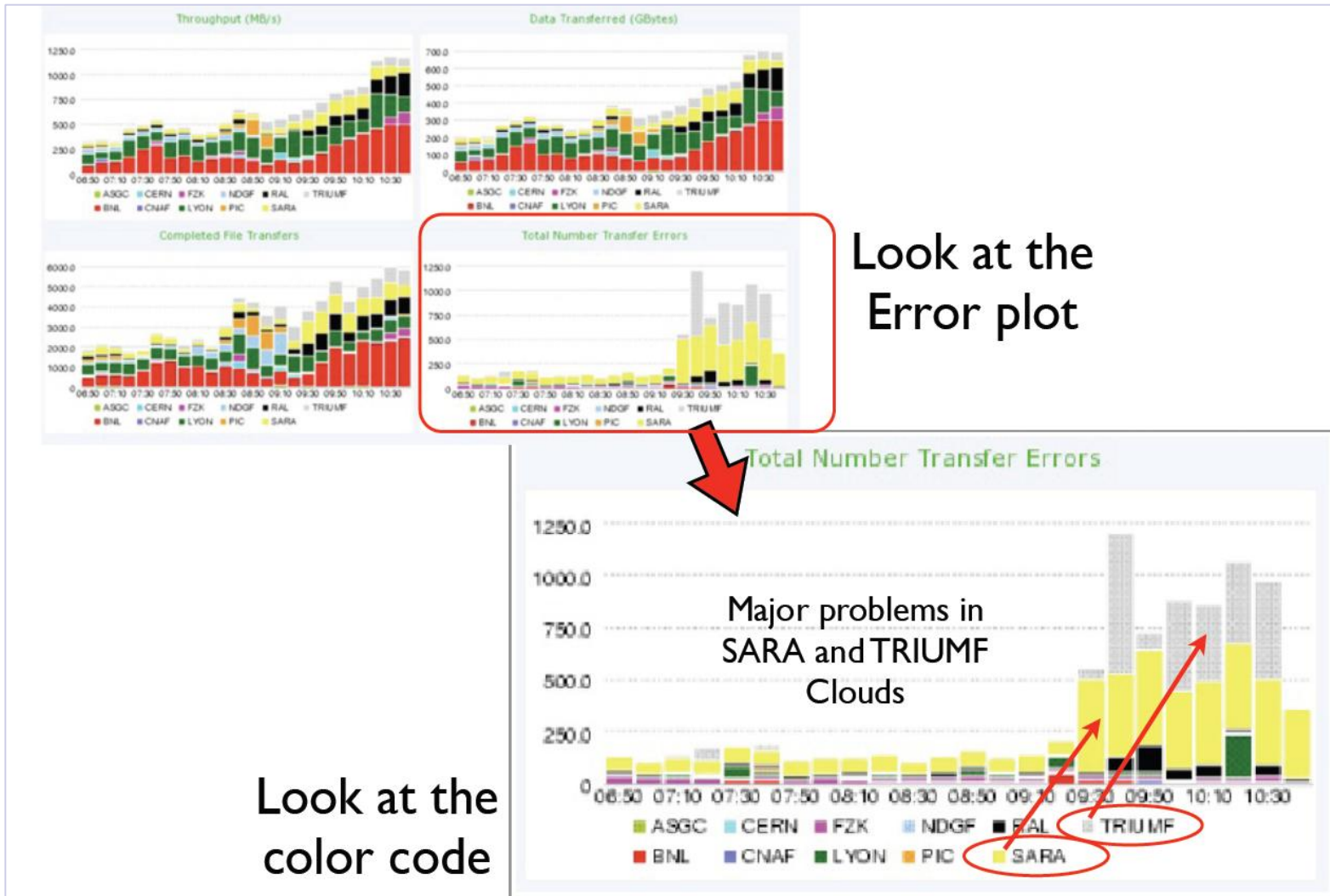
# DDM - dashboard







# DDM errors - how to spot a problem (1)





# DDM errors - how to spot a problem (2)

## Opening a cloud to see per-destination information

SARA	73%	66 MB/s	11565	928	10816	4362	0	0	
Click on the site name to go to the site page, '+' to see statistics for this site per source									
+ CSTCDIE_DATADISK	100%	2 MB/s	704	40	704	0	0	0	ok
+ CSTCDIE_HOTDISK	0%	0 kB/s	0	0	0	0	0	0	ok
+ CSTCDIE_MCDISK	0%	0 kB/s	0	0	0	0	0	0	ok
+ CSTCDIE_PRODDISK	100%	41 kB/s	8	6	8	0	0	0	ok
+ CSTCDIE_SCRATCHDISK	0%	0 kB/s	0	0	0	0	0	0	ok
+ CSTCDIE_SOFT-TEST	0%	0 kB/s	0	0	0	0	0	0	ok
+ CSTCDIE_USERDISK	0%	0 kB/s	0	0	0	0	0	0	ok
- IL-TAU-HEP_DATADISK	0%	0 kB/s	0	0	0	1576	0	0	down
FTS State [Failed] FTS Retries [1] Reason [DESTINATION error during TRANSFER_PREPARATION phase: (CONNECTION_ERROR) failed to contact on remote SRM [http://tau-se.hep.tau.ac.il:8444/srm/managerv2]. Given' up after 3 tries]									
1576									
2									
3									
NIKHEF-ELPROD_DATADISK 0% 0 kB/s 0 0 0 1404 0 0 0									
SARA-MATRIX_DATADISK 0% 0 kB/s 0 0 0 172 0 0 0									
+ IL-TAU-HEP_HOTDISK	0%	0 kB/s	0	0	0	0	0	0	down
+ IL-TAU-HEP_MCDISK	0%	0 kB/s	0	0	0	0	0	0	down
+ IL-TAU-HEP_PRODDISK	0%	0 kB/s	0	0	0	782	0	0	down
+ IL-TAU-HEP_SCRATCHDISK	0%	0 kB/s	0	0	0	0	0	0	down
+ IL-TAU-HEP_SOFT-TEST	0%	0 kB/s	0	0	0	0	0	0	down
+ ITEP_DATADISK	100%	1 kB/s	4	4	4	0	0	0	ok

2. Click on the plus sign in front of the site name to see the break down by the source sites

3. Click on the error number to see the error messages



# ATLAS Data Replication Monitoring

## DAQ Runs (cosmic, lbeam, pp,..) monitoring page (generated on 2010-07-13 01:20:32 CERN)

[TIER1S](#) [TIER2S](#) [T1-T1](#) [TiersInfo](#) [T1-T2](#)

Other flows

see also: [FT](#) | [MC](#) | [DATA](#) | [REPRO](#) | [FT:time stats](#) | [MC:time stat](#)

This page shows datasets transfer statistics to **TIER1S** by clouds, by time, by sites for last 24 hours and all test period.

Other Activities

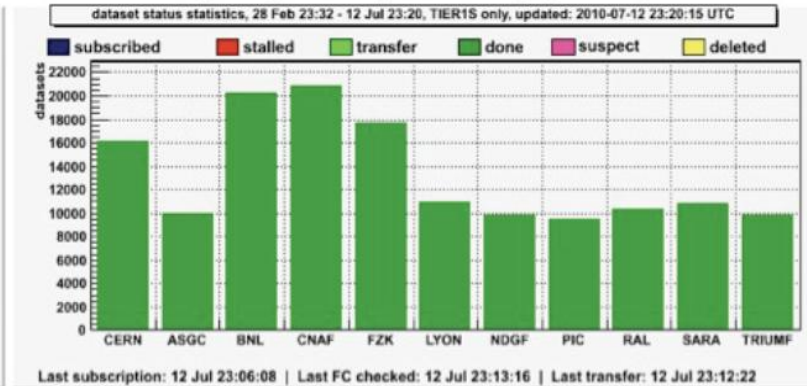
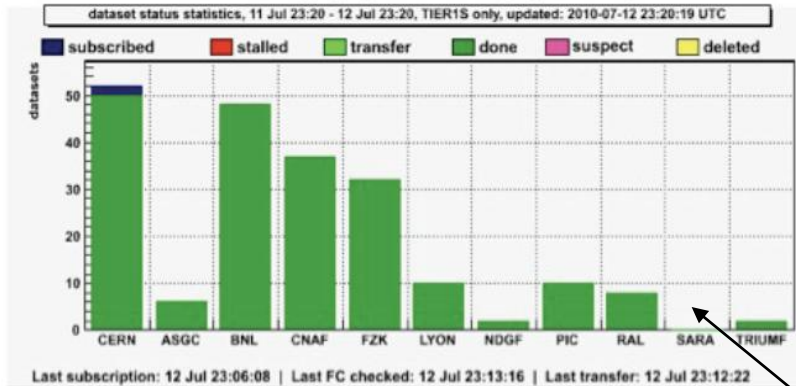
T0 - T1 transfers

- subscribed \* subscribed datasets
- stalled \* subscription only, no one file transferred since 12+ hours
- transfer \* datasets in transfer stage
- done \* datasets with all transferred files
- suspect \* datasets with number of transferred files more than total one, also empty datasets included

### TIER1S by clouds

last 24 hours (11 July 23:20:19 - 12 July 23:20:19)

all period (28 February 23:32:12 - 12 July 23:20:19)



These plots look OK, but SARA cloud gets no data...

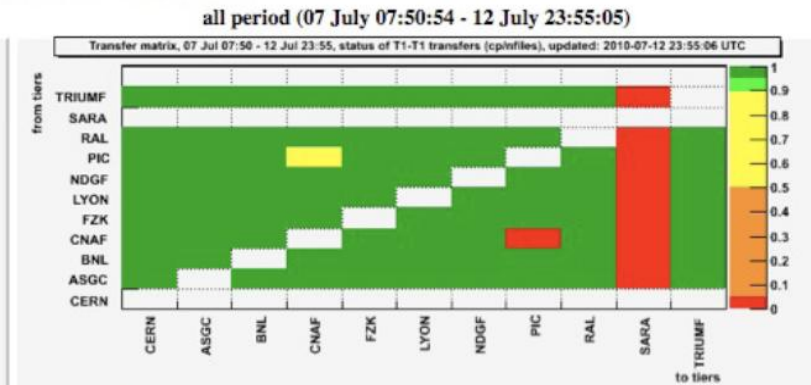
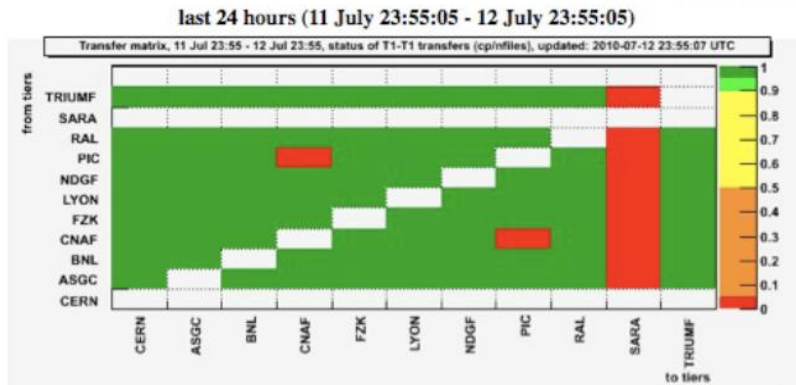
- Transfer failures are clearly errors, but sometimes no transfers also indicates some problem



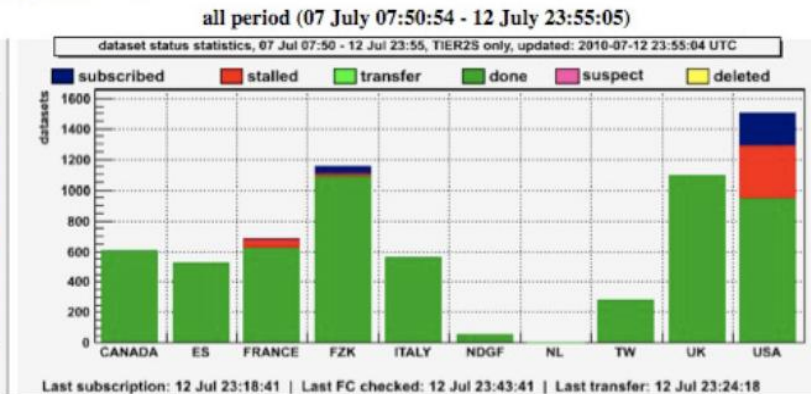
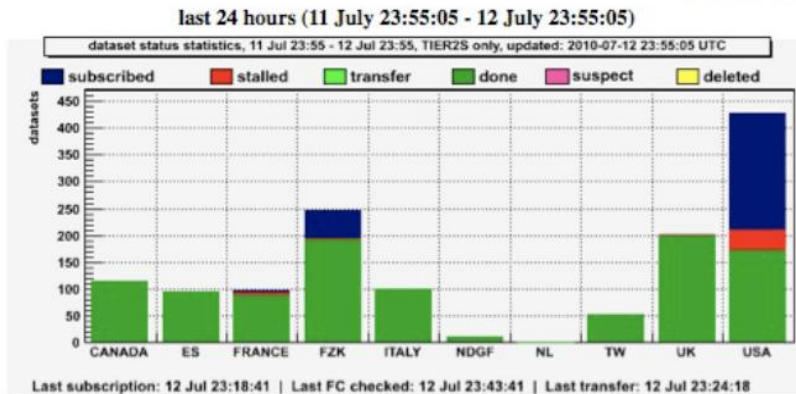
# Data Replication between sites

- datasets transfer statistics to T1- T1 by clouds, by time and all test period;
- datasets transfer statistics to TIER2S by clouds for last 24 hours and all test period

## TIER1-TIER1 transfers statistics



## TIER2S by clouds





# DDM Functional Tests

- continuous export of test data to verify the health of the data management system and the sites

## Functional Tests monitoring page *(generated on 2010-07-13 01:35:06 CERN)*

[TIER1S](#) [TIER2S](#) [T1-T1](#) [TiersInfo](#) [T1-T2](#)

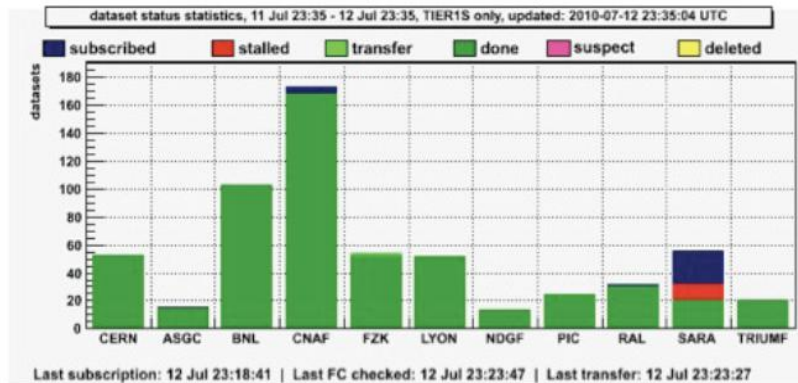
see also: [ [FT](#) | [MC](#) | [DATA](#) | [REPRO](#) | [FT:time stats](#) | [MC:time sta](#) ]

This page shows datasets transfer statistics to **TIER1S** by clouds, by time, by sites for last 24 hours and all test period.

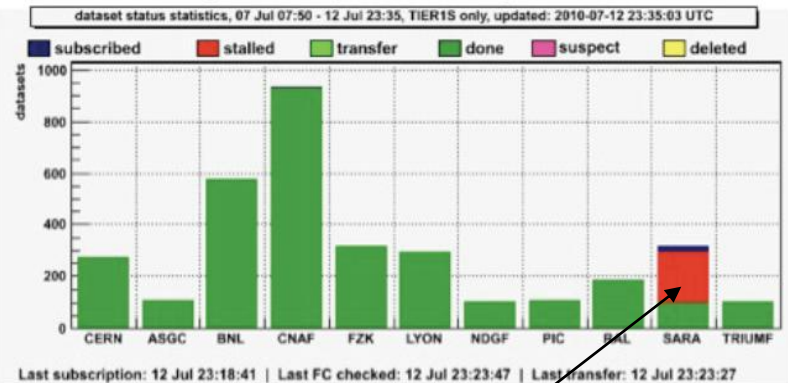
- subscribed \* subscribed datasets
- stalled \* subscription only, no one file transferred since 12+ hours
- transfer \* datasets in transfer stage
- done \* datasets with all transferred files
- suspect \* datasets with number of transferred files more than total one, also empty datasets included

### TIER1S by clouds

last 24 hours (11 July 23:35:04 - 12 July 23:35:04)



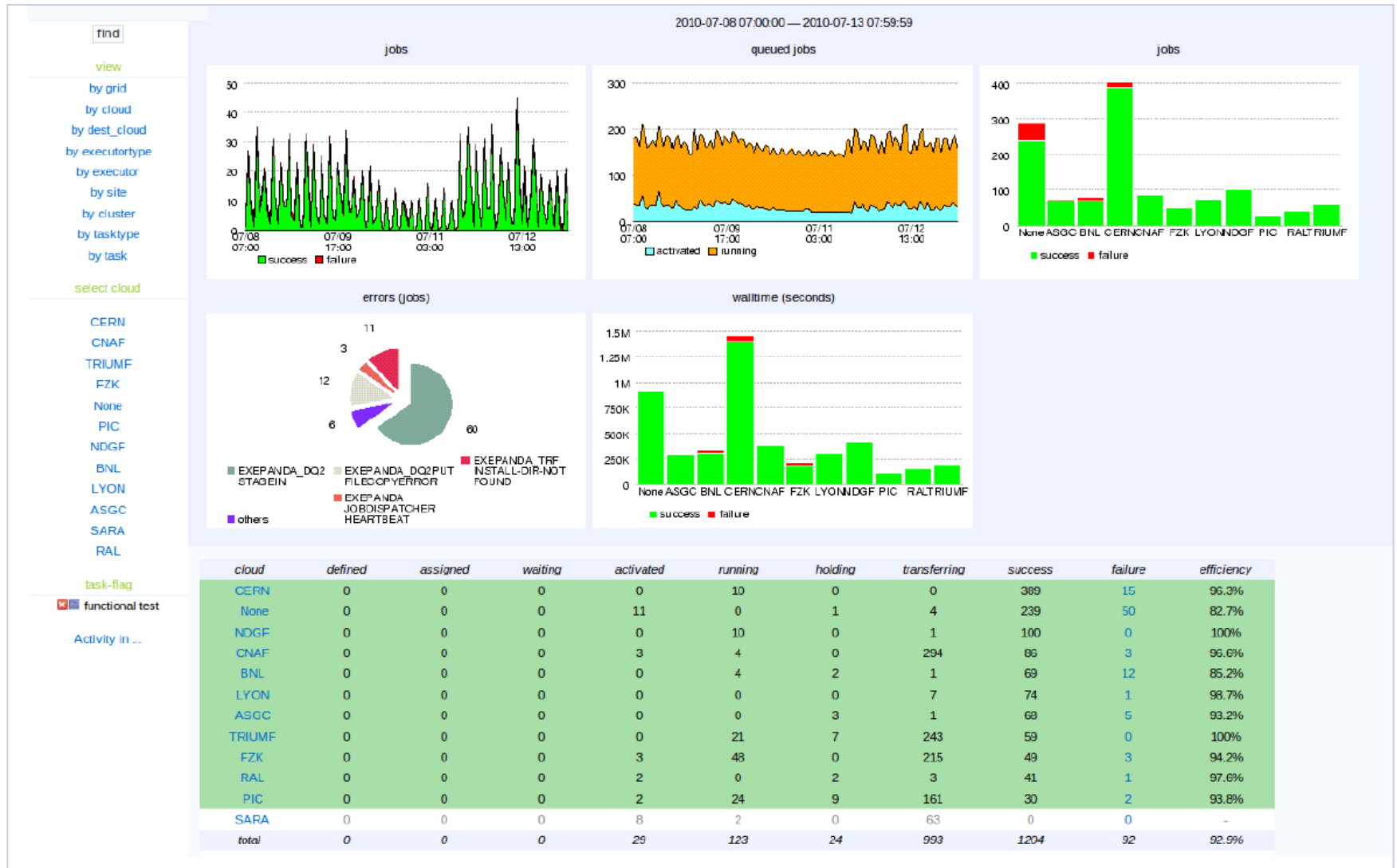
all period (07 July 07:50:54 - 12 July 23:35:04)



Problem with SARA



# Dashboard overview of the Production Functional Tests





# Functional Test Data Distribution Table

[Configuration](#) [Production](#) [Clouds](#) [Incidents](#) [DDM](#) [PandaMover](#) [AutoPilot](#) [Sites](#) [Releases](#) [Analysis](#) [Stats](#) [Physics data](#) [Usage](#) [ProdDash](#) [DDMDash](#)

[Update](#) Show [my page](#) [users](#) [groups](#)

**Panda monitor**  
Times are in UTC

[Panda info and help](#)

**Jobs** - [search](#)  
States: [running](#), [defined](#), [waiting](#), [assigned](#), [failed](#), [finished](#), [failed](#)  
Types: [analysis](#), [prod](#), [install](#), [test](#)

**Quick search**  
Panda job ID  
Batch ID  
Dataset  
Task request  
Task status  
File

**Summaries**  
Blocks:  days  
Errors:  days  
Nodes:  days  
Usage   days

**Tasks** - [search](#)  
[Generic Task Req](#)  
[EvGen Task Req](#)  
[CTBs/m Task Req](#)  
[Task list](#)  
[New Tag](#)  
[Bug Report](#)  
[Task overview query](#)

**Datasets** - [search](#)  
[Popular datasets](#)  
[Aborted datasets](#)  
[Dataset browser](#)

T0 -> T1 [T1 -> T1](#) [Tiersinfo](#) [Plots](#) [Weekly status page](#) generated on Tue, 13 Jul 2010 00:02:19 (UTC time is used within the page)

[ARDA Monitoring](#) [DQ2 Dataset Browser](#) cloud:  with status:  show last  datasets per site

dsn pattern:

exclude dsn pattern:

dataset transfer time:  hour(s)

Check numbers

This page showed datasets subscribed to T1 from T0 and CALIBRATION subscriptions included.

You selected: ANY cloud with dataset status=in\_progress, dsn\_pattern='data10\_%', showed last 100 datasets per site.

Cloud	Datasets	Total Files in datasets	Total CpFiles in datasets	Subscribed	Transfer	Done	Suspect	Average datasets transfer time, hours
ASGC	9917	245925	245925	0	0	9917	0	11.3
BNL	20246	995784	995784	0	0	20246	0	3.8
CNAF	20788	291450	291450	0	0	20788	0	3.7
FZK	17731	385887	385887	0	0	17731	0	3.3
LYON	10912	449324	449324	0	0	10912	0	2.5
NDGF	9857	227000	227000	0	0	9857	0	2.3
PIC	9482	231418	231418	0	0	9482	0	3.2
RAL	10350	355397	355397	0	0	10350	0	2.9
SARA	10817	430530	428178	6	4	10807	0	2.9
TRIUMF	9833	224750	224750	0	0	9833	0	2.8

Total Datasets	Total Files in datasets	Total CpFiles in datasets	Last Subscription	Last Transfer	Last FC Checked
129932	3837465	3835113	12 Jul 20:55	12 Jul 23:07	12 Jul 23:41

- legend:**
- subscribed - subscription only, no files transferred
  - transfer - < 90% files successfully transferred
  - 90% transfer - more than 90% files successfully transferred
  - done - all files successfully transferred
  - complete - all files successfully transferred, complete dataset replica
  - suspect - number of transferred files more than total subscribed one
  - in\_progress - not finished datasets, transfers in progress (not done and not complete)

NIKHEF-ELPROD\_DATADISK (Datasets: 9368, Files: 129551, cpFiles: 129551, Last Subscription: 11 Jul 18:17, Last Transfer: 11 Jul 20:09)

SARA-MATRIX\_DATADISK (Datasets: 1058, Files: 212173, cpFiles: 209821, Last Subscription: 08 Jul 07:03, Last Transfer: 08 Jul 09:42)

<a href="#">data10_7TeV.00158632.physics_MuonswBeam_recon.ESD.f274</a>	583 / 0	08 Jul 07:03	Never	113.0
<a href="#">data10_7TeV.00158710.physics_CosmicCalo.merge.RAW</a>	225 / 0	08 Jul 01:05	Never	119.0
<a href="#">data10_7TeV.00158707.physics_L1Calo.merge.RAW</a>	5 / 0	07 Jul 19:17	Never	124.8
<a href="#">data10_7TeV.00158707.physics_MuonswBeam.merge.RAW</a>	26 / 0	07 Jul 19:17	Never	124.8
<a href="#">data10_7TeV.00158707.physics_CosmicCalo.merge.RAW</a>	28 / 0	07 Jul 19:16	Never	124.8
<a href="#">data10_7TeV.00158660.physics_MuonswBeam.merge.RAW</a>	42 / 0	07 Jul 10:44	Never	133.3
<a href="#">data10_7TeV.00158682.physics_MinBias_recon.ESD.f273</a>	1483 / 286	07 Jul 05:10	08 Jul 09:41	139.9
<a href="#">data10_7TeV.00158653.physics_RNDM.merge.RAW</a>	420 / 276	06 Jul 21:43	08 Jul 09:42	146.3
<a href="#">data10_7TeV.00158549.physics_MinBias_recon.ESD.f273</a>	290 / 146	06 Jul 21:10	08 Jul 09:42	146.9
<a href="#">data10_7TeV.00158549.physics_L1Calo_recon.ESD.f273</a>	1050 / 1042	06 Jul 16:18	08 Jul 09:41	151.7

Datasets, which had not been completely transferred (stuck or just slow)



## PanDA Monitoring (1)

- ATLAS 'production' run through a single grid executor called PanDA

### Production and Distributed Analysis

- 'Production' usually meant MonteCarlo event generation, but in ATLAS this 'production system' also manages T1 reconstruction as well as physics and performance group analyses

PanDA is a Pilot-based workload management system:

- Pilot jobs are directed to sites and contact the Server upon activation;
- The Server assigns a payload to be executed and provides URLs for staging output files
- PanDA server performs workload management and brokerage duties
  - Ensures that ATLAS grid resources across sites are used optimally and that experiment workload policy is adhered to

The PanDA monitor provides a web browser interface to the Panda system:

- datablocks, jobs, sites, system component logs, job status logs, production statistics, etc.



# PanDA Monitoring (2)

**Configuration**

2 min old [Update](#)

**Panda monitor**  
Times are in UTC

[Panda info and help](#)

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**Jobs - search**

States: [running](#), [defined](#), [waiting](#), [assigned](#), [activated](#), [finished](#), [failed](#)

Types: [analysis](#), [prod](#), [install](#), [test](#)

Quick search  
Panda job ID  
Batch ID  
Dataset  
Task request  
Task status  
File

Summaries  
Blocks:  days  
Errors:  days  
Nodes:  days  
Usage [1](#), [2](#) days

**Tasks - search**

[Generic Task Req](#)  
[EvGen Task Req](#)  
[CTBSim Task Req](#)  
[Task list](#)  
[New Tag](#)  
[Bug Report](#)  
[Task overview query](#)

**Datasets - search**

[DQ2 Popularity](#)  
[Aborted datasets](#)  
[Datasets Browser](#)

**Datasets Distribution**

DaTRI:  

- [Data Transfer Request](#)
- [List User Requests](#)
- [List Patherna Requests](#)

[Production](#) [Clouds](#) [Incidents](#) [DDM](#) [PandaMover](#) [AutoPilot](#) [Sites](#) [Releases](#) [Analysis](#) [Stats](#) [Physics data](#) [Usage](#) [ProdDash](#) [DDMDash](#)

Not logged in. [List users](#)

## Panda Production Operations Dashboard

Panda shift [calendar](#) [mailing list](#)  
ADCoS [wiki](#) [ebq](#) [calendar](#) [mailing list](#)  
Production task support [mailing list](#)

[Click for help](#)

**Servers:** CERN:OK [Logger:OK](#)

**Active tasks:** CA:15 DE:27 ES:18 FR:31 IT:3 ND:8 NL:13 TW:3 UK:20 US:40  
**Bamboo** [task brokerage](#), [job submissions](#), [status](#) over last 12 hours

**Jobs updated >12 hrs ago:** [activated:59953](#) [running:none](#)  
**Jobs updated >36 hrs ago:** [transferring:3](#)

[Summary plots by cloud](#)

[Cloud efficiency history](#)

**Production job summary, last 12 hours** (Details: [errors](#), [nodes](#))  
*Comments/requests on the new summary table to Torre (wenaus@gmail.com). Old version of page is [here](#)*

**Processing types:** evgen(4991) merge(4637) pile(6449) prod\_test(195) reprocessing(61391) simul(238750) validation(84)

**Users:** Junji.Tojo(232) Michiru.Kaneda(21716) Thomas.Koffas(143) a.bocci(1141) aras.papadellis(45) borut.kersevan(257549) douglas(195) jamie.boyd(34) john.morris(1587) leonardo.caminati(116) menke(2442) minoru.hirose(9956) pacheco(317) yhj(24)

Pilot counts are for the last 3 hours. Error rates above 5% are shown in red.

Cloud	Pilots	Latest	defined	assigned	waiting	activated	sent	running	holding	transferring	finished	failed	cancelled	%fail
<a href="#">ALL</a>			784	445	0	94963	1	46288	2338	24178	93091	27340	69	23%
<a href="#">CA</a> ✓	889	10-18 12:55	184	0	0	5476	0	2794	95	2176	5147	16	0	0%
<a href="#">CERN</a> (broken)	896	10-18	0	0	0	0	0	0	0	0	54	0	0	0%

**Production blocks active in last 12 hours** ([details here](#))

Block ID	Jobs	Cloud	Version	Time Range
<a href="#">data10_7TeV.00158801.phys.s_MuonswBeam.recon.AOD.r1552_tid177453_00</a>	34 jobs	Atlas	15.6.12.7	From 2010-10-17 To 2010-10-18
<a href="#">finished:34</a>				
<a href="#">data10_7TeV.00165591.phys.s_Egamma.merq.NTUP_TOPVAL.f292_m609_p291_tid177299_00</a>	490 jobs	Atlas	15.6.13.3.2	From 2010-10-18 To 2010-10-18
<a href="#">failed:490</a>				
<a href="#">data10_7TeV.00165591.phys.s_letTauEtmis.merq.D2AODM_TOPIET.f292_m609_p294_tid177302_00</a>	768 jobs	Atlas	15.6.13.3.2	From 2010-10-18 To 2010-10-18
<a href="#">failed:768</a>				
<a href="#">data10_7TeV.00165591.phys.s_letTauEtmis.merq.NTUP_TOPVAL.f292_m609_p295_tid177303_00</a>	768 jobs	Atlas	15.6.13.3.2	From 2010-10-18 To 2010-10-18
<a href="#">failed:768</a>				
<a href="#">data10_7TeV.00165591.phys.s_letTauEtmis.merq.NTUP_TOPVAL.f292_m609_p296_tid177304_00</a>	768 jobs	Atlas	15.6.13.3.2	From 2010-10-18 To 2010-10-18
<a href="#">failed:768</a>				

### Ganglia World Wide Summary

More plots: [ALL](#) jobs in [CA](#) last [hour](#) [Go](#)

Generated by TRIUMF-LCG2 (times in UTC)



How to look?

# PanDA Monitoring (3)

> Open site view for worst cloud by clicking on it

UK															
US															
US Sites	Job Nodes	Jobs	Latest	Pilot Nodes	defined	assigned	waiting	activated	sent	running	holding	transferring	finished	failed	tot trf other
2431	3506	07-13 07:18	3684	0	295	0	380	0	7766	181	7469 / 0	19655	3506	15%	1% 14%
Site Name	2431	3506	07-13 07:18	3684	0	295	0	380	0	7766	181	7469 / 0	19655	3506	15% 1% 14%
AGL2	283	11	07-13 07:18	516	0	0	0	0	0	827	24	1741 / 0	3478	11	0% 0% 0%
BNL_ATLAS_1	436	3092	07-13 07:18	733	0	211	0	5	0	929	36	0 / 0	3514	3092	47% 0% 47%
BNL_ATLAS_2	22	164	07-13 07:18	32	0	1	0	17	0	160	3	0 / 0	70	164	70% 2% 68%
BNL_ITD	0	0		0	0	0	0	0	0	0	0	0 / 0	0	0	
BNL_XRD	0	0		0	0	0	0	0	0	0	0	0 / 0	0	0	
BU_ATLAS_Tier2	0	0	offline	0	0	0	0	0	0	0	0	0 / 0	0	0	
BU_ATLAS_Tier2o	113	4	07-13 07:18	145	0	0	0	22	0	537	4	138 / 0	781	4	1% 0% 0%
GLOW-ATLAS	8	1	07-13 07:17	7	0	0	0	24	0	10	0	39 / 0	8	1	11% 11% 0%
HU_ATLAS_Tier2	129	9	07-13 07:18	239	0	0	0	135	0	1535	26	1151 / 0	2476	9	0% 0% 0%
IU_OSG	0	0	test	0	0	0	0	0	0	0	0	0 / 0	0	0	
IllinoisHEP	17	1	07-13 07:18	22	0	0	0	141	0	256	0	81 / 0	519	1	0% 0% 0%
LTU_CCT	0	0		0	0	0	0	0	0	0	0	0 / 0	0	0	
MWT2_IU	128	4	07-13 07:18	191	0	0	0	0	0	487	20	298 / 0	1015	4	0% 0% 0%
MWT2_UC	234	10	07-13 07:18	351	0	28	0	0	0	1257	26	616 / 0	1405	10	1% 1% 0%
Nebraska-Lincoln-red	3	1	test	75	0	0	0	0	0	0	0	0 / 0	2	1	33% 0% 33%
Nebraska-Omaha-fforid	0	0	offline	0	0	0	0	0	0	0	0	0 / 0	0	0	
OU_OCHEP_SWT2	54	131	07-13 07:18	82	0	17	0	0	0	54	0	369 / 0	915	131	13% 11% 2%
OU_OSCER_ATLAS	0	0	offline	0	0	0	0	0	0	0	0	0 / 0	0	0	
OU_OSCER_ATLASdeb	0	0	offline	0	0	0	0	0	0	0	0	0 / 0	0	0	
SLACXRD	655	38	07-13 07:18	807	0	19	0	0	0	929	11	1905 / 0	2612	38	1% 1% 0%
SWT2_CPB	179	5	07-13 07:17	250	0	19	0	0	0	250	16	451 / 0	978	5	1% 1% 0%
Tufts_ATLAS_Tier3	0	0	test	18	0	0	0	0	0	0	0	0 / 0	0	0	
UCITB_EDGE7	0	0	test	2	0	0	0	0	0	0	0	0 / 0	0	0	
UC_ATLAS_MWT2	0	0	offline	0	0	0	0	0	0	0	0	0 / 0	0	0	
UC_Teraport	0	0		0	0	0	0	0	0	0	0	0 / 0	0	0	
UTA_SWT2	153	33	07-13 07:18	187	0	0	0	1	0	403	11	612 / 0	1654	33	2% 2% 0%
UTD-HEP	17	2	07-13 07:18	27	0	0	0	35	0	124	4	68 / 0	228	2	1% 1% 0%
Production blocks active in last 12 hours (details here)															
data10_7TeV.00157637_physics_MuonswBeam.merge_DESDM_RPVLL_f268_p182_p184_tid151252_00												2 jobs		Atlas-15.6.9.13 To 2010-07-13	



# PanDA Monitoring (4)

## Following up a problem

### > Overview of failed jobs and a short reason for the failure

Click for help

Jobs - [search](#)  
 States: [running](#), [defined](#), [waiting](#), [assigned](#), [activated](#), [finished](#), [failed](#)  
 Types: [analysis](#), [prod](#), [install](#), [test](#)

Quick search  
 Panda job ID:   
 Batch ID:   
 Dataset:   
 Task request:   
 Task status:   
 File:

Summaries  
 Blocks:  days  
 Errors:  days  
 Nodes:  days  
 Usage:  days

Tasks - [search](#)  
[Generic Task Req](#)  
[EvGen Task Req](#)  
[CTBeim Task Req](#)  
[Task list](#)  
[New Tag](#)  
[Run Report](#)  
[Task overview query](#)

Datasets - [search](#)  
[Popular datasets](#)  
[Aborted datasets](#)  
[Datasets Browser](#)

Datasets Distribution  
[Data Transfer Request](#)  
[DoTRL: User Requests](#)  
[ACDs](#)  
[EVENTs](#)  
[Conditions DS](#)  
[DB Releases](#)  
[SIT packages](#)  
[Validation Samples](#)  
[Functional Tests](#)  
[ATLAS Data](#)  
[Reprocessed Datasets](#)

[Logging monitor](#)

Summary of **production** jobs for the last **12** hours, JOBID any In **failed** state at **BNL\_ATLAS\_1** site Go Retrieve All

3000 jobs. Listing limited to search depth of 3000 per job table. Use &limit=N in the URL to change the limit.  
 States: failed:3000  
 Users (2): [borut.kersevan@iis.si:2998](#) [douglas@cem.ch:2](#)  
 Releases (4): Atlas-15.3.1:2 Atlas-15.6.3:2948 Atlas-15.6.9:45 Atlas-15.6.9:5  
 Processing types (4): merge:2972 pile:5 prod\_test:2 simul:21  
 Job types (1): managed:3000  
 Task ID (37): 129126:2 150530:2 150620:2 150621:17 150700:10 150704:685 150709:26 150710:53 150714:22 150715:9 150718:21 150726:11 150728:10 150735:84 150738:39 150739:6 150743:9 150751:18 150752:22 150753:414 150756:31 150758:98 150759:105 150767:18 150782:1 150786:30 150788:39 150795:43 150800:198 150802:74 150804:393 150805:319 150806:1 150820:12 150958:4 151025:1 151148:2  
 Transformations (4): Mergino\_trf.py:2 csc\_atlasG4\_trf.py:23 csc\_digi\_trf.py Reco\_trf.py:5 csc\_mergeHT\_trf.py:2970  
 Sites (1): BNL\_ATLAS\_1:3000

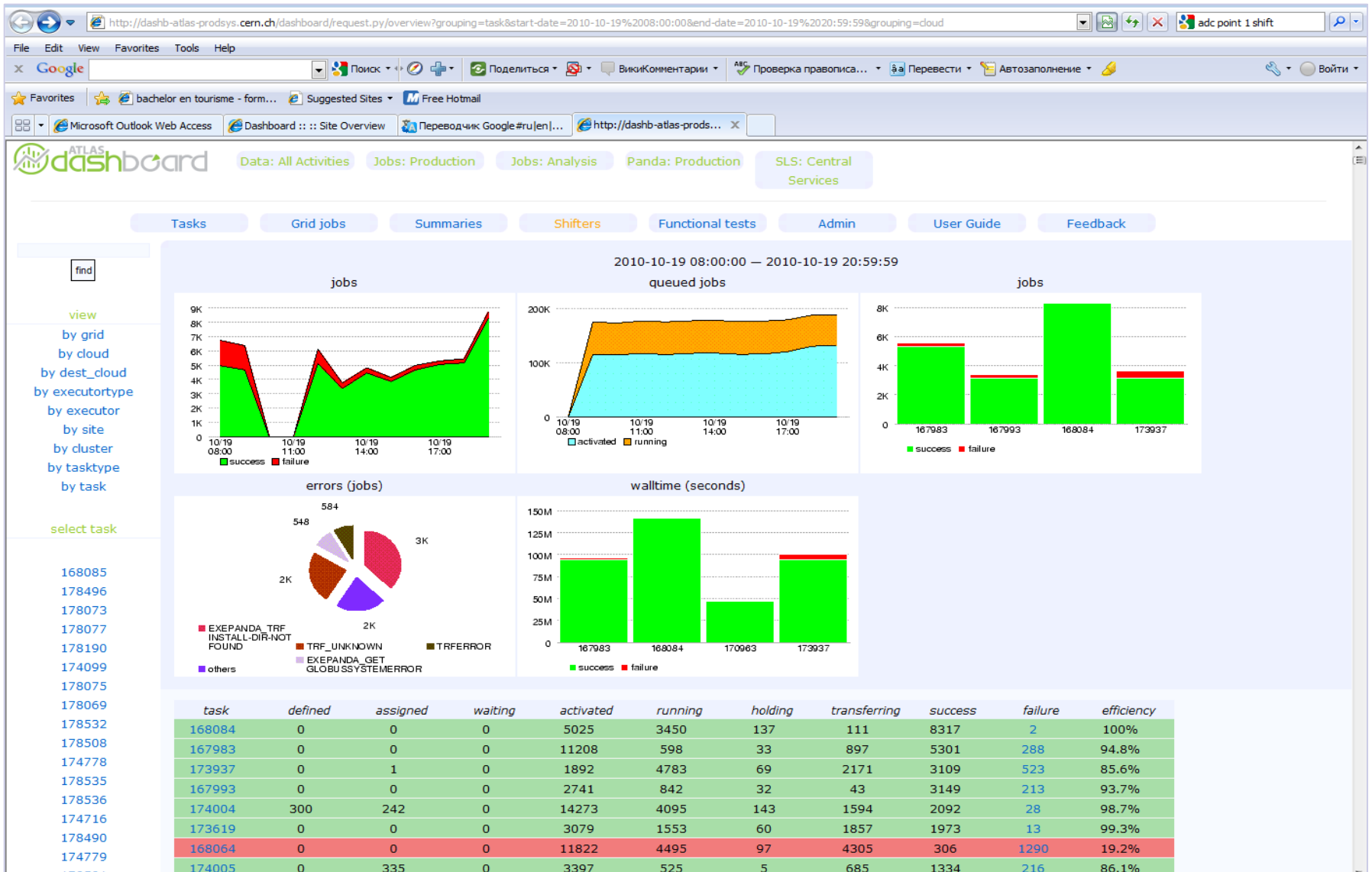
Showing 200 jobs modified from 2010-07-13 08:40 to 2010-07-13 04:54 [Show older jobs](#)

Jobs: (add &limit=N to URL to increase number of jobs shown)

PandaID, Owner, Working group	job	Status	Created	Time to start	Duration	Ended/Modified	Cloud/Site, Type	Prio
<a href="#">1088109689</a> <a href="#">borut.kersevan@iis.si</a>	<a href="#">mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.merge.e568_s766_s767_tid150800_000273.job</a> #2	failed	2010-07-13 08:05	0:01:27	0:33:59	07-13 08:40	US/BNL_ATLAS_1, production	449
<b>Error details:</b> pilot: lsm-put failed (201): Unable to send control message, line [3] is down Failed to send Hello fd=3 Failed to create a control line Unable to send control message line [5] is down Failed to send Hello fd=5 Failed to create a control line Failed open fi								
<b>In:</b> <a href="#">mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.simul.HITS.e568_s766_tid150617_00</a> <b>Out:</b> <a href="#">mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.merge.HITS.e568_s766_s767_tid150800_00</a>								
<a href="#">1088108324</a> <a href="#">borut.kersevan@iis.si</a>	<a href="#">mc09_7TeV.115975.J6_pythia_jetjet_fsr_up.merge.e568_s765_s767_tid150709_000064.job</a> #2	failed	2010-07-13 07:54	0:29:24	0:31:49	07-13 08:55	US/BNL_ATLAS_1, production	449
<b>Error details:</b> pilot: lsm-put failed (201): Unable to send control message, line [3] is down Failed to send Hello fd=3 Failed to create a control line Unable to send control message line [5] is down Failed to send Hello fd=5 Failed to create a control line Failed open fi								
<b>In:</b> <a href="#">mc09_7TeV.115975.J6_pythia_jetjet_fsr_up.simul.HITS.e568_s765_tid150535_00</a> <b>Out:</b> <a href="#">mc09_7TeV.115975.J6_pythia_jetjet_fsr_up.merge.HITS.e568_s765_s767_tid150709_00</a>								
<a href="#">1088108321</a> <a href="#">borut.kersevan@iis.si</a>	<a href="#">mc09_7TeV.116111.McAtNio_JIMMY_a11_mumu_2muEF.merge.e568_s765_s767_tid150806_000029.job</a> #1	failed	2010-07-13 07:54	0:29:25	0:27:47	07-13 08:51	US/BNL_ATLAS_1, production	450
<b>Error details:</b> pilot: Put error: 1_1279009437/HITS.150806_000029.pool.root.1: globus_ftp_client_state.c:globus_ftp_client_response_callback:3616: the server responded with a error 451 Internal timeout lcg_cp: Communication error on send[201] Copy command failed!								
<b>In:</b> <a href="#">mc09_7TeV.116111.McAtNio_JIMMY_a11_mumu_2muEF.simul.HITS.e568_s765_tid150033_00</a> <b>Out:</b> <a href="#">mc09_7TeV.116111.McAtNio_JIMMY_a11_mumu_2muEF.merge.HITS.e568_s765_s767_tid150806_00</a>								
<a href="#">1088108306</a> <a href="#">borut.kersevan@iis.si</a>	<a href="#">mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.merge.e568_s766_s767_tid150800_000333.job</a> #1	failed	2010-07-13 07:54	0:29:25	0:05:57	07-13 08:29	US/BNL_ATLAS_1, production	450
<b>Error details:</b> pilot: Get error: lsm-get failed (202): [202] File /pnfs/usatlas.bnl.gov/MCDISK/mc09_7TeV/log/e568_s766/mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.simul.log.e568_s766_tid150617_00/log.150617_007001.job.log.tgz.1 does not exist!								
<b>In:</b> <a href="#">mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.simul.HITS.e568_s766_tid150617_00</a> <b>Out:</b> <a href="#">mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.merge.HITS.e568_s766_s767_tid150800_00</a>								
<a href="#">1088108299</a> <a href="#">borut.kersevan@iis.si</a>	<a href="#">mc09_7TeV.115855.J6_pythia_jetjet_Perugia2010.merge.e568_s766_s767_tid150800_000326.job</a> #1	failed	2010-07-13 07:54	0:29:25	0:07:05	07-13 08:31	US/BNL_ATLAS_1, production	450
<b>Error details:</b> pilot: Get error: lsm-get failed (201): [201] Copy command failed!								



# Dashboard overview of the production jobs





## Job Summary (1)

- Job Summary enables very flexible access to recent monitoring data and shows the job processing of a VO at run-time
  
- Interactive view : What is going on now regarding job processing in the scope of ATLAS
  
- Aimed at different types of users:
  - individual scientists using the Grid for data analysis, user support teams, site admins, VO managers, managers of different computing projects.



# Job Summary (2)



## JOB SUMMARY

sort by: Close

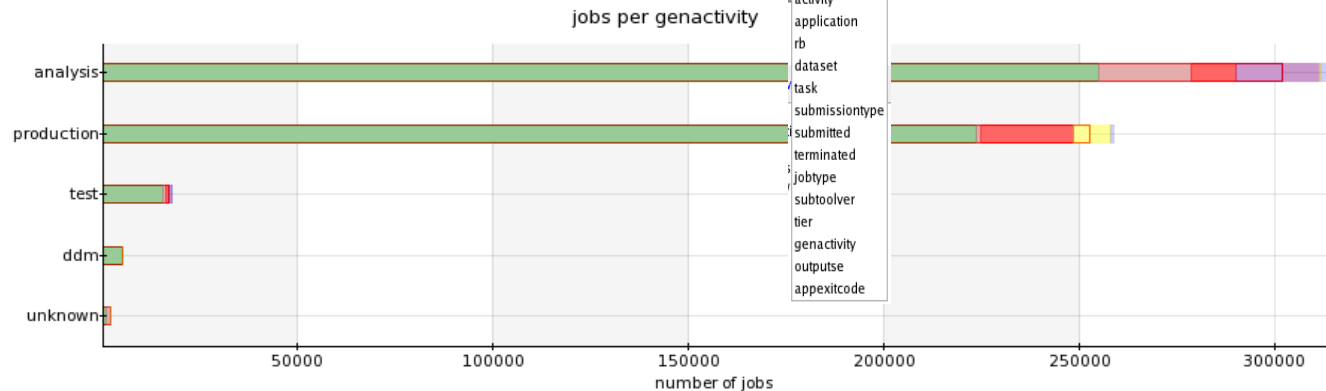
- grid
- site
- ce
- user
- submissiontool
- submissionui
- activity
- application
- rb
- dataset
- task
- submissiontype
- submitted
- terminated
- jobtype
- subtoolver
- tier
- genactivity
- outputse
- appexitcode

Waiting time    Running time    Overall time    CPU time    Job Wrapper time    Efficiency

Search a job using the GridJobId    Search

- any user
- any site
- any ce
- any submissiontool
- any application
- any rb
- any activity
- any grid
- any jobtype
- any tier

- unk  pend  run  term
- done  canc  abort  g-unk
- succ  site-fail  app-fail
- all-fail  a-unk  donesuccess
- submitted



submitted    app-succeeded    application-failed    site-failed    aborted    cancelled    app-unknown    pending    running

genactivity	current status				grid exit status				application exit status				status			NEvProc		
	Sub	Pend	Run	Term	Done	Canc	Abort	Unk	Grid%	Succ	AppFail	SiteFail	AllFail	Unk	App%		Site%	Overall%
ddm	5244	0	0	5244	5242	0	2	0	99.96	5227	0	0	0	17	100	100	99.68	0
production	252559	9777	465	242317	217759	5	23631	922	90.21	223483	1151	0	1151	17683	99.49	100	92.23	270803619
test	17170	0	1	17169	15740	718	705	6	91.71	15427	940	0	940	802	94.26	100	89.85	1450132
analysis	301708	200	1490	300018	266457	21392	11511	658	89.01	254754	23684	0	23684	21580	91.49	100	84.91	129841461
unknown	2241	1	0	2240	2215	1	22	2	98.97	1119	1118	0	1118	3	50.02	100	49.96	268923

genactivity	Sub	Site%	Overall%	NEvProc	WrapCPU
ddm	5244	100	65.87	513629938	31602746.28
production	252559	100	91.26	97900	35064.3
test	17170	100	94.49	42101561	0
analysis	301708	100	98.53	212600	0
unknown	2241	100	100	200	71.28
<b>total: 5</b>	<b>578922</b>	<b>100</b>	<b>75.38</b>	<b>556042199</b>	<b>31637881.86</b>

**overall status**

- Overall%: (success - (success&aborted)) / (terminated-(grid-unk&app-unk))



## Analysis Job Monitoring (1)

- Collects and exposes a user-centric set of information to the user regarding submitted tasks.
- Focused on the user's perspective.
- Offers a wide selection of graphical plots.
- User-driven development.
- The job monitoring application provides a consistent way of following a user's analysis jobs regardless of the submission tool.



# Analysis Job monitoring (2)

<http://dashboard10.cern.ch/index.html>

ATLAS dashboard

USER: [dropdown] REFRESH: Disabled

TIME RANGE: FROM [input] TILL [input] TIME RANGE: Last Day

SUPPORT HELP

Users List

Search for user [input]

- AdrienRenaud
- AndreasRedelbach
- ArjunTrivedi479009
- AsokaDeSilva
- BrentAlexanderWilson403008
- CemileEzer
- ClementHelsens
- ConsortiConsorti
- DarrenDavidPrice178101
- DavidTuckett
- DimitriosIliadis
- Elena.OliverGarcia
- EmmerichKneringer
- EvgenySedykh
- EvgenySoldatov
- FedericaLegger
- FrankSeifert
- GabrieleChiodini
- GiacomoArtoni
- GordonFischer
- HarinderSinghBawa345844
- Hurng-ChunLEE
- IoannisNomidis
- JackCranshaw899901
- JamesFerrando

ATLAS dashboard

USER: JamesFerrando REFRESH: Disabled

TIME RANGE: FROM [input] TILL [input] TIME RANGE: Last Month

SUPPORT HELP

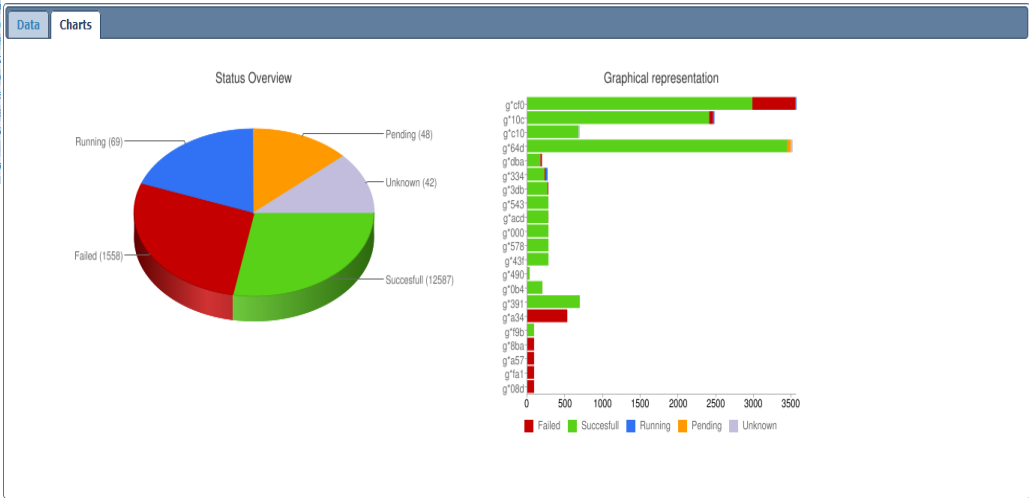
Users List > JamesFerrando > Tasks

Data Charts

monitorTaskId	Num of Jobs	Pending	Running	Successful	Failed	Unknown	Graphically
ganga:db6414d1-6c47-4c66-bdcb-0be762d16334:	270	0	30	229	11	0	
ganga:c7a56a53-fa6e-4b86-916f-4675803f464d:	3516	48	1	3441	4	22	
ganga:c125bac7-fd58-454d-a290-e0a75b83f43f:	280	0	0	280	0	0	
ganga:bf80003d-7dab-4de1-a843-8c1591f9808d:	89	0	0	0	89	0	
ganga:b9c0307b-837c-4839-b146-3e38ce794543:	280	0	0	279	0	1	
ganga:b8e0360-abe3-4f4e-9097-5753199600b4:	200	0	0	199	1	0	
ganga:910550fc-64cb-4873-8764-0929ce984a57:	89	0	0	0	89	0	

meta information

- Uses:
- jQuery based frontend
- Includes
- Full bookmarking capability
  - Working 'refresh' capability
  - "Breadcrumbs" navigation element

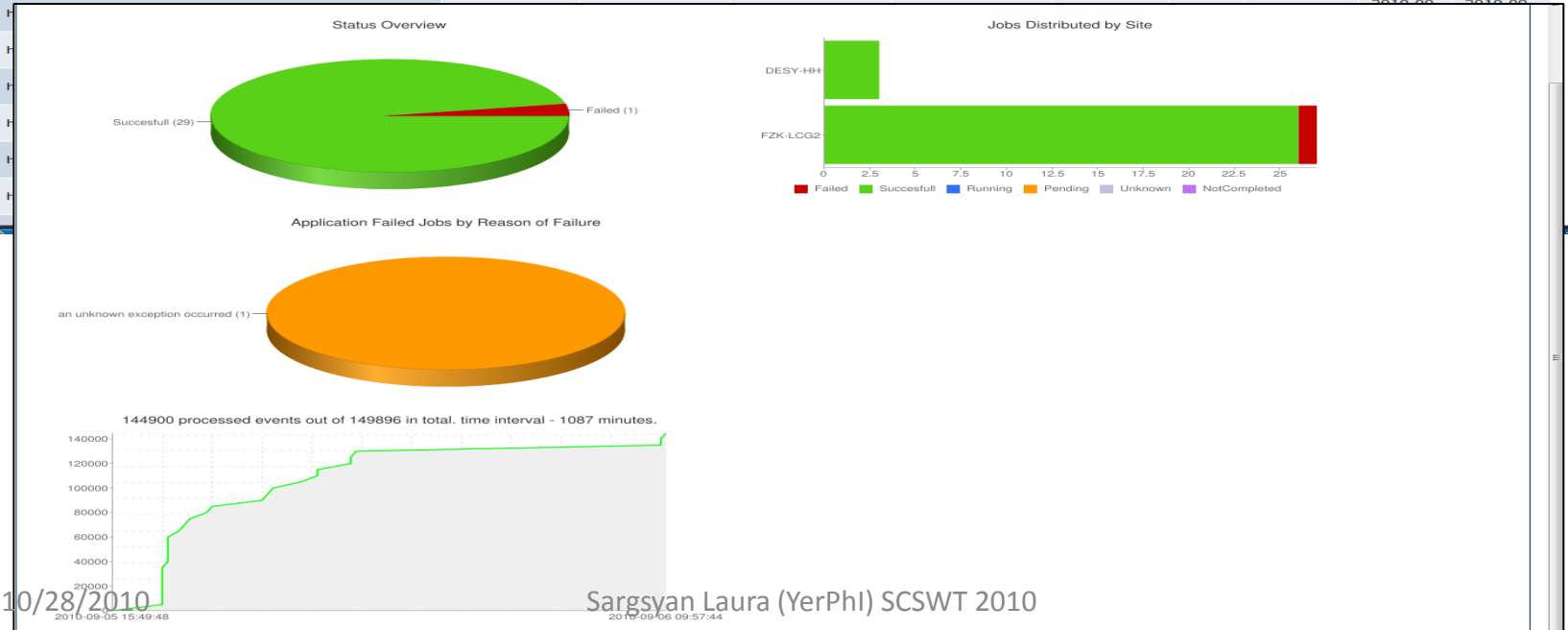






# Analysis Job monitoring (3)

URL	Count	Status	Count	Letter	Count	Site	Start	End	End
https://wms211.cern.ch:9000/TWhRAuQG1OSDj99YIaldz	22	Successfull	0	U	1	FZK-LCG2	2010-09-05 15:45:21	2010-09-05 15:50:25	2010-09-05 19:04:22
https://wms211.cern.ch:9000/td1l80sBKbl4soy9CQkqjA	16	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:22	2010-09-05 15:50:11	2010-09-05 17:40:15
https://wms211.cern.ch:9000/t_-3P0RUXfhUlnrL_Qomb	14	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:22	2010-09-05 15:50:15	2010-09-05 17:36:27
https://wms211.cern.ch:9000/qw0i-Ukn0Yq_aW_K0Jd7	24	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:22	2010-09-05 15:50:07	2010-09-05 17:45:07
https://wms211.cern.ch:9000/QJlIG94vUdG20JdvZoyz3\	26	Successfull	0	D	2	FZK-LCG2	2010-09-05 20:38:22	2010-09-05 20:38:22	2010-09-05 22:39:47
https://wms211.cern.ch:9000/PgLO5zayOUhB6Q97MJD	4	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:21	2010-09-05 15:50:12	2010-09-05 17:41:41
https://wms211.cern.ch:9000/n7Jd50j1hYWhbwDBjN2r	3	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:22	2010-09-05 15:49:48	2010-09-05 17:38:06
https://wms211.cern.ch:9000/MTu3T8tUuTw-q3Z1EvHH	27	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:21	2010-09-05 15:50:12	2010-09-05 17:35:04
https://wms211.cern.ch:9000/lzgM04lpwXW_Rjai6kVON	29	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:22	2010-09-05 15:50:17	2010-09-05 18:22:20
https://wms211.cern.ch:9000/kSrPLGyuB6wW_Qr7dHFn	21	Successfull	0	D	1	FZK-LCG2	2010-09-05 15:45:21	2010-09-05 15:50:19	2010-09-05 18:20:37
https://wms211.cern.ch:9000/J_MWpFB_EDCqLUMkPOic	28	Successfull	0	U	1	FZK-LCG2	2010-09-05 15:45:21	2010-09-05 15:50:07	2010-09-05 17:32:57
https://wms211.cern.ch:9000/HsEtKlje-IJICxolxnbIA	5	Failed	8	U	1	FZK-LCG2	2010-09-05 15:45:21	2010-09-05 15:49:52	2010-09-05 15:52:48
https://wms211.cern.ch:9000/fr4h12b-kOidy1eGQTPN/	6	Successfull	0	D	3	FZK-LCG2	2010-09-05 21:25:37	2010-09-05 21:25:37	2010-09-05 23:41:28





## Historical view (Under development)

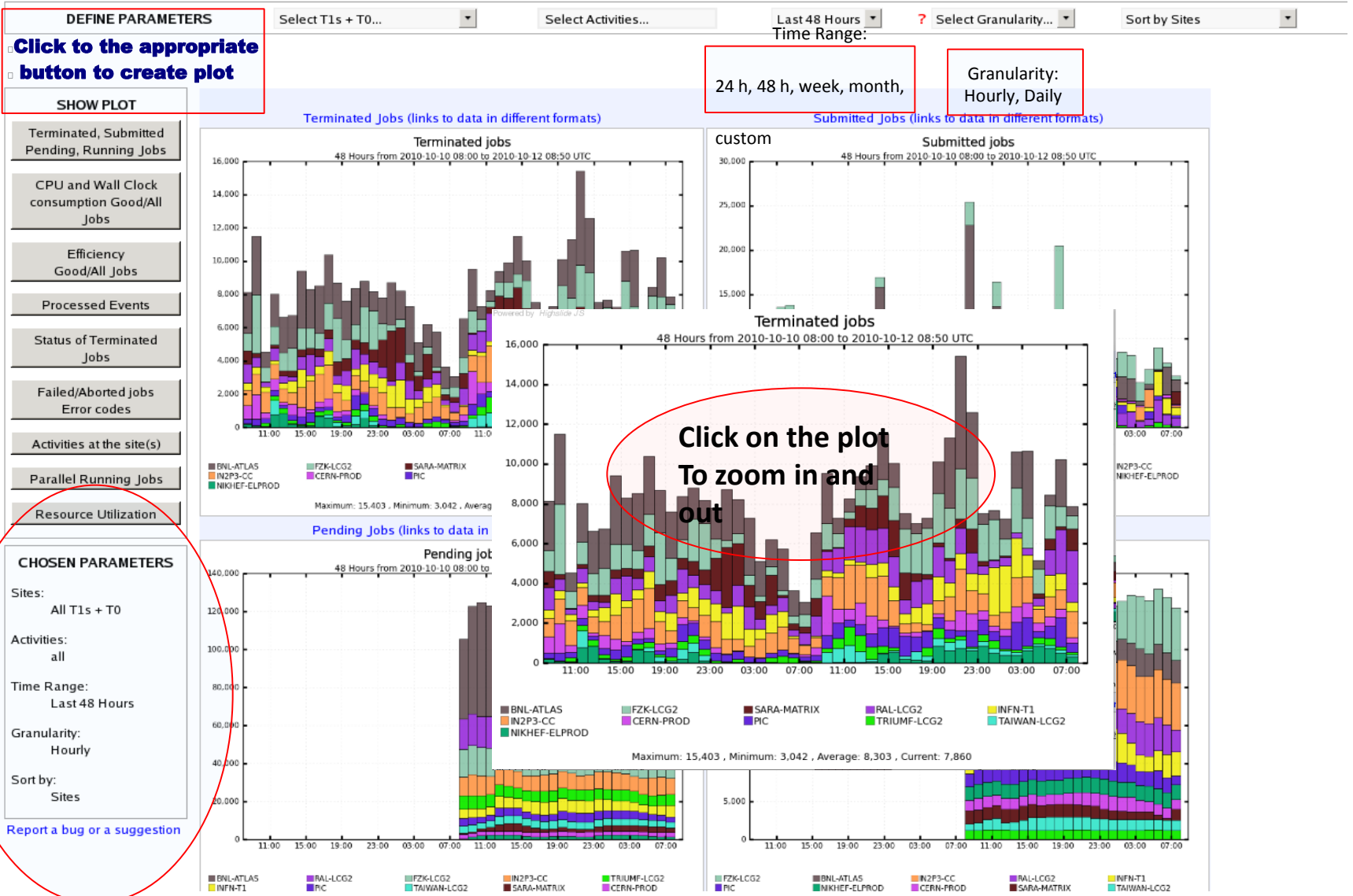
### Functionality

- Number of terminated, submitted, pending, running jobs
- Distribution of failed jobs by failure codes/reasons/categories
- CPU/Wall clock consumption, efficiency as cpu versus wallclock
- Processed events : number of processed events as a function of time, CPU/wallclock time spent on a single event
- Resource utilization, number of used slots, efficiency of site usage compared to pledges
- Activities at the site. Single site view with job processing metrics . Data transfer distributions will be added soon.
- All data can be filtered by site or activity. Filtering by cloud is coming soon
- Any time range can be selected
- Available granularities are hourly/daily/weekly/monthly
- All data is available in machine-readable format
- All plots are available via direct link



# Terminated, Submitted, Pending, Running Jobs

<http://dashb-atlas-job-dev.cern.ch/dashboard/request.py/dailysummary>





# Site Status Board



## Site Status for the ATLAS sites

v0.10.0\_rc3 [Login](#) [Found a bug?](#) [HELP](#)

Index

Expanded Table

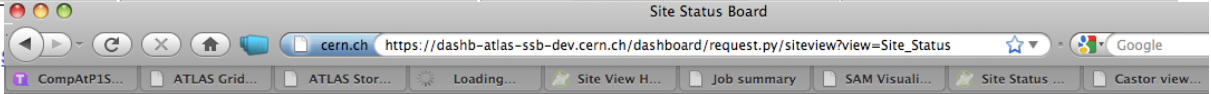
Gridmap

Alternative views

Admin

(last update at 16:17:45 09/27/2010 UTC)  
[Scheduled central services interventions](#)

Click on any of the headers to show/hide those sites



## Site Status for the ATLAS sites

v0.10.0\_rc20 [Logout](#)

Index

Expanded Table

Gridmap

Alternative views

Site\_Status

-- Instructions: [https://twiki.cern.ch/twiki/bin/view/Atlas/ADCSiteStatusBoard#Site\\_Status\\_View](https://twiki.cern.ch/twiki/bin/view/Atlas/ADCSiteStatusBoard#Site_Status_View) -- Contact the devs: [atlas-adc-ssb-devs@cern.ch](mailto:atlas-adc-ssb-devs@cern.ch)

Put the mouse over any column header to get the description of the column  
Clicking on a column header will display the evolution of that column over the last 24 hours

Site Name	panda_production site_name	panda_analysis site_name	DDM status for shifter	panda_production	panda analysis	Downtime	global site status (expand this column)
AGLT2	AGLT2	ANALY_AGLT2	online	online	online	0h	4/4 combined
Australia-ATLAS	Australia-ATLAS	ANALY_AUSTRALIA	online	online	online	0h	4/4 combined
BEIJING-LCG2	BEIJING	ANALY_BEIJING	online	online	online	0h	4/4 combined
BNL-ATLAS	BNL_ATLAS_1	ANALY_BNL_ATLAS_1	online	online	online	0h	4/4 combined
BU_ATLAS_Tier2	BU_ATLAS_Tier2o	ANALY_NET2	blacklisted	online	online	0h	4/4 combined
CA-ALBERTA-WESTGRID-T2	CA-ALBERTA-WESTGRID-T2	ANALY_ALBERTA-WG1	online	online	online	0h	4/4 combined
CA-SCINET-T2	CA-SCINET-T2	ANALY_SCINET	online	online	online	0h	4/4 combined
CA-VICTORIA-WESTGRID-T2	CA-VICTORIA-WESTGRID-T2	ANALY_VICTORIA-WG1	online	online	online	0h	4/4 combined
CERN-PROD	CERN-PROD	ANALY_CERN	online	online	online	0h	4/4 combined
CSCS-LCG2	CSCS-LCG2	ANALY_CSCS	online	online	online	0h	4/4 combined
CYFRONET-LCG2	CYFRONET-LCG2	ANALY_CYF	online	online	online	0h	4/4 combined
DESY-HH	DESY-HH	ANALY_DESY-HH	online	online	online	0h	4/4 combined
DESY-ZN	DESY-ZN	ANALY_DESY-ZN	online	online	online	0h	4/4 combined
FZK-LCG2	FZK-LCG2	ANALY_FZK	online	online	online	0h	4/4 combined
GRIF	n/a	n/a	n/a	online	online	0h	3/4 combined
GRIF-IRFU	n/a	n/a	online	n/a	n/a	n/a	1/4 combined
GRIF-LAL	n/a	n/a	online	n/a	n/a	n/a	1/4 combined
GRIF-LPNHE	n/a	n/a	online	n/a	n/a	n/a	1/4 combined
GoeGrid	GoeGrid	ANALY_GOEGRID	online	online	online	0h	4/4 combined
HEPHY-UIBK	HEPHY-UIBK	ANALY_HEPHY-UIBK	blacklisted	online	online	0h	4/4 combined
IFIC-LCG2	IFIC	ANALY_IFIC	online	online	online	0h	4/4 combined

- ✓ [IN2P3-CC](#)
- ✓ [SARA-MATRIX](#)
- ✓ [BNL-ATLAS](#)
- ✓ [INFN-T1](#)
- ✓ [TRIUMF-LCG](#)

- ✓ [AGLT2](#)
- ✓ [CA-ALBERTA-WESTGRID-T2](#)
- ✓ [CYFRONET-LCG2](#)
- ✓ [GoeGrid](#)
- ✓ [IN2P3-LAPP](#)
- ✓ [INFN-NAPOLI-ATLAS](#)
- ✓ [LIP-Coimbra](#)
- ✓ [MWT2\\_IU](#)
- [RO-02-NIPNE](#)
- ✓ [RU-Protvino-IHEP](#)
- ✓ [Australia-ATLA](#)
- ✓ [CA-SCINET-T2](#)
- ✓ [DESY-HH](#)
- ✓ [HEPHY-UIBK](#)
- ✓ [IN2P3-LPC](#)
- ✓ [INFN-ROMA1](#)
- ✓ [LIP-Lisbon](#)
- ✓ [MWT2\\_UC](#)
- ✓ [RO-07-NIPNE](#)
- ✓ [SFU-LCG2](#)

Show/Hide Legend

- ✓ The site is ok
- ✓ At least one of the critical columns is in warning
- At least one of the critical columns fails. The size represents how many hours the site has been in error (less than 12 hours, between 12 and 72, or more than 72)
- The site is in maintenance. This means that at least one of the critical columns reports maintenance color (brown)
- Under investigation. A ticket has been submitted to follow up this problem

✓ [UKI-LT2-RHUL](#)

## Shifters, Sites and Experts



# AGIS - ATLAS Grid Downtime Calendar

ATLAS Grid Information System

http://atlas-agis-dev.cern.ch/agis/calendar/?show\_T1=1&show\_T2=1

ATLAS Grid Information System

**Control:**

- AGIS main page
- Downtimes
- Topology management
- Services management
- Subscription management
- Activity management
- Other
- User management

Downtime Legend: T0,T1: OUTAGE (orange), T0,T1: AT\_RISK (red), T2s: OUTAGE (blue), T2s: AT\_RISK (light blue), NO\_RISK (green)

Show only downtimes:  T0,T1: OUTAGE,  T0,T1: AT\_RISK,  T2s: OUTAGE,  T2s: AT\_RISK,  NO\_RISK

Today **September 2010** Print Week Month Agenda

Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1 Sep	2	3	4	5
SFU-LCG2	(14:05) NCG-INGRID-PT (18:00) SARA-MATRIX 22:17 TAIWAN-LCG2	(04:40) TAIWAN-LCG2 17:00 CA-ALBERTA-WE	(13:47) TAIWAN-LCG2 04:40 TAIWAN-LCG2 07:01 IN2P3-LPSC 10:00 UKI-LT2-QMUL <a href="#">+3 more</a>	(12:02) IN2P3-LPSC 14:00 UNI-SIEGEN-HEP	(12:00) IN2P3-LPSC 16:00 JINR-LCG2	
6	7	8	9	10	11	12
IN2P3-LPSC	(08:59) UKI-SCOTGRID-GLASGOW (07:00) CSCS-LCG2	(10:40) UKI-SCOTGRID-GLASGOW	(20:02) WEIZMANN-LCG2 07:01 IN2P3-LPSC	(09:39) INFN-FRASCATI	(10:13) RO-07-NIPNE (15:00) UKI-SOUTHGRID-RALPP	07:14 UKI-LT2-QMUL 08:33 TECHNION-HEP
13	14	15	16	17	18	19
RO-07-NIPNE	(08:00) UKI-SCOTGRID-ECDF 05:30 RAL-LCG2	(00:01) UKI-NORTHGRID-LANCS-HEP 08:00 UKI-LT2-QMUL	(14:41) UNI-DORTMUND (15:40) UNI-FREIBURG	(10:10) IN2P3-CPPM (15:48) GOEGRID	(16:00) UKI-SCOTGRID-DURHAM	
20	21	22	23	24	25	26
UNI-FREIBURG	(11:56) PSNC (14:00) GRIF-IRFU (14:00) GRIF-LAL (14:00) GRIF-LPNHE	(16:10) UNI-FREIBURG 10:47 NCG-INGRID-PT	10:30 PIC 08:00 NDGF-T1	(11:10) RO-07-NIPNE	(14:24) NDGF-T1	
27	28	29	30	1 Oct	2	3
PSNC	(06:00) UKI-NORTHGRID-LIV-HEP (10:00) INFN-FRASCATI	00:00 BEIJING-LCG2 09:00 UKI-NORTHGRID		(00:00) UNI-DORTMUND		
08:00 UAM-LCG2 09:30 NIKHEF-ELPROD 14:23 INFN-T1						



# Central Services Monitoring

- provides current status and the time history of various computing services components


**Service Level Status overview**

Home Search KPIs Tags Admin Documentation Help

## ATLAS Distributed Computing Central Services 19 Oct 2010 Tue 01:40:04

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### ADC Central Services

availability:  [\(more\)](#)

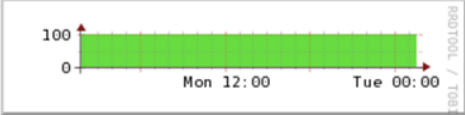
percentage: 100%

status: **available**

this service consists of:

-  ATLAS\_DDM\_VOBOXES
-  ATLAS\_CC
-  ATLAS\_DDM\_Tracker
-  ATLAS\_DDM\_Deletion
-  ATLAS-AMI

availability in the last 24 hours [\(more\)](#):



100  
0  
Mon 12:00 Tue 00:00

### Additional information

full name: **ATLAS Distributed Computing Central Services**

short name: ADC Central Services

group: IT-GS

site: CERN


---

email: [atlas-project-adc-operations@cern.ch](mailto:atlas-project-adc-operations@cern.ch)

web site: <https://twiki.cern.c...>

alarms page: <https://prod-grid-lo...>


---

manager: **Alessandro Di Girolamo** 


### Availability update

last update: 01:33:50, 19 Oct 2010  
(6 minutes ago)

expires after: 77 minutes

 [rss feed with status changes](#)

### Part of (subservice of):

-  Services for ATLAS

### Admin

[admin tools](#)



# ADC DDM VOBOXES

Service Level Status overview

Home Search KPIs Tags Admin Documentation Help

**ss\_tier0(atlas-SS10)** 19 Oct 2010 Tue 01:56:25

---

**Service information**

full name: **ss\_tier0(atlas-SS10)**  
 group: IT-ES  
 site: CERN

email: [atlas-adc-expert@cern.ch](mailto:atlas-adc-expert@cern.ch)

service managers: Alessandro Di Girolamo   
 Fernando Harald Barreiro Megino

Part of (subservice of):  
 ATLAS\_DDM\_VOBOXES

Subservices  
 none / not declared

Clusters, subclusters and nodes  
 none / not declared

Depends on  
 none / not declared

Depended on by  
 none / not declared

---

**Service availability (more)**

availability:

percentage: 100%

availability info: 0 DQ2 restart in 30min period  
 0 CRITICAL in 30min period  
 Running on node atlas-SS10

status: **available**

last update: 01:44:02, 19 Oct 2010 (12 minutes ago)  
 expires after: 47 minutes

rss feed with status changes

how is availability measured or estimated:  
 Availability 50%: num of CRITICAL in the last 30min exceeds 3  
 Availability 30%: DQ2 report is older than 33 min  
 Availability 0%: num of DQ2\_restart in the last 30min exceeds 3

availability in the last 24 hours (more):

**Additional service information (more)**

service notes:  
<https://twiki.cern.ch...>  
<http://lemonweb.cern...>

ARDACallbacks\_Number: 0  
 Files\_Number: 3  
 Files\_State\_COPIED\_Number: 0  
 Files\_State\_COPYING\_Number: 3  
 Files\_State\_COPY\_FAILED\_Number: 0  
 Files\_State\_NEW\_Number: 0  
 Files\_State\_QUEUED\_Number: 0  
 Files\_State\_REGISTER\_FAILED\_Number: 0  
 Files\_State\_STAGED\_Number: 0  
 Files\_State\_STAGE\_FAILED\_Number: 0  
 Files\_State\_STAGING\_Number: 0  
 Files\_State\_DONE\_LastHour: 779

DQ2\_restarts in 30 min period: 0  
 ERROR in 30 min period: 0  
 CRITICAL in 30 min period: 0  
 VALIDATE in 30 min period: 137

Internal information:  
 sql DB queries on file status

Fabric monitoring sensors(i.e. lemon)

---

Admin  
 admin tools

SLS by CERN IT/CF SLS.Support@cern.ch



# Storage space monitor

Service Level Status overview

Home Search KPIs Tags Admin Documentation Help

ATLAS Storage Space 21 Oct 2010 Thu 01:00:23

### ATLAS Storage Space

availability:   
(more)  
percentage: 6%  
status: **available**

this service consists of:

- BNL-OSG2 Storage space
- CERN-PROD Storage space
- FZK-LCG2 Storage space
- IN2P3-CC Storage space
- INFN-T1 Storage space
- NDGF-T1 Storage space
- NIKHEF-ELPROD Storage space
- PIC Storage space
- RAL-LCG2 Storage space
- SARA-MATRIX Storage space
- TAIWAN-LCG2 Storage space
- TRIUMF-LCG2 Storage space
- ATLASDATADISK Storage space
- ATLASDATATAPE Storage space
- ATLASMCTAPE Storage space
- ATLASMCDISK Storage space
- ATLAS CALIBDISK Storage Space

availability in the last 24 hours (more):

### Additional information

full name: **ATLAS Storage Space**  
group: IT-GS  
site: CERN

service managers: **Alessandro Di Girolamo**   
Fernando Harald Barreiro Megino

### Availability update

last update: 00:47:04, 21 Oct 2010  
(13 minutes ago)  
expires after: 780 minutes

[rss feed with status changes](#)

how is availability measured or estimated:

N.B.  
IMPORTANT  
The current availabilities and thresholds in this Storage Space tree are for testing purposes.

### Part of (subservice of):

- Worldwide LCG
- Services for ATLAS

### Admin

[admin tools](#)





# LCG File Catalog

http://sfs.cern.ch/sfs/service.php?id=LFC\_ATLAS

Most Visited Red Hat, Inc. Red Hat Network Support Shop Products ADC Training


JobSummary gridmsg101.cern.ch : Queues SLS Service Level Status overview Переводчик Google

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## Grid LFC (LCG File Catalog) for ATLAS

17 Sep 2010 Fri 17:32:49



### Grid LFC ATLAS

availability:  [\(more\)](#)

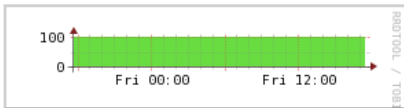
percentage: 100%

status: **available**

this service consists of:

-  Grid LFC ATLAS central
-  Grid LFC ATLAS local

availability in the last 24 hours [\(more\)](#):



100  
0  
Fri 00:00 Fri 12:00

### Additional information


full name: **Grid LFC (LCG File Catalog) for ATLAS**

short name: Grid LFC ATLAS

group: IT-PES

site: CERN


email: [LFC.Support@cern.ch](mailto:LFC.Support@cern.ch)

manager: **Philippe Defert** 



### Availability update

last update: 17:15:25, 17 Sep 2010  
(17 minutes ago)

expires after: 60 minutes

 [rss feed with status changes](#)

### Part of (subservice of):

-   Services for ATLAS
-   Grid LFC

### Admin

[admin tools](#)

SLS by CERN IT/CF SLS.Support@cern.ch

- central catalog is used to store pointers to either the site or the actual physical location of a files in the grid
- local catalog per site which stores mappings from logical to physical names for all ATLAS files at that particular site.



## Where is this monitoring information?

- <http://dashb-atlas-data.cern.ch/dashboard/request.py/site>
- <http://dashb-atlas-ssb.cern.ch/dashboard/request.py/siteviewhome>
- <http://dashb-atlas-ssb.cern.ch/dashboard/request.py/siteview?view=Site>Status>
- [http://atlas-agis-dev.cern.ch/agis/calendar/?show\\_T1=1&showT2=1](http://atlas-agis-dev.cern.ch/agis/calendar/?show_T1=1&showT2=1)
- <http://atladcops.cern.ch:8000/drmon/ftmon.html>
- <http://atladcops.cern.ch:8000/drmon/crmon.html>
- <http://dashboard10.cern.ch/dashboard/request.py/jobsummary>
- <http://dashboard10.cern.ch/index.html>
- <http://dashb-atlas-job-dev.cern.ch/dashboard/request.py/dailysummary>
- <http://sls.cern.ch/sls/service.php?id=atlas-SS10>
- [http://sls.cern.ch/sls/service.php?id=CERN-PROD\\_ATLASDATADISK](http://sls.cern.ch/sls/service.php?id=CERN-PROD_ATLASDATADISK)
- [http://sls.cern.ch/sls/service.php?id=storage\\_space](http://sls.cern.ch/sls/service.php?id=storage_space)
- <http://dashb-atlas-prodsys.cern.ch/dashboard/request.py/overview>
- <http://atlas.web.cern.ch/Atlas/tzero/prod1/monitoring/>
- <http://hammercloud.cern.ch/atlas>
- <http://dashb-atlas-sam.cern.ch/dashboard/request.py/latestresultssmry>
- ... and some more

What about aggregation of monitoring information?



## Conclusions

- Monitoring of experiment's infrastructure usage gives the most relevant indication of the quality of the infrastructure
- Monitoring applications allow to facilitate the operational tasks and to ensure the steady improvement of the infrastructure quality
- Usage of the system is steadily growing, functionality is being extended
- Monitoring is under active development in ADC. We're converging on common solutions
  - E.g. the technology cocktail
    - New analysis dashboard and future PanDA monitoring will use common technology "cocktail"(Django, JSON, jQuery...)
  - Message passing with MSG (ActiveMQ) and STOMP protocol.

## Announcement

- Full day monitoring workshop next SW&C week (29 Nov-3 Dec at CERN)