

FTS monitoring work

WLCG service reliability workshop

November 2007

Alexander Uzhinskiy
Andrey Nechaevskiy



Outline

- Monitoring strategy
 - Prototype monitoring tool
 - (Prototype) operational procedures
-



New FTS error classification

- ❑ Current version of FTS 2.0 has reasonable error categorization (much improved over 1.5) – you see it in the current error messages
- ❑ New dev version of FTS 2.0 has better categorization
 - No schema update – the current FTS 2.0 already has the necessary schema

Exposing differing levels of detail:

- ❑ **Scope:** basic, determines where the error occurred
 - SOURCE, DESTINATION, TRANSFER
 - ❑ **Category:** over 30 error classification codes
 - GRIDFTP_ERROR, DEST_PREP_SRM_ERROR, FILE_EXISTS, NO_SPACE_LEFT, TRANSFER_TIMEOUT
 - ❑ **Phase:** determines when in the file lifecycle the error occurred
 - e.g. ALLOCATION , TRANSFER_PREPARATION, TRANSFER, TRANSFER_FINALIZATION
 - ❑ **Message:** the error message detail – and pattern matching on the error message (>350 messages so far)

 - ❑ <https://twiki.cern.ch/twiki/bin/view/EGEE/FTSErrorClassification>
-



General strategy

- All our monitoring components should agree on these classifications
 - Based on a detailed study of all the errors seen over the last 9 months on CERN-PROD
 - These classifications are being stored in the DB
 - Summarizations and their visualizations should make use of these, as necessary
 - For seeing where the problems really are
 - Differing levels of detail
 - Increasing levels of detail should be available if you want to drill down
 - Even with reasonable categories, you (often) have to pattern match the errors to distinguish problems
-



General strategy

- Different people want different views
 - Try to generate different summaries from same data
 - The 'raw' data is being stored in the DB
 - Generated summaries for the different views should be stored in the DB (and then exposed however)
 - As much as possible, the (CPU) processing for these summaries should be in the DB
 - Make more use of DB's CPU
 - PL/SQL based Oracle analytics is rather efficient: this is what Oracle is for
 - But ... still prototyping 😊
-



FTS service monitoring

- ❑ **Different types of monitoring are being prototyped for different purposes**
 - ❑ [Summary statistics](#) (FTS report) Daily and weekly summary statistics – good for tracking general situation but can't be use in real time monitoring.
 - ❑ [Snapshot summary](#) Snapshot of current status – statistics about current transfers. Is useful to get general view of the situation
 - ❑ [Current transfers](#) Status of the actual transfers submitted during the last hour. Good for tracking certain class of problems, but there is no summarization.
 - ❑ [Channel settings](#) Current channel settings on the tier-0 service - provide the same information which you can get from the CLI using glite-transfer- interface but in an easier way.
 - ❑ [Agent status](#) Status and location of channel agent daemons – same as above but provides information about agent daemons
 - ❑ [Log mining monitoring](#) Detailed log-mining tool – later section.
-



FTS monitoring prototype

- Tracking, summarisation and visualization of problems
- Summarisation data is persistent (i.e. history is available)
- 1st prototype implementation: Perl+Shell -> MySQL -> PHP+XHTML
 - Development version uses PL/SQL -> Oracle
 - The same local visualisation: PHP + XHTML
- Uses standardised error categorisation
- Detail available: more than 350 known 'detail' errors (pattern matching)
- Views: Flexible setting in selecting channel, error, time period and result form.
- Presentation result as tables, graphics or charts

Monitoring system - Spider - Mozilla Firefox

http://pcitgd26.cern.ch/channel.php

other links: FTS report GRIDVIEW IT Services FTS home FTS TWiki

Monitoring tools

Select channel: all, ASCC-CERN, BNL-CERN, CERN-ASCC

Select time options: last info, last 24 h, period

From: 1' 2007, To: 1' 2007

result form: analytic

Submit

Statistic tools

Top 10 mistakes last day, Top 10 mistakes of the week

Top by: number, count

From: 1' 2007, To: 1' 2007

show

Channels number - 36, Known mistakes number - 381, Largest number of error on channel - CERN-PIC

Mistakes monitoring tools

Select channel: all, ASCC-CERN, BNL-CERN, CERN-ASCC

Select mistake: 1, 2, 3, 4

Select time options: last info, last 24 h, period

From: 1' 2007, To: 1' 2007

Graphic mode? Submit

Report tools

Castor weekly report: 100 threshold level, Submit

Select channel: all, ASCC-CERN, BNL-CERN, CERN-ASCC

From: 1' 2007, To: 1' 2007

Sites report: 20 threshold level, Submit

mistakes description | known mistakes date base

ASCC - CERN																			
date	time	all	last	fts	gibus	user	top	doach	castor	t_doach	s_doach	t_castor	s_castor	dpm	t_dpm	s_dpm	t_sm	s_sm	arm
2007-11-15	11:35:18	157	21	0	2	0	0	0	151	0	0	1	0	0	0	0	1	0	2
BNL - CERN																			

Done

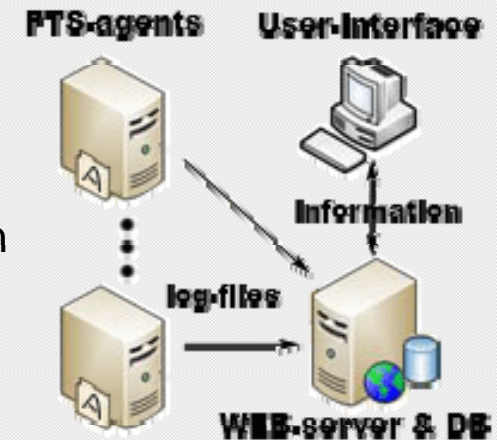


Prototype: current architecture

□ 1st prototype used log-file analysis

Procedure:

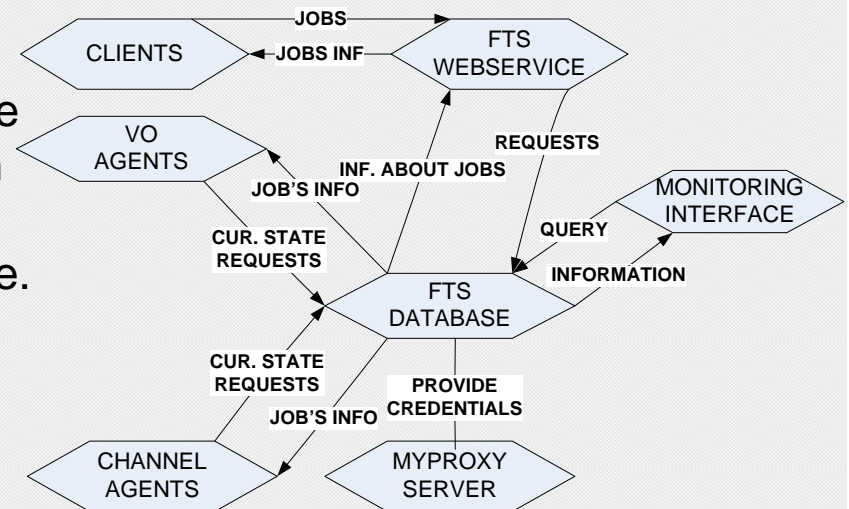
every hour the log files are copied to the web-server where they're parsed by scripts. All the summary information is written to the DB and is accessible through the web-interface.



□ Current prototype gets the information from the DB

Procedure:

every so often, a PL/SQL job runs summarising the information in the DB (which is the same as that in the logs). All the summary information is written to the DB and is accessible through the web-interface. Selected summary views may be broadcast externally using the mechanisms defined by the WLCG monitoring group.





1st monitoring prototype

1. Main module provides information about individual errors or grouped by category on all FTS channels. Different time views: latest, last 24 hours, fixed period

ASCC-CERN																																															
Date	Time	al	unrec	failed	lost	unknown	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
2007-11-20	10:34:47	474	0	474	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CERN-BNL																																																	
Date	Time	al	unrec	failed	lost	unknown	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
2007-11-20	10:34:49	646	0	646	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CERN-FNAL																																																	
Date	Time	al	unrec	failed	lost	unknown	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
2007-11-20	10:34:49	29	0	29	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

CERN-RTTBK																																																	
Date	Time	al	unrec	failed	lost	unknown	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
2007-11-20	10:34:51	666	0	666	146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
451 Local resource failure: malloc: Cannot allocate memory																																																	

CERN-INTP3																																																	
Date	Time	al	unrec	failed	lost	unknown	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	
2007-11-20	10:35:01	50	0	50	452	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

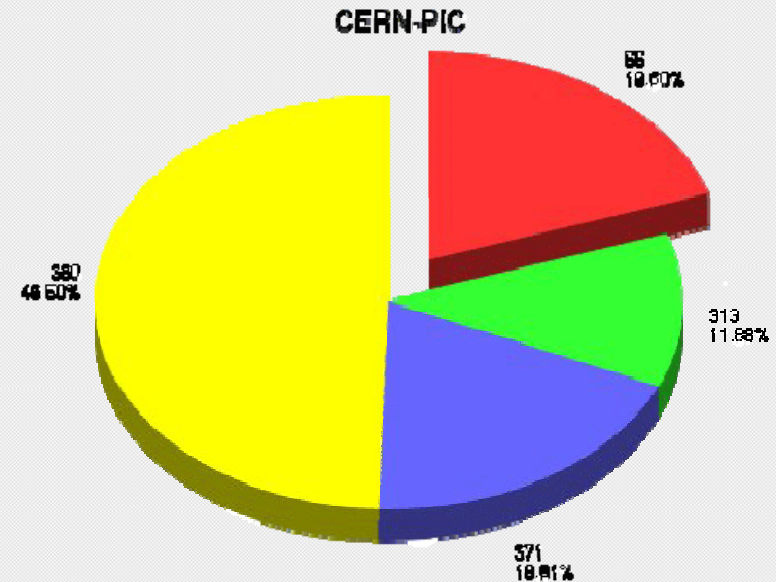
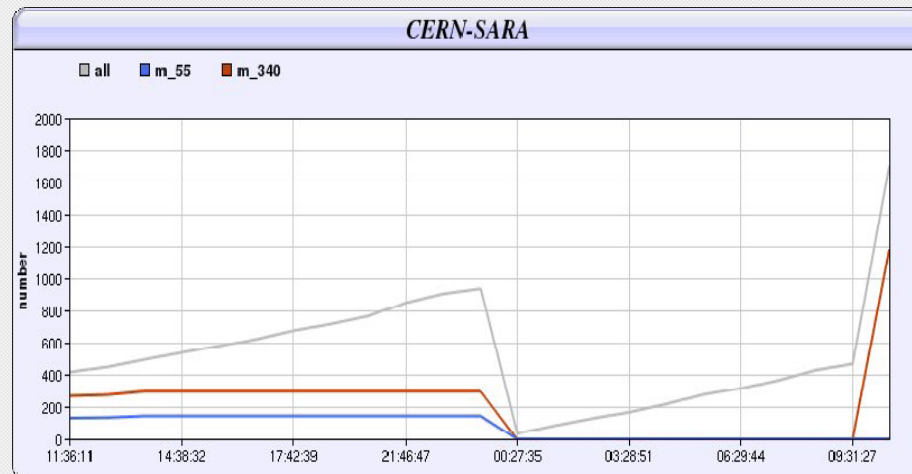
CERN-IN2P3																			
date	time	all	lost	fts	gdbus	user	tcp	dcach	castor	t_dcach	s_dcach	t_castor	s_castor	dpm	t_dpm	s_dpm	t_srm	s_srm	srm
2007-11-20	10:35:01	4501	161	0	0	90	0	0	0	0	0	1	3945	0	0	0	92	372	1

Channel	33	36	65	69	75	76	77	79	81	156	169	198	285	286	301	344	368	373	380
CERN-IN2P3	0	0	0	0	296	0	0	0	0	0	0	0	0	0	3	0	0	0	3646



1st monitoring prototype

2. Error monitoring module allows you to filter and get information about only the most interesting errors





1st monitoring prototype

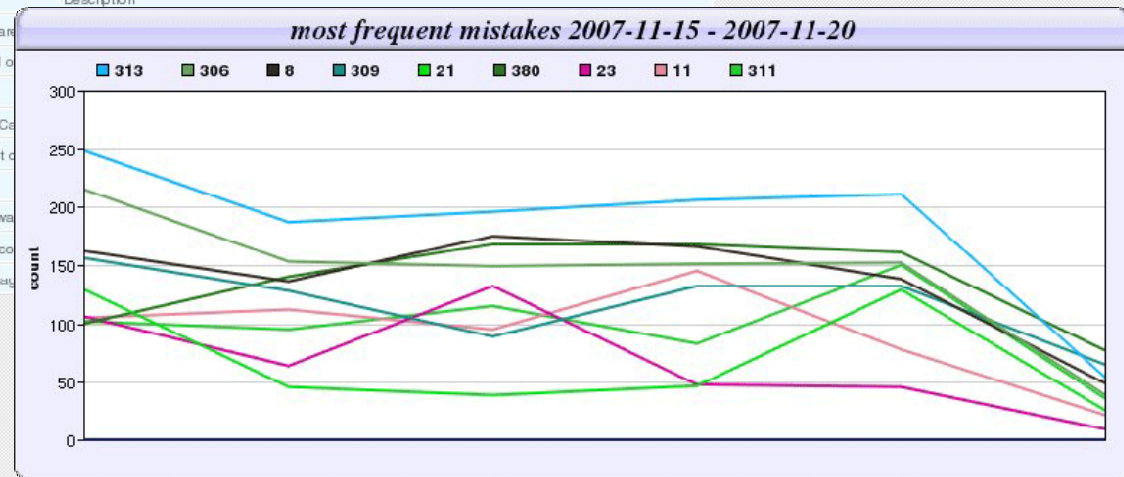
3. Statistics. Define the channel with biggest number of errors. Ratings of errors by frequency or total quantity on channels.

Top 10 (number)

Place	Error_N	Number	Description
1	380	1048892	Final error on SOURCE during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface.c:2162 Unknown error 17: 8 (errno=0 sermo=0)
2	313	307608	SOURCE during PREPARATION phase: [REQUEST_TIMEOUT] failed to prepare source file in 180 seconds
3	309	248662	DESTINATION during PREPARATION phase: [CONNECTION] failed to contact on remote SRM [srm]. Givin' up after 3 tries
4	306	180681	failed to prepare Destination file in 180 seconds
5	90	140075	FINAL-SRM_SOURCE: Failed on SRM get: Failed SRM get on [address] call. Error is RequestFileStatus#:[] failed with error:[at Wed Feb 21 12:18:44 CET 2007 sate Failed : file not found : path [path] not found
6	8	121226	the server sent an error response: 425 425 Can't open data connection. timed out() failed.
7	55	119986	the server sent an error response: 425 425 Cannot open port: java.lang.Exception: Pool manager error: Best pool <[name]> too high : [number]
8	75	116101	SOURCE during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface.c:2162 Required tape segments are no: all accessible (errno=0, sermo=0)
9	311	97840	TRANSFER during TRANSFER phase: [TRANSFER_TIMEOUT] gridftp_copy_wait: Connection timed out

Top 10 (count)

Place	Error_N	Count	Description
1	313	1470	SOURCE during PREPARATION phase: [REQUEST_TIMEOUT] failed to prepare
2	8	1220	the server sent an error response: 425 425 Can't open data connection. timed o
3	306	1214	failed to prepare Destination file in 180 seconds
4	380	1165	Final error on SOURCE during PREPARATION phase: [GENERAL_FAILURE] Ca
5	309	905	DESTINATION during PREPARATION phase: [CONNECTION] failed to contact o
6	11	873	an end-of-file was reached
7	311	864	TRANSFER during TRANSFER phase: [TRANSFER_TIMEOUT] gridftp_copy_wa
8	362	721	TRANSFER during TRANSFER phase: [TRANSFER_TIMEOUT] globus_gass_co
9	21	655	DESTINATION during PREPARATION phase: [GENERAL_FAILURE] CastorStag





1st monitoring prototype

4. Reports. e.g. Top errors on T1-sites, weekly Tier-0 Castor report



CERN-IN2P3 threshold level 200 (2007-11-10 - 2007-11-20)

all	average	max	min	m_id	m_example	total
3885	353	1746	0	7	425 Cannot open port: java.lang.Exception: Pool request timed out	54950



CERN-INFN threshold level 200 (2007-11-10 - 2007-11-20)

all	average	max	min	m_id	m_example	total
4388	399	2198	0	21	DESTINATION during PREPARATION phase: [GENERAL_FAILURE] CastorStageInterface.c:2507 Device or resource busy (errno=0, sermo=0)	11609
2794	254	2791	0	321	DESTINATION during PREPARATION phase: [GENERAL_FAILURE] destination file failed on the SRM with error [SRM_FAILURE]	11609



CERN-RAL threshold level 200 (2007-11-10 - 2007-11-20)

all	average	max	min	m_id	m_example	total
2589	235	662	0	32	SOURCE during PREPARATION phase: [INVALID_PATH] specified file(s) does not exist	31605
5701	518	2097	0	309	DESTINATION during PREPARATION phase: [CONNECTION] failed to contact on remote SRM [srm]. Givin' up after 3 tries	31605



CERN-SARA threshold level 200 (2007-11-10 - 2007-11-20)

all	average	max	min	m_id	m_example	total
5263	478	4242	0	309	DESTINATION during PREPARATION phase: [CONNECTION] failed to contact on remote SRM [srm]. Givin' up after 3 tries	16372



GRIDKA-CERN threshold level 200 (2007-11-10 - 2007-11-20)

all	average	max	min	m_id	m_example	total
5307	482	1107	0	313	SOURCE during PREPARATION phase: [REQUEST_TIMEOUT] failed to prepare source file in 180 seconds	7460



Current prototype

- New version of system is more integrated into the FTS schema, so we don't have to parse log files, and has extra features:
 - 2 dimensions of error representation – error categories and specific errors
 - Views for 4 different users group (FTS operations, Storage site admins, VO admins, Management)
 - 5 monitored objects
 - channels, sites, host, errors, VOs
 - General information
 - Advanced admin panel
 - Alarm mechanism
 - ...
-



Current prototype

4. Main interface, alarms, general information, objects, options.

Monitoring system - Spider. Information about VO - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://lxb2012.cern.ch/vo.php?vo%5B%5D=1&sl=sl1&data_ot_d=77777&data_ot_m=11&data_o

SF.net Red Hat, Inc. Гоммеух/Галерея/n... Red Hat Network Support Delete Shop Products Training ImportImport

other links: Transfer Operations FTS report GRIDVIEW IT Services FTS home FTS TWiki Admin CP

Information about:
Channels Sites Hosts Mistakes VOs Alarms

Monitoring tools

Select VO: all lhcb dteam

Select time options: last info last 24 h period

From: - 1' 200; Till: 2' 1' 200;

Information about: General situation Concrete errors Categories

Separate by: channels sites

result form: tables

Submit

Statistic tools

Select VO: all lhcb dteam

Enter size of TOP: 5

Select time options: last day period

From: - 1' 200; Till: 2' 1' 200;

Information about: Channels Sites

Submit

category/mistakes list

ALARMS

On channel - CERN-CERN vo - dteam has more then 9 of 1 - errors! time - 14:56:03

On channel - CERN-GRIDKA for vo - all, all - errors increase more then on 8 from the last check; time: 13:56:02 - 14:56:03

For VO - dteam % of failer more then 80! [% - 84]; time - 14:56:03

2007-11-25 14:56:03 dteam general information

succed	failed	%failed	source	destination	transfer
7	38	84	10	28	0

W3C XHTML 1.0

Copyright © 2007 Zmey

Done



Current prototype

4. Admin interface – easy way to manage objects and change settings!

Monitoring system - Spider. Admin page - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

http://lxb2012.cern.ch/admin/index.php?acc=all_set

SF.net Red Hat, Inc. Gommeux/Галерея/n... Red Hat Network Support Delete Shop Products Training ImportImport

other links: Transfer Operations FTS report GRIDVIEW IT Services FTS home FTS TWiki

Monitoring page Main page last script raning time - 14:56:03

Channels

- CERN-CERN
- CERN-INDIACMS
- CERN-INFN
- CERN-GRIDKA

add edit delete find Submit

Sites

- CERN-PROD
- SARA-V22
- FZK-PPS
- NDGF-T1

add edit delete find Submit

Hosts

- lxfra3004.cern.ch
- ant5.grid.sara.nl
- 101-101-103-e.gridka.de
- lxfra3001.cern.ch

add edit delete find Submit

VOs

- lhcb
- dteam

add edit delete find Submit

MISTAKES

Add new mistake manually Find new mistakes in DB Show all mistakes Show agent mistakes

SETTINGS

Edit settings Alarm settings Add alarm settings

ID - 21	O_TYPE - channe	A_TYPE -	VO - dteam	M_ID - 1	LEVEL - 9	edit	delete	Submit
ID - 43	O_TYPE - channe	A_TYPE -	VO - All	M_ID - 0	LEVEL - 8	edit	delete	Submit
ID - 1	O_TYPE - VO	A_TYPE -	VO - All	M_ID - 1	LEVEL - 80	edit	delete	Submit

If M-id = 0 it means all mistake
A_TYPE: 1 - if amount > level; 2 - if amount(t)-amount(t-1)>level (increase from the last time); 3 - if % of failure > level (allowed only for channel or VO)

W3C XHTML 1.0

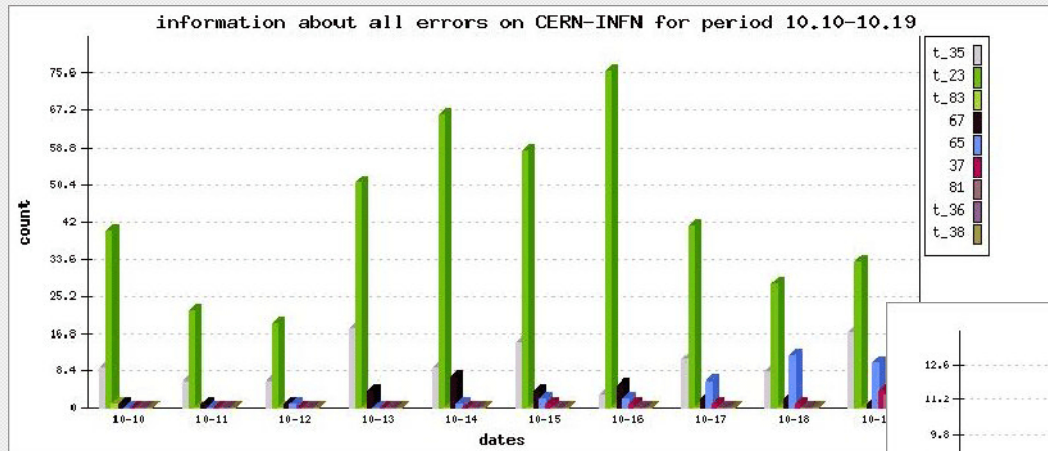
Copyright © 2007 Zmey

Done

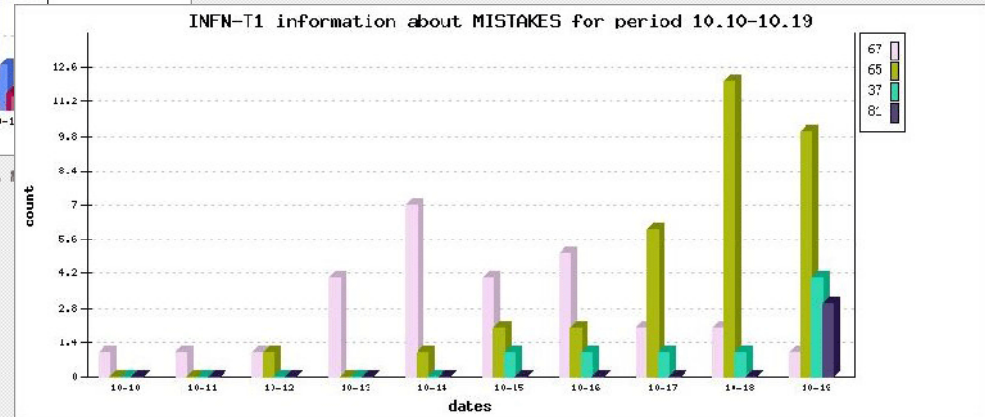


Current prototype

4. Cross-module links – possibility to drill down. Categories or errors – you choose!



Get info about source site | Get info about destination



Get information about hosts

CERN-PROD information about categories for 11.24

	GENERAL_FAILURE	INVALID_PATH	REQUEST_FAILURE
2007-11-24	3	1	3

CERN-PROD information about errors for 11.24

	168	1	33	67
2007-11-24	2	1	3	1



Current prototype

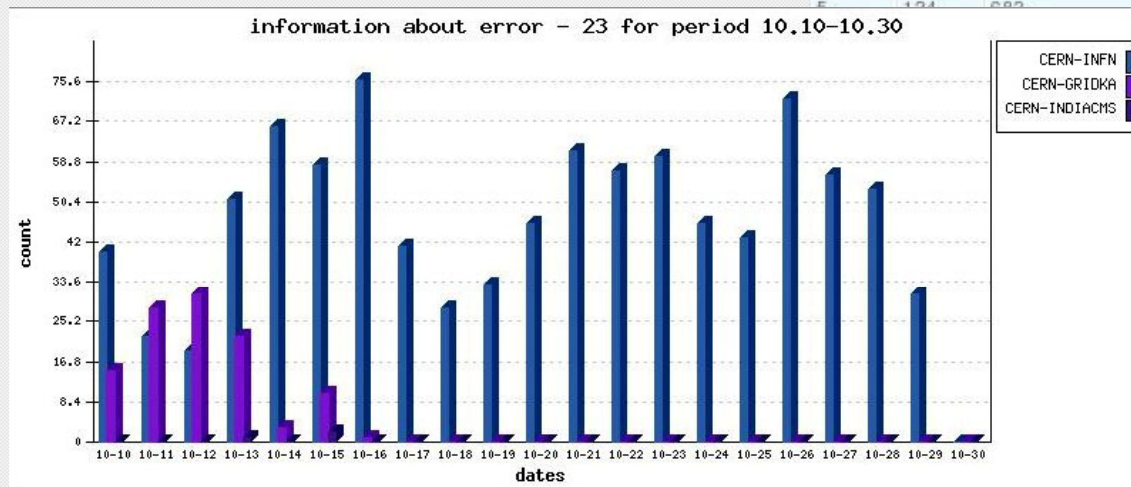
4. We maintain functionality of previous version, but add extra views!

TOP 3 channels with biggest amounts of error 01.10 – 25.11

place	volume	channels
1	104990	CERN-INDIACMS
2	1924	CERN-GRIDKA
3	1743	CERN-INFN

TOP 10 errors for 01.10 - 25.11 sorted by total amount

place	error_id	number	error sample
1	41	60955	failed to contact on remote SRM [srm]. Given up after 3 tries
2	125	27691	Unable to map request to space for policy TRANSFER_WAN
3	123	17394	No such file or directory
4	23	1100	421 Timeout (900 seconds): closing control connection
5	124	692	426 Transfer aborted, closing connection :failed in recvEBlock
			425 Can't open data connection. timed out() failed.
			failed to prepare Destination file in 180 seconds
			Request aborted
			gridftp_copy_wait: Connection timed out
			specified file(s) does not exist





Other tools

- (Several) other tools exist
 - Developed by T1 sites
 - Some will be shown today
 - They collect information in various ways
 - They cover different parts of the 'service monitoring' areas discussed
 - Different visualisations

 - Question (for discussion) of how to integrate these ?
-



Debugging procedures

- **Have worked out a daily procedure at Tier-0:** tracking current situation during the day (e.g. the 'latest info' option) helps us to identify new problems on FTS channels
 - Then follow up: e.g. GGUS ticket could be opened or we could try contact with responsible person (but we have only several emails)
 - **'Top errors'** help us get a overall view on general situation, and also point out major problems
 - SOURCE during PREPARATION phase: [REQUEST_TIMEOUT] failed to prepare source file in 180 seconds
 - DESTINATION during PREPARATION phase: [REQUEST_TIMEOUT] failed to prepare Destination file in 180 seconds
 - the server sent an error response: 425 425 Can't open data connection. timed out() failed
 - SOURCE during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface.c:2162 Required tape segments are not all accessible
 - DESTINATION during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface.c:2507 Device or resource busy
 - By working with monitoring tools and following a daily procedure we can get notion about the evolution of certain errors, tendencies and dependences
 - **Reporting tools** provide us information about errors on specific site, so 'standard' questions can be answered e.g. reports for Joint Operations Meeting
-



Operations procedures

TransferOperationsDailyLog < LCG < TWiki - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

https://twiki.cern.ch/twiki/bin/view/LCG/TransferOperationsDailyLog

SF.net Red Hat, Inc. Gommeux/Γanepes/n... Red Hat Network Support Delete Shop Products Training ImportImport

CERN Webs

15 November 2007

- 1 tickets opened, 2 moved, 1 solved

29085 - (2007.11.15) FTS transfer - SRM problem on site PIC

vo: atlas, lhcb

[309] FINAL.DESTINATION: failed to contact on remote SRM [https://srm-disk.pic.es:8443/srm/managerv1]. Givin' up after 3 tries

28984 - (2007.11.13) Transfer problems between sites CERN-PROD and FZK-LCG2 SOLVED

vo: cms

[11] an end-of-file was reached (possibly the destination disk is full)

[12] 451 Local resource failure: malloc: Cannot allocate memory

Reason: Since the update to dCache1.8 last week we see problems with the SRMSpaceManager and with pnb. Tuesday afternoon SRM didn't work anymore and a restart of SRM was needed. We are working on these problems together with the dCache developers.

28546 - (2007.11.01) SRM problem on site TAIWAN-LCG2

vo: cms, atlas

[315] SOURCE during PREPARATION phase: [CONNECTION] service timeout during [SRMGet].

14 November 2007

- 0 tickets opened, 2 moved, 0 solved

- Transfer ranging from 300 to 540 Mbit/s, averaging around 360MB/s.
- The most active sites are IN2P3, FNAL and ASCO
- Mostly traffic from CMS and LHC Atlas

twiki.cern.ch

TransferOperationsWeeklyReports < LCG < TWiki - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

https://twiki.cern.ch/twiki/bin/view/LCG/TransferOperationsWeeklyReports

SF.net Red Hat, Inc. Gommeux/Γanepes/n... Red Hat Network Support Delete Shop Products Training ImportImport

Transfer Service Weekly Reports

This is the weekly report for the Joint Operations Meeting, tracking open issues on the WLCG transfer service.

The report should include a summary of transfer activity per experiment and per site. It should also summarise the weekly issues that have been causing problems on the transfer service.

12 Nov 2007

2 tickets have been opened and 0 have been moved from last week.

1 ticket has been SOLVED OK

[TransferOperationsWeeklyCastor - Report about Castor's errors](#)

[Report about IN2P3, INFN and FZK sites](#)

Focussing on a few tickets:

28546 - (2007.11.01) SRM problem on site TAIWAN-LCG2

Frequently errors:

[313] SOURCE during PREPARATION phase: [REQUEST_TIMEOUT] failed to prepare source file in 180 seconds

[8] the server sent an error response: 425 425 Can't open data connection. timed out() failed.

[306] failed to prepare Destination file in 180 seconds

[311] TRANSFER during TRANSFER phase: [TRANSFER_TIMEOUT] gridftp_copy_wait: Connection timed out

[21] DESTINATION during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface?.c:2507 Device or resource busy (errno=0, sermo=0)

twiki.cern.ch

1. Daily log – tracking of current problems and open issues
2. Daily log Archive – history of situation on channels from February '07 till present time
3. Weekly Report – summary report for the Joint Operations Meeting
4. Weekly Tier-0 – summary of issues noticed on the Castor Tier-0 service

TransferOperationsWeeklyCastor < LCG < TWiki - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

https://twiki.cern.ch/twiki/bin/view/LCG/TransferOperationsWeeklyCastor

SF.net Red Hat, Inc. Gommeux/Γanepes/n... Red Hat Network Support Delete Shop Products Training ImportImport

Transfer Operations Weekly Castor

This is the weekly report for problems with Castor.

It should summarise the weekly issues that have been causing Castor problems.

16 Nov 2007

report 10.11 - 16.11

CERN-ALL transfers:

[75] SOURCE during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface?.c:2162 Required tape segments are not all accessible (errno=0, sermo=0) av. number - 5324 av. max - 3265 (CERN-TRIUMF)

[110] the server sent an error response: 550 550 [address]: Connection refused av. number - 800 av. max - 566 (CERN-RAL)

[111] the server sent an error response: 550 550 [address]Connection reset by peer. av. number - 721 av. max - 721 (CERN-RAL)

[116] a system call failed (Connection reset by peer) av. number - 277 av. max - 198 (CERN-NDGF)

[313] SOURCE during PREPARATION phase: [REQUEST_TIMEOUT] failed to prepare source file in 180 seconds av. number - 4501 av. max - 2789 (CERN-GRIDKA)

[315] SOURCE during PREPARATION phase: [CONNECTION] service timeout during [SrmGet] av. number - 1130 av. max - 1129 (CERN-GRIDKA)

[380] Final error on SOURCE during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface?.c:2162 Unknown error 1718 (errno=0, sermo=0) av. number - 1309 av. max - 1309 (CERN-BNL)

ALL-CERN transfers:

[309] DESTINATION during PREPARATION phase: [CONNECTION] failed to contact on remote SRM [srm]. Givin' up after 3 tries av. number - 644 av. max - 326 (PIC-CERN)

[349] DESTINATION during PREPARATION phase: [GENERAL_FAILURE] CastorStagerInterface?.c:2507 Permission denied (errno=, sermo=) number - 120 max - 120 (STAR-CERN)

twiki.cern.ch



Summary

- Strategy is to quickly prototype tools
 - Production versions (ideally) should move into DB

 - We understand the information we have in the schema
 - and some of the summaries, views and reports we'd like to make from it – need input for more!

 - CERN and T1 sites developed some prototype tools following this model

 - We're working out and testing a set of operational procedures based on these tools

 - We need input for more!
-