

CDF Status

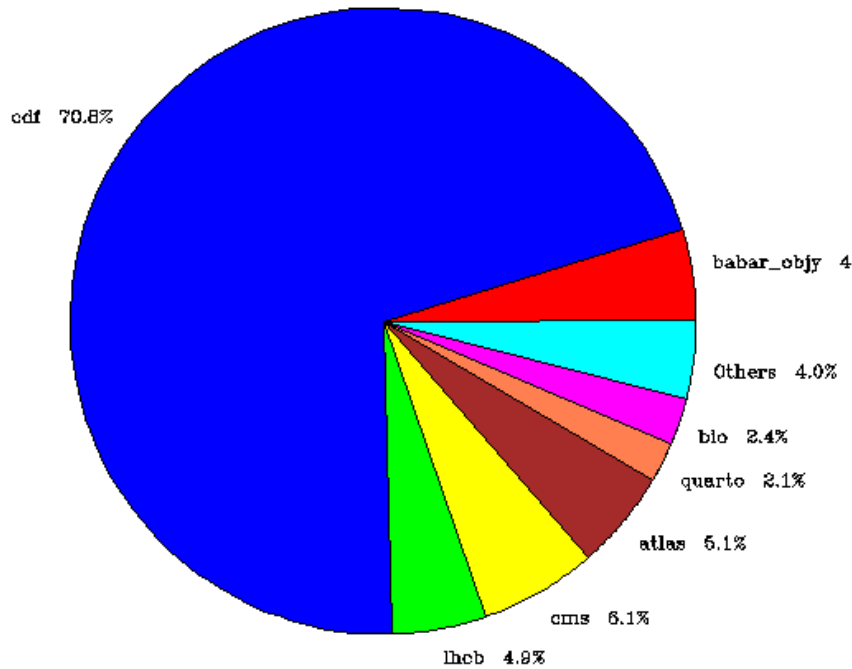
Donatella Lucchesi
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INFN Padova

Report on:

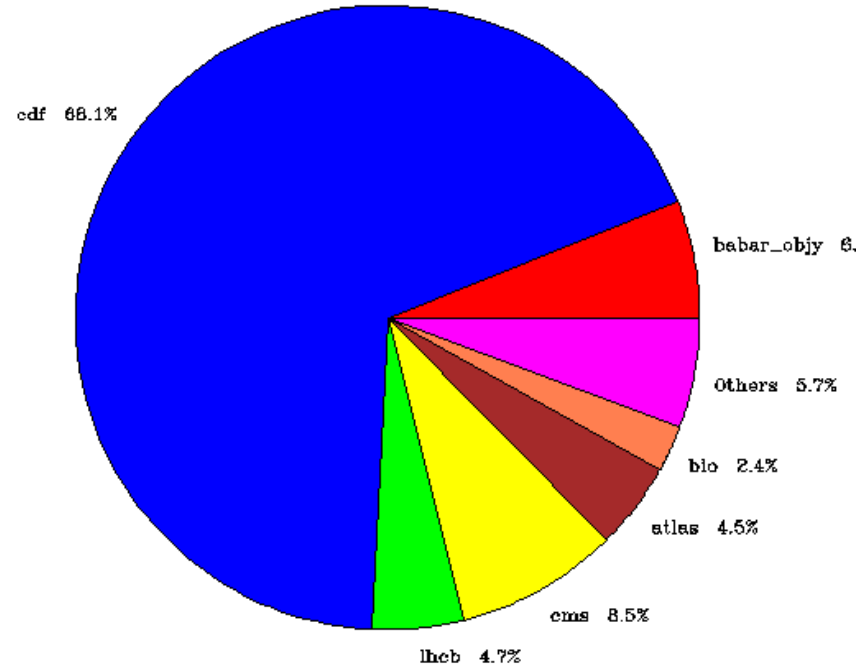
- Tier1 usage
- lcgcaf seen by GRID
- CDF issues

Last month Tier 1 usage

CPU time (hours)

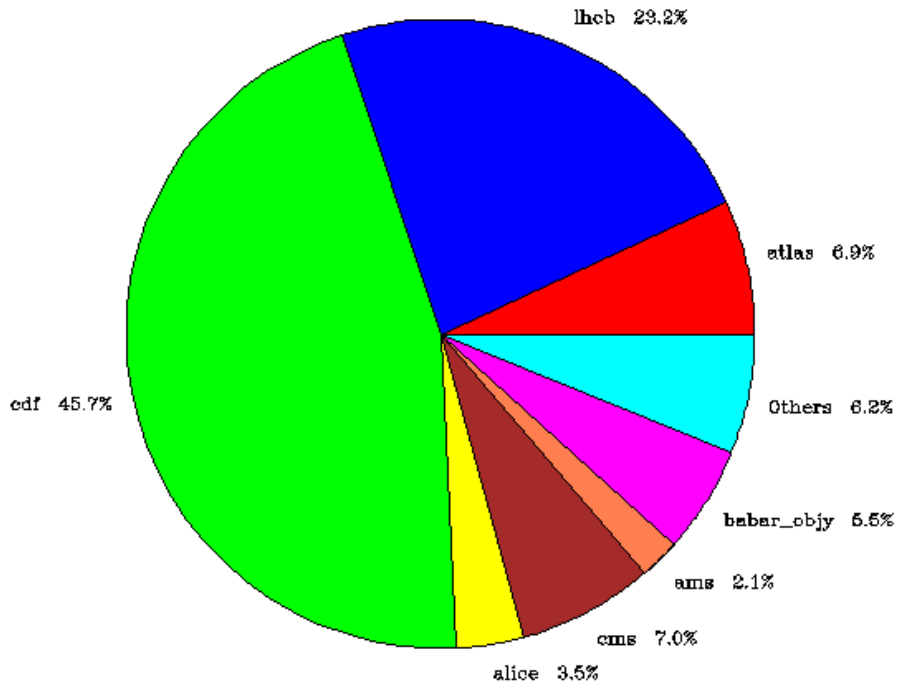


Total time (hours)

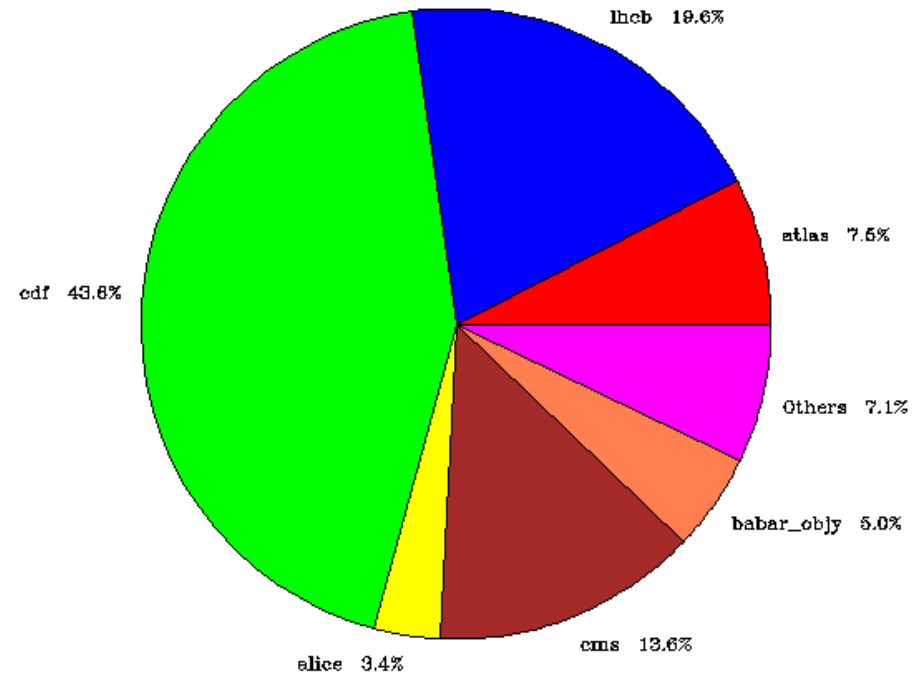


Last year Tier 1 usage

CPU time (hours)

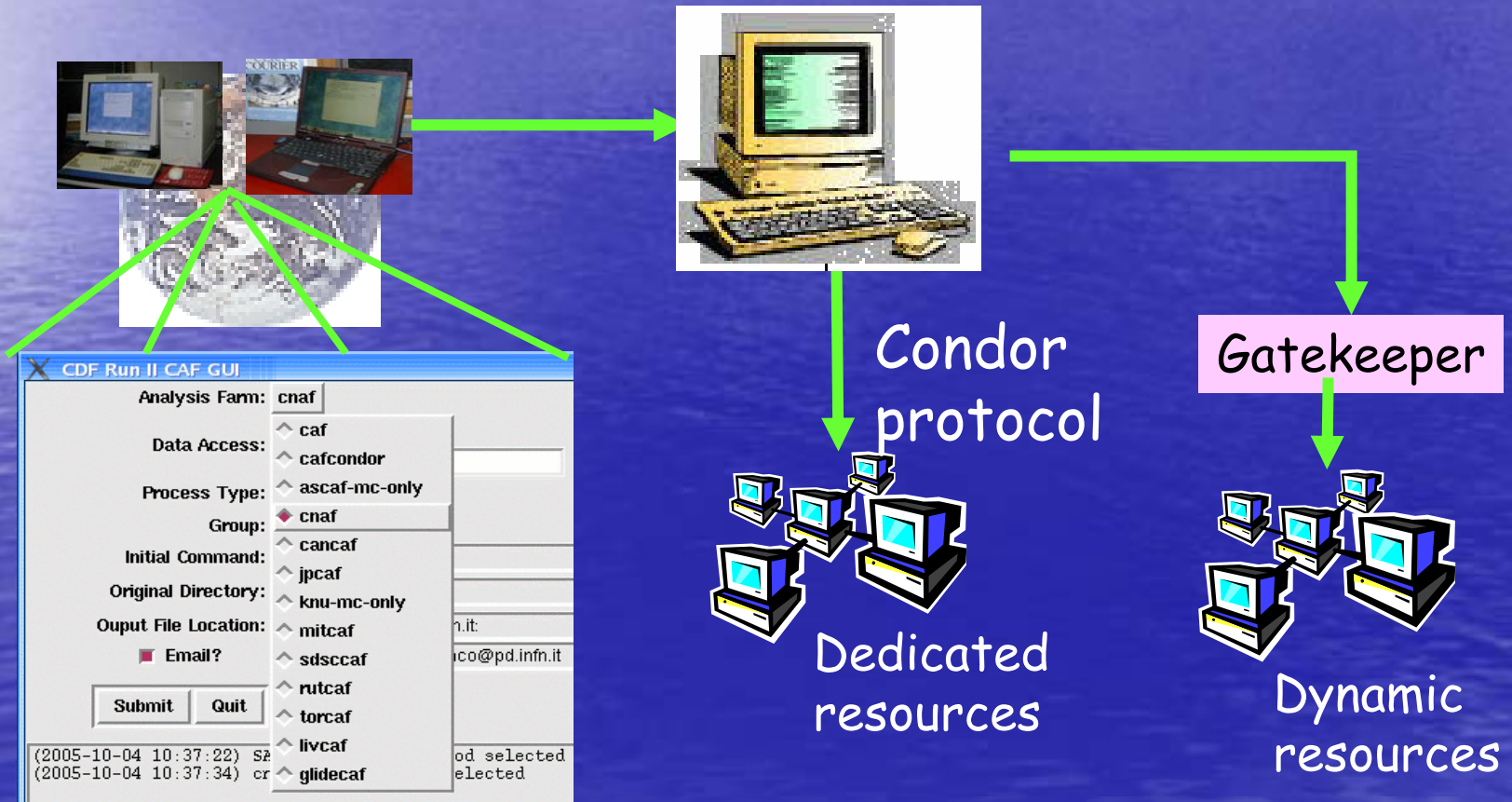


Total time (hours)

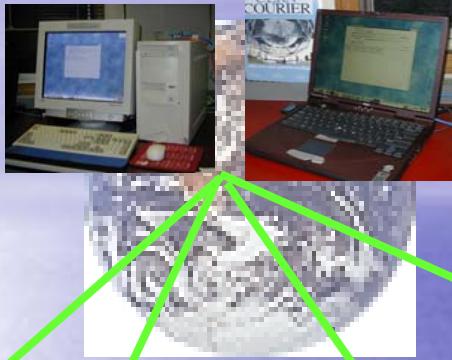


Current CDF access to Tier 1 Resources

- We use the glide-in, an "opportunistic" use of resources. Developed by S. Sarkar with I. Sfiligoi help
- It is stable and it has high performances
- Used for Monte Carlo production and data analysis (CNAF)



Full GRID: "lcgcaf"



Secure connection
via Kerberos



Head node \cong
User Interface

CDF Run II CAF GUI

Analysis Farm: **cnaf**

Data Access: cnaf
 cafcondor

Process Type: ascaf-mc-only
 cnaf

Group: cancaf
 jpcaf

Initial Command: knu-mc-only
 mitcaf

Original Directory: sdscacf
 rutcaf

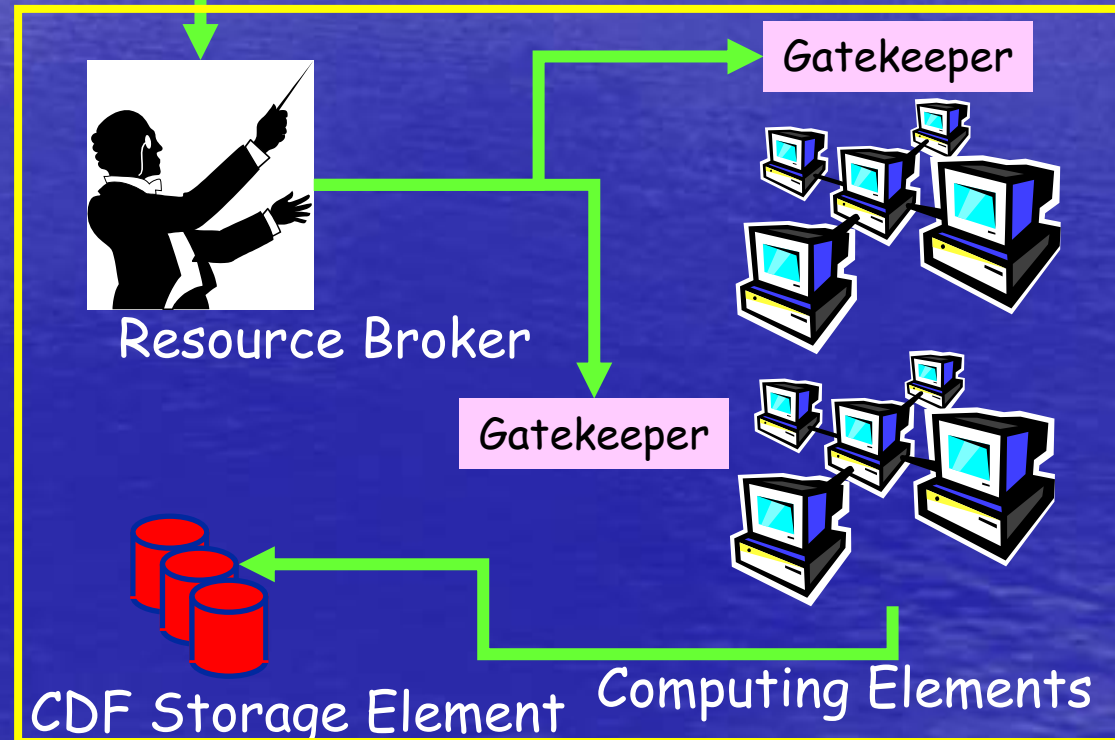
Output File Location: torcaf
 livcaf

Email?

glidecaf

(2005-10-04 10:37:22) s2
(2005-10-04 10:37:34) cr

od selected
ected

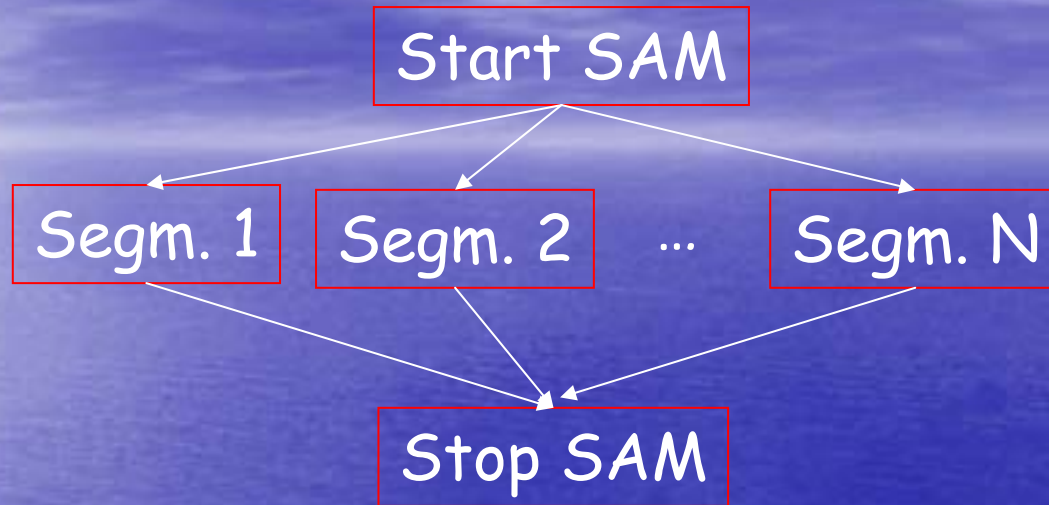


General requirements and characteristics:

- VOMS servers: voms.cnaf.infn.it (production) or cert-voms.cnaf.infn.it (pre-prod./cert.)
- Resource Broker: gLite 1.4.1 via WMproxy
- AFS needed on all CE nodes
- The FNAL CA need to be fully supported. It seems that it has to be installed by hand each time....at least for Europe

Submission

RB gLite 1.4.1 via WMproxy. A simple DAG with $N \sim 1000$:



- SAM = the CDF catalog
- No automatic bookkeeping, no method to resubmit failed jobs, user by hand.
- No automatic merge of output.
- Summary of jobs outcomes: an email sent to users with success/fails, input/output files, N events obtained from LB query (glite-wms-job-logging-info, glite-job-status)

Catalogs

- SAM is used as catalog for data and right now also as disk space manager but really painful.
January 18-19en a CDF workshop at FNAL on "Data Handling at remote site".
Under discussion also: SAM/SRM interface.
Need to collaborate also with CNAF to make it CASTOR compliant
- Calibration database is centralized at FNAL and cached at CNAF via Frontier. No problems till now.

Monitoring

Job monitoring: **JobMon** (VDT, official supported by OSG) based on Clarens server framework

Clarens server

Register and outbound connection

WN1

WNm

...

WNn

GSI web-services framework

Client

Run on CDF UI

User command:
JobMon job-n_segment-m "ls -ltr"

Monitoring

CDF jobs summary: web monitoring.

Every 5 minutes queries to LB services and information caching. If RB does not work no monitoring!

lcg CAFnew Web Monitor [History][Analyze]

lcg CAFnew overview [History]

System Info

Total VMs	Claimed	Load=0	Load<30	Assigned	Free	VM Load	Load
744	744	0	0	0	0	402	372

Total CAFMarks	Claimed CAFMarks	Free CAFMarks	VM Load CAFMarks	Avg. CAFMarks/VM
248.0k	248.0k	0.0k	134.2k	333.0

/hour	Started sections	Finished sections	Submitted jobs	Terminated jobs
Last 20 mins	0.00	0.00	0.00	0.00
Last 120 mins	0.00	0.00	0.00	0.00

Sections by Accounting Group(ordered by AcctGroup)

Accounting Group	Quota	Running	Assigned	Idle	Wait	Held	Completed	Removed	Total	Jobs
common	-	744	0	0	273	0	0	0	1017	22
Total (1)		744	0	0	273	0	0	0	1017	22

User Sections (ordered by User)

User	Running	Assigned	Idle	Wait	Held	Completed	Removed	Total	Jobs
delli	743	0	0	273	0	0	0	1016	21

Updated: Jan 11 15:46:00

Windows taskbar: start, grid-workshop-06, Microsoft PowerPoint ..., blah Web Monitor - M..., 4:15 PM

Monitoring

blah Web Monitor - Mozilla

lcg CAFnew Web Monitor [[History](#) | [Analyze](#)]

[Overview](#)
[System status](#)
[Completed jobs](#)
[Jobs status](#)

By accounting group:

- [common](#)

By user:

- [delli](#)
- [jeans](#)

By length:

- [short](#)
- [medium](#)
- [long](#)

By Input Source:

- [Unknown](#)

Updated: Jan 11 15:46:00

lcg CAFnew jobs for user delli [Status][Long]

Job	Priority	User	Accounting User	Length	Submit Time	Total	Runn ing	Assi gned	Idle	Wait	Held	Comp leted	Remo ved	Fail ed	Trou bled	Err. RtC	Bac up
904	10.00/999	delli	common.delli	long	Dec 29 16:10	300	287	0	0	13	0	0	0	0	0	0	0
905	10.00/999	delli	common.delli	long	Dec 30 09:32	300	57	0	0	243	0	0	0	0	0	0	0
906	10.00/999	delli	common.delli	long	Jan 03 16:26	100	100	0	0	0	0	0	0	0	0	0	0
907	10.00/999	delli	common.delli	long	Jan 04 10:58	100	99	0	0	1	0	0	0	0	0	0	0
908	10.00/999	delli	common.delli	long	Jan 04 11:14	100	100	0	0	0	0	0	0	0	0	0	0
909	10.00/999	delli	common.delli	long	Jan 04 11:22	100	100	0	0	0	0	0	0	0	0	0	0
911	10.00/999	delli	common.delli	long	Jan 09 12:03	1	0	0	0	1	0	0	0	0	0	0	0
912	10.00/999	delli	common.delli	long	Jan 09 12:04	1	0	0	0	1	0	0	0	0	0	0	0
913	10.00/999	delli	common.delli	long	Jan 09 12:05	1	0	0	0	1	0	0	0	0	0	0	0
914	10.00/999	delli	common.delli	long	Jan 09 12:05	1	0	0	0	1	0	0	0	0	0	0	0
915	10.00/999	delli	common.delli	long	Jan 09 12:05	1	0	0	0	1	0	0	0	0	0	0	0

start | grid-workshop-06 | Microsoft PowerPoint ... | blah Web Monitor - M... | 4:16 PM

User and group policies

- Currently nothing!
- Queues and disk space useful for CDF -> GPBOX
- History and priority per user?

GRID Performances for CDF

From November up to now 60 dag of 100-300 segments.
+ recovery of ~40 segments

- 20 unknown status. Bug on LB, "status done" never register, jobs appear still running.
- Now we can not submit, jobs remain pending.
- Of the remain 40 dag->1200 segments:
 - 97% done success
 - 2.0% aborted
 - 1.0% done failed

Many specifics errors: ~30% of them not useful
(i.e. CE condor error)

CDF need to run every day.

This has been achieved with the glide-in by submitting to the gatekeeper.

The submission via the WMS (gLite) it is too unstable to be used in production for the moment.