

NAF for LHCb status report

- Complementary to large-scale batch processing
- Provides interactive nodes
- Effective & short analysis cycle
- Debugging of (analysis) code
- Improve collaborative development of analyses



NAF important asset for physics
output of German LHCb groups

Content

- NAF for LHCb concept
- Typical LHCb analysis schema
- Status
- Requests



Difference between GRID and NAF for LHCb

■ GRID

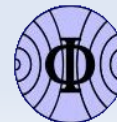
- Batch environment
- Large scale tasks
- Well defined and debugged jobs
- Currently only official software

■ NAF

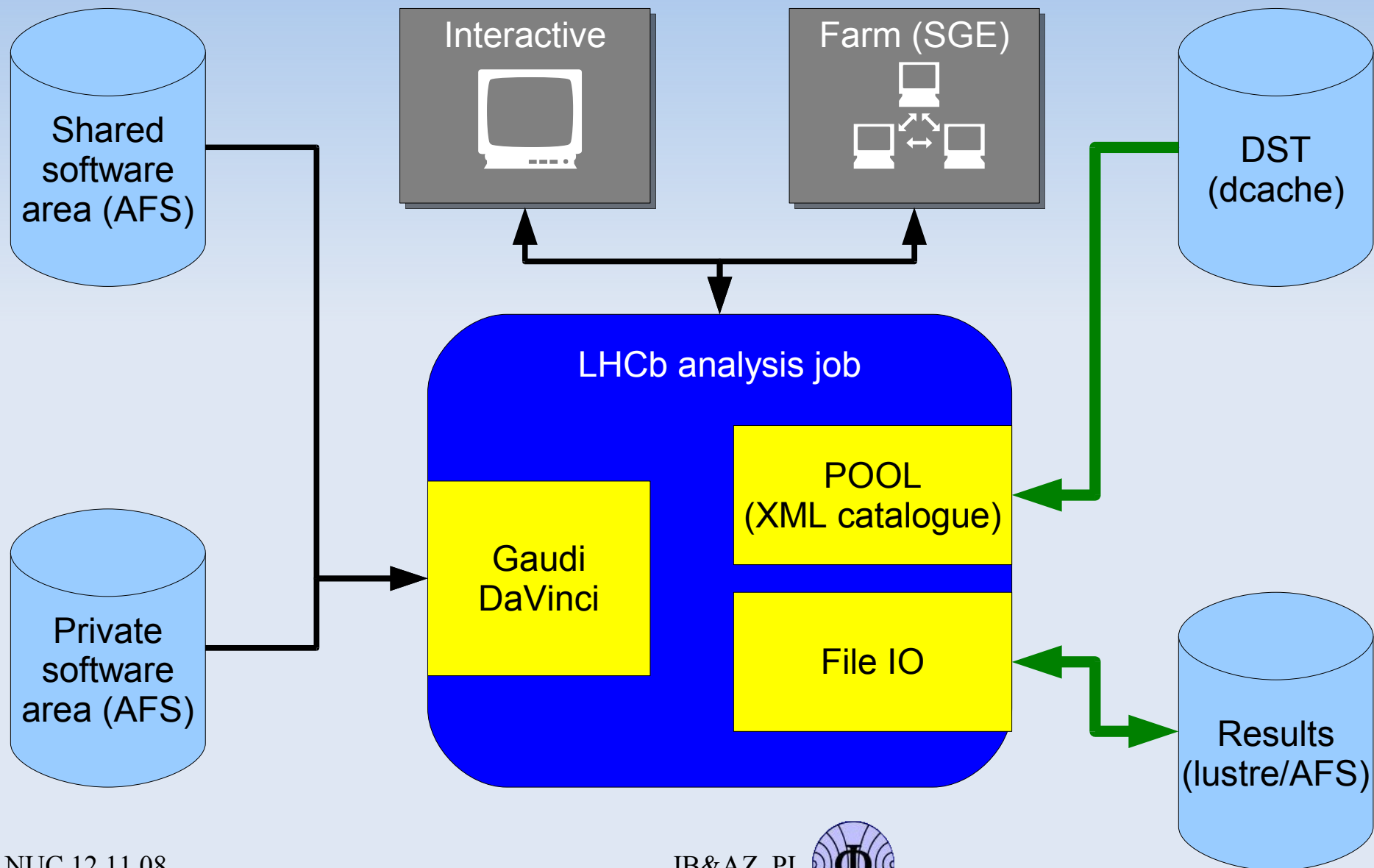
- Interactive and batch environment
- Small to middle tasks
- Development and debugging
- User controllable software

Responsibilities

- All system hardware and software: NAF
- User support: us
- Data and software management: users



Typical LHCb analysis job



Current status

Web Portal for registration open since Oct. 20th

Since then:

- 11 registered users, from
- 3 German LHCb groups
- Environment is tested with typical LHCb analysis jobs (interactive and in batch mode)
- Data and software management tools are online and working

- Automatic login
- Simplified registration
- Documentation
- Forum and blogs
- Access to management tools

NAF support for LHCB

Home » NAF Alexey Zhelezov

Grid Certificate

Submitted by admin on 27 October, 2008 - 19:10

To get Grid Certificate in Germany, please visit <https://gridka-ca-sec.fzk.de> and fill the form under "Erstantrag Persönliches Zertifikat" page.

You can get more info about Grid Certificate CA under <https://gridka-ca-sec.fzk.de>.

IMPORTANT: you will have to use the same computer to finally get your certificate after

NAF Control

- Data
- Software

Navigation

- Blogs
- Forums
- Polls
- Books

Certificate Login

[Switch to secured site.](#)

You need valid GRID certificate. You will be automatically registered.

- Export the certificate to file (~/.globus/mycert.p12) https://gridka-ca-sec.fzk.de/help/zertifikate_exportieren.php
- Convert it to PEM form https://gridka-ca-sec.fzk.de/help/zertifikate_und_schluesel_konvertiere...

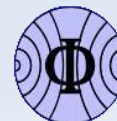
Please give sensible access rights to your certificate files, e.g.:

```
chmod 400 mycert.p12 use
chmod 444 usercert.pem
```

[User guide](#) | [About](#)

Search this site:

Active forum topics



Data Management

Configuration: DC06 - phys-v2-lumi2

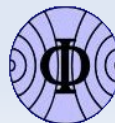
Event type: 10000000 - incl_b

Datatype	Dbase	Step 3	Step 2	Step 1	Events	Size	NAF		Your events
							Events	Size/State	
DIGI 1	v30r14		Boole - v12r10	Gauss - v25r10	850840	232.9 Gb	998	281 Mb	300
SIM 1	v30r14			Gauss - v25r10	3982	2.9 Gb	-	-	-
DST 1	v30r14	Brunel - v30r17	Boole - v12r10	Gauss - v25r10	851837	301.6 Gb	3985	1.4 Gb	3000
Combined									
SIM 1+DIGI 1	v30r14		Boole - v12r10	Gauss - v25r10	1995	2.0 Gb	-	-	-
DIGI 1+DST 1	v30r14	Brunel - v30r17	Boole - v12r10	Gauss - v25r10	850840	534.1 Gb	998	1.7 Gb	-
SIM 1+DIGI 1+DST 1	v30r14	Brunel - v30r17	Boole - v12r10	Gauss - v25r10	1995	2.7 Gb	-	-	-

Request/lock/unlock:

DIGI 1#v30r14#DIGI 1#Boole - v12r10#SIM 1#Gauss - v25r10 1000 Request/Lock Get .opts Get .xml

- Request replication of LHCb data from Bookkeeping to NAF SE
- POOL XML catalogues and option files generation (ready to use on NAF)



Software management

- Direct selection of required software from all currently available
- Transparent installation into shared area

Please select the package: User: Alexey Zhelezov

DAVINCI		
Version	Platform	Status
v20r3	slc4_ia32_gcc34_dbg	Request to install
	slc4_ia32_gcc34	Request to install
	slc4_amd64_gcc34_dbg	Request to install
	slc4_amd64_gcc34	Installed
v20r2	slc4_ia32_gcc34_dbg	Request to install
	slc4_ia32_gcc34	Request to install
	slc4_amd64_gcc34_dbg	Request to install
	slc4_amd64_gcc34	Request to install
v20r1	slc4_ia32_gcc34_dbg	Request to install
	slc4_ia32_gcc34	Request to install
	slc4_amd64_gcc34_dbg	Request to install
	slc4_amd64_gcc34	Request to install
v20r0	slc4_ia32_gcc34_dbg	Request to install
	slc4_ia32_gcc34	Request to install
	slc4_amd64_gcc34_dbg	Request to install
	slc4_amd64_gcc34	Installed
v19r14	slc4_ia32_gcc34_dbg	Request to install
	slc4_ia32_gcc34	Request to install

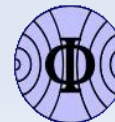


Local integration (Physicalisches Institut, HD)

- The same data and software management interface
- Naf-login and naf-afs scripts
- The same login environment (difference in software path only)

Wishes

- Up to date status information:
 - What problems are already known ?
 - What changes are planned ?
- Accounting
 - Which resources we have used?
 - (for admin) Detailed information about user's activity (in batch system).



Resources request

Category	2008	2009	2010
Storage (TB)			
User space	2	4	4
LHCb software	0.5	1	1
data space(dst)	10	50	200
ntuples	2	50	100



Conclusions

- LHCb NAF on it's way
- First users employ system
- Web portal used for data & software download
- Requirements document under development

