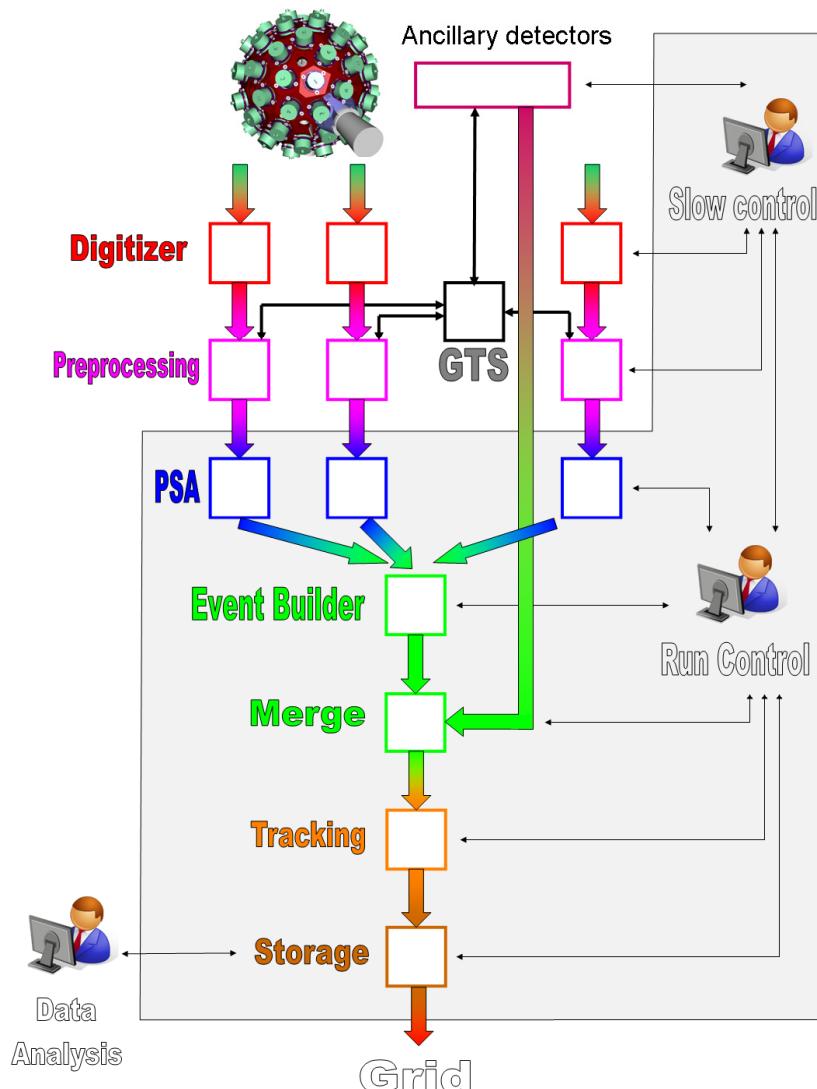




# DAQ overview

*Ch. THEISEN for the DAQ WG*

# The DAQ WG



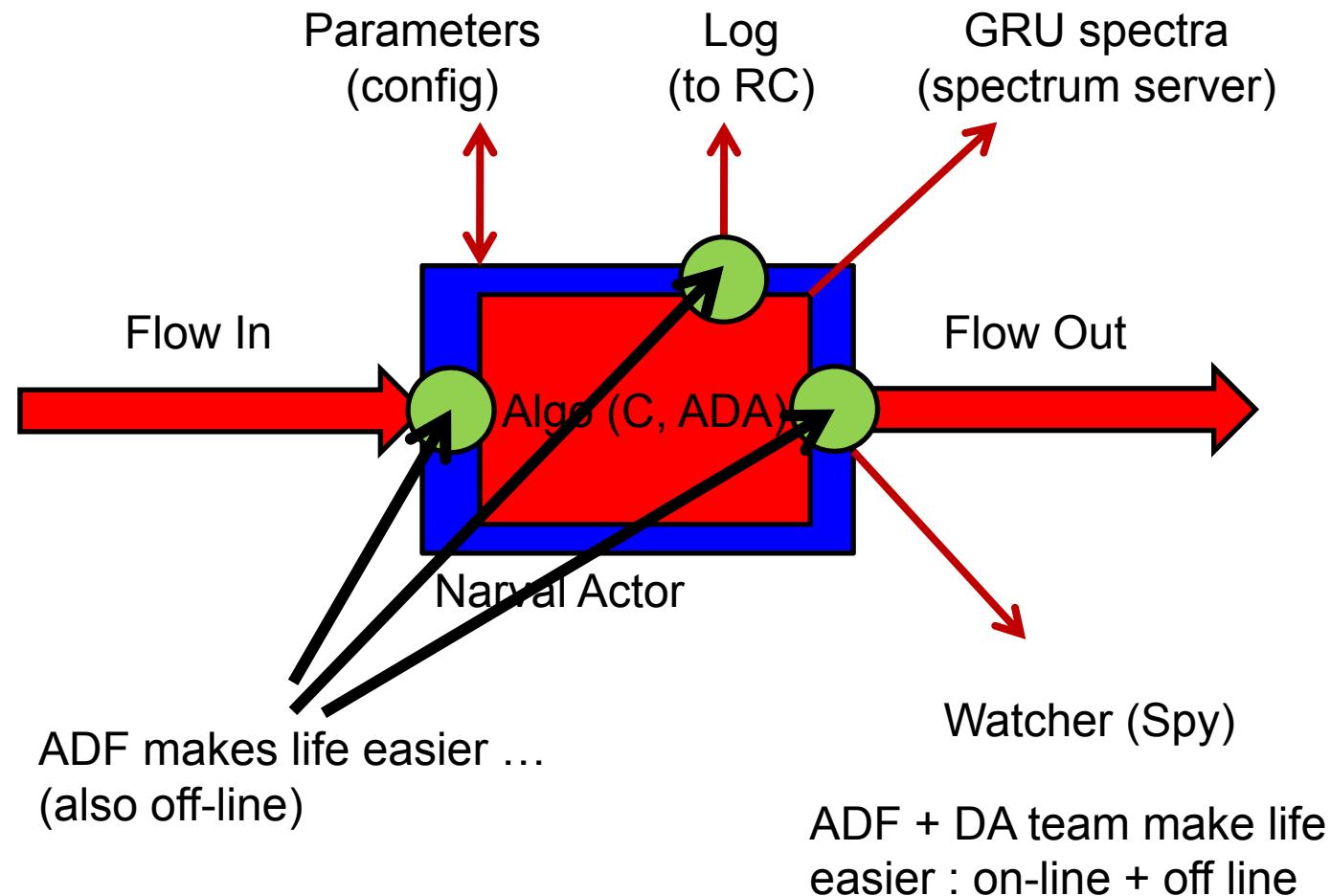
## Teams :

- Data acquisition (X. Grave)
- Run Control & GUI (G. Maron)

## Tasks :

1. Main Data Flow.
2. DAQ services
3. Slow control integration
4. Hardware and software installation and handling
5. Local infrastructure
6. Overall integration

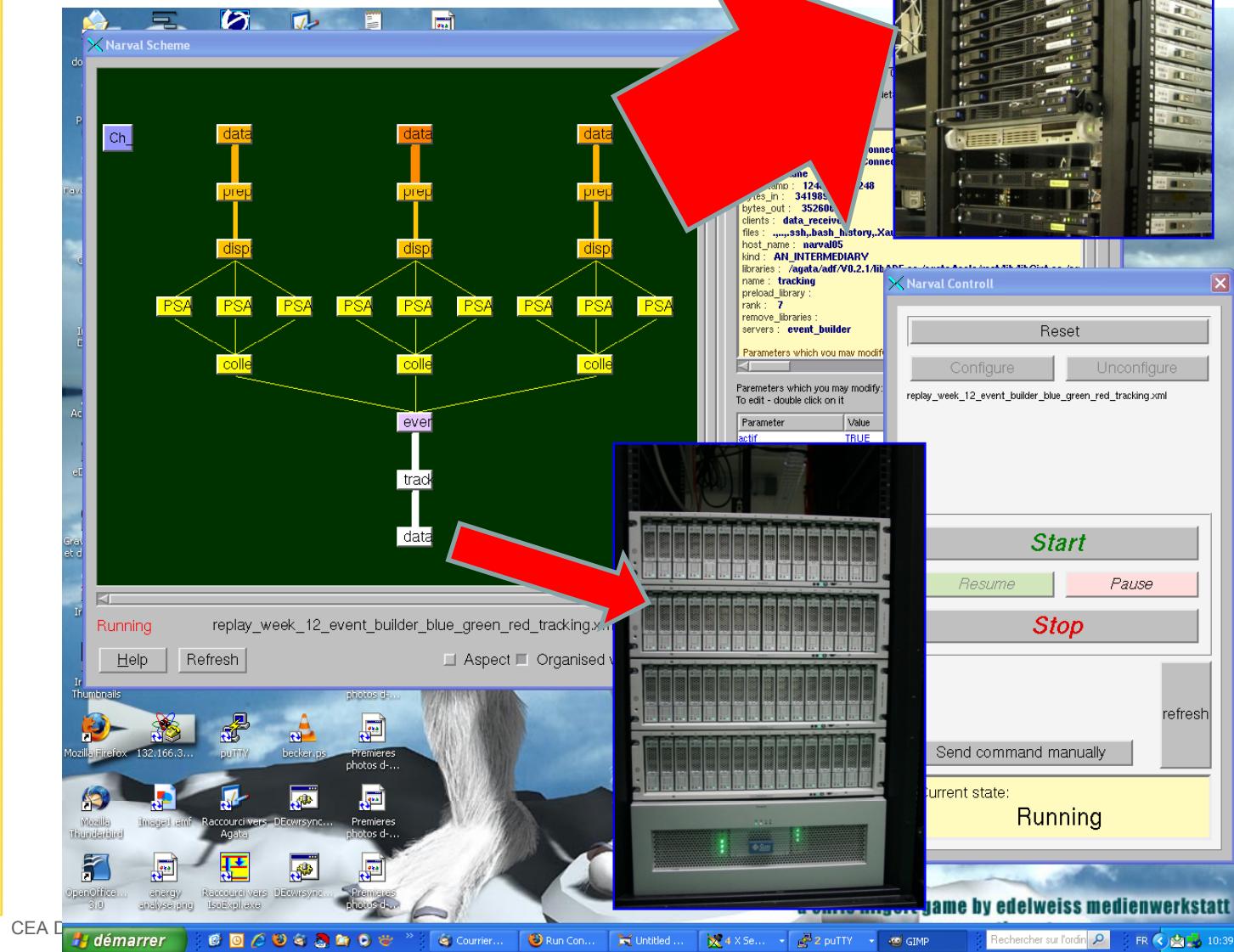
# The data flow basis : Narval actors



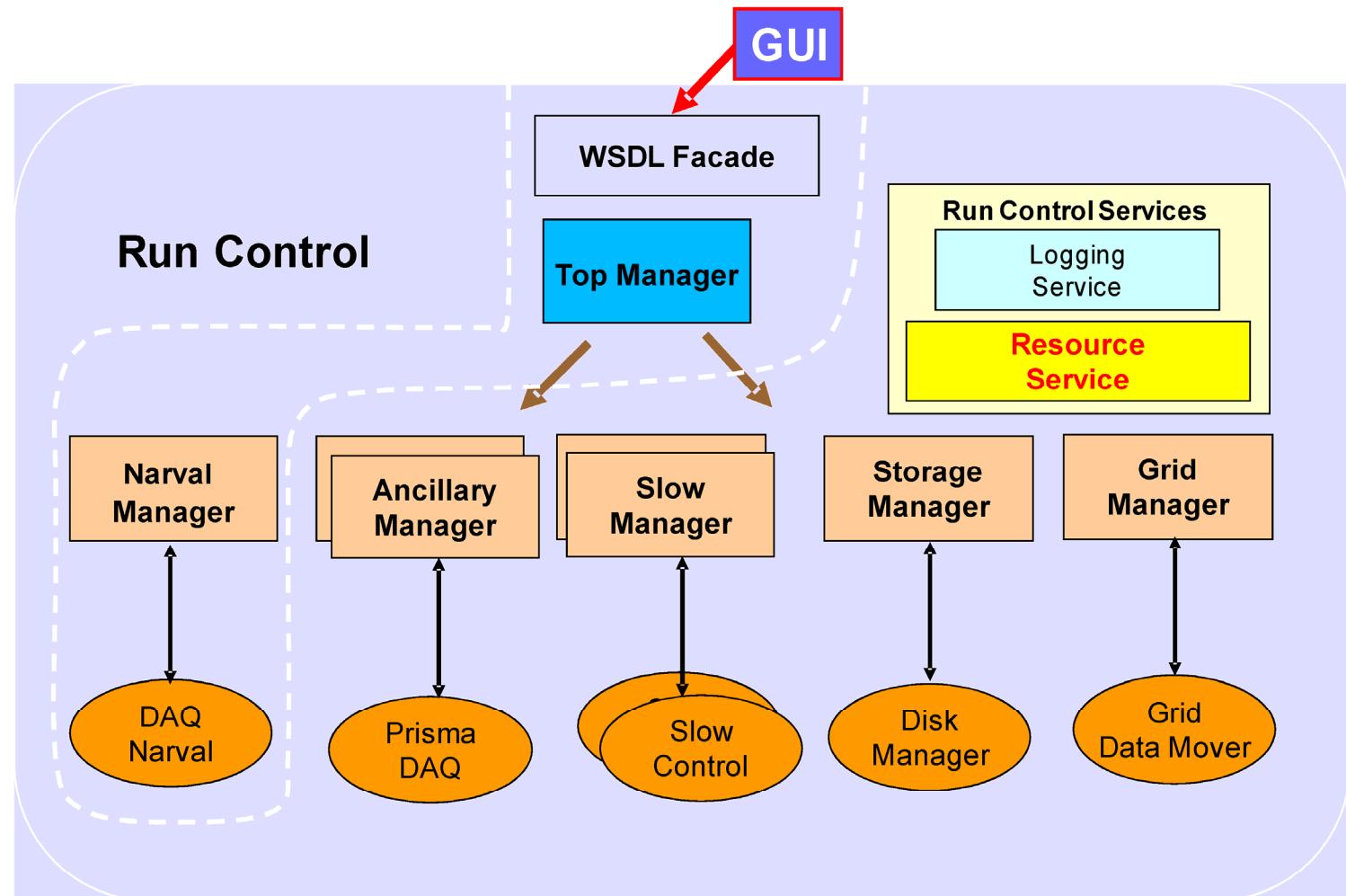
# Distributed processes



- Simple 1TC case



# Run Control

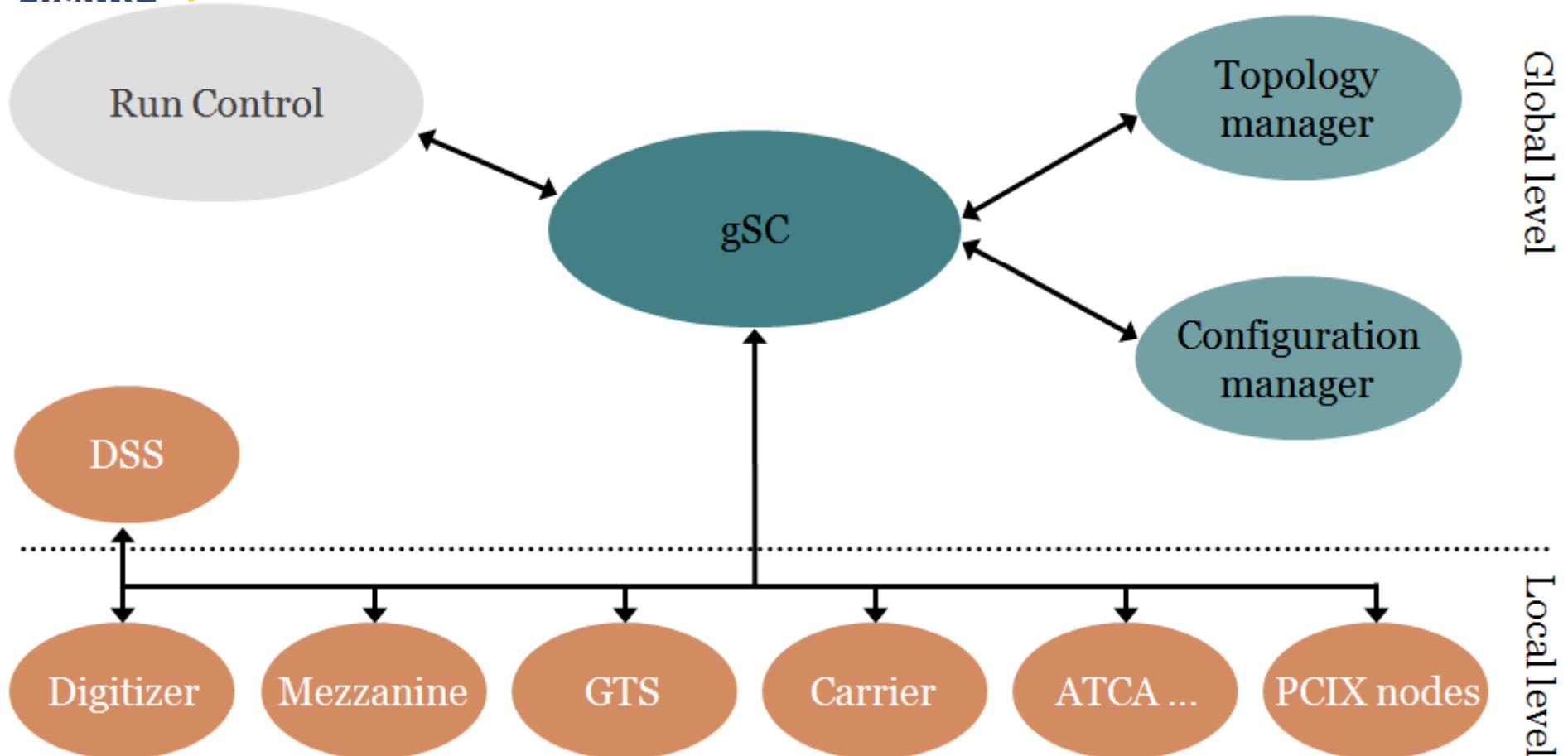


→ Pietro Molini

# Slow Control + Global Slow Control



- Slow Control : specific to each hardware → mostly Dino's WG
- Global Slow Control : the glue between SC's and RC → E. Legay



# The logbook



<http://agata-0.lnl.infn.it:8989/>

Welcome to Agata Elog

Logbook	Entries	Last submission
<b>Experiments</b>		
Common	1	Tue Dec 22 11:34:08 2009 by Johan Nyberg, mailto:johan.nyberg@physics.uu.se
2009-03-16	16	Mon May 25 23:44:32 2009 by Francesco Recchia, mailto:recchia@pd.infn.it
2009-06-29	3	Wed Jul 1 11:53:40 2009 by Benedikt Birkenbach, mailto:bene@ikp.uni-koeln.de
2009-10-22	0	-
2009-11-13	0	-
2009-12-03	0	-
<b>General</b>		
Shift	11	Fri Apr 4 11:14:02 2008 by araceli lopez-martens, mailto:araceli.lopez-martens@csnsm.in2p3.fr
<b>Subsystems</b>		
DAQ	0	-
Run Control	0	-
Prisma	0	-
Slow Control	1802	Tue Jan 19 10:57:35 2010 by AGATA
DSS	0	-
<b>Test</b>		
Test	11	Wed Jan 21 11:37:53 2009 by Michele
Comments Comments and suggestions to improve Agata elog	2	Wed Jul 1 18:59:54 2009 by Benedikt Birkenbach, mailto:bene@ikp.uni-koeln.de

# Administration and services

---



X3550 (M2) server, workstations,  
SUN Storage Tek 6540, SUN Fire X4560 , GPFS,  
NFS, OpenLDAP, DNS, networks, 3Com 4200G,  
DHCP, DA pizzas, DA workstations, OpenVPN,  
SRM transfer to grid, beer, VO manager, zabbix,  
KVM, coffee, ftp server, SystemImager, backup,  
rsnapshot, lenny distribution, gnat, polyORB, WSDL,  
gridcc, elog, mediawiki, shorewall, ...

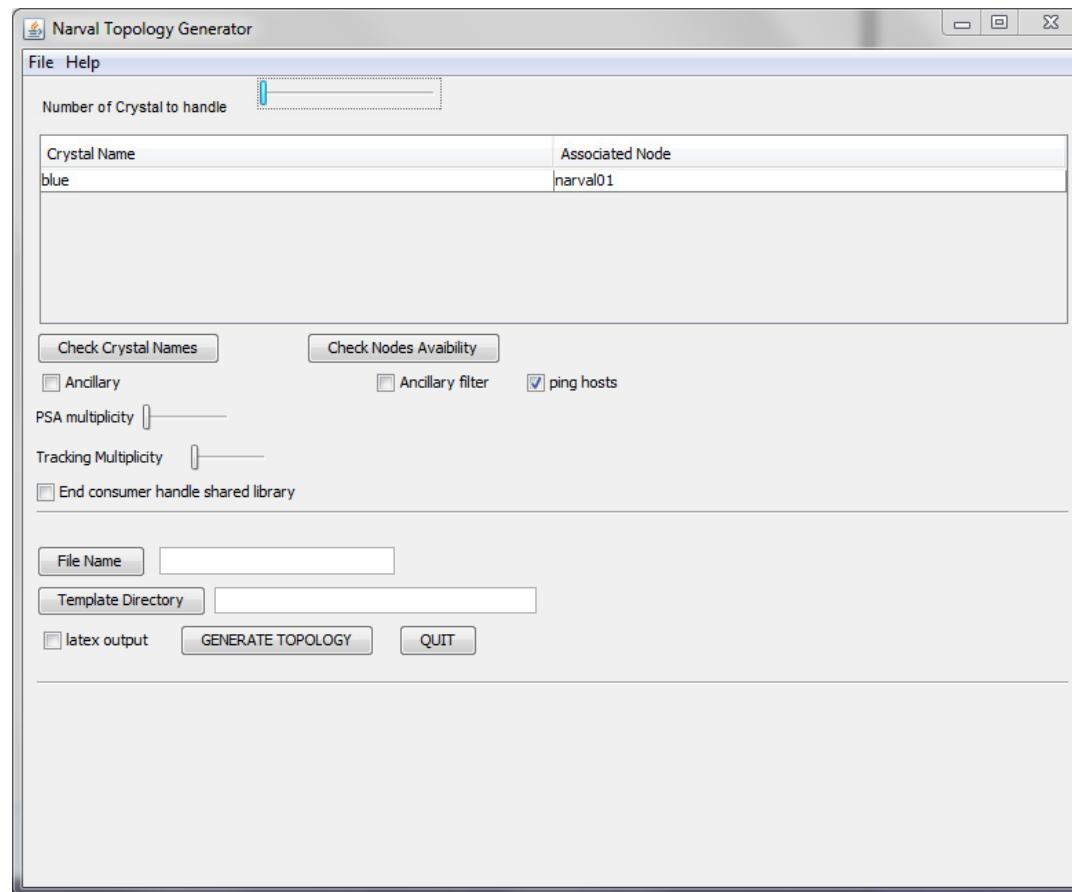


What's new since last AGATA week ?

# Narval topology generator



Distributed architecture : one needs to build and connect actors  
→ An expert task.  
→ Narval topology generator makes life easier



# GUI



- Expert button



- « ultimate reset » soon

# Ticket system



- Feedback from user
- Track requests, ...

Edit primary links

## AGATA daq acquisition group

Home > Case Tracker > All cases

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**all cases in System problems**

A list of cases created within Case Tracker, per your filter criteria.

**Case filter criteria:** project *System problems*, all cases.

#	Title	Last updated	Priority	Status	Type	Assigned to
400-24	Agata-0 upgrade	13/01/2010 - 11:00	3	Open	General Task	Anonymous
400-23	LDAP deployment	13/01/2010 - 10:58	3	Open	General Task	yann
400-22	Upgrade Golden client	13/01/2010 - 10:57	3	Open	General Task	yann
400-21	Narval09	13/01/2010 - 10:54	3	Open	Bug	Anonymous
400-20	German pizzas	13/01/2010 - 10:52	3	Open	General Task	Nicolas Dosme
400-17	second DNS zone	26/11/2009 - 17:38	3	Closed	Feature Request	Anonymous
400-13	Visualization PC	20/11/2009 - 17:52	3	Closed	General Task	Anonymous
400-8	Installing x4540 system	20/11/2009 - 12:24	1-High	Closed	General Task	yann
400-16	KVM	18/11/2009 - 10:42	3	Closed	Feature Request	Anonymous
400-10	Zabbix	30/10/2009 - 13:42	3	Closed	Bug	yann
400-19	Idap	21/07/2009 - 14:52	3	Open	Feature Request	yann
400-18	backup	21/07/2009 - 14:23	3	Open	Feature Request	yann
400-15	zabbix update	01/07/2009 - 12:23	3	Closed	Bug	xavier
400-14	vpn key generation	30/06/2009 - 12:24	3	Closed	General Task	yann
400-11	Revoking mechanism	24/06/2009 - 17:57	2	Closed	Feature Request	Eric Legay

1 2 next > last »

<http://csngwinfo.in2p3.fr/?q=casetracker>

**Ticket System**

- Case Tracker
  - Overview
  - Cases
- How to

**Who's online**

There is currently 1 user and 1 guest online.

Online users

- theisen

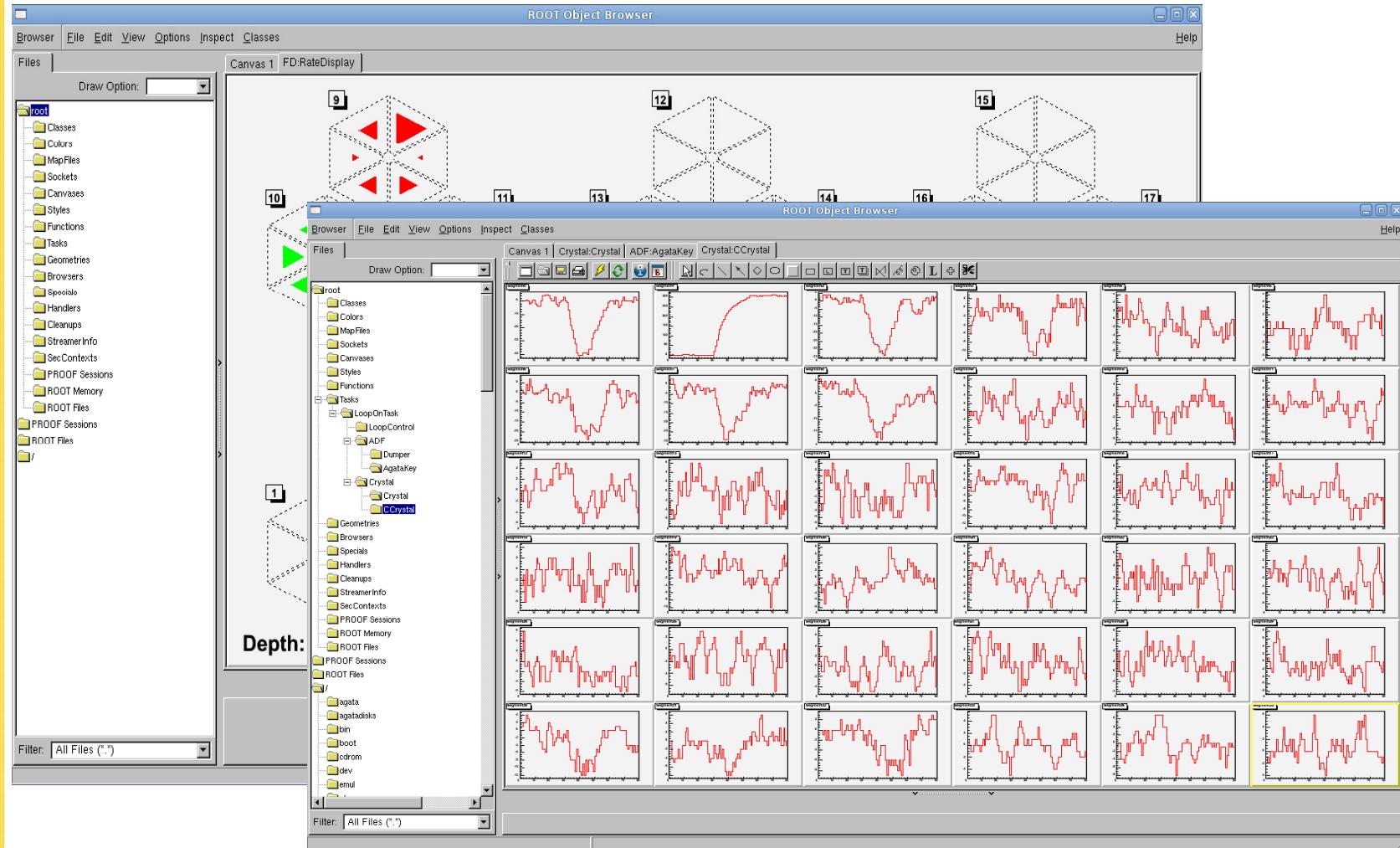
**theisen**

- Create content
- Recent posts
- My account
- Administer
- Log out

# Watchers (spy)



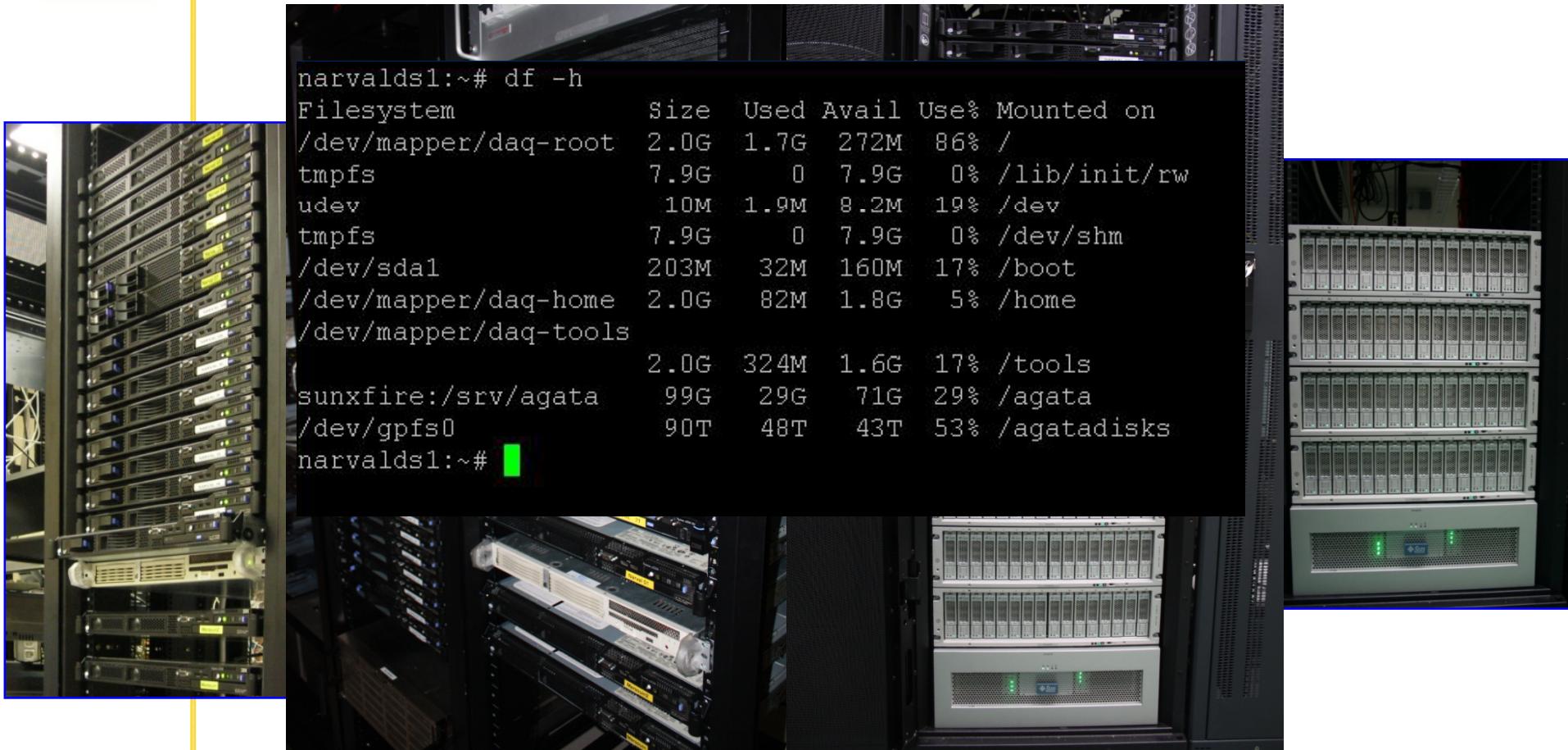
- Not new, but recent implementations (see Olivier's talk)
- Can be used off- or on-line



# New hardware



- 4 pizza boxes (this week !)
- 48 TB disk (this week !)
- Disk array for backup (this week !)



# Other new features

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- Run #
- Ancillary detectors merge
  - Based on crystal merge. Correlations based either on time stamp or event number correlations
- Global Slow Control
  - In progress. LNL Meeting on Tuesday
  - See Eric's report
- ...

# Next

---



- Hardware for 5-6TC
- Using the run # (run files, save configuration, ...).
- Better and easier file management
- More diagnostic and monitoring
- Improved message login
- Ultimate reset
- Global Slow Control
- 3rd disk server; faster I/O
- More documentation
- Easier installation (Narval + Data Flow) : Data replay
- Eric needs beer and pizzas

# Next : 8 TC phase

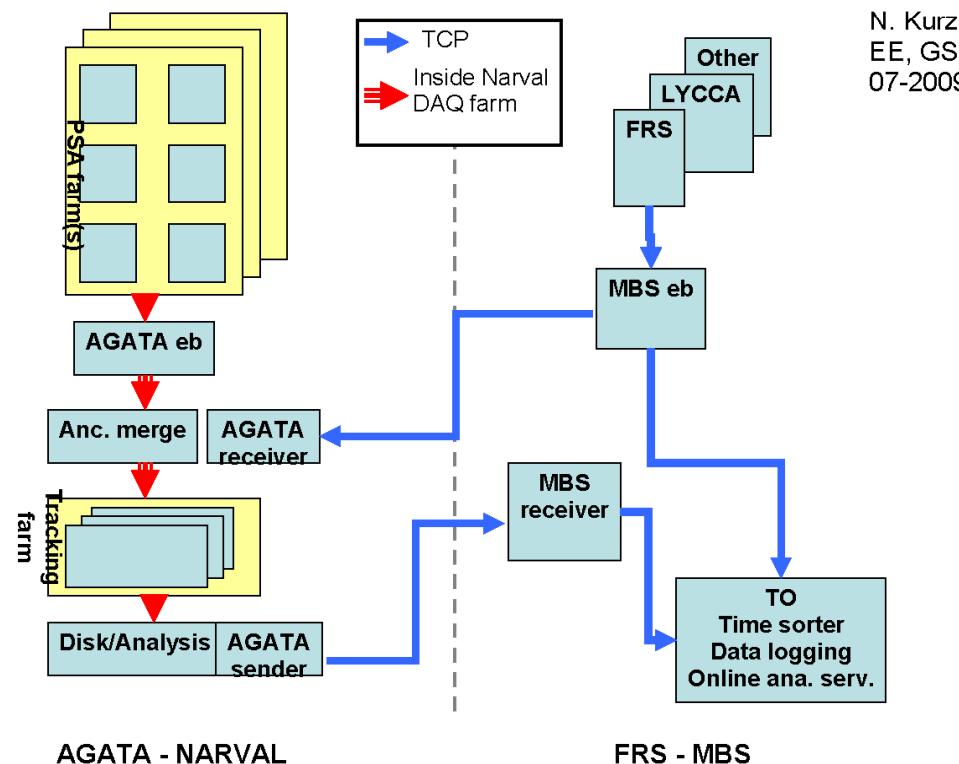


- No revolution foreseen : scaling the system for
  - New TCs
  - Counting rates
  - New pizzas + network
- !!! Prices of pizza boxes increasing and subject to fast and unexpected market fluctuations !!!

# GSI and Ganil campaigns



- GSI
  - DAQ infrastructure discussed.
  - No major problem foreseen
  - (this morning session)





- **GANIL**
  - ICC Instrument Coordination Committee (Spiral 2)
  - Discussion started
  - GANIL starting using Narval

# Web, documentation



- DAQ web site : <http://csngwinfo.in2p3.fr/>
- DAQ wiki

The screenshot shows a web browser displaying the 'Welcome to the DAQ portal | AGATA...' page. The page features a sidebar with links to various AGATA working groups (Organization, DAQ WG minutes, News, DAQ mailing list), Dataflow (Narval website, Data format minutes, News, NARVAL mailing list), Run Control (News), Slow Control (Slow Control minutes, ENX website, Data Base Access, Web Services Implementation, WSDL interface, News, SC mailing list), and Resources (AGATA Week, AGATA wiki clone, Documentation, Hardware list, Syndicate, Links). The main content area includes a 'Ticket System' sidebar with Case Tracker, Who's online (0 users, 0 guests), and a theisen sidebar with Create content, Recent posts, My account, Administer, and Log out options. Two images of server racks are displayed in the center.

# Web, documentation



- DAQ web site
- DAQ wiki

The screenshot shows a web browser window displaying the AGATA DAQ wiki main page. The browser's toolbar includes File, Edition, Affichage, Historique, Marque-pages, Outils, and a search bar. The address bar shows the URL <http://csgwinfo.in2p3.fr/mec>. The page title is "Welcome to the DAQ portal | AGATA...". The main content area is titled "Main Page" and features a sidebar with the AGATA logo and links to various services like Workstation, Acquisition software, Grid information, and Narval and algorithms. The main content area contains two cartoon illustrations: one of a woman labeled "Lambda physicist" and one of a man labeled "Skilled physicist". Below them is a cartoon drawing of two people talking, with one saying "But I'm not a member of technical staff" and the other replying "Technically you ARE". A copyright notice "© Agata 2011" is visible at the bottom of the drawing. At the bottom of the page, there is a "Ressources" section.

# Few remarks



- Most of the DAQ is hidden. GUIs are the only the part of the iceberg above water.
- Lot has been done on the part under water. Many thanks to the DAQ WG and to physicists experimenting the systems.
- We are slowly moving from a development phase to a “service” phase.
- We need your feedback to improve the system.

# Agenda

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- **DAQ Status** (20')  
Christophe Theisen
- **The DAQ side of commissioning** (20')  
Daniele Mengoni
- **Run Control status report** (15')  
Pietro Benedetto Molini
- **Global Slow Control** (30')  
Eric Legay
- **Slow Control parameters: the digitizer example** (15')  
Vic Pucknell