



# Introduction

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Calcul ATLAS France (CAF) meeting  
CC-IN2P3 Lyon, 1<sup>st</sup> April 2019

# ... some changes

This is my first meeting as « chair » ( in French GO = Gentil Organisateur)

Luc has chaired the CAF since 5 years !

Chairs of CAF : S. Rozanov (CPPM) → 2005,  
E. Lançon(IRFU), → 2014,  
L. Poggioli (LAL) → March 2019

But also « simple » CAF representative for much longer time (2009)

and taking large part of squad-FR load !

Now CAF-deputy

Big thanks !

# Today's meeting and next to come

- **Today :**

- CAF on 1st April [[indico](#)]

not everybody could attend, or only partially – sorry about that  
next CAF meeting should be in June, September ....

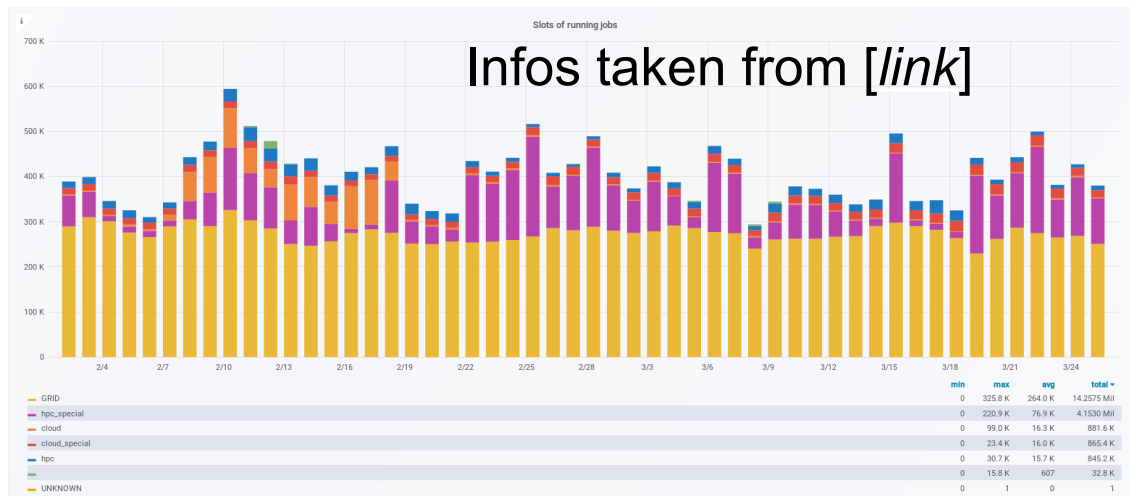
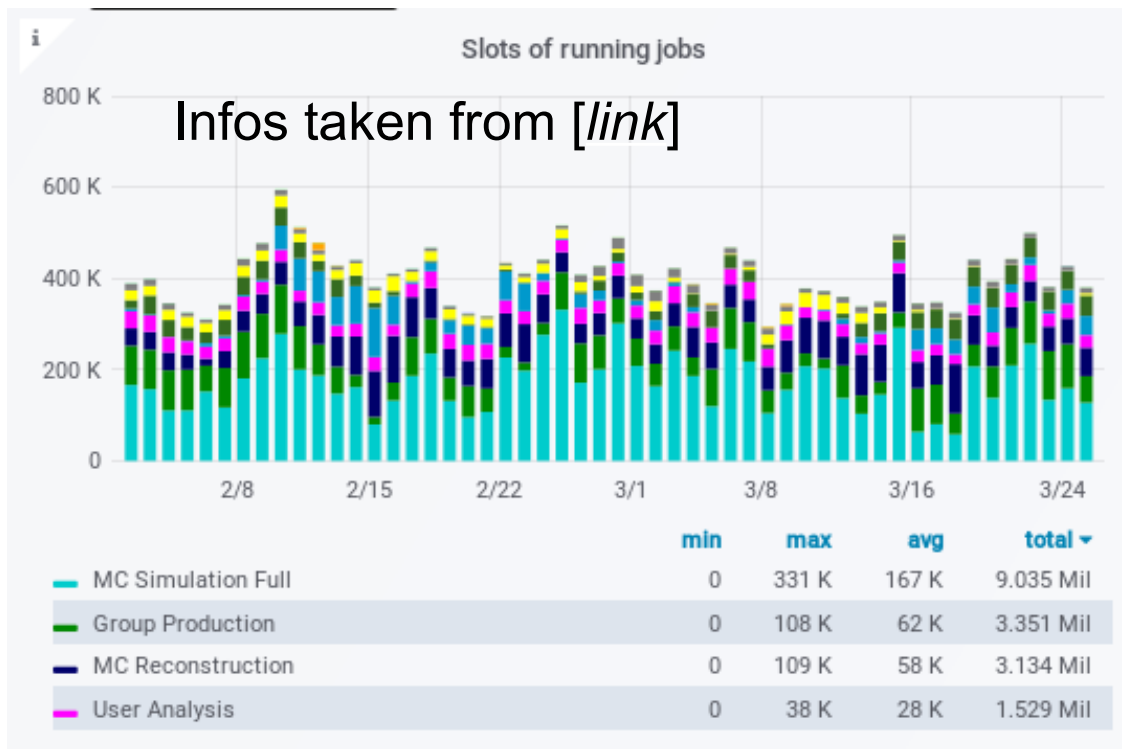
- **Previous meetings :**

- ATLAS sites jamboree and HPC strategy, 5-8th March, CERN [[indico](#)]
- HSF and WLCG meeting, 18-22 March, JLAB [[indico](#)]

- **Meetings to come :**

- CC-IN2P3 GPU workshop, 3-5th April, Lyon [[indico](#)]
- LCG-FR ComDir, 5th April [[indico](#)], next in May, June
- LCG-FR Tech, 19th April [[indico](#)], next in May, June
- LCG-FR Sites meeting, 22-24th May in LAPP (to be confirmed)
- ATLAS S&C, New York, 24-28 June [[indico](#)]

# ATLAS ressources usage since last CAF



- Different activities
- >300k grid+cloud job slots
- Peaks of 220k HPC

# LCG-FR

- **Meetings to come :**

- LCG-FR CoDir, 5th April [*indico*], next in May, June
- LCG-FR Tech, 19th April [*indico*], next in May, June
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- **Funding**

- All sites have been notified (mid-March) for their budget hardware/mission

# Pledges

## ● Pledges to be deployed by 1st April

Storage Space Accounting [*pledge*, *current*]

	Pledge 2018 (TB)	Pledge 2019 (TB)	Current (TB)
CC-IN2P3	8100	10100	7700
CPPM	1100	1500	1600
GRIF	3300	3840	3600
LAPP	1850	2100	1900
LPC	1200	1400	1200
LPSC	828	850	830

	Pledge 2018 (TB)	Pledge 2019 (TB)	Current (TB)
Beijing	400	400	370
Tokyo	4800	5600	5600
RO	1500	1600	2000
RO-02			335
RO-07			1700

CC-IN2P3 will install end of pledges in 1-2 weeks in contact with GRIF and LPC

cpu Accounting [*pledge*]

	Pledge 2018 (HS06)	Pledge 2019 (HS06)	Current (HS06)
CC-IN2P3	105000	118500	239238
CPPM	11000	14000	12700
GRIF	46200	47000	59700
LAPP	18000	21000	24000
LPC	11000	11800	13300
LPSC	10100	13300	-

	Pledge 2018 (HS06)	Pledge 2019 (HS06)	Current (HS06)
Beijing	5800	8000	-
Tokyo	36000	40000	-
RO	1500	40000	13200
RO-02			
RO-07			

Some numbers do not appear well in rebus ...

# Network

Extract of email sent by Jérôme Bernier (14/03)

- **RENATER** is setting up new 100Gb/s links with new hardware WDM CORIANT / INFINERA of RENATER6.
  - some issues for production mode ; work with companies to solve bugs
  - advantage of new WDM hardware is that RENATER can put in place 100Gb/s links and provide to projects a part of it.
- **LHCOPNRENATER** has put in place a 100Gb/s link between CCIN2P3 and CERN. We have now 40Gb/s available on it for LHCOPN project
- **LHCONE North** :  
[https://pasillo.renater.fr/weathermap/weathermap\\_lhcone\\_france.html](https://pasillo.renater.fr/weathermap/weathermap_lhcone_france.html)  
RENATER has put in place a 100Gb/s link with GEANT for LHCONE Paris. We have now 40Gb/s available on it for LHCOPN North project
- **LHCONE South** : RENATER is waiting for bug correction on WDM hardware to provide a 100Gb/s link between LHCONE Lyon and GEANT Genève.
- **LCG-FR laboratories short term evolution** :  
LPNHE to 20Gb/s-; LAPP to 40Gb/s ; IRFU / LAL / LLR / IPNO to 100Gb/s with arrival of UPSaclay network ; CCIN2P3 to 100Gb/s

# Saturation of LHCOne links in France (solved)

Extract of email sent by Catherine to FR LHC experiments representative + LHC experiments computing conveners on 20th March

The LHCOne and LHCOPN links have been at 20 Gbps since 2016. At that time (in 2016), we had anticipated the growth of the network needs and agreed with our NREN to double the capacity in early 2018. Unfortunately, in 2017, the NREN encountered operational problems and subsequent delays in the deployment of the new links. A new 100 Gbps link between CC-IN2P3 (Lyon) and CERN has been commissioned last autumn and 40 Gbps have been guaranteed for LHCOPN on this link since then. We do not notice any saturations here. Additional brand-new 100 Gbps links (Paris <-> GEANT and Lyon <-> GEANT) have been commissioned this year and the available capacity for LHCOne was increased last week. The capacity for both of our LHCOne links is now doubled: 40 Gbps is available for each link since last Friday (March 15th). These are the links that connect all of the French Tier-2s, as well as the FR Tier-1, to LHCOne.

An additional difficulty that we have had: our NREN found a bug on their WDM equipment. This bug was preventing us from increasing the capacity of one of our LHCOne links. A ticket is currently open at the level of the hardware provider. We found a workaround. Even if this workaround ends up being a permanent solution, it will not prevent us to increase the network bandwidth in the future.