

WLCG Status Report

Ian Bird

WLCG Referees Meeting

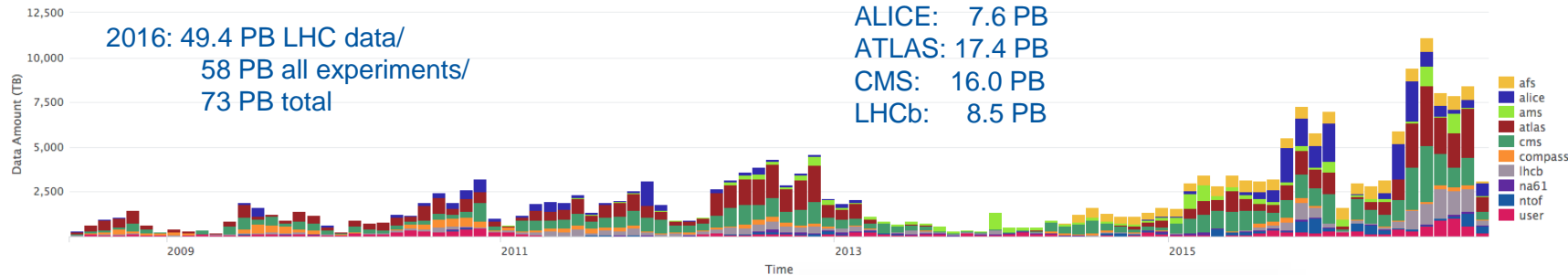
CERN; 21st February 2017

Data Taking 2016 - updated

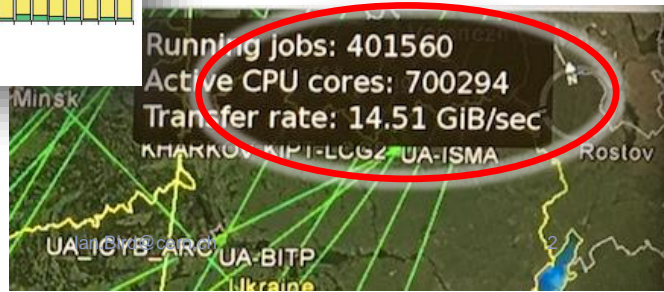
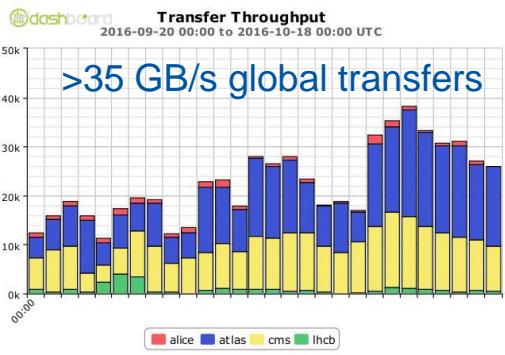
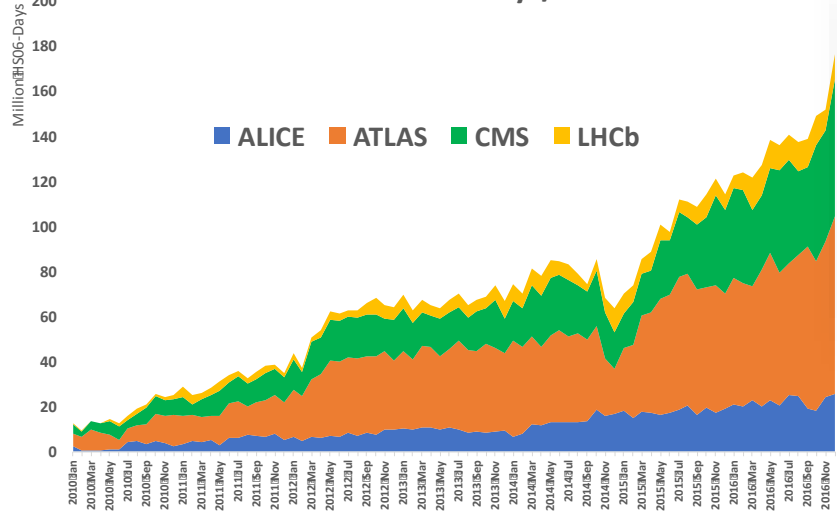
Transferred Data Amount per Virtual Organization for WRITE Requests

2016: 49.4 PB LHC data/
58 PB all experiments/
73 PB total

ALICE: 7.6 PB
ATLAS: 17.4 PB
CMS: 16.0 PB
LHCb: 8.5 PB

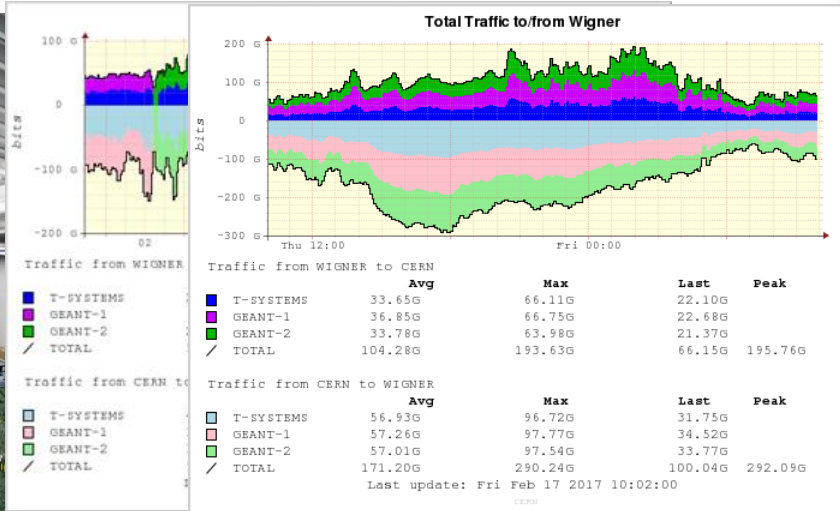
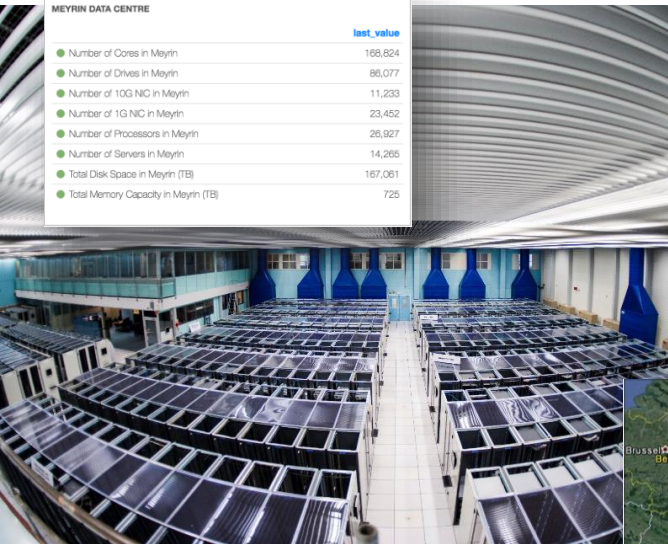


CPU Delivered HS06-Days/Month



Tier 0 - 2017

	last_value
Number of Cores in Meyrin	168,824
Number of Drives in Meyrin	86,077
Number of 10G NIC in Meyrin	11,233
Number of 1G NIC in Meyrin	23,452
Number of Processors in Meyrin	26,927
Number of Servers in Meyrin	14,265
Total Disk Space in Meyrin (TB)	167,061
Total Memory Capacity in Meyrin (TB)	725



	last_value
Number of Cores in Wigner	56,000
Number of Drives in Wigner	29,694
Number of 10G NIC in Wigner	2,981
Number of 1G NIC in Wigner	6,579
Number of Processors in Wigner	7,002
Number of Servers in Wigner	3,504
Total Disk Space in Wigner (TB)	97,315
Total Memory Capacity in Wigner (TB)	221

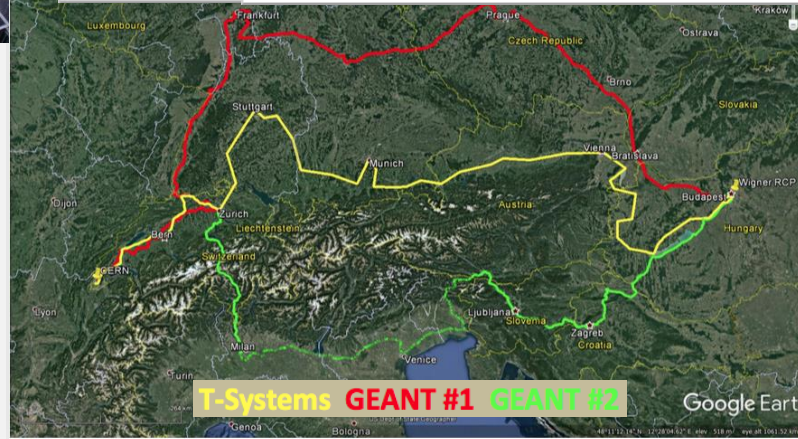


2017:

- 225k cores → 325k
- 150 PB raw → 250 PB

2018:

- ???



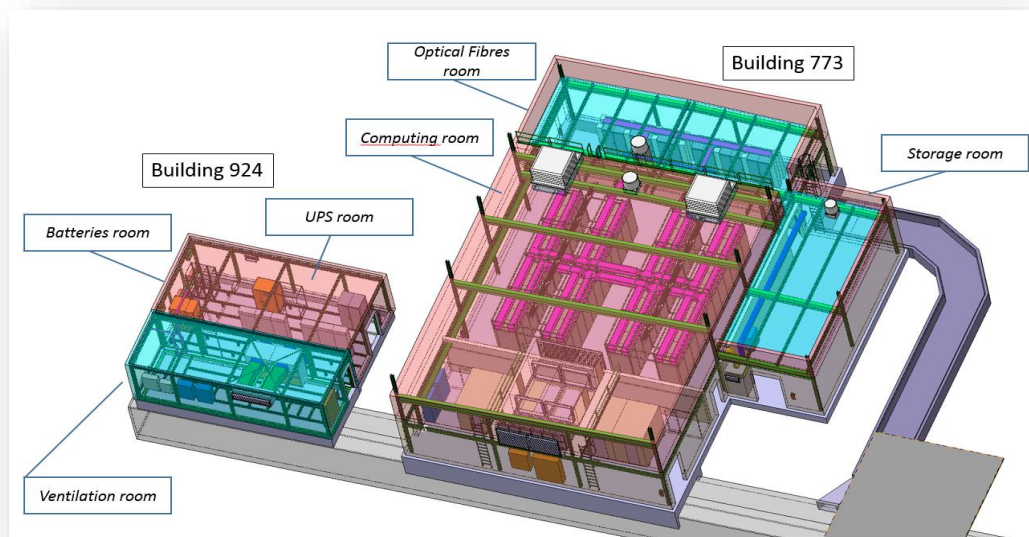
2017-18/19

- Upgrade internal networking capacity
- Refresh tape infrastructure



Under construction – 2nd network hub

- ❑ Provide redundancy to external connectivity (GEANT, LHCOPN, LHCONE, ESNet, etc.)
 - Physically separate from main CC – in Prévessin
- ❑ Project started some time ago – originally conceived as part of Wigner project to ensure business continuity
 - Delayed by lack of funding
 - Hopefully to be delivered in 2017



Feasibility being studied

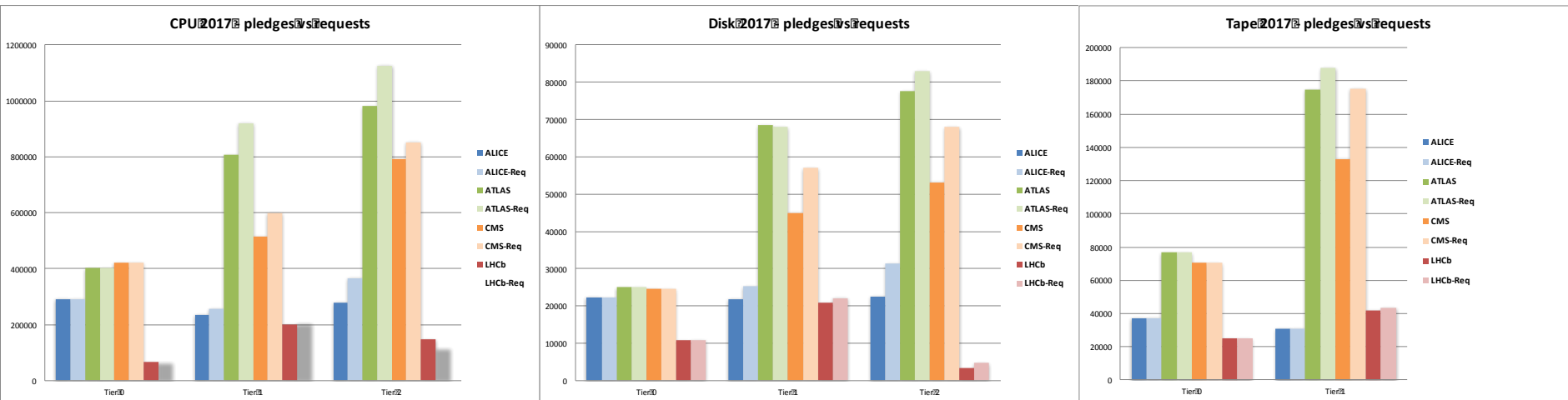


- ❑ Feasibility of a new DC in Prévessin being studied – optimise the long term cost of computing at CERN for LHC
 - Based on GSI Green Cube

CERN Directorate:

- ❑ Decision made to provisionally go ahead with an open tender for a Turnkey DC, based on a high level Functional Specification, but with strict qualification criteria
- ❑ Final decision expected shortly

Resources 2017 - status




- ❑ CERN pledges updated since last meeting
 - Meets 2017 needs; but 2018 situation is unclear – may be no increase (except tape)
- ❑ Informal information from Tier 1s
 - Mostly on track to provide agreed pledges by May/June – some earlier
 - Expect several countries to provide additional resources to help meet the increased requests
 - But will not be formally pledged

HL-LHC planning

- ❑ Major activity has been the HSF/CWP workshop in San Diego in January
 - See later for summary
- ❑ Should discuss and agree what is needed this year for the “CDR”/vision paper
 - Outline of work needed to arrive at the Computing TDR in 2020
 - Probably needs to include discussion of strategies to explore to constrain costs of computing
 - Need input of the referees

Something to worry about ???...




DATA CENTRE SOFTWARE SECURITY TRANSFORMATION DEVOPS BUSINESS PERSONAL TECH SCIENCE EMERGENT TECH BOOTNOTES

Data Centre ▶ **Storage**

Did Oracle just sign tape's death warrant? Depends what 'no comment' means

Big Red keeps schtum over the status of StreamLine




17 Feb 2017 at 10:44, Chris Mellor

El Reg was tipped off that Oracle's StorageTek (StreamLine) tape library product range was going to be end-of-lifed.

More like this

Oracle Lto



Most read

Talk of tech innovation is bullsh*. Shut up and get the work done – says Linus Torvalds

Global IPv4 address drought: Seriously, we're done now. We're done