

Status Report on the LHC Experiments and Computing



Council 178

December 18 , 2015
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CERN



The Experiments

- Run 2 commissioning completed.
- Online/offline successfully validated
- Analyses underway, first results at 13 TeV already published.
- Phase I upgrades proceeding well
- First step of the Phase II Upgrades for ATLAS and CMS approved by the RRB in October

13 TeV data analysis

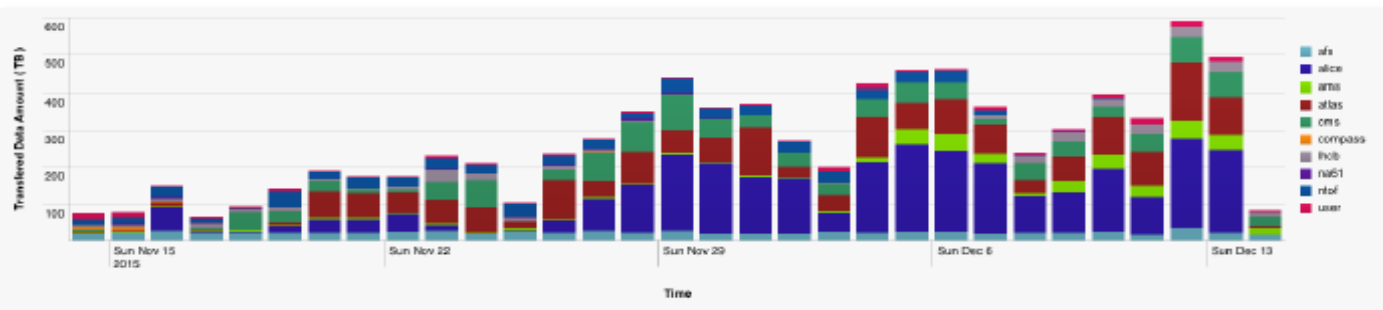
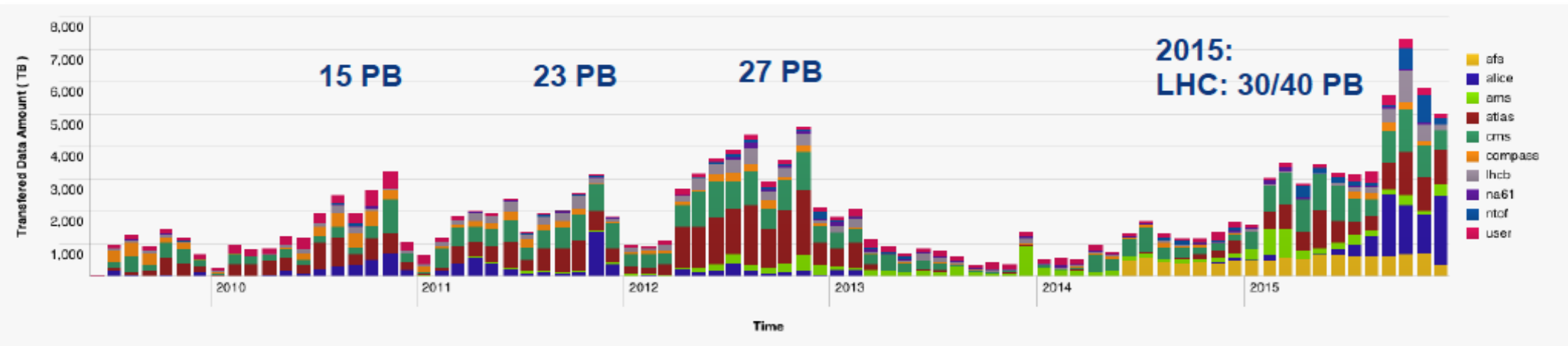
- Data analysis in full swing
- First result already published/submitted
- Joint ATLAS/CMS seminar on Tuesday in a packed auditorium (<https://indico.cern.ch/event/442432/>)
- Several tantalizing hints, eagerly awaiting for more data

ESFRI and HL-LHC

....Both the evaluation of the scientific case as well as the assessment of maturity **revealed the exceptional quality of the HL-LHC proposal**. ESFRI considers **taking the HL-LHC on-board of the 2016 Roadmap as very positively**: it is definitely a major upgrade of the world leading LHC and will guarantee global leadership for the next decade.....

.....On this basis **ESFRI recommends to give maximum evidence of the HL-LHC project by including it in the `Landmarks` list of the 2016 ESFRI Roadmap, stressing its flagship character among European RIs.**

2015 data in Tier 0



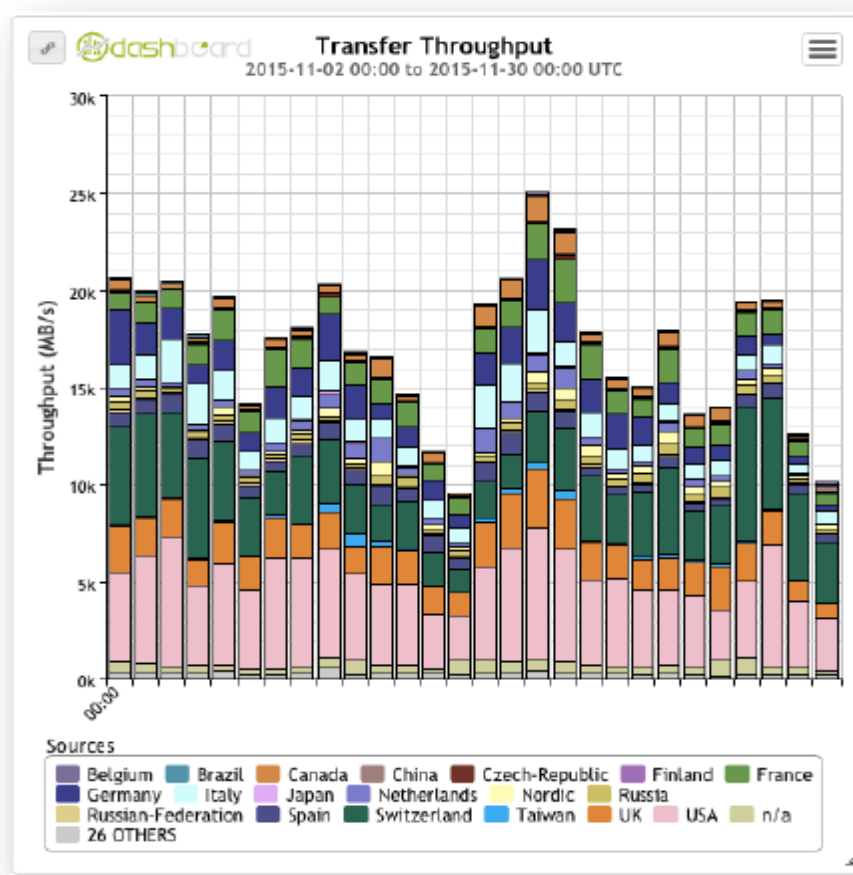
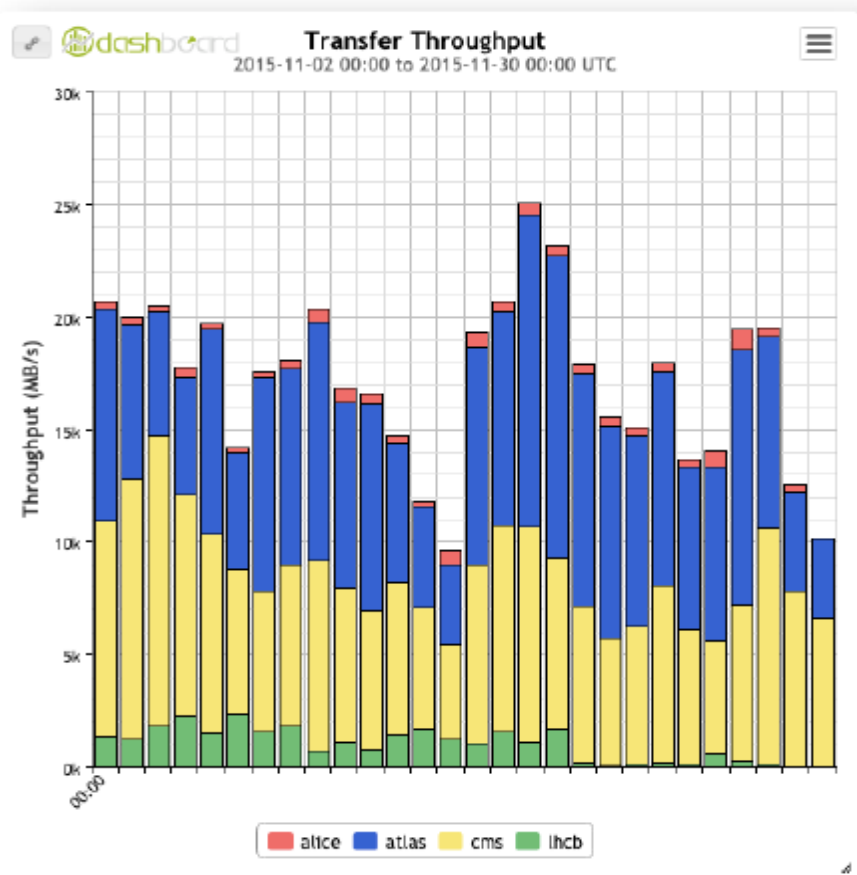
HI data:
up to 600 TB/day this weekend
(Run 1 max was ~220 TB/day)

HI data:
Data rates ~8 GB/s sustained for 8 h
(peaks ~10.5 GB/s)



14 Dec 20

Transfers



Transfer rates also already above those in Run 1: 20-25 GB/s global

ATLAS & CMS have each transferred ~20 PB in last month

In summary

Experiments have demonstrated their readiness to cope with Run 2 conditions

Evolution of their computing model successfully tested

A considerable amount of data have been collected and first results are being produced

Upgrades proceeding well

A very intense maintenance/fix period during YETS

THANK YOU