NETWORK REQUIREMENTS FOR LHC DATA ANALYSIS

Workshop in Göttingen

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LHC DATA ANALYSIS
THE NETWORK VIEW

- Analysis of LHC data is performed very successful at T2 and T3 centers.
- In Germany most of the T2 sites are connected to the German NREN provided by the DFN.
- The LHC data traffic is often using a substantial fraction and at times dominating the total capacity of the bandwidth of large T2 sites.
- Data transfers are to the German T1 in Karlsruhe as well as world wide to other T1 and T2 centers.

THE WORKSHOP TODAY

- Review the experience gained during the first year of LHC data analysis
- Analyze traffic patterns
- Discuss the expected evolution of data volume and analysis models and the impact on networking needs.
- Potential national and international upgrades of the networking architecture and bandwidth provision will be presented.
- The goal of the workshop is to prepare a decision whether and when networking for LHC data analysis needs to be upgraded and to what level.

THE WORKSHOP TODAY

Participation:

- German ATLAS, CMS computing coordination
- Helmholtz Allianz Grid Project Board
- DFN
- CERN IT
- T1 management, networking experts
- German T2 centers
- invited: ATLAS and CMS computing management
- invited: ALICE german computing coordination
- invited: computing coordination from Austria, Czech Republic, Poland and Switzerland

TODAY'S AGENDA

Introduction, Organization matters
11:00 - 11:15

BOS, Kors
Tier2s connectivity requirements Working Group report
11:15 - 12:00

DUCKECK, Guenter
Networking for ATLAS analysis in D: experience and outlook
12:00 - 12:45

Lunch Break
12:45 - 13:30

KRESS, Thomas
Networking for CMS analysis in D: experience and outlook
13:30 - 13:50

FOSTER, David
Plans for International Networking for LHC Data analysis
13:50 - 14:35

DFN
German Networking plans for LHC Analysis
14:35 - 15:20

Discussion & Summary
finish by 16:00

QUESTIONS TO ANSWER:

1) Do we have a networking problem (now, or will there be one in future)?

2) What is the problem?

3) What does it need to solve the problem?

4) What is the best solution?

5) When do we need the solution?

6) Is the proposed solution solving the problem?

7) Can we afford the solution?

8) Do we have all the information to decide?

9) When do we have to decide?

All discussions need to take the international context into account!