

**WLCG Workshop 2017**

**Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Introduction

Contribution ID: 2

Type: **not specified**

## Collaboration Board

**Presenter:** JONES, Roger (Lancaster University (GB))

Contribution ID: 3

Type: **not specified**

## **Medium Term Evolution - Compute**

**Presenter:** KEEBLE, Oliver (CERN)

Contribution ID: 4

Type: **not specified**

## **Medium Term Evolution - Security & Trust**

Contribution ID: 5

Type: **not specified**

## Medium Term Evolution - Data

Contribution ID: 6

Type: **not specified**

## IPv6

Contribution ID: 7

Type: **not specified**

## CWP Status



Contribution ID: **8**

Type: **not specified**

## Networking

Contribution ID: 9

Type: **not specified**

## Data contd

Contribution ID: **10**

Type: **not specified**

## **Compute continued**

**Presenter:** KEEBLE, Oliver (CERN)

Contribution ID: **11**

Type: **not specified**

## **Infrastructure & Technology Evolution**

Contribution ID: 12

Type: **not specified**

## **Operational Tools, Benchmarking, Accounting etc**

Contribution ID: 13

Type: **not specified**

## **Infrastructure & Technology Evolution**

Contribution ID: **14**

Type: **not specified**

## **Coffee**

*Wednesday, 21 June 2017 15:30 (30 minutes)*

Contribution ID: 15

Type: **not specified**

## Operational Tools



Contribution ID: **16**

Type: **not specified**

## **Data part 1**

**Session Classification:** Medium term evolution - Data

Contribution ID: 17

Type: **not specified**

## **Site and storage architecture - regional federations**

*Tuesday, 20 June 2017 11:30 (10 minutes)*

**Presenter:** SOBIE, Randy (University of Victoria (CA))

**Session Classification:** Medium term evolution - Data

Contribution ID: **18**

Type: **not specified**

## **SKA data management**

*Tuesday, 20 June 2017 11:00 (10 minutes)*

**Presenter:** BOLTON, Rosie

**Session Classification:** Medium term evolution - Data

Contribution ID: 19

Type: **not specified**

## SKA Networking Requirements

*Tuesday, 20 June 2017 13:30 (20 minutes)*

I will talk about networks within the telescope, the inter-continental network needs, and the work going on in the AENEAS project which is forming a design for the SKA European Science Data Centre. I will also discuss the basic needs and cover areas of possible collaboration with WLCG on networking.

**Presenter:** HUGHES-JONES, Richard (GEANT)

**Session Classification:** Medium term evolution - Network

Contribution ID: 20

Type: **not specified**

## **WLCG Network Monitoring and Analytics**

*Tuesday, 20 June 2017 14:50 (15 minutes)*

We will present on the status and plans for WLCG network monitoring and analytics. The goal is to identify missing requirements from the experiments and sites as well as missing effort to deliver on the requirements.

**Presenter:** MC KEE, Shawn (University of Michigan (US))

**Session Classification:** Medium term evolution - Network

Contribution ID: 21

Type: **not specified**

## **ATLAS Networking Requirements**

*Tuesday, 20 June 2017 13:50 (15 minutes)*

ATLAS networking needs for the experiment and the sites.

**Presenter:** DEWHURST, Alastair (STFC - Rutherford Appleton Lab. (GB))

**Session Classification:** Medium term evolution - Network

Contribution ID: 22

Type: **not specified**

## **LHCb Networking Requirements**

*Tuesday, 20 June 2017 14:35 (15 minutes)*

LHCb Networking Requirements

**Presenter:** ROISER, Stefan (CERN)

**Session Classification:** Medium term evolution - Network

Contribution ID: 23

Type: **not specified**

## CMS Networking Requirements

*Tuesday, 20 June 2017 14:20 (15 minutes)*

CMS Networking Requirements

**Presenter:** WISSING, Christoph (Deutsches Elektronen-Synchrotron (DE))

**Session Classification:** Medium term evolution - Network



Contribution ID: 24

Type: **not specified**

## **Network Monitoring and Debugging Discussion**

*Tuesday, 20 June 2017 15:05 (25 minutes)*

Discussion of network monitoring and diagnosis

**Session Classification:** Medium term evolution - Network

Contribution ID: 25

Type: **not specified**

## **Overview & report from Data Steering Group**

*Tuesday, 20 June 2017 09:00 (15 minutes)*

**Presenter:** KEEBLE, Oliver (CERN)

**Session Classification:** Medium term evolution - Data

Contribution ID: 26

Type: **not specified**

## Discussion

*Tuesday, 20 June 2017 09:15 (15 minutes)*

**Session Classification:** Medium term evolution - Data

Contribution ID: 27

Type: **not specified**

## Storage resource reporting

*Tuesday, 20 June 2017 09:30 (10 minutes)*

**Presenter:** KEEBLE, Oliver (CERN)

**Session Classification:** Medium term evolution - Data

Contribution ID: 28

Type: **not specified**

## Discussion

*Tuesday, 20 June 2017 09:40 (20 minutes)*

**Session Classification:** Medium term evolution - Data

Contribution ID: 29

Type: **not specified**

## Object stores

*Tuesday, 20 June 2017 10:00 (10 minutes)*

**Presenter:** DEWHURST, Alastair (STFC - Rutherford Appleton Lab. (GB))

**Session Classification:** Medium term evolution - Data

Contribution ID: **30**

Type: **not specified**

## **Discussion**

*Tuesday, 20 June 2017 10:10 (20 minutes)*

**Session Classification:** Medium term evolution - Data

Contribution ID: **31**

Type: **not specified**

## **Site and storage architecture - diskless sites**

*Tuesday, 20 June 2017 11:40 (10 minutes)*

**Presenter:** VAMVAKOPOULOS, Emmanouil (CC-IN2P3 - Centre de Calcul (FR))

**Session Classification:** Medium term evolution - Data



Contribution ID: 32

Type: **not specified**

## Discussion

*Tuesday, 20 June 2017 11:50 (40 minutes)*

**Session Classification:** Medium term evolution - Data

Contribution ID: 33

Type: **not specified**

## Site and storage architecture - caches

*Tuesday, 20 June 2017 11:20 (10 minutes)*

**Presenter:** BOCKELMAN, Brian Paul (University of Nebraska-Lincoln (US))

**Session Classification:** Medium term evolution - Data

Contribution ID: 34

Type: **not specified**

## **Site and storage architecture - multi-site storage**

*Tuesday, 20 June 2017 11:10 (10 minutes)*

**Presenter:** MKRTCHYAN, Tigran (DESY)

**Session Classification:** Medium term evolution - Data

Contribution ID: 35

Type: **not specified**

## **ALICE Network Requirements**

*Tuesday, 20 June 2017 14:05 (15 minutes)*

**Primary author:** BETEV, Latchezar (CERN)

**Presenter:** BETEV, Latchezar (CERN)

**Session Classification:** Medium term evolution - Network

Contribution ID: **36**

Type: **not specified**

## **WLCG and IPv6**

*Wednesday, 21 June 2017 16:00 (20 minutes)*

**Presenters:** DEWHURST, Alastair (STFC - Rutherford Appleton Lab. (GB)); SCIABA, Andrea (CERN)

**Session Classification:** Introduction

Contribution ID: 37

Type: **not specified**

## **An introduction to IPv6**

*Wednesday, 21 June 2017 16:20 (30 minutes)*

**Presenter:** Mr FROY, Terry (Queen Mary University of London)

**Session Classification:** Introduction

Contribution ID: **38**

Type: **not specified**

## Deploying IPv6

*Wednesday, 21 June 2017 16:50 (20 minutes)*

**Presenter:** PRELZ, Francesco (Università degli Studi e INFN Milano (IT))

**Session Classification:** Introduction

Contribution ID: **39**

Type: **not specified**

## **DHCPv6 at CERN**

*Wednesday, 21 June 2017 17:10 (20 minutes)*

**Presenter:** MARTELLI, Edoardo (CERN)

**Session Classification:** Introduction



Contribution ID: **40**

Type: **not specified**

## **Hands-on preparation**

*Wednesday, 21 June 2017 17:30 (30 minutes)*

**Session Classification:** Introduction

Contribution ID: 41

Type: **not specified**

## **European SKA Regional Centre Compute Model**

*Monday, 19 June 2017 13:30 (20 minutes)*

**Presenter:** SCAIFE, Anna

**Session Classification:** Medium term evolution - Compute

Contribution ID: 42

Type: **not specified**

## Discussion

*Monday, 19 June 2017 13:50 (10 minutes)*

**Session Classification:** Medium term evolution - Compute

Contribution ID: 43

Type: **not specified**

## **Review of WLCG experiment compute plans**

*Monday, 19 June 2017 14:00 (25 minutes)*

**Presenter:** CAMPANA, Simone (CERN)

**Session Classification:** Medium term evolution - Compute

Contribution ID: 44

Type: **not specified**

## Discussion

*Monday, 19 June 2017 14:25 (10 minutes)*

**Session Classification:** Medium term evolution - Compute

Contribution ID: 45

Type: **not specified**

## **Lightweight sites compute - possible models**

*Monday, 19 June 2017 14:35 (15 minutes)*

**Presenter:** LITMAATH, Maarten (CERN)

**Session Classification:** Medium term evolution - Compute

Contribution ID: 46

Type: **not specified**

## Discussion

*Monday, 19 June 2017 14:50 (10 minutes)*

**Session Classification:** Medium term evolution - Compute

Contribution ID: 47

Type: **not specified**

## **Singularity introduction and use in OSG**

*Monday, 19 June 2017 15:30 (20 minutes)*

**Presenter:** BOCKELMAN, Brian Paul (University of Nebraska-Lincoln (US))

**Session Classification:** Medium term evolution - Compute



Contribution ID: 48

Type: **not specified**

## Use of containers at RAL Tier-1

*Monday, 19 June 2017 15:50 (20 minutes)*

**Presenter:** LAHIFF, Andrew David (STFC - Rutherford Appleton Lab. (GB))

**Session Classification:** Medium term evolution - Compute

Contribution ID: 49

Type: **not specified**

## Discussion

*Monday, 19 June 2017 16:10 (20 minutes)*

**Session Classification:** Medium term evolution - Compute

Contribution ID: **50**

Type: **not specified**

## **Singularity**

*Monday, 19 June 2017 16:35 (15 minutes)*

**Primary author:** BRILLAULT, Vincent (CERN)

**Presenters:** VALSAN, Liviu (CERN); BRILLAULT, Vincent (CERN)

**Session Classification:** Medium term evolution - Security and trust

Contribution ID: 51

Type: **not specified**

## **Collaboration between security teams**

*Monday, 19 June 2017 16:50 (20 minutes)*

**Primary author:** WARTEL, Romain (CERN)

**Presenter:** WARTEL, Romain (CERN)

**Session Classification:** Medium term evolution - Security and trust

Contribution ID: 52

Type: **not specified**

## Ongoing work

*Monday, 19 June 2017 17:10 (20 minutes)*

**Primary author:** VALSAN, Liviu (CERN)

**Presenter:** VALSAN, Liviu (CERN)

**Session Classification:** Medium term evolution - Security and trust

Contribution ID: 53

Type: **not specified**

## **Status report from Benchmarking Working Group**

*Wednesday, 21 June 2017 11:00 (40 minutes)*

**Presenter:** GIORDANO, Domenico (CERN)

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: 54

Type: **not specified**

## **Benchmarking discussion (with panellists)**

*Wednesday, 21 June 2017 11:40 (50 minutes)*

**Presenters:** FORTI, Alessandra (University of Manchester (GB)); MCNAB, Andrew (University of Manchester); LATCHEZAR, Betev (CERN); FLIX MOLINA, Jose (Centro de Investigaciones Energéticas Medioambientales y Tecno); ALEF, Manfred (Karlsruhe Institute of Technology (KIT))

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: 55

Type: **not specified**

## **Status, plans of WLCG Unified Monitoring**

*Wednesday, 21 June 2017 13:30 (25 minutes)*

**Presenter:** AIMAR, Alberto (CERN)

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...



Contribution ID: 56

Type: **not specified**

## ElasticSearch Service at CERN

*Wednesday, 21 June 2017 13:55 (10 minutes)*

**Presenter:** SCHWICKERATH, Ulrich (CERN)

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: 57

Type: **not specified**

## **Monitoring in Experiments (Summary)**

*Wednesday, 21 June 2017 14:05 (20 minutes)*

**Presenter:** AIMAR, Alberto (CERN)

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: 58

Type: **not specified**

## Q&A

*Wednesday, 21 June 2017 14:25 (5 minutes)*

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: 59

Type: **not specified**

## Information System Evolution

*Wednesday, 21 June 2017 14:30 (15 minutes)*

**Presenter:** ANDREEVA, Julia (CERN)

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: **60**

Type: **not specified**

## **CRIC**

*Wednesday, 21 June 2017 14:45 (25 minutes)*

**Presenter:** DI GIROLAMO, Alessandro (CERN)

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: **61**

Type: **not specified**

## **Storage Space Accounting - Introduction**

*Wednesday, 21 June 2017 15:10 (5 minutes)*

**Presenter:** ANDREEVA, Julia (CERN)

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: **62**

Type: **not specified**

## **Storage Space Accounting - Prototype**

*Wednesday, 21 June 2017 15:15 (15 minutes)*

**Presenter:** Mr CHRISTIDIS, Dimitrios (University of Patras (GR))

**Session Classification:** Operational tools, benchmarking, accounting, monitoring, etc...

Contribution ID: **63**

Type: **not specified**

## **Preliminary steps**

*Thursday, 22 June 2017 09:00 (15 minutes)*

**Presenter:** Mr FROY, Terry (Queen Mary University of London)

**Session Classification:** IPv6 Tutorial



Contribution ID: **64**

Type: **not specified**

## **Data transfer exercise**

*Thursday, 22 June 2017 09:15 (1 hour)*

**Presenter:** TIGERSTEDT, Ulf Bobson Severin (Helsinki Institute of Physics (FI))

**Session Classification:** IPv6 Tutorial

Contribution ID: 65

Type: **not specified**

## **perfSonar exercise (installation)**

*Thursday, 22 June 2017 10:15 (15 minutes)*

**Presenter:** RAND, Duncan (Imperial College (GB))

**Session Classification:** IPv6 Tutorial

Contribution ID: **66**

Type: **not specified**

## Welcome

*Monday, 19 June 2017 13:00 (5 minutes)*

**Presenter:** SOLDNER-REMBOLD, Stefan (University of Manchester)

**Session Classification:** Introduction

Contribution ID: 67

Type: **not specified**

## Introduction

*Monday, 19 June 2017 13:06 (24 minutes)*

**Presenters:** BIRD, Ian (CERN); COLLIER, Ian (STFC - Rutherford Appleton Lab. (GB))

**Session Classification:** Introduction

Contribution ID: 68

Type: **not specified**

## Cost Models

*Tuesday, 20 June 2017 16:00 (30 minutes)*

To be able to predict the needs of computing and to understand which type of resources contribute to the overall costs, several models have been developed and are in use. Can we build models based on a common approach between the experiments and to what detail do we need to go? Short presentation followed by a discussion.

**Primary author:** FLIX MOLINA, Jose (Centro de Investigaciones Energéticas Medioambientales y Tecnológico)

**Presenter:** FLIX MOLINA, Jose (Centro de Investigaciones Energéticas Medioambientales y Tecnológico)

**Session Classification:** Efficiency and cost

Contribution ID: 69

Type: **not specified**

## Bringing improvements into production

*Tuesday, 20 June 2017 16:30 (30 minutes)*

In our community we often observe a significant latency between the proof of concept of an improvement and the exploitation in production, while we often react to emergencies swiftly. Do we understand the underlying causes and what could be done to benefit more timely from improvements? Short presentation followed by a lively discussion.

**Primary author:** ELMSHEUSER, Johannes (Brookhaven National Laboratory (US))

**Presenter:** ELMSHEUSER, Johannes (Brookhaven National Laboratory (US))

**Session Classification:** Efficiency and cost

Contribution ID: 70

Type: **not specified**

## Exchanging and disseminating knowledge

*Tuesday, 20 June 2017 17:00 (30 minutes)*

In many places, conferences, summer schools, workshops over many years findings on performance and efficiency are presented and techniques and tools are taught. There is a lot of knowledge and experience in our community, however this knowledge is fragmented and often web searches are the way to connect these sources. To achieve the improvements to successfully face the HL-LHC challenges this knowledge needs to be more easily accessible and made usable for contributors at all levels. How can we achieve this? Very short presentation followed by a discussion and hopefully a seed for a plan.

**Primary author:** SCHULZ, Markus (CERN)

**Presenter:** SCHULZ, Markus (CERN)

**Session Classification:** Efficiency and cost

Contribution ID: 71

Type: **not specified**

## Logistic

*Monday, 19 June 2017 13:05 (1 minute)*

**Presenter:** FORTI, Alessandra (University of Manchester (GB))

**Session Classification:** Introduction



Contribution ID: 72

Type: **not specified**

## **Project Leader's report**

*Wednesday, 21 June 2017 09:30 (20 minutes)*

**Presenter:** BIRD, Ian (CERN)

**Session Classification:** Collaboration board

Contribution ID: 73

Type: **not specified**

## Update on HNSciCloud

*Wednesday, 21 June 2017 09:50 (10 minutes)*

**Session Classification:** Collaboration board

Contribution ID: 74

Type: **not specified**

## **The Scientific Computing Forum**

*Wednesday, 21 June 2017 10:00 (10 minutes)*

**Session Classification:** Collaboration board

Contribution ID: 75

Type: **not specified**

## **Relationship with other proejcts, including SKA**

*Wednesday, 21 June 2017 10:10 (20 minutes)*

**Session Classification:** Collaboration board

Contribution ID: 76

Type: **not specified**

## **perfSonar exercise (configuration)**

*Thursday, 22 June 2017 11:00 (45 minutes)*

**Presenter:** RAND, Duncan (Imperial College (GB))

**Session Classification:** IPv6 Tutorial

Contribution ID: 77

Type: **not specified**

## **squid for Frontier and CVMFS**

*Thursday, 22 June 2017 11:45 (45 minutes)*

**Presenter:** SCIABA, Andrea (CERN)

**Session Classification:** IPv6 Tutorial

Contribution ID: 78

Type: **not specified**

## **Security update [slides for all talks]**

*Monday, 19 June 2017 16:30 (5 minutes)*

**Presenters:** VALSAN, Liviu (CERN); WARTEL, Romain (CERN); BRILLAULT, Vincent (CERN)

**Session Classification:** Medium term evolution - Security and trust