Uni.lu (Kirchberg)
Chaos cluster

LCSB Belval
(gaia cluster)

Uni.lu

10 GbE
10 GbE
10 GbE
1 GbE

Chaos cluster access
Bull R423 (2U)
(2*4c Intel Xeon E5630 @ 2.53GHz), RAM: 24GB

Adminfront
Dell PE R610 (2U)
(2*4c Intel Xeon L5640 @ 2,26 GHz), RAM: 64GB

10 GbE

Cisco Nexus C5010
10GbE

10 GbE

Infiniband QDR 40 Gb/s
(Min Hop)

IB

IB

IB

NFS server
Dell R710 (2U)
(2*4c Intel Xeon E5506 @ 2.13GHz), RAM: 24GB

FC8

FC8

NetApp E5486 (180 TB)
60 disks (3 TB SAS 7.2krpm) = 180 TB (raw)
Multipathing over 2 controllers (Cache mirroring)
6 **RAID6** LUNs (8+2 disks) = 144TB (lvm + xfs)

CentOS

debian
POWERED

Xen™

Puppet

fai Fully Automatic
Installation

CS.43 (416 cores)
Computing Nodes

1x Dell R910 (4U)   **[32 cores]**
(4*6c Intel Xeon X7560@2,26GHz), RAM:1TB

1x HP c7000 enclosure (10U)
32 blades HP BL2x220c G6 [384 cores]
(2*6c Intel Xeon L5640@2.26GHz), RAM: 24GB

AS.28 (708 cores) **Computing Nodes**

1x Dell M1000e enclosure (10U)
16 blades Dell M610 [196 cores]
(2*6c Intel Xeon L5640@2.26GHz), RAM: 24GB

1x Dell M1000e enclosure (10U)
16 blades Dell M620 [256 cores]
(2*8c Intel Xeon E5-2660@2.2GHz), RAM: 32GB

2x HP SL6500 (8U)
16 blades SL230s Gen8 [256 cores]
(2*8c Intel Xeon E5-2660@2.2GHz), RAM: 32GB

Chaos cluster characteristics

- **Computing**: 81 nodes, 1124 cores; $R_{peak} \approx 14.508$ TFlops
- **Storage**: 180 TB (NFS) + 180TB (NFS, backup)