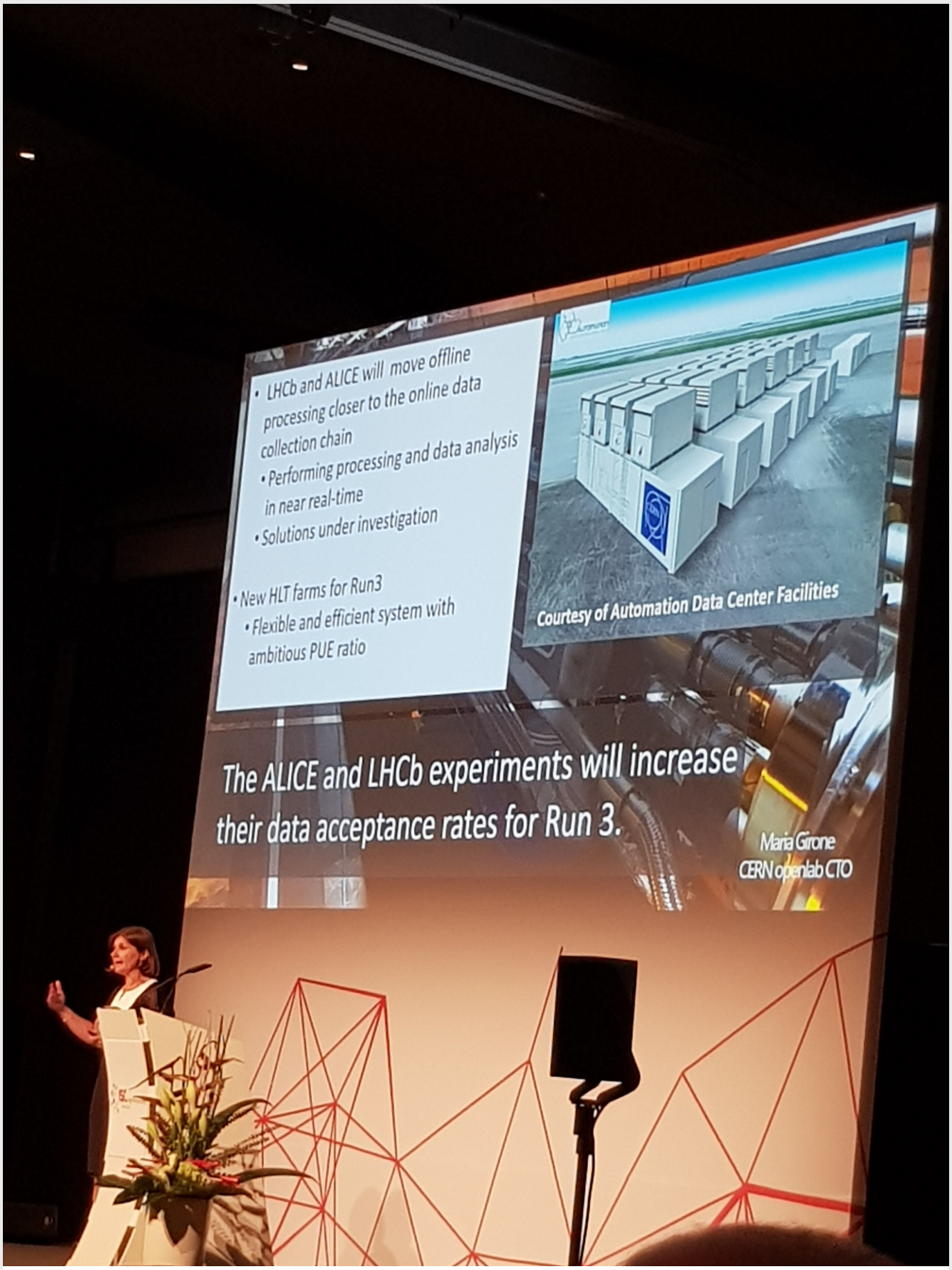
Primeur Weekly! Magazine

Automation gets order from CERN

22 Jun 2018 Halle - *Halle-based Automation wins an order for the expansion of the data centres for 2 experiments at CERN. Thanks to the 10 modules, more information can be collected and managed at a reasonable cost and within a short delivery period. Furthermore, the modules will be installed on top of the experiments (Near Source).*



Keynote speaker at ISC 2018 on HPC in Frankfurt, Maria Girone - CTO of CERN openlab - referred to Automation's SAFE when explaining CERN needs to embrace new technologies to cope with the growing amount of data generated at CERN with the upcoming upgrades of the LHC and the experiments.

It is beyond doubt that CERN, the European Organization for Nuclear Research, uses High Performance Compute (HPC) for its data processing and storage. The scientific and technical staff develop, build and monitor the perfect functioning of the particle accelerators. In addition, they provide support for the preparation, performance, analysis and interpretation of data from complex experiments.

CERN has decided not to build new or additional (traditional) data centres, but to use Prefabricated Data Centre Modules to carry out the upgrades instead. The advantages of these modules are obvious:

- Fast, flexible and efficient solution that complies with the highest quality standards
- A solution that complies to the high performance requirements of CERN-ICT
- 12-week delivery period
- Optimized performance configurations when it comes to power, density and energy efficiency
- Near Source: the modules are installed on top of the experiments, which implies a huge saving on the transfer of data

Each Prefabricated Data Centre provides a 2 MW net IT load with an estimated annual average pPUE below 1.075. Herewith, the Automation SAFE-ECO solution achieves a value far below the 1.10 pPUE requirement in terms of energy efficiency thanks to the integration of a cooling system that is specifically adapted to the weather conditions in Central Europe.

By way of comparison: a traditional data centre with a power of 2 MW has a pPUE between 1.35 and 1.8. Or, in other words: a traditional data centre consumes 25% more energy than a Prefabricated Data Centre.

A wide range of segments and businesses are already using Prefabricated Datacenter Modules:

- For Proximus the SAFE ECO system with 'fresh air' is currently being installed to support the FTTH project. The existing buildings will gradually be replaced with the modules, which, in addition, comply to the severest noise-level criteria for material in residential areas.
- 2 SAFE ECO 'Indirect Evaporative Cooling' units have already been installed in Mainz, Germany. The energy saving for this customer is estimated at at least 90,000 euro per year for a 100 KW net IT load data centre. There is also room to install 8 extra modules.

Furthermore, 600 personalized modules have been installed all over the world in a wide range of industries and applications, such as Industrial IoT, Telco, HPC and ECO.

Automation will be present at the ISC Exhibition in Frankfurt for HPC from 25 to 27 June at booth C-1222. In addition, the Project Manager of LHCb, Niko Neufeld, will be giving a presentation, on 27 June, in which he will explain why he has chosen Automation's Prefabricated Data Centre Modules.

The first 2 CERN modules will be delivered in September.

Source: Automation

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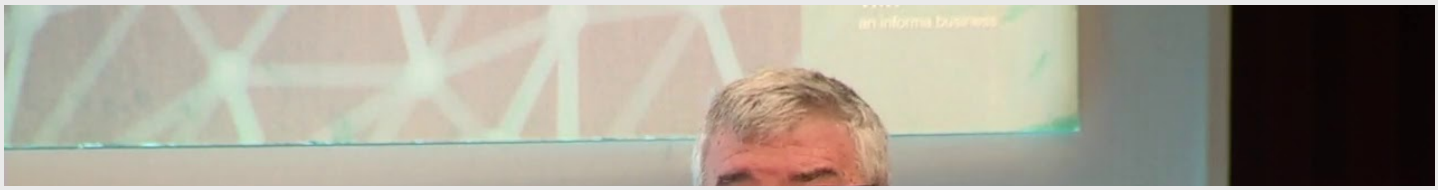

No supercomputer in the European Union in the top 3 of the world? For BSC that is a choice, says Mateo Valero Focus on Europe