



# Service Asset and Configuration Management in ALICE Detector Control System

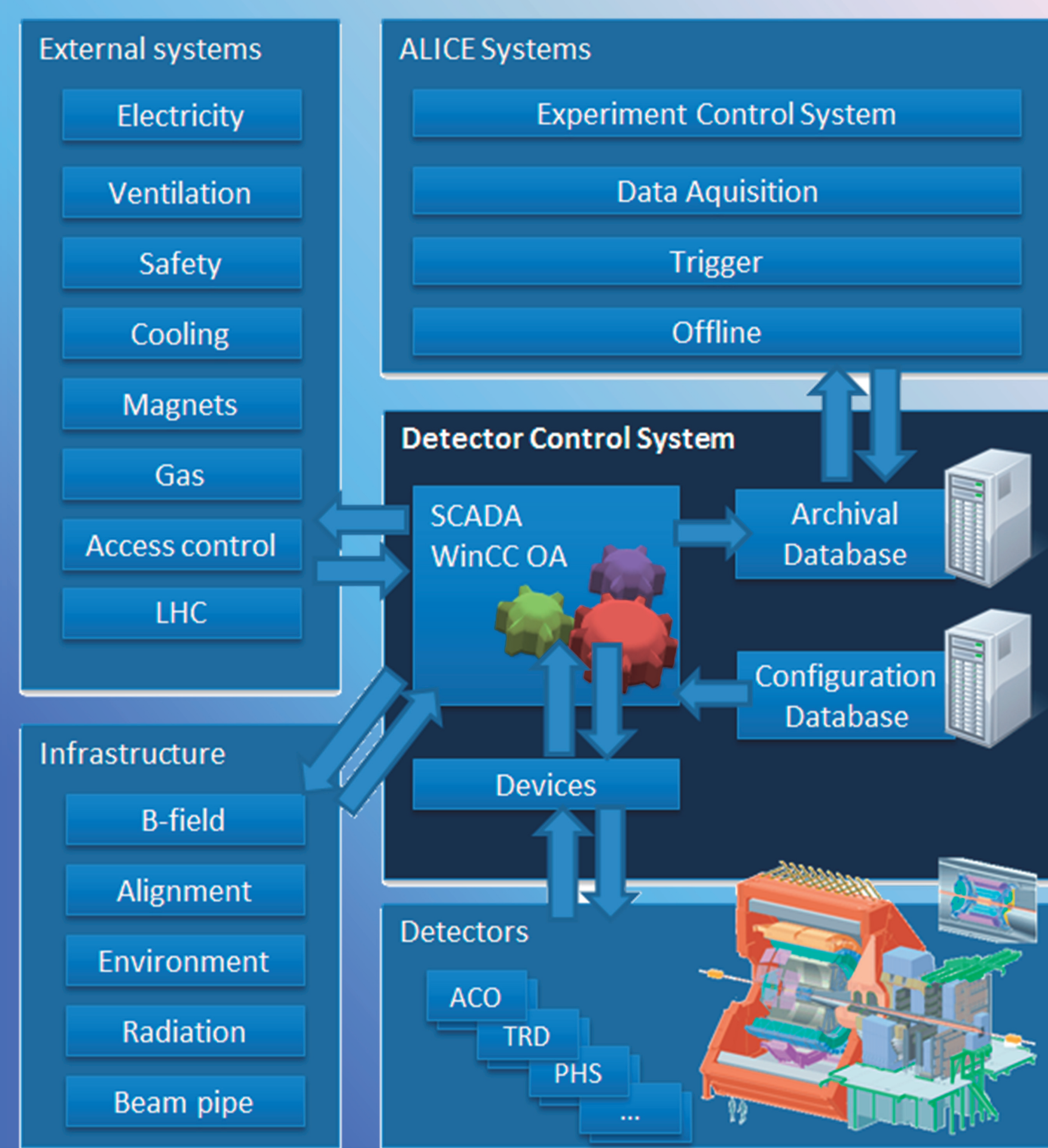


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on behalf of the ALICE Collaboration

ALICE (A Large Ion Collider Experiment) is one of the big LHC (Large Hadron Collider) detectors at CERN. The experiment is composed of 19 sub-detectors constructed by different institutes participating in the project. Each of these subsystems has a dedicated control system based on the commercial SCADA package “WinCC OA” and numerous other software and hardware components delivered by external vendors. The task of the central controls coordination team is to supervise integration, to provide shared services (like database, gas monitoring, safety systems) and to manage complex infrastructure that is used by over 100 developers around the world. Due to the scale of the control system, it is essential to ensure that reliable and accurate information about all the components - required to deliver these services along with relationship between the assets - is properly stored and controlled. This poster presents Configuration Management System, implemented on the basis of the IT Infrastructure Library recommendations, which supports the central team in meeting these requirements.

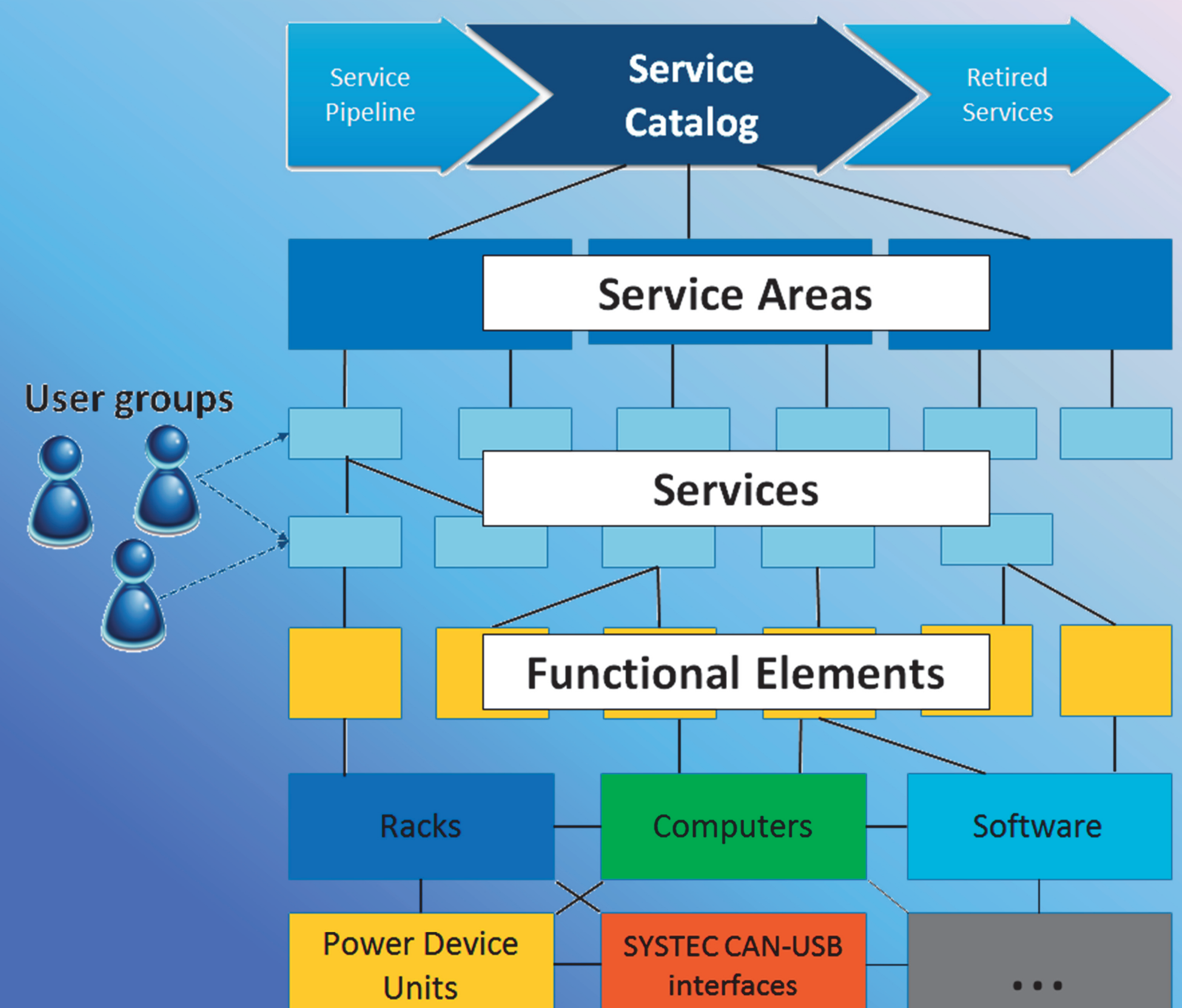
## Context of Detector Control System in ALICE



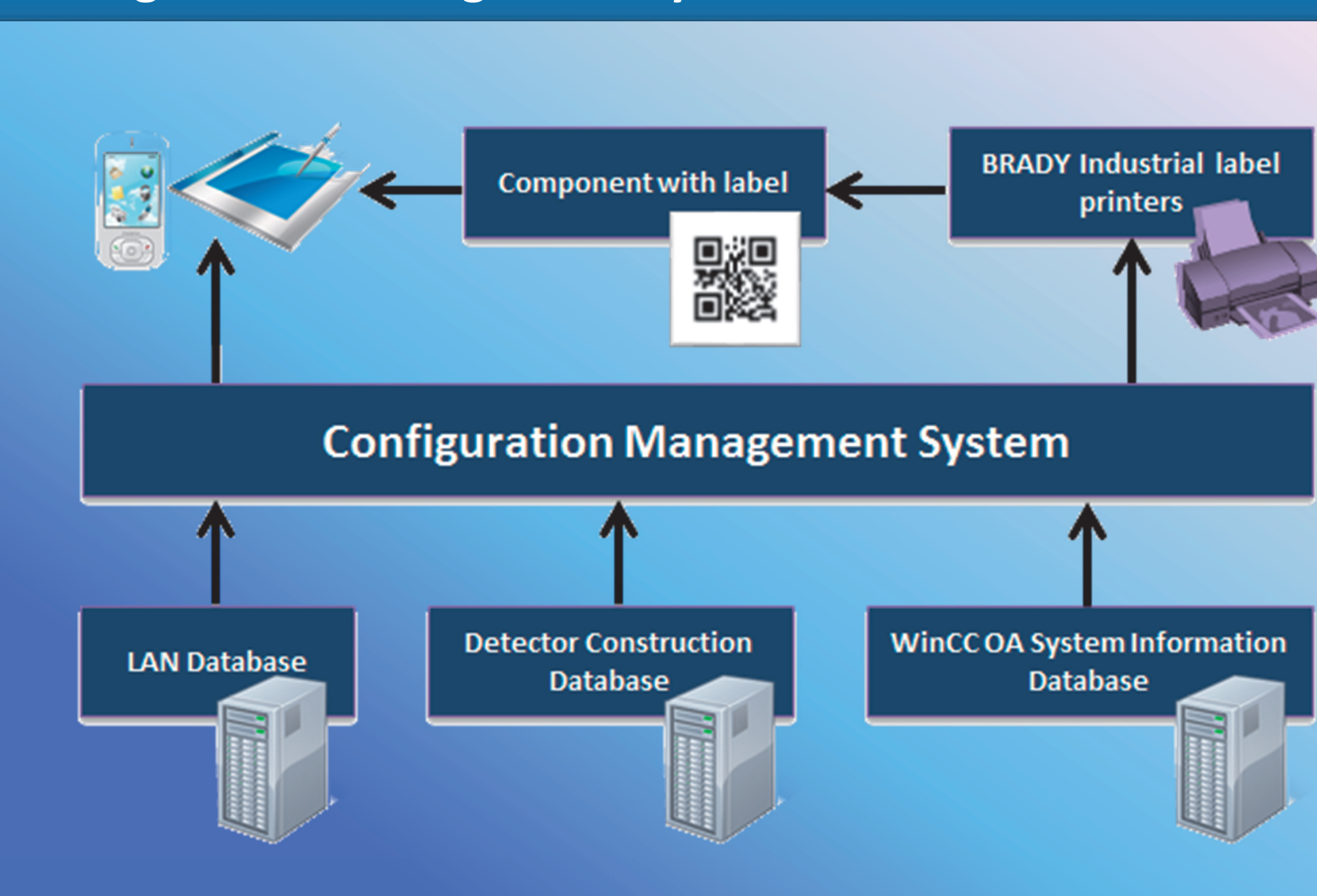
## Configuration Management System

- Common interface to different data sources
- Support for Service Management
- Generic data model
- Web application (Oracle Apex)

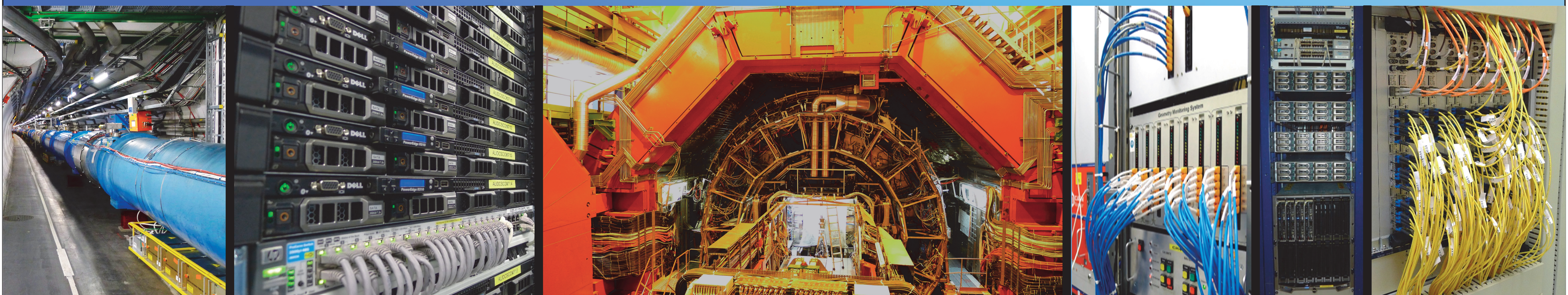
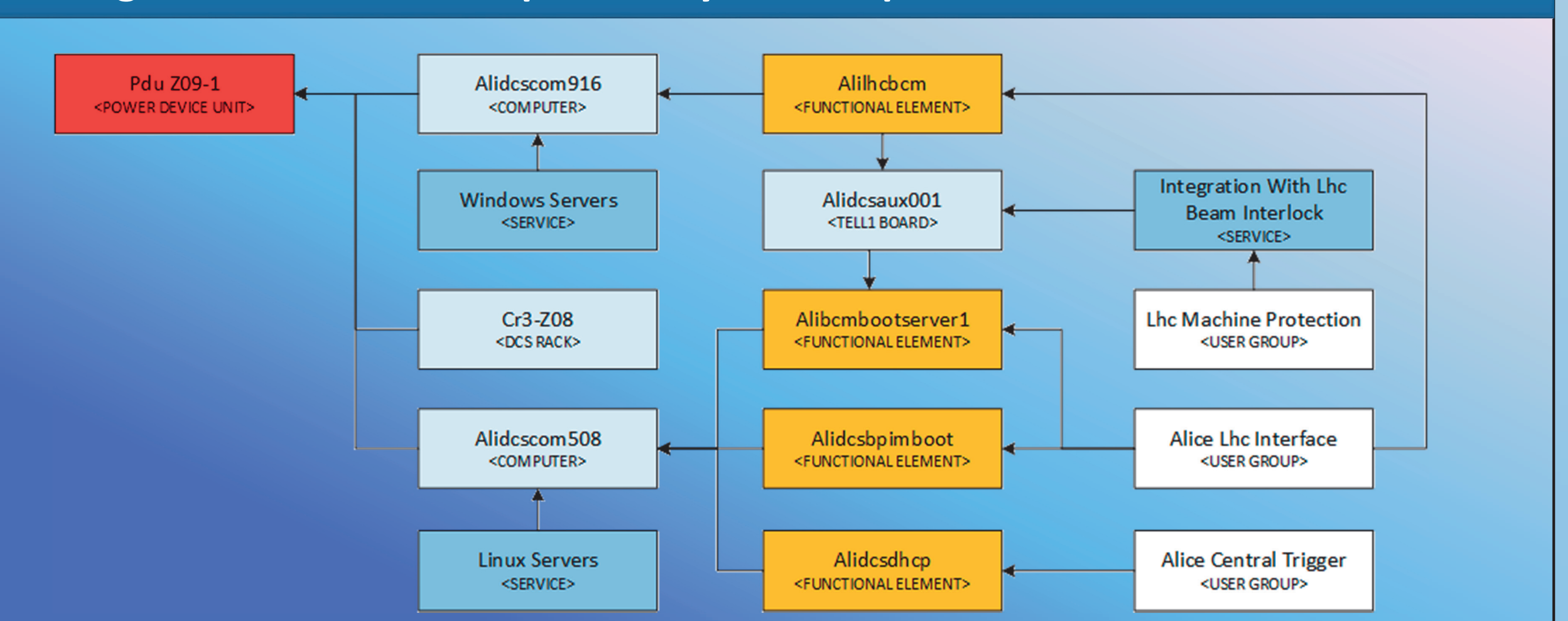
## Types of configuration items and their relations



## Configuration Management System – information flow



## Automatic generation of diagrams showing dependencies between configuration items for impact analysis - sample result



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