C ontrol system based on a
H ighly
A bstracted and
O pen
S tructure

!CHAOS

WP3 STATUS 09/06/2015

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Status Accelerator Use Case

- **BTF use case achieved the objective of the first feedback through !CHAOS!**

- !CHAOS "light" successfully tested to overcome "run time" issues due to: aged HW/SW and labVIEW Linux bugs

- NI accepted bug and scheduled resolution on next LV release (possible escalation to have the bug resolved in some intermediate patch)

- Introduced !CHAOS support to compile on old Libera Brilliance (armv5tel + linux 2.6.20), successfully run a virtual powersupply CU.

- Introduced !CHAOS support to compile crio9068, successfully run a virtual powersupply CU

- labVIEW2CHAOS native library to access !CHAOS resources without DLL

- Developed a Labview Libera interface

TODO Accelerator Use Case

- Adding !CHAOS support for Libera Brilliance +

- Develop !CHAOS drivers for Libera Brilliance

- Dafne accumulator orbit under !CHAOS

- Adding new drivers for BTF devices in order to have BTF fully controlled by !CHAOS

!CHAOS

Status ESCO USE Case

We have a preliminary setup of a network of Zigbee nodes and sensors that are monitoring the Aula Touschek. These nodes provide environmental information (Temp,Humidity,CO_2) and a ! CHAOS CU get these values and push them into the "Cloud". "An intelligent algorithm" will drive the UTA through another !CHAOS CU in order to achieve an optimum comfort trying to minimizing power consumption.

http://chaost-webui1.chaos.lnf.infn.it/ED36.html
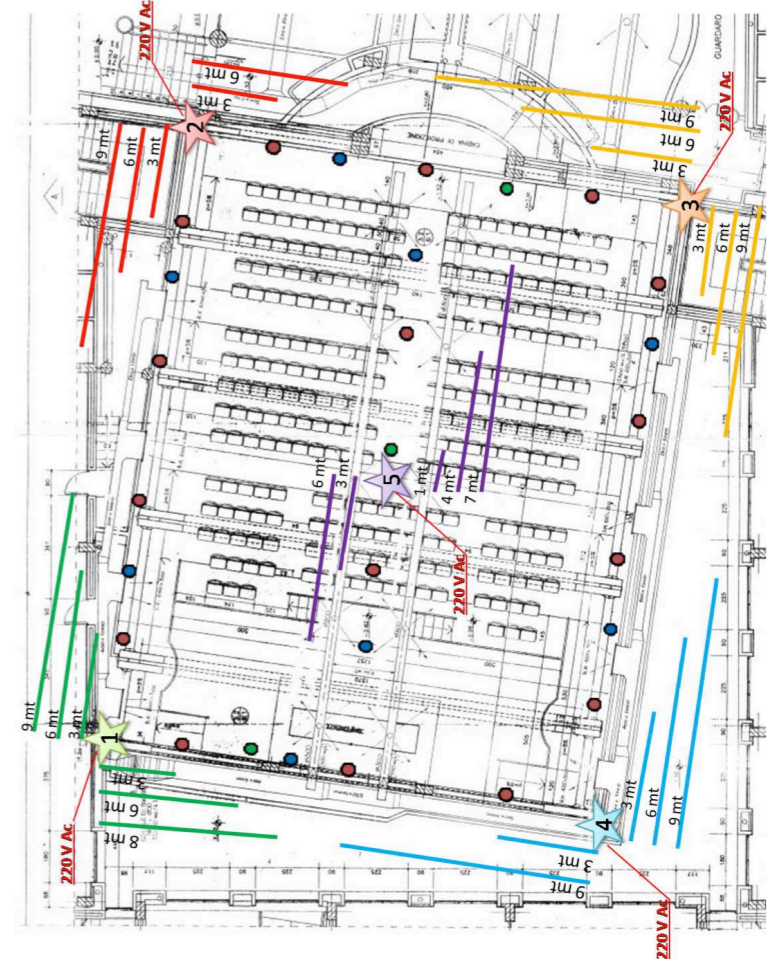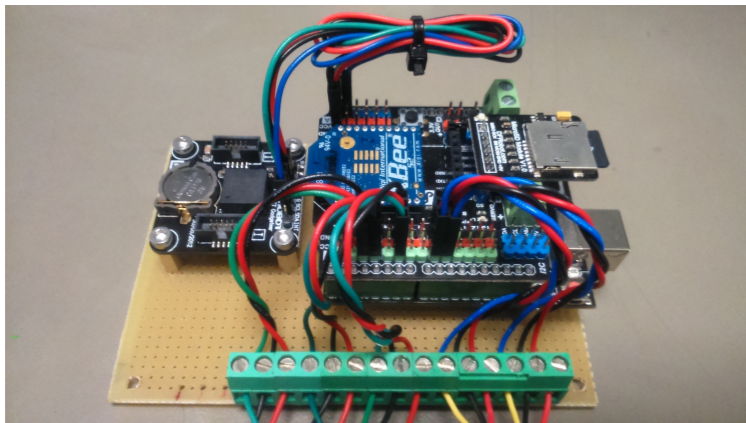
TODO ESCO Use Case

- Test and install control on UTA

- !CHAOS Driver for conditioning (climaveneta)

- FULL GUI to monitor and control the system

- Algorithm to realize a useful feedback on UTA

thanks you