

Distributed Control of Environmental Chambers with Compact FieldPoint and LabVIEW RT

Customer

United Technologies Research Center (East Hartford, CT) supports all of United Technologies Corp.'s business units and their products – from elevators and fuel cells to helicopters and jet engines.

Challenge

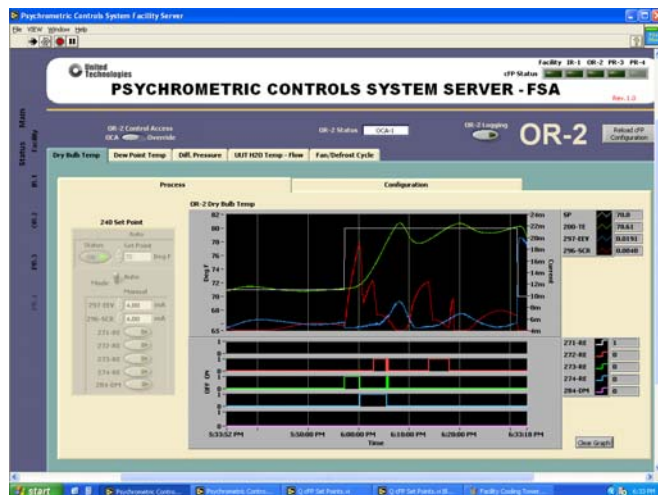
Enable users to control humidity and temperature of environmental chambers used for product performance characterization testing.

Solution

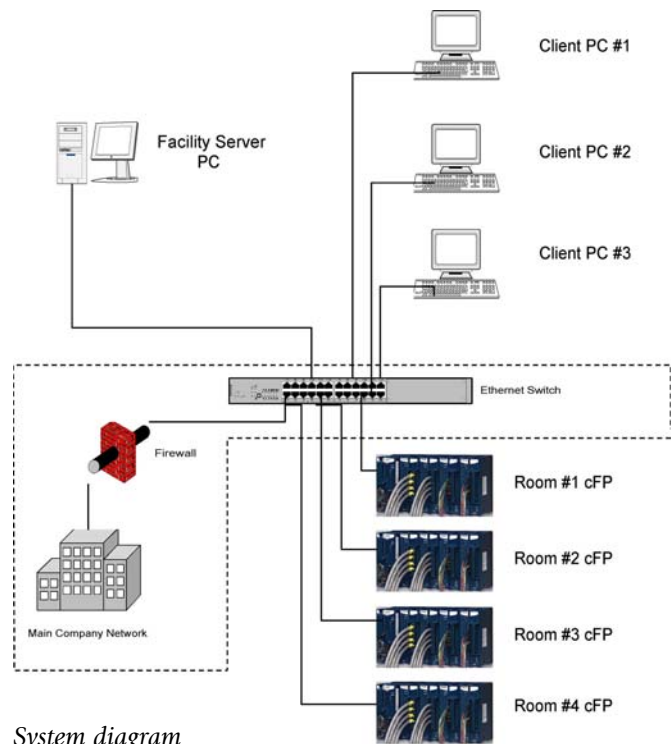
Provide distributed, real-time control of environmental chambers; Enable users to specify and execute control recipes in individual chambers or in unison with multiple chambers.

Key products used:

- National Instruments (NI) LabVIEW Real-Time
- NI LabVIEW Datalogging and Supervisory Control
- NI Compact FieldPoint
- NI PID Control Toolkit



Facility server user interface



System diagram

Benefits

The new, fully automated environmental chamber control system replaced a manual system that required special knowledge to operate. The control system also expanded testing capabilities by enabling simultaneous, multi-unit testing.

To achieve similar results, contact our office nearest you or visit www.bloomy.com.

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