



- System Overview
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Responsive web app based on bootstrap and JavaScript MVC framework

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Provide RESTful API to Web APP or Mobile APPs

3

Use Mosquitto to implement the MQTT protocol for distributing real-time messages

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Record devices data from field controllers, AHUs and PM2.5 sensors via Modbus periodically

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Connect to public weather data source via open API

6

Reporting server to provide reporting and analytics that can be embedded into the web application

7

Persistent storage for facilities, devices, historian data, rules, identity, users, roles

8

Long running service to monitor rules in database, trigger actions to field controllers and publish alert messages to MQTT broker

9

Fetch real-time device status and alerts from Modbus-MQTT Gateway and publish messages to the MQTT broker

10

Subscribe real-time control messages from MQTT broker and then send to field controllers via Modbus

11

Store real-time alerts and control messages to the MySQL database

12

Convert data between Modbus and MQTT

13

An industrial computer that contains a minimal Linux operating system and a fully configured application stack