

3 SCALING HOME AUTOMATION TO PUBLIC BUILDINGS: A DISTRIBUTED MULTIUSER SETUP FOR OPENHAB 2

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ABSTRACT:

Home automation systems can help to reduce energy costs and increase comfort of living by adjusting room temperatures according to schedules, rules, and sensor input. OpenHAB 2 is an open-source home automation framework supporting various home automation technologies and devices. While OpenHAB is well suited for single occupancy homes, large public buildings pose additional challenges. The limited range of wireless home automation technologies requires transceivers distributed across the building. Additionally, control permissions need to be restricted to authorized persons. This work presents OpenHAB-DM, a distributed OpenHAB 2 setup with extensions introducing user authentication, access control, and management tools for decentralized OpenHAB node deployment.

3.1 Referenced Paper

F. Heimgaertner, S. Hettich, O. Kohlbacher, & M. Menth, 2017. Scaling home automation to public buildings: A distributed multiuser setup for OpenHAB 2. *2017 Global Internet of Things Summit (GIoTS)*, Geneva, 2017, pp. 1-6. DOI: 10.1109/GIOTS.2017.8016235

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