

Smart Home & Building



Feature development and maintenance of a central unit in the home automation domain

Customer requirements

The project was concerned with the refactoring of two generations of a house automation system's central units and the extending of their functionality. To reach this goal various hardware platforms and build environments had to be taken into account.

The data model and the persistency were also to be refactored. Finally, further measures for stabilising the system were to be implemented. In this context, it was also necessary to expand debugging.

Technology used

Embedded Linux, C++, Qt, Google Test, Review Board, ptxdist, yocto, CMake, EnOcean

comlet solution

Various new features were implemented as well on system level as on application level. The central units' data model was completely reworked. Adjustments were made to Linux init processes to optimise start-up behaviour. Features such as "backup & restore" and "return to factory settings" were also specified and implemented. In addition various system services were expanded and adapted.

The technical changes were accompanied by additional process adaptations such as a web-based source code review process, coding styles, and the creation and integration of unit tests into the build process. Several trainings for the development team were conducted to create a common understanding.

