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Open-source Strategy

The i3-MARKET consortium is committed to contributing to a reference implementation (community release) of the individual building blocks as well as the overall i3-MARKET data market frameworks to the developer community through an open-source project as shown in Figure 7.1.

The open-source management project structure has been updated to reach the developer and entrepreneur (SMEs) communities largely and facilitate their onboarding or innovation processes. i3-MARKET followed an open-source path using two of the most well-known and established open-source organizations that provide open-source projects hosting: Gitlab and GitHub. We have studied the options to have better impact and acceptance in the developer and SME communities and adopted the procedure and roles for the users of our i3-MARKET open-source project in a way that suited best to the i3-MARKET case.

The i3-MARKET project governance process defines a support and evaluation process to include software improvements as follows:

- **Request for changes or updates:** A technical board identifies any change requests previous to a *major* release, which should be integrated into this *major* release. Before a release, all changes have to be tested by using a pre-production/staging approach.
- **The evaluation of any type of technical request:** A technical board approves a software component or initiates a project in i3-MARKET OSS.
- **The communication of the results from technical experts:** A tagging release strategy is used in order to indicate the impact of the changes made on the i3-MARKET ecosystem.
- **Evaluation of contributions for new commits:** A technical board assesses and evaluates the contributions including documentation in i3-MARKET OSS.

- **Reports and changes report:** A technical board issues a short report, explaining the rationale of the acceptance or the rejection in exceptional cases.

The i3-MARKET team aims to facilitate and simplify development of data services based on i3-MARKET Backplane; any developer should be capable of implementing and developing data services based on i3-MARKET Backplane tools. The i3-MARKET open-source team provides the slack tool (i3-MARKET.slack.com) for a direct communication and conversations with the developers team; the slack channel is used as a direct communication channel and it is open to any developer that is part of the i3-MARKET community but also for those external that want to start engaging with the project.

Developers require technical information that goes beyond high-level descriptions in a website or that a normal software project documentation can provide. The i3-MARKET project has set up an open-source developers portal as an online tool to facilitate the members of the ecosystem to get access to the materials, documentation, technical information, developers know-how, and code. The online tool of the i3-MARKET project is deployed to actively facilitate reaching out not only to the open-source community but also SMEs and entrepreneurs in order to facilitate an easy adoption and building an ecosystem around the i3-MARKET project.

The documentation and specifications are released using the open-source website portal at <http://www.open-source.i3-MARKET.eu>. Videos showing the progress and use of the developed software tools can be accessed via the i3-MARKET YouTube channel. The community of open-source developers SMEs and entrepreneurs can now easily find instructions that are available at the i3-MARKET open-source portal. This is a live portal, which is a continuous update according to the latest development of the project. The main purpose of releasing this developer-centric portal is to actively enable a channel for reaching out to the open-source community and to allow SMEs and entrepreneurs to get all the latest developments and also download and use the different i3-MARKET available software updates. More specific technical documentations about the components and systems are also available in a specific “Developer Portal” at <https://i3-MARKET.gitlab.io/code/Backplane/Backplane-api-gateway/Backplane-api-specification/index.html>.

i3-MARKET Open-Source Strategy



Figure 7.1 i3-MARKET open-source strategy.

The code is available open-source via the establishment of the i3-MARKET spaces on Gitlab, available at <https://gitlab.com/i3-MARKET-V3-public-repository/> and GitHub, available at <https://github.com/i3-MARKET-V3-public-repository>. The i3-MARKET’s developers team has made an extra effort to release all the software created in these two well-known platforms as they are among the largest and most popular open-source communities; i3-MARKET has conducted all the necessary efforts to establish an automatic and transparent synchronization mechanism and the OSS governance methodology to support members of both communities. The i3-MARKET Git repository provides the collaborative space and software tools used by the i3-MARKET community. The i3-MARKET Backplane software is included in the current public repositories and further developments will be supported by members and communities.

