

## Practices of the KDE ecosystem

**Social Practices.** For the social view, we grouped practices related to working together in the community.

- . S1: Create confidence in a member based on his work history. Based on this, provide different levels of responsibilities.
- . S2: Require that at least two persons nominate a member to be promoted up the levels of responsibilities.
- . S3: Conduct annual meetings among translators by projects.
- . S4: Promote the networking in the work Market.
- . S5: Promote the social relationships to members in other countries.
- . S6: Create opportunity to practice another human language such as English.
- . S7: Conduct a general annual meeting to discuss face-to-face several questions of the community.
- . S8: Perform elections to assign responsibility levels for new members.
- . S9: Teach experienced members how to use tools to be more productive. For example: use of shortcut keys, scripts, and plug-ins.
- . S10: Active members can be given trips to events sponsored by the ecosystem.
- . S11: Use tools to support communication in the group such as: mailing lists, forums, IRCs, wikis, blogs to communication.
- . S12: Promote Happy Hours and/or dinners to facilitate the social integration during events.

**Business Practices.** For the business view, we grouped practices related to aspects of management, strategic planning, and innovation, and organized activities such as marketing, taking decisions, and so on.

- . B1: Provide flexibility in the translation schedule and negotiate deadlines.
- . B2: Reach an agreement in the community to face questions that are not registered in the tutorials or guidelines.
- . B3: Make decisions based on discussions in the mailing list.
- . B4: Provides lectures to teach how to translate and how to become a contributor.
- . B5: Provide a nonprofit corporation to manage legal and financial issues.

- . B6: Divide the activities into working groups responsible for several areas such as: marketing, infrastructure, design, community in order to keep the group healthy.
- . B7: Make technical decisions independently inside each project.
- . B8: Attract companies that invest money to support the ecosystem.
- . B9: Provide flexibility in the time to work with better code quality.
- . B10: Use lessons learned by past mistakes to modify and improve the practice.
- . B11: Define a schedule of releases that will affect the work of the entire community.
- . B12: Provide a feature plan that will be used for the implementation.
- . B13: Provide an accountability report every three months to community.
- . B14: Define and support a special group to manage all business issues.
- . B15: Define a hierarchical structure for members with different levels of responsibilities.
- . B16: Assign a lead maintainer for each project for making technical decisions.

**Technical Practices.** These practices address issues related to product development (core and applications), technologies used, code rules, among others.

- . T1: Each person chooses the work they desire to perform among available tasks in the ecosystem. For example: file to translate, code development, test of applications, and so on.
- . T2: Review all code before accepting into the release.
- . T3: Do not review translations of artifacts.
- . T4: Provide guidelines for how to translate artifacts.
- . T5: Provide guidelines for how to create the environment to work with translation and code development.
- . T6: Control the translation work separating artifacts into two groups to translate: stable - artifacts have experienced none or few changes and unstable - artifacts are continually being changed and checked constantly.
- . T7: Provide different access levels to the KDE repository to check-in artifacts for release.
- . T8: Provide specific tools to optimize the translation work. For example: the tool,

called Localize, searches text to translate and save the specific format. It also suggests words to use in translation.

- . T9: Provide different kinds of translation environments to work: online and offline.
- . T10: Provide a freeze period to stabilize the translation of a version before the launch of a version.
- . T11: Provide tools for code optimization, perform static analysis of code, code review, and test automation.
- . T12: Provide checklists of tasks to conclude the work. For example: before adding the code to the repository, the developer needs to document, test, integrate with other applications, code must be reviewed by another person and translation must be checked.
- . T13: Provide continuous integration tools that check code every day and report errors.
- . T14: Require that code must follow a standard defined previously.
- . T15: Provide a manifest which the project must follow to be considered part of the ecosystem.
- . T16: Require that all infrastructure must be under the control of the ecosystem and be based on the technologies created by the ecosystem.
- . T17: Provide a design style to be followed for all applications.
- . T18: Conducting incremental transitions rather than versions and releases all at once.
- . T19: Use scripts to do an initial code review and catch errors.
- . T20: Execute the code with several different versions of operational system and compilers, keeping compatibility and avoiding errors.
- . T21: Use scripts to evaluate improper dependencies.
- . T22: Each member announces the feature that he will implement to avoid duplicated work.
- . T23: Develop code to be extensible. The use of plug-ins and compilation is separated between the core and applications.
- . T24: Number versions with 3 numbers indicating what was changed in the version.
- . T25: Keep backward compatibility for a long time (around 6 years).

- . T26: Provide guidelines informing about actions that are allowed and not allowed to keep backward compatibility.
- . T27: Communicate changes in the API to the community in advance.
- . T28: Generate code documentation automatically.
- . T29: Provide documentation about operation of projects such as wikis, user guidelines, and meetings event log.
- . T30: Use discussion mailing lists divided by different topics such as test, development, etc.
- . T31: Use a group of members to perform tests in beta version.
- . T32: Use a bug triage task force to remove repeated or non-existent bugs.
- . T33: Conduct and control refactoring in project as necessary.
- . T34: Use technology to reuse GUI components to facilitate the development work.
- . T35: Developers handle manually change management.
- . T36: Developers and End Users create requirements for core and applications.
- . T37: Provide blogs for members where they can post news about new functionalities and other topics of the project.
- . T38: Develop two versions in parallel, a old and a new version until that new version is stable and ready to replace the old version
- . T39: Different types of contributors help to test code that needs special hardware, operational system or network connection. This happens because normally a developer does not have all devices to test code.
- . T40: Mark the code as deprecated in features that will be removed from the software.