



How a Large Open-Source Foundation Uses Exalate to Help Drive Adoption with its Communities

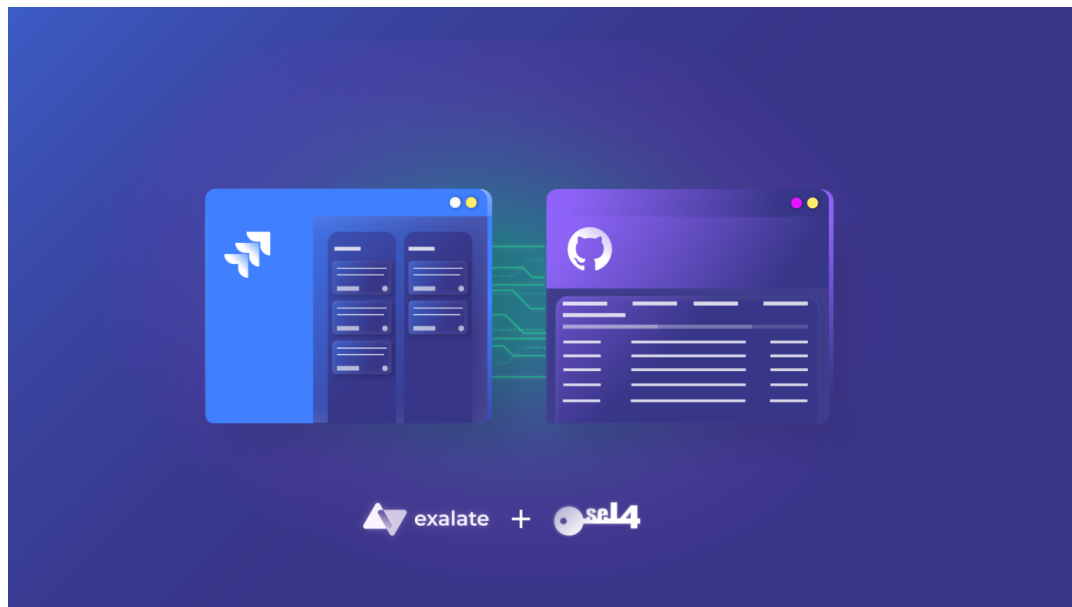


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More and more organizations are now collaborating with outsourcing companies to deliver projects and meet goals more efficiently.

The [seL4 Foundation](#) is an Open Source foundation around the highly secure [seL4 operating system microkernel](#), with a large, active ecosystem of companies, research institutions, open-source developers, users, and platform providers. The seL4 microkernel is a high-security basis for autonomous systems in [aviation, space, and ground-based vehicles](#), as well as secure communication devices, medical devices, and information systems.



As a director of the seL4 Foundation and the chair of the Technical Steering Committee that oversees the direction of the technology, *Gerwin Klein*, explains to us how Exalate has helped maintain a seamless collaboration between teams working in Jira and GitHub.

Why Exalate?

- Smoother collaboration between Jira and GitHub
- Keeping the data updated Free license plan (Atlassian) for open-source companies
- Not losing track of issue raising in a large number of GitHub repositories
- Keeping data integrated while providing access to public

Tackling the Challenge

The seL4 Foundation manages over 50 active GitHub repositories, which grew out of more than 20 years of research on highly secure operating system kernels by UNSW Sydney, and later CSIRO, Australia's national science agency.

For issue tracking as well as for project and sprint planning, the seL4 Foundation also runs an instance of Jira with three main trackers, again with accumulated knowledge and material from over 20 years of research. So if it could facilitate this collaboration between the two platforms, the Foundation could have better-integrated data and more control over what was shared with who and how.

As with any large project, there are many roles. For instance, there is the open-source community of developers, companies, and contributors who provide the software, coordinate on Jira, and collaborate on GitHub. There are also their users or more casual contributors who will raise GitHub issues or pull requests but will typically not interact much with Jira.

This raises challenges:

- Issues were raised on GitHub and in many different repositories, but planning and the actual issue tracking and developer discussion were happening in Jira.
- 50 GitHub repositories did not map straightforwardly onto three Jira trackers with simple Jira automation.



“It’s slightly complicated to create the mapping between these Jira trackers and GitHub repositories. And that made us look for a synchronization solution like Exalate.”

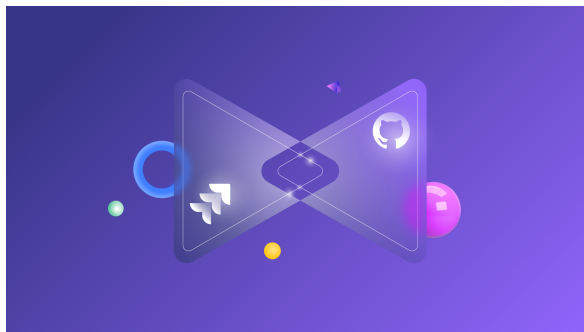
says Gerwin Klein, chair of the Technical Steering Committee of the Foundation.

GitHub is accessible and popular in the open-source community, but is too distributed for more complex planning and issue discussions. Jira is well-suited for the required features, complexity and coordination, but less accessible for users who typically only interact with one or few of the many repositories the seL4 Foundation manages.

“Being programmers, we first looked into writing our own synchronization solution, of course, including using Jira automation and GitHub integration. But it quickly became clear that this would have become a time consuming and probably an expensive side project. When looking at the solutions on the market, Exalate was the one with the right features and the most comprehensive solution. Even if time and budget had not been an issue, I think we would still have gone for Exalate.”

says Gerwin.

So Exalate came into the picture to help facilitate the synchronization between the two environments in the most flexible way possible.



[How to Set up a Jira GitHub Integration](#)

Flexible Two-Way Synchronization with Exalate

Exalate successfully met the Foundation's requirements and users can now easily sync issues between Jira and GitHub, no matter how many repositories there are, commenting on one side and following up on the other for instance.



For the seL4 Foundation as an open-source organization, there had been no security risks to address before adopting Exalate since both ends are public. But they needed security in the sense that not everyone should be able to change the data. So they needed data integrity but confidentiality was not an issue.



We asked Gerwin about the most noticeable impact they have experienced in the short time they have been using Exalate:

“The most beneficial impact we’ve got from Exalate is the ability to be in full control of our GitHub issues that users raise. Because if you have over 50 active repositories, you cannot help with missing issues over time and they’d easily go stale. But with Exalate, we’re now able to manage them all in one place. That is a real lifesaver.”

The long-term goal of the foundation is to drive adoption of the secure seL4 microkernel and to provide the open-source community around it with the tools to make that happen.

The seL4 kernel is used in a number of industries, with demonstrators in autonomous systems in aviation, space, and ground-based vehicles, as well as secure communication devices and medical devices. To succeed long-term, it needs an ecosystem of companies that can compete and collaborate with each other, and at the same time support the open source community to drive the platform further.

Exalate is one of the key tools to make this diverse ecosystem happen.

Results Recap

- Gaining full control of GitHub repositories
- Efficient data update
- Cost efficient
- Providing integrated public data

As companies grow bigger and their collaboration goes cross company, their need to adopt a seamless integration becomes more and more inevitable. You can save time, money, and resources with the right solution and of course enjoy the ease of communication without having to handle everything manually.

Become an Exalate user and experience a seamless integration and an optimized workflow. It's flexible enough for any sync use case.

[Book a demo now](#)