

FREQUENTIS

Industry: **Air Traffic Management and Public Safety & Transport**

Headquarters Location: **Vienna, Austria**

Revenue: **€303.6 million EURO (2019)**

Employees: **1,850 (2019)**

OVERVIEW

Frequentis is an international supplier of communication and information systems for control centers with safety-critical tasks. Its industry-leading products and solutions are used in 140 countries for Air Traffic Management (civil and military air traffic control, air defense) and Public Safety & Transport (police, fire brigade, ambulance services, shipping, railways).

At Frequentis, software development work spans two main systems; Jama Connect™ for requirements management and testing and Atlassian Jira for agile planning and implementation. When the native integration they'd been using between the two tools was retired by its vendor, Frequentis seized the opportunity to replace it with a faster and more scalable integration platform. In 2019 Frequentis began using Tasktop Hub to automate traceability across tool boundaries and eliminate error-prone duplicate data entry, boosting product development efficiency.

SOLUTION HIGHLIGHTS



Automated traceability from requirements to code, thanks to cross-tool data synchronization with embedded cross-referenced links



98% faster handovers from Requirements and Systems Engineers to Software Developers and Software Testers



Significant time-savings for setting up and maintaining new integration projects, utilizing reusable and standardized integration models



“In Tasktop we’ve found a reliable partner that supports us and our customers in meeting the high demands for our products in a safety-critical environment. Together we contribute to making the world a bit safer.”

Peter Kuessel, IT Director, Frequentis

AIR TRAFFIC
MANAGEMENT

AIRPORTS / AIRLINES

DEFENCE

PUBLIC SAFETY

PUBLIC TRANSPORT

MARITIME

CHALLENGE

Frequentis develops safety-critical solutions for many highly regulated industries. Requirements and their test cases are thus painstakingly authored in a fit-for-purpose tool called Jama Connect. The software developers, who implement the requirements as code, plan and execute their work in Atlassian Jira, a popular work management tool.

Regulatory compliance mandates traceability from requirements to code, meaning the ability to trace a requirement to the code that implements it and to evidence that it has been properly tested. For this purpose, Frequentis had been utilizing a native Jama connector to synchronize data between Jama and Jira and establish Jama as a main source of truth for compliance reporting. All Frequentis software specialists had come to rely on the integration to duplicate data between the tools on their behalf and allow them to stay in their tool of choice.

While useful, the native integration wasn't perfect: It typically took several hours for data to flow between the systems, slowing teams down as they waited for new requirements or defects to sync over to Jira or for status updates to flow back to their colleagues in Jama. In addition, each project team was responsible for defining the configuration of the integration, which took time away from developing new revenue-generating capabilities.

When Jama announced it would be retiring its native Jira connector, Frequentis seized the opportunity to find a powerful and scalable replacement that would optimize efficiency and productivity in product development.

SOLUTION OVERVIEW

After a rigorous search (that included several proofs-of-concept and pilots) and with the warm endorsement of Jama, Frequentis decided to purchase Tasktop Hub. Hub is an off-the-shelf integration platform that could take over as the critical bridge between the tools while further optimizing software delivery operations:

- Tasktop Hub could maximize individual productivity and reduce communication delays by significantly improving the speed of data exchange.
- Tasktop Hub could eliminate the costly overhead of setting up and administering the integrations by creating standardized, reusable integration models.
- Tasktop Hub would allow Frequentis to upgrade their Jama and Jira instances freely as new versions become available, without breaking their integrations or metrics.

Business Continuity throughout the Migration Period

With the native connector's end-of-life date fast approaching, the migration to Tasktop Hub began briskly. The Hub installation and initial configuration went very smoothly, and Sr. IT System Engineer Manuel Scharfy was trained on setting up the initial integration models. Models are reusable configuration elements that standardize the data flow between systems and allow Hub administrators like Manuel to spin up new integrations within minutes.

Manuel prepped over 100 projects for the migration to ensure that existing pairings and links from previously synchronized artifacts would be maintained once Hub took over. In parallel, new integrations were set up directly on Hub, harnessing the preconfigured models. In June 2020, Frequentis began using Hub in production.

In the six months since the migration, Frequentis estimates that Hub's model-based integration has delivered significant time savings that can now be devoted to product development. The time previously spent on point-to-point field mapping between hundreds of Jama and Jira project pairs was replaced by seven integrations that easily scale to hundreds of projects.

Furthermore, Hub's excellent and detailed administration UI has made it easy to troubleshoot and correct errors without spending countless hours digging through log files, as they'd previously been forced to do.



“With Tasktop Hub, integration has become a seamless background job running on our technologists’ behalf, without them having to be trained or involved.”

Walter Strahsberger, Head of IT Backbone, Frequentis

Accelerating Product Development Speed with Near Real-Time Synchronization

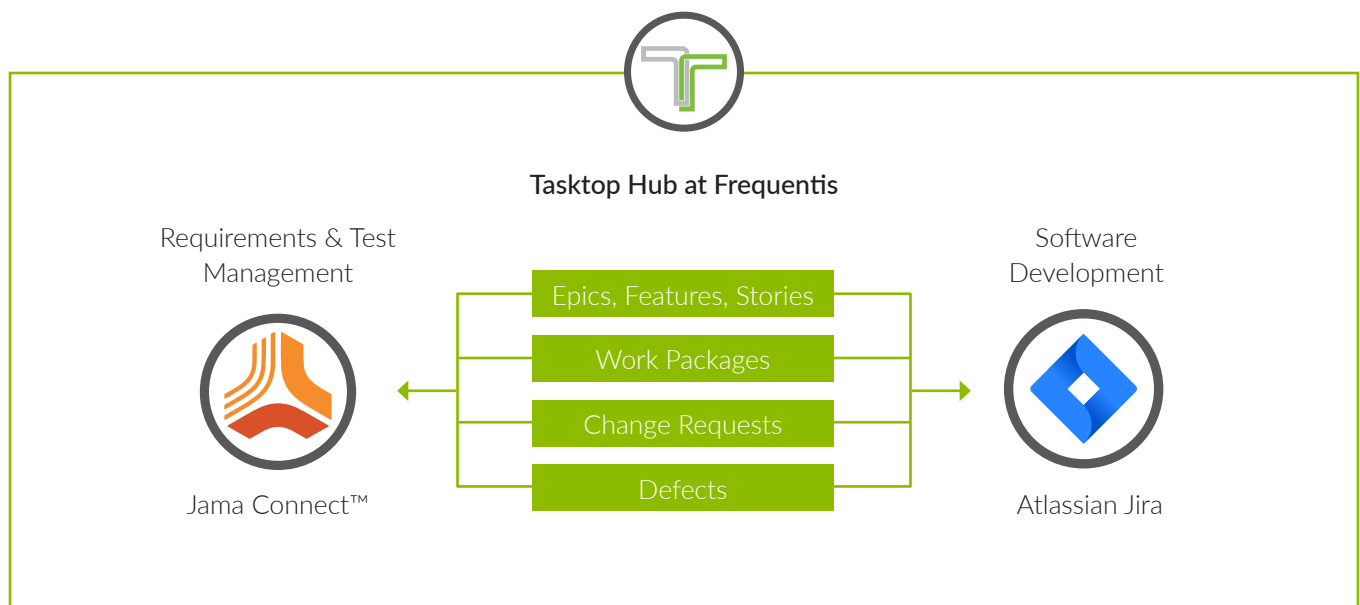
At Frequentis, the requirements management teams author requirements in Jama and then break the work down into stories and work packages for the software developers. In less than five minutes, Tasktop Hub synchronizes the prepped work directly into the relevant development team's backlog in Jira so implementation can begin. Tasktop constantly mirrors changes back-and-forth between the two systems, keeping practitioners informed of any changes and managers clued into the work's progress. Similarly, when stories are tested, software testers log defects in Jama which flow immediately over to the developers for resolution.

The instantaneous bi-directional updates have delighted the employees, who previously were delayed for hours while waiting for the synchronization to happen.



"It's now possible to work in both systems with data synchronized in near real-time. Our users don't have to wait for the sync to finish. This instantaneous update has increased employee satisfaction with both connected tools and has reduced potential misalignments in the data."

Manuel Scharfy, Sr. IT System Engineer, Frequentis



WHAT'S NEXT FOR FREQUENTIS AND TASKTOP

Frequentis and Tasktop are in close touch, holding monthly meetings to review their setup, environment and needs and learn about new product features that can benefit them. "Support has been extraordinarily great the whole time, starting at the very beginning during the POC, then through the migration phase, and now with the operation of the product day-to-day," says Scharfy. "The user experience is intuitive and sleek, and the documentation is very detailed." Frequentis is looking forward to utilizing additional Hub features to further enhance the data flowing across their systems in the future.