

Automated instrument onboarding with Atlassian Jira and TetraScience

Integrating instruments at an enterprise scale

A large, global biopharma selected the Tetra Scientific Data and AI Cloud™ as its enterprise-wide scientific data solution. Deploying the Tetra Scientific Data and AI Cloud across the company's 50+ labs required establishing Tetra Integrations with 350+ instruments.

Tetra Integrations are the software components that connect the Tetra Scientific Data and AI Cloud to scientific instruments, informatics applications, analytical applications, and AI tools. A Tetra File-Log Agent is a type of Tetra Integration. The instrument-agnostic File-Log Agent detects changes in file-based outputs generated from instruments, collects raw data, and then transmits that data to the Tetra Scientific Data and AI Cloud.

File-Log Agents must be configured so they can extract and organize data from varying instruments and applications to enable data to be searched, accessed, and interpreted by downstream applications. Through the configuration, file paths, file types, and metadata will be associated with specific attributes, such as lab name, instrument name, and vendor name.

Configuring an individual File-Log Agent manually might take lab IT specialists five minutes, and it could introduce transcription errors and inconsistencies. For this global enterprise, the configuration process was not fast enough to scale for hundreds of instruments. The speed of raw instrument data collection into a data lake was too low for the planned deployment of TetraScience technology.

Auto-configuration of Tetra File-Log Agents with Jira

The company automated the Tetra File-Log Agent configuration process by pairing the Tetra Scientific Data and AI Cloud with the project management software Jira.

Users can now enter an instrument's data parameters into a Jira Issue. The configuration table details are retrieved via the Jira API where they are automatically transformed into File-Log Agent configuration parameters. These configuration parameters are then transmitted to the File-Log Agent, as described here. In this way, scientists can provide their IT team configuration instructions for each instrument type once. When the team adds instruments of the same type, they can be configured automatically, greatly reducing project timelines and the risk of transcription errors.

Successfully accelerated instrument onboarding

This global biopharma now onboards instruments 25x faster by pairing Jira automation with the Tetra Scientific Data and AI Cloud. The company has greatly reduced the risk of transcription errors.

AI readiness

The success of AI initiatives in biopharma depends on the accessibility, breadth, and quality of scientific data. The Tetra Scientific Data and AI Cloud offers the best approach for converting raw (primary) data into the large-scale, liquid, purpose-engineered, and compliant data that AI tools require. Establishing reliable integrations is a first, immutable step. By automating the configuration of Tetra File-Log Agents, this global biopharma is accelerating the collection of large-scale data sets it will need to move forward on its AI journey.

Jira Software

Challenge:

A top 20 global biopharma needed to integrate 350+ instruments, but each integration required 5 minutes of manual configuration. The company needed a more scalable solution.

Solution:

The biopharma paired Jira with the Tetra Scientific Data and AI Cloud, enabling teams to automatically configure Tetra File-Log Agents using API access to pre-set configuration tables.

Result:

- 25x faster instrument onboarding through automation
- Greatly reduced the risk of transcription errors