

IMPROVED SOFTWARE QUALITY WITH AN APPLICATION LIFECYCLE MANAGEMENT SOLUTION

Noesis team developed, using Jira Software, a complete and transversal solution, which ensures task and project management, and brings together several functionalities that are essential for the Application Lifecycle Management (ALM) of a company responsible for managing 10 Airports.



Sector:
Airport Services

Business Unit:

Quality Management and DevOps & Automation

Solution:

ALM end-to-end solution, based on Jira Software



THE CHALLENGE

Due to the criticality of this sector, the fulfilment of due dates and the quality of the developed systems are essential to the success of the Organization. The developed applications are highly sensitive and have a large impact on the end users, making it necessary to ensure that all the development phases of the software are effective and efficient.

With this scenario, Noesis was faced with the challenge of defining and customizing an ALM Framework for this company responsible for Airports management, in order to guarantee its optimization, integration, and simultaneously to present a user-friendly solution, that allows the improvement of the current software quality levels.

GOALS

- › To define a single work model to be used throughout the complete lifecycle of the software development.
- › Setup a complete ALM framework, that includes Requirement Management, Test and defect Management, integrated with Release and Configuration Management.
- › Customize the ALM Framework into an end-to-end solution, that ensures visibility and traceability between all the elements of the software development lifecycle.
- › Improve the quality processes in order to increase their agility, effectiveness, reduce rework and prevent incidents in production.



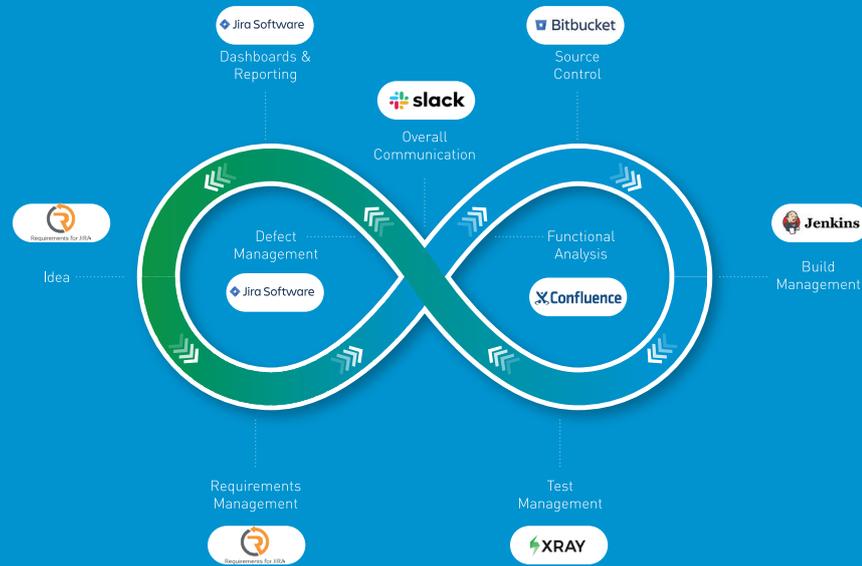
SOLUTION

Noesis team initially studied the the methods, technical solutions and processes in the organization. Then, it was defined a strategy in order to accomplish the goals, starting with processes' redefinition and the selection of the technological tools to be implemented.

The technical solutions implemented were the Frameworks ALM, based on JIRA Software, complemented with tools and plugins that are compatible with this core: R4J, Confluence, Xray, Bitbucket, Jenkins and Slack.

Noesis also implemented Jira Service Desk, as a gateway to access the established processes. This solution collects and centralizes user's requests, facilitates communication with the rest of the systems and allows automatic status updates.

- › **Jira Software:** core solution, which ensures task and project management, and brings together several functionalities that are essential for the development lifecycle. This represented the beginning of the ALM workflow.
- › **R4J:** plugin from Jira Software, that allows requirement management (creation, update, versioning and requirement coverage analysis).



- › **Confluence:** collaborative knowledge base, aimed at creating, organizing and filing the documentation that supports the project, allows version control and integrated feedback.
- › **Xray:** plugin from Jira, that allows test management (creation, maintenance, execution and monitoring results).
- › **Bitbucket:** solution that manages the development code and allows version control. It is crucial for code review and supports Continuous Integration and Continuous Delivery processes, among other functionalities.
- › **Jenkins:** server for automatic builds, that ensures software development automation, such as Continuous Integration and Continuous Delivery.
- › **Slack:** communication solution, with ChatOps capability, based on instant messaging and the creation of communication groups/channels.

THE RESULTS

This integrated ALM solution supported by Jira Software brought about significant competitive advantages:

- › Tool integration from conception, delivery and productive environments.
- › Fluid and clear integration between all the implemented technical solutions.
- › Full traceability between all the elements belonging software's development lifecycle.
- › A Single platform that manages all the project information, allowing stakeholders to access common project information.
- › Solution management made easy, based on plugins.
- › Continuous Integration & Continuous Delivery customization and automation.
- › More flexibility on creating and publishing quality dashboards (KPI's).
- › Gaps/errors in the integrated processes identified easily.



Noesis is an international tech consulting company offering services and solutions to support clients in digital transformation and the development of their businesses. In order to obtain sustained value that is transversal to all sectors, Noesis is focused on infrastructures, software, quality and people. The organization is based on highly specialized talents, operating in nine business units and six countries: Portugal, Spain, the Netherlands, Brazil, Ireland, and the USA.

Since 2020 Noesis has joined Altia, listed on The Alternative Equity Market. With this incorporation, Noesis is now part of an organization with more than 2000 employees, 3 Datacenters and 20 offices.

Jira Software

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