

CUSTOMER STORY

Thales Group

# Thales builds an integrated environment with full traceability for defense projects



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## TOOL, MANY USES

A tool that brings together project teams and technical teams.

5x

## QUICKER ACHIEVEMENT OF TRACEABILITY

Considerable reduction of time spent on audits.

+

## VALUE AND BETTER ROI

Cost-effectiveness of a flexible, scalable product with an SLA of this level.

# Summary

## ORGANIZATION

Thales Group is a French multinational company which designs, builds electrical systems, and provides services for several markets such as the aerospace, transport and security ones. Thales is the world leader in cybersecurity, and operates throughout the global industry.

## RAPHAËL HIET



Raphaël HIET is in charge of coordinating defense-industry projects at Thales.

## FIRST MEETING BETWEEN THALES AND TULEAP

After thinking about or trying other tools, **Thales teams opted for Tuleap**, as it was the only solution to meet all of their requirements. When the teams discovered Tuleap for the first time, it was through the community version. Right away, Thales teams knew they found the **perfect tool** since it is completely open source and made it easy to test features in detail and analyze the source code. In 2017, Raphaël finally made the decision to take things to the next level and went for a Tuleap Enterprise Edition On Premise. Thanks to the full maintenance provided by Enalean, the support team's expertise and the continuous development of Tuleap, Thales teams were able to fully focus on their core business. Since then, they have been **enjoying a flexible, scalable environment and responsive expert support**.

“ With Tuleap, we can demonstrate the complete traceability of our software, from specifications, to tests, documents and output a synthetis. ”

| Raphaël HIET, Project Designer Authority, Thales Group

# The challenges in the defense sector

Defense projects imply high-level requirements. If the goal of bringing all the teams together around an integrated tool has been so crucial, it is because beyond the need for collaboration, the defense sector requires strong traceability and strict confidentiality throughout the projects.

## REACHING FULL TRACEABILITY

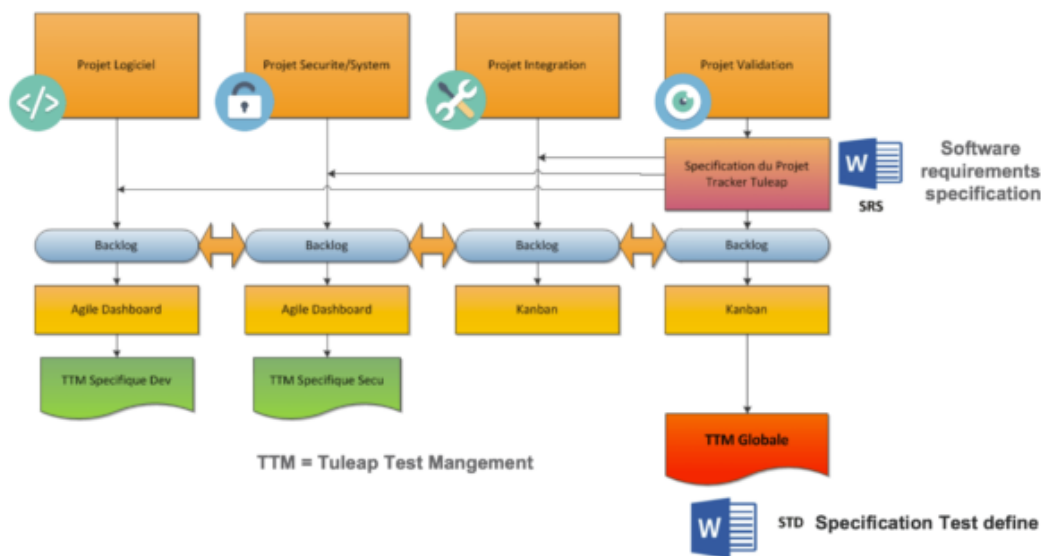
« Thanks to the cross-reference system in Tuleap, you can easily find which user story is linked to which requirement. And the dependency graph is obviously easy to draw. »

When it comes to document management though, a little work had to be done to fight against old habits as teams were so used to work with other “in-house” tools, in particular to manage audits. But then, not all teams had access to the “in-house” tool: developers, for example, did not have access to it so, to get information, they had to turn to project managers. A huge waste of time as you could guess.

**With Tuleap, the question was settled quickly: everything is centralized, everything is mapped out.** Today, Thales teams no longer use the old Word files with endless variations. Thanks to Tuleap, they **keep track of each modification** on an artefact or document; they are able to quickly tell whether the latest version is approved or not. **Considerable time savings**, but also **better collaboration**, and of course, **incomparable traceability, which is essential.**

“ With Tuleap, we get full-on traceability, even for audits. We can follow the progress of releases and quickly provide all the evidence and metrics needed. We don't lose any information. ”

| Raphaël HIET, Project Designer Authority, Thales Group



The different Thales projects exchange and cross information on a single Tuleap platform

## GLOBAL PROJECT OVERVIEW

Just like any other big organization, Thales teams are usually trapped in their own world; they lack global vision on the project. When a project manager requests a short report of the status of the project with strict indicators, you must be able to give it to them.

« Tuleap gathers all information. It allows capitalization. And in the world of DevOps, in which collaboration and sharing are at the heart, Tuleap represents and carries out these values for me, because it answers several pillars of DevOps. »

Indeed, with the trackers, the document manager and the Wiki, teams can bring altogether any given information about their project in the same shared workspace. As a result, project managers have access to all the necessary indicators easily, in a few clicks. They create reports with visual graphics, more or less detailed depending on the level of precision they need.

To extract statistics on several projects, Thales teams use multi-tracker research in Tuleap, not only **to centralize everything**, but also **to cross-reference everything**:

« With multi-tracker research, we use all the power of Tuleap. We will cross everything. And that is fundamental. »

## REACH TRACEABILITY BEYOND THE TOOL

Another key point of choosing Tuleap was the issue of reaching full traceability even outside the tool. While many organizations are fully digital, it doesn't mean they all are. For instance, it is the case for certain departments of the French state, which are generally part of Thales's customers. And they usually request to deliver paper documents, sometimes listing up to 6,000 pages of test sheets, which afterwards must be transcribed into the tool that Thales teams are using. Raphaël had to find a way to efficiently switch from paper format to his web solution Tuleap, while making sure to maintain full traceability and not to lose data on the way.

“Tuleap REST API was great for us because it allowed us to meet our need: we could extract information from trackers, which can be seen online but only by Thales teams, to make paper documents, and distribute it to our client.”

| Raphaël HIET, Project Designer Authority, Thales Group

## Why did Thales choose Tuleap for a secure and flexible environment?

Beyond the technical features, the decision was also motivated by a major aspect: the need for security. Indeed, we are talking about defense projects: therefore highly confidential projects, with ultra-high cybersecurity requirements and specific business specificities. All of this implies finding a solution that can be adapted to answer these needs.

## AN INTEGRATED ENVIRONMENT WHICH GATHERS ALL TEAMS

To be effective, Raphaël needed an integrated and agile environment for software developers, testers, DevOps and cybersecurity teams.

«We have to orchestrate all the teams around a tool. If everyone goes their own way, at the end of the project, it's a big bang. The version is failed, the customer is not happy, and for follow-up... well, it's complicated.»

With Tuleap, Raphaël succeeded in bringing together all project stakeholders around **an all-in-one work environment**, ensuring **one single source of truth**. And that was essential.

## A SECURE BUSINESS SOLUTION WITH A HIGH LEVEL OF CONFIDENTIALITY

One of the main challenges for organizations evolving in critical sectors is to be able to host highly confidential information on secure servers

« How do you deliver a service, especially for the group itself, with information you're not allowed to put on some servers because it does not have the credentials? You're stuck. »

In Tuleap, user access management is very sharp. Everything is configurable, precisely, by project, by tool.

«Assigning rights to each of the trackers and even to each of the tracker fields was essential for me.»

Choosing Tuleap made it possible to **stick to the infrastructure** and the **CISO** (Chief Information Security Officer) **strategy**. In other words, it means: the guarantee of security, availability and integrity of the information system and data.

## HIGH LEVEL OF TRACEABILITY

For critical projects, every move has to be documented: traceability of any small change during the software project cycle is essential. As you will see in the section dedicated to this subject below, Thales teams have noted **the power of Tuleap cross-reference system**. It keeps track of all work elements of the project, from requirements, to tasks, to bugs, code, tests, documents. **Essential for audits.**

«With Tuleap you can do whatever you want. I'm not sure that we would have been able to put in place everything we have done so far with another software. Why? Because very often they have proprietary licenses, meaning that all information is hidden. So you are not given access to the source code.»

## FAST ROI

During his cost study, Raphaël noticed **how quick the return on investment was**. Indeed, he concluded that Tuleap Enterprise subscription not only ensures a surprisingly rapid ROI for a product with as many features as Tuleap, but also offers a high level of **SLA** (Service Level Agreement): everything he was asking for.

## OPEN SOURCE SOFTWARE

The open source aspect of Tuleap was one more element that played an important role in the decision-making process.

## FRENCH TOOL

By choosing Tuleap, Thales not only participates in **promoting French tech**, but it also makes sure to have a **team nearby** for development, maintenance and support services which are based in France. Plus, data are stored on French servers.

“ With Tuleap, our teams also have direct access to the source code. They can ensure the security level of the software they are using. Also, they can develop additional plugins. ”

| Raphaël HIET, Project Designer Authority, Thales Group

# How Thales teams work in agility with Tuleap?

Theoretically, working with agile approaches increases team collaboration. But with heterogeneous teams, it doesn't take long to realize that not all teams work in agility in the same way.

## CHOOSE YOUR AGILE METHOD

While for the developers it was quite easy to make them adopt the **agile Scrum method**, the challenge was not so easy for other teams. For security teams, for example, Scrum was not the right solution. The **Kanban method** either, because it was complicated to define user stories. So, instead of setting up a common workflow for all the teams, making them all work in Scrum or Kanban, the final decision was to let each of them work at their own pace and then to bring everyone together at the right time.

You can now find a team of developers who work in Scrum on the one hand, with a rhythm of one release every 2 weeks. On the other hand, a security team that works accordingly to an “in-house agile approach”, with a rhythm of one release every 4 weeks. This specific agile workflow corresponds to a pace of 15 sprints for developers, compared to about half of them for security teams.

“ With Tuleap, each team was able to customize its project in its own « agile way ».”

| Raphaël HIET, Project Designer Authority, Thales Group

## CHOOSE YOUR AGILE TOOLS

The advantage of Tuleap is that it offers a range of agile and DevOps modules that can be used together or not.

Teams are free to pick what they prefer, take the tools they need to deliver their product and fulfill their mission, while operating on an integrated platform that links their information with that of other teams.

In terms of agile tools, at Thales, each team uses the Tuleap modules it needs, without even thinking about using external tools:

- **Tuleap Kanban boards** for DevOps and validation teams;
- **Tuleap Scrum Agile Dashboards** for developers;
- **Tuleap Tracker** for security teams;
- **Tuleap Test Management** for testers;
- **Git in Tuleap, Integrated MediaWiki, Tuleap Document Manager**, are tools used by everyone.



# Results : better confidentiality and the implementation of full traceability

“ With Tuleap, we can demonstrate the complete traceability of our software, from specifications, to tests, documents and output a synthetic.

| Raphaël HIET, Project Designer Authority, Thales Group

The challenge was to find a solution to bring together every team, each of one having their own habits and way of working, to a common ground. But they had to be careful not to restrict them or force them to follow a predefined agile workflow. Tuleap made it possible allowing Thales teams to benefit from:

- **Better monitoring and management of incidents**
- **Gradual elimination of Excel or Word files:** with the automatic charts generated in Tuleap, teams streamline information and everyone is aligned with the level of data usability;
- **Good document management** with version history monitoring;
- **Real-time monitoring of test campaigns;**
- **Automatic generation of project monitoring metrics** and indicators such as requirement / test coverage rate;
- **Better information sharing:** teams know the status of the project.



[www.tuleap.org](http://www.tuleap.org)