



Managing Strong Jira and Confluence Growth - 3 Case Studies

Discover 3 testimonials from international companies that have embraced **Jira and Confluence** over the years and turned to Atlassian's **Data Center** for their strategic platforms.

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Introduction

This ebook is based on interviews with three major international companies who have been using Atlassian tools—Jira, Confluence and/or Bitbucket—for several years.

They are large-scale companies, leaders in their international markets, employing between 10,000 and 155,000 people worldwide and working in radically different business sectors—space, banking, and telecommunications.

What do they have in common? Jira and Confluence were initially used by one or more software development teams individually, and their success convinced new teams and even the entire company to use the tools. Today, after massive and extremely fast adoption, these platforms have become essential to and are used daily by a large percentage of each business's teams.

The cases presented in this ebook are far from isolated. Valiantys, as an Atlassian Platinum Solution Partner, very often encounters this type of development with its customers using Atlassian tools. Adoption typically begins with a few development teams, which are Atlassian's historic market for Jira Software, and spreads virally, with companies adding Confluence, Jira Service Desk and Bitbucket. In just a few years, these tools become mission-critical, the number of platforms in use multiply and grow, and operational challenges begin to increase.

An interruption in service or a drop in performance can thus be very costly for the company (due to loss of productivity, interruption of customer service, loss of turnover, etc.). It can also cause dissatisfaction among users, who may lose confidence in the tools even though they perfectly fit their needs. The initial architecture of the platform is no longer appropriately sized for today's use, or the platforms don't adapt and adjust as fast as the growth of users, projects, requests, etc.

Jira and Confluence, which have become the teams' main tools, must be available at all times, across multiple time zones, and must offer a high level of service. IT teams are forced to perform version upgrades or maintenance actions outside office hours, and deal with administrative complexity that hinders company development.

In this ebook, you will discover how 3 large companies encountered these issues with Jira and Confluence, and the solutions they put in place to manage spectacular increase in use. They explain how they meet the challenge of high performance and high availability for their Atlassian platforms. With thousands of users, millions of Jira requests, and hundreds of Jira projects or Confluence spaces and pages.

CASE STUDY 1

One of the largest international banking groups

This group employs more than 45,000 people, and is one of the most profitable and important investment banks in the global financial system.



Arrival of Atlassian tools

Jira and Confluence were adopted by the business more than 7 years ago to meet the application management lifecycle (ALM) needs of developers in terms of project management and collaboration. Each team worked on its own projects, collaborating on the same instance.



Growth

After 3.5 years of use, a development project saw this instance transformed into a global platform that integrated Jira and Confluence, as well as Bitbucket, Fisheye, and Crucible, in a «tool chain» approach. As the projects and the need for these tools grew, a second Jira/Confluence platform was set up for external partners, and a third for other non-development teams.

Across all their instances, the company has grown from 100 Jira/Confluence users in 2012 to 20,000 today; that is, a 200-fold increase. This spectacular growth is due to the gradual abandonment of tools that competed with Jira and Confluence, strong company growth, and an organizational context of increased digitization.

The first platform, dedicated to ALM, is the oldest, largest and most critical to date for this banking group. Its growth has been exponential. In 2015, at launch, it had 1,000 projects. In 2016, 3,000; in 2017, 5,600; in 2018, 8,000. The average annual growth of projects is 43%. While it reached 67% during periods of strong adoption, growth has now evened out at around 30%. Since early 2019, 3,000 new projects have already been created.

The Jira/Confluence platform for non-developers opened four years ago, and is also at the top of the adoption curve: 2,300 projects exist now in 2019 compared to 950 projects a year earlier, representing 142% growth in just one year.



Challenges and Impact

With such a massive increase in the number of users and projects, as early as 2017, the company began encountering a decline in performance during peak use times. The impact was significant for users, who quickly expressed their dissatisfaction. The team in charge of Atlassian tools could not «affect the necessary configurations and even less on the number of users or projects». It needed to improve platform scalability, but service interruptions for maintenance and upgrades were no longer tolerable for tools used non-stop by the various teams.



Solutions

In 2017, the company made the logical decision to migrate its largest platform to the Data Center versions of Jira, Confluence, and Bitbucket. The large banking group had already realized the importance of the tools more than 4 years prior when deploying the 3 global Jira and Confluence platforms, and had already bet on the Atlassian suite. Scalability, an end to service interruptions, improved performance, and the ability to archive projects had become essential.

The Data Center version of the ALM platform uses 2 nodes (soon 3), allows for even more users, and enables maintenance and upgrade operations to be carried out efficiently and without service interruptions, during office hours. «Improvements were seen as soon as the 2nd node was put in place.» Archiving Jira projects also cleans and streamlines the instance. Bitbucket Data Center provides a lot of satisfaction: «80% of licenses have already been allocated.» The Smart Mirroring feature, exclusive to the Bitbucket Data Center version, is particularly appealing to development teams around the world who want to work on the same instances at the same time. It will be deployed soon.

CASE STUDY 2

An international telecommunications leader

This company has more than 150,000 employees and hundreds of millions of customers around the world, making it a market leader in every country in which it operates.



Arrival of Atlassian tools

As with many companies, Jira initially appealed to software development teams. This company gives a lot of freedom to its project teams to choose the tools they need. Many of them chose Jira independently and without consulting with other teams, and set up their own instances.

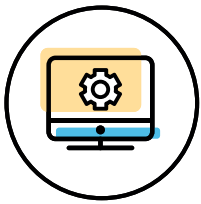


Growth

As a result, the number of Jira Instances grew over the years to reach 60 in early 2016. In March 2016, 3 teams in charge of key projects requested the creation of a single instance so as to consolidate their projects to help manage the rapid increase in users and tickets, save money on licenses and administration costs, and share administration. «These teams were not expert enough to manage their instances by themselves.» So it's a Jira/Confluence platform dedicated to the Innovation entity, which has been exploited to accommodate the other 3 instances. The platform is now made up of Jira, Confluence, Jira Service Desk, and many apps from the Atlassian Marketplace, and enables the management of development projects in agile mode, with the SAFe framework.

This platform is the most critical for the company. Its growth was very fast: from 400 users a few months after the implementation in January 2017 to more than 1,000 employees six months later in July 2017, and finally reaching 2,000 in December 2017. By the end of 2018, the platform had 6,000 users. In the first 3 months of 2019, 1,000 additional users joined it. In the end, the number of users had multiplied seventeen-fold in just over 2 years, with average annual growth of more than 70%.

Some employees benefited from presentations and training encouraging them to join the platform, but this strong growth was mainly due to a viral adoption. «Collaborators developed their skills on their own, with no special support project at the enterprise level.»



Challenges and Impact

Since 2017, the platform has suffered from the increase in users and projects and has experienced performance problems. «Users reported daily dissatisfaction with response time.» Nor were the services interruptions accepted by the teams, even on weekends. Users required 24/7 service availability throughout Europe.

The team of 2 administrators managing more than 10 servers needed to upgrade the platforms to meet needs and fill gaps, and also to simplify activities as much as possible. They were no longer able to perform maintenance actions and upgrades outside of office hours, given the other teams' ongoing use of the tools.



Solutions

The first solution was to migrate Jira, the most-used tool, to a Data Center version to take advantage of the multiple nodes and distribute the load as needed (in case of peaks, interruptions, or failures). The transition required a lot of preparation in terms of configuration for the company, but the switch was accomplished quickly, in less than 2 hours.

The second solution to this sustained growth was to reduce the number of upgrades and build on the Enterprise versions and major releases announced by Atlassian as being particularly relevant to larger organizations.

The third solution was for the team of administrators to optimize the management of Atlassian licenses and apps. They needed to increase billing flexibility and map billing of the licenses to the usage of the system by their various internal entities. The team entrusted the management of the licenses to Valiantys, which enabled us to simplify the customer's view of purchases, renewals and subsequent invoicing to relevant departmental budgets.

Today the main platform in Data Center mode responds to the needs of teams through a multi-node architecture and continues to grow in numbers of users, projects and tickets. It is upgraded once or twice a year, and its administrators can deploy the new version at their leisure and without interruption of service.

CASE STUDY 3

A key business in the global space industry

This company is a key player in the space industry in both civil and military fields. Nearly 10,000 employees and many subsidiaries work on its large-scale, highly technical projects.



Arrival of Atlassian tools

Atlassian tools were adopted in 2012 by the software development teams. Following a corporate decision, Jira, Confluence, Fisheye, and Crucible were implemented to manage end-to-end development, from requirements to anomalies. From the outset of their use the tools have been integrated with each other and managed by a dedicated team of administrators.

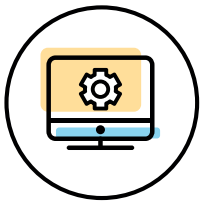


Growth

After 3 years of use, the software teams had profoundly changed their habits for managing and communicating about releases. Other teams who wrote functional specifications discovered Confluence via the satisfaction of developers who had experience with it, and they wanted to use it as a content and documentation production tool. Then «Confluence took over» in this business.

Jira is a tool used by expert teams, and is seeing increasing numbers of users. But Confluence has now become «a central tool for the digital transformation of the company,» having been adopted by all the business teams one by one; each have found in it a solution adapted to their own needs.

The organization could not have predicted such development for its Jira/Confluence platform; from 275 users in October 2015, it increased to more than 5,800 by January 2019, a 21-fold increase in just over 3 years. The average annual increase in users is 186%. Here too, the desire for high value tools exceeds the investment made in internal training. Confluence spaces are being added at a rapid pace, which attests to «a significant change in the culture of information sharing» within this company—from 25 spaces in 2015 to 113 in 2016, 280 in 2017, and 742 in 2018. And the first quarter of 2019 has already seen the creation of 258 new spaces. This enterprise is one of the most advanced Confluence-using organizations in the world.



Challenges and Impact

Starting in 2017, complaints from Confluence users about slow response times multiplied and saturated the internal support service. The continued growth in number of users worried the internal Atlassian team all the more, as the problem was perceived to only get worse.

At the end of November 2017, the team had to handle their first major incident; Confluence broke down for 4 days when it fell under an unprecedented peak load, disrupting the company's activities. Once the cause was identified (a configuration problem), the administrators had to perform an insecure emergency upgrade without being able to analyze the side effects. Then a second incident took place a few months later. Confluence began crashing every day at a particular time, and this lasted for 1 month. «Users expressed strong dissatisfaction and began to lose confidence in the product, believing that Confluence's limits had been reached.»



Solutions

These late 2017/early 2018 incidents on the Confluence instance were a tipping point. With the help of Valiantys consultants, the support team monitored the platform to identify performance issues. Although optimizing the configuration of the apps was the beginning of a solution, the company realized that upgrading the platform was essential if they wanted to be able to provide greater performance and ironclad availability. A proof of concept in the use of Confluence Data Center is now in progress (2019).

Being able to set up redundancy thanks to the clustering architecture of the Data Center versions is a major expectation for this team, which hopes to make service interruptions a distant memory.

In addition, license growth has been anticipated well in advance. In 2015, the internal Atlassian team took into account the enthusiasm for Jira and Confluence that had been demonstrated over 3 years, and bought licenses through Valiantys to cover Atlassian usage by all their employees in anticipation of continuous and rapid increase in the number users.

Data Center versions of Atlassian tools

Optimized to keep pace with the growth of large companies

Atlassian has created this deployment option specifically for companies for whom Atlassian tools have become essential.

Data Center versions are always deployed on your own infrastructure or your hosted servers. Like the Atlassian server version, they offer the same level of control over your data and infrastructure. However, Data Center provides a higher level of performance and scalability, to ensure barrier-free growth and support team productivity and innovation.



High availability

The redundancy enabled by the multi-node architecture ensures that your users will have permanent access to your critical applications. If one node fails, the load balancer will automatically redirect users to another available node.



Performance at scale

Satisfactory response times even at very large scale, and the ability to increase the number of concurrent accesses are possible by adding new nodes to your cluster at no additional cost.



Instant scalability

Version upgrades and the addition of new nodes to your Data Center cluster are possible without service interruption. Indexes and apps are automatically synchronized.



Disaster recovery

Data Center allows companies to implement a disaster recovery plan that guarantees service continuity, even in the event of total system failure.



Flexible deployment

Data Center deployment is possible on your servers or on Amazon Web Services. With Quick Start Guides, you'll be ready to get going in record time.



SAML 2.0 SSO

Administrators can specify a SAML provider to manage user authentication. The Data Center offering supports several identification management tools.



Archiving projects with Data Center

When the number of Jira tickets and projects becomes too high, administrators can archive inactive or completed projects so that they do not overload the instance, and thus they can optimize its performance.



Conclusion

The 3 companies presented here had more or less quickly anticipated their rapid growth.

The ease of handling Atlassian tools and the considerable value they bring to user teams have a particular consequence that we find in these three testimonies, but also more widely in the experiences of many large companies; namely, an initially tactical deployment (used by some software development teams) becomes strategic (used massively, company-wide, and becomes mission-critical).

Inevitably, performance and availability problems appear. In most cases, the transition to more than 500 users is a critical step, and the service provided by the tools is often impacted at that time. The cause of these problems is no more nor less than spectacular adoption—the price of success, in short!

Atlassian has become aware of this phenomenon, and now offers software architectures, called Data Center versions, that allow massive, company-wide exploitation of solutions and simplify their use at scale.

The 3 companies surveyed here have turned to these Data Center solutions, having previously performed other actions to improve their configurations and infrastructures so as to achieve their performance objectives. Their main expectation for the migration to Data Center was to be able to provide a service that met the demands of their teams with better performance and 24/7 availability. The simplification of administration offered by the Data Center versions is an additional, high-quality advantage.

A migration to Data Center is the solution to a need for high availability and full-service continuity of Atlassian tools, but is not the only answer to performance issues. In some cases, it is necessary to resize the existing infrastructure, consolidate several instances, or put in place governance and best practices so as not to unnecessarily overburden the platforms and undermine their capabilities. In order to ascertain the best approach a structured analysis should always be undertaken.

If you find yourself facing the challenges and problems encountered by the companies examined in this eBook, or you want to plan for an anticipated rapid growth in the number of users then contact us. Valiantys offers a service to accurately audit your platforms. We will analyse your usage of your systems including identifying factors that impact your platform performance. Our conclusions draw on our expertise and best practise and where appropriate can identify approaches that can include Data Center as a solution.

Just as one of the companies mentioned in this eBook, next steps could include performing a data Center proof of concept to confirm our analysis and the benefits attributable to such a solution before committing to implementation in your production environment.

Whatever your Atlassian concern, Valiantys teams are at your disposal to assist you in adapting your platforms to your new needs and effectively respond to your growth.

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Who we are

Valiantys is a top Atlassian Platinum Solution Partner with proven expertise in DevOps, Agile and ITSM. Our mission is to revolutionize the way teams collaborate and empower them to work smarter. We've delivered client-tailored services to over 4,500 companies, providing expert guidance on the deployment, adoption and support of Agile tools. We're a global company with Atlassian certified consultants in France, the United Kingdom, the Netherlands, Belgium, Switzerland, the United States, Canada and China.

What makes the difference?

We are one of Atlassian's most experienced global partners in deploying powerful, highly redundant, multi-node platforms for thousands of simultaneous-access users. We have worked alongside Atlassian to design a framework for testing Jira's high performance and to migrate the largest Atlassian platform ever identified to a Data Center version.

To learn more, visit: valiantys.com

To get in touch: valiantys.com/en/contact-us



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