A North American Bank reduced costs 8 times through its digital transformation with Chakray

Due to government regulations in the banking sector and open banking trends, the client, a North American bank, decided to embark on a new digital transformation project where the main objectivewas to meet new regulatory requirements around the concept of Open Banking.

The bank was very clear about the requirements that had to be met. They had to expose sensitive data to subsidiaries, associated companies, third party financial service providers and clients, so it was necessary to have a solution that included APIs and integration.

In addition, to ensure the confidentiality and integrity of third-party data, they needed a solution that offered automated provisioning of identities, accounts and privilege management, and included Single Sign-On (SSO) capability in Web applications and SaaS applications, using centrally managed identities. Previously, they only had an active directory repository and multiple schemas, but no identity solutions.

That's why, although they started their journey using another technology, they decided to replace it in the short term with WSO2, as it offered everything they were looking for and, for this, they decided to work together with Chakray for implementation.

The Solution

With the support of the Chakray team, the WSO2 Enterprise Integrator, WSO2 API Manager, WSO2 Identity Server and ANKA products were implemented

The APIs that have been created are deployed on the gateways that receive requests from the Intranet through Traefik. Exposed APIs will consume integrations hosted on WSO2 Enterprise Integrator (Service Bus / Data Services Server) and/or Micro Integrations based on WSO2 Micro Integrator. This integration layer will be in charge of consuming the backend services.

The integration layer is exposed through an API Management layer which adds functions such as: consumption analytics, performance, monetization, API lifecycle management, versioning, security, consumption limitation, among others.

There is also an Analytics layer that delivers a complete vision of what happens within the platform with the different approaches, described below:

API analytics: using ANKA, the Application Monitoring part is used to obtain traceability of operations across the platform (API Manager -> Enterprise service bus / Micro Integrator -> Backends). To obtain consumption details grouped by: agent, application, user, geolocation, API performance metrics and monetization.

ESB analytics: Detailed report on consumption, response time, response type metrics (error / success), message information at each integration step (very useful in troubleshooting).

IAM analytics: Analysis aimed at determining Who / How / When / From where an operation that requires authorization was authenticated or executed.

The decision to use Anka was driven by analytical purposes, as well as to integrate the monitoring of the virtual machines that were in VMware, where they have connected their IO instances (from the three environments) to monitor the status of each of the services they have deployed.
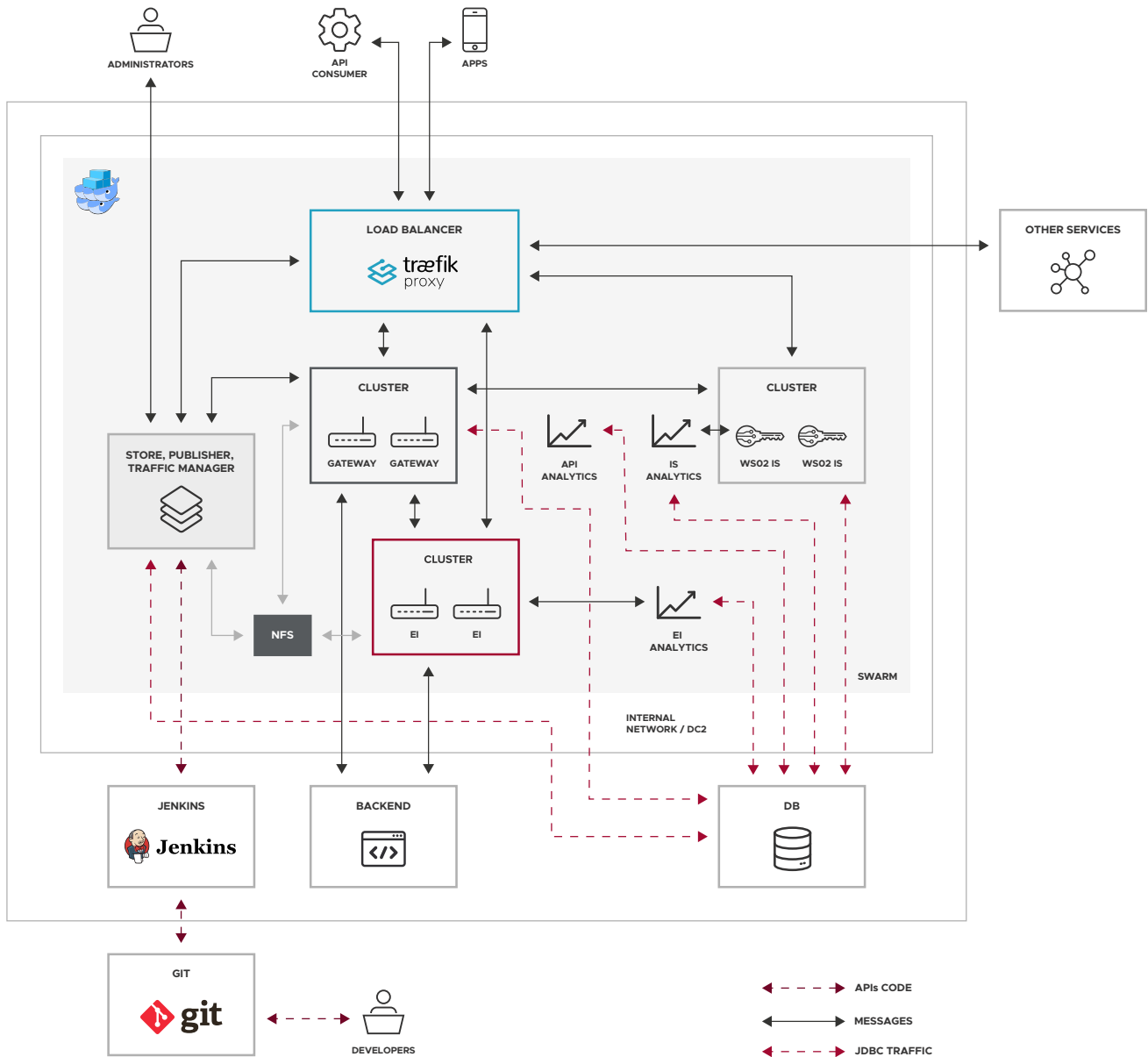
To deliver this vision, the bank requested an engagement model from Chakray which included services such as: Consulting, Architecture, Design, Project Management, Managed Services, Training and Support.

Outcomes

The project, of course, was not without its challenges.

For instance, during development problems with administration and standardization of APIs arose, but they were solved quickly and efficiently, without the need for Vendor support.

The project was successfully executed, and was key to the Digital Transformation of the North American bank, in which new functionalities and additional developments were introduced on a sprint by sprint basis.

The factors that made it a success were the good coordination between the teams, where the bank always maintained availability and supported all the requirements requested, and all the elements were delivered on time and within budget, and adapted to the changing needs of the scope.

This was also confirmed by the North American bank's UNIX systems administrator, "The attention we have received from the Chakray team has been fast and efficient. When we have needed to solve any problem they have supported us in the best way."

The successful outcomes achieved were:

- The new platform is modern, secure, highly available, flexible, with virtually unlimited growth capacity, with distributed and monitored components. The previous environment processed 200,000 monthly transactions and the new production environment around 1.2 million monthly transactions. The new platform will be able to efficiently process the volume of transactions that this client is expected to have in the future, which are approximately 2 million monthly transactions.

- Lower costs due to the fact that development has been more agile in many aspects, for example, data can be easily exposed as a REST web service using the Data Services Server component, that means just SQL and basic programming knowledge is required. In addition, WSO2 resulted in licensing savings at a cost 8 times lower than the replaced technology stack.

- It improved and optimized the use and implementation of technology attributes and refined the solution with precision, and provided thought leadership around DevOps to deliver greater capacity, efficiency and savings.

Today, the client is maximising the potential of WSO2 and ANKA to develop solutions in a more agile way, satisfying the regulatory requirements and developing a business model focused on the end customer.

The Technologies

The following technologies were required to deliver the desired outcomes.

nexus repository	docker	ANKA Observability Framework
Bamboo	WSO2	Jenkins
git	træfik proxy	ORACLE DATABASE

About the client

It is a North American financial business group that offers financial specialized solutions. It has divisions of Private Banking, Business Banking, Trustees, Cards and Leasing and Infrastructure.

About Chakray

At Chakray, we work with transforming companies to ensure that they leverage the strategies, capabilities, technology solutions, and processes to ensure digital agility becomes an advantage rather than an ongoing constraint.

CHAKRAY

Get in touch

Do you want to improve your systems? Ask our experts.

Ask our consultants without compromise. We will help you find the best solution for your project.

CONTACT US