



## Success story

# BYMA reduced its operation time from minutes to seconds with the Red Hat Ansible Automation Platform solution



### Sector:

Financial services

### Region:

LATAM

### Headquarters:

Buenos Aires, Argentina

### Channel:

Expertise

### Software and Services:

#### Products:

Red Hat Ansible  
Automation Platform

Red Hat Enterprise Linux



facebook.com/redhatinc  
@RedHat  
linkedin.com/company/red-hat

redhat.com

**BYMA (Bolsas y Mercados Argentinos, for its Spanish acronym) is the Argentine Stock Exchange that intelligently combines markets and technology.** Integrated under a state-of-the-art technological platform, and with the quality and security standards of the main markets in the world, BYMA offers secure and transparent access to different types of investments for institutions, companies and the general public.

The company **concentrates all steps of the Argentina capital markets industry through a vertical integration** that encompasses listing, trading, registration, settlement, custody with central depository, payment of claims, access to holdings, and other pre and post-trade services.

The BYMA Group is composed of 4 companies: **BYMA**, Bolsas y Mercados Argentinos; **Caja de Valores**, Argentina's central depository; the **Instituto Argentino de Mercado de Capitales** (IAMC, for its Spanish acronym), the Group's educational organization; and **TECVAL**, the Group's technology company.

## A technological profile

For several years, BYMA has been pursuing a solid innovation strategy aimed at generating an economy of scale and, at the same time, working to become an increasingly flexible company, with a structure that allows the incorporation of new investors at an ever lower fixed cost and with greater efficiency.

BYMA is a stock exchange and also a technology company. IT developments play a leading and central role, both for the evolution of the Group's technological infrastructure and for the evolution of the Argentinian Capital Market ecosystem.



**Sector:**

Financial services

**Region:**

LATAM

**Headquarters:**

Buenos Aires, Argentina

**Channel:**

Expertise

**Software and Services:**

**Products:**

Red Hat Ansible  
Automation Platform

Red Hat Enterprise Linux

## Optimization as a challenge

During the years 2021 and 2022, and with the objective of reducing server OS configuration time and introducing changes at the security, patching and certificate level; BYMA implemented Red Hat technology solutions in specific challenges that contributed to achieve a substantial improvement:

First, linked to the configuration remediation of the user authentication clients on the servers and the repository of operating system configurations for changes and delivery of packages on the servers.

Secondly, verification and log4j vulnerability survey on all Linux equipment for decision making and sizing of possible solutions. For both issues, BYMA worked specifically with the Red Hat Ansible Automation Platform solution interacting with the Red Hat Enterprise Linux operating system. Specifically, in the case of user authentication, it was developed on the IPA verification system. With respect to the Log4j vulnerability survey, Red Hat Ansible Automation Platform was used to detect possible flaws in the entire production environment, in order to make the necessary configurations from the security area that will help to remedy these vulnerabilities.

The third solution was the integration of Red Hat Ansible Automation Platform with user password protection systems, where the update, encryption and password change of the root user and other local users is automatically synchronized.

"The automation of administration, control and delivery tasks in the Technology areas is part of our evolution strategy. This allows not only to obtain centralized traceability, time reduction and error mitigation, but also to make resources available for valuable tasks aligned to our strategic objectives, thus providing greater agility in Infrastructure, DevOps and Security projects. This change has undoubtedly come to evolve the way we manage technology and increase the value of our technical teams".

**Maximiliano Ignaciuk**

CTO - BYMA

## Automation as a first step

Manual tasks performed by operating system administrators, plus remediation of IPA users, plus password maintenance and enveloping, made the manual task time-consuming and time-consuming.

The benefit that the IT organization needed to demonstrate was then related to the possibility of **automating in the first instance routine administration tasks** by incorporating a solution based on the **Ansible Tower** tool, which allowed the application of **massive changes in a fast and secure way**.

In addition, progress was made in streamlining the work to move to a **batch model**, where **results are obtained in an agile, online and scalable model, reducing to seconds the management time of an administrator in the system**, tasks that required between 6 and 10 minutes before the implemented improvements.



facebook.com/redhatinc  
@RedHat  
linkedin.com/company/red-hat

redhat.com

**Sector:**

Financial services

**Region:**

LATAM

**Headquarters:**

Buenos Aires, Argentina

**Channel:**

Expertise

**Software and Services:**

**Products:**

Red Hat Ansible  
Automation Platform

Red Hat Enterprise Linux

## Efficiency on a discreet and effective platform

Some of the achievements at the organizational level after the implementation of the Red Hat Ansible Automation Platform solution were:

- Automation of password change and enveloping of root and other local users by integrating the Red Hat Ansible Automation Platform solution from minutes to seconds.
- Application of password protection tools for more than 600 users
- Application of log4j vulnerability scanning on Linux servers. The Red Hat Ansible Automation Platform solution was used to detect vulnerabilities, which were then remediated with security tools, achieving a higher level of security.
- Client update Repository of operating system configurations on all productive hosts.
- Upgraded user authentication client on more than 450 Linux OS servers, which reduced access problems by administrator users to the servers, while the installed version proved to be much more stable.

In addition, the search for the Log4j vulnerability was carried out massively **without impacting operations and the results were obtained quickly** so that corrective actions could be taken. The application of this model resulted in a **significant reduction in administration and task execution costs**.

With the same success, Satellite or IPA client **updates were performed on 450 servers**, which had an impact on the **update and maintenance of more than 600 service users**, making a significant difference in terms of time, form and response.

"With Red Hat Ansible Automation Platform, we are able to automate routine tasks, simplifying them in an agile and secure way. We went from a manual and repetitive execution to a simple and centralized management, with a high level of satisfaction in the implementation areas and minimized the impact of human errors in highly complex tasks. Leveraging their idempotence and modules was the key to success."

**Sergio Schmid**

DevOps Manager - BYMA

## The value behind the challenge

Since the implementation of Red Hat automation, we have observed a considerable reduction in client configuration times in the tools from minutes to seconds.



facebook.com/redhatinc  
@RedHat  
linkedin.com/company/red-hat

redhat.com



---

**Sector:**

Financial services

---

**Region:**

LATAM

---

**Headquarters:**

Buenos Aires, Argentina

---

**Channel:**

Expertise

---

**Software and Services:****Products:**

Red Hat Ansible  
Automation Platform

Red Hat Enterprise Linux

At the same time, password change and root user enveloping errors were reduced in 100% of the users that are under the methodology implemented with Red Hat Ansible Automation Platform, which brings a considerable benefit when an administrator needs to enter a server with the root user, since the password is kept updated and synchronized.

A **methodology was also applied that allows automated verification of client status and control of complex situations**, which without the Red Hat Ansible Automation Platform solution, would take considerable time to execute or involve manual administration.

**Main details**

Among the achievements we can list:

- » Team registration in Identity Management (Includes hotfix - host enrollment) for more than 450 users.
- » Client remediation Repository and client SO-fix configuration on more than 600 servers going from minutes to seconds.
- » Batch root Linux user synchronization - root password remedy.
- » Vulnerability scanning in batch log4j case -log4j search- 420
- » Reduction of password change and root user enveloping errors in 100% of the users that are under the methodology implemented with Red Hat - Red Hat Ansible Automation Platform.
- » Substantial improvement in the safety rate of the systems and efficient and fast remediation maneuvers.



facebook.com/redhatinc  
@RedHat  
linkedin.com/company/red-hat

[redhat.com](https://redhat.com)

---

Copyright © 2023 Red Hat, Inc. Red Hat and the Red Hat logo are trademarks or registered trademarks of Red Hat, Inc. or its subsidiaries in the United States and other countries. Linux® is the registered trademark of Linus Torvalds in the U.S. and other countries.

