

Swisscom gains efficiency by standardizing and expanding automation

Software and services

Red Hat[®] Ansible[®] Automation Platform

Red Hat Enterprise Linux®

Red Hat Consulting

Red Hat Technical Account Manager To reduce costs, work more efficiently, and speed up response times, Swisscom needed a tool for enterprise-wide IT and network automation. With help from Red Hat, a trusted vendor, the service provider used Red Hat Ansible Automation Platform to automate the management of around 20,000 components across all areas of its business. Ansible Automation Platform's self-service provisioning and role-based access capabilities also help Swisscom's teams focus on more valuable development projects and accelerate response times for resource requests. Unified automation and orchestration through Ansible Automation Platform mean Swisscom's various teams can now better collaborate on shared projects, sharing knowledge and artifacts.



"We are seeing synergy effects where different teams can all use Red Hat Ansible Automation Platform because it can manage the different products."

> **Giancarlo Morena** Product Manager, Swisscom

Telecommunications

20,000 employees

Benefits

- Saved approximately 3,000 hours per year in manual operating system tasks
- Provided self-service capabilities for IT tasks, simplifying and accelerating common tasks
- Improved collaboration with shared playbooks, know-how, and experience
- Accelerated understanding with learning from Red Hat experts

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Improving IT management efficiency

Swisscom is Switzerland's leading telecommunications company and one of its leading IT companies. Swisscom offers residential customers an extensive range of TV, mobile telecommunications, and other services. For business customers, its portfolio includes network, cloud, and ICT services. To continue to operate successfully in highly competitive markets, Swisscom constantly seeks ways to reduce costs, work more efficiently, and speed up response times.

As part of these ongoing efforts, the company sought to automate its IT processes, systems, and components. "We have a lot of different network platforms across different datacenters, but we didn't have a central automation solution," said Giancarlo Morena, Product Manager at Swisscom. "Our approach was based on scripts, using different closed-source tools for different platforms, and we were looking for something more centralized."

To find a solution, Swisscom turned to long-time vendor Red Hat. Swisscom has successfully used Red Hat software in its IT environment for many years, including Red Hat Enterprise Linux, Red Hat Enterprise Linux for SAP solutions, Red Hat OpenStack® Platform, and Red Hat OpenShift® Container Platform.

Automating with a trusted partner

With help from Red Hat Consulting, the service provider completed a proof of concept (POC) for Ansible Automation Platform, a centralized application programming interface (API) and user interface for enterprise-wide automation. "We liked that Red Hat Ansible Automation Platform has a large and rich API we can use to integrate with other tools," said Morena. "Another factor in our decision was that Ansible Automation Platform is agentless, so we wouldn't need to deploy and maintain agents on each endpoint."

Swisscom initially deployed Ansible Automation Platform in 2018 for automating and orchestrating about 15,000 network components—including servers, firewalls, network devices, and storage devices—ranging across multiple network environments. "We first used Ansible Automation Platform for automating the several thousand Red Hat Enterprise Linux servers we manage for internal and enterprise customers," said Morena, "and for managing the operating system (OS), security patching, new server provisioning, and other post-installation actions for several thousand servers."

Over the years, Swisscom has expanded its use of Ansible Automation Platform to new teams and new use cases with support from a Red Hat Technical Account Manager (TAM). Those use cases include managing its email anti-abuse system, automating firewalls, and automating and orchestrating its Oracle Exadata platform and Windows and various Linux OSs. "We use Ansible Automation Platform for managing software life cycles and rollouts, for patching, provisioning, and configuring internal and external servers, for configuration enforcement, and more besides," said Morena. "Our more than 200 users include network engineers, Oracle DBAs, and DevOps engineers, to name but a few. The Swisscom Private Cloud, Swisscom Mobile, and Swisscom TV teams also use Ansible Automation Platform."

The Red Hat technology now automates the management of around 20,000 components. Taking the Swisscom Private Cloud as an example use case, Ansible Automation Platform executes playbooks to set up a customized virtual machine (VM) and OS, then configures and hardens the service for each customer before adding any additional software components required.

"Self-service is one of our most important goals. We want to enable our partners, customers, and colleagues to carry out tasks that they usually cannot access independently, using Red Hat Ansible Automation Platform's role-based access mode or the API. Users do not need the support of an operating system engineer but are able to work in a self-service

Giancarlo Morena

mode."

Product Manager, Swisscom



Speeding work with more efficient processes

Saved ~3,000 hours per year in manual operating system tasks

As automation becomes more complex, the capabilities provided by Ansible Automation Platform save Swisscom around 3,000 hours of operations management time per year. Automating manual tasks has freed up its engineers to focus on developing new, innovative projects instead of repetitive work, generating further time savings.

In addition, streamlining routine manual tasks helps Swisscom scale its products and services to meet changing demand. Request response times are significantly faster, with time to deploy reduced from hours to minutes.

"With our current deployment, we can save many operation hours and invest the time of our engineers in more valuable tasks," said Morena. "For networking, we have a lot of different zones. Ansible Automation Platform helps us with the group instances feature so we can deploy small satellites and reach all our servers from 1 dashboard."

Provided self-service capabilities for IT tasks

One of the key features of Ansible Automation Platform for Swisscom is role-based access, which lets teams define specific inventories for running playbooks and give access to other teams to run on servers without requiring local server access. It means application teams, for example, can patch or reboot their servers themselves without waiting for the OS team to grant access manually. Tasks are completed in less time and more accurately.

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Improved collaboration with shared playbooks, know-how, and experience

With unified automation and orchestration through Ansible Automation Platform, Swisscom's various teams can now better collaborate on shared projects, passing on knowledge and artifacts to one another. "Our different teams can combine, centralize, and share Ansible Playbooks, along with knowledge and best practices," said Morena. "To give you an example, teams don't have to write provisioning and configuration management playbooks. They can reuse the ones written by the networking team."

Swisscom's teams have also established an internal Ansible Automation Platform community with a channel on Microsoft Teams, where any member can ask for help and advice. An internal wiki provides self-written documentation with detailed use cases from different teams using Ansible Automation Platform.

"We are seeing synergy effects where different teams can all use Red Hat Ansible Automation Platform because it can manage the different products," said Morena. "Teams can then take advantage of the community to address specific use cases or issues, which makes life easier and leads to better quality."





Accelerated understanding with learning from Red Hat experts

The knowledge shared by Red Hat Consulting and the Red Hat TAM, along with understanding gained through Red Hat Training and Red Hat Certification programs, has proven crucial to Swisscom's rapid adoption and expansion of Ansible Automation Platform.

"We partly chose Red Hat Ansible Automation Platform because it's easy to use and learn. You can make very fast progress compared to other configuration management tools," said Morena. "What my team has learned from the Red Hat experts has given them a greater understanding of the technology so they can support the wider team." Teams more experienced in using Ansible Automation Platform offer support; any Ansible Automation Platform user anywhere in Swisscom can request support and be confident that a team with in-depth knowledge of the tool will respond.

Finding new ways to automate

With automation more important than ever for Swisscom, the service provider's use of Ansible Automation Platform will continue to expand, allowing it to be even more proactive and react even faster. "It's important for Swisscom to have tools that can help us to be efficient in our daily work," said Morena. "Red Hat Ansible Automation Platform gives us a lot of flexibility and covers a lot of different patterns. It also integrates well with our other tools."

Swisscom's ambitions include growing its outsourcing business and also growing as a public cloud provider. "Swisscom is not only a telco provider; we also offer IT services to our customers," said Morena. "As we grow our services business, we will continue to expand our use of Red Hat Ansible Automation Platform—for managing our global public clouds, for example."

About Swisscom

Swisscom, Switzerland's leading telecommunications company and one of its leading IT companies, is headquartered in Ittigen, close to the capital city Bern. Outside Switzerland, Swisscom has a presence in the Italian market in the guise of Fastweb. It is 51% Confederation-owned and is one of Switzerland's most sustainable and innovative companies.



About Red Hat Innovators in the Open

Innovation is the core of open source. Red Hat customers use open source technologies to change not only their own organizations, but also entire industries and markets. Red Hat Innovators in the Open proudly showcases how our customers use enterprise open source solutions to solve their toughest business challenges. Want to share your story? Learn more.



About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. A trusted adviser to the Fortune 500, Red Hat provides award-winning support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

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