The automated enterprise

Transform your business with an automation platform that unifies your people and processes

Red Hat

See what's inside

Modernize for a digital world

Change is upon us.

The pace and scale of modern business innovation is increasing. Many industries are experiencing widespread disruption. Digitally connected customers demand more at a faster pace. New competition comes from outside of traditional market segments. These trends place competitive pressures on businesses.

IT complexity can inhibit innovation.

IT modernization is all about finding smarter ways to do business. However, IT operations teams manage ever-changing, complex IT architectures built on multiple platforms and complicated technology stacks. Many organizations struggle to deploy a modern infrastructure due to the maintenance cost and management complexity of their existing systems. Combined with the need to innovate at a faster pace, this complexity places a burden on IT operations teams. They are now asked to move faster, manage increasingly complex IT environments, and accommodate new development approaches and technologies.

Automation can help.

No matter the complexity of your environment or where you are on your IT modernization journey, an IT operations automation strategy can help you improve existing processes. With automation, you can save time, increase quality, improve employee satisfaction, and reduce costs throughout your organization.

Benefits of IT automation

IT automation can help your organization:

- Speed operations and development.

- Improve agility and responsiveness.

- Boost productivity and efficiency.

- Increase consistency and availability.

- Improve security and compliance.

- Focus on high-value, strategic initiatives.

62% of organizations are implementing automation and orchestration across IT systems and processes to achieve **digital transformation initiatives**.[1]

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1 F5 Networks, "The State of Application Services," 2019.
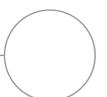
Move business forward with IT automation

What is automation?

Automation is the use of software to perform tasks in order to reduce cost, complexity, and errors. It is prevalent in IT systems and business decision software, and can also be found in other industries like manufacturing, robotics, vehicle control, and more.

IT automation uses repeatable instructions to replace an IT professional's manual work. This could be a single task, groups of tasks, or even a complex orchestration of tasks. Its key purpose is to help overburdened staff regain control and shift their focus from tedious day-to-day matters to strategic initiatives. IT automation can help staff better perform their tasks and increase job satisfaction.

What can you automate?

You can automate anything on a device or resource that you can configure yourself.

Automate:

- Applications
- Clouds
- Containers
- Infrastructure
- Network devices
- Servers and storage

Accomplish:

- Security and compliance
- Configuration
- Deployment
- Delivery
- Orchestration
- Provisioning

How can automation help?

Automation serves as a force multiplier for your teams, making work easier and more repeatable. You can address a variety of common IT challenges with automation:

- Errors, risks, and high costs associated with routine tasks and manual processes
- Difficulty performing operations at scale
- Slow time to value for applications and services
- Inefficient workflows and operations
- Trouble keeping pace with increasing changes, demand, and infrastructure size
- Lack of time to focus on high-value initiatives
- Disconnects between teams using multistep processes to solve common issues

Automation is for everyone

Automation can help you mitigate key issues across roles.

IT architects need team-based solutions that work consistently and rapidly across technologies.

CIOs need to reduce costs and risks across infrastructure, network, and engineering organizations.

Systems administrators need tools that help them keep pace with increasing infrastructure scale.

Engineering directors need to control all aspects of the delivery chain while maintaining compliance.

DevOps practitioners need a zero-downtime continuous integration and deployment platform.

Security analysts need efficient ways to evaluate events and streamline remediation processes.
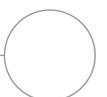
Transform your organization through enterprise-wide automation adoption

Many organizations already automate some number of IT operations in limited, disparate areas using inflexible, ad hoc scripts or proprietary, device-specific legacy tools. While these approaches may speed specific functions, they do not scale across diverse resources and can make it difficult to share automation expertise across the organization. Additionally, it is often difficult to update and extend these types of automation as technologies evolve and new requirements emerge. In fact, only 18% of organizations consider themselves very or extremely effective at employing automation in software development and maintenance.[2]

An enterprise-wide approach can help you realize the full value of automation for modern, digital operations. Enterprise-wide automation allows your organization to manage complex environments more easily, gain visibility into your operations, and integrate new technology and processes more effectively. This supports increased business agility, innovation, and value.

Enterprise-wide automation involves your people, processes, and platform

Automating across your organization requires more than just tools — you also need to consider your people, processes, and platform.

Transformation requires automation

Deploying automation across your organization can help you transform to support modern, fast-changing, digital business. No other IT technology can impact all aspects of transformation:

- Maintenance and change management
- Skills and talent
- Standardization and scale
- Continuous delivery
- Operational complexity and costs

People

People are at the core of any enterprise-wide initiative, and automation is no different. In order to adopt automation across your organization, all teams — including line of business, network, security, operations, development, and infrastructure — must be on board and participate.
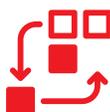
Processes

Processes move projects within your organization from start to finish. Clear processes for creating, deploying, managing, and adapting automation are essential for broad adoption and ongoing use.

Platform

An automation platform provides the capabilities for building, running, and managing your automation. In contrast to simple automation tools, an automation platform gives your organization a unified foundation for creating, deploying, and sharing consistent automation content and knowledge at scale.

Only 18% of organizations consider themselves very or extremely effective at employing automation in software development and maintenance.[2]

2 Harvey Nash and KPMG, "CIO Survey 2019: A Changing Perspective," 2019. **home.kpmg/xx/en/home/insights/2019/06/harvey-nash-kpmg-cio-survey-2019.html**.
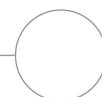
Success = people + processes + platform

Enterprise-wise automation relies on a combination of people, processes, and a platform. Each factor has a significant effect on your automation outcomes. Successful automation requires you to address each element.

People

Process
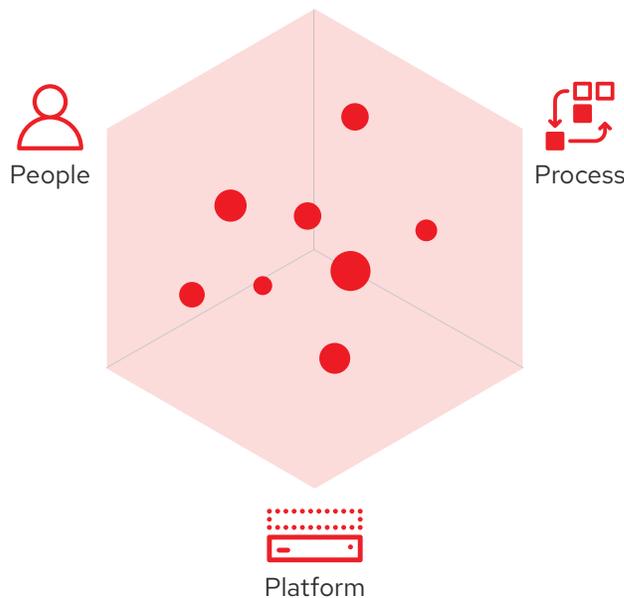
Platform

Automation tool or automation platform?

Though they may seem like the same thing, automation platforms and tools have contrasting characteristics that can be the difference between efficient enterprise-wide adoption and unorganized, disparate automation efforts.

Tools are effective only for individual and point automation. They do not provide the connection and management capabilities needed for enterprise-wise automation.

Platforms provide a unified foundation for multiple people to automate consistently. They deliver the means for efficiently managing and sharing automation content across an organization.

Automation by the numbers

Red Hat® Ansible® Automation Platform unites people and processes on a flexible foundation to deliver value across your organization:

68%
more productive IT infrastructure management teams[3]

41%
more efficient application environment management teams[3]

25%
more efficient IT security teams[3]

53%
reduction in unplanned downtime[3]

135%
more applications developed per year[3]

498%
five-year return on investment[3]

US$1.13M
in additional annual new revenue[3]

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3 IDC White Paper, sponsored by Red Hat. "Red Hat Ansible Automation Improves IT Agility and Time to Market," June 2019. redhat.com/en/resources/business-value-red-hat-ansible-automation-analyst-paper.
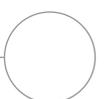
Create a strategy for adopting automation across your organization

Enterprise-wide automation does not happen instantly, and automation is not an all-or-nothing proposition. You need a sustainable automation strategy to guide your journey. Building your strategy requires assessment, planning, and adaptation.

Identify your business objectives
Connect automation efforts with business challenges and goals. This helps you identify where to automate and create top-down requirements for success. For example, you could automate patching to boost system security and stability and meet business needs for higher uptime.

Encourage cross-team collaboration and coordination
Use incentives to promote collaboration across your organization. Coordination allows teams to create complete automation workflows that deliver more value. Working with others also helps to cultivate shared ownership and accountability for automation.

Build trust throughout your organization
Build a centralized repository for trusted automation content. Each team should create automation content in their area of expertise and contribute it to the repository for use by other teams. Staff can include boundaries that allow others to use their content more confidently.

Share knowledge and success
Create a core team of stakeholders — often called a community of practice (CoP) or center of excellence (CoE) — that share automation best practices, experiences, and accomplishments across your organization. These teams should also help others along their automation journey.

Centralize your automation content
Choose an automation platform that provides a unified foundation for collaboration, tools, and content across your organization. Sharing tools and content in a single, trusted location allows teams to automate more efficiently and avoid duplicate efforts.

Defining automation success

There is no single way to measure automation success — each team has unique characteristics and ambitions. Create realistic goals that align with your organization's current skills while encouraging teams to learn and expand their abilities. Examples of long-term automation success include:

- **Adoption** across your enterprise, from vision to execution, with an emphasis on simplicity and shared knowledge.

- **Accountability** with each staff member taking responsibility for their individual goals.

- **Governance** through prescriptive processes that accomplish automation goals and produce repeatable results.

- **Security** with a simplified pipeline, repeatable and reusable practices, proactive vulnerability resolution, and automated investigation and response to incidents.

- **Standards** that provide the foundation and extensibility needed to achieve organizational and team goals.
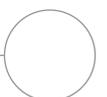
Start your journey to automation success

Once you have your automation strategy defined, it's time to get started. Start small, show value, expand conservatively, and repeat. Work to accomplish incremental successes over short periods of time. For each win, promote the value of automation and share your experience across your organization. This establishes a base for others to build upon your experiences and deliver even more value.

Identify and celebrate success

Successful automation delivers measurable business value by moving your organization from operational efficiency to organizational effectiveness. Save time and free staff to focus on strategic work. Increase productivity and employee satisfaction. Improve the quality of infrastructure, applications, and products. Reduce costs and overcome complexity.

The specifics of automation success will look different for each organization, but there are common themes:

- Multiple teams within your organization create and share automation content in a consistent, standardized manner.

- Teams can manage their resources more effectively with their existing staffing level.

- Expertise across your organization is codified in your automation library.

Prerequisites for starting your automation journey

Before you begin automating, prepare your organization for success with the following steps.
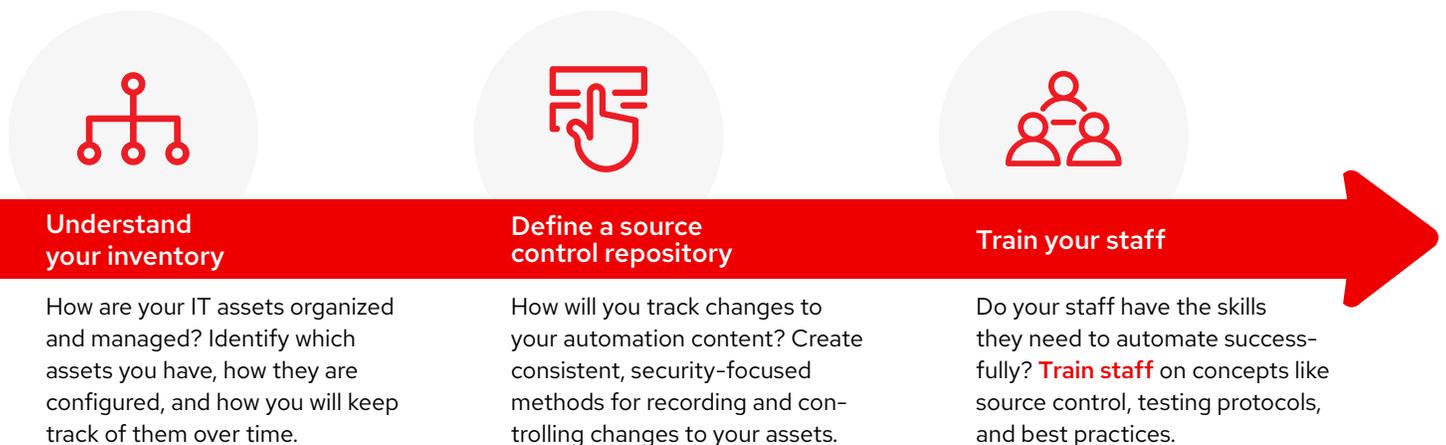
Where can you start automating?

Common places to start your automation journey include:

1. Read-only tasks.

2. Inventory creation.

3. Tedious manual tasks.

4. Frequently requested tasks.

Understand your inventory

How are your IT assets organized and managed? Identify which assets you have, how they are configured, and how you will keep track of them over time.

Define a source control repository

How will you track changes to your automation content? Create consistent, security-focused methods for recording and controlling changes to your assets.

Train your staff

Do your staff have the skills they need to automate successfully? Train staff on concepts like source control, testing protocols, and best practices.

Infrastructure automation

Most IT organizations face growing infrastructure size and complexity. With limited time and staff, IT teams often struggle to keep pace with this growth, resulting in delayed updates, patching, and resource delivery. Applying automation to common management tasks — like provisioning, configuring, deploying, and decommissioning — simplifies operations at scale, allowing you to regain control over and visibility into your infrastructure.

Manage IT infrastructure configurations

Your IT environment contains a variety of hardware and software. Consistently managing all of these by hand can lead to higher maintenance costs and inability to meet strict service-level agreements (SLAs).

How can automation help?

Automation gives you predictable and repeatable processes for managing configurations across operating systems to improve consistency, speed changes, and increase uptime.

Automation in action

The **British Army Information Application Services (IAS) Branch** used automation to simplify infrastructure management, deploy changes faster and more efficiently, and reduce manual errors and unplanned downtime.

75% less time to deliver infrastructure changes

Maintain more systems with your existing staff

IT teams do not usually grow in size at the same pace as the infrastructure they manage. Teams often struggle to maintain increasing responsibilities with their existing staffing levels.

How can automation help?

Automation helps teams manage large, complex IT infrastructures with their current staff. It can free your staff from tedious, time-consuming tasks and allow them to focus on more rewarding and strategic projects.

Automation in action

Germany's Federal Office for Agriculture and Food, BLE automated its infrastructure to streamline processes, ensure compliance with security requirements, and improve service delivery.

Bundesanstalt für
Landwirtschaft und Ernährung

More than
50% faster IT management and configuration
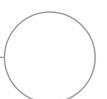
Network automation

Even as underlying technologies have evolved, network management has remained largely the same for decades. Networks are typically built, operated, and maintained by hand. However, traditional, manual approaches to network configuration and updates are too slow and error-prone to effectively support the needs of rapidly shifting workload requirements. Automating network resource and service management allows network operations teams to become more agile and flexible and effectively support modern business demands.

Ensure network configuration consistency

Manual network configuration can result in inconsistencies, misconfigurations, and network instabilities, making it difficult to deliver the high level of service needed for digital business operations.

How can automation help?

Automation helps you standardize network management processes to enforce best practices. Network operations teams can rapidly and easily deliver services at scale and reduce mean time to resolution (MTTR) for service interruptions.

Automation in action

Swisscom automated management of around 15,000 network and IT components to shift focus to more valuable development projects and accelerate response times for resource requests.

Streamline application load balancing and failover

Application loads must be balanced across infrastructure to optimize performance and costs. Manually balancing loads can lead to poor application performance and delay failover when system problems arise.

How can automation help?

Automating your load balancers eliminates the need for manual intervention, permitting faster ongoing adjustments and failover for improved application performance and reliability.

Automation in action

Surescripts automated IT processes and failover operations to speed network appliance and server deployment, issue resolution, and launch of new applications to customers.

swisscom

3,000 hours saved on manual tasks (anticipated)

surescripts®
The Nation's E-Prescription Network

2 hours per service saved during failover incidents

NOTE: Read about Microsoft's network automation experiences on **page 15**.

Use case
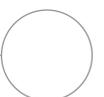
Security automation

As both infrastructure and networks grow in size and complexity, it becomes increasingly difficult to manually manage security and compliance. Manual operations can result in slower detection and remediation of issues, errors in resource configuration, and inconsistent policy application, leaving your systems vulnerable to compliance issues and attack. Automation can help you streamline daily operations as well as integrate security into processes, applications, and infrastructure from the start. In fact, fully deploying security automation can reduce the average cost of a breach by 95%, but only 16% of organizations have done so.[3]

Threat hunting

Fast threat detection can reduce the likelihood that your organization will experience a security breach as well as the associated costs if a breach occurs.[4] Manual processes can delay threat identification in complex IT environments, leaving your business vulnerable.

How can automation help?

Applying automation to your security processes can help you identify, validate, and escalate threats faster without manual intervention.

Automation in action

Forrester Consulting interviewed one company that uses automation across their organization and found that they were able to simplify security updates and improve security standards.

Up to
94%
fewer resource hours to recover from security incidents

Security incident response

Detecting and containing security breaches within 200 days or less reduce the average cost of a breach by US$1.22 million.[3] However, remediation across multiple platforms and tools can be complicated, time-consuming, and error-prone when performed manually.

How can automation help?

Security teams can use automation to rapidly apply remediation to affected systems across your environment concurrently and respond to incidents faster.

Automation in action

IDC interviewed multiple decision makers about their experiences with automation and found that each organization realized significant productivity, agility, and operational benefits through automation.

25%
more efficient IT security teams

4   IBM Security, "2019 Cost of a Data Breach Report," 2019. **ibm.com/security/data-breach**.

5   Forrester Consulting, "The Total Economic Impact™ Of Red Hat Ansible Tower," June 2018. **redhat.com/en/engage/total-economic-impact-ansible-tower-20180710**.

6   IDC White Paper, sponsored by Red Hat. "Red Hat Ansible Automation Improves IT Agility and Time to Market," June 2019. **redhat.com/en/resources/business-value-red-hat-ansible-automation-analyst-paper**.
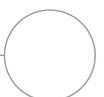
DevOps automation

DevOps brings development and operations teams together to move ideas and projects from development to production faster and more efficiently. This involves more frequent changes to code and more dynamic infrastructure use. Traditional, manual management strategies cannot keep up with this increased demand. Automation helps you accelerate your processes, continuously scale environments, and build continuous integration and continuous deployment (CI/CD) workflows to support fast, agile application and service development and launch. Unsurprisingly, 85% of IT leaders say automation is critical to their DevOps strategy.[7]

Provision environments

DevOps environments encompass a variety of technologies. Provisioning and deploying changes to these complex environments can be time-consuming and requires expert knowledge for each component.

How can automation help?

Applying Infrastructure-as-Code (IaC) approaches with automation allows your IT team to provide self-service capabilities and rapidly deliver preapproved resources and configurations without manual intervention.

Automation in action

ServiceMaster automated processes and infrastructure management to shift to an agile development approach, launch applications faster, and improve collaboration and customer experiences.

95% faster virtual machine provisioning time

Accelerate development

Developers require IT resources to create, test, and deploy new applications and services. Manual IT operations can delay resource and service delivery and impede proof-of-concept performance, ultimately resulting in slower development.

How can automation help?

Combining application programming interface (API)-centric design with automation lets your IT team deliver resources faster, supporting rapid proofs of concept, development, testing, and deployment into production.

Automation in action

Elo Serviços S.A. automated its IT environment to deploy, manage, and update its customer service and applications faster and stay ahead of traditional and fintech competition.

More than
97% faster service time to market

Hybrid and multicloud automation

Hybrid and multicloud environments add an additional layer of complexity to infrastructure, network, application, and user administration. IT teams need to manage both on-site and cloud-based environments, often using specialized management tools for each. As a result, it can be nearly impossible to effectively maintain, track, scale, and secure resources and applications by hand. Automation can unite hybrid and multicloud management under a single set of processes and policies to improve consistency, scalability, and speed.

Scale multicloud environments

Each cloud provider offers specific tools for operating and managing their own cloud resources. These tools rarely interoperate directly with each other, requiring IT teams to provision, administer, and maintain each cloud differently.

How can automation help?

Automation can help you manage multicloud environments more consistently. You can create automation assets that codify resources across all of your clouds and offer a single API for a given operation, regardless of the cloud involved.

Automation in action

Datacom transformed its service offerings with automation, streamlining internal operations and providing customers a flexible, fast, and easily consumable platform that can adapt over time.

Integrate private cloud environments

Hybrid cloud environments combine both on-site and cloud platforms, resources, and tools. This variety can make it difficult for IT teams to integrate and support both infrastructures consistently.

How can automation help?

A flexible automation platform lets you apply the same automation code to existing on-site systems, current cloud resources, and future assets, ensuring consistency and providing a layer of operational integration.

Automation in action

Ascend Money built a central application development and deployment platform that encompasses automation, simplifying operations across geographies and increasing consistency and scale.

DATACOM

ascend money

20% higher operational efficiency

57% less time to perform tasks
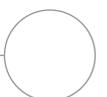
Ensure success with Red Hat Consulting

Red Hat Consulting can help you automate your enterprise more quickly and easily. The Red Hat Services Journey: Automation Adoption provides a framework for managing an organization-wide automation adoption journey. Red Hat Consulting works with you on all stages of automation adoption, from introducing techniques and technology, to aligning teams on standard practices, to orchestrating powerful workflows aligned to your evolving business objectives.

Steps for automation success

1 **Discover your quick-win opportunities**
Define an overarching strategy to identify organizational objectives and address process, tooling, and skill gaps with measurable outcomes. Select a single process or area to automate and showcase.

2 **Build a pilot that gets noticed**
Automate and deploy into production an initial set of workflows, managed by a select team using Red Hat Ansible Automation Platform. Use your pilot to demonstrate meaningful impact for your business and IT.

3 **Integrate your initial success**
Based on your experience with your pilot, integrate a set of standardized workflows with additional operational or business support systems for increased oversight, orchestration, or other benefits.

4 **Accelerate your automation adoption**
Create a center of excellence (CoE) or community of practice (CoP), based on your adoption core team, to guide other teams in applying standardized automation approaches across projects and processes.

5 **Optimize and move toward an automation-first culture**
Continually evaluate your automation practices and rapidly launch, combine, and enhance workflows and orchestrations to meet changing requirements as your organization introduces new technologies and solutions.
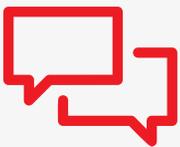
> "Red Hat Consulting provided a powerful mix of expertise, best-practice guidance, and mentoring to help us design a defined DevOps process, with regular reviews to help us continue maturing our approach."[8]
>
> **Jufri Fan**
> Head IT Solution Architect, BTPN

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8 Red Hat, "BTPN launches innovative banking services faster with Red Hat," April 2018. **redhat.com/en/resources/btpn-customer-case-study**.
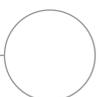
Choose the right foundation for your automated enterprise

There are many automation solutions available, but not all include the capabilities your organization needs to become an automated enterprise. The right automation solution can be the difference between cultivating an automated enterprise and automation chaos. Look for automation platforms that offer:

- **Complete support.** Promote IT availability and reliability with platforms that provide enterprise-grade support, including quality and security testing, integration, and clear roadmaps.

- **Vendor interoperability.** Continue to use and automate your preferred third-party technologies through standard, open interfaces that allow other vendors to create modules or plugins for integration into your automation platform and strategy.

- **Easy learning curve.** Allow staff across your organization to adopt automation quickly and effectively with simple, human-readable automation and intuitive tools.

- **Scalability.** Deploy automation across your entire enterprise in a consistent manner with a platform that scales across infrastructure, operating systems, management tools, and user roles.

- **Datacenter integration.** Unify your entire datacenter and organization with a platform that integrates with all parts of your datacenter infrastructure.

Move your business forward with Red Hat Ansible Automation Platform

A foundation for building and operating automation services at scale, **Red Hat Ansible Automation Platform** delivers all the tools and features you need to implement enterprise-wide automation. It combines a simple, easy-to-read automation language with a trusted, composable execution environment and security-focused sharing and collaboration capabilities. Multiple roles within your business can use Red Hat Ansible Automation Platform, allowing you to create, scale, and engage your automation across your entire organization.

Create

Get started faster by accessing Ansible's massive open source community and prebuilt Ansible roles, plugins, and modules. Codify your infrastructure and share automation assets across teams and individuals to deploy and manage infrastructure on-site or in the cloud.

Scale

Easily transfer your automation to multiple domains and across different use cases. Stakeholders in developer, operator, and line-of-business teams can engage with automation in ways that work best for them and make sense for their individual roles without slowing development time.

Engage

Take your automation even further with analytics, policy and governance, and content management. The online tools included with Ansible Automation Platform make day-to-day life more efficient for automation users, allowing teams to solve problems once and share the results with everyone.

No matter where you are in your automation journey, Red Hat Ansible Automation Platform can help you increase agility, improve productivity, and get to market faster.
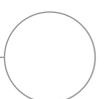
Red Hat Ansible Automation Platform

Everything you need to deploy automation across your organization

Red Hat Ansible Automation Platform integrates Red Hat's powerful automation suite consisting of Red Hat Ansible Tower and Red Hat Ansible Engine with Software-as-a-Service (SaaS)-based capabilities and features to improve effectiveness across organizations. The platform includes all the tools needed to deploy automation across your organization.

People

Line of business teams

Network teams

Security teams

Operations teams

Development teams

Infrastructure teams

Process

Standards

Collaboration

Sharing

Reuse

Platform

Automation Analytics

Improve automation efficiencies across Ansible Automation Platform deployments.

Automation Hub

Access certified automation content via a centralized repository.

Content Collections

Streamline management, distribution, and consumption of automation content.

Red Hat Ansible Tower

Scale IT automation, manage complex deployments, and speed productivity.

Red Hat Ansible Engine

Run Ansible Playbooks, the automation language that can perfectly describe IT application infrastructure.
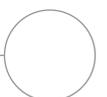
Microsoft

Digitally transform through automation and cloud technologies

Challenge

Microsoft is a leading platform and productivity company for the mobile-first, cloud-first world. The company wanted to digitally transform its customer, partner, and employee experience to accelerate growth. With drastic increases in network complexity and volume and the number of connected devices, Microsoft decided to automate and digitize its processes using the technologies showcased throughout this e-book.

Solution

Microsoft deployed Red Hat Ansible Tower, part of Red Hat Ansible Automation Platform, to automate its network in a consistent, repeatable way. Through automation, Microsoft's network developers can now focus on impactful features that support customer demands. Ansible Tower has also helped Microsoft increase network scalability and consistency, while accelerating network issue ticket resolution.

"Automation plays a huge role in our digital transformation."

Ludovic Hauduc
Corporate Vice President, Core Platform Services, Microsoft

Implemented repeatable, shareable automation

Increased network scalability and consistency

Accelerated network issue resolution
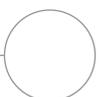
Siemens

Enhance communication security through automation

Challenge

Siemens is a global technology company focusing on electrification—from power generation, transmission, and distribution to smart grid solutions and the efficient application of electrical energy—as well as the areas of medical imaging and laboratory diagnostics. The company uses public key infrastructures (PKIs) — a collection of processes and policies for creating, using, managing, and storing digital certificates and other secure communications components — across its organization to reliably protect access to sensitive information. Siemens is increasingly using PKIs to also secure Internet of Things (IoT) communications and now maintains two PKI environments for these different use cases. To support growing PKI use, the company sought a more robust automation solution that would help its teams accommodate demand while reducing configuration complexity.

Solution

To simplify and better automate its PKI environment, Siemens worked closely with Red Hat Consulting to replace its legacy automation solution with Red Hat Ansible Automation Platform. With expert support and training, Siemens' PKI team is now using Ansible Automation Platform to automate manual management tasks and improve communications security across the business.

> "We needed more automation, and for this Red Hat Ansible Automation [Platform] was the perfect choice, but we were not experts in Ansible… It's important to maximize our IT investment, so we wanted as much detail as possible from Red Hat's experts."
>
> **Rufus Buschart**
> Head of PKI, Siemens

Optimized Ansible for Windows-based security environment

Improved IT efficiency by automating management tasks

Enhanced in-house Ansible expertise with dedicated, expert consulting and training
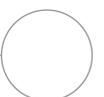
SBB

Accelerate rail service innovation with automation

Challenge

Swiss Federal Railways (SBB) is ranked among the world's best railway operators, based on its high rate of use, service quality, and safety rating.[9] In the next few years, SBB plans to invest close to US$1 billion annually in new and modernized trains to create a smart, safe, and highly efficient rail network. For example, new trains will include intelligent features such as dynamic LED information displays, digital seat booking systems, CCTV safety monitoring, and WiFi access.

However, managing the devices supporting these features was difficult due to high volume and a lack of central control. After connecting all of its trains to a corporate network through 4G LTE mobile routers, SBB sought to establish an IT infrastructure that could take advantage of this connection to centrally manage all of the intelligent devices across its rail network.

Solution

SBB centralized and automated device management and development platform using Red Hat Ansible Automation Platform and Red Hat Enterprise Linux®, supported by Red Hat Satellite. With this solution, SBB has reduced device configuration times by 90%, improved the security of its data and network, and given developers access to data that will inform new, innovative services for railway passengers.

"The possibilities are limitless because we can easily manage all of these connections and continue supporting all of our devices with Red Hat Ansible Automation Platform."

Sascha Berger
Systems Engineer, SBB

Cut device configuration times by more than 90%

Enhanced security for critical transportation infrastructure

Simplified service updates and innovation across devices

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9 Loco2, "The Great Train Comparison," 2018. raileurope.co.uk/blog/great-train-comparison_report.
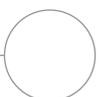
Ready to start your automation journey?

Digital business requires automation. An enterprise-wide automation approach can help you save time, increase quality, and reduce costs. Red Hat provides an automation platform and expertise that empower your organization to boost business agility, innovation, and value.

→   Get started with Ansible: **ansible.com/get-started**

→   Learn about IT automation: **redhat.com/it-automation**

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