


AUTO MAT- ION



An IT executive's guide to automation

The need for transformative automation



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Why you need to consider transformative automation

Organizations across industries face unprecedented pressure to deliver services more quickly and securely than ever before.

IT plays a crucial role in meeting these demands, but it can serve as a blocker if it can't keep up with demand or is not scalable.



The solution often lies along one of two paths: **hire or automate.**

Due to talent shortages or budgetary restrictions, many organizations can't increase the size of their teams. Automation software can extend your workforce to help you do more with what you have.

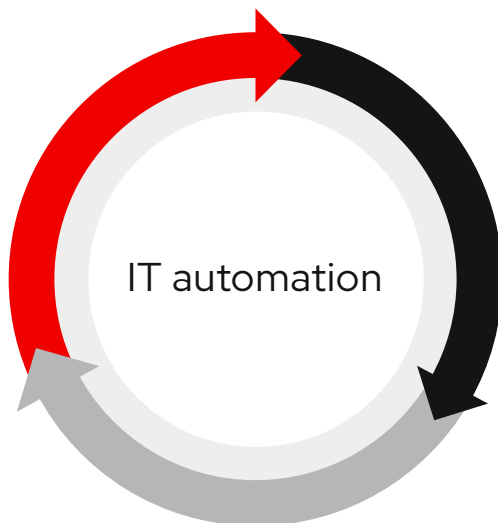
Automation can help organizations better position themselves.

It allows them to take advantage of opportunities by:

- Moving faster.
- Operating with more predictability and efficiency.
- Propelling them into new ways of working that give them a competitive edge.



✓ Automation is a key supporting technology in digital transformation.



With digital transformation spanning **people**, **processes**, and **technology**, it's important to understand how automation touches each of those elements.

- **People:** Improve morale by moving people from mundane cost center tasks to contributing to profit centers and innovation
- **Technology:** Automate tasks and workflows
- **Processes:** Automate human workflows



So, what's holding organizations back from taking advantage of transformative automation?

According to a recent Forrester study,¹ part of this hesitancy is a misalignment between leadership and implementers when it comes to goals and ideal use cases for automation.



Given the critical benefits that automation can bring to an organization, there is an urgent need to close this gap between the C-suite and implementers.

83%

of implementers say they received leadership support to purchase their open source automation licenses [open source software with enterprise support]¹

Yet, one in four of those implementers who received leadership support still experiences misalignment somewhere along the journey, whether it be in:

- Setting automation priorities.
- Determining which open source automation to use.
- Or deciding the level to which infrastructure automation tasks are automated.¹

¹ Forrester Consulting thought leadership paper commissioned by Red Hat. "Enterprise open source automation drives innovation," July 2020.

Consider automation a long-term strategy, not just a tool

As an IT executive, the decision to make a change most often requires a catalyst, or a compelling event.

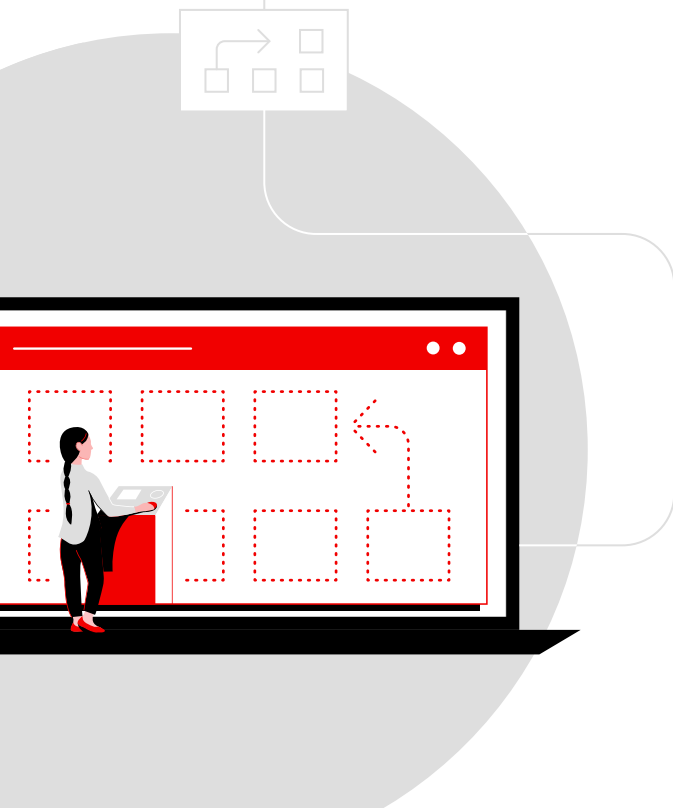
Sometimes that impetus is industry specific, or the increased use of multiple cloud services within your organization. Sometimes it's a catastrophic outage which leads to a loss in revenue. Other times, it's a global shift in how companies manage their business, including the need to accommodate flexible work arrangements without warning.

A virtual magnifying glass has been put on business problems or gaps that perhaps weren't obvious before.

Organizations are either thriving and expanding, maintaining the status quo, or contracting—and sometimes all at once in different areas of the business.

As such, business leaders are eager to find new ways to:

- Gain competitive advantage.
- Get to market faster.
- Improve customer experience.
- Change internal processes.



IT executives need more than a tool to get their company where it needs to be.

They need a long-term strategy—and a true automation platform—that contributes to the organization’s overall digital transformation.

IT automation can help by giving organizations the ability to do more with less, while scaling their infrastructure.

// 99% of decision makers report a variety of technology and business benefits from their firms’ automation software investments.²

Five benefits of an IT automation platform

1. Improve efficiency, reduce costs, and accelerate time to market

Within an enterprise, IT can be unmanageable at scale. In organizations bogged down with technical debt and overloaded with manual workflows, automation can create efficiency.

IT automation offers control by digitizing processes so they no longer rely on human intervention, with the business value appearing on the bottom line.

² Forrester Consulting thought leadership paper commissioned by Red Hat. “Enterprise open source automation drives innovation,” July 2020.

An IDC whitepaper sponsored by Red Hat³ found that organizations using Red Hat® Ansible® Automation to standardize and automate IT operations and configuration activities across their environments recognized a

5-year return on investment (ROI) of 498% with 5 months to payback.

The report also found that users felt they:

- Had better control over the cost of infrastructure and cloud resources.
- Experienced an accelerated time to market.³

Plus, automation allows you to redeploy your IT teams to work on projects that deliver greater value to the organization.



Orange Sonatel, the principal telecommunications provider of Senegal, **reduced application deployment time from weeks to minutes**,⁴ using Red Hat OpenShift® and Red Hat Ansible Automation Platform to automate time-consuming manual deployment processes.

The service provider's teams can now deliver new services and features to customers **faster** and with **66% fewer staff**.⁴

³ IDC whitepaper, sponsored by Red Hat. "Red Hat Ansible Automation improves IT agility and time to market," June 2019.

⁴ Red Hat case study, "Senegal's top telco adopts Red Hat Ansible Automation Platform and Red Hat OpenShift," September 2020.

2. Eliminate islands of automation

When individual tasks are automated in isolation, islands of automation are created. In this scenario, different teams are automating different tasks using different tools. The effectiveness of automation is optimized when an automation solution works across

teams and departments. An automation platform provides control and visibility over your organization's automation efforts. **End-to-end automation allows you to connect disparate processes, which multiplies its value.**

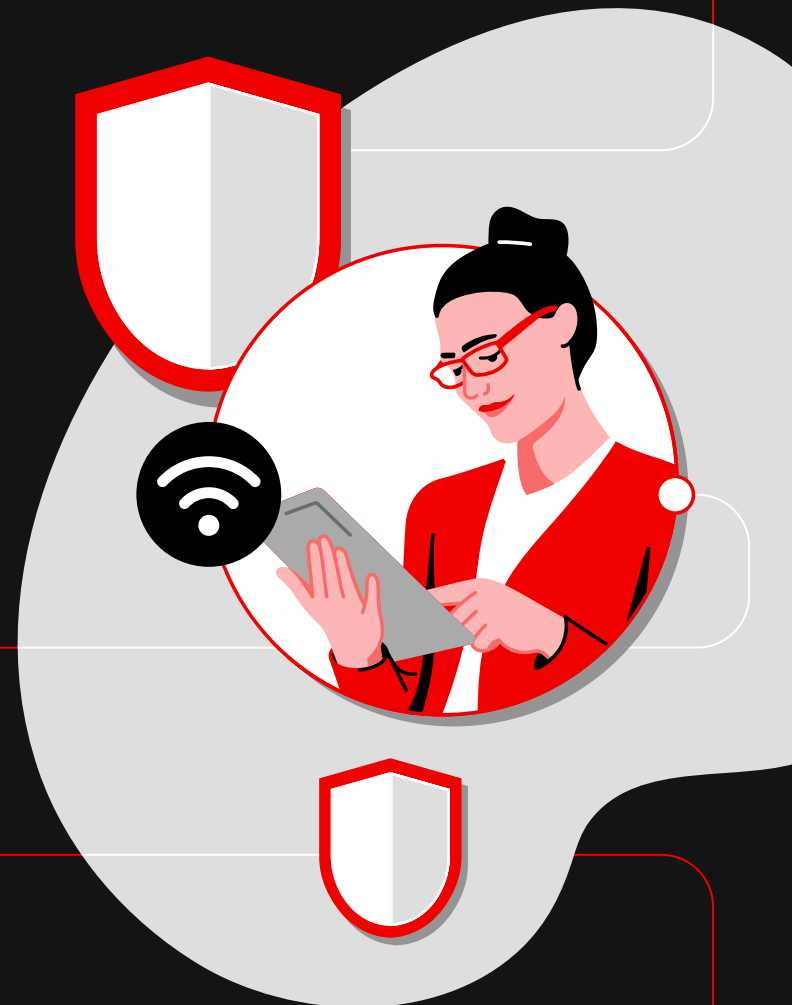
3. Support security

Considering that the average cost of a data breach in 2020 is US\$3.86 million,⁵ security remains top of mind for organizations. Automation helps remove the risk of human error and makes required actions repeatable and consistent.

A Forrester Consulting study shows that 56% of decision makers named improved security as a technical benefit seen by adopting enterprise versions of open source automation hardware.⁶

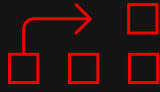
These efforts can include:

- Automating system and security updates.
- Coordinating enterprise security systems.
- Addressing security incidents.
- Responding to threats.



⁵ IBM Security. "Cost of a Data Breach Report 2020," 2020.

⁶ Forrester Consulting thought leadership paper commissioned by Red Hat. "Enterprise open source automation drives innovation," July 2020.

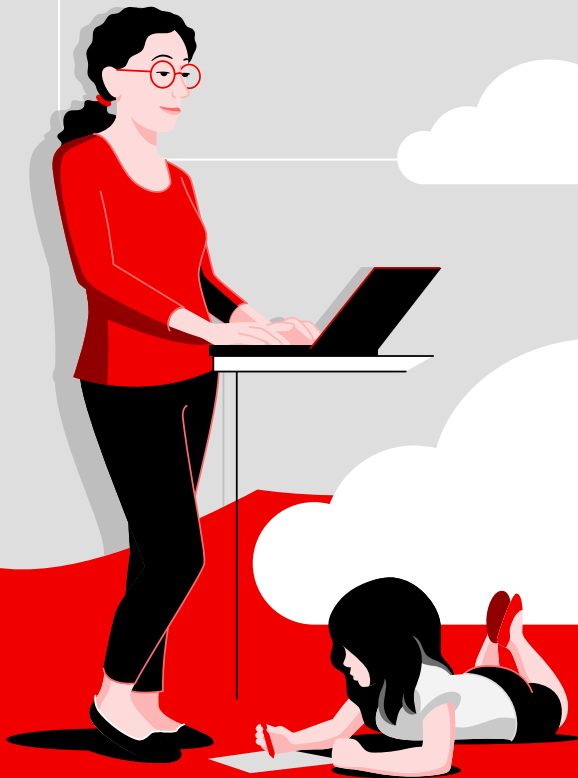


4. Minimize bespoke tooling

The right automation solution acts as a unified platform, which means you can automate and orchestrate across your entire ecosystem and integrate with existing tooling.

This helps you define strategies and governance for modular, integrated automation that meets requirements for:

- Reliability.
- Business continuity.
- Reportability.



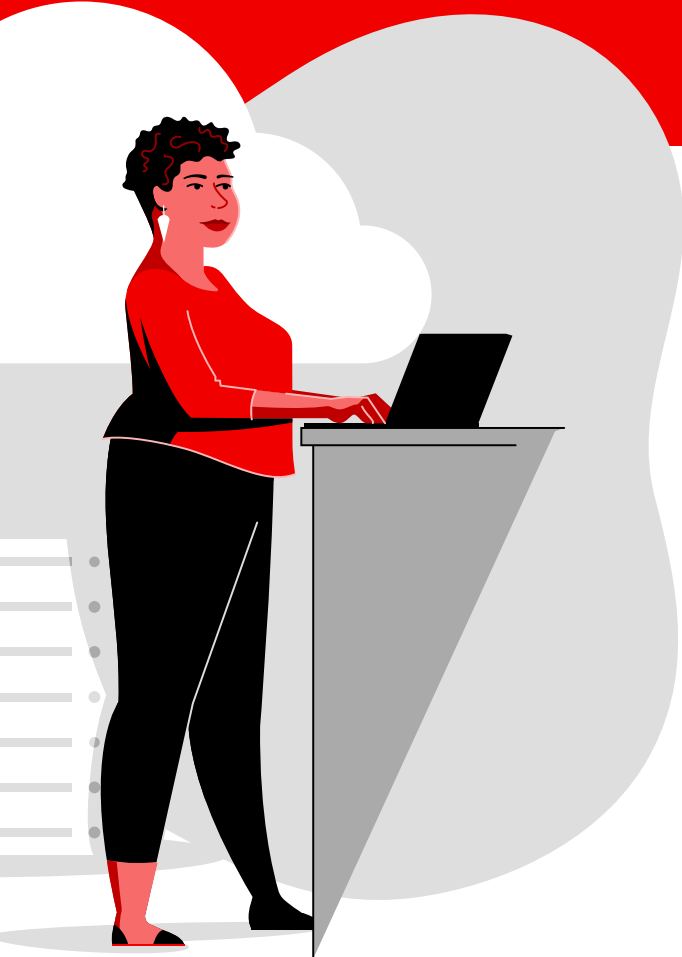
5. Attract and retain talent

Automation can help you guard against employee burnout. In most cases, the tasks that are automated are those that people don't want to do or don't have the time to perform.

Rather than taking away jobs, automating these tasks is like adding members to your teams, allowing your employees to focus on more fulfilling responsibilities and innovative IT work.

- By moving your staff out of cost center jobs, they can work on projects that can positively impact your customers.
- Top talent is rarely wooed by the prospect of performing repetitive tasks.

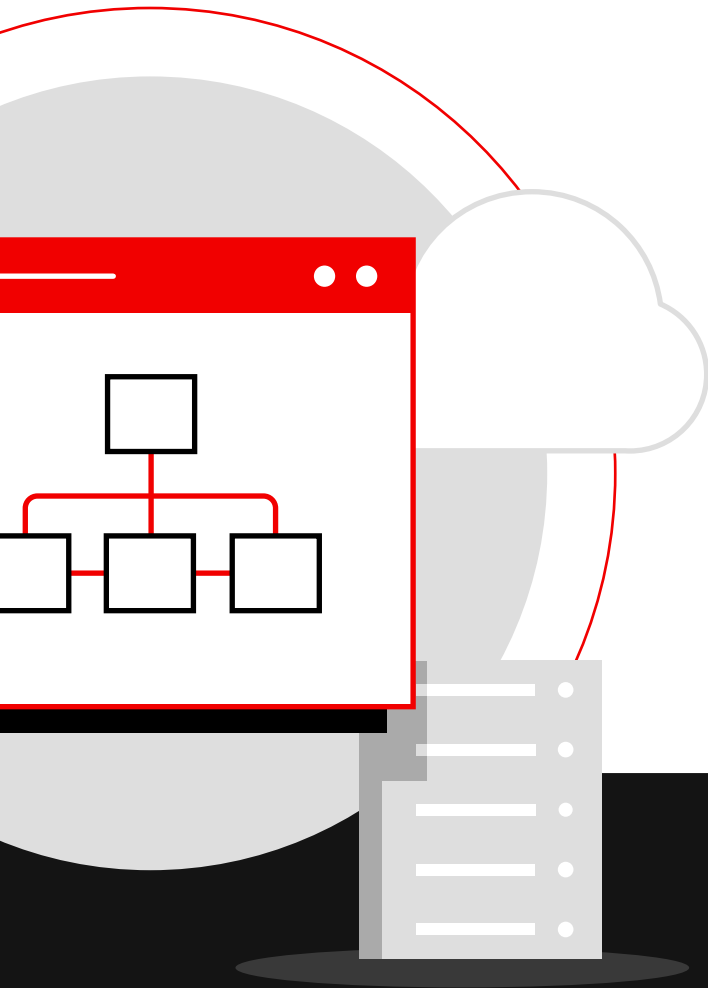
✓ Automation can attract the type of employees you're looking for in a high-demand talent pool.



The IT executive's role in adopting and growing an automation solution for success

As organizations navigate the new realities of an ever-changing enterprise ecosystem, IT automation has become an imperative boardroom conversation.

Once the benefits have been weighed and the decision made to move forward with an IT automation solution, executives need to consider their role in ensuring a successful rollout and adoption.



Best practices for a successful automation rollout

Be a champion rather than a sponsor

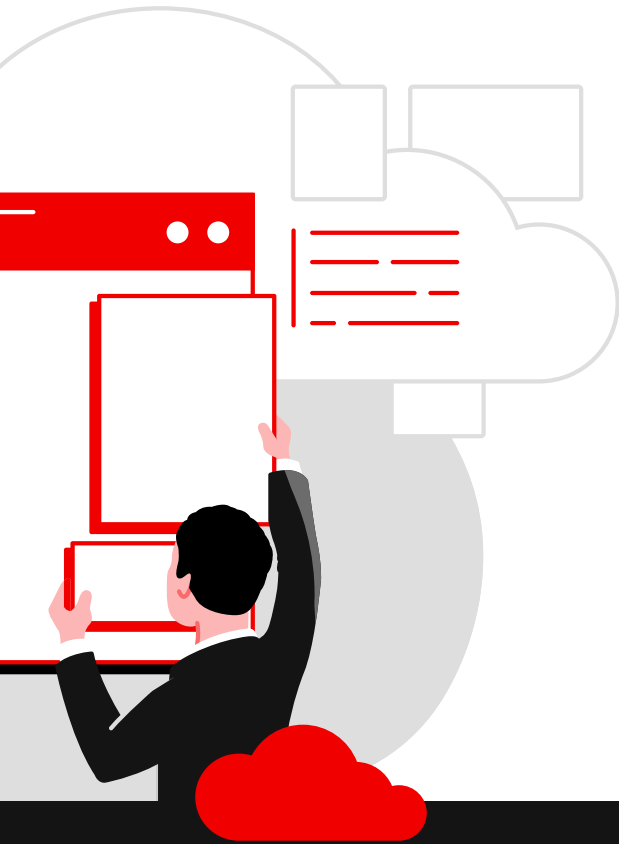
For enterprise-wide automation to succeed, active support needs to come from the top.

- The role of the IT executive must go well beyond signing off on a purchase order or serving as an executive sponsor.
- You need to be a champion of the technology and have a vision that you share for how it's going to benefit not only your organization, but people's jobs at an individual level.
- By becoming involved at an early stage in the process and socializing your confidence loudly and frequently, account teams will be primed to embrace automation by the time it's rolled out.

Align to a business objective

It's always a mistake to automate for the sake of automating. To make automation successful within your organization, you need to:

1. Use it to achieve a business objective. Whatever that key business challenge might be, identify how automation can help move it forward—and **define what success looks like**.
2. Once you've determined this, **focus on outcomes, not outputs**, and then socialize and champion those outcomes.
3. By attaching key performance indicators (KPIs) to your automation project, you're showing that **this isn't just a new technology, but one that is prioritized**. Plus, if the metrics you are outlining are meaningful and realistic, this exercise helps you prove your project's success beyond implementation.



Support change and collaboration

A common concern from executives about bringing automation into their organization is dealing with employee fears about being automated out of a paycheck.

- **The truth is that automation doesn't replace IT professionals—it replaces drudge work and restores order to chaotic systems.**
- However, this reality might not be immediately apparent. Remember, IT automation is a piece of digital transformation, which touches technology, processes, and people.
- Recognize and address employee anxiety and concerns, and focus on the benefits they'll experience, including improved cross-enterprise collaboration to move projects forward faster.
- If you don't acknowledge the on-the-ground effects of automation, you will likely struggle with adoption.

“Every single process, service, and application at Microsoft is going through digitization and optimization. We are investing in automating all of our critical business processes. So technology is important. It's critical. But culture comes first.”⁷

Ludovic Hauduc

General Manager,
Core Platform Engineering, Microsoft

⁷ Red Hat case study. “International technology company builds culture of IT automation,” December 2019.

Encourage adoption by investing in people

As with the implementation of any technology, **if people don't know how to use automation, it doesn't work.** And if they don't adopt the tools, the investment is useless. Making sure your workforce is trained and using the technology in the right way is critical to successful adoption.

By offering teams opportunities to build their skills with automation tools, you'll not only encourage adoption, but make the most of your investment. Work with a vendor that provides consulting and training solutions to help you educate your workforce on how to effectively use your automation platform.

“Red Hat's experts clarified the process of developing services and apps on Red Hat technologies from design to production implementation. With the knowledge they shared, we now can develop, run, and deploy everything ourselves and take advantage of automation.”⁸

Sefa Can Acar

Linux Administrator, Bilyoner Interactive Services

“Implementers are taking a tactical approach, trying to automate commodity technical tasks, while leadership is focused on improving security. Leadership may not be doing a good enough job conveying their priorities downstream, as overall implementers view everything as slightly lower priority.”⁹

Find a middle ground

To see true business benefits from automation, there must be alignment between leadership and implementers.

While multiple levels within your organization might agree that automation is important, they might not agree with you on automation priorities.

By choosing an automation platform instead of a tool, you can demonstrate the value of automation at the practitioner level by showing how you can automate across all levels of their infrastructure. By connecting domains across the organization, you can further your digital transformation to meet C-level goals.

⁸ Red Hat case study, [“Turkish betting platform runs on Red Hat OpenShift and Ansible,”](#) 2020.

⁹ Forrester Consulting thought leadership paper commissioned by Red Hat. [“Enterprise open source automation drives innovation,”](#) July 2020.

What to look for in an IT automation solution

Choose an automation platform, not a tool

As an integral part of your organization's digital transformation, look at automation holistically. When you can automate workloads in addition to tasks, you can change entire processes and free up employee time.



Once you understand why you want to automate and how to successfully incorporate automation into your organization, you need to choose an IT automation solution.

Find an automation platform that supports workload portability

As you automate, you will want flexibility and agility. As an enterprise, you potentially have thousands of containers, so you need to find an automation solution that can automate and orchestrate container deployment, networking, scalability, and availability.

Select an automation platform that is easy to adopt

The easier a platform is to adopt, the more likely that it will be embraced across your organization. Look for a technology with a simple-to-learn programming language and shareable, certified content.

Embrace an automation solution that doesn't lock you in

When you choose an automation platform that's built on open source technology, you benefit from the freedom of interoperability and the absence of vendor lock-in.

Ensure your automation platform includes management tools

Find a platform that includes analytics, role-based access control (RBAC), and the ability to seamlessly share content.



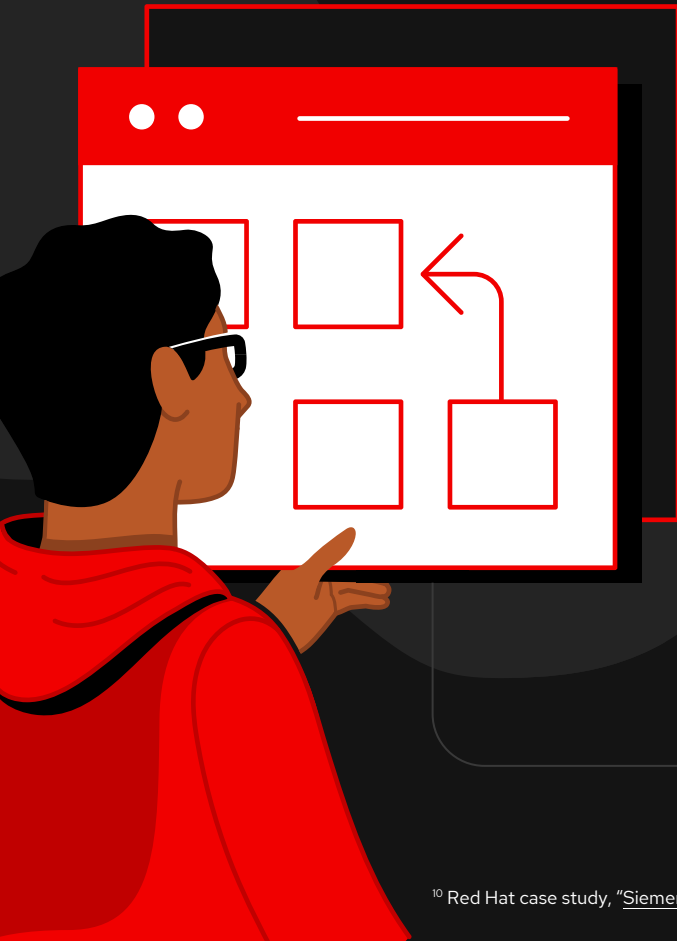
☐ Decide on a vendor that provides consulting and training solutions

Your organization doesn't need to manage implementation and training on your own. Find a vendor that can help you build your automation platform and educate your workforce on how to effectively use it.

// The in-person workshops [with Red Hat Consulting] were very important to our technicians gaining a thorough understanding of Ansible to deploy faster and better.¹⁰

Rufus Buschart

Head of Public Key Infrastructure, Siemens



¹⁰ Red Hat case study, "Siemens automates communication security with Red Hat Ansible," September 2019.

Red Hat for transformative automation

Your organization relies on your IT infrastructure and applications.

Use IT automation to:

- Save time.
- Improve employee satisfaction.
- Reduce costs.
- Connect your technology, processes, and teams.
- Deliver more business value.



// Red Hat's solution is a good fit for customers that want a holistic automation platform that integrates with a wide array of other vendors' infrastructure.¹¹

¹¹ Forrester Research. "The Forrester Wave™: Infrastructure automation platforms Q3 2020," 2020.

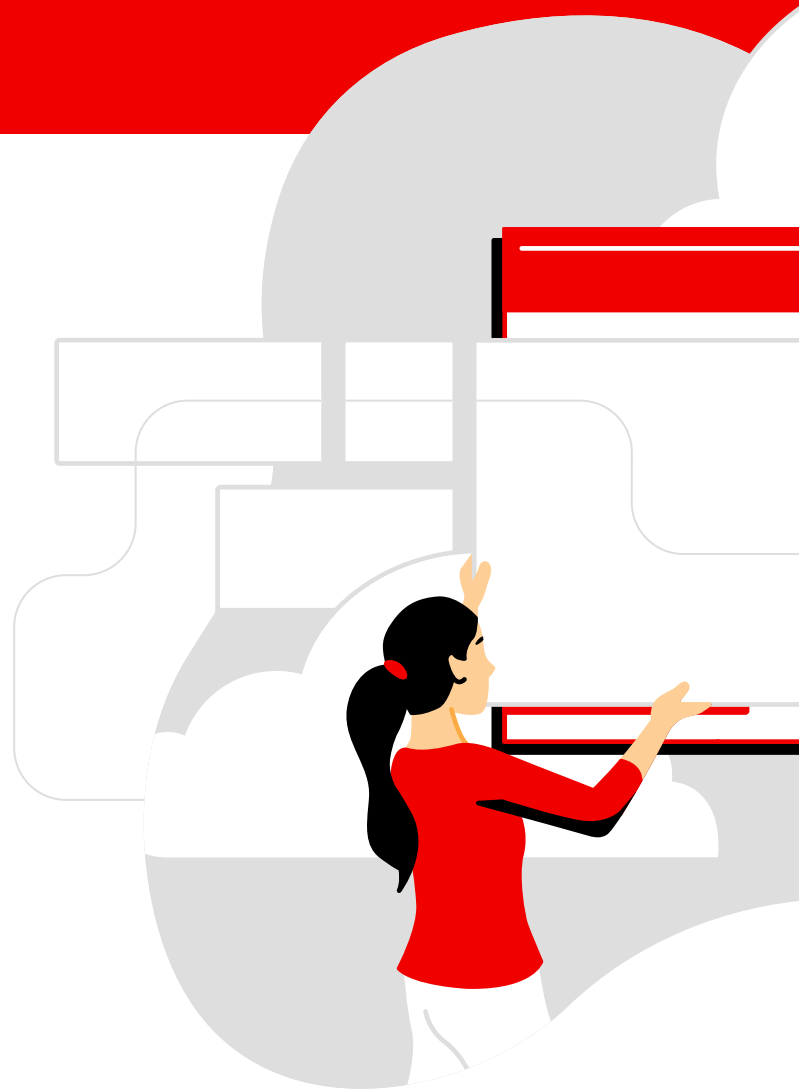
Automate your infrastructure with

Red Hat Ansible Automation Platform

Red Hat Ansible Automation Platform is a foundation for the automated enterprise.

A full enterprise solution for the hybrid cloud, it covers a number of use cases, including:

- **Infrastructure provisioning and configuration management.** Read the e-book, [Automate infrastructure workflows](#).
- **Networking.** Read the e-book, [Network Automation for Everyone](#).
- **Application development and deployment.** Read the whitepaper, [Streamline CI/CD pipelines with Red Hat Ansible Automation Platform](#).
- **Security automation and configuration compliance.** Read the e-book, [Simplify your security operations center](#).
- **Cross-function orchestration.** Read the [use case for orchestration](#).
- **Self-service enablement.** Learn more about [Red Hat Ansible Automation Platform](#).



Balancing simplicity with power

Red Hat Ansible Automation Platform can be used across IT departments with consistency.

Rely on Red Hat Ansible Automation Platform for:

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

Use and automate your preferred infrastructure technologies via standard, open interfaces that allow vendors to create modules or plugins for your automation platform.

Simple adoption

Allow staff across your organization to build and deploy automation quickly and effectively with simple, human-readable automation and intuitive tools.

Massive scalability

Deploy automation consistently across your entire IT organization with a platform that scales across infrastructure, operating systems, management tools, and user roles.



Agentless deployment

Quickly connect and automate your infrastructure components with security—without needing to install and maintain an agent on each device.

Supported partner content

The [Automation Hub](#) is an ever-expanding resource for supported partner content, providing ways to use automation, and how-to guides to implement them into your infrastructure.

“ At one time, we had a ridiculous, laborious process for producing customer reports. By integrating ticket requests, we could automate report generation and make it available via a dashboard at the touch of a button.

Many bespoke use cases, such as onboarding new users, can also now be done by the customer themselves because we have used the Ansible Tower API to integrate the processes and workflows.¹²

Talor Hollaway
CTO, Advent One

¹² Red Hat case study. “[Advent One improves capabilities with Ansible Automation Platform](#),” 2020.

ROI at a glance

The Swiss Federal Railway¹³

- Reduced device configuration times by more than 90%, from five days to three hours.
- Enhanced security for critical national transportation infrastructure with RBACs.
- Established comprehensive device access for easier service updates and innovation.

Microsoft¹⁵

- Adopted centralized, phased automation to verify and reuse production code.
- Established DevOps culture focused on learning new skills and collaborating across teams.
- Saved thousands of work hours by mitigating network downtime and reducing production code defects.

Ensono¹⁴

- Saved more than 100 work hours by automating repetitive manual tasks, such as configuration management database discovery and population.
- Established centralized infrastructure with role based access controls to better allocate support staff and support enhancement of service management platform.
- Improved Windows and Linux® team collaboration through standardization, speeding work on valuable projects.

¹³ Red Hat case study. "Swiss railway accelerates innovation with Red Hat Ansible Automation," October 2019.

¹⁴ Red Hat case study. "Ensono saves more than 100 work hours with Red Hat Ansible Tower," May 2019.

¹⁵ Red Hat case study. "International technology company builds culture of IT automation," December, 2019.

AUTO MAT- ION



Ready to get started?

Choose the automation platform that
"excels at providing a variety of deployment options."¹⁶

Automate your infrastructure with Red Hat

Learn more about [Red Hat Ansible Automation Platform](#).

Get the resources and support you need to start your automation journey with [Red Hat Consulting](#).

Find out how [automation solutions can help your organization digitally transform](#).

¹⁶ Forrester Research. "The Forrester Wave™: Infrastructure automation platforms Q3 2020," 2020.