

5 steps to automate your business

Accelerate enterprise-wide automation with Red Hat Services



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Introduction

Automation continues to be a hot topic as many businesses wrestle with how to maximize its benefits, but not all automation strategies are created equal.

Across industries, businesses are integrating automation into their practices using different techniques, philosophies, and strategies. Some organizations are experimenting with community automation solutions that can address specific tasks but are not scalable or sustainable in the long term. On the other hand, implementing the right enterprise-ready automation solution can unify teams, standardize processes, and transform the way IT is delivered.

Assess automation in your organization

Making the most of automation across your organization often begins with more questions than answers. What are the steps on the journey toward adopting enterprise-wide automation? How can you identify your automation maturity? And where is the best place to start?

Consider these maturity levels to help identify where your organization is on its automation journey:

Interested in automation

- Your teams are aiming for automation, but aren't sure where to start.
- Your teams are interested and enthusiastic about automation, which is key to this stage of your journey.

Gathering information about current automation usage

- Development, security, and operations (DevSecOps) teams are information gatherers and champions of automation in your organization.
- These teams are highly knowledgeable and enthusiastic about organization-wide automation and can be the starting point for your automation journey.

Where you might need help

It can be a daunting task to create a common automation platform, build trust and a corporate dialogue, and establish standard practices that can be quickly learned, adopted, and scaled across the organization.

nation usage Where you might need help

DevSecOps teams may lack business or executive support, organizational cooperation, or influence to make effective changes.

Working with isolated automation

- · Automation is led by certain IT teams or business groups.
- Your automation-focused teams achieve localized success that accelerates processes and reduces risk, but is limited to a specific task or objective.

Where you might need help

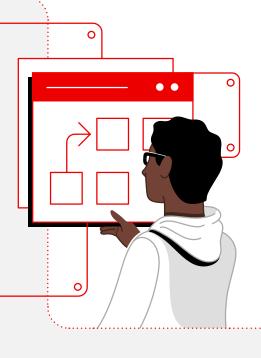
Team success doesn't always extend to other parts of the organization due to various obstacles, even though automation would provide significant benefits.

Integrating automation

- Nearly every team in your organization has adopted automation practices.
- You've embraced the philosophy behind automation and are experiencing improvements in efficiency and innovation as a result.

Where you might need help

Each group has customized or isolated processes and tooling that don't work beyond their own scope, creating cross-organization incompatibility and complicating DevSecOps integration efforts.



Begin your automation journey

While IT and business leaders know that enterprise-wide automation can boost efficiency, enhance a focus on security, and accelerate innovation, many are unsure where to start.

Getting started with automation, or extending use cases across your organization, begins with a shift in mindset. It's helpful to think of enterprise-wide automation as a journey rather than an end state. Start by exploring what your organization needs by taking into account more than just the tools currently in use.

Points of consideration

 What areas of your organization would benefit most from automation, such as infrastructure as code (IaC), configuration as code, network automation, or security automation (such as compliance enforcement)?

· How would self-service capabilities

through IT service management,

including automated service

catalogs, ticketing systems,

and asset life cycles, accelerate

existing automation use cases?

 How much time and effort could be saved by your service team, which may currently be overwhelmed by requests?

· How could a single source of

truth benefit your teams?

- Do you have an existing repository to refer back to for successful automation code, tools, and processes, as well as systems inventory and configurations, as teams expand their automation efforts?
- Which projects or future projects could you accelerate using a centralized orchestration platform that ties automation systems together?

Putting these considerations into practice won't happen overnight, but with the right enterprise solution such as **Red Hat® Ansible® Automation Platform**, you can shorten the time needed to take full advantage of automation across your organization.

A unified automation platform can help teams:



Integrate multiple, disjointed solutions.



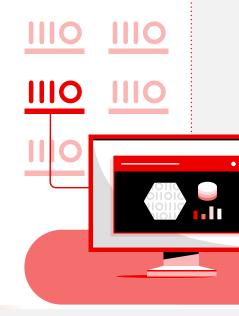
Create an approach to define or refine the organization's automation readiness.



Establish methods to identify automation gaps in their current environment.

A successful automation strategy requires an enterprise-wide focus on:

- Adoption across the enterprise, from vision to execution, with an emphasis on simplicity and shared knowledge.
- Accountability with all members of the organization taking responsibility for their individual goals.
- **Governance** through prescriptive processes that accomplish automation goals and produce repeatable results.
- Security with a simplified pipeline that reduces the risk of hacking or overriding automation. It should include repeatable and reusable data and compliance practices, as well as a proactive approach to the resolution of vulnerabilities.
- **Standards** that provide a foundation but also allow the extensibility needed to achieve organizational and team goals.
- Code quality and coding practices that promote collaboration and reduce technical debt in the long run.
- Developer experience that focuses on rapid onboarding using source control, precommit hooks, continuous integration (CI) and continuous delivery (CD) pipelines, and generally supporting the developers' usage of good practices and code quality in Ansible coding and testing.
- Open practices that foster efficient reuse of automation code and learnings.



The benefits and potential of enterprise-wide automation are many, including greater return on investment (ROI), more efficient teams, and delivering solutions to your customers more quickly. But getting started or advancing stalled automation efforts can be complex.

Fortunately, you're not alone. Red Hat Services can help provide real-world experience and expertise to your teams to assist you along the way:

Red Hat Consulting works alongside teams to assess your organization's automation maturity and jointly develop and execute a technical roadmap through mentorship that aligns with your automation strategy and goals.

Red Hat Training and Certification provides courses and coveted industry certifications to help your teams ramp up their automation skills and compliance and work more efficiently.

Red Hat Technical Account Management (TAM) provides operational guidance for your Ansible platform to help you proactively address security issues and plan ahead.

Navigate to quick-win opportunities

The initial phase in your automation journey shouldn't be long or complex. You know your business, and you probably already have an idea of where you would like to start.

The goal at this early stage should be to find a single process or area to establish a successful, foundational use case that delivers value across your business. During this step, working with a single, motivated team can help you get moving quickly, and you can add to this team as you go.

Red Hat Consulting can help you get started with this step by drafting an overarching strategy to identify objectives and address processes, tooling, and skill gaps with measurable outcomes. They can help you outline your current and target state, identify viable approaches and technologies (including participants), and identify use cases and challenges.

Be ready to identify organizational needs and embrace cross-team collaboration. This business focus and collaborative problem-solving approach will help to close gaps and produce measurable outcomes in less time.

Quickly find a use case to get started

Navigation is about asking the right questions to thoroughly understand your needs and determine where you should start with your initial use case.

- Get all stakeholders together to determine time-consuming processes that represent automation opportunities.
 - Start by focusing on use cases internal to a single team or spanning no more than 2 teams so that knowledge sharing is optimized.
 - > Identify who gets pulled in and what they do to complete the process.
 - > Break down complex steps into smaller, more manageable parts.
- Identify what systems are already in place to help extend automation and what is needed to scale your solution.
- Start small by choosing a single use case to automate and keep scope constrained to establish initial value.
 - > Start with simple, but repetitive Day 2 administrative tasks such as:
 - Restarting a service or a device.
 - Deploying and configuring a specific noncritical agent.
 - > Look for attainable and/or high-impact activities such as:
 - Assessing configuration drift via check mode.
 - Provisioning infrastructure in development and test environments.
 - Building simple application stacks on development and/or test infrastructure.



Before you begin, take advantage of a comprehensive learning curriculum to ensure your team has the skills they need to address automation challenges.

Learn more about what a Red Hat Learning Subscription offers.

As your automation practices mature, you can use the power of artificial intelligence (AI) to accelerate your automation initiatives using Red Hat Ansible Lightspeed with IBM watsonx Code Assistant.

A generative AI (gen AI) service available to Ansible Automation Platform users, Ansible Lightspeed can help automation teams create, adopt, and maintain Ansible content more efficiently. This lets you turn your automation ideas into Ansible code using natural language prompts to write syntactically correct tasks.

Learn more about Red Hat Ansible Lightspeed

Don't forget



Properly documenting the planning for your automation use cases is central to future automation success. To do this effectively, consider creating a centralized place for automation repositories and setting up an internal chat channel so the planning teams can support each other.

See automation in action

Red Hat Consulting can provide guidance on how to maximize the value of your automation platform investment.

Red Hat helps us to manage group applications, and this management allows us to provide users with the autonomy they need ... We have been able to dedicate the equivalent of 18 months of

1 employee's work to more rewarding, strategic projects within the IT department."

Francisco José Martín

Automation Manager, Department of Exploitation and Operation, Cepsa

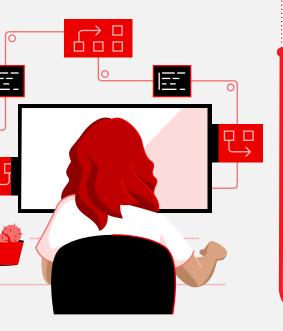
Read the Cepsa case study





What's next? Once you have discovered your automation opportunities, it's time to take the next step and build a foundational use case that demonstrates improvement and generates excitement.

Build a foundation that gets noticed



The next step is to take your ideas and turn them into action. Based on your discovery findings, you'll automate an initial set of workflows to provide meaningful impact for IT and the broader business.

At this stage you may also want to implement an informal community to bridge your initial teams together. While this is likely not a formal Community of Practice (CoP), which refers to a group of like-minded individuals working toward common practices and exchanging learnings throughout your organization, it is a good step in that direction.

At this stage, Red Hat Consulting can help your teams codevelop foundational use cases, including gathering stakeholders, determining automation opportunities, and identifying existing systems to enable automation. This minimum viable product (MVP) implementation is not your average proof of concept. It will deliver a big win for both your automation strategy and your organization.

Your foundational use case should:

- Produce meaningful results that help alleviate burdensome processes, redundancies, inconsistencies, or time-consuming, manual tasks.
- Generate a quick win for the company that frees up staff to work on more innovative projects, which includes time to further automate systems and processes.
- Automate a widely used process or set of processes that can be
 easily automated in a short timeframe with minimum risk, but still provide
 measurable benefits.
- **Provide iterative processes and communications** to avoid obstacles and offer visibility into the automation process.



Quick tip: You might want to avoid complex or business-critical processes in your initial steps toward automation implementation. While there is the possibility of significant benefit, best practice is to demonstrate success with lower-risk activities and build from there.

Don't forget

As you build on your foundation of automation success, consider the following to help you scale your automation efforts.



Aim for production. Make your foundational use case work in the real world and show your teams that they can feel secure knowing that their automation solution is working for them.



Improve the potential for adoption by automating a process that is both useful and highly visible.



Emphasize to both planning and implementation teams the importance of knowledge sharing through the repository and chat channel established in Step 1. These teams will start an automation community that can grow into a valuable force toward standardization, enablement, and best practices.



Train your core teams on DevOps culture and processes so they can adopt and evangelize your automation technology more quickly.



Red Hat's experts can help automation teams take advantage of Ansible Automation Platform features to increase efficiencies and accountability through standardization.



Me realized we needed enterprise technology that could support a cultural shift to an automationcentric approach for our DevOps teams ... The project was complex, and any mistakes would have been costly. If we were going to invest in a new approach, we needed to ensure our teams were given the right knowledge and skills to support it. Red Hat Consulting was a great partner in our learning."2

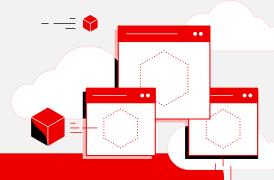
Pierre-François Liozon

Unix Team Head, Crédit Agricole Group Infrastructure Platform CA-GIP

Build a compelling rationale for your foundational use case

Learn how an insurance company reduced IT monitoring time and errors by 80% with Red Hat.

Read the case study





What's next? With a significant win on your path toward enterprise-wide automation, it's time to build on your momentum. You can now expand on what you've learned and integrate automation into additional operational and business support systems.

Extend your initial success

In this step, you'll focus on what you've already produced, and bring that success to additional teams across your organization.

Standardized automation workflows across operational or business support systems can help you reach enterprise-wide automation. As you extend automation across your organization, Red Hat Consulting can help you make the most of your existing automation implementations and look for opportunities to use repeatable methods in other parts of your organization.



Look for opportunities to integrate your existing automation framework into other areas:

- · Build self-service tools for IT service management:
 - > Use Red Hat management solutions to orchestrate automation use across the company.
 - > Use **event-driven automation** to respond automatically to events, such as a network outage, to remove manual steps typically taken by IT teams.
- · Increase scope by adding new application automation capabilities on top of existing frameworks:
 - > Extend automation to load balancing, firewall application profiles, and other networking systems to achieve larger goals of end-to-end application deployments.
 - > Iterate on existing processes to achieve increased oversight, orchestration, collaboration, security, and practices centered around automation.
- · Make every iteration a new MVP:
 - > Work in small, implementable increments that deliver value quickly.
 - > Continue to improve upon what you've already created based on feedback gathered from teams involved.
 - > Regularly evaluate how far you've come, so your team can see how small steps add up to big achievements.
 - > Document and collaborate:
 - Document your work and iterate on your practices so that others can learn from your successes. Make sure to include:
 - + Process transformation.
 - + Standardization.
 - + Workflow automation.
- Build your source of truth:
 - > Build a data model, storage architecture, configuration management database (CMDB), or system tracking database.
 - Track code, scripts, and changes.
 - Implement standardized processes for automation framework development.

During this stage, a Red Hat Technical Account Manager (TAM) can provide your teams with operational and advisory guidance, including anticipating and resolving issues and planning ahead to help support automation success. Additionally, training your teams on Ansible Automation Platform will help them onboard key operations, development, and engineering teams onto the new platform to accelerate migration, gain efficiencies through automation, and scale.

As additional teams embrace Ansible Automation Platform, look for colleagues eager to assist their peers, explore and optimize Ansible features, and freely share knowledge throughout the organization via documentation repositories, examples, and chat channels. They can help you maximize your use of automation and create a vibrant, self-sustaining culture.

Get started with training based on your role.

Learn more in this skills path brief



Don't forget



Make sure the teams involved in change management stay engaged during the process.



Changes to automation are changes to processes, tools, and workflows.



Automation is internal to product delivery and should be treated as such.

Explore the platform that powers success

Learn how Red Hat Ansible Automation Platform helps you automate across your enterprise.

Read more



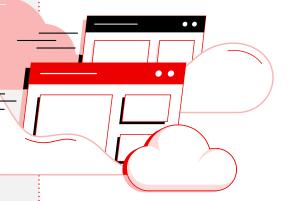
What's next? By the end of Step 3, you're well on your way toward enterprise-wide automation. Now it's time to accelerate adoption, and you have the foundation and confidence to lead the way.

Accelerate automation adoption

With a well-defined source of truth and proven automation processes and tools simplifying work every day, you're ready to take the next step.

With your automation planners and implementers now spanning multiple teams, you can formally establish your CoP. The automation CoP and its knowledge repositories are the initial step for new teams that want to gain the benefits of automation. Each new team starts with a foundational use case of their own. By insisting on a well-defined use case and involving teams across the business, you'll improve the perception of automation across the organization.

Your automation CoP is:





A core team of cross-functional automation champions, including your automation subject-matter expert (SME), IT architects, business and IT SMEs, and IT developers.



Empowered by standard practices and a common language that is documented in knowledge repositories and helps the greater organization create, share, and utilize automation.



Prepared to engage with other teams in your organization that need help with automation, providing training and hands-on assistance so others can learn from your success. This should include an explicit allowance by management for some CoP leaders to spend a portion of their work week in support of broader automation initiatives outside their immediate teams.

See what automation CoP success can look like

By expanding its use of Red Hat Ansible Automation Platform with help from Red Hat Consulting, ProRail has adopted standardized processes for network switch modification and more. A new automation CoP has simplified crossteam collaboration and established a foundation for ongoing innovation.

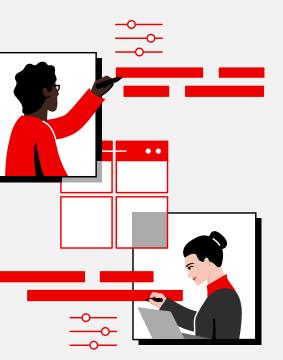
The goal is to use playbooks across the different teams, such as Network, ESB, and Operating System, to ensure the service is provided. The interaction we're seeing between the engineers is fantastic. Mindsets are changing as people are thinking about how to automate and how to collaborate."3

Coert Busio

IT4IT and IT4OT Manager, ProRail

Read the ProRail case study

To build an effective and lasting CoP, you'll need to:



- 1. Determine the community's mission and goals, which should align with corporate strategy.
- 2. Obtain executive sponsorship so they can create an environment for the community to thrive.
- 3. Assemble community leadership by selecting enthusiasts who can balance standardization and innovation.
- 4. Formalize knowledge management and tooling to ensure that resources are discoverable and supported by IT.
- 5. Engage in regular communication with executives, community leaders, and community members, both existing and new.

Red Hat Services can help you establish your CoP strategy and support you in this process, providing you with the building blocks to open up that collaboration with other teams and share with one another continually.

Additionally, as you continue automation adoption and evolve your usage of Ansible Automation Platform, getting your team certified on Ansible will help them hone their expertise to help others. Your Red Hat TAM will continue to provide support, helping to improve security, reliability, and manageability of Ansible Automation Platform so you can focus on your business goals.

Don't forget

Automation is both a culture and a practice.



Showcase your successes to start moving teams toward automation across the enterprise.



Allow automation to become your corporate language so that everyone can learn how to speak it.



Stay focused on innovation and you'll see your enterprise transform.

Expand your automation capabilities

Learn how TransUnion is expanding its use of Red Hat Ansible Automation Platform to accelerate feature development and migrate to the cloud at scale.

Read the press release



What's next? The secret to transformation lies in the last step. Once you have an enterprise that has embraced both the culture and practice of automation, it's time to optimize and grow.

Optimize and grow an automation-focused enterprise

By this point, you've built substantial momentum and achieved significant automation successes throughout your enterprise, creating a culture of automation. But like all technologies, change is inevitable. As your company introduces new solutions and internal tools, you will want to adopt an automation-focused approach.

As industry trends shift, you can take advantage of the latest technologies and practices. With automation, your teams will reclaim the time and energy needed to rapidly launch, combine, and enhance workflows and orchestrations to meet changing requirements.

Offering self-service automation endpoints, for example, which can be accessed and implemented manually through a user interface or other automation workflows through application programming interfaces (APIs), provides more valuable services to end users.

Integrated into a self-service portal for end-user convenience, the job and workflow templates API of Ansible Automation Platform offers the necessary points of integration to follow this approach. The same API can be used by developers in their CI/CD pipeline to deploy and configure the infrastructure and applications they need for their activities.

Ultimately, Ansible Automation Platform becomes the central automation hub where administrators and other automation owners can control and monitor who is using their automation, independently of the entry point they are using. Similarly, security teams have a central auditing point which they can integrate with their security information and event management (SIEM) logging system.

As trust in automation grows, **Event-Driven Ansible** can be engaged via monitoring and other event tools to trigger, for example, remediation actions through the same previously defined automation. This aims to get rid of the last manual component and strives for a completely self-healing system. Ultimately, Event-Driven Ansible can help increase your automation maturity by connecting events to existing automation content.



To get started with Event-Driven Ansible, use it to automatically gather additional information and complement a ticket reviewed by a person who can then manually trigger the recommended automated action. Once the causality between event and automated action has been sufficiently validated, the manual validation can be removed and the job template directly triggered.

As your Ansible Automation Platform proficiency expands, and as more and more teams across your organization use the platform and engage the CoP, you may find that the grassroots, part-time support of CoP leaders isn't enough to keep up with the growth of automation in the business. At some point, you may wish to allocate budget to a full-fledged Center of Excellence (CoE) in which dedicated staff help new teams and provide governance over your automation platform.

What's the difference between a CoE and CoP?

A CoE is a structured, centralized unit, accountable to management and focused on achieving excellence and sharing best practices in a specific technical domain. A CoP, on the other hand, is a more informal, decentralized group aimed at fostering collaboration, camaraderie, and knowledge sharing among individuals with a common technical interest or expertise.



Get started with Red Hat Services

Enterprise automation is attractive for its ability to provide accelerated outcomes with consistent and repeatable processes that support the evolution of a DevSecOps culture.

No matter where your organization is on its automation journey, adopting automation on a large scale is complex. Red Hat Services is here to help ease that pressure and meet you where you are, working with you to establish a sustainable automation strategy that gets you on the path towards a modernized IT organization.

The Red Hat Services difference



Mentor-based approach

Working with Red Hat engineering and support organizations, Red Hat Consulting brings advanced automation skills and technical expertise directly to your organization to help you produce roadmaps, position and align teams, streamline processes, and make enterprise systems and applications work together.



Real-world training

Red Hat Training and Certification develops role-based, hands-on knowledge in emerging and foundational open source technologies. With a comprehensive automation curriculum, your organization can build the skills for long-term success with your automation investments.



1-on-1 specialized support

Red Hat Technical Account Management provides operational guidance along your automation journey, working to resolve potential problems before they occur, minimize disruption, and free you up to focus on your key business challenges.





Ready to begin?

Start by discussing your challenges and goals with a Red Hat expert.

Schedule a discovery session

Learn more about evolving your automation journey with Red Hat Services

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