Enterprise automation with a DevOps methodology

Practical steps and best practices for automation implementation

Applying modern automation to your enterprise application environment helps your business better serve your customers—so you can be successful in the digital economy. This high-level enterprise automation checklist can help you transition to a more automated, efficient environment.

Start small
Show small successes. Automate something, but do not try to automate many things in one release. It might be that not everyone wants to automate—at least not in the beginning. Practice patience.

Spread awareness
As you begin your automation journey, it is important to spread the vision. Take time to share information and demos throughout the organization to create awareness about automation and prove its value.

Automate your tools
Do not forget to automate installing and upgrading your automation tools—such as Red Hat® Ansible® Automation Platform, Jenkins, and required plugins. Develop your Infrastructure as Code (IaC) so that it can be easily managed. Manually installing automation tools creates the same problem that you have fixed with automation on your target hosts. If you do rely on manual installs, you will have unreliable and inconsistent environments for your automation tools and pipelines, which is not a reliable foundation.

Fail early, fail fast
Failed solutions cost you time, money, and resources. Large solution failures typically trace back to small failures in assumptions or implementation that don’t come to light until the solution moves to production or scales up. The larger these small failures are discovered, the larger the cost. Manage these costs by continually moving tests as early in the process as possible.

Adopt agile methodologies
The prerequisite for successful automation is the adoption of open and agile methodologies and scrum teams. Although this change can take more than a year and will continue to evolve, open communications and cross-team collaboration sustain and reinforce their value.

Refine your DevOps toolchain
Wherever you are in the evolution from waterfall practices to agile methodologies, pay attention to your DevOps toolchain. Make sure leaders in both development and operations are thinking in a consistent way, and continue the ongoing process of fine tuning your DevOps toolchain.
√ Obsess on standards

Three things are important when it comes to automation: standards, standards, and standards. From day one, standardize your playbooks, roles, model-based approach, and other automation practices. It helps to maintain clean, readable, manageable, and stable code. Syntax and runtime errors mostly occur due to a lack of standards.

√ Engineer for scale

Move beyond systems/device delivery and focus on multiteam services delivery to address platforms, content lifecycles, CI/CD, SRE, and more. Define strategies and governance for modular, integrated automation to address requirements for reliability, business continuity, and reportability.

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Discover the 5 steps to automate your business

Read the e-book for practical guidance to help you take your next automation step confidently.

Take the assessment

See how you compare to other organizations who are prioritizing automation with this brief assessment.

About Red Hat

Red Hat is the world’s leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning support, training, and consulting services make Red Hat a trusted adviser to the Fortune 500. As a strategic partner to cloud providers, system integrators, application vendors, customers, and open source communities, Red Hat can help organizations prepare for the digital future.

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