

Migrate from CentOS Linux to Red Hat Enterprise Linux on Microsoft Azure



The business value of Red Hat Enterprise Linux

Compared to unpaid alternatives like CentOS Linux, Red Hat Enterprise Linux helps your teams get more done, faster, no matter where they work.²

- ▶ **32%** more efficient IT infrastructure teams
- ▶ **42%** faster identification of security risks
- ▶ **23%** faster development life cycles for new applications
- ▶ **72%** less unplanned downtime
- ▶ **24%** lower 3-year cost of operations
- ▶ **\$17.31 million** average higher net revenue per year per organization

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Choose an operating system and cloud provider that support your business initiatives

Across industries, organizations are moving to the cloud to streamline costs, gain efficiency, and innovate faster. In fact, enterprises run 50% of their workloads and host 48% of their data in the cloud, and migrating more workloads to the cloud is a top initiative for 44% of organizations.¹

Even so, moving to the cloud can create additional IT complexity. Cloud strategies require careful planning to get the most from cloud investments while avoiding potential security risks, operational inefficiencies, and budget overruns.

Standardizing on a consistent operating system across your datacenter and cloud environments can help you overcome this complexity and simplify your cloud journey. With an open source development model that delivers flexibility and innovation, [Linux®](#) is an ideal choice for cloud environments. However, not all Linux distributions are the same, and your choice of distribution can have a significant impact on the efficiency, performance, security, and cost of your cloud and datacenter environments.

Organizations that use CentOS Linux—a freely available, community-supported Linux distribution—currently face a choice. The CentOS Project stopped providing CentOS Linux 8 releases and updates in December 2021 and will discontinue all updates and releases of CentOS Linux 7 in June 2024. As a result, CentOS Linux users must migrate to a new operating system to continue receiving updates, patches, and new features. While implementing a new operating system may seem tedious, it also presents an opportunity to reassess your organization's needs and choose a platform that will better support your cloud strategy now and in the future.

[Red Hat® Enterprise Linux](#) is a consistent, intelligent operating foundation for modern IT and enterprise hybrid cloud deployments. Running Red Hat Enterprise Linux on [Microsoft Azure](#) delivers optimal benefits for your organization. Because CentOS Linux is derived from sources published by Red Hat, you can continue to use many of the same skills, techniques, and elements while gaining the features, tools, support, and value you need to be successful in the cloud.

Standardize on a production-grade, open hybrid cloud foundation

Consistency is a key factor in successful cloud journeys. Standardizing on a single operating foundation across your datacenter and cloud environments can greatly simplify your path to the cloud. Rather than splitting operations and management into multiple domains, your teams can use a single set of tools and platforms to deploy, run, and move applications and workloads between your datacenter and your cloud.

1 Flexera. ["Flexera 2023 State of the Cloud Report"](#) March 2023.

2 IDC White Paper, sponsored by Red Hat. ["The Business Value of Red Hat Solutions Versus Non-Paid Open Source Alternatives"](#), March 2023. Document #US50423523.



Running Red Hat Enterprise Linux on Microsoft Azure brings together your datacenter and cloud infrastructure into an open hybrid cloud environment to streamline operations, increase flexibility, and help you make the most of your investments. The cloud-ready, security-focused operating system provides a consistent, tailored experience across footprints, while sustainable, trusted cloud infrastructure gives you global capacity, reliable operations, and innovative services. Red Hat Enterprise Linux is tested and certified for use on Microsoft Azure. Red Hat and Microsoft work together to ensure that our solutions deliver high availability, reliability, and performance for demanding applications.

While CentOS Linux is derived from sources published publicly by Red Hat, it is not the same operating system and does not offer the same enterprise features, tools, or support. Moving to Red Hat Enterprise Linux on Microsoft Azure gives you direct access to the latest enterprise-ready Linux innovation certified for use with Red Hat's portfolio of software, automation, and management technologies. Cross-product integration, certification with a large ecosystem of partner products, and a choice of architectures and versions improve interoperability across open hybrid cloud environments. Intense testing and hardening and a controlled, trusted software supply chain allow you to foster innovation without compromising reliability. Red Hat and Microsoft also partner with leading hardware and software vendors to give you more choice, innovation, and stability within our ecosystem. In fact, you can likely continue to use the third-party products and tools you already have with Red Hat Enterprise Linux on Microsoft Azure.



Support your developers wherever they work

Access tools and resources through Red Hat Developer

The [Red Hat Developer program](#) provides tools, technologies, and a community of builders to help you solve problems, connect with colleagues, stay current, and lead your projects forward.

[Red Hat Developer Subscription for Teams](#) is available at no cost for organizations already using Red Hat products and includes access to Red Hat Developer e-books, cheatsheets, and other useful content.

Developing and testing applications in a different environment than you use for production deployment can lead to issues in production, and developers may not receive the tools, resources, and support they need to be most productive. Adopting a common foundation—like Red Hat Enterprise Linux on Microsoft Azure—for development, test, and production environments streamlines time to launch for new applications and reduces the risk of incompatibilities and issues at launch. Red Hat Enterprise Linux delivers easy access to reliable operating system images on Microsoft Azure in addition to the toolchains, libraries, container tools, and runtimes needed to streamline the path from development to production. Updates are delivered via [application streams](#), allowing developers and IT architects to experiment with the latest tools, runtime languages, and databases while maintaining earlier versions of production applications.

Red Hat also offers developer-specific resources, programs, and subscriptions to help organizations develop on Red Hat Enterprise Linux more easily and cost-effectively:

- ▶ [Red Hat Developer program](#)
- ▶ [Red Hat Developer Subscription for Individuals](#)
- ▶ [Red Hat Developer Subscription for Teams](#)

These programs can be used both in your datacenter and in your Microsoft Azure environment.

Access integrated, expert support in the cloud

80% of enterprises cite a lack of resources or expertise as a top cloud challenge.¹ The CentOS Project does not offer commercial support for CentOS Linux users, so you've likely been handling all platform support issues in-house, requiring more time and staff to operate.

With Red Hat Enterprise Linux on Microsoft Azure, you are backed by Red Hat's [award-winning support organization](#) in coordination with Microsoft's support teams. Red Hat and Microsoft work together to provide expertise, knowledge, and support to ensure you can successfully accomplish your goals.



Save time and effort with Red Hat Insights

Red Hat Insights helps you reduce the time spent on common management tasks:⁴

- ▶ **91%** less time to detect security vulnerabilities
- ▶ **96%** less time to detect known operational risks
- ▶ **89%** less time to detect configuration drift

with our solutions. We provide an integrated, enterprise-grade support system for customers running Red Hat solutions on Microsoft Azure. This complete support experience features multilingual engineers across 18 regions, colocated staff from both companies, an integrated ticketing system, and a seamless, coordinated escalation and resolution process. You receive the same high-value experience whether you obtain Red Hat Enterprise Linux directly from Red Hat or through Microsoft. As a result, you can spend less time solving support issues and refocus staff on more strategic tasks. Accordingly, Red Hat Enterprise Linux users experience 72% less unplanned downtime than organizations that use unpaid Linux distributions.²

Streamline management across hybrid clouds with integrated tools

52% of surveyed organizations use a single operating system as part of their cloud management strategy.³ CentOS Linux does not include advanced management or remediation tools, so you probably manage these systems manually or with other in-house administration tools. Standardizing on Red Hat Enterprise Linux and Microsoft Azure streamlines your operations and management. You can use the same set of management tools—like [Red Hat Insights](#), [Red Hat Satellite](#), and [Red Hat Ansible® Automation Platform](#)—to administer and automate all of your environments, saving time and effort.

Red Hat Enterprise Linux includes access to Red Hat Insights, a unique suite of hosted services that continuously analyzes platforms and applications to help you better manage and optimize your hybrid cloud environment. Red Hat Insights uses predictive analytics and deep domain expertise to speed complex operational tasks from hours to minutes. With a focus on operations, security, and business outcomes, it proactively alerts administrators and stakeholders before an outage or security event occurs.

Red Hat Insights works across on-site and cloud environments—including Microsoft Azure—allowing you to manage and optimize everything from a single interface. You can also create, manage, and deploy Red Hat Enterprise Linux operating system images across your datacenter and Microsoft Azure environments more quickly and easily using the included image builder service. Build customized Red Hat Enterprise Linux images, save them as templates, and push them to Microsoft Azure inventory. Finally, to further simplify operations, you can link your Red Hat account to your Microsoft Azure account and choose to automatically connect your cloud-based systems and workloads to Red Hat Insights and other Red Hat services upon provisioning.

Maintain security and compliance across open hybrid cloud environments



Certify for security

Certification to stringent security standards lets you use Red Hat Enterprise Linux and Microsoft Azure across industries and situations without compromising security.

Security remains a top cloud challenge for 78% of enterprises.¹ And effectively maintaining security and compliance in the cloud requires consistency. CentOS Linux does not include advanced security management tools and carries no governmental or public security certifications.

Red Hat and Microsoft build advanced security features into Red Hat Enterprise Linux and Microsoft Azure to help you maintain a security-focused and compliant hybrid cloud environment. Red Hat and Microsoft security response teams work together and in collaboration with customers, partners, and the global open source community to identify and resolve vulnerabilities.

Built-in operating security features like [live kernel patching](#), security profiles, [security standards certification](#), and a [trusted software supply chain](#) help you meet today's high security and compliance expectations. Automated tools, regular updates and patch releases, and accessible expertise safeguard your environment. The Red Hat Insights compliance service helps you track your organization's adherence

3 Red Hat. ["Annual Linux market report for 2021."](#) January 2023.

4 Principled Technologies, sponsored by Red Hat. ["Save administrator time and effort by activating Red Hat Insights to automate monitoring."](#) September 2020.



Streamline your migration

The [Convert2RHEL tool](#) lets you simply and quickly convert your CentOS Linux systems directly into Red Hat Enterprise Linux systems so you can get started faster and with less cost and hassle.



Build your skills path

[Red Hat Learning Subscription](#) helps your teams fill skills gaps and get the most from your Red Hat products with unlimited access to training content, labs, and videos.

to compliance requirements across your environments and provides remediation guidance.

Using industry-standard encryption protocols, Microsoft Azure secures your data as it travels to, from, and within Microsoft datacenters and at rest in Azure Storage. Within Microsoft Azure, you can turn on security management and threat protection for Red Hat Enterprise Linux as a default. These settings deliver built-in behavioral analytics and use machine learning to identify attacks and zero-day exploits.

Gain more control over your cloud spend

Managing cloud spend is a top cloud challenge for 82% of enterprises.¹ Red Hat and Microsoft offer multiple purchasing options to align with your organization's budget and requirements:

- ▶ Purchase subscriptions from Red Hat and use them on site or on Microsoft Azure via [Red Hat Cloud Access](#).
- ▶ Obtain Red Hat Enterprise Linux instances from the [Azure Marketplace](#).
- ▶ Use your Microsoft Azure Consumption Commitment (MACC) and [Azure Hybrid Benefit](#) discounts for Red Hat Enterprise Linux instances on Microsoft Azure.
- ▶ Use the Red Hat Hybrid Committed Spend program for discounted pricing and flexible payment options on site and on Microsoft Azure.

[Read the brief](#) to learn more about these options.

Migrate to a platform for the future

Red Hat offers several migration paths and programs to ease your transition to Red Hat Enterprise Linux. Red Hat's [Convert2RHEL tool](#) lets you simply and quickly convert your CentOS Linux systems directly into Red Hat Enterprise Linux systems while maintaining existing operating system customizations, configurations, and preferences. You can also engage [Red Hat Consulting](#) to speed your migration.

Move forward with confidence

The discontinuation of CentOS Linux provides an opportunity to move to an operating system that better supports your cloud initiatives. Red Hat Enterprise Linux on Microsoft Azure delivers an intelligent, production-grade operating foundation for open hybrid cloud environments.

Choose your path forward at [red.ht/centos](#).



About Red Hat

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

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