

# Red Hat Enterprise Linux on Microsoft Azure

The Enterprise **Linux** and the Enterprise **Cloud**:  
Transforming Businesses for Success.



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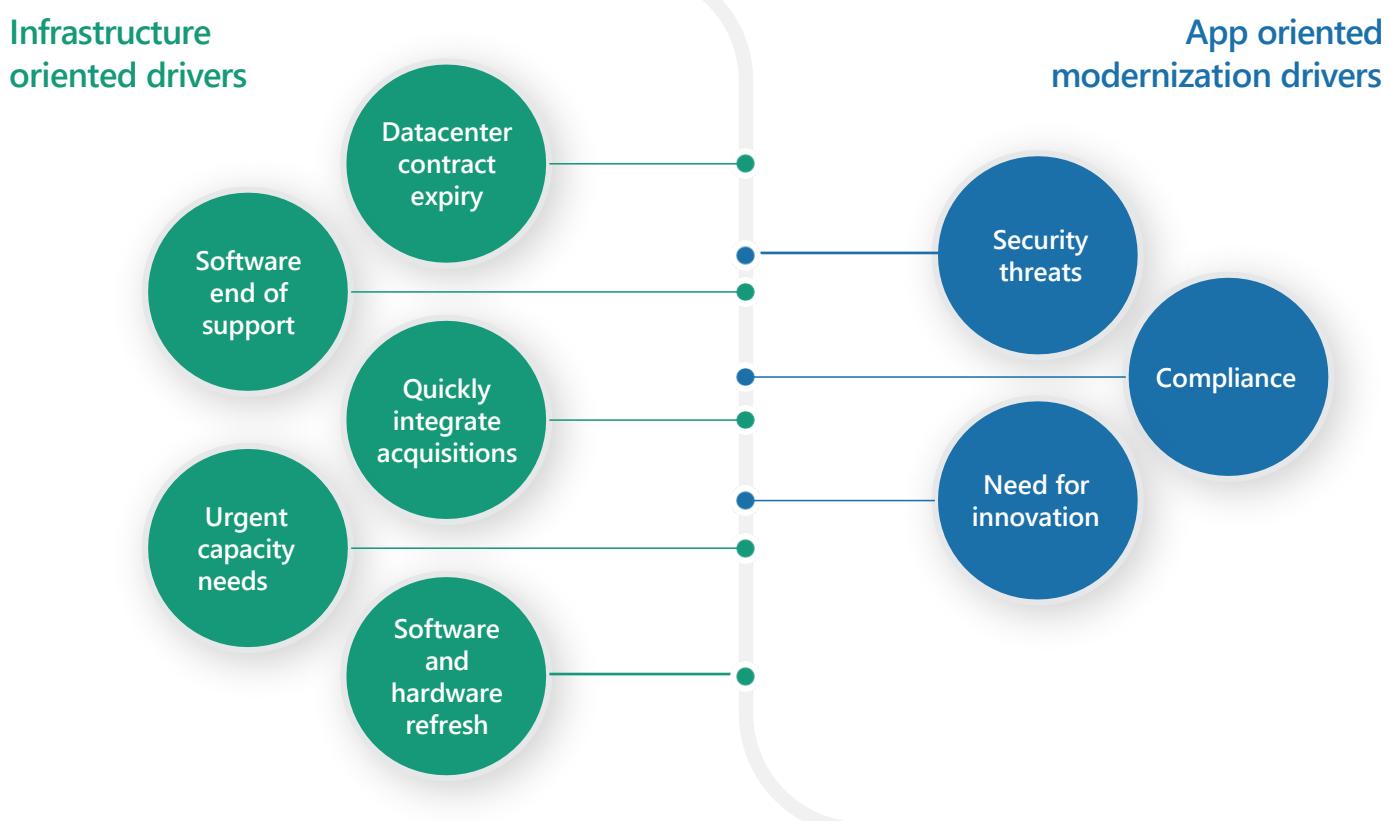
# Cloud migration drivers

There are several well-established reasons that prompt organizations to transition their applications to the cloud. These triggers are often a blend of strategic, technical, and operational considerations.

One of the top drivers is the need for scalability and elasticity. As businesses grow

and face different competitive dynamics, their IT requirements can change dramatically. Cloud services provide the flexibility to scale resources up or down as needed, without the heavy upfront investments in hardware and infrastructure. Security concerns can also help customers accelerate their cloud migration initiatives. In fact, cloud providers invest heavily in security measures, and compliance certifications simplify adhering to industry regulations – a crucial factor for organizations operating in regulated sectors.

With rapid advancements in technology, legacy systems can become a potential liability. Cloud migration enables organizations to modernize their IT infrastructure, staying current with the latest innovations.



# Three considerations for a successful cloud migration

When migrating workloads to a cloud environment, these three considerations can help you successfully integrate your resources into a cloud infrastructure.

**1. Reduce complexity.** When applications reside in multiple environments such as across public cloud and on-premises environments, it can create complexity. How will you manage applications? Will you have the visibility needed to maintain application performance and stability? Can you ensure configuration security and identify vulnerabilities?

Standardizing on a Linux distribution that provides a common user experience and efficient management across on-premises and cloud environments is key to ensuring applications can be properly migrated to the cloud, and that best practices and processes are put in place.

**2. Recognize that empowerment can bring risk.** Cloud capabilities allow any team member to deploy infrastructure to meet project needs. Developers can work more efficiently with instant access to the resources and tools they require. While this freedom may accelerate

innovation and application development, it can also introduce risk. To reduce this risk, developer resources and tools must be standardized, delivered with security, and aligned with organizational processes. A strong cloud governance set of processes must be put in place.

**3. Approach cloud as a journey, not a destination.** Embarking on a cloud journey brings greater flexibility and the opportunity to adopt new ways of working. By migrating to the cloud, you can streamline workflow, innovate, and compete in ways that were not possible in environments that lacked agility or were cost prohibitive. Where you are today will not be where you are tomorrow, and along that journey, you will encounter new technologies that fundamentally change how you approach application development and your environment. From greater application portability with containers, to lifting and shifting applications, to protecting against an evolving threat landscape, hybrid cloud is a long-term strategy that will evolve with your business.



of organizations are using, experimenting with, or planning to use Microsoft Azure.

# Build a hybrid cloud to support modern IT

With access to new tools and new ways of working, a cloud approach empowers organizations to keep pace with evolving technology. But how do you ensure that you have the most effective, security-focused solutions to keep up with your business?

**A hybrid cloud that is built to support the needs of modern IT delivers:**



**Choice without complexity.** Choose where to run your applications—in your datacenter and in the cloud—to expand your IT options without adding complexity.



**Portability.** Benefit from a consistent enterprise platform and application programming interfaces (APIs) for certified apps and containers, creating portability across physical, virtual, and private and public clouds.

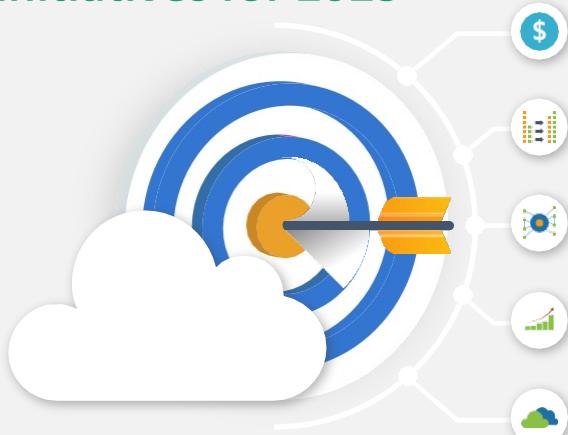


**Comprehensive support.** Access global support across hybrid environments for a consistent support experience.



**Manageability.** Simply and efficiently manage workloads across physical, virtual, and private and public clouds.

## Top cloud initiatives for 2023



1. Optimize existing use of cloud (cost savings).
2. Migrate more workloads to the cloud.
3. Implement automated policies for cloud governance.
4. Improve financial reporting on cloud costs.
5. Progress on a cloud-first strategy.

# Why customers choose Red Hat and Azure

## Red Hat and Azure empower the Enterprise

Red Hat on Azure leverages the combined strength of two industry giants given the proven track record that both companies have in the enterprise space. Red Hat's open-source Linux expertise complements Azure's cloud prowess. This collaboration offers a holistic solution for modern businesses. By choosing Red Hat on Azure, organizations tap into a powerful ecosystem that propels their digital transformation initiatives.

The prominent logos are a testament of the vast impact of our solutions on our customers.



of commercial banks, telecommunication companies, and media or technology companies in the Fortune Global 500 rely on Red Hat products.



of Fortune 500 companies use Microsoft Azure

# Unlock business value by moving to the cloud

Cloud migration provides organizations with scalability, cost optimization, and robust security features. Migrating to the cloud fosters innovation and agility, helping organizations to adapt to market changes and modernize legacy systems.

Together, Red Hat and Microsoft Azure provide a comprehensive, flexible, and open solution for organizations ready to start their cloud migration. With integrated support from both companies, migrating with Red Hat® Enterprise Linux® on Azure is a simpler experience.

Additionally, organizations with committed spend for Azure can use it to deploy Red Hat solutions.

Migrating to the cloud with Red Hat solutions on Microsoft Azure can provide multiple benefits:



## Maximize return on investment.

Reduce and avoid costs by optimizing workload placement and simplifying management and monitoring.



## Increase performance and business resilience.

Improve scalability, elasticity, and performance, reduce time to value, and enhance business continuity.



## Focus on security from code to cloud.

Improve your security posture and meet regulatory compliance requirements.



## Get ready for AI.

Gain a competitive advantage with AI services. Modernize old apps, create new ones, and innovate more efficiently.

**Cost savings.**  
[NTT Ltd](#) in the UK achieved an operational cost reduction of roughly **30%** by leveraging a central operating model.

**Faster time-to-value.**  
[Munich Re](#) drastically cut provisioning time and rolled out their SAP system across multiple Azure regions to strengthen their backup and disaster recovery capabilities.

**Stronger security posture.**  
[Aurobay](#) implemented cross-platform policies for configuration, compliance, and protection, maintaining security without affecting user experience.

**Accelerated innovation.**  
Hong Kong based insurance provider [AIA](#) has delivered more than 100 major projects that use AI and analytics after moving to Azure.



# Cutting costs, not corners

The Total Economic Impact™ of Red Hat Enterprise Linux on Microsoft Azure revealed substantial business outcomes enabled by Red Hat Enterprise Linux on Azure, including a 192% ROI, \$7.85M NPV, and an overall benefit present value of ~\$12M over a period of three years. Forrester breaks this big number down into tangible value by category, calculating \$3.9 million from business continuity savings and \$4.4 million in data center cost savings.

Prior to deploying Red Hat Enterprise Linux on Microsoft Azure, the composite organization experienced 12 outages per year due to hardware failures and natural disasters, with each outage lasting an average of 4 hours. After migrating to Azure, the organization saw a 50% reduction in outage frequency and an 85% reduction in outage downtime. The quantified benefits include a 60% reduction in legacy solution costs, and 40% FTE reallocation towards value-add business initiatives.



“

**There are a number of reasons that sold us. First, we have that flexibility to use our Red Hat subscriptions on Azure so we can mix and match, which is huge for us. Second, we have guaranteed compatibility with Microsoft running Red Hat Enterprise Linux on Azure. Third, we have access in the different markets, so our facilities can get access to core systems that are locally deployed.**

**Global Director of IT**  
Wholesale retail

Source: [The Total Economic Impact™ of Red Hat Enterprise Linux on Microsoft Azure](#), a commissioned study conducted by Forrester Consulting on behalf of Red Hat and Microsoft, January 2024. Results are for a composite organization representative of interviewed customers.

# Azure: Human ingenuity. AI power.

Customers choose Azure for its unparalleled combination of innovation, scalability, and trust. Azure customers have deep relationships with Microsoft in the enterprise.

Azure offers a vast array of cutting-edge services, from AI and analytics to IoT and quantum, enabling businesses to stay ahead in a rapidly evolving digital landscape. Azure's global scale and local presence spans across 60+ regions, ensuring high availability and low latency.

Azure's commitment to security is unwavering, with industry-leading compliance certifications and advanced threat protection. Azure's seamless integration with existing infrastructure and robust hybrid capabilities can simplify and accelerate the cloud migration efforts. In essence, Azure empowers customers to innovate freely, scale effortlessly, and maintain utmost confidence in their digital endeavors.

## Why do customers choose Azure?



Trusted enterprise  
relationships with  
Microsoft



Microsoft Cloud



Security



Global data center reach—  
Data residency and  
sovereignty



Edge, hybrid, multicloud



Developer solutions



Partner ecosystem

# Red Hat Enterprise Linux on Azure: Any workload, one OS

Engineered for the cloud, Red Hat® Enterprise Linux® gives organizations a consistent operating system (OS) across Azure, private, and hybrid cloud environments—and the flexibility to go where your business goes.

Red Hat Enterprise Linux also provides tools for container development: Buildah for building containers, Podman for running containers, and Skopeo for sharing containers. It gives developers the flexibility to build where and how they need to, even at remote edge sites and simplifies the build-to-deploy process by standardizing on a set of agreed-upon technologies that are well supported, maintained, security-focused, performant, and ready for production deployment.



**Innovate** with application streams that provide multiple versions of tools, allowing developers to more easily access the latest stable versions of the languages, tools, and databases they need while maintaining support for teams that require older versions.

**Transform** with image builder to define and deploy your custom Red Hat Enterprise Linux images and push them to Azure. Red Hat Enterprise Linux helps simplify and accelerate the transformation of workloads across datacenter, cloud and edge environments. Subscription portability removes complexity and enhances manageability across all footprints, including the cloud.

**Optimize** by using Red Hat Insights services that provide guidance and expertise for configuring Red Hat Enterprise Linux and workloads that run on it to achieve optimal performance, increase efficiency, and streamline management at scale. Insights also provides several sets of services to manage RHEL instances, including public cloud resource optimization, workload performance tuning, patching, security monitoring and CVEs, and subscription management.

**Protect** with Red Hat Single Sign-on for cloud-native, distributed authentication for applications, identity management and Active Directory integration, including user and directory services and certificate services, and a dedicated security team. Organizations in regulated sectors benefit from key certifications for FIPS 140-2, Common Criteria, and STIG, and Red Hat Insights can be used to define and enforce policies to improve security compliance and operational efficiency.



# A proven history of collaboration

Microsoft and Red Hat have a long history of collaboration that spans close to a decade, illustrating the power of industry leaders collaborating to drive innovation and help customers achieve better outcomes. Over the years, this collaboration has deepened and evolved. It has yielded solutions like Azure Red Hat OpenShift, which brings together Red Hat's Kubernetes platform with Microsoft's Azure cloud infrastructure, empowering businesses to build, deploy, and scale containerized applications more effectively. And more recently collaboration on emerging industry standards like confidential computing.

Furthermore, the collaboration extends to support and co-sell agreements, simplifying the procurement and management of Red Hat solutions on Azure for customers. This showcases the commitment of both companies to embrace open-source technologies, foster innovation, and provide customers with flexible, secure, and integrated solutions in an increasingly complex and hybrid IT landscape.

# You can capitalize on our massive portfolio



From Red Hat Enterprise Linux built to run mission critical workloads like SAP HANA and SQL Server to the ability to develop modern Java apps.



From the ability to simplify the automation of your environment with Ansible to the ability to build, manage and deploy modern cloud native apps with Azure Red Hat OpenShift.



Azure is the only cloud to offer Ansible, OpenShift, and JBoss as managed services, billed through your Azure account. This translates into a lower administrative burden, and simplified procurement and billing experience.

Red Hat workloads run great on Azure thanks to a close engineering collaboration, endorsed distros optimized for Azure, integrated customer support and flexible licensing options to help you run Red Hat applications in Azure on your terms. The joint customer support includes multilingual engineers across multiple regions, co-located staff from both companies, an integrated ticketing system, and a coordinated escalation and resolution process. Bring your existing Red Hat Enterprise Linux subscriptions directly to Azure with Azure Hybrid Benefit for Linux or via Red Hat Cloud Access.

Red Hat and Microsoft are working seamlessly together to build, support and sell Red Hat products to customers. Customers can buy how they want and deploy how they want. There's never been a better time to find, try and deploy these products.

And it is not just about products, solutions, and services ...

# How to get started

Some of the initiatives we see customers launching recently include:

1. Migration of their RHEL workloads to Azure without the need to refactor their apps
2. If they have distros like CentOS Linux they can migrate to and standardize on RHEL and simplify their environment especially with the end-of-life approaching in June 2024
3. And ultimately, we have helped them modernize and automate their cloud solutions with our combined capabilities.



## Get started

with Red Hat Enterprise Linux on Azure Marketplace.



The Enterprise **Cloud** and the Enterprise **Linux**