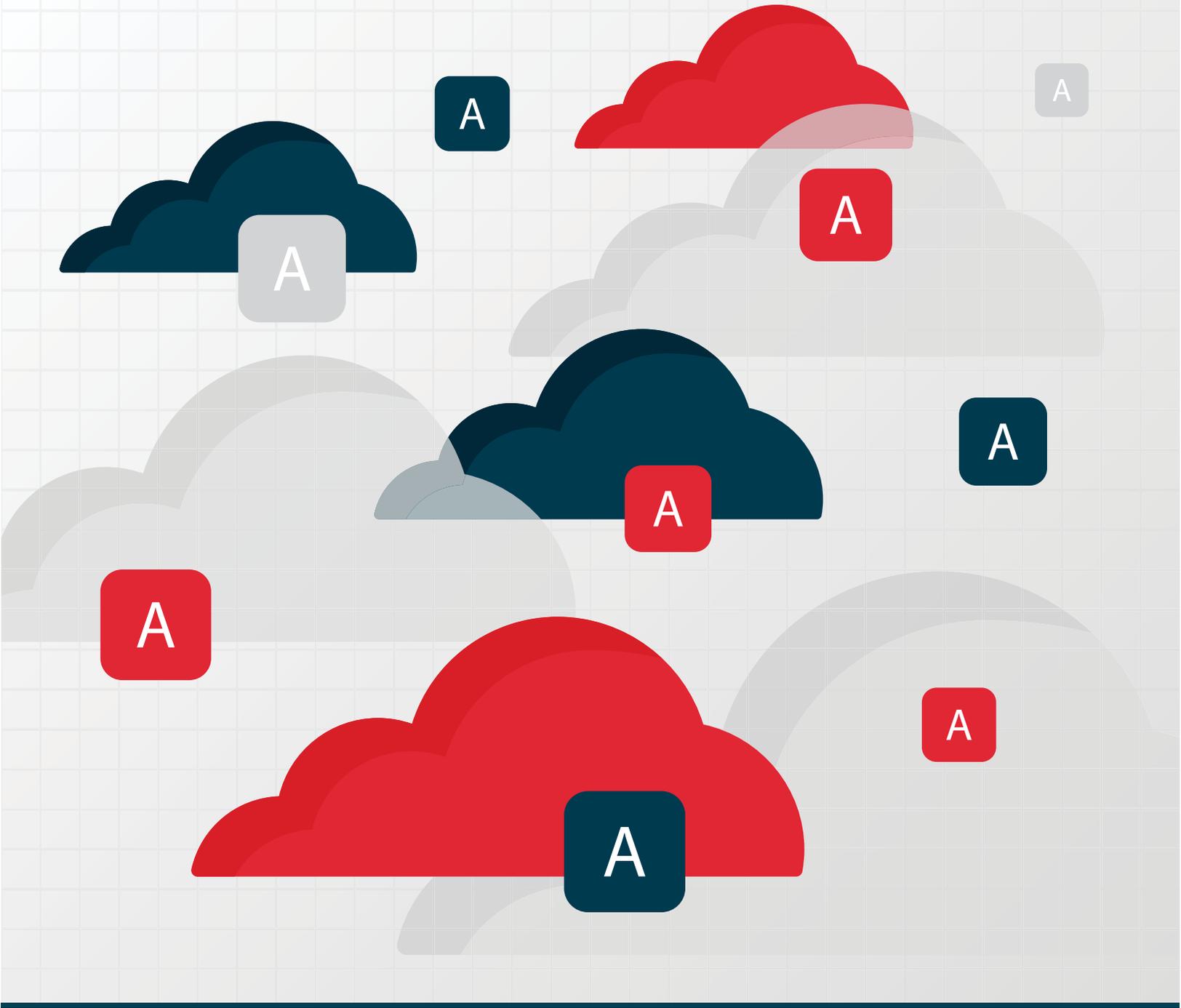




**Red Hat**



**Microsoft**



**Advance your business  
with a hybrid environment**

# See what's inside

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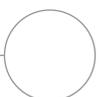
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Ready to get started?



# The future is hybrid

Change is an inevitable and constant force in today's digital world. In fact, less than 40% of CEOs globally are very confident about their organization's prospects over the next three years.<sup>1</sup> As a result, many organizations are transforming to become digital businesses.

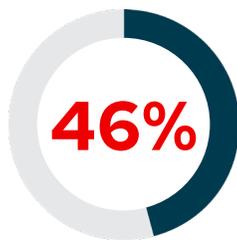
Adapting your business for digital operations with open hybrid cloud technologies can help take advantage of new opportunities. By unifying disparate IT environments, hybrid cloud technologies can help you achieve greater business agility, efficiency, and competitive advantage. In fact, 58% of enterprises have a hybrid cloud strategy and 69% use hybrid cloud technologies to move their business forward.<sup>2</sup>

Even so, implementing a hybrid environment strategy can take time. Choosing and integrating the right combination of technologies is critical. Red Hat and Microsoft offer a flexible, open, hybrid cloud foundation and modular solutions that help you digitally transform on your schedule and adapt over time.

## Key reasons for digital transformation<sup>3</sup>



Taking advantage of growth opportunities in new markets



Adapting to evolving customer behaviors and preferences



Responding to increased competitive pressure



Aligning with new regulatory and compliance standards

## Organizations are adapting for digital business<sup>4</sup>

**62%**

are deploying automation and orchestration.

**52%**

are changing the way they develop applications.

**48%**

are changing how they deliver production applications.

**48%**

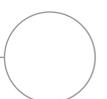
are exploring new application architectures.

<sup>1</sup> PWC, "22nd Annual Global CEO Survey: CEO's curbed confidence spells caution," 2019.

<sup>2</sup> Flexera, "RightScale 2019 State of the Cloud Report from Flexera," February 2019. [info.flexerasoftware.com/SLO-WP-State-of-the-Cloud-2019](https://info.flexerasoftware.com/SLO-WP-State-of-the-Cloud-2019).

<sup>3</sup> Brian Solis, Altimeter, "The state of digital transformation, 2018-2019 edition," 2018. [insights.prophet.com/the-state-of-digital-transformation-2018-2019](https://insights.prophet.com/the-state-of-digital-transformation-2018-2019).

<sup>4</sup> F5 Networks, "The State of Application Services," 2019.



# Start your hybrid cloud journey with Red Hat and Microsoft

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No matter where you are on your journey to hybrid cloud, Red Hat and Microsoft can help you build an IT environment that meets your needs today and prepares you for future change.



## Trusted global partners

Both Red Hat and Microsoft are established, trusted companies that take a customer-centric approach to business.



## Integrated solutions

Red Hat and Microsoft provide integrated solutions that simply work to speed and simplify deployment. Integration also ensures interoperability and stability.



## Collaborative support

The companies provide **integrated, global support** – including integrated ticketing and coordinated issue resolution – for Red Hat® solutions running on Microsoft® Azure®.



## Engineering collaboration

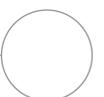
Red Hat and Microsoft engineering teams work together to develop hybrid cloud technology options that are scalable and include enterprise-grade security.



## Advanced security

The companies deliver comprehensive security features that integrate to provide a high level of protection for your IT environment.

Red Hat and Microsoft offer an open, hybrid cloud foundation and modular solutions that deliver the flexibility, choice, and support needed for digital operations. This foundation creates a connected cloud environment for today, while preparing your organization for consistent, high-quality database operations, unified management and automation, and modern application development and deployment.



# Build a common, production-grade foundation for business applications

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Combining **Red Hat Enterprise Linux®** with **Microsoft Azure** and **Azure Stack** gives you a flexible, production-grade foundation for today and the future. As the most deployed commercial operating system in public clouds, Red Hat Enterprise Linux delivers a stable, high-performance platform, with built-in security and manageability, for running cloud-based workloads.<sup>5</sup> Microsoft Azure is a global network of some of the world's largest datacenters and provides a comprehensive set of cloud services for building, deploying, and managing the most demanding applications. The combination delivers high availability, reliability, and performance for demanding applications.

## Key benefits of a Red Hat and Microsoft foundation



### Speed

Quickly launch and scale applications without deploying and configuring additional hardware.



### Interoperability

Improve reliability, security, and performance with tested and certified interoperability across on-premise and cloud environments.



### Security

Protect your data, applications, and business and infrastructure with **advanced, integrated security features** that work across your hybrid environment.



### Consistency

Seamlessly integrate traditional on-premise applications and cloud-native workloads with a consistent, hybrid foundation.

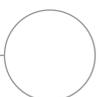


### Performance

Run cloud-native applications on-premise to meet latency and connectivity requirements for edge and disconnected solutions.

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<sup>5</sup> Red Hat, "The state of Linux in the public cloud for enterprises," February 2018. [redhat.com/en/resources/state-of-linux-in-public-cloud-for-enterprises](https://redhat.com/en/resources/state-of-linux-in-public-cloud-for-enterprises).



## Customer success highlight

# Seneca College

Transform IT service delivery with standardized hybrid environment

### Challenge

Seneca College, one of Canada's largest colleges, prides itself on delivering the latest, best technology to its students and faculty. But the IT infrastructure running its learning management system was complex, costly, and slow. Addressing these issues and reducing the total cost of ownership (TCO) of the IT environment became a priority.

### Solution

The college decided to standardize on a single Linux distribution and eliminate proprietary platforms to provide a more consistent experience for its faculty and students. By standardizing on Red Hat Enterprise Linux, integrated with Microsoft Azure, the college saved more than CA\$100,000 and increased performance speed. In addition, implementing an open, private cloud based on Red Hat CloudForms® and Red Hat OpenStack® Platform has helped the college create a foundation for future automation of IT resource delivery.



"The most important thing about working with a vendor is reliability. Now that we've standardized on the Red Hat platform, I can sleep at night."

**Roy Hart**  
Chief Information Officer, Seneca College



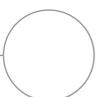
Saved more than  
CA\$100,000



Accelerated and automated  
IT resource delivery

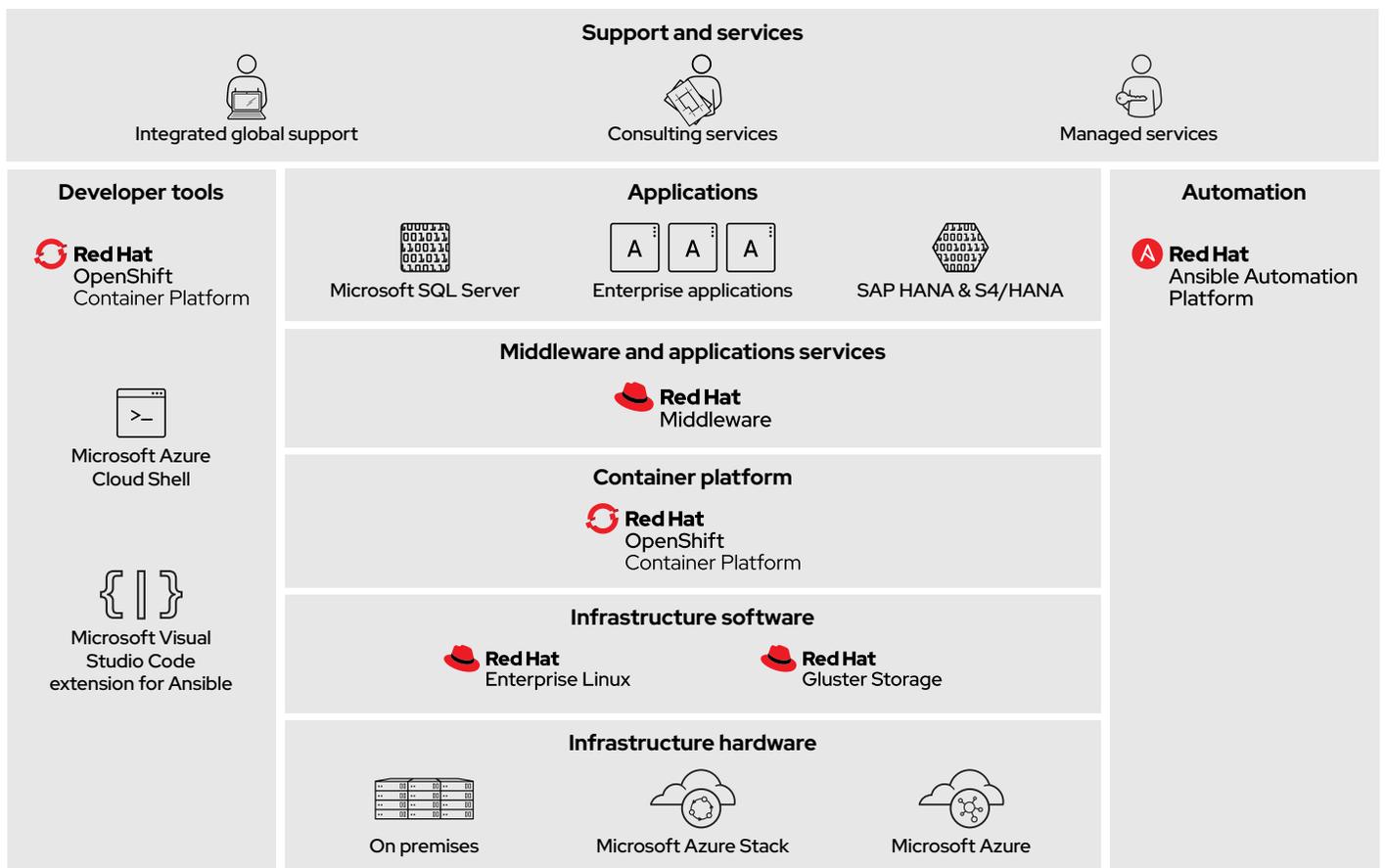


Achieved better performance  
and stability



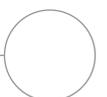
# Prepare for change with a modular, hybrid environment

Technology, market conditions, and competition are constantly changing. Red Hat and Microsoft help you prepare for change with adaptable, modular solutions that let you start with a base foundation of Red Hat Enterprise Linux and Microsoft Azure and add other components and capabilities as your needs change.



Start with a connected hybrid cloud foundation and expand your infrastructure as needed for these uses:

- High-quality, consistent database operations and experiences
- Unified IT management and automation across your environment
- Modern, containerized application development and deployment



# Deliver a consistent, high-quality database experience

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32% of organizations cite creating a formal infrastructure and process around data, insights, and analytics as a short-term goal.<sup>6</sup> Adding **Microsoft SQL Server** to your Red Hat and Microsoft hybrid cloud foundation gives you more database flexibility, performance, and protection.



Run your database in a variety of on-premise and cloud environments – including Microsoft Azure – knowing they will run consistently and reliably.



Improve development speed and application portability with certified containers that work across development, test, and production environments.



Accelerate your database with a high-performance platform that meets demanding requirements for computational scalability, application performance, and database throughput.



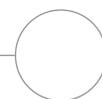
Reduce costs with database performance tuning profiles that optimize performance and simplify scalability for Microsoft SQL Server databases running on Red Hat Enterprise Linux.



Protect sensitive data with advanced security features like network firewall control, container isolation, Security-Enhanced Linux (SELinux), and Always Encrypted technology.

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<sup>6</sup> Brian Solis, Altimeter, "The state of digital transformation, 2018-2019 edition," 2018. [insights.prophet.com/the-state-of-digital-transformation-2018-2019](https://insights.prophet.com/the-state-of-digital-transformation-2018-2019).



## Customer success highlight

# Humantech

Improve performance and costs with a standardized environment

### Challenge

Humantech is one of the world's largest providers of ergonomics consulting and software services. The company decided to standardize its IT environment on one operating system in order to promote its continued growth and success. However, Humantech wanted to keep its preferred Windows database, Microsoft SQL Server, because of the solution's reliable performance and familiar technology.

### Solution

To satisfy both needs, the company adopted SQL Server 2017 on Red Hat Enterprise Linux. Now, Humantech saves on IT maintenance and has an updated database that offers fast operation and strong security. By continuing to use SQL Server, the company saved 3-6 months on their learning curve, delivering results even faster.



"With SQL Server on Linux, we gain a world-class database product running in the environment we want. We're no longer limited by the underlying operating system. For us, that is a breath of fresh air."

**Ken Lupo**  
Director of Technology, Humantech



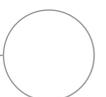
Reduced overall support and maintenance costs by 50%



Decreased logging and monitoring time by 50%



Reduced processing time of terabyte-scale data sets by 22%



# Speed data access and insight to make better business decisions

48% of organizations cite delivering business intelligence and analytics as a top operational priority.<sup>7</sup> Through strong partnerships and joint engineering relationships, Red Hat, SAP, and Microsoft provide a high-performance, stable, and supported platform to support your digital goals. With Red Hat Enterprise Linux for SAP® Solutions and Microsoft Azure, you can speed access to the information and insight you need to make better decisions to advance your business.



## Record-breaking performance

Speed data access and analysis with optimized, record-breaking performance.



## Enterprise availability

Increase data availability with a resilient, SAP-certified infrastructure and data replication.



## Production-grade stability

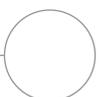
Gain stability for your environment through extended support services and binary compatibility.



## World-class support

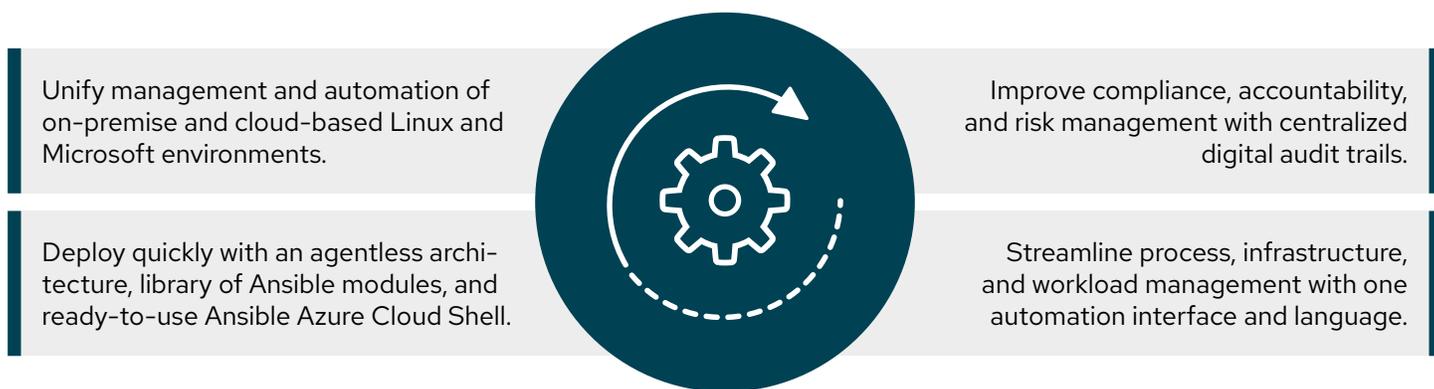
Simplify support and issue resolution with a collaborative, hassle-free, global support model.

<sup>7</sup> Harvey Nash and KPMG, "CIO Survey 2018: The transformational CIO," 2018.



# Unify management and automation of on-premise and cloud environments

74% of organizations say the use of IT infrastructure automation is somewhat or very important.<sup>8</sup> **Red Hat Ansible® Automation Platform** helps you unify management and automation across physical, virtualized, and cloud environments, including your Red Hat and Microsoft hybrid foundation and solutions.



**31%**

of organizations are piloting automation for production use.<sup>8</sup>

**53%**

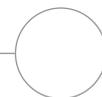
of organizations are using automation in production.<sup>8</sup>

**Ansible**

is the leading cloud configuration tool across organizations.<sup>9</sup>

<sup>8</sup> F5 Networks, "The State of Application Delivery," 2018.

<sup>9</sup> Flexera, "RightScale 2019 State of the Cloud Report from Flexera," February 2019. [info.flexerasoftware.com/SLO-WP-State-of-the-Cloud-2019](https://info.flexerasoftware.com/SLO-WP-State-of-the-Cloud-2019).



## Customer success highlight

# Microsoft

Digitally transform through automation and cloud technologies

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### Challenge

Microsoft faces many of the same challenges that your own organization may struggle with. The company wanted to digitally transform its customer, partner, and employee experience to accelerate growth. With drastic increases in network complexity and volume and the number of connected devices, Microsoft decided to automate and digitize its processes using the technologies showcased throughout this e-book.

### Solution

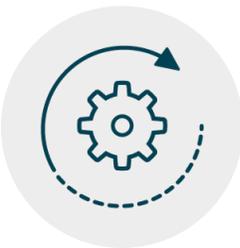
Microsoft deployed Red Hat Ansible Tower, part of Red Hat Ansible Automation Platform, to automate its network in a consistent, repeatable way. Through automation, Microsoft's network developers can now focus on impactful features that support customer demands. Ansible has also helped Microsoft increase network scalability and consistency, while accelerating network issue ticket resolution.



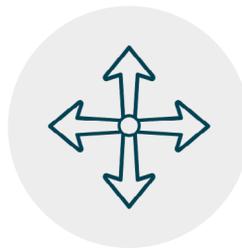
"Automation plays a huge role in our digital transformation."

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**Ludovic Hauduc**  
Corporate Vice President, Core Platform Services, Microsoft



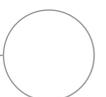
Implemented repeatable, shareable automation



Increased network scalability and consistency



Accelerated network issue resolution

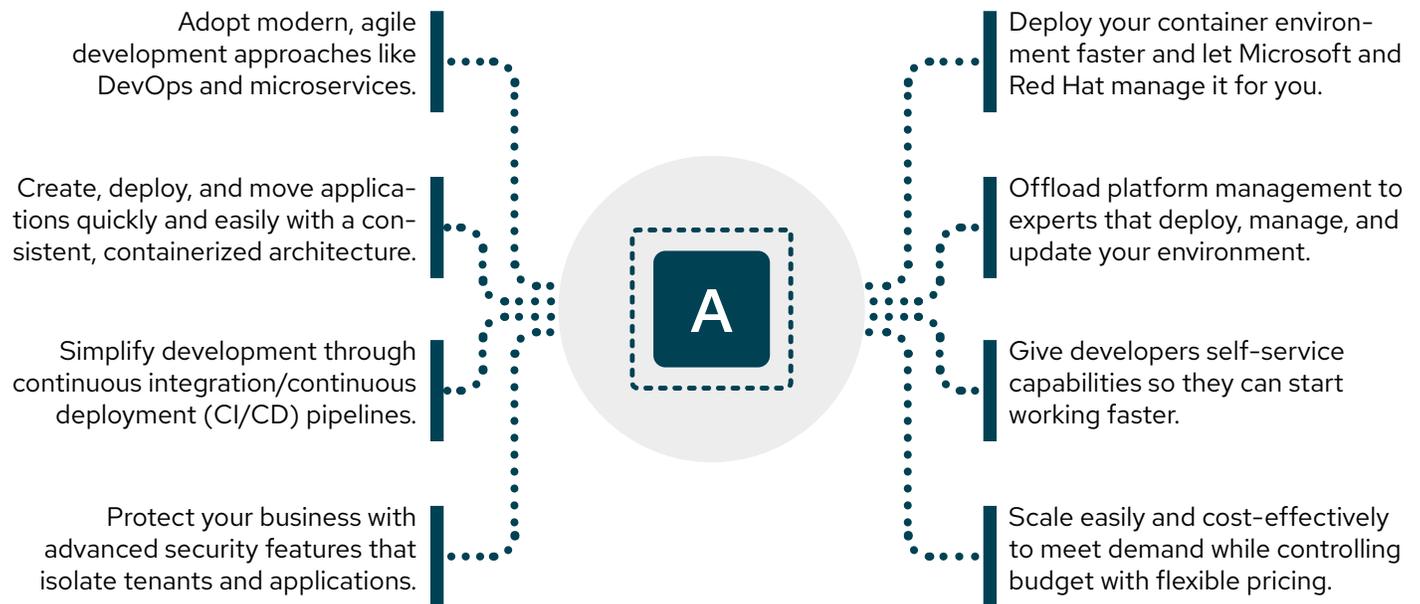


# Deliver high-value applications and services faster

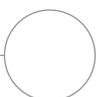
41% of organizations are exploring new application architectures like containers and microservices to support modern business needs.<sup>10</sup> Combining **Red Hat OpenShift® Container Platform** with your Red Hat and Microsoft hybrid foundation provides a complete, orchestrated framework for deploying containers in a public cloud environment. You can also take advantage of the **Azure Red Hat OpenShift** managed service to deploy an enterprise-grade container environment quickly and easily.

## Red Hat OpenShift Container Platform on Microsoft Azure

## Azure Red Hat OpenShift managed service



<sup>10</sup> F5 Networks, "The State of Application Delivery," 2018.



## Customer success highlight

# Lufthansa Technik

Deliver applications faster and foster integration between solutions

### Challenge

Lufthansa Technik is the world's largest independent provider of maintenance, repair, and overhaul (MRO) services for commercial airlines, as well as head of state and VIP jets. To create and support their AVIATAR digital platform, the Lufthansa Technik team needed a flexible, scalable environment that could run multiple applications using a shared repository of industry data, such as aircraft sensor data, as well as operational data, such as flight plans and delay information. The team also sought to gradually move from on-premise to cloud infrastructure.

### Solution

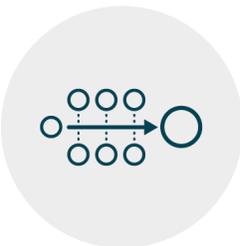
The company created a hybrid cloud infrastructure based on enterprise open source software from Red Hat and Microsoft Azure cloud services. The AVIATAR team can now use agile DevOps approaches, automation, internal and third-party integration, and self-service capabilities to quickly iterate based on data and feedback. As a result, Lufthansa Technik provides an innovative digital platform that helps the world's airlines optimize their operations.



"The moment we have an idea, we can start building the product. This agility is something we have never experienced before."

**Tobias Mohr**

Head of Technology and Infrastructure,  
Aviatar, Lufthansa Technik



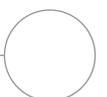
Accelerated application workflows  
with automation and DevOps



Improved flexibility through  
solution integration



Anticipates savings equating  
to millions of euros

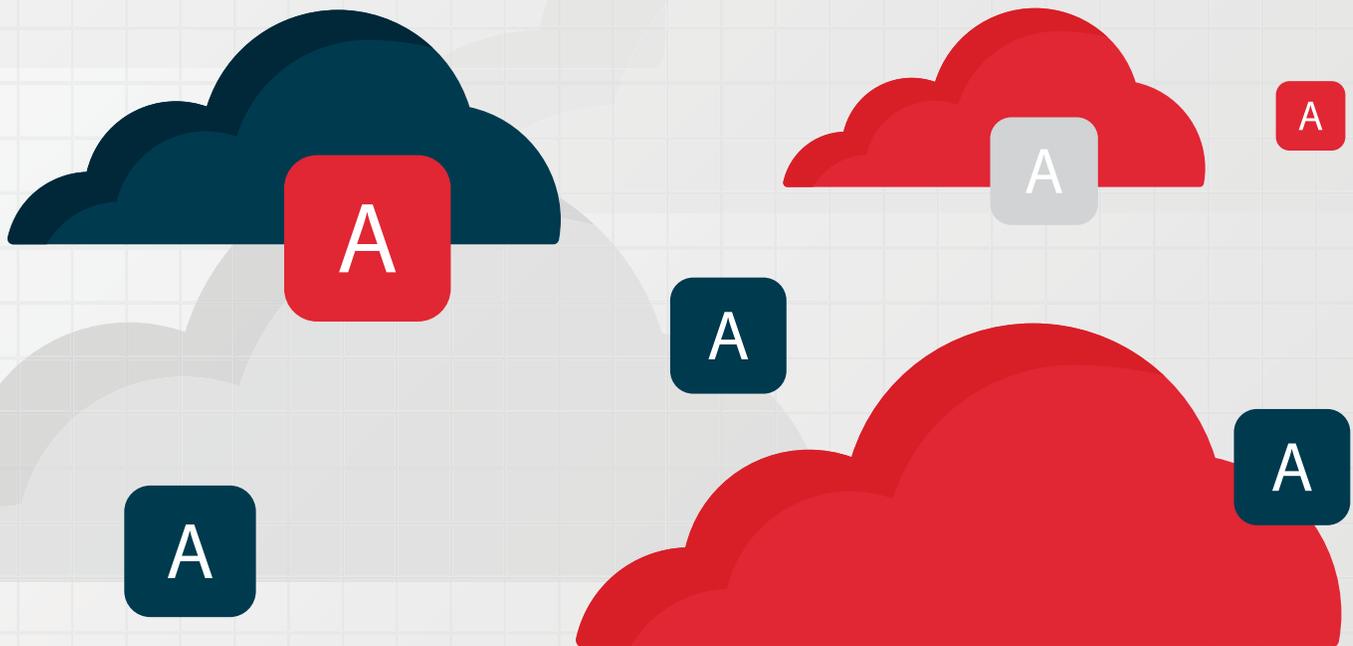


# Ready to get started?

Hybrid cloud technologies can help your organization succeed in fast-moving, competitive markets.

**No matter where you are in your journey to a hybrid infrastructure, Red Hat and Microsoft can help you succeed.**

Integrated, modular solutions; joint support; unified management; and interoperable application development capabilities give you more options for building, deploying, and managing a hybrid environment that meets your business needs today and adapts to future change.



Learn more and plan your hybrid journey at  
[go.redhat.com/microsoft-azure-hybrid-cloud](https://go.redhat.com/microsoft-azure-hybrid-cloud).

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