

# **Open your possibilities** with Red Hat

Mid-sized organizations are redefining the power and potential of their IT environments

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97% of mid-size companies say that technology is important for business success, and 98% are investing to modernize their IT infrastructure.<sup>1</sup>

# **Business runs on data**

Across industries, mid-sized organizations have reinvented themselves as data-driven entities:

- > Retailers gain clarity about customers so they can make the right offer at the right time.
- Financial institutions count on trusted systems to manage assets and meet evertighter regulations.
- Health care providers use data to reduce costs while improving patient care and outcomes.
- Manufacturers use data to manage lean operations, run robotics, and detect defects.
- Public sector organizations use data to better serve constituents while stopping fraud, waste, and abuse.

In every industry, mid-sized organizations have found success with data and analytics. But they face challenges along the way.

#### What's your challenge?

Whether your organization has 500 employees or 5,000, these scenarios probably look familiar:

- You need up-to-the-minute insights from data, but the volume and velocity of data are overwhelming the systems designed to make sense of it.
- The IT environment has become too complex and feels like a deck of cards from different decks. There are too many moving parts to align and a lot of finger-pointing among vendors when things don't work.
- Too much time is spent managing IT and not enough on finding ways to better the business and put those new ideas into action. It feels like you're always catching up instead of leading the way.
- As the business becomes more digital and interconnected, you worry about security and business continuity. If the world's biggest and most notable online platforms can get hacked, how can you protect your business?
- It's difficult to launch new applications and data capabilities because components don't communicate or expand on demand. The IT foundation needs to be more integration-friendly and future-ready.

There's a lot to manage. A lot at stake. We understand. And we're here to help, wherever you are in your IT evolution – and wherever you are in the world.

# Open up to a world of possibilities

With Red Hat, you can modernize your IT environment to address these challenges and innovate your business. Move apps into production quickly and smoothly. Be more adaptable and more stable at the same time. Harden security while gaining the flexibility to stay ahead of constant change. Give the IT team back their valuable time by freeing them from mundane management tasks.

Reaching that state is more straightforward than you might think.

Red Hat solutions meet you wherever your starting point is – and grow with you, how and when you want. Learn more about our solutions for mid-sized companies.

<sup>1</sup> Techaisle, sponsored by Red Hat. "Digital Transformation for Modern Midmarket: The Next Step in Business Success, Preparing the Channel to Profit from DX." September 2018.



Simplicity is the key to a more efficient, costeffective IT ecosystem. There's no need to rip and replace. We'll meet you wherever you are and work with what you have. You can retain what you needed yesterday, add what you need for today, and prepare for tomorrow. We remove the barriers to what you want to accomplish.

Set your own path to success as you move yourself, your department, and your business forward faster.

# Set a strong foundation

# Standardization is the key to efficient, effective IT

Is your business held back by outdated approaches to the design, management, and operation of the IT environment? Is there too much complexity and not enough clarity into the infrastructure?

If so, you're in good company. Over time, most companies have evolved a patchwork of operating systems and versions, server hardware configurations, and management tools – a complex maze of resources. It often takes a large, skilled IT staff to handle interoperability issues, complicated administration, and convoluted processes. And the consequences? Slower provisioning, more downtime, and security and compliance gaps. It can be difficult to deliver the services the business needs with the efficiency and speed it demands.

A standard operating environment helps you simplify and modernize the IT infrastructure and operations.

The ideal is to have a defined set of components, interfaces, and processes throughout the entire IT infrastructure – a known foundation for all systems. This consistent, simplified IT infrastructure is easier to manage and operate. You can streamline operations with a single, standard set of operating procedures and processes – and manage a larger infrastructure with a smaller staff.

# How Red Hat can help

#### Red Hat brings order to your IT environment

We have created a unified platform of open source components that work well with each other – and with your existing technologies and processes.

We started by revolutionizing the operating system with Red Hat<sup>®</sup> Enterprise Linux<sup>®</sup>, the world's leading enterprise Linux platform.<sup>3</sup> We then developed a broad portfolio of products to extend the possibilities into cloud computing and modern software strategies such as containers and microservices – all with security and the ability to be managed with automation.

Red Hat Enterprise Linux isn't just for enterprises. With an attractive subscription model, it's affordable for organizations of all sizes, while it boosts the bottom line through cost savings and new revenues.

# Spend less, save time, and operate more efficiently

When your systems have a common, shared foundation, they can deliver a variety of services as needed instead of being dedicated to a single function. Intelligent sharing of IT resources gets more work done with fewer servers.

redhat.com E-book Open your possibilities with Red Hat

The trusted, scalable, and more secure foundation since 2003 Red Hat Enterprise

Linux is the world's

leading enterprise

trusted by more than

Linux platform,<sup>2</sup>

90% of the

Fortune 500.<sup>2</sup>

<sup>2</sup> Red Hat client data and Fortune 500 list for 2019.

**<sup>3</sup>** IDC, "Worldwide Operating Systems and Subsystems Market Shares, 2018," released November 2019.



67% of surveyed mid-sized organizations already use automation or are planning or testing for it.<sup>4</sup> As a result, organizations that use Red Hat Enterprise Linux spend less on server purchases, software for those servers, server maintenance, and datacenter power, cooling, and floor space. Red Hat-powered organizations spend less time doing routine IT tasks, resolving support calls, recovering from unplanned downtime, and deploying or upgrading business apps. And they reap business benefits by delivering new services faster.

#### Position yourself for whatever the future brings

With Red Hat Enterprise Linux as your foundation, you can readily scale up existing apps and roll out new technologies – on a server (bare metal), on virtual machines (VMs), and in cloud environments. From containers to automation and artificial intelligence, Red Hat Enterprise Linux is created for innovators, designed for developers, and engineered for operations. It's today's stage for what you can do tomorrow.

# Automate – Free your IT team for better things

# IT components and tasks multiply faster than humans can handle

IT operations teams manage intricate IT architectures built on multiple platforms and complex technology layers. Legacy management tools have limitations. They compartmentalize control, use proprietary languages, and don't expand well. As a result, manual tasks dominate the team's time and energy, which limits innovation and growth.

**Automate redundant and mundane tasks.** With automation, you'll see faster rollout of new applications and services, fewer security and compliance risks, and lower operating expense – while you free IT staff and budget for more valuable activities.

## How Red Hat can help

Red Hat's automation and management portfolio takes charge of the routine tasks that bog down your operations team. No matter the complexity of your environment or where you are on your IT modernization journey, there's an automation strategy that's right for you. Choose the components you need and automate on your schedule.

- Free up time, money, and resources. Automation works with your existing environment and helps you get more out of every minute, every person, and every investment.
- Claim space to think ahead. Automation reduces the risk of human error. Processes become more simple, reliable, and accurate.
- Capitalize on consistency. With automation, everything runs better and faster. You can trust that your IT environment will operate as it should, so you can spend more time focusing on strategic things.
- Choose your path. You could start by automating one task or service, then share it and build on it. Over time, you'll reach your chosen level of automation, without having to make big changes at once.

<sup>4</sup> IDC InfoBrief sponsored by Red Hat: "Key Infrastructure Trends and Decisions Facing Midmarket Organizations in Asia Pacific." September 2019.



Provide security for any environment supported by Red Hat Enterprise Linux – from physical machines to hybrid multiclouds.

#### Red Hat IT automation and management products

Count on Red Hat open source technologies to deploy, optimize, and add security for your applications and infrastructure. Products to consider:

- Red Hat Ansible<sup>®</sup> Automation Platform automates configuration, provisioning, workflow orchestration, application deployment, and life-cycle management. It's easy to get started because Ansible uses agentless technology. That means there's no need for a nugget of software to run in the background on the machine being managed.
- Red Hat Insights (included with Red Hat Enterprise Linux), performs continuous, deep analysis to identify and resolve security, compliance, and configuration issues.
- Red Hat Satellite is the easiest way to manage Red Hat infrastructure across physical, virtual, and cloud environments. Keep systems running efficiently, with the proper security, and in compliance with standards.
- Red Hat Smart Management combines the powerful infrastructure management capabilities of Red Hat Satellite with the ability to execute remediation plans from Red Hat Insights.

# **Capitalize on the cloud**

#### IT on demand – Anywhere, anytime, as you need it

Cloud computing is the act of running workloads within clouds – IT environments that pool and share resources across a network. The cloud can be:

- > Within your organization and serve only you (private cloud).
- > Outside your organization, serving other tenants as well (public cloud).
- > Made of multiple clouds with some degree of connection among them (hybrid cloud).
- A combination of public and private clouds that may or may not be networked together (multicloud).

Through cloud technology, your IT infrastructure can expand and shrink to support the business as needed.

For example, if you are an online retailer, you could maintain an on-premise IT infrastructure that meets your average day-to-day needs. During peak times, such as holidays and sales events, you could use cloud bursting, where an application bursts into a public cloud as demand for computing capacity spikes. You process the heavier demand without needing extra resources in your own datacenter.

Mid-sized organizations are flocking to cloud computing, but standalone clouds based on proprietary technologies are not the answer. They inhibit clouds from interacting with one another. Hybrid cloud bridges clouds, makes workloads portable among them, and creates a unified experience.

Using a common foundation makes your cloud deployment faster, more reliable, and more efficient.

Companies with infrastructure and applications in the cloud report three key benefits: higher customer satisfaction (74%), more efficient operations (78%), and profitability from using smarter data (99%).<sup>5</sup>

Platform provides a proven foundation for today's cloud workloads – and a clear path to hybrid cloud, the edge, and beyond.

**Red Hat OpenStack** 

<sup>5</sup> IDG Research Services, "Enterprise cloud computing unlocks deep strategic value through increased business agility." Sponsored by Accenture and AWS. Accessed July 2020.



Organizations are continually under pressure to deliver new applications, features, and services – faster, across increasingly diverse IT environments.

#### How Red Hat can help

Red Hat's open source technologies bring a consistent foundation to any cloud deployment. Our standard operating system works the same in any environment. Our container platform packages and moves apps from cloud to cloud, and Red Hat tools help you manage and automate it all – in your private cloud or across multiple private and public clouds.

Products to consider:

- Red Hat Enterprise Linux provides the flexible, stable foundation for cloud deployments, whether
  on bare metal (traditional single-tenant servers), distributed across virtual machines, or deployed
  in modular software containers. Red Hat Enterprise Linux is certified by hundreds of public cloud
  and service providers. So you can move to the cloud with confidence.
- Red Hat OpenStack<sup>®</sup> Platform is our cloud computing platform co-engineered with Red Hat Enterprise Linux. It virtualizes resources from industry-standard hardware, organizes those resources into clouds, and manages them so users can access what they need, when they need it, wherever it lives.

Because Linux containers are based w on open source technology, they benefit from the latest advancements as soon as they're available.

Cloud concepts aren't just baked into our cloud products. Red Hat infrastructure management and monitoring, storage, and middleware products are all engineered to support cloud computing. You can get the most out of the cloud, knowing that today's investments and tomorrow's new applications will run anywhere.

If you want to take advantage of a cloud approach to improve the business but aren't sure of the best way to move forward, our experienced teams can help you establish a plan – a prudent roadmap from where you are to where you want to be.

You have many possibilities because you can integrate offerings from a vast ecosystem of OpenStack-certified partners – hundreds of software, hardware, and services vendors.

# **Modernize your applications**

# Accelerate the path to competitive advantage

To compete and succeed, your business likely relies on a host of digital applications, such as:

- **Operations software** to manage procurement, HR, customer experience, and other business functions.
- **Business intelligence** to transform volumes of data into insights to make sound business decisions.
- > Predictive analytics to ask questions to guide forward-looking decisions.
- Data visualization that turns data into images to show patterns and trends in an intuitive, visual story.
- > Machine learning, where an application learns from the data it sees and makes new discoveries.

You need to be able to run these applications and services – and roll out new ones – quickly, whenever needed. Whatever users and customers clamor for – a new mobile banking feature, a tool to improve online shopping, or a self-service performance dashboard, for example – you need to deliver quickly.



Your data platform significantly affects your organization's ability to use data to make timely decisions, track important metrics, and even provide products and services to customers.

70% of surveyed mid-market organizations list big data analytics as their top IT initiative.<sup>7</sup>

> Red Hat solutions deliver softwaredefined storage on your choice of industrystandard hardware and deployment environment – bare metal, virtualized, or cloud.

Your customers expect you to keep pace with competitors. Your users need security and self-service access from anywhere. And all of it needs to be fed with trusted data from multiple sources. How do you meet these requirements in increasingly diverse and intertwined IT environments?

There are two keys to successfully modernizing your applications:

- A standardized operating environment provides a unified foundation for services. Operating system, data, app development, and management work together, in your datacenter or in the cloud. Launching new applications is therefore straightforward, compared to complex legacy architectures.
- ➤ Containers package applications into modules with their entire runtime environment all of the files necessary to run. Rather than run an entire, complex application in one centralized machine, the application is organized into modules that evolve and scale independently.

Containers are surging in popularity, for good reason. Application development life cycles are 66% faster and require 35% less IT staff time.<sup>6</sup> Infrastructure and development platform costs are down an average of 38% per application.<sup>6</sup>

# How Red Hat can help

We know the potential of containers and the importance of standardizing the way people build and run containers. We have what you need to take advantage of everything containers have to offer. Products to consider:

- Red Hat Enterprise Linux comes with Red Hat OpenShift<sup>®</sup> Container Platform, which automates the container application life cycle, embeds security into the container pipeline, and is designed with DevOps (developer and IT operations) teams in mind.
- Optional components build on this foundation, such as Red Hat Decision Manager for automating business decisions and Red Hat Fuse to enable different types of professionals, from IT experts to business users, to collaborate on development.
- Our container catalog provides access to hundreds of certified container images, language runtimes, databases, and connecting middleware that can run anywhere you run Red Hat Enterprise Linux.
- Our online training classes build your team's technical skills in container concepts and container orchestration technology.

Whatever your current application development process and platform, and whatever you aim to do with containers, Red Hat is here to help.

<sup>6</sup> Carvalho, Larry, and Marden, Matthew, "The Business Value of Red Hat OpenShift," IDC, October 2017.

<sup>7</sup> Techaisle, sponsored by Red Hat. "Digital Transformation for Modern Midmarket: The Next Step in Business Success, Preparing the Channel to Profit from DX." September 2018..



Scale your operations and move to market faster. Bridge the gaps between application development and data science. Get deeper insights into your data.

# Make light work of heavy data

# Reliable, trusted, high-volume data, where and when you need it

Modern businesses need a solid data platform to process huge volumes of data for operational and analytics workloads. As business becomes more digital than ever, data management can either be a benefit or a bane. Even if other companies in your sector are using similar applications and services, in a competitive industry, the one with the best data management platform will win.

However, in many organizations data lives on a mix of systems, often locked into a specific development language, operating system, or deployment model (cloud, virtual, or on-premise).

Business and IT leaders are looking to streamline data processes – to standardize the data environment, consolidate database servers on a consistent platform, reduce licensing costs, and gain better visibility into the data and its supporting infrastructure.

# How Red Hat can help

Red Hat's open, stable database solutions help your business work more efficiently and grow faster with data that is available, stable, and protected. Products to consider:

- Red Hat Enterprise Linux for Microsoft SQL Server allows you to consolidate database systems to provide fast, reliable, and more secure data access. The platform runs efficiently across multiple environments, whether on-premise or in the cloud, to meet critical data demands.
- Red Hat Smart Management brings together the monitoring and analysis of Red Hat Insights with the infrastructure management capabilities of Red Hat Satellite, all with a single subscription. Provide security for any storage environment supported by Red Hat Enterprise Linux – from physical machines to hybrid clouds.

Red Hat OpenShift Container Platform includes a set of software-defined storage capabilities. Rather than a single, physical storage device, software-defined storage manages data across virtual storage locations on multiple machines, a cost-effective strategy.

- Red Hat OpenShift Container Storage provides the data and storage services platform for container applications and runs anywhere Red Hat OpenShift does.
- Red Hat Gluster<sup>®</sup> Storage handles general purpose workloads such as analytics and backup and restore systems.
- Red Hat Ceph<sup>®</sup> Storage is an open, massively scalable storage solution for modern data pipelines, such as advanced analytics, media repositories, and artificial intelligence (AI).

# Protect your IT environment – and the business

# Fortify security with a layered approach

Security isn't a feature or add-on. It isn't something you set and forget. It should be holistic and embedded into the design of the IT environment. And it must continually evolve with the changing regulatory landscape.

48% of surveyed mid-market organizations list security as a top concern related to their operating environments.<sup>8</sup>

Look for security that is built in at all layers of development and infrastructure life cycles, rather than bolted on.

<sup>8</sup> Techaisle, sponsored by Red Hat. "Digital Transformation for Modern Midmarket: The Next Step in Business Success, Preparing the Channel to Profit from DX." September 2018.



By tapping into the collective talent and innovation of open source communities, we are creating better, stronger, and more innovative software. So how do resource-limited organizations enforce security across increasingly complex IT environments? How do you harden IT to resist breaches as the threats become more sophisticated?

An effective security strategy starts with assessing the value of each application and piece of data, who needs to use them, and the potential effects of unauthorized use. With that understanding, you can define a security platform that balances risk with accessibility – one that keeps your digital assets more secure without blocking the way for legitimate users.

Modern security is far more than perimeter defense – access authorizations through a centralized identity management system. Security must permeate every layer of the IT infrastructure and every stage of the IT development process. A standardized operating environment simplifies this level of protection by:

- > Integrating security measures through multiple layers of the infrastructure stack.
- > Providing more control over your environment due to fewer system variations.
- > Streamlining the process of keeping systems current with the latest security updates.

# How Red Hat can help

The entire portfolio of Red Hat products and services has embedded security capabilities. Security can be integrated into every phase of the development life cycle, from designing and building applications, to running and managing them, to adapting them as new threats emerge. Products to consider:

- Red Hat Enterprise Linux certified to FIPS 140-2 and Common Criteria standards has builtin security features such as Security-Enhanced Linux (SELinux) and mandatory access controls (MAC) to keep bad actors out and meet regulations. SELinux extends security to other platforms running on Red Hat Enterprise Linux, such as:
  - Red Hat Virtualization, to control the actions of VMs.
  - Red Hat OpenStack Platform, to provide security and stability for cloud deployments.
  - Red Hat OpenShift Container Platform, to isolate containers and control their resources.
- > Red Hat automation and management products offer ongoing vigilance:
  - Red Hat Ansible Automation Platform can inspect Windows and Linux endpoints for vulnerabilities and ensure your systems have the latest security updates.
  - Red Hat Insights, included with Red Hat Enterprise Linux, analyzes security risks in real time and sends alerts of issues requiring attention.
  - Red Hat Satellite examines systems and security settings for signs of compromise. It meets OpenSCAP national security standards as well as more stringent standards, such as for the payment card industry and national defense agencies.
- Red Hat identity and access management products, such as Red Hat Directory Server and Red Hat Certificate System, manage application settings, trusted user profiles, group data, policies, access control information, and more.

**9** IDC, "The Business Value of Red Hat Solutions and Cost Relationship to Unpaid Alternatives," July 2019.

Businesses that use Red Hat subscription software instead of unpaid, communitysupported alternatives gain US\$17,195 in benefits per 100 users.<sup>9</sup>

# Rely on a trusted leader More than 90% of the companies in the

Fortune 500 rely on Red Hat.<sup>10</sup> You can too.

**<sup>10</sup>** Red Hat client data and Fortune 500 list for 2019.



Red Hat is here for you. We can help build your organization's in-house security expertise with training, support, and consulting services. You'll get proactive security advisories and speedy updates (often the same day) to address new risks.

# Accomplish more with open source

#### Create better technology with open source

Through Red Hat's unique development model, we start with community-created open source software and build on each project to harden security, resolve issues, and add new features. We offer the software – with universal access to the source code – for free. We also contribute improvements back to each project so the entire open source community can benefit.

#### How we work

Two decades ago, we collaborated with IT leaders, open source advocates, developers, and partners to create a better foundation for the future of IT – Red Hat Enterprise Linux. Today, we deliver a comprehensive portfolio of products and services using the same open, collaborative business model and with an affordable, predictable subscription.

With a Red Hat subscription, your organization can:

- > Download supported versions of Red Hat software.
- Learn from our ever-expanding online knowledgebase.
- Get support and advice for working with Red Hat software, even in critical environments.
- Get access to the latest Red Hat software as it is updated by Red Hat.

Red Hat subscriptions give you the freedom to move your business forward with less worry and more room for innovation.

#### The world's leading provider of open source IT solutions

Red Hat is now the largest open source company in the world.<sup>11</sup> We remain committed to the open development model as the path to more stable, secure, and innovative technologies.

Find out how Red Hat and open source can redefine the possibilities for your organization.

**<sup>11</sup>** Red Hat open source webpage, accessed July 2020.

# **Get started with Red Hat**

Learn more about our solutions for mid-sized companies and talk to a Red Hatter.



#### **About Red Hat**

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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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