Build an efficient IT foundation for modern business success

A guide to creating value through IT optimization

See what's inside

What is IT optimization?

IT optimization is an incremental and methodical set of changes that moves your organization toward a standard infrastructure. Optimizing your IT helps you get more from your current IT investments while freeing budget and time to prepare for the future.

Success in a digital world requires IT optimization.

Every IT decision maker balances two major demands: maintaining existing IT systems and laying a foundation for future innovation. Rigid, proprietary infrastructure can shift that balance too far towards legacy operations, preventing your organization from working on strategic, forward-looking initiatives. To shift your focus to the future, you need to modernize your IT infrastructure or migrate to more flexible, stable, open platforms and tools.

IT optimization doesn't happen all at once — it is an incremental, continuous process. Through strategic optimization, you can gradually increase agility while improving overall productivity and business performance. With optimized software, platforms, and processes, you can achieve faster delivery of software and services to both internal and external customers.

At its core, optimization is the foundation for IT modernization and long-term success in a digital world.

Three ways IT optimization boosts your innovative potential

Standardization

- Deploy a common, consistent IT framework across your organization.

- Streamline security and improve compliance with policies and regulations.

- Simplify operations and improve accuracy through automation.

Digital transformation

- Incrementally free budget and resources for innovation.

- Gain proven return on investment and lower total cost of ownership.

- Build a foundation for innovation to compete more effectively.

Simplified management

- Optimize and scale infrastructure across hybrid and multicloud environments without compromising security.

- Systematically manage all modern and traditional infrastructure elements.

This e-book reviews key steps in your IT optimization journey and recommendations for getting started. Read on to learn how you can modernize to support digital business.
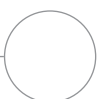
Step 1

Realign your IT environment for consistency

Complex, disparate IT environments based on proprietary solutions often require more time, energy, and budget to manage. Inconsistent platforms and processes hinder growth and demand reactive maintenance. Additionally, supporting multiple platforms increases training, support, and operational budget.

Deploying a standardized operating environment (SOE) will help you create consistency across your organization. With a consistent platform, you can achieve the efficiencies needed to reduce costs and accelerate IT while effectively supporting innovation. Standardize on a modern solution that supports new technologies and approaches, including hybrid and private cloud connectivity, cloud-native development, and containers.

Benefits of standardizing

Deploying a standard IT platform across your organization delivers many benefits.

Automate error-prone manual tasks.

Centralize and streamline system life-cycle management.

Manage license use and subscription agreement compliance.

Speed software installation, upgrades, and patching.

Improve security.

Decrease shadow IT.

Gain more value with enterprise-grade open source technologies

While standardizing on free, community-supported open source technologies may seem like a good way to reduce expenses, commercial offerings provide more value and can actually cost less over time.

Organizations that standardize on Red Hat's enterprise-grade open source solutions experience:

Greater IT staff productivity

$10,365
savings through staff time efficiencies[1]

Lower risks

$4,200
saved in reduced downtime[1]

Reduced IT infrastructure costs

$874
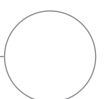saved through optimized licensing and training costs[1]

Increased business productivity

$1,756
saved through better business operations support[1]

* All savings per 100 users

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1 IDC White Paper, sponsored by Red Hat. "The Business Value of Red Hat Solutions and Cost Relationship to Unpaid Alternatives," July 2019. Document #US45045719.

Step 2

Modernize your software

Once you have standardized your operating environment, it's time to consider your software. Modern software can improve IT efficiency and innovation potential. It also prepares you to adopt cloud-native and container-based development practices for even greater agility. And it lays a foundation for hardware upgrades and cloud migration. In fact, software modernization can provide a 368% three-year return on investment.[2]

Key opportunities for software modernization

Operating system

Select an operating system that provides a cost-effective foundation for cloud agility and scalability while supporting your existing development projects.

$7 billion

saved annually by IT organizations that use an enterprise-grade open source operating system.[3]

Management tools

Deploy a single, centralized platform to increase control and proactively manage assets across your entire infrastructure.

38%
more efficient IT infrastructure teams.[2]

32%
lower three-year server infrastructure costs.[2]

Development platform

Build a virtualized environment that supports your current efforts while preparing for cloud-native and container-based development approaches.

34%
less time required to deliver new applications.[2]

21%
more productive development teams.[2]

Legacy solutions

Replace expensive proprietary platforms with enterprise-grade open source technologies that deliver increased elasticity, scalability, and cost efficiencies.

32%
lower IT infrastructure costs.[2]

63%
less unplanned downtime.[2]

2 IDC White Paper, sponsored by Red Hat. "The Business Value of Red Hat Solutions and Cost Relationship to Unpaid Alternatives," July 2019. Document #US45045719.

3 IDC White Paper, sponsored by Red Hat. "The Economic Impact of Red Hat Enterprise Linux: Trillions, Yes Trillions,of Dollars," May 2019. Document #US45007819.
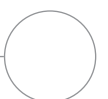
Step 3

Lay a foundation for cloud

Cloud computing offers a dynamic, powerful alternative to monolithic server purchases and disruptive datacenter refreshes. As a result, 87% of enterprises have a hybrid cloud strategy, and 93% have a multicloud strategy in place.[4]

By combining on-site, private, and public cloud resources, hybrid and multicloud environments deliver the agility, speed, and efficiency needed for digital transformation. Add compute, storage, networking, and services as needed. Quickly access turnkey modern development environments. Eliminate complicated server and application management operations while maintaining security and control.

An optimized hybrid cloud environment can help you incrementally replace aging infrastructure — without downtime — to increase flexibility, stability, and efficiency. Automation — through built-in capabilities or a unified platform — is essential. Through automation, you can deliver self-service capabilities to IT users and lay a foundation for modern development techniques and approaches like DevOps and continuous integration/continuous delivery (CI/CD) pipelines.

Simplify management with open, hyperconverged technologies

Virtualization sprawl can result in greater costs and less control over resources. To reduce sprawl, many organizations choose to use only one public cloud offering, locking them into a single vendor. Others adopt expensive high-level management services or simply continue with costly legacy operations.

Open, hyperconverged infrastructure (HCI) can help you overcome these challenges. HCI provides a mature, software-defined datacenter stack, including an SOE, virtualization capabilities, and software-defined storage. This foundation for modernization simplifies management, increases operational efficiency, and provides built-in cloud elasticity that scales on demand. By replacing sprawling legacy virtualization systems with open HCI, you can prepare for upstream innovation while lowering acquisition and operational costs with an open source subscription model.

93% of surveyed organizations reported that their move to public cloud is part of a larger digital transformation initiative.[4]

Cloud adoption is growing

Organizations of all sizes are moving workloads to cloud environments to gain agility, speed, and efficiency.

36% of organizations are expanding cloud initiatives to optimize IT operations.[4]

87% of enterprises have a hybrid cloud strategy in place.[5]

93% of enterprises have a multicloud strategy in place.[5]

>50% of global organizations use more than one cloud for development and deployment purposes.[6]

By 2022,

35% of production applications will be cloud-native, incorporating microservices, containers, and dynamic orchestration.[6]

4 IDC InfoBrief, sponsored by Red Hat. "Moving to the Public Cloud: The Strategic Role of Server Operating System Environments," April 2019.

5 Flexera. "2020 Flexera State of the Cloud Report," April 2020.

6 IDC InfoBrief, sponsored by Red Hat. "An Open Approach to Digital Transformation," July 2020. Document # US46635820.
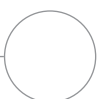
Step 4

Migrate where it makes sense

IT teams often continue to use familiar tools even as the value and innovation of those tools decreases. In many cases, current IT decision makers previously used those same tools. Optimization is an ongoing process that challenges decision makers to continuously assess and migrate to new solutions that offer greater IT and business value.

Common migration opportunities

Virtualization platform

Legacy virtualization hypervisors can increase both cost and risk. They also lock you into a single vendor and platform and hinder migration of applications to cloud-native and container-based environments.

Choose an open source virtualization solution that supports modern development practices and integrates easily into hybrid cloud environments.

Unauthorized IT resource use

Slow delivery of IT resources and innovation can encourage users to deploy unauthorized resources outside of IT's control. These *shadow IT* resources result in higher costs and security and operational risks.

Modernize and optimize your IT to speed resource delivery and innovation. Continuously assess and improve targeted areas to keep up with growing demand and expectations.

On-site infrastructure

HCI can simplify management and increase operational efficiency. Even so, proprietary HCI offerings can be more costly and inflexible than modern, open source options.

Choose an open hyperconverged solution to maintain flexibility and choice while streamlining management, security, and compliance on a mature datacenter stack.
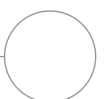
Ready to start your IT optimization journey?

IT optimization is about balancing modernization and budget.

Take the first step toward IT modernization by deploying a consistent, enterprise-grade foundation for hybrid cloud environments. A modern, cloud-ready platform will give you everything you need to optimize your virtualization environment, adopt cloud-native development approaches, and improve security and compliance. You can also free up budget for innovation to support your business in a digital world.

About [PartnerName]

Enter up to 6 lines about your company here. Do not change the paragraph (Body of page > Body text) or character settings (None). If you would like to include a hyperlink, use the Hyperlink - Inline character type for the hyperlinked text only.

Instructions for adding your logo below.

1. Select the empty frame to the right of the Red Hat logo, select File > Place, and navigate to your logo file.

2. Select Object > Fitting > Fill Frame Proportionally.

3. Select the placed logo and move your logo to the left edge of the frame.

4. Select and move the Red Hat logo, divider line, and your logo to the right until the right edge of your logo is aligned with the right edge of this text box.

5. Select and delete this text box.

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