

# 5 ways OpenShift on OpenStack can help you prepare for the future

## Cloud and container technologies will fuel innovation for the future.

Cloud and container technologies can help organizations modernize their applications to increase scalability, reliability, and security while reducing costs. In fact, 52% of enterprises consider “containerizing workloads” and 50% consider “bringing workloads to the cloud” to be key parts of application modernization.<sup>1</sup> Accordingly, 67% of telecommunications companies expect more than 50% of their workloads to be containerized within 12 months.<sup>2</sup>

As a leader and expert in both OpenStack® and Kubernetes technologies, Red Hat can help simplify your cloud-native journey, no matter where you are in the process. [Red Hat® OpenStack Platform](#) and [Red Hat OpenShift®](#) work together to give you a flexible, production-grade foundation that supports your organization and initiatives throughout your modernization journey. The platforms are co-engineered and developed together for reliable interoperability and to make the most of each platform’s capabilities over time. We support both platforms, simplifying and streamlining issue resolution with a single point of contact. Plus, we offer services and training to help your organization

develop the practices, tools, and culture needed to more efficiently modernize existing applications and build new cloud-native ones.

Here are 5 key ways running Red Hat OpenShift on Red Hat OpenStack Platform can help you prepare for the future.

## 1 Migrate workloads over time

Most organizations will approach application modernization as an iterative process, rather than a single step. While container adoption is growing, many commercial applications are not yet available in containerized formats. And it takes time to modernize and containerize your custom applications—organizations expect nearly half of their custom applications to take more than 1 year to modernize.<sup>1</sup>

Running Red Hat OpenShift on Red Hat OpenStack Platform gives you the flexibility to run both virtualized and containerized applications side by side on the same integrated, supported foundation. As a result, you can migrate your applications and workloads from virtual machines to containers incrementally over time. For example, telecommunications service providers can run both 4G virtualized network functions (VNFs) and 5G cloud-native network functions (CNFs) on the same foundation to optimize resources and costs without compromising reliability or flexibility.

## 2 Gain cloud-native skills naturally

Much as moving to the cloud required changes to standard IT operations, moving to containers and cloud-native operations calls for new skills and approaches to application development, deployment, and management. 75% of organizations report a lack of internal staff with expertise as a top container-related challenge.<sup>3</sup> Learning how to use containers and cloud-native technologies effectively—and with a focus on security—takes time and effort.

Together, Red Hat OpenShift and Red Hat OpenStack Platform give you a foundation for gaining cloud-native skills over time. IT operations staff can run virtual machines on Red Hat OpenStack Platform, and manage them using proven existing processes. Meanwhile, developers can create containerized workloads on Red Hat OpenShift, and deploy them using cloud-native operations. This gives your teams an opportunity to get started with cloud-native operations and develop their skills in a low-risk setting.

<sup>1</sup> Red Hat. “[How enterprises approach legacy application modernization](#),” January 2023.

<sup>2</sup> 2023 Global Tech Outlook, a Red Hat Report. Conducted by Red Hat via Qualtrics, May - June 2022. n = 199

<sup>3</sup> Flexera. “[Flexera 2023 State of the Cloud Report](#),” March 2023.

### 3 Accelerate DevOps

Many organizations are adopting **DevOps** approaches to speed application development and delivery. Containers and container-based application platforms can provide the standardized environments, automation capabilities, and consistency across infrastructure needed for successful DevOps practices.

Combining Red Hat OpenStack Platform and Red Hat OpenShift gives you the capabilities to build your DevOps practice. Red Hat OpenShift includes many built-in developer and operations tools, pipelines, and automation to support DevOps processes. You can get started with small projects in a specific area of your environment, and apply learnings to your broader operations and applications as you become more confident.

### 4 Focus on value and progress

Adopting new technology can be a complicated process. In fact, 61% of organizations cite deciding on a container platform as a challenge.<sup>3</sup> People are a key factor in technology adoption initiatives, and all impacted staff need to be on board from an early stage.

Running Red Hat OpenShift on Red Hat OpenStack Platform gives you a way to experiment with containers and cloud-native operations in a low-risk setting. You can try new approaches, get familiar with containers, and gain cloud-native skills while still supporting critical applications using your current platform and processes. Teams can start with small projects, experience and show the value of container technologies, and expand their efforts accordingly to support gradual, organic adoption throughout your organization.

#### Try Red Hat OpenShift Platform Plus for free

Eligible Red Hat OpenStack Platform customers can try OpenShift Platform Plus free for 1 year. [Register today](#) to get access.



#### About Red Hat

Red Hat helps customers standardize across environments, develop cloud-native applications, and integrate, automate, secure, and manage complex environments with [award-winning](#) support, training, and consulting services.

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*“As we continue our transformation journey, Red Hat OpenStack Platform and Red Hat OpenShift will continue to play a crucial role.”*

#### Jan van Hoorick

Network & Service Platform Architect, Proximus Group

Read the [success story](#).

### 5 Access proven expertise

Organizations cite ensuring security and compliance, migrating applications, and managing environments to be top challenges when moving to containers.<sup>3</sup> Accordingly, organizations expect external partners to be involved in modernizing 69% of their applications.<sup>1</sup>

Red Hat can help your organization develop the practices, tools, and culture needed to more efficiently modernize existing applications and build new cloud-native ones. Our mentor-based approach gives your teams information straight from the source and teaches them the skills they need to adopt cloud-native operations. Red Hat experts with diverse technical experience work with your staff in a collaborative, hands-on manner to ensure success.

Our training offerings also pair well with consulting engagements. Red Hat Training helps your teams build the skills to evolve with changing IT needs. Our flexible curriculum lets you choose from courses that teach everything from managing and deploying containers to implementing microservices and DevOps processes.

#### Get help from the experts

Learn the skills you need to adopt cloud-native operations. Start with a [no-cost discovery session](#) or take our [free skills assessment](#).