

5 ways to maximize multicloud ROI

Red Hat helps service providers maximize cloud-environment returns

"We needed to change from a relatively traditional system landscape into a more modern, cloud-based, agile, nimble set of systems."

Head of Engineering
Vodafone, New Zealand

Executive summary

As service providers move more IT workloads to public clouds, a scenario often unfolds where each department picks the cloud provider it likes best. Service providers then end up with an increasing number of workloads running in separate clouds. The result is a new set of disconnected systems and processes, which is the opposite of what IT and operations teams want to achieve through digital transformation.

Service providers' transformation goals typically include streamlining IT and network operations, expanding partner ecosystems, introducing new technologies such as artificial intelligence (AI), and deploying 5G networks. These different workloads and services might be launched in different cloud environments. As a result, an added transformation goal should be for a service provider to remain agile enough to move workloads from a cloud to cloud environment when it provides an advantage.

When service providers lack this agility, they lose many of the economic, technical, and competitive advantages public clouds should offer. The core problem is operational. Cloud providers offer disparate operations, interfaces, and functions. This makes resource optimization and application portability across different cloud environments difficult, especially as more new clouds enter to host different workloads. When operators provide services to customers that rely on different clouds, they may not have the ability to integrate or orchestrate them across all of their cloud environments.

Finding a way to manage multicloud environments as a common set of resources and move workloads to the clouds that best suit them are the next big needs for service providers. If a service provider cannot move workloads and optimize how cloud resources are consumed, they risk becoming overdependent on specific clouds, far less efficient in how they consume cloud services, and far less agile than competitors who can.

Given these challenges, Red Hat's approach to multicloud solutions provides an optimized path for service providers to operate more efficiently across multiple clouds. By providing a consistent, predictable platform—integration and orchestration capabilities—and management experience across clouds, Red Hat simplifies developing, deploying and moving applications to maximize service providers' control, flexibility, and choice in public clouds.

Service providers add more clouds

[A recent survey from Futurium research quoted in Forbes](#) found that 80% of service providers use more than two different public cloud providers and 17% use more than three². As service providers adopt three or more cloud strategies for different purposes, it is helpful for operations environments to manage multiple public and private clouds as a common set of cloud resources, rather than as separate cloud environments. By doing so, service providers can preserve their ability to maximize scale, flexibility, efficiency, and cloud economics across their growing and changing multicloud environments.

According to Michael Soper, Senior Telecom Analyst at TBR, “service providers that leverage a multicloud strategy enable key capabilities, such as matching workloads to the best fitting clouds; accessing a broader supplier ecosystem; and the ability to select cloud partners more strategically, which can lead to accelerated and more cost-effective deployment of compelling services and solutions.”

A coherent multicloud opportunity emerges

Service providers now have an opportunity to create consistent, multicloud environments that can be managed from a single console and expanded over time.

Early adopters of multiple public clouds have often adopted distinct standalone operations for each cloud, usually native to the public cloud provider. But this piecemeal approach can quickly become cumbersome. It runs counter to most service providers’ IT consolidation, digital transformation, and operating expense (OPEX) reduction goals. And it does not align with industry standards, such as the [TM Forum Open Digital Architecture \(ODA\)](#).

Service providers can control multicloud operations

As service providers become more familiar with public clouds, the distinction between cloud operations and cloud resources is becoming clearer. A service provider does not need to adopt only one cloud provider’s proprietary management tools to use its cloud resources. Rather, it makes more sense to manage all cloud resources as a common pool from a centralized and highly automated multicloud infrastructure platform, such as Red Hat® OpenShift®.

A multicloud infrastructure platform lets service providers optimize cloud resource allocation and usage across all of their clouds. It reduces cost redundancies because there is no need to run proprietary management systems for each cloud environment. And it can give customer-facing teams more ability to create new services and customer experiences using a range of cloud resources and functions.

Red Hat OpenShift can be extended with [advanced cluster management](#) capabilities for Kubernetes, which lets service providers deploy, policy-manage, and safeguard applications across multiple clouds at scale. Combined with Red Hat [Ansible®](#) Automation Platform, service providers can eliminate guesswork when deploying workloads in different clouds. Teams no longer need to be educated on the finer nuances of each cloud environment to roll out policy-compliant applications and infrastructure at scale.

By providing visibility across available and interdependent public clouds, the platform should also provide a service provider more reach for where it can deliver cloud-based services, along with better resiliency and service quality.

This multicloud approach gives service providers more strategic flexibility because they can choose from cloud partners. They can remain fluid in how they assign workloads, especially as market, technology, and commercial conditions change.

² Raynovich, R. Scott. “[Multicloud networking is the next big cloud market \(Pt. 1\)](#).” *Forbes*, Oct. 25, 2022.

5 ways to get much more from your multicloud

Red Hat supports enterprises across industries as they adopt more cloud environments and want to control how they are operated. Service providers can gain substantially more value from public clouds using the right multicloud approach than if they stick with a piecemeal approach that becomes more fragmented over time.

Here are five ways service providers can maximize their multicloud investment.

1. Add value across clouds with service delivery automation

Service providers have been on a search for a new value for more than a decade as traditional revenues have been replaced with services in increasingly competitive markets. Service providers' businesses may have been disrupted by cloud-based hyperscalers at first, but cloud computing is now a common part of the telecom service fabric as well, given that 80% of service providers use more than one cloud³.

Red Hat supports the next crucial step, which is to weave multiple distinct clouds into one highly automated service delivery infrastructure that can continuously serve customers anywhere in the world. To deliver this kind of automation, [Ansible Automation Platform's library of cloud support modules](#) lets service providers provision instances, networks, and even complete cloud or 5G network infrastructure anywhere it is needed.

Service providers can then use one common playbook and language for application deployment, on-premise virtualization, and infrastructure provisioning while Ansible Automation Platform takes on the responsibility to ensure cloud deployments work cohesively across public, private, or hybrid clouds. By automating service delivery across clouds in this way, service providers add new value to the global cloud environment that no vendor can effortlessly provide alone.

2. Deploy faster to realize 5G promises sooner

In 5G standalone networks, everything is meant to be cloud-native, from the RAN to the core. Service providers weave sophisticated 5G networks and network slices out of cloud-native network functions running across multiple public and private clouds. In fact, [TM Forum reports](#) that 65% of service providers prefer a hybrid cloud approach while just 11% prefer to work with a single public cloud supplier.

[TM Forum](#) also reports, however, that 87% of service providers feel their new network assets, such as fiber and 5G networks, could have been deployed more efficiently, which means service providers are under pressure to deliver value from 5G investments in less time.

Red Hat helps service providers to deploy cloud-native 5G networks across multiple clouds and to orchestrate the resources needed to support dynamic 5G network interactions and resource requests. Red Hat's multicloud approach unlocks the level of automation needed to instantiate and operate cloud-native 5G standalone networks and to deploy, configure, and improve them rapidly and continuously.

³ Raynovich, R. Scott. "[Multicloud networking is the next big cloud market \(Pt. 1\)](#)," *Forbes*, Oct. 5, 2022.

3. Power faster service innovation

Many service providers are pursuing cloud-native architecture strategies. This equips operations and business systems with standard application programming interfaces (APIs) to increase business agility and process integration. And 33% of service providers committed to a cloud-native approach to all IT workloads, [according to TM Forum](#).

This changeover lays the groundwork for closed-loop, zero-touch automated network operations and intent-based, autonomous networks, which can provide service providers with the innovation platform they ultimately need. Red Hat helps service providers achieve this with a multicloud platform ready to manage resources, orchestrate functions, and securely expose APIs right away. While multicloud optimization begins with matching the right workloads to the best clouds, the next step will introduce new operations capabilities, such as zero-touch automation across multiple, underlying cloud infrastructures. This is what it will take to support the large-scale consumer and B2B use cases driving 5G investments worldwide.

4. Maintain business, operational and network agility

A purposeful multicloud strategy can set service providers up for the long-term business and technical agility their markets demand and their operations require. [Omdia principal analyst Roz Roseboro writes](#) service providers cannot afford to “underestimate the level of lock-in that comes with the public cloud.” She adds service providers are susceptible to becoming dependent on the very cloud services they have used to make them independent from costlier legacy platforms, which makes it “difficult and costly to make a change.”

Red Hat’s multicloud strategy helps service providers maintain the agility they need to control their operations and to change which clouds they use for different purposes when they need or want to. They can take advantage of a variety of cloud and technology partner ecosystems at once and create multicloud solutions for customers and end users without being restrained by only one cloud supplier, environment’s capabilities, or geographic reach.

5. Reduce costs continuously

Public cloud adoption continues to provide a [cost reduction path](#) as service providers, and other enterprises, grow from shifting some workloads to a cloud environment to transitioning entire datacenters to public clouds. Red Hat’s multicloud approach not only helps service providers realize the substantial economic benefits of public cloud adoption, but also avoids the technical and operational pitfalls that undermine those benefits.

By allowing service and application portability across cloud environments and sustaining service providers’ operational control over their aggregated public cloud assets, Red Hat unburdens service providers to focus on maximizing how they use cloud resources to generate revenue while also optimizing the cost

Red Hat delivers the promise of the multicloud

Red Hat and its certified partners help service providers take control of their expanding public and private cloud resources. Red Hat, along with a large ecosystem, provides solutions that provide visibility, observability, and manageability across the public clouds and on-premise infrastructure that service providers can use to manage their many diverse workloads.

With Red Hat's multicloud approach, service providers can use the best that any cloud supplier can offer while managing, optimizing, and improving all their cloud environments and cloud services from one console.

These highly efficient and flexible capabilities benefit service providers in many ways. First, they accelerate time to market for new services because service providers can build new applications, components, or integrations once and then deploy and continuously improve them anywhere. They also improve operational efficiency because service providers stay in control of how they operate cloud-based workloads, regardless of which cloud resource they use. This provides flexibility and agility because service providers don't need to change operations or adapt applications with each new cloud. Lastly, these capabilities support application portability across cloud environments and allow service providers to manage their multicloud environments as a common set of resources and infrastructures.

With less time and energy spent managing multicloud challenges, service providers can increase their focus on innovation, taking advantage of their ability to choose which clouds suit them best and control how they use their resources. Red Hat gives service providers the agility to onboard the best cloud solutions for any job as they evolve and to use this special capability as a competitive advantage, offered fully integrated on [the leading cloud platforms](#).

Learn more

Read about [Red Hat's multicloud solutions](#)



About Red Hat

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 develop cloud-native applications, integrate existing and new IT applications, and automate and manage complex environments. [A trusted adviser to the Fortune 500](#), Red Hat provides [award-winning](#) support, training, and consulting services that bring the benefits of open innovation to any industry. Red Hat is a connective hub in a global network of enterprises, partners, and communities, helping organizations grow, transform, and prepare for the digital future.

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