

# How telcos modernize, manage, and scale critical 5G infrastructure

The telecommunications service (telco) industry is under pressure to expand and enhance 5G networks, scale infrastructure to handle increasing volumes of traffic, and modernize existing applications while delivering a steady stream of exciting and competitive new technologies to customers. With Red Hat® Services, telco service providers can find and implement cloud-native architecture to support their needs while learning the skills to manage it in-house. Follow these 4 steps to begin your 5G journey with Red Hat Services.

## 1 Create a flexible, multicloud environment

To keep pace with rapid innovations in service delivery in the telco industry and deliver new functionality to customers, telecom service providers are migrating workloads to multicloud or hybrid cloud environments.

Managing workloads in these environments can be challenging. Service providers can deploy and manage their cloud-native workloads consistently across private and public clouds for complete flexibility and portability. With Red Hat OpenShift®, telcos can innovate with the assurance that they have a more reliable foundation that is user-friendly.

**How Red Hat helps:** Red Hat Technical Account Managers (TAMs) work with customers to plan and better implement Red Hat open source solutions. They act as trusted advisors, anticipating and mitigating challenges so telcos can achieve time-to-value in less time. Red Hat Services provides training to transfer specialist knowledge in a sustainable way, empowering service provider staff and personnel with the necessary skills and confidence to take control of their environments in the future.

## 2 Collaborate and upskill to accelerate time to market

Customers expect their service providers to offer the latest functionalities and features with little downtime or modification, but limited cooperation across teams, manual processes, and traditional technology slow developers down.

To address this, leading service providers have adopted Red Hat technologies such as Red Hat Ansible® Automation Platform and Red Hat OpenShift to take advantage of open source communities and projects. With these technologies, they can unlock the latest innovations while adopting cloud-native tools and methodologies like DevSecOps. By aligning teams to collaborate on common goals, service providers have reduced deployment times—in the case of one leading telecommunications service provider, from 8 hours to 90 minutes. The same service provider also optimized its application servers, which reduced restart windows from 50 minutes to 3—crucial for providing high performing 24x7 services.\*

**How Red Hat helps:** Red Hat uses its industry knowledge to partner with telecommunication companies, training their employees and offering advice on how to improve their work.

Red Hat Services has been able to identify and validate how Ansible Automation Platform takes care of customer-specific maintenance tasks, so developers have more time to focus on building applications.

\* Red Hat client data.

## 3 Reduce operational complexity and boost resilience

Telco networks are increasingly complex, which can be costly and inefficient when not operated and managed well or when unnecessarily fragmented. Add to that the constant challenge to launch new services while operating and maintaining existing services and the need to simplify becomes starkly apparent.

Service providers can build a unified platform by implementing Red Hat OpenShift to provide a consistent operational experience across different cloud environments and domains to improve performance and efficiency. With expertise from Red Hat Services, service providers can learn to increase operational efficiency and scalability by reducing complexity. This can help increase the overall resilience of an environment and encourage high levels of user adoption through initiatives like workshops, training, and targeted education programs on specific products, processes, or best practices.

**How Red Hat helps:** Red Hat TAMs and telco delivery executives can proactively engage with customer teams to run health checks and create risk mitigation strategies. Red Hat TAMs can introduce specific technologies, like Ansible Automation Platform, connecting a customer's operations team with Red Hat Services to take advantage of support and establish solid disaster recovery plans.

Working closely with telcos' external partners and internal teams, Red Hat Services has provided mentorship and knowledge transfer for many customers.

## 4 Make strategic, long-term relationships for the future

Red Hat is often the first choice for leading telcos that want to stay at the forefront of the industry by building solid, stable, and safeguarded application platforms. Together with Red Hat and their partners, service providers bring a skilled team of experts and the necessary technologies to deliver critical 5G services and a platform that can grow and adapt to new business needs in the future. Red Hat is the strategic, long-term, trusted vendor actively developing this evolution with them.

**How Red Hat helps:** Red Hat Consulting helps service providers with planning, start, and execution of new projects, supporting the cultural shift towards cloud-native within telco organizations. Aside from implementing Red Hat OpenShift, Red Hat helps telcos get more value from new open source technology and methodologies, demonstrating how to best use it to maximize their value to their business. Red Hat agile coaches work with different user groups to help them transition to DevSecOps, while Red Hat coaching and mentoring is provided to help improve team skills and transfer critical knowledge with practical hands-on support as needed.

Moreover, Red Hat TAMs have proven to be the trusted technology advisors within many telco organizations, as they optimize workflows and shorten delivery times to ensure new platforms are well adopted.

Overall, Red Hat Services is ready to support the telco industry in meeting the challenges of deploying 5G network functions today and the implementation of artificial intelligence (AI) at scale in the future.

[Learn more about how Red Hat Services can support telcos](#)

[See how Red Hat TAMs can help you work better](#)



### 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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