

Azure for Operators



Microsoft’s hybrid cloud solutions for operators can help you deploy, secure, and monetize your network services across Microsoft Azure and other platforms in a multi-cloud environment.

The cloud can provide colossal amounts of compute, be accessed from anywhere, and is capable of storing huge volumes of data, delivering operational efficiencies to businesses across every industry.



Microsoft Azure is the world’s computer, already handling **30B+** packets/second

170+ network points of presence **20K+** peering points **160K+** miles of optical fiber

A cloud for network operators

With the announcement of Azure for Operators, Microsoft has launched a strategy to partner with network operators to create new opportunities and provide core infrastructure, combining the power of cloud and edge for low latency, broad reach, and service intelligence. Our work with operators, enterprises, and government plays a critical role in delivering experiences that previously would have been unimaginable, and breakthroughs that would have been impossible.

The Azure for Operators portfolio is optimized to support the unique needs of the communications industry. Our approach is guided by three key principles:

- 1. Bringing the power of the intelligent cloud and edge to operator networks
- 2. Taking a partner-based, ecosystem-wide approach
- 3. Reducing cost, driving revenue, and future-proofing the network

The intelligent cloud: fusing the virtual and physical world

Artificial Intelligence and Machine Learning technologies will drive the next generation of 5G applications. To better serve operators, Microsoft Azure has embraced the concepts of intelligent cloud, intelligent edge and the hybrid cloud.

10B/mo+ cognitive services transactions **150B/mo** messages via IoT Hub
6.2B+ IoT devices deployed with Azure RTOS **1M/mo** machine learning experiments



Operators Checklist

When choosing a cloud platform, operators should evaluate a solution based on these critical components:



Built for growth

- Edge computing is key to the monetization of 5G infrastructure, supporting new classes of applications that rely on low-latency connectivity or the summarization of huge volumes of local data. Your cloud provider should provide access to a large community of developers and extensive library of applications that will turn the vision of edge computing into new revenue. Your cloud partner should be willing to embrace new commercial models, recognizing the value created by new 5G capabilities



Partner-friendly ecosystem

- Azure for Operators assets operate in harmony to create a tailored experience for any operator. Our full-service stack is designed to complement an operator’s existing assets, allowing operators to select complete solutions or only the elements that they need. Our rich suite of Azure cloud services is made available to integrate quickly with operator services, and our growing partner ecosystem includes providers of RAN, core and edge network functions, and OSS/BSS solutions. Operators can leverage all elements of this Azure for Operators service stack while still retaining their customer relationships, controlling their brand experience, and defining their service offerings.



Inherently secure

- Based on Zero Trust networking principles, Microsoft Azure provides a collection of integrated cloud services that you can use to help protect your business assets while reducing security costs and complexity. Building on the principles of security, privacy, compliance, resiliency, and intellectual property protection, Microsoft strives to earn and keep your trust. Microsoft invests over \$1 billion annually in cybersecurity, including the Azure platform, and employs over 3,500 dedicated cybersecurity professionals.



Complete set of network APIs, respecting carrier control points

- Operators view their networks as platforms on which new applications can be built by third parties, offering additional opportunities to generate revenues. Exposing secure, programmable network APIs through Azure makes it easier for operators to attract developer communities and to capture a new class of solutions made possible by low latency networking and edge compute. In addition, the controls and services exposed in the network must contain the appropriate controls for the operators to continue to effectively manage the customer experience, guarantee performance, and maintain security.



Carrier-grade, built with telco DNA

- Microsoft recently acquired Metaswitch Networks and Affirmed Networks to add hundreds of world-class communications engineers, more than 50 combined years of “telco DNA” and a broad range of high-performance cloud native software products to our portfolio. Adding this level of expertise is a critical and differentiated industry commitment to fully understanding and meeting the needs of our operator partners, and ensure the Azure platform is truly “carrier grade.”

For all these cloud platform elements and more, Azure for Operators has you covered.