

DATASHEET

## Power 5G monetization, cloud agility, and efficiency with real-time data

Telecommunication companies (telcos) must deliver new services as quickly as possible to increase revenue, improve customer experiences, and reduce costs—but doing so requires accurate, fast databases.

The introduction of 5G, increasing cloud adoption, and AI integration are reshaping the landscape for telcos and communication service providers (CSPs).

Business support system (BSS) and operations support system (OSS) platforms, which historically were custom-built and rigid, are now being modernized to be more agile and integrated.

**47%**

of telco network capacity will be cloud-native in the next 3-5 years<sup>1</sup>

**\$80B**

expected CSP spending on OSS/BSS software by 2028<sup>2</sup>

**45%**

of CSPs expect spending on GenAI use cases to surge over the next two years<sup>3</sup>

As telcos fully rollout 5G stand-alone networks, the need for agile, software-based networks is driving the transition to cloud solutions for network orchestration, systems of record, and more. This shift requires the integration and upgrading of OSS and BSS systems, industry-standard APIs, DevOps methodologies, and leveraging AI/ML technologies for automation and cost efficiencies.

With this transformation, telcos can develop new services, going beyond providing traditional connectivity. But legacy, siloed data systems are still holding many companies back. Businesses must modernize every part of their environments, including the data layer, to remain competitive, lower operational costs, and improve customer experiences.

### Staying competitive and driving revenue with new 5G services

Competing with cloud hyperscalers and OTT providers requires agile, integrated OSS/BSS systems and new partner ecosystems that leverage open APIs. Real-time, cloud-native data layers that can respond in sub-millisecond times, scale seamlessly, and support multiple data models are needed to keep up with the requirements of location data, video, SMS, or IoT—even during peak loads.

### Providing personalized, omnichannel customer experiences

From call centers and order management to real-time billing apps, real-time data forms the foundation of seamless customer experiences. Leveraging data from all digital channels, including websites, mobile apps, social channels, and customer interactions, can inform personalized services, identify high-value customers, and offer insights for sales and marketing strategies to reduce churn.

### Embracing GenAI to reduce costs and support data-driven decision making

GenAI can create significant and incremental value for telcos and CSPs by powering automation, streamlining processes, driving innovation, and unlocking new value sources. Fueled by the goldmine of data trapped in OSS/BSS systems, GenAI can transform network operations and customer engagement through predictive maintenance, auto-healing networks, human-like chatbots, recommendations, and fraud detection.



<sup>1</sup> [NETWORKS ON CLOUD: A CLEAR ADVANTAGE](#), Capgemini Research Institute, 2023.

<sup>2</sup> [OSS/BSS Software and Services Report](#), Analysys Mason, Oct 2023

<sup>3</sup> [Telecommunications' Next Frontier: Navigating the GenAI Imperative](#), Altman Solon, Sept 2023

## Redis powers real-time services

Telcos and CSPs need a real-time data platform that meets the demands of today's consumers, empowers new services, and delivers operational efficiencies across networks. Redis offers multiple data models and a query and search engine boasting sub-millisecond performance and reliability across cloud and hybrid environments to help businesses get the most value out of their data.

### Build faster services with modern data models

Redis delivers real-time performance to critical telco OSS/BSS services with a low-latency, unified data layer that supports multiple data structures including hashes, geospatial, and JSON, as well as a query and search engine. This means customer experiences—website user sessions, call center routing, address searches via open APIs, provisioning and billing, order and inventory management, emergency services, and more—are all faster and more meaningful.

### Drive linear scalability and high traffic with zero downtime

Redis can be used as a highly scalable cache or database to ensure that customer engagement apps and websites are always fast and responsive. We offer performance that scales linearly, up to 200M ops/sec, with zero downtime and high availability in any scenario with persistence and replication methods, instant failure detection, and single-digit-second failover.

### Get new 5G services to market faster

Redis Cloud is available as a managed service across all major cloud providers to help your organization stay focused on driving innovation, rather than ongoing maintenance and management. Launch databases in the cloud in seconds, and leverage Active-Active Geo-Distribution for low latency and 99.999% uptime for business continuity across geographic regions.



### Delivering public safety services with reliable real-time location data

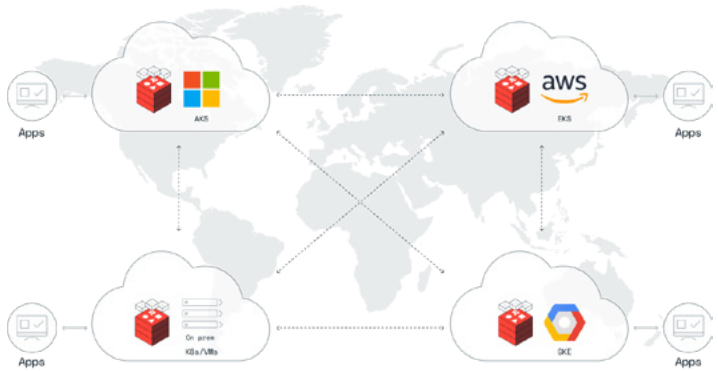
Proximus, a leading telco in Belgium, faced challenges handling high volumes of mobile signaling traffic and meeting legal requirements for accurate location data. By implementing Redis as their

real-time location data store, Proximus achieved an impressive 32% latency improvement to 1.31ms, with an average throughput of 878K ops/s, enabling precise tracking of mobile users for emergency services, incident management, and crowd monitoring. We empower Proximus' services, compliance, and public safety initiatives, shaping a safer and more connected future.



### Improving customer experience through increased reliability and performance

Telus, a leading Canadian telco, use Redis to power its Showcase application, which acts as a central hub of personalized content for TELUS' Optik TV customers. After using Redis open source, they migrated to Redis Enterprise, which provided improved reliability, resilience, and performance. Only Redis Enterprise could handle the large volume of transactions and meet the business' latency requirements. This solution enabled Telus to enhance the customer experience and simplify their operations, solidifying Redis as an essential tool for their business.



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