



Cloud-Native Storage

Rakuten Software Defined Storage
powers Google Distributed Cloud
connected Server



Eliminate Risks and Rapidly Roll Out with Confidence

Google Distributed Cloud (GDC) is a portfolio of fully managed hardware and software solutions that extend Google Cloud's infrastructure and services to the edge and into your data centers. Rakuten Cloud-Native Storage serves as the pre-certified storage solution for GDC edge solutions.

Experience effortless, reliable edge storage deployments for Google Anthos. Run seamlessly, securely and efficiently on heterogeneous storage media—on-prem or cloud.

Whether you are rolling out 10 or 10,000+ edge locations, this joint solution addresses the big concerns.

KEY WORKLOADS

Real-time analytics

Databases

AI/ML frameworks

Dynamic retail environments

Expansive IoT deployments

Immersive content delivery
experiences

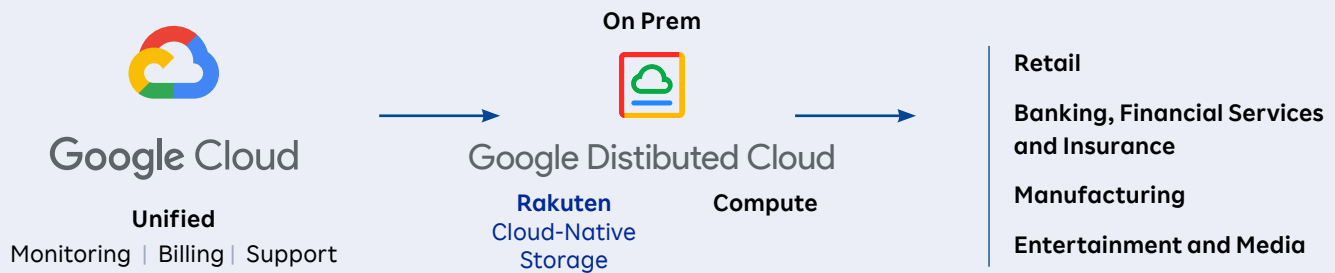
Computer Vision

Security applications

Solution Benefits

- **Reduce time to success:** Time is opportunity; deploy more rapidly with a solution that works from the get-go—no exceptions and no surprises.
- **Simplify operations:** Break operations silos with unified billing and resolution, dedicated teams from Google Cloud, Rakuten Cloud-Native Storage and customer services, and one central point of accountability.
- **Better solution agility:** Breed continued success with our future-proof design, demonstrating high performance at scale. Accelerated feature evolution keeps you on top of the competition, with a more adaptable solution.
- **Integrated, advanced, security:** Built-in, fully integrated storage security, automated and attuned to Google Cloud's market-leading security requirements.

Eliminate Complexity



With the flexibility of Kubernetes® and cloud-native design comes complexity under the layers, especially with storage, as applications are deconstructed into many containers, each with distinct connections and relationships to storage data. The standard Kubernetes Container Storage Interface (CSI) provides minimal storage support and does not fully address crucial aspects like data persistence, high availability, auto-scaling, and

other requirements needed to run mission-critical edge data services successfully and repeatedly. This becomes particularly challenging in edge or on-premise environments with limited dedicated storage resources, staffing, and access. This is where the unified package of Google Distributed Cloud and Rakuten Cloud-Native Storage makes things easier.

Google Distributed Cloud + Rakuten Cloud-Native Storage Solution Benefits

This unique solution solves both the business and technical challenges that organizations face as they roll out mission-critical edge services.

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Ease of deployment and scale: Integrated product roadmap releases, with pre-certified solution packages for every release, from both Google Cloud and Rakuten Cloud.

Efficient edge infrastructure: Minimal data footprint with advanced replication and data protection services.

Streamlined execution and resolution: Unified, single billing, and support through Google Cloud.

High performance for any workload: Bare-metal performance, rapid quiescence, flexible, agile, and linear scale.

Joint development of next-gen features: Our companies have been working together on aspects related to integrated security and observability for the past two years to deliver a more useable and stable customer experience.

Tested solution:

- Pre-validated and tested products built by dedicated solution development and testing teams.
- Unified releases and roadmaps for co-development and testing of next-gen features to rapidly meet new market opportunities.

“We started to see a pattern where people needed a facsimile of what they have in the cloud, at a much smaller footprint at these edge locations, but with a very large number of sites that were deployed. We’re seeing a lot of innovation happening in this space where customers are deploying innovative applications out at the edge, where they need both compute and storage which is where our partnership with Rakuten Cloud comes into play.”

- Vijay Tewari
Head of Product Management, Google Cloud

Why Google Cloud Chose Rakuten Cloud-Native Storage

Rakuten Cloud-Native Storage is the industry’s leading enterprise-grade software-defined storage, built from ground up on Kubernetes, offering fully persistent storage support for containers, virtual machines and bare-metal.

We have a strong pedigree in cloud security and that extends to our storage solution. We effectively meet Google’s security requirements – one of the best in the business. All data is encrypted, at rest, in flight, as well the internal communications between components.

Many vendors say that their cloud-native storage is built from the ground up. But when you look under the layers, they very often slap on interfaces to legacy products, then label them cloud-native, rely on legacy file systems that bottleneck scale and performance, or shackle their main intellectual property with stagnant open-source software, with limited feature sets that they have little control over.

Every aspect of Rakuten Cloud-Native Storage is truly purpose built. It is a low-footprint solution designed for both containerized and virtual machines workloads on Kubernetes. Rakuten Cloud-Native Storage provides a rich set of always incremental, automated data protection and recovery services, with scalable performance. Now it comes fully integrated, in lock step, with every GDC rapid deployment of business-critical edge services.

Ultimately, our success stems not only from our innovative solutions but also from our unwavering commitment to our customers and the tangible results we deliver. We understand that each customer is unique, and we continuously tailor our solutions to meet their specific needs.

Rakuten Cloud-Native Storage Use Cases



Service Industry

Quick Service Restaurants (QSR): Rakuten Cloud-Native Storage's advanced data solution and edge-friendly design make it ideal for deploying dynamic menu boards that adapt to real-time inventory and customer preferences, optimized order processing to minimize wait times, and AI-powered kiosks offering personalized recommendations based on past orders and trending items. The platform's ability to process data locally ensures a responsive and personalized customer experience, even during peak hours.



Retail

Fast-Moving Consumer Goods (FMCG): Rakuten Cloud-Native Storage's robust edge capabilities enable the deployment of smart shelves that detect low stock and trigger automatic replenishment, interactive displays providing product information and promotions, and personalized offers sent directly to customers' smartphones as they browse the aisles. The platform's real-time data processing and secure communication protocols ensure a seamless and engaging shopping experience.



Manufacturing

Manufacturing & Industrial: This solution advances expansive IoT deployments, enabling real-time monitoring of equipment and processes. This allows for predictive maintenance, minimizing downtime and improving operational efficiency. The solution also facilitates data-driven decision-making by providing insights into production performance and identifying areas for optimization.



Healthcare

Telemedicine and Remote Patient Monitoring: Rakuten Cloud-Native Platform's high availability and advanced networking make it ideal for deploying telemedicine and remote patient monitoring solutions. The platform's ability to guarantee QoS and encryption ensures reliable and secure communication between patients and healthcare providers, even in remote locations.