Solution Profile

Hitachi Solutions for PostgreSQL

Drive Lower Costs, Scale Seamlessly and Secure Your Data with VSP One Block Storage and Integrated Solutions

Boost Cost Savings with Efficient PostgreSQL Solutions

Optimize your storage costs with high-performing, compact solutions for PostgreSQL and flexible, pay-as-you-go options that scale with your data needs

Simplify PostgreSQL Data Management

Unified, best-practice workflows and integrated AI-driven observability reduce complexity and boost operational efficiency

Optimize PostgreSQL Storage Capacity

Intelligent, real-time data reduction adapts on the fly, ensuring resource efficiency with minimal management overhead, without sacrificing performance

Managing data and databases, such as PostgreSQL, across multiple cloud or on-premises environments and availability zones can be complex and time-consuming.

As databases scale, performance often lags, posing a significant challenge for businesses. This scaling-out problem arises because distributing data across multiple machines can lead to performance degradation. Replication and performance tuning become critical, yet complex, requiring additional tools to manage horizontal scalability effectively.

Our solutions address these industry issues by providing the necessary tools and strategies to optimize database performance, ensuring smooth and efficient operations even as your database grows.

Hitachi Integrated Systems for PostgreSQL with VSP One Block storage help you reduce complexity, improve operational efficiency, enhance scalability, and simplify data management. With advanced security features, Hitachi keeps your critical data safe and accessible, supporting cost-effective and flexible growth for your business.

The Hitachi PostgreSQL Solution Delivers Efficiency, Scalability and Security

The Hitachi solution for PostgreSQL delivers a compact and cost-effective pre-validated integrated solution for PostgreSQL deployments. It delivers a highly reliable and scalable architecture with lower latency in demanding and dynamic PostgreSQL environments.

Drive Cost-Effective PostgreSQL Performance

Implement an optimized integrated solution from Hitachi that enhances performance and operational efficiency, ensuring your SQL infrastructure runs smoother and more effectively.

- **Lower your overall storage expenses** by implementing high-performing, compact and cost-effective storage solutions for PostgreSQL environments that deliver without overspending.

- **Improve financial agility and control costs** by leveraging pay-as-you-go storage options that scale with your data needs, enabling you to adapt quickly to changing business demands.

Enable Agile Growth of Your Database

Implement flexible and scalable PostgreSQL solutions that support seamless expansion and evolving data demands.

- **Enable flexible growth and data mobility** across hybrid architectures by seamlessly expanding capacity by extending to cloud environments, supporting your evolving business needs.
- **Support business agility and operational efficiency** by streamlining data management in containerized environments, reducing complexity and ensuring consistent performance for PostgreSQL workloads regardless of deployment location.

Ensure Data Integrity and Security

Maintain trust and compliance through reliable, secure integrated architectures that safeguard your business-critical PostgreSQL data.

- **Achieve peace of mind** by safeguarding sensitive customer and financial data through encrypted storage solutions, ensuring compliance with regulatory standards and reducing security risks.
- **Maintain operational continuity and minimize downtime** by leveraging redundant storage architectures, automated backups and seamless replication — both on-premises and in the cloud — for fast data recovery during hardware failures or disasters.

Use Cases

Enhance Performance and Operational Efficiency

Support your PostgreSQL growth with a flexible, scalable storage infrastructure that effortlessly expands capacity and performance. Start small and scale out or up as your data and workload demands increase.

Support Seamless Expansion and Evolving Data Demands

Ensure your PostgreSQL environment remains highly available and flexible by enabling seamless data synchronization across public cloud and on-premises platforms. You'll reduce downtime and support scalable, reliable operations that meet your evolving business needs.

Safeguard Your Business-Critical PostgreSQL Data

Ensure your PostgreSQL data is always available and secure with the Hitachi 100% Data Availability Guarantee. Safeguard your critical databases with encryption and protection against cyber threats.

PostgreSQL Solution Features and Benefits

The components in this integrated solution have been tested and optimized to provide flexibility to be used in various deployment scenarios to provide the right balance between performance and ease of management.

- **Highly Available, Scalable PostgreSQL Environment:** Achieve seamless data synchronization across cloud extending on-premises platforms, ensuring high availability and reducing downtime with Hitachi integrated storage solutions for scalable operations.
- **Unified Management:** Our integrated storage management solutions provide a centralized, easy-to-use interface that simplifies monitoring, automating and optimizing PostgreSQL storage across hybrid and multicloud environments. This streamlined approach helps you reduce operating and manual costs while improving efficiency and overall system performance.
- **Ironclad Security and Compliance:** VSP One storage arrays provide enterprise-grade security features that protect PostgreSQL environments from cyber threats, data breaches and regulatory risks. Immutable snapshots prevent unauthorized changes to backups and ensure recovery from ransomware attacks or accidental deletions.
- **High Performance:** The VSP One Block series offers fast, low-latency storage solutions that ensure PostgreSQL databases run efficiently, supporting high transaction throughput and quick query times. VSP One Block starts as a single, compact, appliance with up to 3.6PBe in 2U and scales up and out to 65 systems and 130 controllers.
- **Flexible Consumption:** We can support your PostgreSQL environment with EverFlex, Hitachi Vantara's IaaS portfolio, with the most flexible capacity and pay per use elastic consumption, delivered and managed your way. From self-managed configurations with light monitoring to full managed services from Hitachi Vantara or with a trusted partner.

Ensure Smooth, Efficient Operations

Hitachi provides VSP One Block to optimize PostgreSQL environments, offering scalable, secure infrastructure. Our technology enhances operational efficiency and simplifies data management across cloud and on-premises platforms. With advanced security features, Hitachi ensures your critical data is available and protected, supporting cost-effective, agile growth for your business.

Next Steps

Discover how Hitachi can transform your database performance and reliability:

- Contact Hitachi to design your optimal PostgreSQL infrastructure.

Visit hitachivantara.com today to learn how our integrated systems can optimize your environment with scalable, secure infrastructure, enhancing efficiency and management across hybrid platforms.

Learn more →

Hitachi Guarantees: Trusted Performance and Reliability

Cyber Resilience Guarantee: Delivers predictable continuity with clean data recovery in seconds after a ransomware attack for VSP One Block midrange and high end — guaranteed — reducing downtime and data loss, unlike standard SLAs.

Performance SLA Guarantee: Guarantees performance of <1 ms latency for customer workloads.

Sustainability SLA Guarantee: Slash energy costs and data center CO_2 footprint with VSP One, and we guarantee that your power consumption will remain in budget.

100% Data Availability Guarantee: Continuous data access keeps databases, applications and users online and productive.

No Questions Asked Effective Capacity Guarantee: Reduces storage requirements with proven data efficiency no exclusions, no fine print.

Modern Storage Assurance: Future-proofs your customers' investment by enabling next-gen controller upgrades without data migration.

About Hitachi Vantara

Hitachi Vantara is transforming the way data fuels innovation. A wholly owned subsidiary of Hitachi, Ltd., we're the data foundation the world's leading innovators rely on. Through data storage, infrastructure systems, cloud management and digital expertise, we build the foundation for sustainable business growth.

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