Hitachi Vantara

Solution Profile

Fueling Oil and Gas With Fast, Secure and Always-Available Data

Drill Through Data Challenges To Keep Oil and Gas Running Strong

Every decision in oil and gas carries weight — from exploration to production, from upstream to downstream. Your teams operate in harsh, remote environments where connectivity is unreliable, risks are high and downtime is expensive.

Seismic models, well logs and supervisory control and data acquisition (SCADA) data are mission-critical, yet legacy systems, siloed data and outdated infrastructure slow access and increase risk. These challenges create daily roadblocks — impacting productivity, safety and costs.

Break Through Barriers — Overcoming Oil & Gas Data Challenges

- **Connectivity Gaps:** Offshore platforms, drilling sites and refineries demand real-time data, but poor infrastructure and high latency create bottlenecks.
- **Operational Risks:** Unplanned downtime, ransomware attacks and hardware failures threaten business continuity and safety.
- **Regulatory Pressures:** Data sovereignty and compliance mandates require full control over where data is stored and accessed, along with detailed file access auditing.
- **Data Sprawl and Inefficiency:** Massive datasets from seismic surveys, equipment monitoring and compliance logs demand scalable, unified storage — but legacy systems create silos, making data migration and system integration complex.

To operate efficiently and mitigate risk, you need a data strategy that delivers resilience, agility and security — wherever the work takes you.

Tap Into Smarter Data for Stronger Operations

Oil and gas operations depend on fast, secure and scalable data management. Keeping up with evolving demands requires a modern approach — one that ensures seamless access, collaboration and resilience across every stage of exploration, production and refining.

- **Deliver Data Where It's Needed — Instantly:** Edge-to-cloud data mobility ensures access even with intermittent connectivity, supporting real-time industrial internet of things (IIoT) and SCADA data processing.
- **Ensure Security and Resilience:** AI-driven threat detection and instant disaster recovery safeguard against cyber threats, ransomware and disruptions while enabling seamless failover for critical sites.
- **Support Remote Collaboration Without Lag:** Caching-enabled edge solutions keep teams connected, whether offshore, on-site or at headquarters.
- **Simplify Compliance and Governance:** Data residency controls ensure that regulated information stays within required regions while remaining securely accessible, with built-in access auditing for compliance monitoring.
- **Scale With Industry Demands:** Unstructured data lakes and high-performance storage solutions support growing seismic processing, CAD modeling and AI-driven analytics while simplifying migration from legacy NAS or Microsoft Windows file servers.

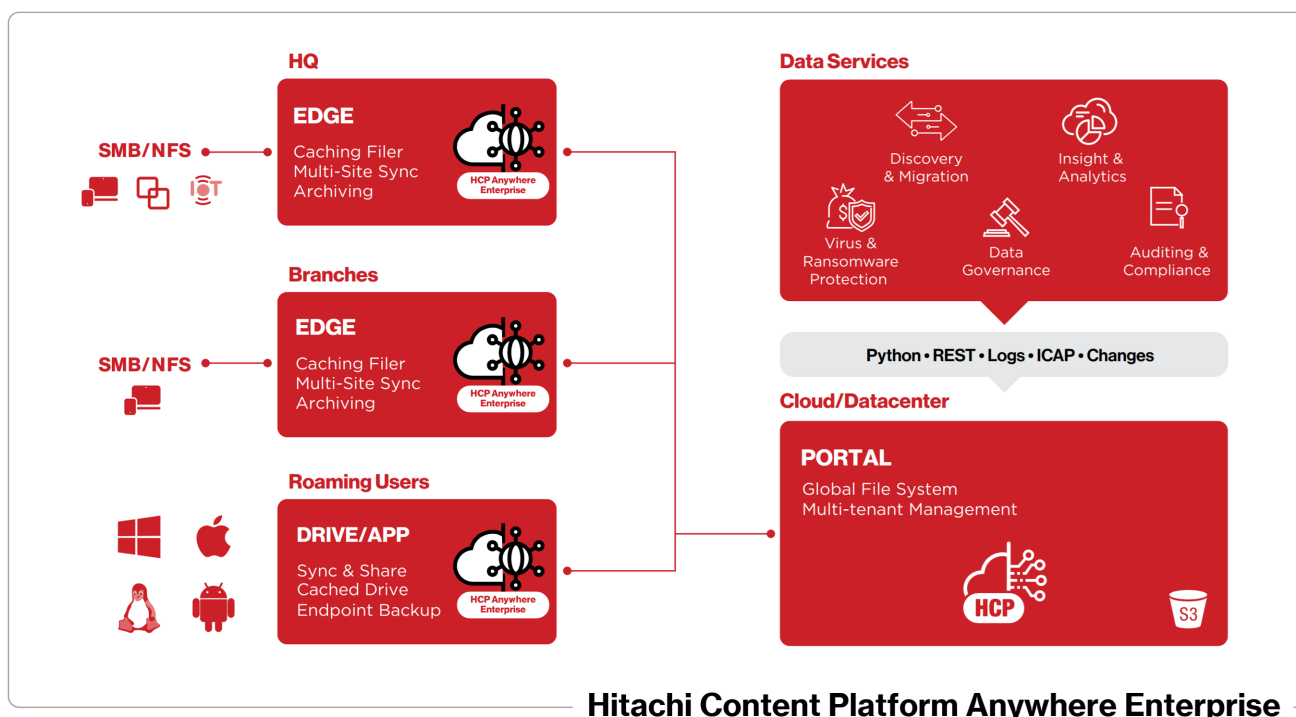## HCP Anywhere Enterprise: File Services Built for the Field

Hitachi Content Platform Anywhere Enterprise (HCP Anywhere Enterprise) solves your toughest data challenges with a resilient, high-performance edge-to-cloud solution designed for the rigors of oil and gas. Engineered for extreme environments like offshore rigs and remote drilling sites, it eliminates reliance on vulnerable NAS hardware, ensuring secure, real-time access to critical data wherever operations take place.

A strong, reliable data foundation keeps your operations running. HCP Anywhere Enterprise optimizes enterprise data management by efficiently handling seismic data (SEG-Y),

well logs (LAS), reservoir simulations (ECLIPSE) and 3D CAD models (Autodesk AutoCAD, SolidWorks). Its caching-enabled edge solution keeps your teams connected, even in intermittent or high-latency environments, ensuring seamless synchronization with a central repository.

By centralizing data management and streamlining collaboration across distributed sites, HCP Anywhere Enterprise minimizes the need for on-site IT resources. At the same time, it provides military-grade security, immutable data protection, AI-based ransomware detection and instant disaster recovery, to safeguard your critical infrastructure and sensitive industrial data.

The Foundation for Resilient, High-Performance Oil and Gas Data

Hitachi Content Platform Anywhere Enterprise

Global File System

Acts as a centralized data lake, managing massive volumes of oil and gas data. Integrates seamlessly with industry-specific applications for faster seismic analysis, reservoir modeling and performance optimization.

HCP Anywhere Enterprise Edge Filers

Replace traditional file servers with a centrally managed, caching-enabled edge solution. Ideal for offshore rigs and remote drilling sites, ensuring fast access to seismic data, CAD files, SCADA logs and operational reports.

HCP Anywhere Enterprise Drive

Secure, high-performance file sync and share for Windows and Apple Mac devices. Enables engineers and field operators to monitor equipment health, troubleshoot issues and perform preventive maintenance with minimal downtime.

Protect What Powers Oil and Gas With Cyber-Resilient Data Management

Securing your critical infrastructure while maximizing data access and control requires a solution built for resilience, collaboration and real-time intelligence. HCP Anywhere Enterprise delivers military-grade security, seamless file access and centralized data management, to help you operate with confidence.

- **Keep Teams in Sync Across Locations:** Work seamlessly across remote sites, offshore rigs, and HQ with real-time file access, multi-site collaboration, and high-speed performance to prevent delays.
- **Defend Critical Data at Every Level:** Protect data from cyber threats with AI-powered detection, immutable protection with instant recovery and in-firewall deployment with end-to-end encryption.
- **Enforce Secure, Compliant Data Management:** Isolate and control data with partitioned environments, role-based access, and automated policy enforcement.
- **Take Full Control of Hybrid Cloud Storage:** Leverage HCP's hybrid cloud flexibility to optimize data placement, ensure compliance, and seamlessly scale data across on-prem and cloud locations.
- **Strengthen Security with Intelligent File Auditing:** Track and analyze file access with built-in logging to detect anomalies, prevent breaches, and meet compliance mandates.

Learn more →

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.

Accelerate Insights and Efficiency With an AI Advantage

Turning raw data into actionable intelligence is critical for optimizing your operations and reducing risk. With seamless integration to leading data science and analytics solutions, HCP Anywhere Enterprise enables organizations to efficiently process and analyze unstructured data from seismic models, well logs, reservoir simulations and operational systems.

- **AI and Analytics Integration:** Set your teams up to process and analyze data efficiently by using Python SDK, REST API and Amazon S3-compatibility to enable direct connectivity with Jupyter Notebook, Google Colab and other leading data science tools.
- **Harness Industrial IoT and SCADA Data:** Collect, classify and analyze real-time data from IIoT devices, SCADA systems and operational logs, and provide a continuous stream of insights.
- **Power AI-Driven Insights:** Perform precise data classification to feed structured, high quality data into advanced AI models for deeper operational analysis.
- **Predict Equipment Failures Before They Happen:** Leverage AI-driven analytics to detect patterns, anticipate failures and enable proactive maintenance — reducing downtime and repair costs.
- **Optimize Drilling and Production Strategies:** Apply cloud-powered AI models to enhance drilling efficiency, optimize maintenance schedules and maximize asset performance.
- **Accelerate Decision-Making:** Convert large, complex datasets into real-time insights, supporting faster, more informed operational decisions.

Refine Operations To Keep Data Flowing and Propel Oil and Gas Forward

In oil and gas, every second counts, every decision impacts safety and every delay costs money. Slow, unreliable or unsecured data infrastructure is a risk you can't afford.

HCP Anywhere Enterprise keeps your operations moving forward — securely, efficiently and intelligently — no matter where the job takes you.

Your data should work as hard as you do. Let's make it happen.

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