

Unleashing the Power of AI with the Dell AI Data Platform

Open

Empower seamless integration by supporting diverse databases and file formats allowing an IT stack to evolve over time.

Flexible

Enable efficient scalability by accessing data at its source, allowing for the necessary expansion required to accelerate the deployment of AI models.

Secure

Proactively protect data, detect suspicious behavior and neutralize threats as they occur.

3-5X

Faster queries¹

40%

Reduction in cluster sizes¹

Up to 53%

Reduction in the cost of data analytics²

¹ Performance benchmarks based on testing conducted by Dell in July 2024 using TPC-DS 1TB and 10TB datasets stored on Dell ObjectScale against a variety of Dell Data Lakehouse cluster sizes

² Cloud Data Warehouse vs. Cloud Data Lakehouse: A Snowflake vs. Starburst TCO and Performance Comparison, published by GigaOm

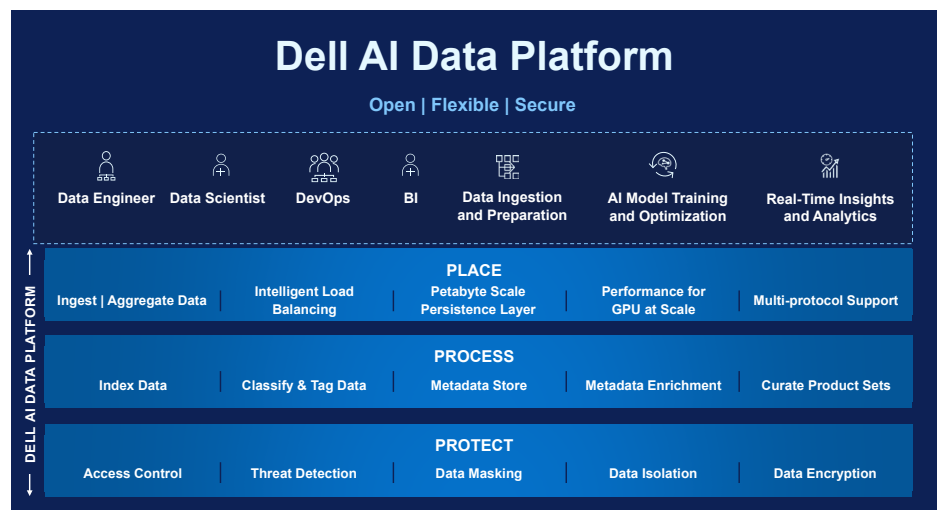
The Era of Interconnected Data

We live in a time where almost every device, application, and user are interconnected, producing endless streams of data. From wearable devices and smart homes to business ecosystems, this interconnectedness has created immense opportunities across sectors like healthcare, transportation, financial services, and beyond. But to maximize the value of this interconnected landscape, data must flow seamlessly across “networks of data,” allowing stakeholders to make informed decisions and unlock new possibilities.

To effectively harness the interconnected data landscape, organizations need a system that enables strategic placement, efficient processing, and secure protection of data. This is where the AI Data Platform stands apart, providing the tools necessary to empower businesses in this new era.

Introducing the Dell AI Data Platform

Redefine how businesses manage and harness their data in the AI-driven world. Moving beyond traditional, siloed solutions, this platform integrates cutting-edge software, data management, and storage into an open, flexible, and secure, scalable architecture. With the power to handle demanding workloads like machine learning, advanced analytics, and AI model training, the AI Data Platform enables seamless data placement, processing, and protection.



Use Cases for Retrieval-Augmented Generation Empowered by the Dell AI Data Platform



RAG systems are transforming healthcare, retail, and financial services by leveraging document stores and vector databases to retrieve and analyze unstructured data efficiently.



In **healthcare**, RAG enhances decision-making by providing clinicians with timely access to patient records, treatment guidelines, and research insights, improving care outcomes.



Retailers use RAG to deliver personalized shopping experiences through tailored recommendations and dynamic offers, while also optimizing inventory management.



Financial institutions benefit from RAG by detecting fraud, analyzing customer interactions, and offering real-time investment insights, fostering trust and streamlined operations.

These systems drive innovation, efficiency, and personalized solutions across industries, paving the way for smarter decision-making.



Empower Your AI Journey

At Dell, we believe your vision should never be held back by technological limitations. The AI Data Platform is your complete solution to transform how data is ingested, processed, and protected for AI and beyond.

Data Placement, Processing, and Protection

The AI Data Platform encompasses three key capabilities that ensure businesses can address modern data challenges holistically.

Data Placement

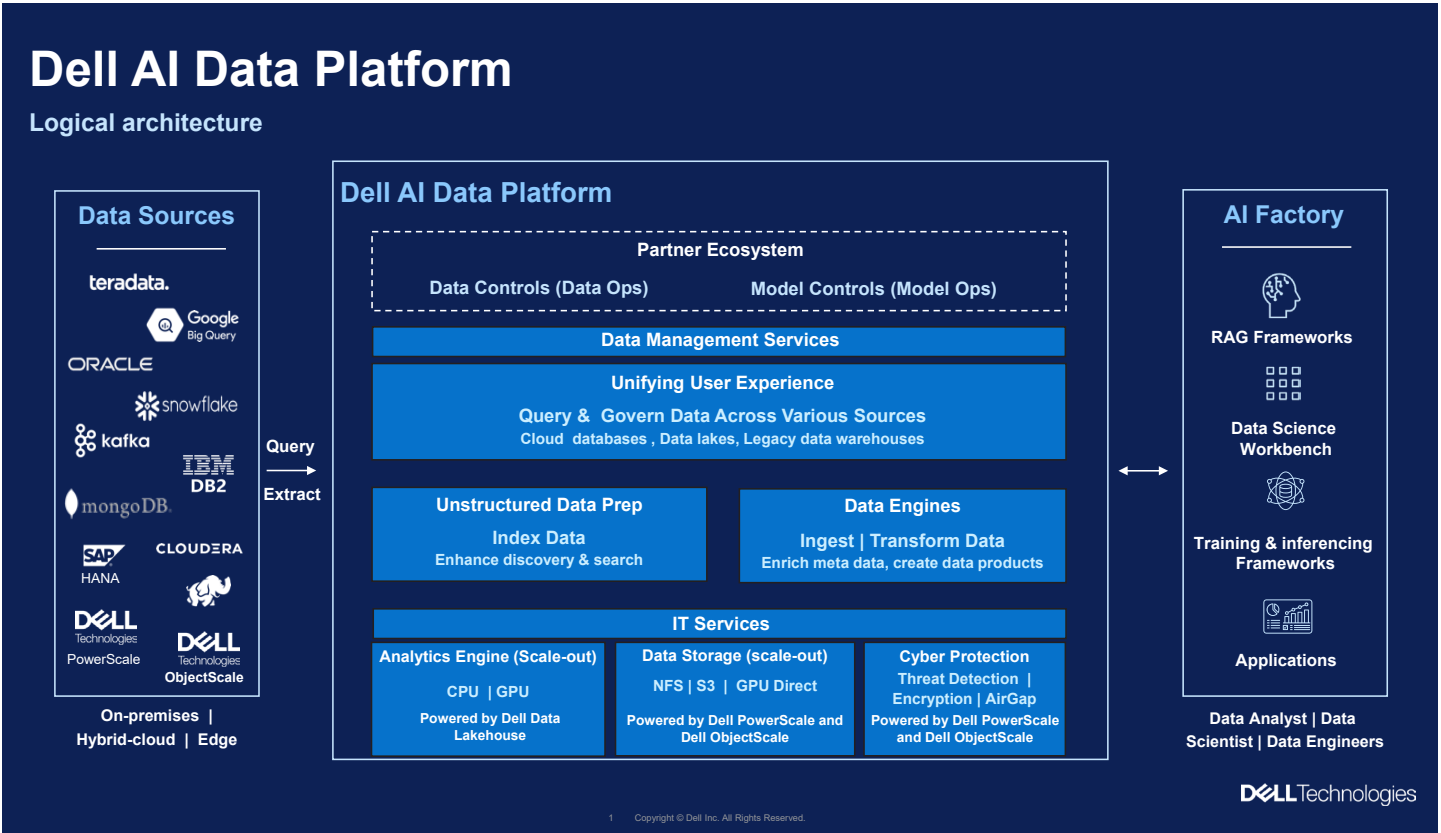
Streamline data collection and management with advanced ingestion and aggregation methods, including continuous streaming for logs and event data. Extract, load, and transform for batch processing, and replication for creating complete data copies across locations. Intelligent load balancing optimizes performance by evenly distributing client connections across interfaces. Scalable petabyte-level storage ensuring high performance with all-flash technology, automated data transfer, and GPU optimization for accelerated AI and machine learning. With multi-protocol support, including NFS, SMB, HDFS, and S3, users can securely access data through their preferred methods, enhancing flexibility and workflow efficiency.

Data Processing

Transform the approach to data management with advanced tools to classify and tag data for better governance and discoverability. MetadataIQ optimizes the process by indexing unstructured data and enabling the exchange of metadata across various data types. This includes importing metadata from diverse sources—such as structured, semi-structured, and unstructured data—to unify management and querying. MetadataIQ also enriches the metadata by adding detailed business context, such as annotations and categorizations, to enhance usability. These capabilities support the curation of comprehensive data product sets from structured, semi-structured, and unstructured sources, ensuring seamless accessibility across file and object stores.

Data Protection

Strengthen your organization's security with advanced solutions designed to control access, detect threats, and safeguard sensitive data. Built-in role-based access control (RBAC) and Active Directory integration ensure consistent and unified permission management. Defend against cyber threats with real-time user behavior detection, automated environment hardening, and XDR system integration. Enhance data protection with masking techniques that obfuscate sensitive information, while access zones provide secure data isolation and flexible workload management.



Successfully deploying AI solutions requires overcoming the limitations of traditional data architectures, which are often centralized, siloed, rigid, and proprietary. These outdated systems create bottlenecks, isolate valuable data, and restrict enterprises from adapting to changing business needs.

The AI Data Platform offers a modern alternative, designed to break through these barriers by embracing open standards, flexibility, and scalability. This platform empowers organizations to unify their data strategies, streamline operations, and unlock the potential of AI at scale.



Learn more [PowerScale](#), [ObjectScale](#), and [Dell Data Lakehouse](#)



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