Data-driven transformation on AWS with Informatica.

The challenge for today's enterprises is to unleash the power of their data, while getting more out of their IT investment. With Informatica on Amazon Web Services (AWS), organizations can evolve their business with data-informed agility, pay for what they need when needed, easily scale data management environments, and free up IT resources to rapidly deliver business differentiation. Informatica provides the foundation for transformational analytics on AWS, delivering trusted, timely and relevant data; combining on-premises and cloud sources, including social, IoT, and other big data sources; and natively supporting AWS data services.

The next big phase in many organization's data-driven digital transformation entails building new data management workloads on AWS and extending or migrating on-premises data management workloads to AWS. Most companies will evolve toward a hybrid data management architecture and need to manage and integrate data across disparate cloud and on-premises systems. Informatica uses an artificial intelligence (AI)-driven approach that effectively supports all these scenarios and enables multiple data management use cases on AWS to accelerate your unique journey to AWS.
Common data management use cases with Informatica and AWS

Whether organizations are looking to reduce infrastructure costs by moving their on-premises applications and data analytics to the cloud or to achieve greater business insights by deploying high-performance next-generation business intelligence initiatives in the cloud, Informatica on AWS can help organizations achieve their objectives.

Migrate with confidence to AWS

The Informatica Intelligent Data Platform helps organizations plan and execute complex migrations of data and analytical workloads to AWS, minimizing risk and duration of projects. Informatica enables customers to catalog their disparate enterprise-wide data for migration, so they can map out a predictable and manageable data migration roadmap. This is essential for migrating both transactional and analytical workloads to AWS.

To minimize risk and increase productivity related to data migration projects, this cataloging capability enables lineage, impact, and data relationships analysis powered by the CLAIRE™ engine, Informatica’s intelligent metadata-driven machine learning capability. Once the team has mapped out the data migration plan, Informatica’s modular solutions enable rapid movement of large data volumes to AWS, leveraging prebuilt, high-performance native connectors for AWS key services such as Amazon Relational Database Service (Amazon RDS) and Amazon Redshift. Informatica also enables ongoing synchronization between on-premises and AWS data systems. Leverage your existing investment in Informatica by easily moving your Data Integration (ETL/ELT), Data Quality, Master Data Management, Big Data Management, and other workloads to AWS.

Modernize your data warehouse with Amazon Redshift

Informatica’s hybrid data management solutions enable companies to modernize their data warehouse with Amazon Redshift, to drive actionable insights from increasing data volume and variety, benefit from cloud economies and elasticity, and support business demands for self-service, agile analytics. Informatica supports customers’ rapid experimentation by quickly kick-starting integration into a new data warehouse on Amazon Redshift and cost-effectively scaling the movement of data into that warehouse. Customers can migrate or extend on-premises enterprise data warehouses (EDW) to Amazon Redshift, allowing them to protect their investment, while realizing the benefits of a modern, petabyte-scale, data warehouse with Amazon Redshift.

Informatica offers hundreds of prebuilt connectors to facilitate connection of any cloud or on-premises data source to Amazon Redshift. A native, ETL/ELT Amazon Redshift connector enables mass ingestion of data and high performance loading, including pushdown to Amazon Redshift, partitioning and parallel data processing, so SLAs can be met.
Informatica connectors also offer other key data management capabilities for AWS data sources, such as data cleansing, deduping, and masking. Easy-to-use, codeless-driven, and role-based tools—including prebuilt templates, dynamic mappings, and data wizards—enable IT professionals as well as business users to productively deliver trusted data to the organization. Finally, enterprise metadata-driven cataloging capabilities empower business users with self-service data discovery and preparation, allowing organizations to support governed self-service and develop an enterprise data model iteratively and in collaboration with IT.

Accelerate big data insights with data lakes on AWS
With the Informatica Intelligent Data Lake solution, you can ingest, cleanse, process, govern, and secure any data, such as IoT and social data, into a trusted data lake on AWS, so more of the big data you need can be quickly turned into insights. Informatica’s solution relies on Amazon Simple Storage Service (Amazon S3) as the data lake storage system and leverages Amazon’s native Hadoop processing power with Amazon Elastic MapReduce (EMR) or other Hadoop distributions hosted on Amazon Elastic Compute Cloud (Amazon EC2).

Informatica’s solution enables you to integrate more data faster from more sources while turning big data into trusted data assets. Its unique metadata-driven AI and enterprise cataloging capabilities empower business stakeholders, such as analysts, to quickly discover, profile, prepare, and secure data for trusted business insight.

Combine Master Data Management with speed and agility of AWS
Informatica’s Intelligent Master Data Management (MDM) solutions help organizations manage and unify their most valuable customer, product, supplier, and other data assets. This helps organizations remove data fragmentation, streamline critical business processes, and create an enterprise-wide view of trusted and relevant data. You can now combine Informatica’s MDM capabilities with the agility of AWS to accelerate the speed of deployment to small, medium, or large organization. With Informatica on AWS you can catalog and discover data assets across your cloud and on-premises systems and create a trusted view of business-critical master data to cut costs, increase revenue by improving operations, and make more informed decisions.

Govern and secure your data on AWS
Informatica’s Intelligent Data Governance solution helps organizations ensure that their enterprise data is consistently trustworthy, governed, cataloged, secured, and compliant with regulations. With Informatica’s solution all key stakeholders can discover, catalog, cleanse, standardize, profile, and secure their data from AWS as well as any other cloud and on-premises data sources. Informatica’s AI-driven governance, data quality, and data cataloging capabilities enable you to intelligently govern your enterprise data. Our AI-driven data security capabilities give you full visibility to analyze and mitigate data sensitivity risk across AWS data services and any other cloud and on-premises data source.
Informatica for AWS data management

Metadata-driven AI is at the heart of Informatica's Intelligent Data Platform, which includes a comprehensive set of capabilities to support any data source, all key data integration and management patterns, any user and any latency, in cloud, on-premises, or hybrid data management environments. It includes Informatica’s Data Integration, Big Data Management, Master Data Management, Enterprise Data Catalog, Data Lake Management, Integration Hub, Data Quality, Data Security, and more.

The solution offers native support for key AWS services, including Amazon Redshift, Amazon Redshift Spectrum S3, Amazon Aurora, Amazon RDS, Amazon DynamoDB, Amazon EMR, and Amazon QuickSight, along with hundreds of prebuilt connectors for cloud and on-premises data systems.

Informatica's AI-driven, visual, role-based, and easy-to-use tools are designed to increase productivity for developers and citizen integrators alike and build the foundation for data visibility needed for data governance, quality, mastering, and security. The solution is designed with inherent scaling capabilities such as partitioning, clustering, and pushdown optimization and for operational confidence with proactive monitoring tools that let you catch and correct problems with production data early before they become more costly data issues.

Informatica products can be easily consumed and launched via the AWS Marketplace using pay-as-you-go (PAYG) and bring your own license (BYOL) models. This eliminates the need for time-consuming and costly investment in infrastructure and helps you rapidly stand up intelligent data management solutions on AWS, unleashing the power of trusted, actionable data in a cost-effective manner.

Read the following reference architecture guides to learn how you can unleash the disruptive power of data of Informatica on AWS:

• [Cloud Analytics for Amazon Redshift Reference Architecture](#)
• [Data Lake Management on AWS Reference Architecture](#)