

Intelligent Cloud Lakehouse Data Management for Cloud Analytics

Key Benefits

- Reduce risks and costs of data warehouse and data lake consolidation and modernization
- Accelerate first time to value and gain rapid ROI
- Drive greater productivity and efficiency
- Gain visibility across your entire data landscape with end-to-end data lineage
- Future proof your cloud environment
- Deliver trusted insights to business stakeholders and non-technical users

Realize the Promise of Cloud Data Warehouses and Data Lakes With a Modern, Intelligent, Automated Solution from Informatica

Organizations today are rapidly moving to the cloud for agility, scalability, flexibility, and cost savings. As part of this move, they are either building new data warehouses or data lakes in the cloud or modernizing or consolidating on-premises data warehouses in the cloud to support their cloud analytics initiatives. And more recently, organizations are building lakehouses in the cloud. A lakehouse merges data warehouses and data lakes into one data platform, bringing the best of both worlds together by combining technologies for business analytics and decision-making with those for exploratory analytics and data science.

Yet organizations face critical challenges in realizing the full potential of cloud analytics in a complex, multi-cloud world. In particular, data quality and data management present significant stumbling blocks for enterprises seeking timely ROI from their investments in consolidating and modernizing data warehouses and data lakes in the cloud.

As enterprises build, consolidate, or modernize analytics in the cloud, a key concern is the data. According to analyst firm TDWI, a majority (64%) of organizations surveyed believe that data quality and data management issues are the leading barriers to successfully delivering cloud data warehouses and data lakes.¹ In the same survey, a clear majority (86%) responded that a systematic approach to cloud data management is important to the success of their data strategy. Without this, enterprises will not be able to accelerate time to value, reduce costs, improve efficiency, increase scale, add flexibility, and deliver trusted insights for business decision making.

These challenges are not new. The same difficulties and mistakes that have characterized on-premises data warehouses and data lakes apply today. Organizations that can avoid them in the cloud will be better positioned to seize competitive advantage, drive innovation, and gain more value from their investments from day one.

¹ TDWI Best Practices Report: Cloud Data Management

Take Advantage of the Cloud and Avoid the Data Management Mistakes of the Past

Whether you already have investments in on-premises data warehouses and data lakes or are starting all-new in the cloud, it's essential to take the right approach to data quality and data management.

In the on-premises era, many analytics initiatives failed to deliver their full value due to data quality and data management issues. Data warehouses were expensive and presented difficulties in scalability and flexibility. As for data lakes, they often devolved into data “swamps,” hardly an agile and innovative solution for delivering new data-driven insights.

The reason for these failures can be ascribed to three suboptimal approaches:

- Using manual efforts such as hand coding to solve data quality and data management challenges
- Tackling end-to-end data management with a patchwork of disjointed point products
- Relying on limited solutions from cloud vendors that could only do basic data integration or ingestion

Manual approaches such as hand coding are expensive to develop and difficult to maintain, even in the new world of cloud. While hand coding may seem like a plausible solution during a project's initial stages, it has several drawbacks that make it unsuitable for modern cloud lakehouse data management. Hand coding requires skilled developers and lacks reusability. Changes in technology, platform, or processing engine require reengineering and recoding—costly and time-consuming processes that hamper agility and innovation.

Likewise, using multiple point products that are not integrated increases cost and complexity. It can take an organization up to 10 different point products to achieve true end-to-end cloud lakehouse data management. Stitching together these disjointed products means that organizations are consigned to constant do-it-yourself integration, changing roadmaps, project overruns, and inconsistent data governance and quality.

Limited solutions from platform-as-a-service (PaaS) or infrastructure-as-a-service (IaaS) vendors—although designed for the cloud—combine many of these downsides. They typically offer basic data integration and ingestion, are reliant on hand-coded development, and provide capabilities that extend only as far as their own platforms.

The Importance of an Independent Cloud Lakehouse Data Management Solution

Organizations seeking to accelerate their cloud data warehousing and data lake initiatives should avoid inefficient, expensive approaches like hand coding, point products, and limited solutions by choosing a best-of-breed, independent cloud lakehouse data management solution.

The Informatica® Cloud Lakehouse Data Management Solution is the only enterprise-grade, cloud-native, end-to-end data management solution for modernizing data warehouses and data lakes in the cloud. Built on the industry-leading Informatica Intelligent Cloud Services (IICS)SM, a modern, modular, multi-cloud, microservices-based, API-driven, AI-powered integration platform as a service, the Informatica Cloud Lakehouse Data Management Solution combines best-of-breed:

- **Data integration:** intelligent, automated data integration capabilities enable you to quickly and efficiently build data pipelines to feed your cloud data warehouse and data lake
- **Data quality and data governance:** intelligent, automated, data quality and governance ensure that data is cleansed standardized, trusted, and secure
- **Metadata management:** a common enterprise metadata foundation enables intelligent, automated, end-to-end visibility and lineage across your environment

The entire solution is built on a foundation of AI-powered intelligence and automation. This comprehensive, intelligent, and automated cloud-native solution addresses all the complex data management challenges involved in cloud data warehouses and data lakes.

Benefits of Informatica Cloud Lakehouse Data Management

- De-risk consolidation or modernization initiatives by avoiding the challenges that come with using hand coding and multiple, limited point solutions to address data management issues.
- Gain cloud scale and agility with rapid deployment of jobs, minimal install and setup, automatic upgrades, fast data onboarding, and an integrated solution for high availability and advanced security.
- Demonstrate rapid ROI with faster first time to value by ensuring the successful completion of data warehouse and data lake migration and modernization projects to the cloud, on time.
- Increase productivity and save costs with an integrated and comprehensive cloud lakehouse data management solution that delivers intelligence and automation across multi-cloud environments.
- Accelerate projects by driving greater efficiency throughout the software development lifecycle (SDLC) with intelligence and automation.
- Improve visibility by connecting and scanning metadata for all types of databases, SaaS applications, ETL tools, BI tools, and more to provide complete and detailed data lineage.
- Future proof from rapidly changing cloud platforms (e.g., Amazon Web Services, Microsoft Azure, Google Cloud Platform, Snowflake, Databricks Delta Lake, etc.) and support multi-cloud environments.
- Successfully deploy a new data warehouse and data lake in the cloud with high-performance data integration that connects to all data and seamlessly integrates high volumes of data for any analytics workload.
- Get up and running quickly without advanced training by leveraging out-of-the-box connectivity to hundreds of data sources and take advantage of graphical, codeless integration and built-in complex transformations.
- Reduce time to market by quickly developing, deploying, and refreshing data pipelines for new, non-technical users.

About Informatica

Digital transformation changes expectations: better service, faster delivery, with less cost. Businesses must transform to stay relevant and data holds the answers.

As the world's leader in Enterprise Cloud Data Management, we're prepared to help you intelligently lead—in any sector, category, or niche. Informatica provides you with the foresight to become more agile, realize new growth opportunities, or create new inventions. With 100% focus on everything data, we offer the versatility needed to succeed.

We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption.

With the industry's leading, metadata-driven cloud lakehouse data management solution, you unleash the full potential of your cloud data warehouse and data lake across a multi-cloud environment. You gain efficiencies and cost savings and can start small and scale with best-of-breed data integration, data quality and governance, and metadata management—built for the cloud, on an AI-powered, intelligent data platform.

Next Steps

[Contact us](#) to learn more about Informatica Cloud Lakehouse Data Management.



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