SNOWFLAKE CLOUD DATA PLATFORM FOR EDUCATION

Comprehensive, Real-Time Insights with a Simple, Powerful, and Flexible Platform.

SINGLE, UNIFIED PLATFORM

Consolidate data warehouses, data marts, and data lakes into a single source of truth with Snowflake Cloud Data Platform's multi-cluster shared data architecture.

CROSS-REGION, CROSS-CLOUD

Distribute your data across regions or even across cloud providers. With Snowflake's cloud-agnostic platform, mix and match clouds as you see fit.

ALL YOUR DATA

Support a broad range of workloads with data sets stored in the cloud, at scale, and in their native formats, without complex transformations.

FULLY MANAGED SERVICE LAYER

Authenticate user sessions, manage resources, enforce comprehensive security measures, compile queries, enable data governance, and ensure ACID compliant transaction integrity.

INSTANT, EFFICIENT, AND NEAR-INFINITE SCALE

Elastically scale compute resources dedicated to each workload, automatically or on the fly, to preserve peak performance and take advantage of per-second pricing to avoid paying for idle capacity.

SECURE DATA SHARING

Instantly and securely share governed data across your organization and with external partners without having to copy or move data.

ALL THE DATA FOR RAPID, RELIABLE INSIGHTS

Academic institutions and educators are looking for new, data-driven strategies to achieve their mission and improve education delivery. They want a holistic view of data to improve the student experience, optimize fundraising opportunities, and become more efficient operationally. But most academic institutions rely on legacy data warehouse technology and siloed data sources that prevent them from gaining insights.

Unfortunately, conventional data warehouses and big data platforms have struggled to deliver on their fundamental promise to make it easy to amass many types of data, enable rapid analytics, and deliver reliable insights from all their data users.

Although there are many compelling reasons for moving data and analytics to the cloud, forward-thinking organizations are looking beyond the benefits of isolated cloud implementations. They are tired of analytic solutions that create on-premises or cloud data silos and increase complexity for IT professionals, delaying time to value for users. They want to combine multiple types of data and a diverse array of analytic initiatives into a progressive and extensible cloud strategy.

THINK LONG-TERM

Snowflake Cloud Data Platform was created to help organizations of all sizes break free from the limitations of conventional software solutions. Snowflake enables educators and academic institutions to fully deliver on their mission by providing secure, governed access to all data through a single, unified cloud data platform. Our patented multi-cluster shared data architecture easily and securely enables a wide variety of workloads—data warehouses, data lakes, data pipelines, and data exchanges—and many types of business intelligence, data science, and data analytics applications.

In addition, the platform easily loads, integrates, and analyzes all types of structured and semi-structured data inside a unified repository that seamlessly operates across clouds and across regions, while supporting these workloads and applications.

With Snowflake, you can also collaborate across departments; local, state, and federal governments; and partners. You can also provide data and insights to external audiences such as donor and alumni networks by seamlessly and securely sharing data. With Snowflake Cloud Data Platform as your foundation, you can shift your focus from managing a sprawl of disparate infrastructure to deriving insights from all your data, by all your users, all within a simple, powerful, and flexible solution.

Only a unique multi-cluster architecture that works with any cloud delivers a host of powerful services to enable many of modern use cases and workloads.

START WITH THE RIGHT CLOUD ARCHITECTURE

Traditional on-premises data warehouses and data lakes are difficult to scale. Even traditional data infrastructures that were adapted for the cloud don't provide the flexibility that you need. But Snowflake allows you to scale storage and compute resources independently, maximizing flexibility as you add users, data, and workloads.

- **Any Cloud:** Built on versatile blob storage, the storage layer holds your data, tables, and query results. This scalable repository handles both structured and semi-structured data and can span multiple regions and clouds.
- **Multi-Cluster, Shared Data Services:** The services layer includes the compute horsepower to process enormous quantities of data with maximum speed and efficiency, thanks to Snowflake's unique architecture. You can specify the number of dedicated clusters you want to use for each workload or let the service scale automatically.
- **Many Workloads:** Snowflake enables a wide variety of workloads and applications, including data warehouses, data lakes, data pipelines, and data exchanges as well as business intelligence, data science, and data analytics applications.
- **Secure and Compliant:** Snowflake meets NIST 800-145 requirements and is FedRAMP In Process (Moderate). Snowflake also meets SOC1 Type 2, SOC2 Type 2, ISO 27001, FISMA Moderate, NIST 800-171, FIPS 140-2, ARS 3.1 PCI DSS, and HIPAA standards.

Snowflake automates everything from how data is stored and processed to transaction management, security, governance, and metadata management. All you have to worry about is loading and querying your data, and Snowflake takes care of the rest.

ONE PLATFORM, NO HEADACHE, ALL THE POSSIBILITIES

Intelligent data acquisition, management, and analytics have become important requirements for IT modernization and creating academic excellence and value. Standardizing on Snowflake Cloud Data Platform allows you to shift your focus from managing infrastructure to managing data, and to obtaining every possible insight from that data. Having a unified cloud repository enabling a single source of truth makes it easy to analyze your data and share it externally as part of a broad cloud ecosystem.

This unique architecture allows you to run multiple workloads across multiple teams and departments without resource contention, maximizing performance and efficiency. Since Snowflake is delivered as a service, you can spend your time extracting value from your data rather than managing the pipelines used to deliver that data.

Snowflake works with leading technology offerings to build a complete solution. From data integration and ingestion to data science and business intelligence, Snowflake works directly with the tools you already own, allowing you to get better value from your data and technology investments.

Delivered as a service, and with consistent functionality across multiple clouds, Snowflake's advanced architecture allows one cohesive platform to serve all types of users and workloads in a consistent way. Centralizing data in a unified, governed, managed data platform allows all authorized users to access accurate and timely data for analysis.

MULTI-CLUSTER COMPUTE ARCHITECTURE

Snowflake's unique architecture separates storage from compute. There's no resource contention, and there are virtually no limits on how many queries or other workloads you can execute or how many users can access the same single source of truth. All workloads can simultaneously leverage the compute power they need, when they need it.

UNIVERSAL PLATFORM SERVICES

The cloud services layer unifies security, governance, and metadata management. It protects your data and optimizes the performance of each workload, eliminating resource contention and guaranteeing transactional consistency for all your data.

ELASTIC, MULTI-FACETED STORAGE

Snowflake lets you store a wide array of data types in their native forms, without creating new data silos. Automatic and near-infinite cloud elasticity releases the resources you need, when you need them, and you never have to pay for idle capacity.

ROBUST TRANSACTION MANAGEMENT

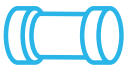
Snowflake Cloud Data Platform supports accurate data loading and analytics on mixed data formats with complete transactional integrity. This modern architecture guarantees the accuracy of all database transactions and ensures optimal performance for all types of query activity.

INDUSTRY-LEADING SECURITY AND GOVERNANCE

Every aspect of Snowflake is geared toward protecting your data, both in transit and at rest, with an emphasis on encryption, access control, data storage, and physical infrastructure in conjunction with comprehensive monitoring, alerts, and cybersecurity practices.

COMPREHENSIVE METADATA MANAGEMENT

With all your data and metadata integrated in a single system, your user community can more easily obtain data-driven insights. Snowflake gives you a single, unified system for easily storing and analyzing vast amounts of data in the cloud.



CONTINUOUS DATA PIPELINES

Snowflake includes a serverless ingestion service called Snowpipe, which uses a REST API to asynchronously load data. Snowflake Streams and Tasks make it easy to schedule data loads for SQL jobs. The platform automatically transforms data into the type and shape required for each target table. An Apache Kafka connector lets you continuously stream JSON records for storage and analysis.

OPTIMIZED DATA LAKE MANAGEMENT EXTENDING THE VALUE OF YOUR DATA LAKE

Snowflake external tables work with data directly stored in your Amazon S3, Azure Blob Storage, or Google Cloud Platform data lake. Materialized views on these external tables let you materialize all your data or just the portion of the data set that you use most frequently, eliminating the need to build an ETL layer or orchestration pipeline.

GLOBAL DATA REPLICATION AMONG MULTIPLE CLOUDS

Snowflake's cross-cloud data platform enables free and secure movement of data anywhere in the world, while also allowing you to select cloud storage vendors that meet the needs of each application or business unit.

HIGH AVAILABILITY AND AUTOMATED FAILOVER

Snowflake replicates data across multiple regions and clouds. This global footprint guarantees instant access and recovery for databases of any size, anywhere in the world.

SECURE DATA SHARING

With Snowflake Secure Data Sharing, you don't have to copy or move your data to share data within your organization, with other departments and governments, or with partners. Data is live, ready to use, and always fresh. Snowflake leverages SQL to streamline data access, loading, and querying.

SNOWFLAKE DATA MARKETPLACE

Snowflake makes it easy to source external data from Snowflake Data Marketplace and enables you to create your own data exchange to improve collaboration with students and teachers, other departments, state and local governments and public and private partners.

ACADEMIC EXCELLENCE, STRENGTHENED PROGRAMS AND ALUMNI RELATIONS, OPERATIONAL EFFICIENCY

Snowflake enables educators and academic institutions to fully deliver on their mission by providing secure, governed access to all data through a single, unified cloud data platform. With actionable intelligence derived from a holistic view of all data, educators have a deeper understanding of the entire student experience, enabling them to drive better learning, improve student outcomes, strengthen advancement programs, optimize alumni relations, and achieve administrative and operational efficiency.

With Snowflake, you can install a modern, flexible and integrated information system to support diverse institutional needs, improve teaching and learning experiences, and deliver access to fresh data for planning and analysis. This will enable you to improve academics, increase student retention and completion rates, and optimize courses.

A single source of truth that connects data in one place will enable you to build and nurture relationships with a broad array of constituents including private donors, policy makers, prospective students, and former students. It will also help you improve fundraising, connect donors to your academic mission, secure commitments required to advance the institution's priorities and programs.

With a cloud data platform foundation you can drive accountable, transparent management practices that promote service and balance risk, enhance reputation, lower costs, and ensure compliance across operational functions. Departments can develop a solid and sustainable revenue model and maintain a sustainable administrative expense model to support the institutional mission. This will promote greater revenues by enabling you to plan, track, and manage funding commitments.

CHOOSING THE RIGHT CLOUD DATA PLATFORM IS CRITICAL TO ACHIEVING YOUR MISSION. WITH SNOWFLAKE, EDUCATIONAL INSTITUTIONS AND DEPARTMENTS CAN:

- Drive academic excellence in service of their mission
- Strengthen research and advancement programs and alumni relations
- Optimize administration and deliver operational efficiency

ABOUT SNOWFLAKE

Thousands of customers deploy Snowflake Cloud Data Platform to derive all the insights from all their data by all their business users. Snowflake equips organizations with a single, integrated platform that offers the only data warehouse built for any cloud; instant, secure, and governed access to their entire network of data; and a core architecture to enable many other types of data workloads, such as developing modern data applications. Find out more at **snowflake.com/education.**