snowflake®

SNOWFLAKE CLOUD DATA PLATFORM

Enable any data workload on any cloud with a simple, powerful, and flexible platform.

SINGLE, UNIFIED PLATFORM
Snowflake's multi-cluster shared data architecture consolidates data warehouses, data marts, and data lakes into a single source of truth that powers multiple types of analytics.

CROSS-REGION, CROSS-CLOUD
With Snowflake's cloud-agnostic platform, you can distribute your data across regions or even across cloud providers. Snowflake allows you to mix and match clouds as you see fit.

ALL YOUR DATA
Data sets are stored in the cloud, at scale, and in their native formats, without complex transformations, supporting a broad range of use cases.

FULLY MANAGED SERVICE LAYER
Autheticate user sessions, manage resources, enforce comprehensive security measures, compile queries, enable data governance, and ensure atomicity, consistency, isolation, and durability (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.

GLOBAL DATA SHARING
Instantly and securely share governed data across your organization, and beyond, with external partners but without having to copy or move data.

GET WHAT YOU WERE PROMISED

Conventional data warehouses and big data platforms have failed to deliver on their fundamental promise: to make it easy to amass many types of data, enable rapid analytics, and deliver reliable insights to all your business users.

While 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 a multitude of data silos, in the cloud and elsewhere, that increase complexity for IT professionals and delay time to value for business 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 was created to help organizations of all sizes break free from the limitations of these conventional software solutions. Our patented multi-cluster shared data architecture delivers a cloud data platform that 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 all of the business units of your organization, with your customers, and with external business partners by seamlessly and securely sharing data to make timely, data-driven decisions.

With Snowflake's 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, and all within a simple, powerful, and flexible solution.
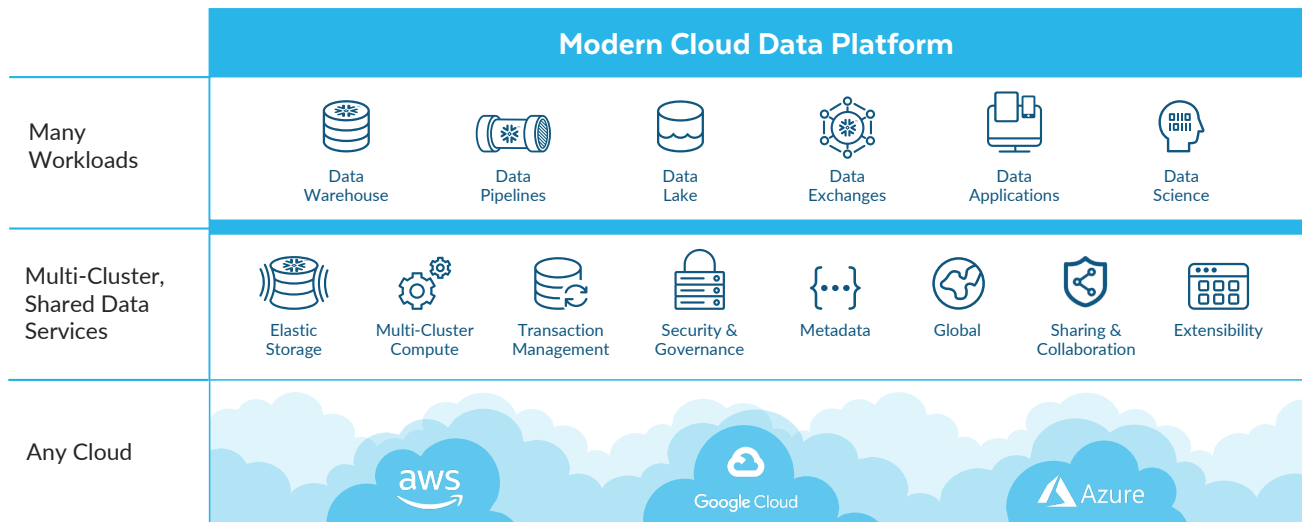
Figure 1: Only a unique multi-cluster architecture that works with any cloud delivers a host of powerful services to enable a number of modern use cases and workloads.

START WITH THE RIGHT CLOUD ARCHITECTURE

While traditional and "cloud-washed" data warehouses and data lakes are difficult to scale, 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.

The platform 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 differentiators in nearly every industry. Standardizing on Snowflake's 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 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 for building 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 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

The 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's cloud data platform 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

The Snowflake cloud data platform includes a serverless ingestion service called Snowpipe, which uses a REST API to asynchronously load data. Snowflake's 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.

EXTEND 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 or just the portion of the data set that you use most frequently, eliminating the need to build an extract, transform, and load (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 Data Sharing, you don't have to copy or move your data in order to collaborate via data across your organization, with your customers, or with your business partners. Data is live, ready to use, and always fresh. Snowflake's cloud data platform leverages SQL to streamline data access, loading, and querying.

PUBLIC AND PRIVATE DATA EXCHANGES

Source and exchange data without creating complex interfaces or cumbersome file-transfer procedures. The Snowflake cloud data platform makes it easy to participate in public data exchanges as well as create your own private exchange so you can publish, access, and monetize data, while controlling data access, using standard SQL tools.

SNOWFLAKE EDITIONS AND SUPPORT OFFERINGS

STANDARD

Standard

Complete SQL data warehouse

Secure data sharing across regions/clouds

Business-hour support M-F

1 day of time travel

Always-on enterprise-grade encryption in transit and at rest

Customer-dedicated virtual warehouses

Federated authentication

Database replication

PREMIER

Standard +

Premier support 24 x 365

Faster response time

SLA with refund for outage

ENTERPRISE

Premier +

Multi-cluster warehouse

Up to 90 days of time travel

Annual rekey of all encrypted data

Materialized views

AWS PrivateLink available for extra fee

BUSINESS CRITICAL

Enterprise +

HIPAA support

PCI compliance

Data encryption everywhere

Tri-Secret Secure using customer-managed keys

AWS PrivateLink support

Enhanced security policy

Database failover and failback for business continuity

VIRTUAL PRIVATE SNOWFLAKE

Business Critical +

Customer-dedicated virtual servers wherever the encryption key is in memory

Customer-dedicated metadata store

Additional operational visibility

ABOUT SNOWFLAKE

Snowflake's cloud data platform shatters the barriers that have prevented organizations of all sizes from unleashing the true value from their data. More than 2,000 customers deploy Snowflake to advance their businesses beyond what was once possible by deriving 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 the cloud; instant, secure, and governed access to their entire network of data; and a core architecture to enable many types of data workloads, including a single platform for developing modern data applications.
Snowflake: Data without limits. Find out more at **snowflake.com.**

snowflake.com   #YourDataNoLimits