

Cloud and Data

data cloud

A data cloud provides an open, cloud-based data infrastructure that enables the availability, integration, portability, availability, and security of enterprise data.

Storage Systems in cloud

- Block based
- Object based
- File based

- Data transformation is made all the more difficult by siloed systems that require a lot of effort and resources to maintain and manage.
- **Incomplete data sets.** Data silos lock data away in separate data sources from users who can't access it.
- Inconsistent data
- Security issues

- **Agile data architecture for data:** Data clouds rely on a [data warehouse](#), a [data lake](#), or even a [data lake](#) in some cases to store all the data collected from source systems. The data architecture you choose will largely depend on your unique requirements, but you should be able to leverage other cloud-based data services and integrations, such as cloud database engines, data pipelines, and APIs.
- **Built-in AI and machine learning:** Intelligent capabilities, such as self-service analytics and AI and machine learning, help organizations save time and effort and support innovation. Data clouds provide automation and advanced tool kits that help you embed AI/ML and data science into business processes and context.

- **Open data platform:** The data platform orchestrates the ingestion and scaling of data sources and the data architecture itself. This component creates a unified source of truth that can be reused for many different purposes across the organization. Open data platforms allow organizations to manage data and applications across multiple multicloud and hybrid cloud environments.
- **Trusted security foundation:** Data needs to be trusted—up-to-date, accurate, and always protected—to streamline data collection and maximize data usage. Data clouds should be secure by default and offer advanced compliance, redundancy, recovery, and reliability capabilities, regardless of the data source.
- Data cloud uses and examples