

# Precisely Data Integrity Suite for Data Mesh

Start building your data mesh architecture with the Precisely Data Integrity Suite.

## Overview

Data mesh is a modern decentralized (or federated) architectural approach that allows organizations to make more timely and trusted data-driven decisions by empowering domain teams to create, organize, and maintain trusted data products for data users.

Data mesh is not a single solution or application, but a combination of data management components. Critical requirements of data mesh include self-service access to all critical data by domain experts, decentralized data governance, and a user-friendly interface to discover, understand, and access approved data products.

With the distributed architecture of data mesh, decentralized data governance is a key priority to ensure compliance with privacy, security, and data policies – while being flexible enough to adapt to domain level requirements.

## Data Integrity for Data Mesh: Preparing for a Modern Data Management Architecture

While a data mesh architecture requires a combination of data management solutions that work together, you can begin preparing for data mesh by prioritizing key requirements:

- **Domain Ownership:** Empower domain experts to create, organize, and manage data products.
- **Access Domain Data:** Deliver self-service access to all critical data by domain owners.
- **Decentralize Governance:** Oversight of security, privacy, and compliance at the domain level.
- **Discover Data Products:** Discover, understand, and access trusted data products on-demand.



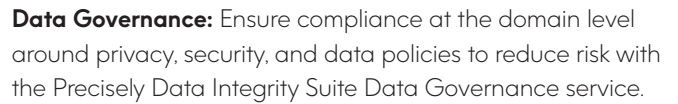
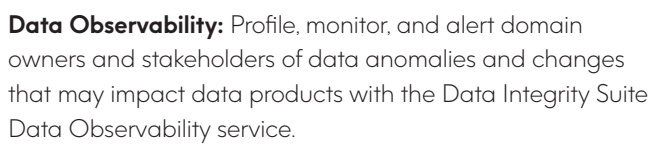
## Benefits

Benefits of a data mesh:

- ✓ Faster delivery of data products empowering business teams to make more timely and trusted business decisions.
- ✓ Accelerate discovery and understanding of trusted data products for more timely data-driven decisions.
- ✓ Improve efficiency for domain experts tasked with delivering consistent and timely data products.
- ✓ Ensure visibility and monitoring of data policies at the domain level to decrease risk and compliance violations while enabling autonomy.
- ✓ Increase data literacy to drive more comprehensive and trusted data-driven decisions from your data products.



**Data Integration:** The Precisely Data Integrity Suite Integration service helps ensure that all critical data is available to domain experts to develop complete and up-to-date data products.



Increase overall data literacy by sharing a unified view of data meaning, ownership, accountability, quality, rules and metrics, and business impact of data products.



Leverage Precisely Data Integrity Suite services such as the Data Quality, Geo Addressing, Data Enrichment, and Spatial Analytics services within the data mesh platform to address unique data product requests.

The diagram illustrates the Data Integrity Framework, organized into three main layers:

- APIs and SDKs:** The top layer, highlighted in a dark blue bar.
- Data Integrity services:** The middle layer, containing seven services:
  - Data Integration:** Represented by a circular arrow icon.
  - Data Observability:** Represented by a circular arrow with a magnifying glass icon.
  - Data Governance:** Represented by a circular arrow with a document icon.
  - Data Quality:** Represented by a circular arrow with a checkmark icon.
  - Geo Addressing:** Represented by a globe icon.
  - Spatial Analytics:** Represented by a location pin icon.
  - Data Enrichment:** Represented by a stack of layers icon.
- Data Integrity Foundation:** The bottom layer, containing three foundational components:
  - Data catalog:** Represented by a document icon with a list.
  - Intelligence:** Represented by a brain icon.
  - Agents:** Represented by a gear icon.

At the bottom of the diagram, a dashed line separates the framework from the deployment environments: **Cloud / VPC / On-Premises**. Below this, logos for the supported cloud providers are displayed: **kafka**, **snowflake**, **databricks**, **CONFLUENT**, **aws**, **Google Cloud**, and **Azure**.