Iceberg Catalogs

Arsham Eslami - Greybeam Feb 27th 2025

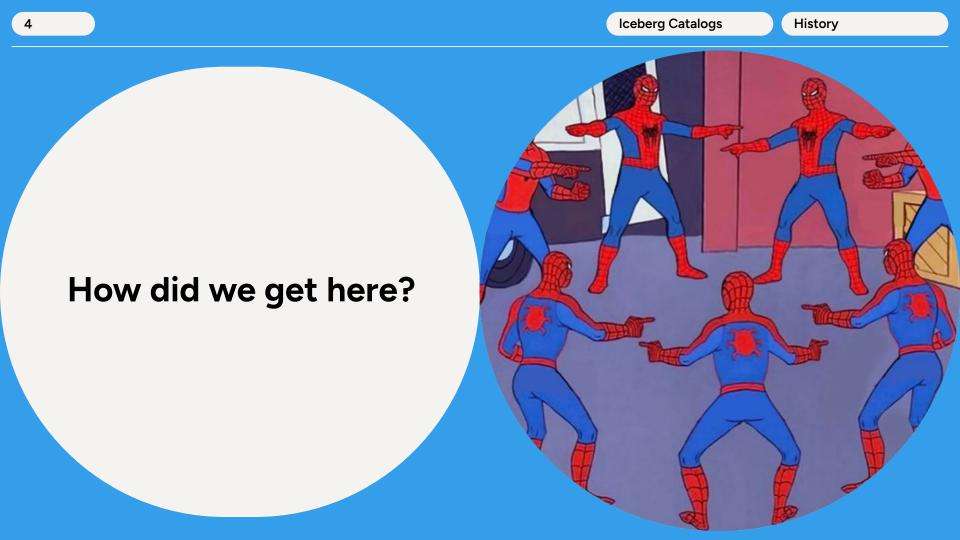
What is a Data Catalog?

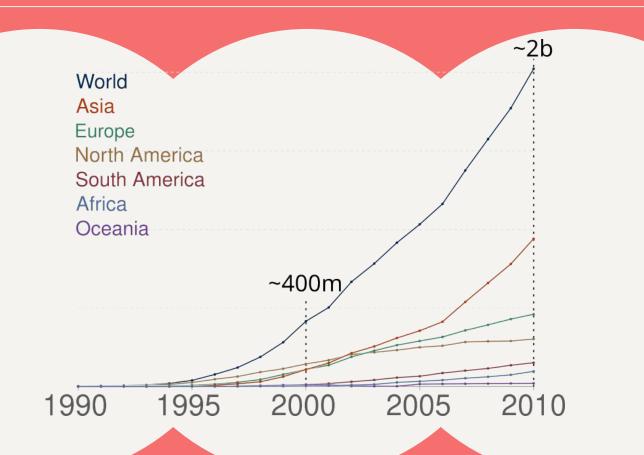
Schema Registry

Metadata Store

Business Context

Why you shouldn't listen to me!





6 Presentation Title Massive Datasets

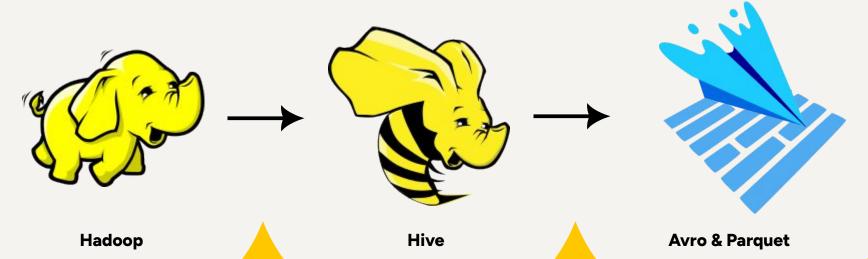
Massive Datasets

Oracle, MySQL, SQL Server Teradata, Netezza,
Greenplum

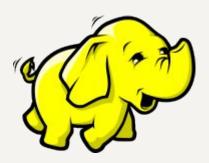


MapReduce, GFS

Hadoop Era



Lakehouse Era



Object Storage



Open Tables Formats



Query Engines

Why do we need a catalog?

Managing Files

Transaction Management

Improve Query Performance

Table metadata in a **relational database**

Centralized approach

Service Based Catalogs

File Based Catalogs

Metadata is **stored as files** inside object storage

Decentralized approach

Metadata is **stored as files** inside object storage but...

Centralized via API

REST spec is open source



The OGs

14 Presentation Title Lakehouses

Tabular Catalog

Purpose

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Example

"Lorem ipsum dolor sit amet, consectetur adipiscing elit."

AWS Glue Catalog

Purpose

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Example

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Project Nessie

Purpose

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Example

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The New Kids

18 Presentation Title Lakehouses

Polaris

Purpose

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Example

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Gravitino

Purpose

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Example

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LakeKeeper

Purpose

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Example

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