



Analyze services provides a framework for ingesting and managing data, executing ETL's and analytics applications and quickly visualizing retrospective, prospective, predictive, and prescriptive data.

## Value

- **More data, more insights:** Enables the development big data analytics solutions to derive predictions and meaningful insights
- **Simplification:** Reduces the complexities of building and maintaining distributed big data computing environments by providing a common set of tools to ingest, transform, and extract data for advanced data visualization

## Analyze Features

The Analyze platform service has four types of services.

- **Data Ingestion Framework** is a set of micro-services that deliver reliable and high performance ingestion of data sets to the Big Data Platform service in a highly scalable way. The ingestion framework can receive data through a variety of protocols, classify the data received (including validate that it conforms the canonical type definitions and quarantine invalid data) and extract business metadata, aggregate and package sets of data for efficient downstream batch processing and copy data from one storage system to another
- **Data Storage** of data for analysis is provided in S3 with support for multi-tenancy. In addition, it offers provenance to support detailed data processing traceability
- **Data Processing Frameworks** enable the creation, deployment and execution of data processing pipelines through a set of primitives/SDK to integrate newly ingested data with existing data and apply transformations as determined by data processing pipelines (extract, transform, and load)

## Data Processing Frameworks Features

The Analyze - Data Processing framework, introduced above, is available in different formats, with similar capabilities, to suit your data processing needs.

- **Big Data Platform (BDP)** is a version of the data processing framework that is a Hadoop-based compute environment for processing large volumes of unstructured data
- **Data Warehouse and OLTP** is a version of the data processing framework that is optimized for processing large volumes of structured data via a data warehouse, or small volumes of structured data via an OLTP system
- **Data Ingestion Integration** this service connects to the Analyze - Data Ingestion service to allow integration of newly ingested data with existing data and apply transformations
- **Data access** is via a set of capabilities to retrieve processed data securely to enable end-user applications
- **Access control** supports the creation of new users, updating of profiles, granting or revoking access, deactivation of accounts, the import of new user identities, and synchronization for federated access through the integration of Authorize - IAM
- **Logging and error handling** supports logging of data processing events with error handling capabilities through the integration of Host - Logging

Consult [hsdp.io](https://hsdp.io) for details