SAP Data Hub
Freedom of Data in a Diverse Landscape

Tobias Koebler & Axel Schuller
SAP Data Hub - Product Management
SAP SE
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Introduction

Product Insights

Data Warehousing and SAP Data Hub

Demo
Introduction
MISSING LINK
Between Big Data and Enterprise Data. Data is kept in silos across the enterprise.

GOVERNANCE
Lack of security and visibility. Who changed the data? What was changed? Who is accessing it?

LIMITED TOOLS
Lack of enterprise readiness. High effort to productize complex data scenarios across data landscape

LANDSCAPE CHALLENGES

Enterprise data landscapes are growing increasingly complex
What would SAP Data Hub look like in the real world?

- Knows weather conditions
- Communicates with pilots
- Monitors airport activities
- Schedules all takeoffs
- Orchestrates landing strip
- Knows traffic
- Schedules all landings
- Knows crews / passengers / destinations
- Influences ground processes
- Leverages different tools / technologies
- Oversees all types of vehicles
- Monitors airport activities
Product Insight
Simplified deployment of SAP Data Hub in cloud environments and on-premise

- All necessary components are fully containerized and delivered as a Docker image, including SAP HANA
- Decoupling data processing (in Kubernetes) and data storage (any support cloud store)
- Deployment in multiple Kubernetes managed environments*
  - Leveraging managed cloud Kubernetes services in AWS, Microsoft Azure, Google Cloud Platform
  - Support for private cloud and on-premise installations

* See Product Availability Matrix for detailed version dependencies
Deployment Options

- on-premise installations
- private cloud
- managed cloud Kubernetes service
- full service

Please always check the Product Availability Matrix for the latest information about supported OS, Kubernetes versions, certified partners, and any other restrictions.
SAP Data Hub launchpad
Central entry point
SAP Data Hub
Metadata Management

Build up catalog to get insight into your company’s metadata
SAP Data Hub Modeler
Pipelining & Processing

Build scalable and flexible flow-based applications
SAP Data Hub Modeler
Building Data-Driven Pipelines with Operators

Extensible
- Standard operators
- Custom/Partner operators
- Wrap custom code

Scalable
- Distributed
- Containerized

Production-Ready
- Manage
- Schedule (stream, time, interval)
- Observe

Re-Usability

- Read the product reviews from HDFS
- Load the sentiment analysis results in SAP Vora
- Parse the file and perform sentiment analysis

Read File
Wiretap
Group
Python2Operator
Vora Avro Ingestor

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Patterns and Use Cases

Overview

IoT Ingestion & Orchestration
Understand real-world performance

Governance / Data Cataloging
Understand and secure your data

Intelligent Data Warehouse
Rapidly integrate and leverage new data sources

Data Science & ML Data Management
**Data Warehousing** and SAP Data Hub
Rapidly integrate and leverage new data sources

**DISCOVER**
- Acquire new data sources with previously siloed data from traditional data warehouses, data marts, enterprise applications, and Big Data stores

**REFINE**
- Combine all types of sources including structured and unstructured data, and enable a large variety of processing on them

**GOVERN**
- Manage the data catalog and analyze data lineage

**ORCHESTRATE**
- Seamlessly process large data sets across highly distributed landscapes and close to the data source, moving only high-value data
Data Warehousing and SAP Data Hub
Customer example

Example Scenario
- Combine refined Big Data with enterprise data and corporate master data
- Extract or federate data into SAP HANA or BW/4HANA
- Ingest data into S3 as landing zone for data
- Orchestrate and schedule all related processes
- Implement transformations and data pipelines
- Harmonize data structures and look-up of reference data
- Execute operations on large data volumes
- Automation of complex data science processes and decision making based on data in-flight

Access
- SAP Analytics Cloud
- SAP PA / Spark / Scala / Python
- Console / 3rd Party

Store & Process
- SAP HANA
- SAP VORA
- Hadoop (HDFS)

Orchestration & Data Refining
- MODELS
- TRANSFORM
- EXTRACT
- FEDERATE
- LOAD
- JOIN
- FILTER
- CLEANSE
- LOCK-UP
- SCRIPT
- MASK
- ANONYMIZE
- PARSE
- STREAM
- COPY
- BATCH

SAP Data Hub
Scenario: Enrich product data in SAP BW with social product assessment data stored in S3

1. Read and cleanse social assessment data from S3 object store
2. Pull product data from SAP BW/4HANA and store in SAP Vora database for later processing
3. Join product data with social assessments
4. Aggregate enriched data in SAP BW/4HANA
DH – BW data transfer

Simplified architecture
Demo

See SAP Data Hub in Action
Thanks!

Contact information

Product Manager SAP Data Hub
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