

## SAP Hybris Commerce, Data Hub

**The Data Hub for SAP Hybris Commerce is a simple, extensible, scalable data integration and mastering solution. It serves as the key point of integration between multiple source and target systems in the SAP Hybris Commerce domain.**

### Business Challenges

As companies embrace customer-centric, omni-channel strategies, many organizations continue to be met with major obstacles when it comes to integrating disparate systems and more importantly the data they share. Executing a comprehensive omni-channel strategy requires companies to assimilate massive amounts of data – data that up to now would be stored in multiple external systems with varying data models – into a single platform.

SAP Hybris builds and develops solutions based on a modern service-oriented architecture (SOA) as part of our promise to aid in reducing implementation time and risk. The Data Hub takes SAP Hybris Commerce projects further, providing a standardized approach to any external data store, making integration easier, quicker, and less cost-intensive.

Traditional data imports between third-party systems, such as ERP, and commerce solutions often require custom-built integrations that are costly both to develop and to maintain. New models for customer engagement and omni-channel commerce require new solutions that reduce time-to-market and total cost of ownership, and allow for greater flexibility.

### Solution Description

The Data Hub is a service-oriented, standards-based data integration solution, designed to eliminate the obstacles associated with the import and manipulation of large amounts of data. It provides a single view of all your data integration needs so that you can create experience-driven commerce strategies with accurate and consistent master data at the core without slowing the business down with partial information.

Combining data from heterogeneous sources into a meaningful unified view, the Data Hub embodies the concept of Master Data Management (MDM), providing a consolidated record with a full history of the canonical data. This allows complete control over ongoing data integration and maintenance, lowering implementation time and costs.

### Ease of Integration

The Data Hub can be used to integrate SAP Hybris Commerce with any system. It has the ability to stage data in a canonical

form either from several sources or from multiple data inputs within one source, where the data is fragmented and published to one or more targets. Data sources can be any combination of the following:

- Fragmented from a single source with complex multiple parts
- Fragmented in time, with data being sent by multiple business processes
- Fragmented by source systems

Data fragments can easily be consolidated and grouped, and users can categorize and assign data accordingly. By providing a standard interface to any external data store, the Data Hub makes integration easier, quicker, and less cost-intensive.

### Ensured Data Quality

The Data Hub quickly transforms data models while:

- Recognizing and displaying incorrect, incomplete or inaccurate data
- Enabling you to fix inconsistencies in the data source
- Ensuring data quality and consistency

It uses an optimized ImpEx interface to publish and resolve errors.

### YaaS Connect

YaaS Connect, which is based on the Data Hub, integrates your on-premise SAP Hybris Commerce solution with Hybris as a Service (YaaS), to enhance the native commerce platform capabilities with cloud-based microservices built on YaaS. Easily add extra channels, such as social commerce or cloud sites, to your solution, and gain instant access to the latest innovations offered on the YaaS cloud platform.

### Fully Extensible

SAP Hybris partners can quickly and easily build their own extensions, manually defining data models, model transformations, grouping patterns, as well as import and publication interfaces. The Data Hub service oriented architecture is part of our promise to aid in reducing implementation time and risk.

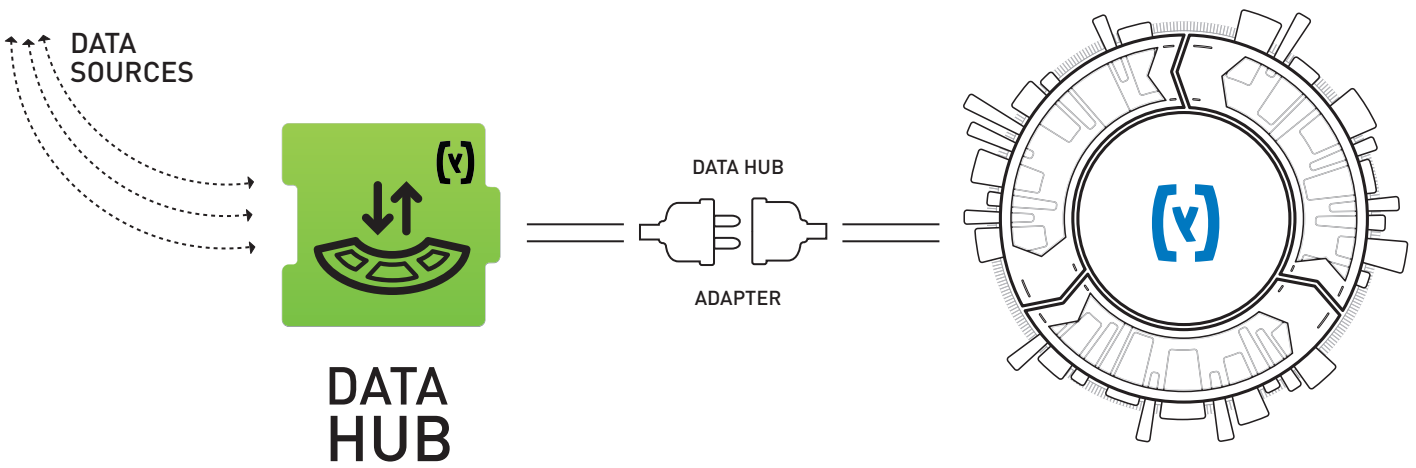


Fig. 1: The Data Hub imports and exports data between SAP Hybris and external data storage systems.

### Attribute Encryption

Organizations can count on data transformation and mapping to be managed securely. The solution, by default, uses the AES128 encryption to ensure attributes are encrypted and decrypted properly as they are written to the database. The encryption is extensible to meet organizational requirements.

### Business Tooling

The Data Hub user interface includes Quick Upload functionality to accommodate the rapid upload of data into the feed, subsequent composition, and publication of the data to one or more target systems. Error and Failure Processing provides insight into errors and failures that occur at each step of the process. The Manage Pools and Feeds menu options allow you to view and create pools and feeds.

### Business Benefits

- **Enterprise scalability and confidence**
  - Ensure high data quality and consistency
  - Support inter-enterprise data exchange scenarios as complex as B2B, including supplier vendor relationships, data feeds from suppliers, and many more scenarios
  - Scale independently from SAP Hybris Commerce.
- **Reduce Total Cost of Ownership**
  - Reduce integration effort for data integration through a fully integrated toolset and pre-built data mappings, and SAP pre-built extension integrations.
  - Reduce cost of maintenance through standardization, effective execution, monitoring and escalation of recurring data import and export operations using event system and processing history.
  - Increase resource availability and simplify training of IT staff with standards based solution.
- **Go to market faster**
  - Reduced integration build and maintenance times.
  - The Data Hub adapter is an intelligent bi-directional interface significantly reducing integration efforts.
  - A set of ready-to-use source and target adapters.
- **Gain control over the data integration process**
  - An intuitive User Interface to enable system administrators and integrators to effectively use the integration functionality
  - Easy error and failure handling through a transparent system of messages

### Key Features

- Utilizes the same familiar extension framework as the hybris platform
- Powerful input/output mechanism to handle a variety of formats, including messages, using the Spring Integration Framework
- Natively integrated to the hybris platform with out of the box Data Hub Adapter
- Ability to create classifications and categories and assign data
- Ability to define data sequencing and dependencies, including the multi-mapping of data
- Designed for reusability to manage mapping of data models using a canonical model decoupled from the source and target domains
- Support for large scale batch and near real-time messaging interface for import/export
- Flexible deployment options to manage scale and performance separately from hybris omni-channel commerce
- Business user interface allows for upload of files containing data and copying and pasting of the data directly in the application
- Enhanced error and failure handling with traceability at each step of the data integration process (load → composition → publication), facilitates visual identification of errors to easily resolve the problems.

The screenshot shows the 'Publication Failures and Errors' section of the Data Hub business UI. It features a search bar and a table with columns for Status, Target System, Pool Name, Start Time, End Time, Publication Id, and # of Errors. Below the table, there is a section for 'Publication Errors' with columns for Item Type, Code, Message, and Integration Key.

Status	Target System	Pool Name	Start Time	End Time	Publication Id	# of Errors
Error	DynamicProductAttributeTargetSystem	GLOBAL	Mon Feb 02 09:50:45 MST 2015	Mon Feb 02 09:50:45 MST 2015	8	3
Error	DynamicProductAttributeTargetSystem	GLOBAL	Mon Feb 02 09:32:22 MST 2015	Mon Feb 02 09:32:22 MST 2015	7	3

Item Type	Code	Message	Integration Key
CanonicalProductAttributeValue	UNKNOWN_TYPE	unknown type 'invalidElectronicsProduct' in header 'INSERT_UPDATE...'	description[invalidElectronicsProduct

Fig. 2: The Data Hub business UI offers intuitive way of handling the data processing on each of the steps.



## About SAP Hybris

SAP Hybris enables businesses to transform how they engage with customers, innovate how they do business, and simplify their technology landscape. With a comprehensive approach to customer engagement and commerce, our solutions unlock opportunities to optimize your customers' experience and transform your business. We help you drive relevant, contextual experiences across all of your customer touch-points in real-time, so that you can create strong differentiation and build competitive advantage in the Digital Economy.

SAP Hybris has helped some of the world's leading organizations transform themselves in response to changing market conditions and customer expectations – delivering exceptional experiences, adding new channels, evolving their business models, and entering new markets. How can we help you?

Explore SAP Hybris solutions today. For more information, visit [www.hybris.com](http://www.hybris.com).

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