

MAKING DATA AVAILABLE FOR MARKETING AND PUBLISHING PURPOSES

The print:hub is a unique software platform that allows data from different systems to be used for marketing and publishing. This prevents data from having to be maintained in different systems. This eliminates the need for error-prone and time-consuming data work like IT data exports and copy/pasting. Data can, for example, be transferred from ERP, PIM, MDM, DAM, CRM, CMS web shops, MRM or other systems.

Data from each of the various systems can be „virtually“ consolidated and made available for digital and offline marketing and publishing processes. The connection to the systems is live via connectors or the data is imported into the middleware. In addition, this can be enriched or transformed within the middleware.

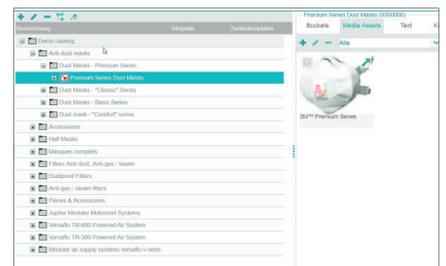
Preconfigured standard connectors are offered for many systems and are developed with Industry standards like REST APIs, JDBC, and others. The other modules of the print:suite access the data of the print:hub middleware.

LIVE CONNECTION OF SYSTEMS VIA CONNECTORS

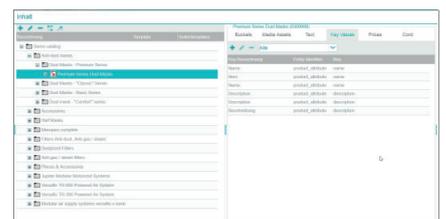
Data from other systems can be queried live. The live integration of systems avoids redundant data storage as well as complex import and synchronization processes. The live connection is made via connectors. The flexibility and performance of the connectors allows for a quick and easy connection between any system and the print:suite. The connectors offered by print:suite are preconfigured for connection to the respective systems and then can be customized for an individual implementation.

IMPORT DATA

In addition to the direct live connection to systems, data can also be imported into the print:hub middleware. Data can either be transferred via a push service or imported via a dedicated import module. The procedures for importing data and the live connection can vary for multiple data sources.



Display of data from the middleware print:hub



Display of data from the middleware print:hub

AT A GLANCE

- ✔ Quick and easy integration of different data sources
- ✔ Standard integration with multiple content systems
- ✔ Making data usable for corporate marketing and publishing purposes
- ✔ Avoidance of duplicate data storage
- ✔ Data consolidation for marketing and publication processes
- ✔ Web-based data visualization
- ✔ Live connection via connectors
- ✔ Data import by providing a push service
- ✔ Data import by import module
- ✔ Data enhancement
- ✔ Capable of print-specific data creation
- ✔ Virtual and content system agnostic data model
- ✔ Caching of data for high-performance rendering
- ✔ SDK for data export

DATA VISUALIZATION

The data consolidated in print:hub is directly available in print:planner, print:whiteboard and Adobe® InDesign®. In addition, a web front-end is available, which displays the consolidated data, e.g. for data control.

CHANNEL ENRICHMENT

Often, data intended for the print channel needs to be changed or adapted: Adaptation of the content to the layout, management of additional links between data elements or control information for output to different print touchpoints, etc. The print:hub middleware offers the ability to further extend or adapt this integrated data. In addition, print-specific content can also be created. The user can adapt, extend and create the data in a web frontend. The web frontend works generically. The creation of the virtual data model generates a web frontend. Additionally individual web interfaces can be configured via a XML-based UI kit.

VIRTUAL DATA MODEL

A virtual data model (entity model) is created in the print:hub. The entity model defines which data objects (entities) are to be retrieved from which system. Multiple entity models can be stored in the print:hub. The information from each of the connected systems is mapped to defined classes (Bucket, Cord, Text, Key Value, Price, Media Asset, Content Meta Data). In addition, entities can be defined that consist of data from multiple systems.

Data providers retrieve the data of an entity model and are independent of the connected data systems. This means that integrated data systems can also be exchanged at a later date without having to change data exports, templates etc.

DATA DELIVERY / DATA EXPORT

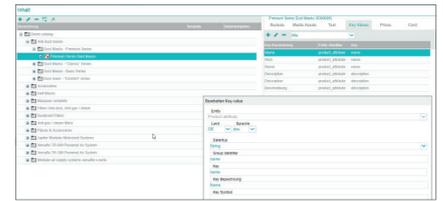
The print:hub delivers via standard data providers. Data providers are configured functions to retrieve and process data from the middleware. For example, data providers are used for page rendering and updating InDesign® documents with data from the middleware. Additional data providers can also be configured and can be used for data export.

DATA CACHING

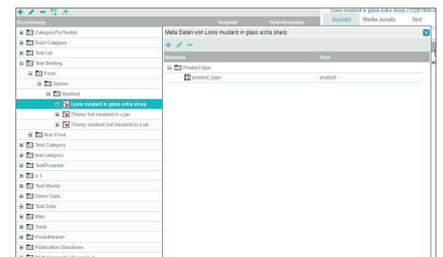
The print:hub offers several ways to cache data, for example to speed up the rendering of pages. On the one hand, generic connectors can be used to define how long data is cached without asking the connected data systems. In addition, it is possible to store in the entity model for how long the data should be kept in the cache.

DEVELOPMENT OF INDIVIDUAL CONNECTORS

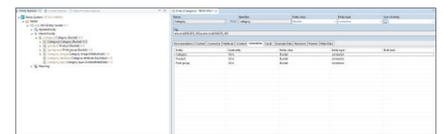
In addition to configuring generic connectors, individual connectors can also be developed. The Publishing Server offers a Java-based plug-in technology for this purpose.



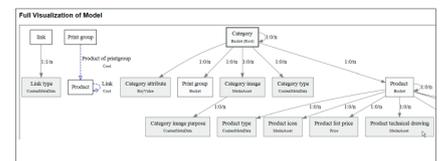
Editing data in the print:hub middleware



Management of metadata for any content



Entity model is configured in ison in the backend application



Graphical representation of the virtual data model

TECHNICAL FEATURES

- ✔ Generic configurable connectors
- ✔ Standardized push service for data transfer to the print:hub database
- ✔ Support of JDBC, JSON, XML, REST
- ✔ Configured virtual data model (entity model) for consolidating different data sources
- ✔ Definition of editing rights per entity
- ✔ Merging data from different systems into new entities (assembling entities)
- ✔ Graphical representation of a virtual data model
- ✔ Generic frontend for data visualization and data maintenance
- ✔ Metadata management for channel-specific enrichment of data from external systems
- ✔ Configuration of individual data management and visualization masks by print:UI Kit
- ✔ Configurable data providers for the output of data
- ✔ Support of MySQL, Oracle, MS SQL Server for persisting data
- ✔ Support of caching functionality (generic connectors and entity model)
- ✔ multi-client capability
- ✔ SDK for the implementation of specific connectors

