Master Data Management with a DaaS Extension for Data Consumption at High Scale

Master data management (MDM) can secure a single source of truth of your data, enabling access to consistent and trusted key information across departments. In this way, MDM empowers retailers, distributors, manufacturers and financial institutions to enhance collaboration, operational efficiency, customer experiences, data analytics and many more operations that require trusted data.

Governed master data can be delivered from the MDM to downstream systems, processes or parties who want to use that authoritative set of data.

Scalability challenges

In a traditional setup, it is common practice to build and maintain separate data stores with APIs between the MDM and the target systems to handle use cases that consume master data at very large scale, e.g., websites or point-of-sale systems. This provides a separation of concerns between complex master data processes and high-volume data consumption so that one activity doesn't disturb the other.

However, this entails a number of operability problems:

- Building and maintaining a separate data store with associated API can be a cumbersome process

- Data stores may easily become inconsistent

- Allowing changes to master data to get through to consuming systems can take a lot of time since those changes may also necessitate development on the data stores

The DaaS solution

Stibo Systems Multidomain MDM features a Data as a Service (DaaS) extension that can solve for the scalability issues. It's a cloud-based data distribution service focused on the delivery of data to high-volume data-consuming applications. Through its configurable API and serverless architecture, the DaaS extension delivers a near real-time version of master data. Users don't need to build and maintain numerous API services but simply re-configure the API. As a single, centralized master data service, the DaaS extension removes the need for creating multiple copies of data for each application in order to deliver data at scale to applications.
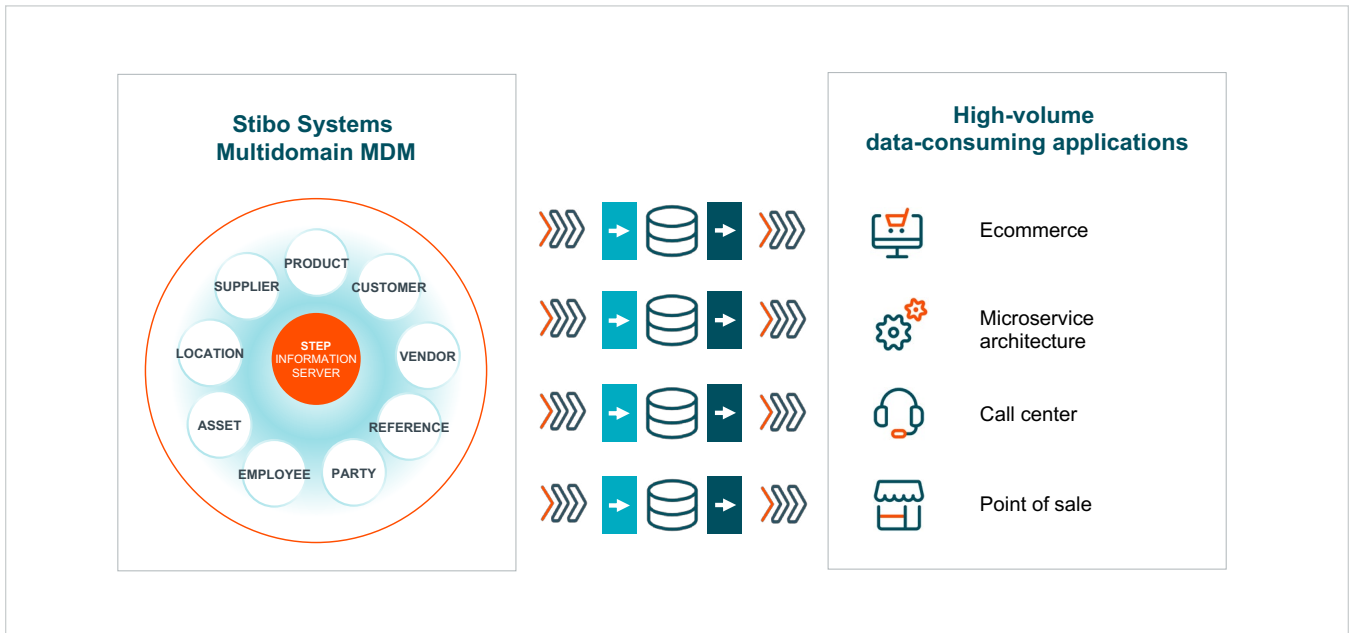
Benefits of MDM with DaaS

- Always-on access. Data is available to consume through an always-on service where the recipient is in control.

- High volume scalability. Data consumption may scale to thousands of parallel requests.

- Near real-time. Data and updates to data can be obtained in near real-time – no replication or download of a copy needed.

- Standards-based. Multiple systems can consume from the service through standards-based cloud-native technology.

- Easily configurable APIs. APIs are separate from the MDM data model in order to make it easy to consume data.

- Improved performance. High volume requests place less strain on internal systems and data can be served with minimal latency.
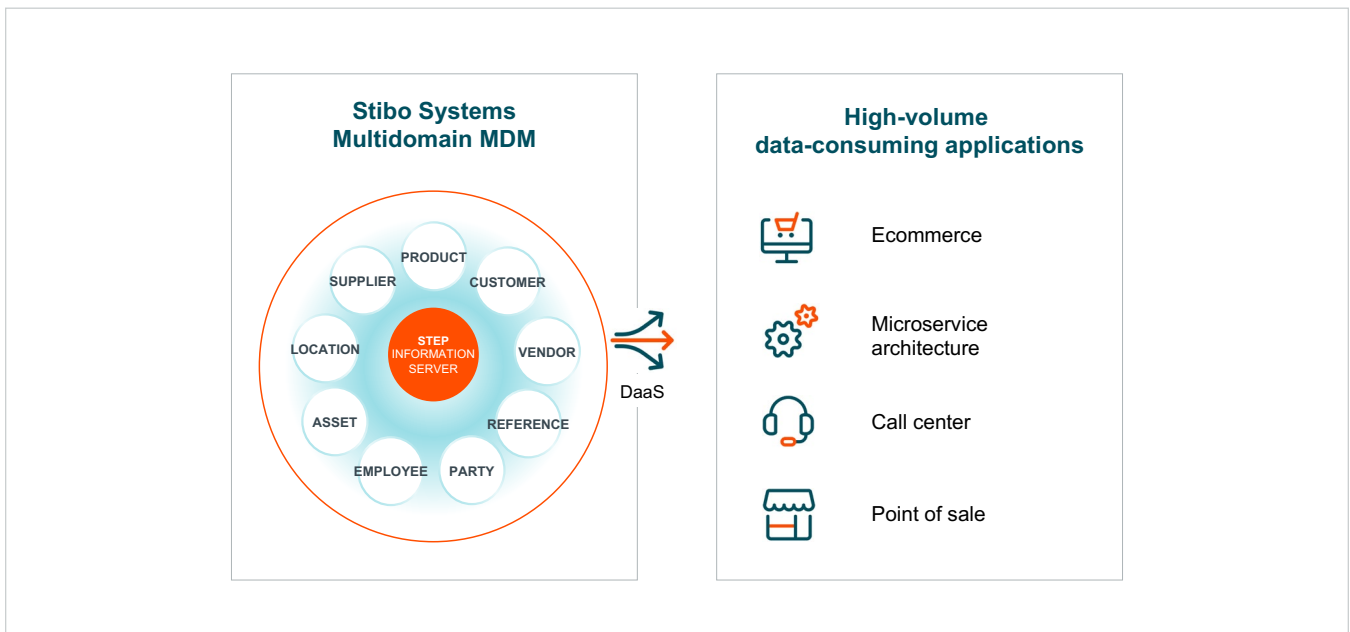
Always-on data delivery

The "as a service" means that you are not required to build and maintain a database with a copy of the data nor to build an API to deliver the data. The result is that you save time for maintenance and don't need to worry about duplicate databases becoming inconsistent. Instead, you can just let your applications look up data synchronously or receive events on data asynchronously.

Traditional setup

Separate data stores with APIs between the MDM and target systems

The DaaS solution

DaaS extension with a configurable API and serverless architecture

Service configuration

DaaS enables multiple services to be configured for the same master data, each with their own API, API keys and associated master data subset. Each API can be configured for maximum ease of consumption:

- Easy to consume the data without having to understand the underlying data model
- No need to have the same data model in your application as in your MDM
- Fast and easy to adapt APIs to changes in your master data model
- You can change names of the objects and limit the scope of data to avoid exposing your entire data source to the application

By making data available through an API service layer and serving data at scale on-demand for internal as well as external systems, the DaaS extension is a perfect example of the data-at-the-edge philosophy.

Features

- Always-on
- Highly scalable
- API model separate from MDM data model
- Ability to configure multiple API services on the same master data
- Data kept up to date in near real-time
- Cloud-based, serverless architecture for maximum scalability
- Service continuously updated
- Separation of concerns between complex MDM use cases and high-volume data consumption
- Token-based authentication

Examples of data that can be served by the DaaS extension

CATALOG	MAPPING	FINANCIAL	COMPANY	CUSTOMER
Products	Locations	Credit ratings	Locations	Names
Variants	Buildings	Price lists	HQ	Addresses
Pictures	Sites	Material costs	Registrations	Relationships
Videos	Landscapes	…	Key personnel	Hierarchies
Documents	Monuments		…	Profiling
360° views	…			History
Certificates				…
…				

Stibo Systems MDM with DaaS is a result of our innovation in master data management and our commitment to enable businesses to enhance their agility and drive more value from their data. Learn more about Multidomain MDM at **stibosystems.com**.

About Stibo Systems

Stibo Systems, the master data management company, is the trusted enabler of data transparency. Our solutions are the driving force behind forward-thinking companies around the world that have unlocked the strategic value of their master data. We empower them to improve the customer experience, drive innovation and growth and create an essential foundation for digital transformation. This gives them the transparency they require and desire – a single, accurate view of their master data – so they can make informed decisions and achieve goals of scale, scope and ambition. Stibo Systems is a privately held subsidiary of the Stibo A/S group, founded in 1794, and is headquartered in Aarhus, Denmark. More at **stibosystems.com**.