

# Mendix OData support

## Turning data into information at the speed of light

Are you looking for ways to gain insight from your Mendix application data? With OData support, Mendix offers a powerful tool to easily transform application data into information you can use to improve customer experiences and streamline operations. Leverage live Mendix application data in BI tools like Tableau, Qlikview or Power BI, analytics platforms like SAS or R, or simply Excel with a single click.

OData is an open protocol that allows the simple creation and consumption of query-able and interoperable RESTful APIs for data. The way the data is presented and queried, is standardized and includes discovery based on metadata, so all tools and products that support the protocol automatically know how to work with your data. OData is an open standard maintained by the OASIS group.

## Exposing data in 1-click

We've made it very easy to expose your application data for consumption by other tools. Just right-click the relevant entities in your domain model and publish them via OData. The entities' associations are also taken into account, and you can specify the URI where the OData entities can be accessed.

Mendix automatically ensures that the security and access rules defined on your entities are also applied when data is queried through the OData endpoint. In addition to the access rules, you can specify which role a user needs in order to access the data (for example a reporting role).

## Use cases

OData support opens a variety of possibilities to leverage Mendix application data:



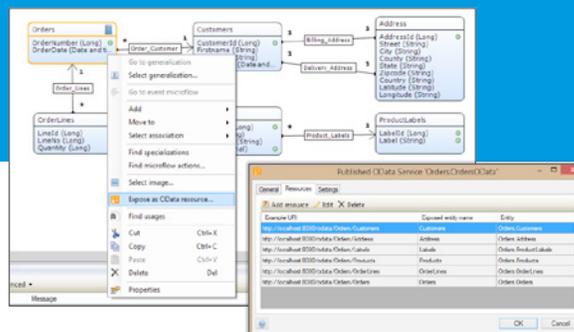
### Business intelligence & reporting

BI tools such as Tableau, Qlikview and Microsoft Power BI can consume the Mendix OData services in just a few clicks. You can expose data from one or multiple Mendix applications. And for smaller data sets, use our default streaming query mechanism for real-time data updates.



### Data warehouse

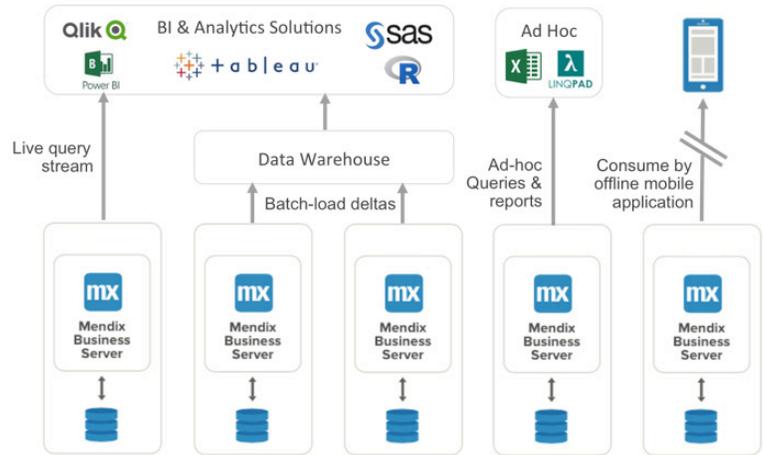
For large data sets, feed a data warehouse between Mendix and your BI tools and schedule updates from Mendix. For example, SnapLogic, a cloud integration platform, lets you retrieve data from different sources, modify that data, and send it to a destination. SnapLogic offers a "REST Snap," which you can configure to read data from a Mendix OData service. The standard 'change date' property in Mendix entities allow you to take the deltas compared to last update. You can then load the data into a data warehouse, for example Amazon RedShift using the "Redshift insert Snap".





### Analytics

Similar to how data is consumed by BI tools, you can leverage Mendix data for statistical analysis and defining recommendation services in tools like SAS or the open source language R. While R is wildly popular in the data scientist community, SAS's Visual Analytics makes complex data analysis easy.



### Ad hoc querying and reporting

For ad-hoc queries and straightforward reporting and analysis, tools like Linqpad and MS Excel provide out-of-the-box support for OData services.



### Offline mobile applications

OData services are also a great way to provide data for native mobile applications. Through OData, the application has a flexible query facility to retrieve the data required from a Mendix server into the application. And since OData is just REST, all mobile platforms can take advantage.

## Key features

 <p><b>1-click publishing</b></p>	 <p><b>Security</b></p>	 <p><b>Standard operations</b></p>	 <p><b>Query streaming</b></p>
<p>Publish OData services for application entities with a single click.</p>	<p>The security and data access rules defined for your application automatically apply for OData services.</p>	<p>We support a set of standard operations to query, sort and filter Mendix application data.</p>	<p>Query streaming ensures performance and minimal memory consumption for real-time updates.</p>



Mendix helps enterprises achieve their digital goals. Our digital innovation platform empowers customers to bring new products to market, digitize customer engagement, and automate unique business processes. Facilitating an iterative, collaborative approach, the platform brings business and IT together to build and deploy innovative applications at the speed of ideas.

A recognized market leader, Mendix is helping hundreds of customers across dozens of industries achieve exceptional results. For more information, visit [www.mendix.com](http://www.mendix.com) and follow us on Twitter [@Mendix](https://twitter.com/Mendix).