

# Known Limitations

This section describes limitations and known issues of AtScale's support for the Qlik.

## Query Size

Since the Qlik - AtScale connection works in Import mode, the whole cube (or all selected elements of the cube) are loaded in Qlik at once. As a result, the queries from Qlik to AtScale and from AtScale to the underlying data warehouse can become quite large. This can lead to reaching the limitations described below.

## AtScale Limitations

- ▶ Maximum number of rows returned for a query

Configured using the `query.result.max_rows` engine setting; for details, see [Query Settings](#). The default value is 200 000, you can adjust it to fit your data size.

- ▶ Maximum amount of time a query can run

Configured using the `query.timeout` engine setting. The default is 60 minutes; you can adjust it accordingly.

- ▶ Maximum number of characters in a query

You could experience error with queries that are too large. The maximum standard SQL query length is 1024.00K characters, including comments and white space characters. Note that this is not adjustable in AtScale. To solve such an issue, consider importing a smaller cube.

## Qlik Sense Limitations

- ▶ Maximum time the query runs

Configured using the Query timeout connection setting. The default value is 60 seconds; you can increase it as needed.

## Filtering The Data At Import

Applying a filter at data import generally yields empty results. The only scenario in which filtering works is when the query name of the cube element and the underlying name of the column in the actual table in the data warehouse are the same.

## Dimensions

Since dimensions are a part of the AtScale cube, it is important to know what limitations you could encounter if you attempt to import dimensions in Qlik Sense. In general, the dimensions and all their attributes are loaded correctly.

## Hierarchies

Note that hierarchies cannot be imported in Qlik. They must be recreated as Master Items, if the drill-down functionality would be used.

## Numerical Attributes

Using a numerical attribute can lead to an error while importing the data in Qlik. The error message would be similar to the following:

```
Query is not possible: measures (Sum([List Price])) are not defined over the product of these dimensions:
```

In such cases it is advisable to avoid using the numerical attribute. A workaround could be to cast them to a string data type.

## Measures

When importing data from AtScale - and given how the import in Qlik joins all the underlying data tables - it is recommended to load data at the highest granularity level. This way you can ensure that the whole dataset is collected before aggregating it.

## Aggregation

In AtScale you can have measures with many different aggregations. The table below summarizes the results if you try to use the measure as a measure in a Qlik chart with the same aggregation. Some aggregation from AtScale are not available in Qlik.

Aggregation in AtScale	Aggregation in Qlik Sense	Shows correct results when used in a chart in Qlik
Sum	Sum	Yes
Average	Average	Yes (only if the most granular data is loaded)
Min	Min	Yes
Max	Max	Yes
Distinct Count	Count (distinct)	No

Distinct Count Estimate	n/a	No
Non-Distinct Count	Count	No
Population Standard Deviation	n/a	No
Population Variance	n/a	No
Sample Standard Deviation	n/a	No
Sample Variance	n/a	No

Analyzing the data when imported but without any aggregations applied shows that in Qlik the aggregation defined in AtScale is not taken into account. The measure from AtScale is imported as a column of numeric type in Qlik, and the aggregation must be defined again when creating charts and analysis. Given that, it is recommended to only load one measure per actual data column, and then aggregate it in Qlik as needed.

For example, assume in AtScale you have Sales Amount - SUM, Sales Amount - AVG, and Sales Amount - MAX. When importing the data you can select only Sales Amount - SUM, and thus you will have only one Sales Amount column in Qlik. From this column you can create all the aggregations and calculations that you need directly in Qlik Sense.

## Semi-Additive

If you have measures with semi-additive behavior - with the semi-additive setting enabled in AtScale - when imported in Qlik, they do not show correct results.

## Calculated Measures

If you import calculated measures in Qlik, the results usually are not correct:

- ▲ Calculated measures are advanced MDX calculations done in AtScale, often using a specific hierarchy or attribute of a dimensions. The results when imported are either numbers that are not correct or N/A.
- ▲ Another aspect of importing calculated measures is that they seem to slow down the data import considerably.
- ▲ Calculated measures also vastly expand the dataset.

It is not recommended to use calculated measures in a cube that is imported in Qlik.

## Multi-Fact Cubes

Multi-fact cubes does not work with Qlik. If you import cubes with more than one fact table, the measure values across unrelated attributes would be wrong.

A workaround for importing data in Qlik Sense when you have a cube with multiple fact tables would be to create perspectives in AtScale. One perspective would contain measure from only one fact table and the relevant attributes.