

Setting The Scope

The scope configuration provides a way to control when AtScale applies security dimension constraints.

Scope Property

When creating a security dimension you should set the scope to one of the following values:

▲ Related

Applies security constraint when the query selects any dimension or secondary attributes that have a path to the security dimension as long as no fact table is used. The security constraint is not applied to dimension-only queries that select multiple dimensions related through a fact table. See the red box on the figure below.

▲ Fact

Applies to the same queries as **Related** but also applies to queries that include a measure from a fact table connected to the secure dimension (see the yellow box on the figure below). The security constraint is **not** applied to single-dimension-only queries that are related to the secured dimension via the fact table (Date and Store Location on the figure below). However, multi-dimension-only queries **will** have security applied because they are joined using a synthetic measure from the fact table that relates them (dashed yellow box on the figure below).

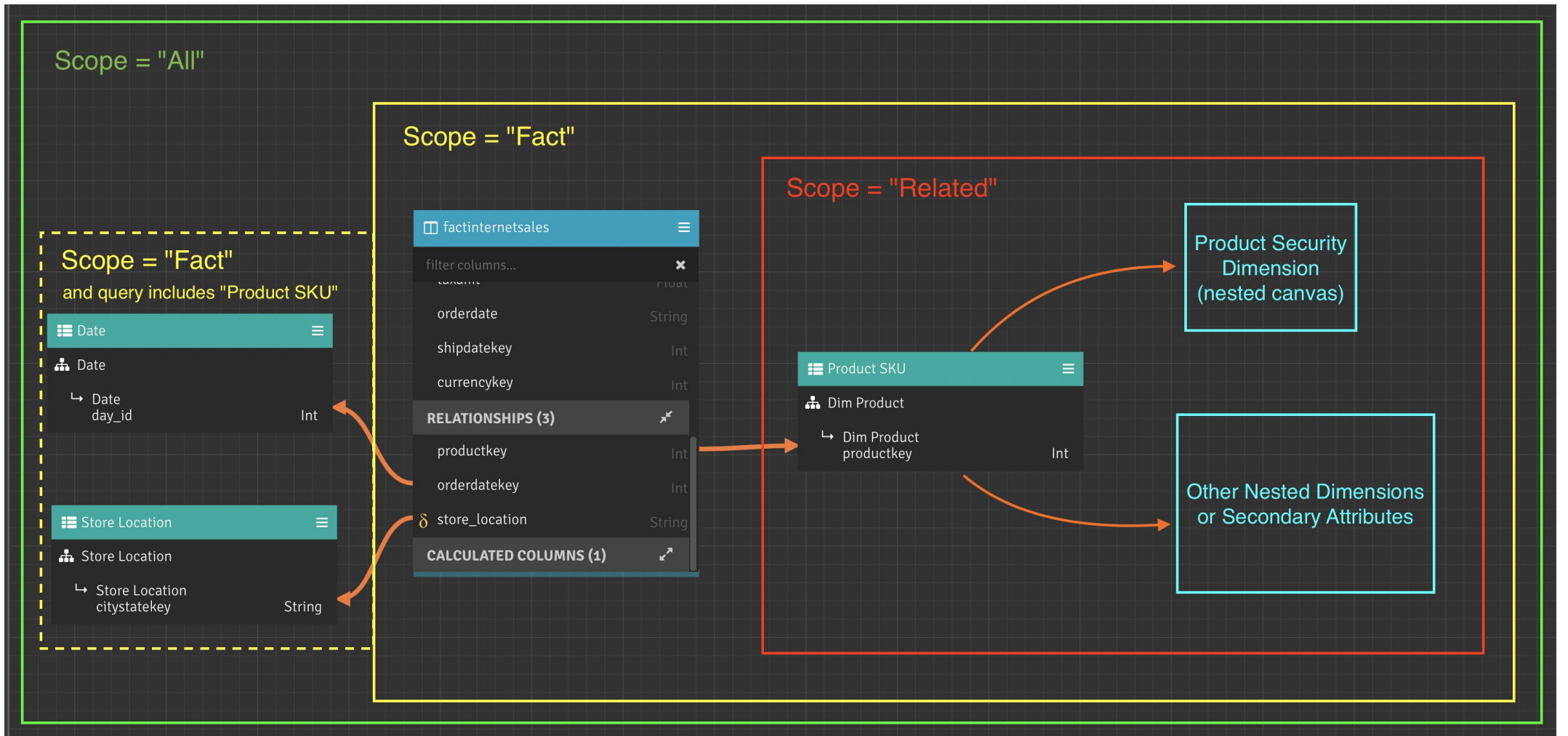
▲ All

Every query will have the security dimension applied unless there is no path to the security dimension. This is the case with two separate fact tables, each with their own unrelated dimensions. See the green box on the figure below.

Example

The figure below illustrates a model consisting of `factinternetsales` (a fact table), `Product SKU` (dimension secured by a nested Product Security Dimension), `Date` (unsecured dimension), and `Store Location` (unsecured dimension).

Figure: Graphic Representation of Security Dimension Query Scopes



Given the model in this figure, the table below illustrates the application of the Product Security Dimension as either a "Yes" or "No" value for each example query and scope setting on the Product Security Dimension.

Table: How Security Dimension Scope Settings Affect Queries

Query selected attributes	Product Security Dim Scope = All	Product Security Dim Scope = Fact	Product Security Dim Scope = Related
Product SKU	Yes	Yes	Yes
Product SKU secondary attributes	Yes	Yes	Yes
Date	Yes	No	No
Store Location	Yes	No	No
Date, Store Location	Yes	Yes	No
Sum(SalesAmount)	Yes	Yes	No
Sum(SalesAmount),	Yes	Yes	No

Date, Store Location			
Sum(SalesAmount), Date, Product SKU	Yes	Yes	Yes

Notes On Security Dimension Scope

- ▶ Degenerate dimensions (dimensions derived from a fact table) behave the same way as standard dimensions with respect to the scope setting of "Fact". Therefore a dimension-only query to a degenerate dimension will **not** have its contents filtered by a secured dimension connected to the fact table (for example, Product SKU on the figure above).
- ▶ Security constraints for all scopes does not apply to queries run against unconnected fact datasets, or their dimensions.

More Information

[Create a Security Dimension](#)