

About Cube Dimensions

A dimension is a logical collection of attributes, which are bound to columns in a source dataset. Dimension attributes are used to group and filter the measure data at query time.

Dimensions provide the context for a cube's measures. For example, a customer dimension can help you understand which people are the most valuable to your business. A date dimension can help you break down activities by day or week or month.

The attributes of a dimension are organized into hierarchies, and hierarchies contain levels. A dimension always consists of at least one hierarchy that contains at least one level. The most granular level of a hierarchy is referred to as the key level. The key level represents the underlying dataset columns that can be used to join to the fact data, and is usually unique for each member of that dimension.

- ▶ [Types of Dimensions in a Cube](#) This section explains the different kinds of dimensions you can have in a cube, how the data comprising a cube dimension is sourced, and how the different kinds of dimensions display on the cube canvas.
- ▶ [About Dimension Hierarchies and Levels](#) A dimension hierarchy organizes dimension attributes into categories or levels, where each level is a sub-division of the level above. Every logical dimension you create has at least one hierarchy with at least one level.
- ▶ [About Default Hierarchical Members](#) You can specify a default member of one or more dimensional hierarchies in a cube to serve together as a default filter in MDX queries on that cube.
- ▶ [Requirements for Modeling Dimensional Hierarchies](#) When you are modeling a hierarchy in a dimension, your design must meet a few requirements. Meeting the following requirements will ensure that you do not receive unexpected query results due to incorrect hierarchy design.
- ▶ [About Dimension Attributes](#) A dimension attribute represents a single data element in the dimension, and is linked to one or more columns of an underlying dataset. There are two kinds of dimension attributes: level attributes and secondary attributes.