

DimensionElementInsert Vs DimensionElementInsertDirect

DimensionElementInsert :

The default method of editing a dimension in TM1 is to use a whole-copy editing pattern. In that pattern, an editing copy of the dimension is created, edits are applied to the editing copy, then finally the actual dimension is rewritten using the editing copy as a template. TurboIntegrator supports whole-copy editing automatically whenever dimension editing TurboIntegrator functions (like DimensionElementInsert) are used in the metadata tab of the process. TurboIntegrator automatically creates the editing copy and applies editing operations to it, then rewrites the actual dimension at the end of the Metadata procedure.

DimensionElementInsertDirect :

DimensionElementInsertDirect adds an element to a dimension by directly editing the dimension.

Direct edits are different in that no editing copy is involved. Instead, the operations are performed directly on the actual dimension. There are two different, specialized use cases for which this type of direct editing is intended:

- When the purpose of the TurboIntegrator process is to make a small change to a large dimension. In this case, direct editing will be more efficient because it avoids copying and completely rewriting the large dimension.
- When the purpose of the TurboIntegrator process is to load large volumes of data into a cube. In this case the process' Metadata procedure is deliberately kept empty, and any element insertion needed to support data loading is performed using direct calls in the Data procedure. When the Metadata procedure is empty, the process skips an entire iteration over the external datasource, which can result in faster data loads.

Scenario1

Metadata Tab : DimensionElementInsert();

Data Tab : CellPutN();

Data gets uploaded

Scenario2

Metadata Tab : DimensionElementInsert();

CellPutN();

Data Tab : *Blank*

Error when you run the process first time as the elements gets inserted after the metadata procedure completes and then run the process again to upload the data

Scenario3

Metadata Tab : DimensionElementInsertDirect();

CellPutN();

Data Tab : *Blank*

Element gets added then and there directly and Data gets Uploaded

Scenario4

Metadata Tab : *Blank*

Data Tab : DimensionElementInsertDirect();

CellPutN();

Element gets added then and there directly and Data gets Uploaded

Scenario5

Metadata Tab : *Blank*

Data Tab : DimensionElementInsert();

CellPutN();

Element is not added and hence data is not loaded