

Cube Development II

Fine-tuning cube design

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Overview

- Aggregations
- Perspectives
- Translations

Aggregations

Aggregation Design Wizard

Review Aggregation Usage
Aggregation usage settings can be modified to include or exclude attributes from consideration.

Cube Objects	Default	Full
<input type="checkbox"/> Employee	2	0
<input type="checkbox"/> Employee	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Organiz...	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Territory	3	0
<input type="checkbox"/> Region	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Country	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Group	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Product	5	0
<input type="checkbox"/> Product	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Color	<input checked="" type="radio"/>	<input type="radio"/>
<input type="checkbox"/> Size	<input checked="" type="radio"/>	<input type="radio"/>

Set All to Default

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Aggregation Design Wizard

Specify Object Counts
Select the count method and click Count to automatically calculate the counts for empty fields, or manually enter the object counts.

Either enter object counts in the grid, or click Count to have the wizard automatically obtain the necessary counts.

Cube Objects	Estimated Count
<input checked="" type="checkbox"/> Reseller Sales	60,855
<input type="checkbox"/> Employee	
<input type="checkbox"/> Territory	
<input type="checkbox"/> Region	11
<input type="checkbox"/> Country	7
<input type="checkbox"/> Group	4

Count Stop

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Aggregation Design Wizard

Set Aggregation Options
Choose an aggregation option to optimize storage and query performance for your system.

Design aggregations until:

- ☐ Estimated storage reaches 100 MB
- ☒ Performance gain reaches 30 %
- ☐ I click Stop
- ☐ Do not design aggregations (0%)


















Continue Stop Reset

64 aggregations have been designed. The optimization level is 10% (3.5MB).

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Perspectives

- Simplify the cube for users who work with subset of cube only
- Do not use as a security measure

Cube Objects	Object Type	Perspective Name
 Sales	Name	Sales by Product-Date
	DefaultMeasure	
 Measure Groups		
 Reseller Sales	MeasureGroup	<input checked="" type="checkbox"/>
 Reseller Order Quantity	Measure	<input type="checkbox"/>
 Reseller Cost	Measure	<input type="checkbox"/>
 Reseller Sales Amount	Measure	<input checked="" type="checkbox"/>
 Internet Sales	MeasureGroup	<input checked="" type="checkbox"/>
 Internet Order Quantity	Measure	<input type="checkbox"/>
 Internet Cost	Measure	<input type="checkbox"/>
 Internet Sales Amount	Measure	<input checked="" type="checkbox"/>
 Dimensions		
 Employee	CubeDimension	<input type="checkbox"/>
 Ship Date	CubeDimension	<input type="checkbox"/>
 Territory	CubeDimension	<input type="checkbox"/>
 Due Date	CubeDimension	<input type="checkbox"/>
 Order Date	CubeDimension	<input checked="" type="checkbox"/>
 Product	CubeDimension	<input checked="" type="checkbox"/>

Select the items to include:

Dimensions
Attributes
Hierarchies
Measure groups
Measures
KPIs
Calculations

Translations

Add captions

Default Language	Obj...	Spanish (Spain)
Sales	Cap...	
Measure Groups		
Reseller Sales	Cap...	Ventas de Revendedor
Reseller Order Quantity	Cap...	Cantidad de Orden del Revendedor
Reseller Cost	Cap...	Costo del Revendedor
Reseller Sales Amount	Cap...	Ventas de Revendedor
Internet Sales	Cap...	Ventas por Internet
Internet Order Quantity	Cap...	Cantidad de Ordenes por Internet
Internet Cost	Cap...	Costo por Internet
Internet Sales Amount	Cap...	Cantidad de Ventas por Internet
Dimensions		
Employee	Cap...	Empleado
Ship Date	Cap...	Fecha de Despacho
Territory	Cap...	Territorio
Due Date	Cap...	Fecha de Entrega
Order Date	Cap...	Fecha de Orden
Product	Cap...	Producto
Customer	Cap...	Cliente
Perspectives		
Sales by Product-Date	Cap...	Ventas por Producto-Fecha

Check results

Sales

- Measures
 - Ventas de Revendedor
 - Cantidad de Orden del Revendedor
 - Costo del Revendedor
 - Ventas de Revendedor
 - Ventas por Internet
 - Cantidad de Ordenes por Internet
 - Cantidad de Ventas por Internet
 - Costo por Internet
- Cliente
- Fecha de Entrega
- Empleado
- Fecha de Orden
- Producto
 - Categoría
 - Color
 - Producto
 - Subcategoría
 - Tamaño
 - Productos
- Fecha de Despacho
- Territorio

Cube Development Tasks

- Use the Cube Browser to check measures in each measure group
- Check labels and formatting of measures
- Slice by each dimension hierarchy
- Verify grand totals
- Adjust dimension usage if necessary
- Design aggregations
- Add perspectives and translations as needed

Summary

- **Aggregations**
 - Pre-calculated summary values for selected attributes
- **Perspectives**
 - Subset of cube to simplify interface for users
- **Translations**
 - Provide alternate captions based on user's regional settings

References

- **Aggregations and Aggregation Designs**
 - [http://msdn.microsoft.com/en-us/library/ms174758\(v=SQL.105\).aspx](http://msdn.microsoft.com/en-us/library/ms174758(v=SQL.105).aspx)
- **Perspectives**
 - <http://msdn.microsoft.com/en-us/library/ms175338.aspx>
- **Cube Translations**
 - [http://msdn.microsoft.com/en-us/library/ms174798\(v=SQL.105\).aspx](http://msdn.microsoft.com/en-us/library/ms174798(v=SQL.105).aspx)