

OLAP example

We have a solution

- Change management [changemanagement]

The solution contains the following lookup fields

- Scope [TYPE]
- Type [TASKTYPE]

It also has some decimal values

- Estimate [ESTIMATE]
- Realized [REALIZED]

In our reporting we want to see distributions by

- A period hierarchy: Year / Quarter / Month
- Categories by Scope, Type and Status

Setting up the cube

A new OLAP cube is set up in: "Integration" > "OLAP cubes" > "Add"

Basic information

- Name display: sample1
- Cube header: Report sample1

Cube definition ("Cube Schema XML")

For further help to designing schemas please refer to the following resources

- <http://mondrian.pentaho.com/documentation/schema.php>

```

<Cube name="sample1cube">
  <Table name="data_changemanagement"/>
  <Dimension name="Scope" foreignKey="TASKTYPE">
    <Hierarchy hasAll="true" primaryKey="LookupID">
      <Table name="formfieldlookup"/>
      <Level name="Type" column="Value" uniqueMembers="true"/>
    </Hierarchy>
  </Dimension>
  <Dimension name="Type" foreignKey="TYPE">
    <Hierarchy hasAll="true" primaryKey="LookupID">
      <Table name="formfieldlookup"/>
      <Level name="Type" column="Value" uniqueMembers="true"/>
    </Hierarchy>
  </Dimension>
  <Dimension name="Status" foreignKey="StatusID">
    <Hierarchy hasAll="true" primaryKey="StatusID">
      <Table name="formstatus"/>
      <Level name="Type" column="Status" uniqueMembers="true"/>
    </Hierarchy>
  </Dimension>
  <Dimension name="Period" type="TimeDimension">
    <Hierarchy name="Periode" hasAll="true" allMemberName="All period">
      <Table name="data_changemanagement"/>
      <Level name="Aar" levelType="TimeYears" uniqueMembers="true">
        <KeyExpression>
          <SQL dialect="mysql">Year(CreatedAt)</SQL>
          <SQL dialect="generic">YEAR</SQL>
        </KeyExpression>
      </Level>
      <Level name="Kvartal" uniqueMembers="false" levelType="TimeQuarters">
        <KeyExpression>
          <SQL dialect="mysql">Quarter(CreatedAt)</SQL>
          <SQL dialect="generic">Quarter</SQL>
        </KeyExpression>
      </Level>
      <Level name="Maaned" uniqueMembers="false" levelType="TimeMonths">
        <KeyExpression>
          <SQL dialect="mysql">Month(CreatedAt)</SQL>
          <SQL dialect="generic">Month</SQL>
        </KeyExpression>
      </Level>
    </Hierarchy>
  </Dimension>
</Cube>

```

```

    </KeyExpression>
  </Level>
</Hierarchy>
</Dimension>
<Measure name="Revision" column="Revision" aggregator="sum" formatString="Standard"/>
<Measure name="Estimate" column="ESTIMATTIMER" aggregator="sum" formatString="Standard"/>
<Measure name="Realized" column="REALISERETTIMER" aggregator="sum" formatString="Standard"/>
</Cube>

```

MDX query ("Cube Query MDX")

For further help to designing queries please refer to the following resources

- <http://technet.microsoft.com/en-us/library/ms145971.aspx>

```

SELECT
  NON EMPTY {[Measures].[Estimate],[Measures].[Realized]} ON COLUMNS,
  NON EMPTY {[Period],[Type],[Status]} ON ROWS
FROM [sample1cube]

```

Results

The cube is accessed via this URL (or press "test" form the OLAP overview)

http://YOUR_DOMAIN/TempusServa/olapview.jsp?query=sample1

Report sample1



			Measures
Periode	Type	Status	Estimate
+All period	+All Types	+All Statuss	289

Report sample1



			Measures
Periode	Type	Status	Estimate
-All period	+All Types	+All Statuss	289
+2009	+All Types	+All Statuss	5
+2010	-All Types	+All Statuss	173
	Bugfix	+All Statuss	12
	Feature	-All Statuss	101
		New item	31
		Roadmap	70
Optimize	+All Statuss	60	
+2011	+All Types	+All Statuss	89
+2012	+All Types	+All Statuss	22

Revision #1

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