Query Pruning based on the Definition of a Constant

As discussed in Improving BW Query Performance by Pruning, pruning can take place in case PartProviders have characteristics which are set constant.

Simple Example

Our test MultiCube is defined as follows:

- MultiProvider STPE_MC9
  - Partcube STPECONST: characteristic ZATSTPEI3 is fixed to the value P01
  - Partcube STPEOLAP1
  - Partcube STPEOLAP2

InfoCube

![Image of InfoCube]

Table RSDICHAPRO

![Image of Table RSDICHAPRO]

MultiProvider

![Image of MultiProvider]

Table RSIPRORANGE

![Image of Table RSIPRORANGE]
Query

The query has a soft filter regarding the characteristic ZATSTPEI3 which is unequal to the constant used in the partprovider STPECONST. Hence, the Analytic Engine can skip (prune) this partprovider:

Transaction RSRT

When you use the debug function 'Explain MultiProvider' you get information about pruning displayed:
### Query Monitor

#### Messages

- 1 InfoProvider(s) excluded because of pruning (Sbor = DYN)
- InfoProvider STPECOST excluded because of metadata restrictions
- Maximum parallelism set to default (8)
- Actual used maximum parallelism is 6

#### Information on Query

**Query:** STPE_PRUNING_CONST  
**Up-to-dateness of Data:** 26.01.2016 15:32:20 CET

<table>
<thead>
<tr>
<th>Key Figures</th>
<th>Amount</th>
<th>Transaction Counter</th>
</tr>
</thead>
<tbody>
<tr>
<td>STPE Plant</td>
<td>6.00 EUR</td>
<td>2.110</td>
</tr>
<tr>
<td>Overall Result</td>
<td>6.00 EUR</td>
<td>2.110</td>
</tr>
</tbody>
</table>