Powering insights for SAP Data with Microsoft Power BI

Miguel Llopis
Senior Program Manager
Microsoft

June 6th, 2018
Market need

• Customers needed an easier way to connect to HANA and BW
• Customers wanted built-in connectors and ability to create their own
Session Goals

- Deep dive into current connectivity options from Power BI to SAP data sources
- Understand Roadmap for rest of CY18
SAP Connectivity Options in Power BI

Two built-in connectors:

- SAP HANA
- SAP BW

Custom Connectors SDK:

- It allows 3rd Party ISVs, Partners, etc. to create their own connectors and easily plug them into Power BI
- Currently supported in Power BI Desktop and Power BI Service (Personal Gateway).
- Enterprise Gateway support is coming in CY18 H1
# SAP HANA – Current state + Recent Enhancements

<table>
<thead>
<tr>
<th>Current State</th>
<th>Recent Enhancements</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Specialized connector for SAP HANA</td>
<td>• <strong>Multi-Dimensional DirectQuery connector</strong> that treats HANA like a “cube” source, including first-class concepts such as hierarchies, and accurate treatment of measures</td>
</tr>
<tr>
<td>• Uses SAP's HANA ODBC Driver</td>
<td></td>
</tr>
<tr>
<td>• Treats HANA more or less as a relational source</td>
<td>• Kerberos-based Single Sign-On in Power BI Service/Gateway</td>
</tr>
<tr>
<td>• Import &amp; DirectQuery modes</td>
<td></td>
</tr>
<tr>
<td>• Supported via On-Prem Data Gateway for Refresh/DQ scenarios</td>
<td></td>
</tr>
<tr>
<td>• Supports HANA Information Models (Analytic/Calculation views)</td>
<td></td>
</tr>
<tr>
<td>• Direct SQL Support for Row &amp; Column Tables</td>
<td></td>
</tr>
<tr>
<td>• Optimized Navigation for HANA Models</td>
<td></td>
</tr>
<tr>
<td>• Improved Navigator experience: optional previews, column selection, technical names support</td>
<td></td>
</tr>
<tr>
<td>• (Limitation) Sub-optimal / inaccurate treatment of measures</td>
<td></td>
</tr>
</tbody>
</table>
DEMO

SAP HANA Connector
SAP HANA – Looking Ahead

SAML-based Single Sign-On in Power BI Service/Gateway

Variable Input UX enhancements
   Improved Hierarchy selection
   Ranges, Exclude, <, >, <=, etc.
### SAP BW – Current state + Recent Enhancements

<table>
<thead>
<tr>
<th>Current State</th>
<th>Recent Enhancements</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Specialized connector for SAP BW. Supports SAP BW 7.x+&lt;br&gt;- Requires SAP NetWeaver RFC SDK&lt;br&gt;- Uses SAP BW MDX Query Interface&lt;br&gt;- Import + DirectQuery modes supported&lt;br&gt;- Multi-Dimensional connector that supports the nuances of BW accurately (hierarchies, variables, etc.)&lt;br&gt;- Connect to InfoCubes &amp; QueryCubes (including BEx queries)&lt;br&gt;- Supports Display Names &amp; Technical Names for easier navigation, as well as Variable/Parameter Inputs, Member Properties, etc.&lt;br&gt;- Supported via On-Prem Data Gateway for Refresh &amp; DirectQuery scenarios</td>
<td>- <strong>DirectQuery</strong> Connector [<em>currently available publicly as Beta and supported in Power BI Desktop/Service/Gateway, GA planned for February/March</em>]&lt;br&gt;- Support for <strong>Member Properties</strong> (Key, Long/Short text, etc.) [<em>available for Import mode since the Power BI Desktop and Gateway October updates, DirectQuery support planned for H1 CY18</em>]&lt;br&gt;- Ability to connect to a <strong>Message Server</strong> (Load Balancer) [<em>public Beta released in Desktop in December, Service support planed for H1 CY18</em>]&lt;br&gt;- <strong>Windows Authentication</strong> support in Power BI Desktop [<em>public Beta released in December, GA planned for H1 CY18</em>]&lt;br&gt;- Kerberos-based <strong>Single Sign-On via Gateway</strong> [<em>Public Preview planned for H1 CY18</em>]</td>
</tr>
</tbody>
</table>
DEMO

SAP Business Warehouse Connector
SAP BW – Looking Ahead

Message Server Support in Power BI Service/Gateway

Kerberos-based Single Sign-On in Power BI Service/Gateway

Performance Improvements
   Navigator Metadata retrieval, Query Optimizations for DirectQuery visualizations, etc.

Variable Input UX enhancements
   Improved Hierarchy selection
   Ranges, Exclude, <, >, <=, etc.

Richer metadata in DirectQuery mode
   Formatting, Currency, Units of Measure
   Key / Sort By
   Short/Medium/Long Text
   Technical Field Names
   Custom Dimension Attributes

SAP Certification