SAP Analytics Cloud
Data Preparation & Integration

Katharina Doerr, SAP Product Management Analytics
July 2019
Legal Disclaimer

The information in this presentation is confidential and proprietary to SAP and may not be disclosed without the permission of SAP. This presentation is not subject to your license agreement or any other service or subscription agreement with SAP. SAP has no obligation to pursue any course of business outlined in this document or any related presentation, or to develop or release any functionality mentioned therein. This document, or any related presentation, and SAP’s strategy and possible future developments, products, and platforms, directions, and functionality are all subject to change and may be changed by SAP at any time for any reason without notice. The information in this document is not a commitment, promise, or legal obligation to deliver any material, code, or functionality. This document is provided without a warranty of any kind, either express or implied, including but not limited to the implied warranties of merchantability, fitness for a particular purpose, or noninfringement. This document is for informational purposes and may not be incorporated into a contract. SAP assumes no responsibility for errors or omissions in this document, except if such damages were caused by SAP’s willful misconduct or gross negligence.

All forward-looking statements are subject to various risks and uncertainties that could cause actual results to differ materially from expectations. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of their dates, and they should not be relied upon in making purchasing decisions.
Agenda

Overview on connectivity and data preparation

Next steps

Sneak-preview demo
One | Simple | Cloud

Business Intelligence
- Data Preparation
- Storytelling

Planning
- Sharing
- Simulation

Predictive
- Forecasting
- Automated Insights

Application Design
- Custom Apps
- SDK Extensions

Unified experience for Planning, BI and Predictive all in one service
Live data connectivity enables SaaS for everyone
End-to-end analytics for the Intelligent Enterprise

Digital Boardroom | Mobile | SAP Analytics Hub

SAP Analytics Cloud

On Premise | Hybrid | Cloud
Data integration

Connect to data anywhere stored in on-premise databases, cloud databases, and personal files. Enrich data and business metadata in preparation for self-service data analysis through purpose-built data modeling capabilities and calculations.

**Live connections**
- Data replication is not required
- Leverage business metadata directly without additional modeling
- Leverage existing security and data authorizations

**Data import connections**
- Business users can model data with Smart Data Preparation
- Easily create, track and reverse data transformations
- Refresh data on demand or via schedule
A frictionless, agile and repetitive process

Connect

Prepare

Explore/Analyse/Predict
Connect
Connect

Best-in-class
Fully connected

Seamless extension
Accelerate through HANA

Openness
Broad scope
Connect to tables or views with support of prompts
Supporting up to 150 cloud data sources through SCP Open Connectors.
Connecting to SAP SCP Open Connectors

Access to 6 new sources
- Amazon S3, Egnyte, Dropbox, OneDrive
  – Upload CSV, .xlsx files from these sources
- Netsuite, Microsoft Dynamics

Setup of SCP’s Open Connector service is needed
- Available on the SAP Store
- Sub-account information of the SCP service is needed to trigger access to these sources in SAC
  – Pricing based on # of API calls
  – Monitor usage in SCP cockpit
- Global pause button of SCP Open Connector sources available to SAC administrator.
New upload limits

On rows
- For files
  - Support 2Gb files
- For non-files (Q4)
  - 100m cells for models
  - 1B cells for Datasets

On columns
- Limits for Agile BI workflows will be re-assessed during beta program
- Beyond that limit, a new UX will be required to navigate across a high number of columns
Exporting data out of SAC

Asynchronous experience when pushing data to CSV, S/4HANA

Export up to 6m rows from the fact data
- Magnitudes better performance vs. existing export
- For requests to export 1m+ rows, only fact data can be considered
- Only files without calculations can be exported, otherwise limit will be still of 1m rows.
Blur the line between live and acquired by leveraging underlying HANA integration technology directly from SAC.
A frictionless, agile and iterative process

Connect

Prepare

Explore/Analyse/Predict
Driving principles of agile data preparation
Show the data from different perspectives

- Direct display – Table View / Card View
- Direct interactions
- Data Quality
- Data Distribution
Driving principles of agile data preparation
Increase user creativity with data

Let the user focus on higher-valued workflows through suggestions
▪ Infer datatypes
▪ Transformation suggestions based on end-user’s selection
▪ Suggest dimension relationships

Let the users play with the data
▪ Show the different states: previous, future
▪ Preview transforms
▪ Let users decide on the result
Unpivot columns into rows

Manage Excel crosstabs
- Apply a new unpivot transformation to bring columns into rows
- Each header row will have its own column after pivoting
- Rows of the dataset will be promoted as column headers

Word of caution on refresh
- Models created with unpivot can only be refreshed if the number of columns is the same.
- Users will have to use “import data” workflow to bring in new data
Data preparation functions
Data preparation functions make it easy to transform data

- Split, duplicate, delete, concatenate columns
- Replace, change single or multiple values/cells
- Extract values to create a new column
- Calculated columns
- Geo enrichment by coordinates & area name
- Create level-based and parent-child hierarchies
- Transpose columns to rows and vice versa
- Combine data from other sources
- History maintained of transformations with undo/redo
Prepare with Agility

Discover, prepare, and share data without the reliance from IT

Easy for business users and analysts to quickly prepare data with a visual, interactive interface

Data defines structure
<table>
<thead>
<tr>
<th>Name</th>
<th>Description</th>
<th>Type</th>
<th>Owner</th>
<th>Created on</th>
<th>Changed by</th>
<th>Changed on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Forms</td>
<td>Input Forms</td>
<td>Folder</td>
<td></td>
<td>Feb 25, 2019 14:22</td>
<td></td>
<td>Feb 25, 2019 14:22</td>
</tr>
<tr>
<td>Public</td>
<td>Public</td>
<td>Folder</td>
<td></td>
<td>Feb 25, 2019 14:22</td>
<td></td>
<td>Feb 25, 2019 14:22</td>
</tr>
<tr>
<td>Samples</td>
<td>Samples</td>
<td>Folder</td>
<td></td>
<td>Feb 25, 2019 14:22</td>
<td></td>
<td>Feb 25, 2019 14:22</td>
</tr>
<tr>
<td>budget.xlsx</td>
<td>-</td>
<td>Model (Analytic)</td>
<td>Paul Ekeland</td>
<td>Apr 30, 2019</td>
<td>Paul Ekeland</td>
<td>Apr 30, 2019</td>
</tr>
<tr>
<td>Queries across all landscapes</td>
<td>-</td>
<td>Story</td>
<td>Paul Ekeland</td>
<td>Apr 17, 2019</td>
<td>Paul Ekeland</td>
<td>Apr 17, 2019</td>
</tr>
<tr>
<td>query_result.csv</td>
<td>-</td>
<td>Model (Analytic)</td>
<td>Paul Ekeland</td>
<td>Apr 17, 2019</td>
<td>Paul Ekeland</td>
<td>Apr 17, 2019</td>
</tr>
<tr>
<td>SurveyResults_Red</td>
<td>-</td>
<td>Model (Analytic)</td>
<td>Paul Ekeland</td>
<td>Apr 5, 2019 14:22</td>
<td>Paul Ekeland</td>
<td>Apr 5, 2019 14:22</td>
</tr>
<tr>
<td>Vancouver Land value</td>
<td>-</td>
<td>Story</td>
<td>Paul Ekeland</td>
<td>Feb 25, 2019 14:22</td>
<td>Paul Ekeland</td>
<td>Feb 25, 2019 14:22</td>
</tr>
</tbody>
</table>
Thank you.

Katharina Doerr, SAP Product Management Analytics

katharina.doerr@sap.com