FACT SHEET

ANALYTICS
CREATOR
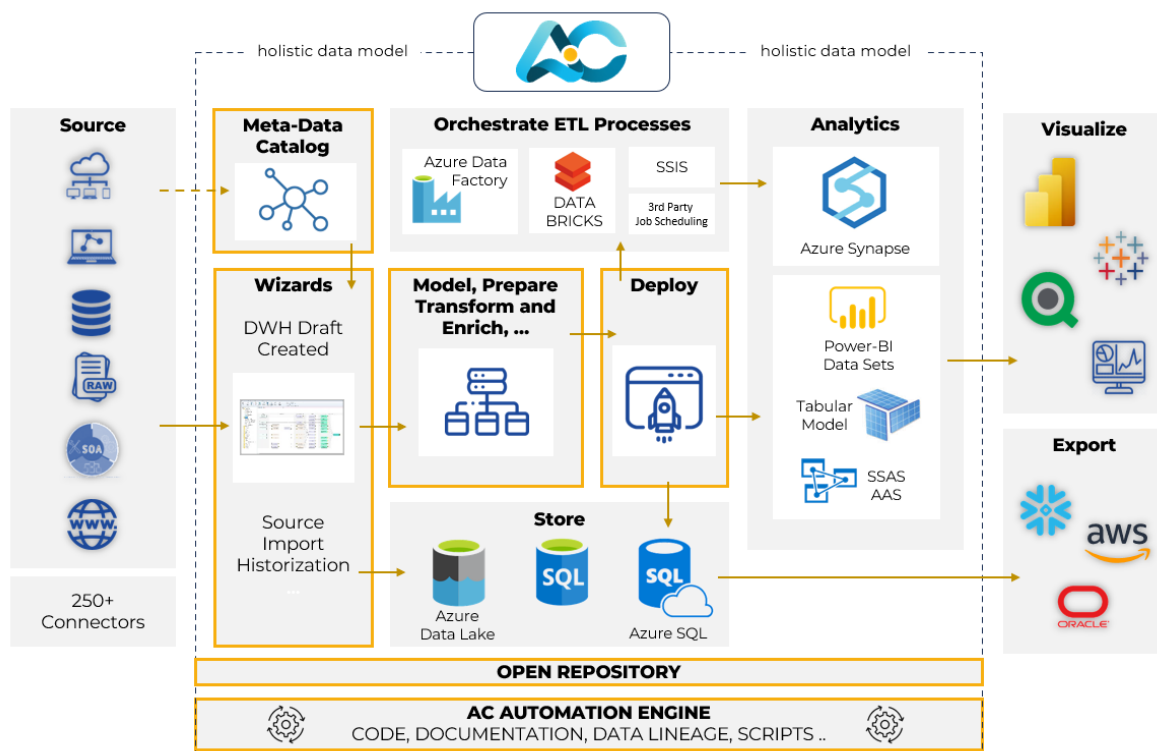
AnalyticsCreator is a powerful DWH automation tool that helps organizations of all sizes streamline their data pipelines and create enterprise-grade data warehouses, data lake houses, or data lakes and analytical models. With **AnalyticsCreator** you can automate the design, development, change process for the entire BI stack, from data extraction and transformation, data warehousing and analytics.

AnalyticsCreator supports a wide range of data sources and target systems, including MS SQL Server, Azure Data Factory, Power BI, Tableau and Qlik. It also offers a variety of features to assist in the design and implementation of complex data models.

AnalyticsCreator is easy to use and manage, with a user-friendly GUI and a variety of pre-build templates and wizards.

MAIN FUNCTIONALITY

- **Full BI-Stack Automation**: From source to data warehouse through to frontend.

- **Holistic Data Model**: Complete view of the entire Data Model. This also allows for rapid prototyping of various models.

- **Data Warehouses:** MS SQL Server 2012-2022, Azure SQL Database, Azure Synapse Analytics dedicated.

- **Analytical Databases:** SSAS Tabular Databases, SSAS Multidimensional Databases, Azure Synapse Analytics dedicated, Power BI, Power BI Premium, Tableau, and Qlik Sense.

- **Data Lakes:** MS Azure Blob Storage.

- **Frontends:** Power BI, Qlik Sense, Tableau, PowerPivot (Excel)**.**

- **Pipelines/ETL**: SQL Server Integration Packages (SSIS), Azure Data Factory 2.0 pipelines, Azure Data Bricks.

- **Azure:** Azure SQL Server, Azure Data Factory Pipelines.

- **Deployment**: Visual Studio Solution (SSDT), Creation of DACPAC files, SSIS packages, Data Factory ARM templates, XMLA files.

- **Modelling Approaches**: Top-down modelling, Bottom-up modelling, import from external modelling tool, Dimensional/Kimball, Data Vault 2.0, Mixed approach of DV 2.0 and Kimball (A combination the best of both worlds by using elements of both Data Vault 2.0 and Kimball modelling), Inmon, 3NF, or any custom data model. The **AnalyticsCreator** wizard can help you create a data vault model automatically and also supports strict Dan Linstead techniques and data vaults.

- **Historization Approaches**: Slowly changing dimensions (SCD) type 0, type 1, type 2, mixed, SnapShot historization, Gapless historization, Change-based calculations.

- **Surrogate Key**: Auto-increment, long integer, Hash key, custom definition of hash algorithm.

- **Support for role-based security** (OLAP Cubes)

- Data partitioning

- Pre-deployment script and post-deployment script

- Multiple environment support (Dev, Test, Prod, etc)

- **Transformations**: Transformation wizard, Regular transformations (Views), Manual transformations (Views), SQL Scripts, Stored procedures, manually created SSIS Packages

- **Other**: Offers GDPR/DSGVO compliance design patterns, Source metadata exploitation, Support for role-based security (OLAP Cubes), Data partitioning, Pre-deployment script and post-deployment script, Multiple environment support, Custom defined layers

- **Anonymization of Data: AnalyticsCreator** allow for both real anonymization and masking of data

GUI

- Windows GUI

- Embedded version control

- Multi-user development supporting distributed development

- Manual object locking possible

- Predefined templates

- Cloud-based repository

- Cloud service support available

- Data Lineage

- Macro language for more flexible development

- Predefined, datatype-based transformations

- Calculated columns in each DWH table

- Single point development: the whole design is possible in AnalyticsCreator. External development not necessary

- Embedding external code

- Automatic documentation in Word and Visio

- Export to Microsoft DevOps, GitHub, ..

- **AnalyticsCreator** repository is stored in a MS SQL Server and can be modified and extended with additional functionality

- [Online Wiki](#)

PROCESS SUPPORT

- ETL procedure protocol

- Error handling on ETL procedures

- Consistency on ETL failure

- Rollback on ETL procedures

- Automatic recognition of source structure changes and automatic adaptation of connected DWH

- Entire DWH life-cycle support

- Delta and full load of data models

- Near real-time data loads possible

- External orchestration/scheduling for ETL process

- Internal orchestration/scheduling for ETL process with generated MS-SSIS packages

- Several workflow configurations

- No is necessary runtime for **AnalyticsCreator**

- Daily processing of created DHWs are run without **AnalyticsCreator**

- No additional licences necessary

- For design component no MS SQL Server necessary

DATA SOURCES

- **Build-in Connectivity**: MS SQL Server, Oracle, SAP ERP, S4/HANA with Theobald Software (ODP, DeltaQ/Tables), SAP Business One with **AnalyticsCreator** own connectivity, SAP ODP objects, Excel, Access, CSV/Text, OLEDB (e.g. Terradata, Netezza, DB2..), ODBC (MySQL, …) , OData , Azure Blob Storage (CSV, Parquet, Avro), REST, MS Sharepoint, Google Ads, Amazon, Salesforce CRM, Hubspot CRM, MS Dynamics 365 Business Central, MS Dynamics Navision

- **3rd party Connectivity**: Access to more than 250+ data source with C-Data connector [www.cdata.com/drivers]. This allows for connection to **AnalyticsCreator** directly by an ODBC, or OLE DB driver, or by connecting an ingest layer with externally filled tables.

- **Define Your Own Connectivity**: (Any data source, Hadoop, Google BigQuery/Analytics, Amazon, Shop solutions, Facebook, LinkedIn, X (formerly Twitter)) In all cases of access to source data an AnalyticsCreator-metadata-connector is created. The AnalyticsCreator -metadata-connector is a description of data-sources you use for more easy handling in AnalyticsCreator. **AnalyticsCreator** is able to automatically create a metadata connector by extracting the data definition from your source data. it contains information about key fields, referential integrity, name of fields and description.

EXPORT FUNCTIONALITY

Export Anywhere 250+:

- Azure blob storage, Text, CSV files, any target system using OLEDB or ODBC driver, automated type conversation, Export performed by SSIS packages or Azure Data Factory pipelines

- Export for example to Oracle, Snowflake, Synapse

USE OF ANALYTICAL FRONTENDS

Push Concept: Power BI models will be created automatically, Tableau models will be created automatically, Qlik models will be created automatically. All models described here will be created at the same time.

Pull Concept: There are many BI Frontends around which allows you to connect with the specified Microsoft data. Check with your vendor or us what is possible. **AnalyticsCreator** allows you to develop a specific solution for your Analytics Frontend in the way that the model will be created automatically for your BI Frontend (Push concept).