

SAP HANA Data Warehousing Foundation

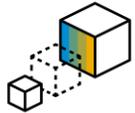
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SAP HANA Data Warehousing Foundation Management Summary

The SAP HANA data warehousing foundation product provides specific data management applications, to support large scale SAP HANA use cases



Web based ease-to-use applications on HANA XS-Advanced platform



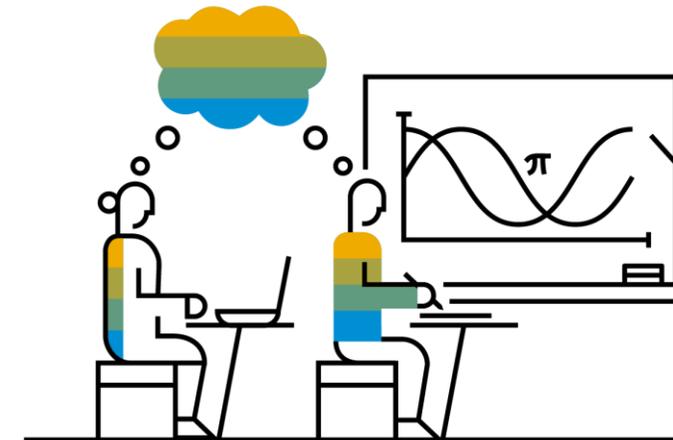
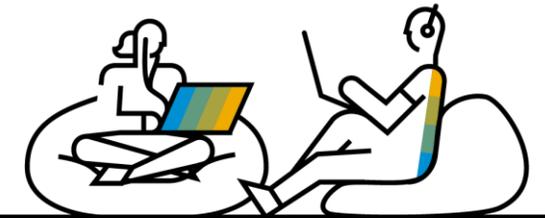
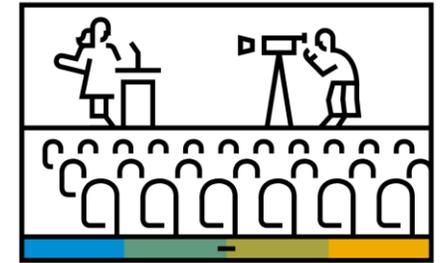
Freedom to custom build data aging, models and data management processes



Functions for data management, scheduling, execution and monitoring

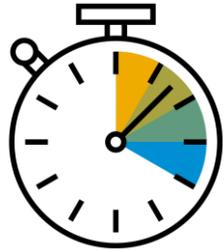


Reduce TCO, by optimization of the memory footprint of data in SAP HANA



SAP HANA Data Warehousing Foundation

Selected Customers



Australian Public Sector customer

Objective:

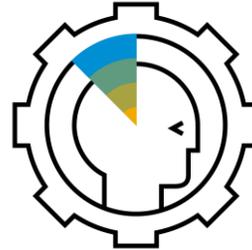
Using NDSO in combination with machine learning algorithms to cleanse S/4 HANA customer data

Approach:

central, 4 developers

Go-Live strategy:

already live



German Insurance customer

Objective:

Replacement of a IBM DB2 based on Enterprise Data Warehouse

Approach:

unknown

Planned Go-Live:

October 2018



US based Oil customer

Objective:

Creating a central Enterprise Data Warehouse (EDW)

Approach:

decentral, multiple developers

Go-Live strategy:

multiple phases

SAP HANA Data Warehousing Foundation

Personas



Data Scientist

**Open platform
for multiple sources**



Data Architect

**Comprehensive
data management
capabilities**



Administrator

**Schedule, Monitor &
execute capabilities**

SAP HANA Data Warehousing Foundation Applications

Native DataStore Object (NDSO)

to provide a central persistence object with the same capabilities of the BW standard advanced DataStore Object (ADSO models)

Data Lifecycle Manager (DLM)

to deliver a possibility to archive / displace data from a SAP HANA persistency to Hadoop or SAP Vora*, HANA Extension Node and Dynamic Tiering**, SAP IQ**, Multi-Store Table**

Data Distribution Optimizer (DDO)**

to plan, adjust and analyze landscape reorganizations for SAP HANA scale out systems

Data Warehouse Scheduler (DWS)

to maintain dependencies between single processes with the focus to provision data warehouse models

Data Warehouse Monitoring (DWM)

to provide a comprehensive overview about current and past activities in the data warehouse



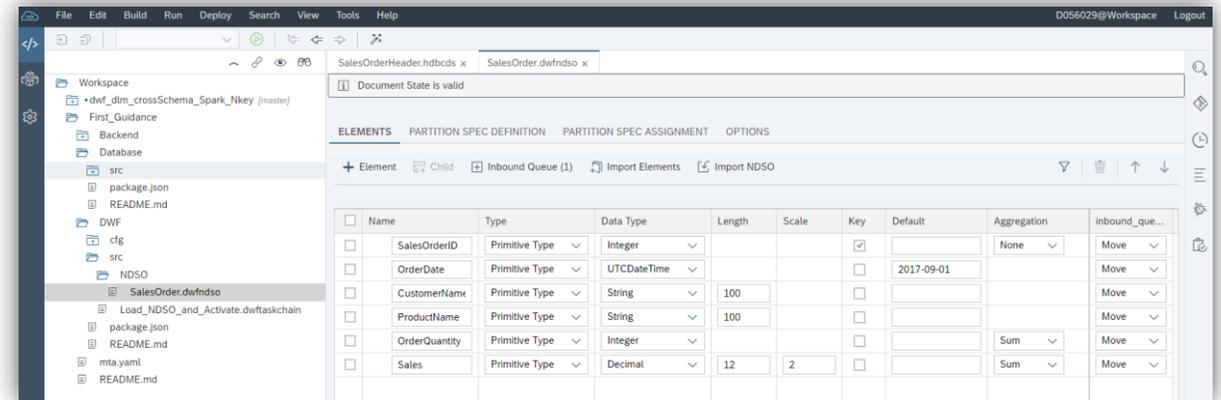
* restricted shipment with DWF 2.0 SP04

** only available on XS-Class

Native DataStore Object (NDSO)

available with XS-Advanced

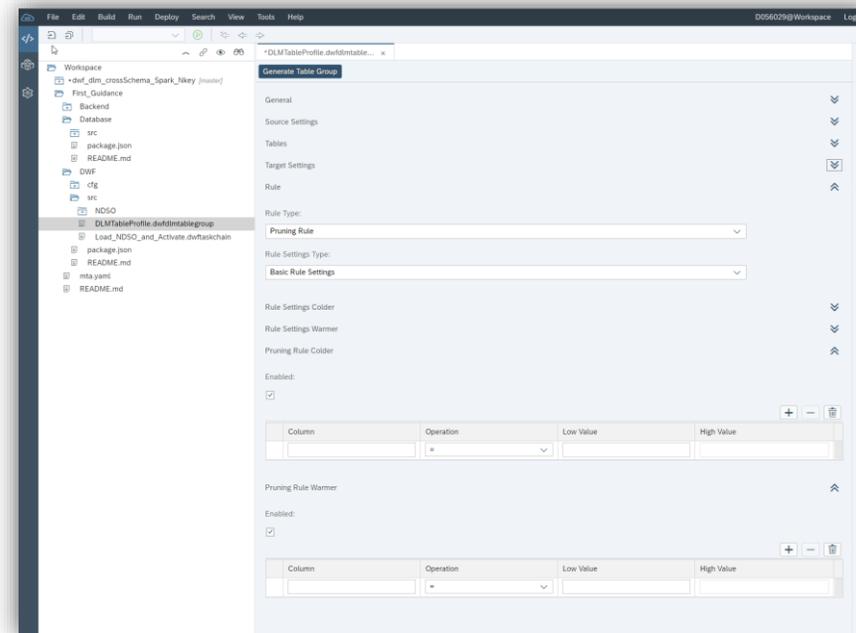
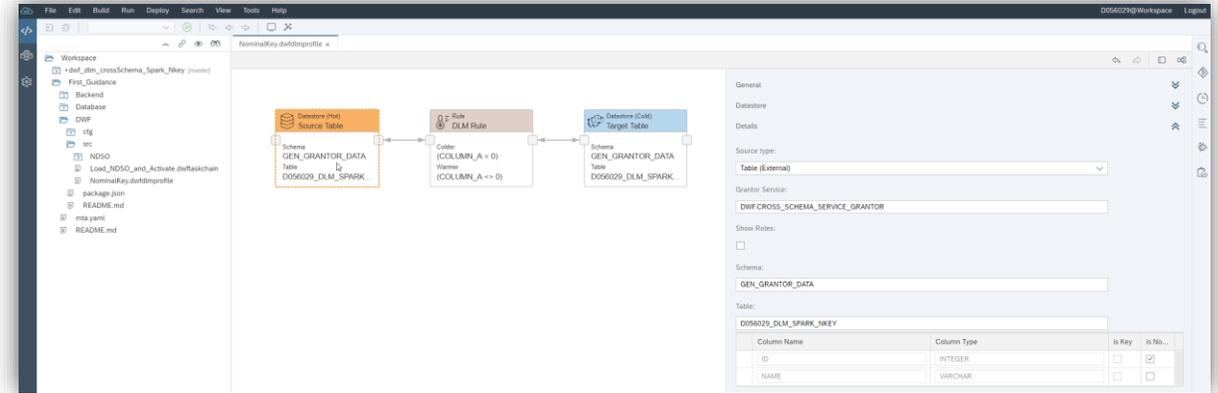
- The NDSO provides request management and delta handling out of the box
- The NDSO is delivered with a user-friendly interface (Web IDE) for load monitoring and request handling features such as roll-back
- The NDSO handles multiple inbound queues to load data from different sources
- The NDSO can be defined in a textual and graphical way
- The NDSO integrates natively with EIM flowgraphs allowing parallel loading, and with 3rd party ETL
- The NDSO supports the “delta language” of SAP data source extractors



Data Lifecycle Manager (DLM)

available with XS-Classical and XS-Advanced

- Integration to custom-built or insert-only focused SAP HANA applications like IoT & Sensor data (Big Data)
- Modeling aging rules on persistence objects
- Generated pruning node views for optimized access between source tables and target tables
- Modeling relocation rules on remote source tables
- Automated and orchestrated data relocation between data stores
- Scheduling data relocation using SAP HANA task chains
- Generated stored procedures to perform mass data relocation – in and out



Data Warehousing Monitoring (DWM)

available with XS-Advanced

- Fiori-style application for (production) system environment w/o access to SAP Web IDE for SAP HANA
- Monitor artifacts, logs, and jobs in a runtime environment of a selected HDI container
- Monitor and schedule task chains executions
- Monitor data lifecycle profiles
- Monitor all Native DataStore Objects according to their execution times
- Display the status of task chains according to their execution times
- Enhanced capabilities for database procedures and DLM related tasks

SAP HANA Data Warehousing Foundation

Monitoring | DataStore Monitor | Task Chain Monitor

Container Explorer

Task Chain Overview

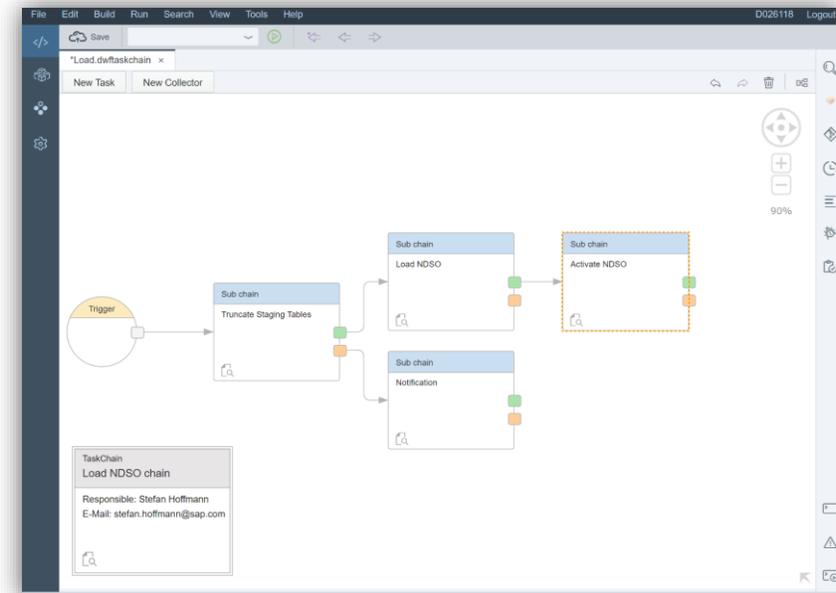
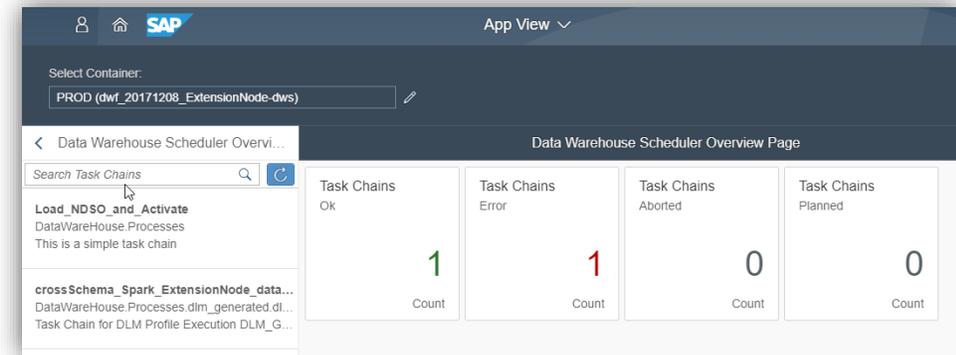
25 of 25 Task Chains | 9 Ok | 7 Error | 0 Aborted | Last Execution Filter | Show All

Namespace	Task Chain	Description	Service	Status	Last Execution At
DataWareHouse.Processes	Load_NDSO_and_Acti...		D031643-9b1djw7lbdy...	Ok	Jan 8, 2018, 4:30:44 PM
DataWareHouse.Processes	Load_NDSO_and_Acti...	This is a simple task c...	dwf_20171208_Extens...	Ok	Feb 13, 2018, 2:16:29 PM
DataWareHouse.Processes	CALL_PROC_WRITIN...		D031852-ez6fbpjulk39...	Error	Feb 28, 2018, 2:14:11 PM
DataWareHouse.Processes	Load_NDSO_and_Acti...	This is a simple task c...	D048584-2rdxgzbtbu17...		
DataWareHouse.Processes	Load_NDSO_and_Acti...	This is a simple task c...	D031852-ez6fbpjulk39...		
DataWareHouse.Processes	Load_NDSO_and_Acti...	This is a simple task c...	D031643-9b1djw7lbdy...		
DataWareHouse.Processes	CALL_PROC_WRITIN...		D031852-ez6fbpjulk39...		
DataWareHouse.Processes	Load_NDSO_and_Acti...	This is a simple task c...	D026118-3tpqy477yu...		
DataWareHouse.Processes	Load_NDSO_and_Acti...	This is a simple task c...	D049409-n9ytkopsdru...		

Data Warehouse Scheduler (DWS)

available with XS-Advanced

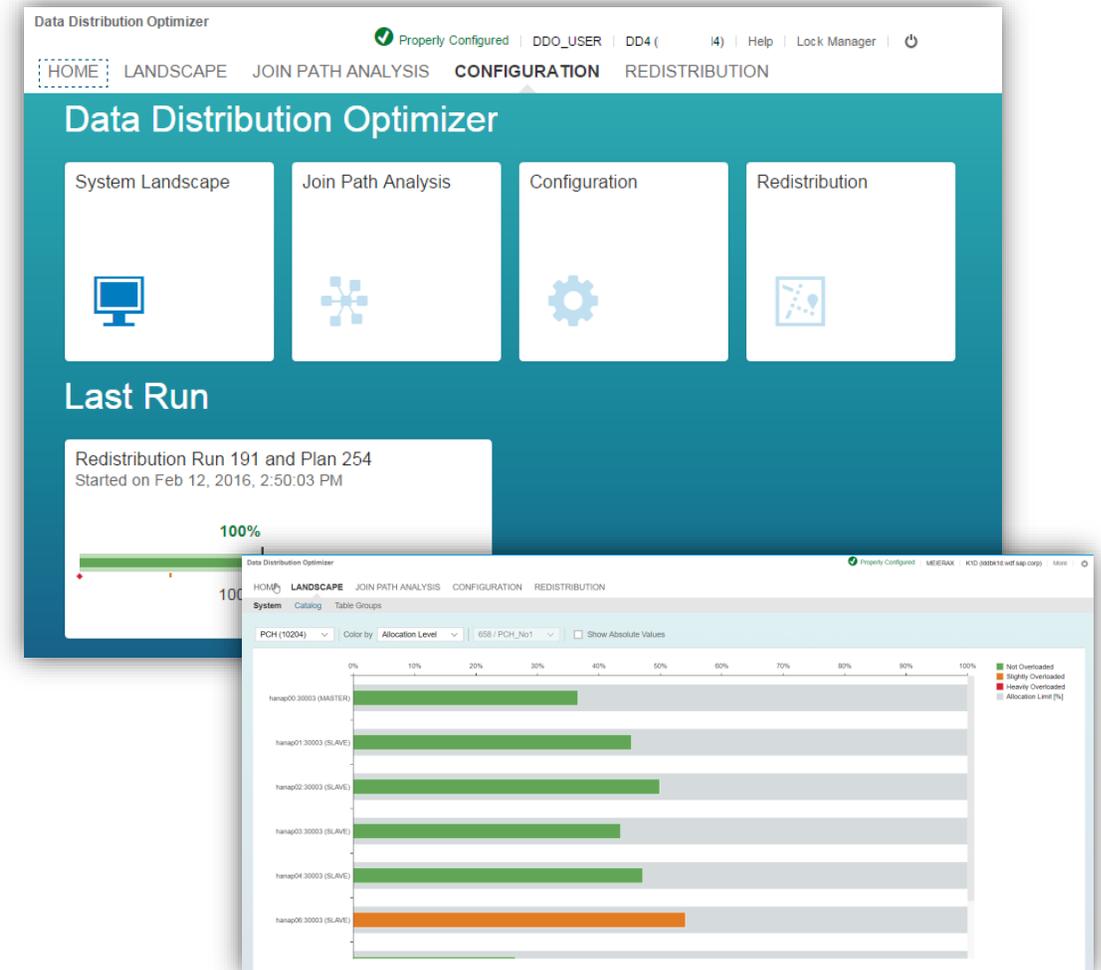
- Embedded in SAP Web IDE for HANA
- Provides a framework to define task chains as a sequences of single tasks
- Flexible start conditions
- Parallelization and dependency handling
- Provides the capability to schedule flowgraphs, NDSO related tasks, project local database procedures and DLM related tasks



Data Distribution Optimizer (DDO)

available with XS-Classics

- SAP HANA Scale-Out Landscape Overview displaying system configurations and data distributions
- Specify different reorganization configurations for different levels of granularity
- Create, adjust, and simulate different reorganization plans to achieve an optimal data distribution in an interactive fashion
- Visualize reorganization plans graphically by comparing the simulations with the actual system landscape
- Export and import reorganization plans across systems (DDO remote mode deployment)
- Analyze reorganization planning steps and logs of planned and executed SAP HANA landscape reorganization runs
- Join path analysis to identify associated database tables in the system and create a proposal for table grouping

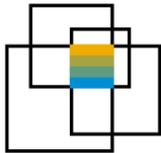


Find out more

Learn about SAP HANA Data Warehousing Foundation



Find support information about **SAP HANA Data Warehousing Foundation** faster and easier on SAP's [Help Portal](#). It provides an overview over product information such as installation, upgrading, development, and the latest features for each version.



Check out the **SAP HANA Data Warehousing Foundation Expert Page** containing valuable resources to fast-track your knowledge with news and technical information as well as a rich support section designed to help you get the highest quality answers quickly and easily directly from SAP experts.

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