



# **GLOSSARY OF SAP** **BW/4HANA**

**A Quick Reference Guide to  
SAP Terminologies**

Concept/Term	Definition
SAP BW/4HANA	SAP's next-gen data warehouse built for HANA. Offers simplified modeling and real-time analytics.
InfoObject	Fundamental building block for master and transactional data. Includes characteristics and key figures.
Advanced DSO (aDSO)	Primary data storage object in BW/4HANA. Supports staging, reporting, and archiving.
CompositeProvider	Combines multiple InfoProviders using joins or unions. Replaces MultiProviders from older BW.
Open ODS View	Virtual layer to expose external data without loading. Enables quick access to non-BW data.

Concept/Term	Definition
InfoProvider	General term for any object storing or exposing data. Includes aDSO, CompositeProvider, and Open ODS.
BW Query	Analytical view built using BW InfoProviders. Created in Eclipse or Web tools for reporting.
DataStore Object	Legacy object used for detailed data storage. Replaced by aDSOs in BW/4HANA.
Master Data	Reusable data like Customer or Material. Shared across different InfoProviders.
Transaction Data	Time-dependent data capturing business events. Linked with master data for analysis.
Field-Based Modeling	Allows modeling without InfoObjects. Simplifies design and improves agility.

Concept/Term	Definition
LSA++	Layered Scalable Architecture optimized for HANA. Promotes virtual models and fewer layers.
Staging Layer	Initial layer to capture raw or cleansed data. Prepares data for harmonization and reporting.
Harmonization Layer	Combines and aligns data across sources. Enables business-rule standardization.
Consumption Layer	Final layer used for reporting and queries. Typically includes CompositeProviders.
Eclipse BW Modeling Tools	Primary tool for BW/4HANA development. Replaces SAP GUI and BEx for modeling.
HANA Studio	Eclipse-based IDE for managing HANA and BW/4HANA models. Supports view and calculation creation.

Concept/Term	Definition
SAP HANA	In-memory database used as the foundation for BW/4HANA. Enables fast, real-time processing.
InfoArea	Folder structure used to organize InfoProviders. Helps manage complex landscapes.
Data Flow Object	Graphical view showing end-to-end data flow. Helps in modeling and impact analysis.
Transformation	Mapping logic between source and target in data load. Includes rules, routines, and formulas.
DTP (Data Transfer Process)	Moves data from one layer to another. Executes transformation and error handling.

Concept/Term	Definition
Source System	External or SAP system providing data to BW. Includes ECC, S/4HANA, or flat files.
DataSource	Defines structure for extracted data from source systems. Basis for transformations.
BW Workspace	Allows business users to model and report on their own data. Supports agile analytics scenarios.
InfoPackage	Used in classic data flows to extract data from sources. Replaced by DTPs in new architecture.
Semantic Group	Groups fields logically during load processes. Ensures consistency and referential integrity.

Concept/Term	Definition
PartProvider	Subset of CompositeProvider objects. Helps organize views and control access.
Authorizations	Controls access to BW data and objects. Uses analysis authorizations for row-level security.
Analysis Authorization	Restricts data access in BW queries. Based on characteristics like region or company code.
Query Variable	Parameter used for dynamic filtering in queries. Can be user-entered or pre-filled.
Key Figure	Numeric data used for measurement and reporting. Examples include revenue, quantity, margin.

Concept/Term	Definition
Characteristic	Descriptive dimension used for slicing data. Examples: customer, product, country.
Time Characteristic	Predefined time-based dimensions like year, quarter, or fiscal period.
Aggregation Level	Layer in planning models for summarizing data. Used in BW-IP and planning functions.
Planning Function	Executes specific planning tasks like distribution or copy. Used in embedded planning.
BW-IP	Integrated planning engine in BW/4HANA. Supports planning and simulation use cases.



Concept/Term	Definition
FOX Formula	Custom scripting language used in planning functions. Supports complex logic.
AMDP (ABAP Managed DB Procedure)	Lets developers push logic to HANA using SQLScript within ABAP. Enhances performance.
Calculation View	HANA-native view used in BW models. Supports complex logic and joins.
External HANA View	Exposes BW objects as HANA views. Enables use in SAC, HANA models, or external tools.
Smart Data Access (SDA)	Allows virtual access to external databases. Avoids physical data replication.

Concept/Term	Definition
Smart Data Integration (SDI)	Enables real-time and batch data replication. Supports transformations and flowgraphs.
Data Tiering Optimization (DTO)	Strategy to manage data across hot, warm, and cold storage. Balances cost and performance.
Query Monitor (RSRT)	Tool to execute and debug BW queries. Provides performance and technical details.
Process Chain	Automates data loads, cleanups, and post-load tasks. Enables scheduled and dependency-driven execution.
Error DTP Handling	Captures erroneous records in separate requests. Allows correction and reprocessing.

Concept/Term	Definition
InfoObject Catalog	Groups InfoObjects into logical sets. Used for managing characteristics and key figures.
Extraction Layer	Initial data acquisition layer from source systems. Typically connected via ODP or flat files.
Delta Mechanism	Captures only changed data from source systems. Reduces data volume and improves efficiency.
Open Hub Destination	Allows data export from BW to external systems. Used for third-party or downstream analytics.
Operational Data Provisioning (ODP)	Framework for data extraction using a unified interface. Preferred over legacy extractors.