GLOSSARY OF SAP
HANA 1.0 SP12

A Quick Reference Guide to SAP Terminologies

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SAP HANA 1.0 SP12
Key Concepts

Concept/Term	Definition
SAP HANA	High-performance, in-memory database platform by SAP. Combines OLTP and OLAP on a single system.
In-Memory Computing	Data is stored in RAM instead of disk for faster access. Enables real-time analytics and processing.
Column Store	Stores data by columns rather than rows. Increases performance for aggregation and compression.
Row Store	Traditional method of storing data in rows. Best for transactional, write-intensive workloads.
HANA Studio	Eclipse-based tool for modeling and administration in HANA. Used for views, security, and system monitoring.

Concept/Term	Definition
Attribute View	Reusable master data view used for filtering and enrichment. Now deprecated in favor of CDS or calculation views.
Analytic View	Combines transactional data with attribute views for reporting. Replaced by star-join calculation views.
Calculation View	Most flexible modeling object in HANA. Supports SQL Script, joins, unions, and star schemas.
SQL Script	Extended SQL used in HANA for complex calculations. Offers loops, variables, and control logic.
XS Engine	Lightweight web server embedded in HANA. Used to build native HANA applications.

Concept/Term	Definition
XS Classic	Original XS engine in HANA 1.0 for native development. Later replaced by XS Advanced.
XS Advanced	Next-gen development environment with multi-language support. Offers container-based architecture.
HANA Modeler	Tool in HANA Studio to create views and manage data models. Essential for analytical use cases.
Schema	Logical container in HANA holding tables, views, and procedures. Segregates data per application or module.
Catalog	Folder in HANA Studio listing database objects by schema. Used for exploring tables, views, and functions.

Concept/Term	Definition
Content	Section in HANA Studio where design-time objects are created. Used for views, packages, and models.
Package	Logical folder to organize design-time artifacts. Required when creating views or procedures.
Delta Merge	Process that combines changes from delta store to main store. Optimizes memory and query performance.
Persistence Layer	HANA's component that ensures data is durable and crash-safe. Manages savepoints and logs.
Savepoint	Scheduled backup of in-memory data to disk. Ensures recovery consistency in HANA.

Concept/Term	Definition
Log Volume	Stores redo logs used for recovery in case of crash. Works alongside data volume and savepoints.
Data Volume	Stores compressed, columnar data in HANA. Backed up regularly as part of system protection.
HANA Appliance	Pre-configured hardware + software setup certified by SAP. Ensures performance and supportability.
HANA Tailored Datacenter	Deployment approach allowing customer to use existing hardware. Must meet SAP's TDI certification.
SLT	Real-time data replication tool for HANA. Supports filtering, transformations, and initial load.

Concept/Term	Definition
SDA	Smart Data Access allows virtual access to external sources. No replication needed; data stays remote.
SDI	Smart Data Integration replicates or virtualizes data with transformation. Includes flowgraphs and adapters.
Replication Server	Component responsible for replicating data to HANA. Used in SLT, SAP LT Replication Server.
Trigger-Based Replication	SLT technique using DB triggers to capture changes. Near real-time replication method.
Initial Load	The first full load of source data into HANA. Prepares system for delta or replication.

Concept/Term	Definition
Delta Load	Transfers only changed data since the last load. Reduces load time and network usage.
HANA View	Virtual object that defines logic for reporting or transformation. Created using Modeler or SQL.
Calculation Scenario	Low-level XML representation of a HANA calculation view. Defines nodes and semantics.
Analytic Privilege	Security mechanism to restrict row-level access in views. Based on attributes like region or department.
SystemDB	Central database in a multi-tenant HANA system. Manages landscape and administration.

Concept/Term	Definition
TenantDB	Individual database running within a multi-tenant system. Logical isolation for applications or customers.
Backup Catalog	Stores metadata of HANA backups. Used to schedule, monitor, and recover backups.
Recovery	Process of restoring data to a consistent state. HANA supports point-in-time and full recovery.
Performance Monitor	Tool in HANA Studio to check CPU, memory, and query performance. Used in root cause analysis.
Compression	Column store feature reducing memory footprint. Uses dictionary, run-length, and cluster encoding.
Table Type	Defines the structure of a table in SQL procedures. Can be row- or column-based.

Concept/Term	Definition
SQL Plan Cache	Stores execution plans for SQL queries. Speeds up query response times by reusing plans.
Load Graph	Visual graph showing memory consumption and object load. Helps identify bottlenecks in performance.
HANA Cockpit	Web-based tool for HANA system monitoring and admin. Replaced many functions of HANA Studio.
Administration Console	Perspective in HANA Studio for managing services, alerts, and user sessions. Essential for DBAs.
Memory Management	HANA controls memory allocation for data, caches, and execution. Monitored via SQL or Cockpit.

Concept/Term	Definition
Join Engine	Executes joins in calculation views. Optimized in HANA to work across column stores efficiently.
Authorization	Defines user access to HANA objects and data. Managed using roles, privileges, and users.
Role	Collection of privileges assigned to HANA users. Can include object, system, or analytic privileges.
Object Privilege	Grants access to specific HANA objects like tables or views. Includes SELECT, INSERT, and EXECUTE rights.
System Privilege	Grants administrative capabilities in HANA. Examples include USER ADMIN, BACKUP ADMIN, etc.