

# The SAP HANA Database

At the core of SAP HANA is the high-performance, in-memory SAP HANA database.

SAP HANA is an in-memory platform that combines an ACID-compliant database with advanced data processing, application services, and flexible data integration services. The SAP HANA database can act as a standard SQL-based relational database. In this role, it can serve as either the data provider for classical transactional applications (OLTP) and/or as the data source for analytical requests (OLAP). Database functionality is accessed through an SQL interface.

8.1

## Standard Database Interfaces

SAP HANA provides standard database interfaces such as JDBC and ODBC and supports standard SQL with SAP HANA-specific extensions.

## Data Provisioning

Several data provisioning mechanisms are available for getting data from different sources into SAP HANA. For example, in a data mart or analytics scenario, data is replicated into SAP HANA from source systems using one of the supported replication technologies). For applications that use SAP HANA as their primary database (such as SAP S/4HANA), data is created directly in SAP HANA.

## Data Recovery

Although the SAP HANA database holds the bulk of its data in memory for maximum performance, it still uses persistent storage to support system restart and recovery. There's minimal delay and no loss of data in the event of failure. For example, after a power failure, the database can be restarted like any disk-based database and returned to its most recent consistent state. In addition, SAP HANA provides functions for backup and recovery, as well as high availability (disaster recovery and fault recovery).

## Related Information

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