

GLOSSARY OF SAP ABAP OO ODATA SERVICES CDS VIEW

A Quick Reference Guide to SAP Terminologies





Concept/Term	Definition
ABAP (Advanced Business Application Programming)	A programming language used in SAP for developing applications and reports within SAP systems.
OData (Open Data Protocol)	A web protocol for querying and updating data, often used to create RESTful APIs for SAP applications.
CDS (Core Data Services) View	A layer of semantic abstraction in SAP HANA that enables modeling of data in a database-independent way, using SQL-like syntax.
OData Service	A service that exposes data through the OData protocol, enabling client applications to interact with SAP systems over HTTP.
ABAP Object-Oriented Programming (ABAP OO)	A programming paradigm within ABAP that uses classes and objects for better code organization and reuse.





Concept/Term	Definition
Entity	A data object represented as a table or view in OData services, which can be queried, updated, or deleted via OData.
Metadata	Describes the structure of OData services, including entity types, properties, and relationships between entities.
Entity Set	A collection of entities in OData services, often used for querying multiple records at once.
Entity Type	A definition of the properties (fields) of an entity in an OData service, similar to a database table structure.
CDS View Annotations	Special instructions in CDS views used to enhance the data model with additional metadata, influencing how the data is exposed or used.





Concept/Term	Definition
SAP Gateway	The technology used to expose SAP data via OData services, allowing integration with external applications.
CDS View Query	A query written in the CDS view language to retrieve data from HANA, incorporating advanced features like associations and aggregations.
Service Binding	The process of associating an OData service with a specific backend system to allow client applications to access data.
SAP Fiori	A user experience (UX) design system that integrates with OData services to provide intuitive, responsive interfaces.
Projection	A technique in CDS views to select specific fields (columns) from a table or view, reducing unnecessary data exposure.





Concept/Term	Definition
Association	A relationship between two entities in CDS views, used to link data from different tables/views.
Join	A CDS view feature used to combine data from multiple sources based on a related key, similar to SQL joins.
Aggregation	The process of grouping and summarizing data in a CDS view, typically using functions like SUM, COUNT, or AVG.
Filter	A condition applied to data in an OData service or CDS view to retrieve only the relevant subset of records.
ABAP CDS View	A CDS view implemented directly in ABAP, allowing the combination of both ABAP and HANA's capabilities for efficient data modeling.





Concept/Term	Definition
HANA Cloud	SAP's cloud-based database platform, which integrates with CDS views for advanced data management and analytics.
CRUD Operations	Refers to Create, Read, Update, and Delete operations that are supported by OData services for manipulating data.
Filter Expression	A condition used to limit the records returned by a CDS view or OData service, typically applied through HTTP query parameters.
UI5 and OData	SAP's front-end framework, UI5, uses OData services to connect with backend data, allowing dynamic user interfaces.
Deep Insert	A capability of OData services to insert nested or related data into an entity set in a single operation.





Concept/Term	Definition
Association Cardinality	Defines the type of relationship between entities in CDS views (e.g., one-to-one, one-to-many).
Projection View	A type of CDS view focused on selecting a subset of fields from a table or another view, often used for performance optimization.
Consumption View	A CDS view designed to expose data to other applications, often involving joins, associations, and aggregations.
Parameter Binding	The mapping of input parameters in OData services to filter or modify data based on user input or program logic.
OData Query Options	A set of query parameters (e.g., \$filter, \$select, \$expand) in OData that allows users to fine-tune the data they retrieve.





Concept/Term	Definition
SAP Cloud Platform Integration (CPI)	An integration service used to connect SAP systems with third-party applications, often using OData services.
Web Services	A method of communication between SAP and external systems, typically using REST or SOAP protocols for exchanging data.
Data Exposure	The process of making data available to external systems or applications, such as through OData services or CDS views.
SAP API Management	A tool for managing and exposing APIs securely, including those based on OData services, to external consumers.
CRUD-Q Operations	The extended version of CRUD operations (Create, Read, Update, Delete) with Query capabilities in OData services.





Concept/Term	Definition
Runtime Data Filtering	Applying filters on data at runtime in OData services or CDS views to ensure only relevant data is processed and displayed.
BOPF (Business Object Processing Framework)	A framework used to manage business objects and their states, often utilized in conjunction with ABAP OO and CDS views.
SAP NetWeaver Gateway	A technology layer that enables the integration of SAP back-end systems with external applications via OData services.
Batch Processing in OData	A feature that allows multiple OData requests to be grouped together and processed in a single HTTP call.
Entity Relationship	A relationship between entities in OData services, defining how one entity links to another in terms of data.





Concept/Term	Definition
Inline Data	A feature in OData where data is included directly within the response message, often used for related entity data.
Dynamic CDS View	A CDS view that adapts to runtime conditions or parameters, offering flexible data modeling capabilities.
External Data Source in CDS	Data from external systems or services that can be integrated into a CDS view for unified access across various platforms.
OData \$expand	An OData query option used to retrieve related entity data by expanding linked entities in a single request.
OData \$select	A query option in OData to limit the fields (properties) returned in a response, improving performance.





Concept/Term	Definition
Backend Service	The server-side component of an OData service that handles requests from external systems and retrieves data from SAP.
Gateway Service Builder	A tool in SAP Gateway used to create and manage OData services, including defining entity types and sets.
Service Operation	The action or function defined within an OData service, such as querying data or executing operations like CREATE or DELETE.
Metadata Document	A document in OData that describes the structure of the service, including the entities, properties, and relationships.
OData \$filter	A query option in OData that allows users to filter data based on specific conditions, such as value ranges or comparisons.