

GLOSSARY OF MASTER SAP ODATA: BEGINNERS TO ADVANCE

A Quick Reference Guide to SAP Terminologies





Concept/Term	Definition
OData (Open Data Protocol)	A standard protocol used to create and consume RESTful APIs, enabling seamless data exchange between SAP and external systems.
SAP Gateway	A technology that enables the creation, consumption, and management of OData services in SAP systems.
SAP OData Services	A set of services that expose data from SAP systems through OData protocol, enabling data access via REST APIs.
Entity Set	A collection of entities exposed through an OData service, representing a data model in SAP, such as customers or orders.
Entity	A single object in an OData service representing a specific data element, like a customer or order.





Concept/Term	Definition
OData URI (Uniform Resource Identifier)	The URL used to access and interact with OData services, specifying the service and data entities to be queried.
\$metadata	A system query option in OData that retrieves the metadata of the service, including entity sets, data types, and relationships.
\$filter	A query option in OData used to filter data based on specific conditions, like "Status eq 'Active'".
\$select	A query option in OData that allows selecting specific fields or properties of an entity to retrieve only the required data.
\$expand	A query option that enables retrieving related entities along with the primary entity, like fetching related orders with customer data.





Concept/Term	Definition
\$orderby	A query option in OData used to sort the result set of an entity, such as ordering by date or name.
\$top	A query option in OData that limits the number of records returned from the service, useful for pagination or limiting large result sets.
\$skip	A query option in OData used to skip a certain number of records in the result set, typically for pagination.
\$search	A query option in OData that allows performing a full-text search on the entity set for specific keywords.
Batch Request	A method in OData to bundle multiple operations (e.g., queries, updates) into a single HTTP request for efficiency.





Concept/Term	Definition
Metadata Document	An XML file that describes the structure of the OData service, including entity types, properties, and relationships.
Service Document	An XML file that lists all available OData services and endpoints exposed by an SAP system.
CRUD Operations	The basic operations of OData: Create, Read, Update, and Delete, corresponding to HTTP methods POST, GET, PUT/PATCH, and DELETE.
SAP Fiori	SAP's design system for building responsive and intuitive user interfaces, commonly using OData services for data access.
SAP UI5	A development toolkit for building webbased user interfaces, using OData services to fetch and display data in SAP applications.





Concept/Term	Definition
OData Producer	The system or service that exposes data to be consumed through OData, typically a backend SAP system like SAP S/4HANA or SAP Gateway.
OData Consumer	The system or client that consumes and processes data from an OData service, such as a web application or mobile app.
CORS (Cross-Origin Resource Sharing)	A mechanism that allows web applications running at one origin to request resources from a different origin, relevant for consuming OData services from browsers.
OData Version 2.0	An earlier version of OData, commonly used in SAP for web services, with limitations compared to OData 4.0 in features like JSON support.
OData Version 4.0	The newer version of OData that includes enhancements like better JSON support, improved filtering, and more complex querying capabilities.





Concept/Term	Definition
JSON Format	A lightweight data interchange format used by OData services to transmit data between client and server, commonly used in SAP for RESTful services.
XML Format	An alternative format for transmitting data in OData services, used in some SAP systems for compatibility with legacy applications.
SAP Cloud Platform	A platform-as-a-service (PaaS) that enables development, integration, and deployment of cloud applications, often using OData for data exchange.
OData Service Registration	The process of registering an OData service in SAP Gateway or SAP S/4HANA to expose it for external consumption.
OData Service Activation	The process of activating an OData service to make it available for consumption by external applications or users.





Concept/Term	Definition
OData Security	Mechanisms for securing OData services, including authentication, authorization, and encryption to ensure secure data exchange.
OAuth	An open standard for token-based authentication, often used to secure OData services by allowing users to grant third-party applications access to their data.
SAP Gateway Client	A tool used to test and debug OData services in SAP, allowing developers to simulate requests and analyze the responses from SAP Gateway.
SAP S/4HANA	SAP's next-generation ERP suite, which supports the use of OData services for real-time data exchange between SAP and external systems.
Entity Framework	A framework for building and interacting with data models in OData, allowing for easier creation of entities and data relationships in SAP systems.

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Concept/Term	Definition
Transaction Handling	A mechanism in OData to ensure data integrity during batch or multi-step operations by managing transactions in a controlled manner.
OData Service Versioning	The practice of maintaining multiple versions of an OData service to ensure backward compatibility while introducing new features or changes.
Proxy Class	A client-side class that acts as an intermediary between the consumer and the OData service, simplifying interactions with the service's endpoints.
SAP API Management	A set of tools to design, monitor, and secure APIs, including OData services, ensuring proper governance and performance of APIs in SAP ecosystems.
Data Transformation	The process of converting data from one format to another, especially when consuming data through OData services, ensuring compatibility with target systems.

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Concept/Term	Definition
Service Layer	A component in SAP architecture that abstracts the complexities of business logic, exposing OData services for client consumption.
SAP Business Suite	A set of integrated business applications from SAP, often using OData to expose critical business data for analytics and reporting.
SAP S/4HANA Cloud	The cloud-based version of SAP S/4HANA, which also supports the use of OData services for efficient data exchange and real-time processing.
SAP BW/4HANA	SAP's data warehousing solution, often consuming or exposing data through OData services for business intelligence and reporting.
Cross-System Data Integration	The process of synchronizing and integrating data between SAP and non-SAP systems using OData services for real-time updates and consistency.





Concept/Term	Definition
SAP Data Intelligence	A tool within SAP BTP that integrates, orchestrates, and processes data from different sources, often using OData services to manage data flows.
API Gateway	A tool used for managing, securing, and routing API requests, including OData services, between clients and SAP back-end systems.
Service Consumer	A client or application that interacts with an OData service to retrieve, update, or delete data exposed by the service.
UI5 (SAP UI5)	A framework for building user interfaces in SAP applications, commonly using OData services to fetch and display data in SAP Fiori apps.
Data Binding	The connection between user interface elements and the underlying data model in SAP applications, typically using OData services to bind data to UI components.