

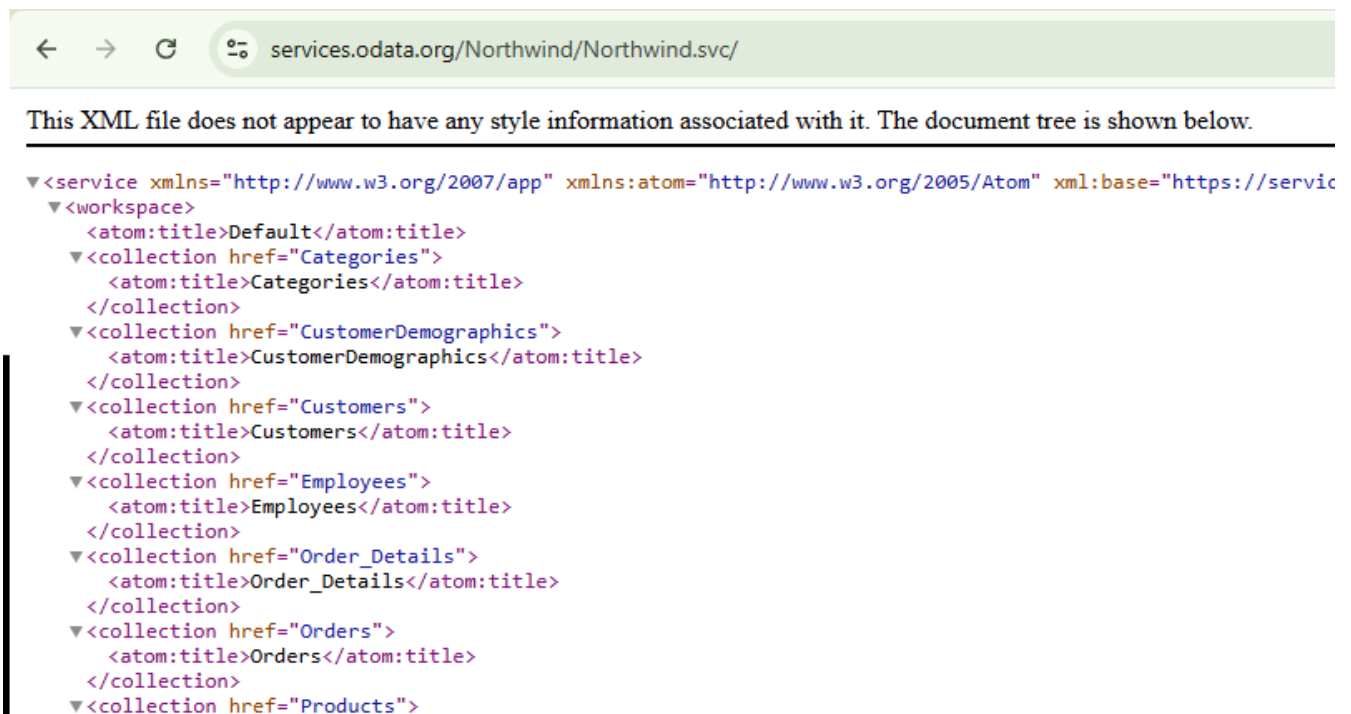
¿Qué es OData?

OData (Open Data Protocol) es un estándar desarrollado por Microsoft que permite la creación y consumo de APIs RESTful de manera uniforme. Facilita el acceso a datos mediante operaciones estándar como **CRUD** (Create, Read, Update, Delete) usando **HTTP** y formatos como **JSON** o **XML**. Se basa en principios como la URL parametrizable para consultas (filtrado, ordenación, paginación) y la interoperabilidad entre sistemas.

En SAP, **OData es clave para SAP Fiori y SAPUI5**, ya que permite la comunicación entre el frontend y el backend SAP a través de servicios expuestos desde SAP Gateway.

Revisión OData Northwind

<https://services.odata.org/Northwind/Northwind.svc/>



Metadata:




[https://services.odata.org/northwind/northwind.svc/\\$metadata](https://services.odata.org/northwind/northwind.svc/$metadata)

```

services.odata.org/Northwind/Northwind.svc/$metadata
<EntityType Name="Customer">
  <Key>
    <PropertyRef Name="CustomerID"/>
  </Key>
  <Property Name="CustomerID" Type="Edm.String" Nullable="false" MaxLength="5" FixedLength="true" Unicode="true"/>
  <Property Name="CompanyName" Type="Edm.String" Nullable="false" MaxLength="40" FixedLength="false" Unicode="true"/>
  <Property Name="ContactName" Type="Edm.String" MaxLength="30" FixedLength="false" Unicode="true"/>
  <Property Name="ContactTitle" Type="Edm.String" MaxLength="30" FixedLength="false" Unicode="true"/>
  <Property Name="Address" Type="Edm.String" MaxLength="60" FixedLength="false" Unicode="true"/>
  <Property Name="City" Type="Edm.String" MaxLength="15" FixedLength="false" Unicode="true"/>
  <Property Name="Region" Type="Edm.String" MaxLength="15" FixedLength="false" Unicode="true"/>
  <Property Name="PostalCode" Type="Edm.String" MaxLength="10" FixedLength="false" Unicode="true"/>
  <Property Name="Country" Type="Edm.String" MaxLength="15" FixedLength="false" Unicode="true"/>
  <Property Name="Phone" Type="Edm.String" MaxLength="24" FixedLength="false" Unicode="true"/>
  <Property Name="Fax" Type="Edm.String" MaxLength="24" FixedLength="false" Unicode="true"/>
  <NavigationProperty Name="Orders" Relationship="NorthwindModel.FK_Orders_Customers" ToRole="Orders" FromRole="Customers"/>
  <NavigationProperty Name="CustomerDemographics" Relationship="NorthwindModel.CustomerCustomerDemo" ToRole="CustomerDemographics" FromRole="Customers"/>
</EntityType>

```

Obtenemos los datos de la entidad Customer:

Customer Entity Type		
	CustomerID	String(5)
Ab	CompanyName	String(40)
Ab	ContactName	String(30)
Ab	ContactTitle	String(30)
Ab	Address	String(60)
Ab	City	String(15)
Ab	Region	String(15)
Ab	PostalCode	String(10)
Ab	Country	String(15)
Ab	Phone	String(24)
Ab	Fax	String(24)
	Orders	many Order
	CustomerDemographics	many CustomerDemographic

[https://services.odata.org/Northwind/Northwind.svc/Customers?\\$format=json](https://services.odata.org/Northwind/Northwind.svc/Customers?$format=json)

[JSON Formatter Chrome](#)

```
← → ↻ 🌐 services.odata.org/Northwind/Northwind.svc/Customers?$format=json

1 // 20250219075534
2 // https://services.odata.org/Northwind/Northwind.svc/Customers?$format=json
3
4 {
5   "odata.metadata": "https://services.odata.org/Northwind/Northwind.svc/$metadata#Customers",
6   "value": [
7     {
8       "CustomerID": "ALFKI",
9       "CompanyName": "Alfreds Futterkiste",
10      "ContactName": "Maria Anders",
11      "ContactTitle": "Sales Representative",
12      "Address": "Obere Str. 57",
13      "City": "Berlin",
14      "Region": null,
15      "PostalCode": "12209",
16      "Country": "Germany",
17      "Phone": "030-0074321",
18      "Fax": "030-0076545"
19    },
20    {
21      "CustomerID": "ANATR",
22      "CompanyName": "Ana Trujillo Emparedados y helados",
23      "ContactName": "Ana Trujillo",
24      "ContactTitle": "Owner",
25      "Address": "Avda. de la Constitución 2222",
26      "City": "México D.F.",
27      "Region": null,
28      "PostalCode": "05021",
29      "Country": "Mexico",
30      "Phone": "(5) 555-4729",
31      "Fax": "(5) 555-3745"
32    },

```

[https://services.odata.org/Northwind/Northwind.svc/Customers\('ALFKI'\)?\\$format=json](https://services.odata.org/Northwind/Northwind.svc/Customers('ALFKI')?$format=json)

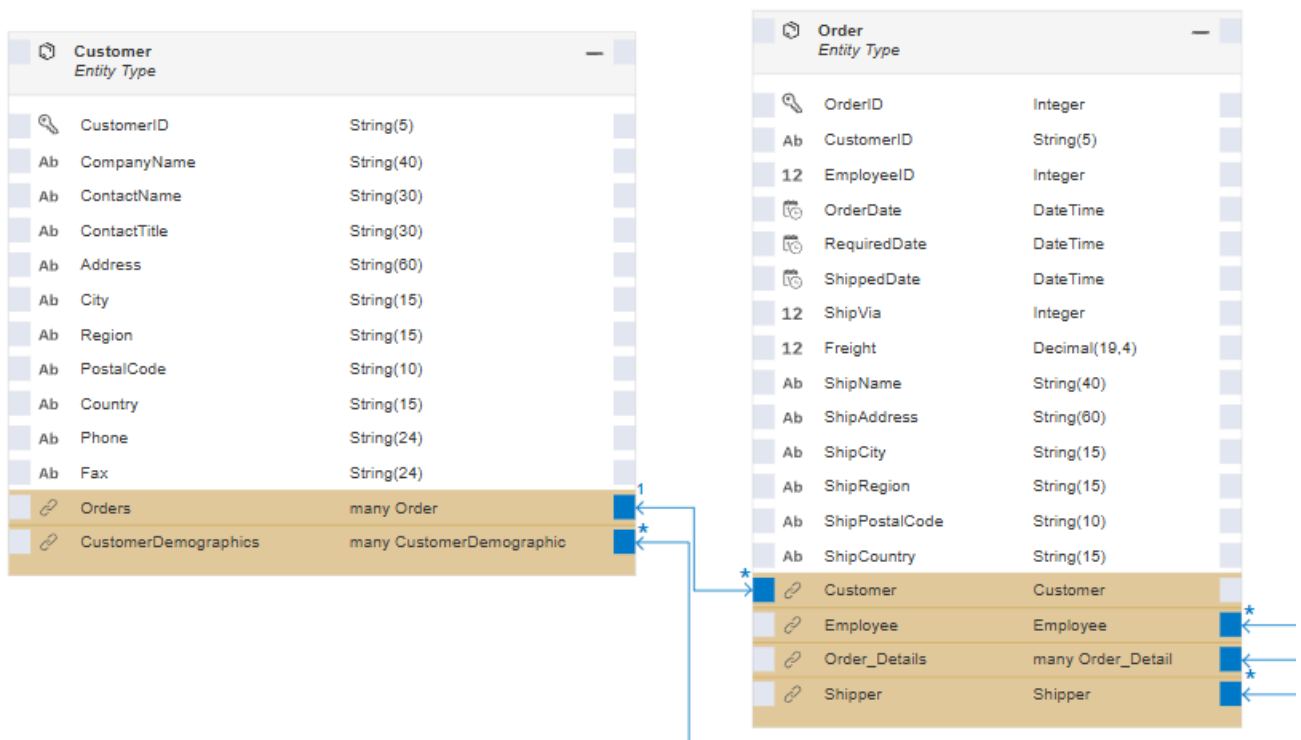
```

← → ↺ services.odata.org/Northwind/Northwind.svc/Customers('ALFKI')?$format=json
1 // 20250219075656
2 // https://services.odata.org/Northwind/Northwind.svc/Customers('ALFKI')?$format=json
3
4 {
5   "odata.metadata": "https://services.odata.org/Northwind/Northwind.svc/$metadata#Customers/@Element",
6   "CustomerID": "ALFKI",
7   "CompanyName": "Alfreds Futterkiste",
8   "ContactName": "Maria Anders",
9   "ContactTitle": "Sales Representative",
10  "Address": "Obere Str. 57",
11  "City": "Berlin",
12  "Region": null,
13  "PostalCode": "12209",
14  "Country": "Germany",
15  "Phone": "030-0074321",
16  "Fax": "030-0076545"
17 }

```

Obtener pedidos del cliente ALFKI

[https://services.odata.org/Northwind/Northwind.svc/Customers\('ALFKI'\)/Orders?\\$format=json](https://services.odata.org/Northwind/Northwind.svc/Customers('ALFKI')/Orders?$format=json)



```

1 // 20250219125337
2 // https://services.odata.org/Northwind/Northwind.svc/Customers('ALFKI')/Orders?$format=json
3
4 {
5   "odata.metadata": "https://services.odata.org/Northwind/Northwind.svc/$metadata#Orders",
6   "value": [
7     {
8       "OrderID": 10643,
9       "CustomerID": "ALFKI",
10      "EmployeeID": 6,
11      "OrderDate": "1997-08-25T00:00:00",
12      "RequiredDate": "1997-09-22T00:00:00",
13      "ShippedDate": "1997-09-02T00:00:00",
14      "ShipVia": 1,
15      "Freight": "29.4600",
16      "ShipName": "Alfreds Futterkiste",
17      "ShipAddress": "Obere Str. 57",
18      "ShipCity": "Berlin",
19      "ShipRegion": null,
20      "ShipPostalCode": "12209",
21      "ShipCountry": "Germany"
22    },
23    {
24      "OrderID": 10692,
25      "CustomerID": "ALFKI",
26      "EmployeeID": 4,
27      "OrderDate": "1997-10-03T00:00:00",
28      "RequiredDate": "1997-10-31T00:00:00",
29      "ShippedDate": "1997-10-13T00:00:00",
30      "ShipVia": 2,
31      "Freight": "61.0200",
32      "ShipName": "Alfred's Futterkiste",
33      "ShipAddress": "Obere Str. 57",
34      "ShipCity": "Berlin",
35      "ShipRegion": null,
36      "ShipPostalCode": "12209",
37      "ShipCountry": "Germany"
38    },
39    {

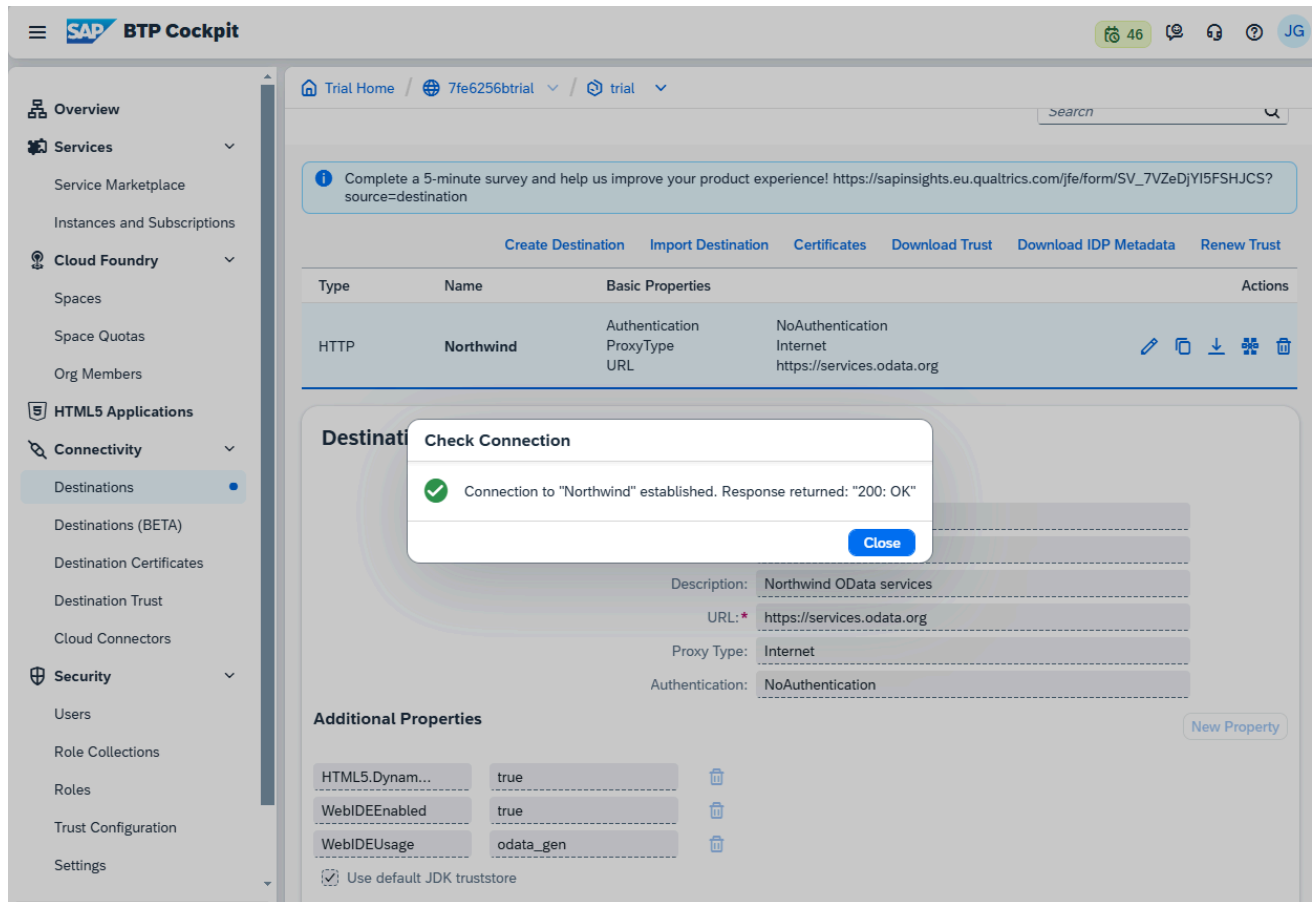
```

[https://services.odata.org/Northwind/Northwind.svc/Customers?\\$filter=PostalCode eq '12209'](https://services.odata.org/Northwind/Northwind.svc/Customers?$filter=PostalCode eq '12209')
[https://services.odata.org/Northwind/Northwind.svc/Customers?\\$select=CustomerID,CompanyName](https://services.odata.org/Northwind/Northwind.svc/Customers?$select=CustomerID,CompanyName)

Crear Destination en SAP BTP Cockpit

Adicional a los parámetros del tutorial anterior se debe agregar el parámetro **WebIDEUsage** para visualizar el destination desde el BAS

Propiedad	Valor
HTML5.DynamicDestination	true
WebIDEEnabled	true
WebIDEUsage	odata_gen



The screenshot shows the SAP BTP Cockpit interface. On the left is a navigation menu with categories: Overview, Services, Cloud Foundry, HTML5 Applications, Connectivity, and Security. The 'Connectivity' section is expanded, showing 'Destinations' as the selected option. The main area displays a table of destinations with one entry: 'Northwind' of type 'HTTP'. Below the table, a 'Check Connection' dialog box is open, showing a green checkmark and the message: 'Connection to "Northwind" established. Response returned: "200: OK"'. The dialog has a 'Close' button. In the background, the destination configuration details are visible: Description: 'Northwind OData services', URL: 'https://services.odata.org', Proxy Type: 'Internet', and Authentication: 'NoAuthentication'. Below these, the 'Additional Properties' section shows a table with the same three properties as the one in the top image: HTML5.DynamicDestination (true), WebIDEEnabled (true), and WebIDEUsage (odata_gen). There is also a checkbox for 'Use default JDK truststore' which is checked.