

DATA VIRTUALITY MASTERCLASS

Topic: Retrieving Data from DV via ODATA

Welcome to the DV Masterclass! Agenda

2:00pm - 3:00pm: Retrieving Data from DV via ODATA

3:00pm - 3:10pm: Break

3:10pm - 4:00pm: Kafka/KSQLDB Showcase

4:00pm - 4:10pm: Break

4:10pm - 5:00pm: Procedural Relational Command

Retrieving Data from DV via ODATA Carlos/Matthias 1h

Kafka/KSQLDB showcase Matthias 1h

Procedural Relational Command Carlos 45min

What to expect from this session?

In this track, we will show how to use the OData interface to Data Virtuality

- What is OData
- When was it added to Data Virtuality
- Use cases
- Special requirements
- OData vs Rest API vs JDBC
- Advantages and disadvantages of OData
- Best practices
- Demo

What is OData?

What is OData?

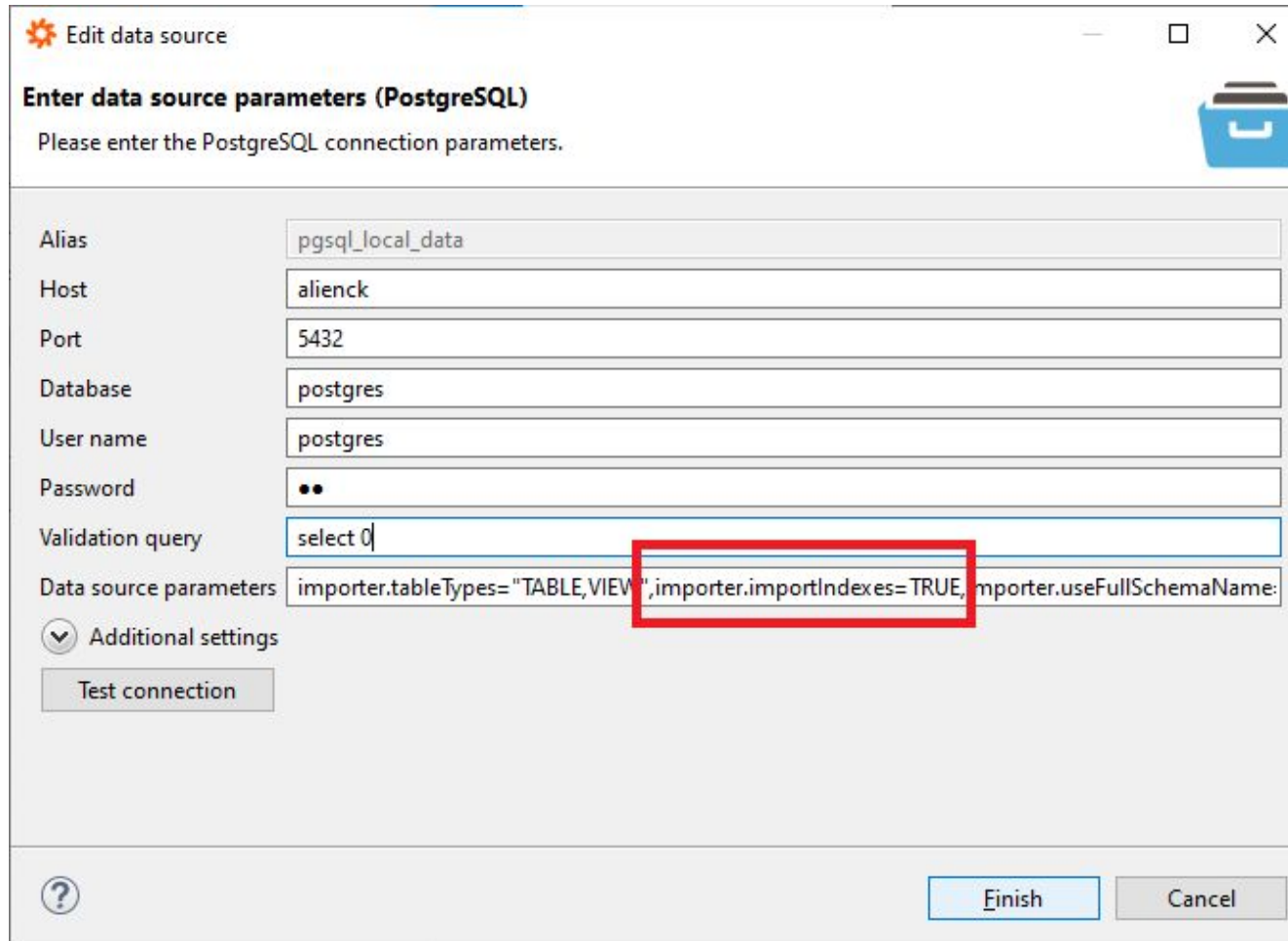
- What is OData:
 - Best place for answers is <https://www.odata.org/>
- OData was adding to DV in beta version 3.0
- OData will be available in DV version 3.1
- Does OData have an additional cost?
 - No additional cost
 - Will be available in Platform SaaS
 - Rest API available in Platform and Pipes Pro
- Does DV have an OData client?
 - In development

OData use cases?

- Virtualization plus an OData interface.
- Clients that can't connect via ODBC or JDBC.
- Exposing an API to your clients.

Special requirements for enabling OData

- Tables need to have a primary key
- Must add importer.importIndexes=TRUE to you model properties



Edit data source

Enter data source parameters (PostgreSQL)

Please enter the PostgreSQL connection parameters.

Alias: pgsq_l_local_data

Host: alienck

Port: 5432

Database: postgres

User name: postgres

Password: ••

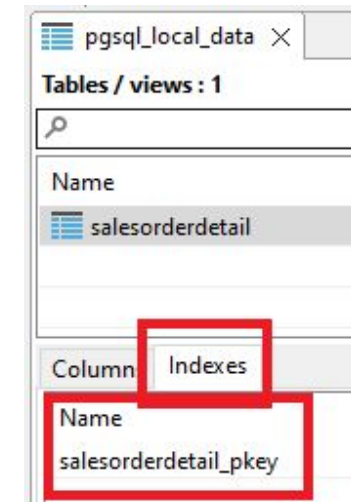
Validation query: select 0

Data source parameters: importer.tableTypes= "TABLE,VIEW", importer.importIndexes=TRUE, importer.useFullSchemaName:

Additional settings

Test connection

Finish Cancel



pgsq_l_local_data

Tables / views : 1

Name

salesorderdetail

Column Indexes

Name

salesorderdetail_pkey

OData vs Rest API vs JDBC

- OData will tell you it's metadata.
- JDBC, ODBC, OData the results are self-describing.
- Rest API - complex query as payload
- OData and Rest API - Can be used to simulate a webhook
- OData requires wrappers and specifying primary keys.
- JDBC - faster
- Rest API and JDBC allow remote creation of views and sprocs.
- ODBC/JDBC are the fastest
- Rest API and OData are slower

Use OData to transfer data between DV instances?

- You can, but no benefit. Use DV JDBC connector.
- Wouldn't be able to create views and sprocs.
- Requires an OData client (that is in development)

Advantages and disadvantages of OData

- Driverless - don't need any drivers.
- When you can't use ODBC/JDBC
- Network security - Uses the HTTP/HTTPS protocols. HTTP/HTTPS are usually open in corporate firewalls
- OData has a structured method for sharing metadata. Data Types.
- Performance
- Automation isn't possible with OData. It's meant for transferring data.
- Views need to specify the primary key
- To keep original views, you would need wrappers
- Basic authentication
- Behind the scenes, basic auth request is forwarded to LDAP

Best practices

- Separate schema for wrappers
- We're including the SQL scripts to create wrappers for OData

Any feedback / questions?

Thank you!

Please feel free to contact us at:
presales@datavirtuality.com

or

visit us at:
datavirtuality.com