



OData Tips and Tricks

SaaS TAM

07 10 2023



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Agenda

- Prerequisites for OData
- Accessing OData using Power BI
- Accessing OData using Postman


Enable Access OData

ALM Octane Enterprise_708093328

ENTITIES LISTS RELEASES CALENDARS FLAG RULES CREDENTIALS DEVOPS ENTITY LABELS USERS API ACCESS PARAMETERS **PERMISSIONS** MORE SETTINGS

Role: MyRole ▾ + Add Role Rename Role Delete Role Reset Role

	<	Send Emails	<input checked="" type="checkbox"/>
Tests		Access OData	<input checked="" type="checkbox"/>
Runs		Manage Environment tags	<input checked="" type="checkbox"/>
Backlog		Share Template With All	<input checked="" type="checkbox"/>
Requirements		Share Template With Teams	<input checked="" type="checkbox"/>
Application Modules		Delete Shared Templates	<input checked="" type="checkbox"/>
Release Management		Share Favorites With All	<input checked="" type="checkbox"/>
Teams		Share Favorites With Teams	<input checked="" type="checkbox"/>
Security		Delete Shared Favorites	<input checked="" type="checkbox"/>
Pipelines		Import Export Favorite	<input type="checkbox"/>
Integrations		Customize Story Boards By Member	<input checked="" type="checkbox"/>
Administration		Create Tag	<input checked="" type="checkbox"/>
DevOps Administration			
General System Actions			
Module Visibility			
Data Access			



Create API Key And Grant Access to Workspace

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ENTITIES

LISTS

RELEASES

CALENDARS

FLAG RULES

CREDENTIALS

DEVOPS

ENTITY LABELS

USERS

API ACCESS

PARAMETERS

PERMISSIONS

MORE SETTINGS

Add API access

■ Name:

ODataUser

Expiration:

Description:

Account for accessing Odata

Assign to Workspaces and Roles

■ Role:

MyRole

■ In workspaces:

Demo ×

Dem... ×

Dem... ×

...

+ Add role to assign

Add

Cancel

Workspace roles

Last modified

7yzqw2v

Synchronizer ...

04/05/2023 11:06:57

11/04/2019 23:50:56

13-b326-79a177bc7d61_servi...

Octane2Bridg...

11/12/2019 11:31:20

0zre9yr

Integration Bri...

11/12/2019 11:31:20

MyRole in 15 ...

07/03/2023 18:58:05

CI/CD Integrat...

07/13/2022 07:39:02

9

Workspace A...

05/15/2023 16:45:24

Create an APIKey and provide access to the appropriate workspaces

Enable SUPPORTS_BASIC_AUTHENTICATION

LM Octane Enterprise_708093328

ENTITIESLISTSRELEASESCALENDARSFLAG RULESCREDENTIALSDEVOPSENTITY LABELSUSERSAPI ACCESSPARAMETERSPERMISSIONSMORE SETTINGS

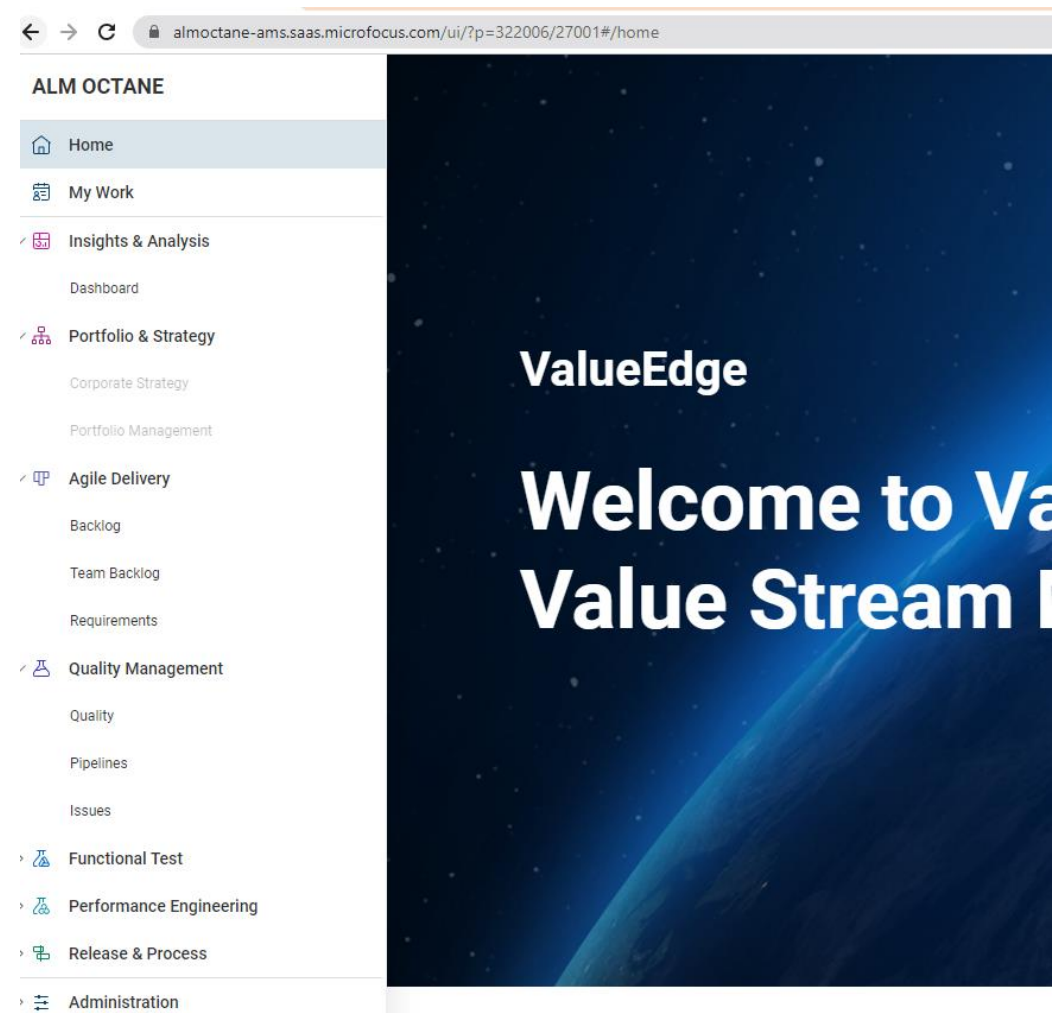
supports_basic

X

?

ID	Value	Actions
SUPPORTS_BASIC_AUTHENTICATION	true	<div>Save</div> <div>Reset</div>
SUPPORTS_BASIC_AUTHENTICATION_FOR_ODATA	true	<div>Save</div> <div>Reset</div>

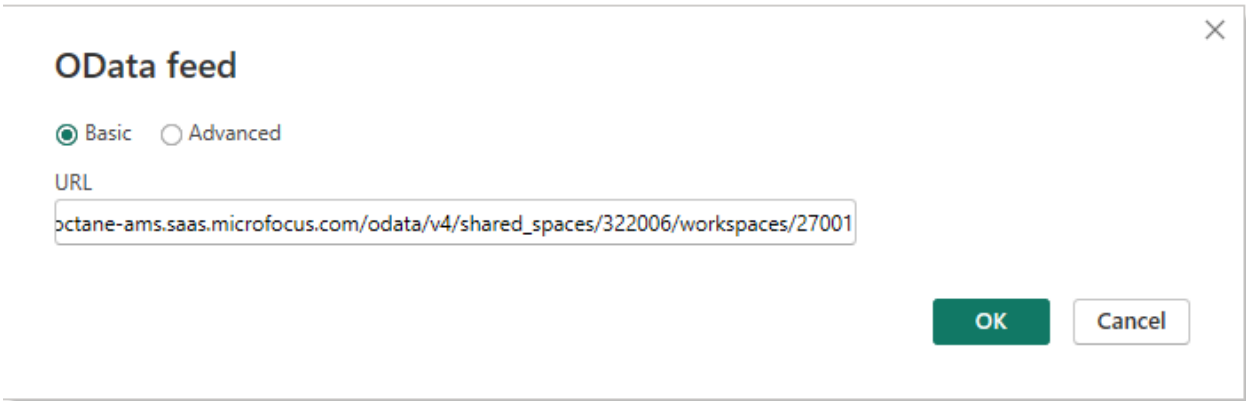
PowerBI Connection



<https://server> :<port> /odata/v4/shared_spaces/<space_ID>/workspaces/<workspace_ID>/

Example:

https://almoctane-ams.saas.microfocus.com/odata/v4/shared_spaces/322006/workspaces/27001



Cross Workspaces

Single workspace:

<https://server> :<port> /odata/v4/shared_spaces/<space_ID>/workspaces/<workspace_ID>/

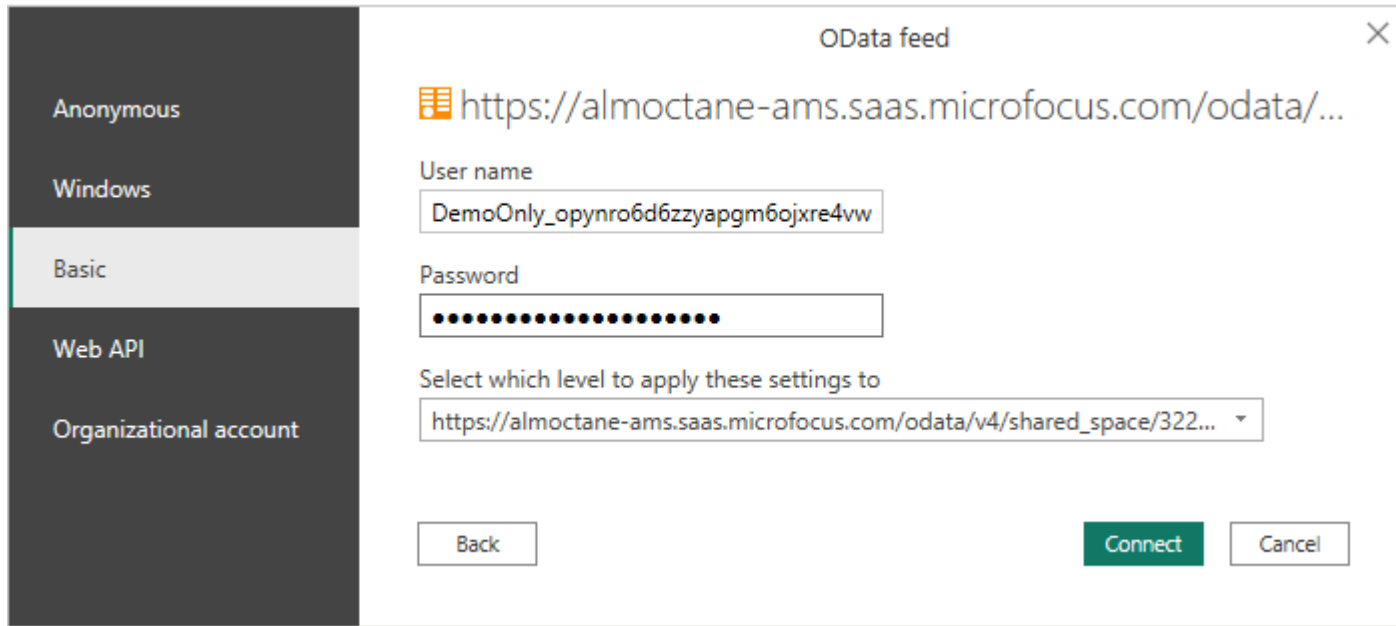
Multiple workspaces:

<https://server> :<port> /odata/v4/shared_spaces/<space_ID>/workspaces/<workspace_ID>/cross_workspace/<1002>,<1003>

All workspaces:

<https://server> :<port> /odata/v4/shared_spaces/<space_ID>/workspaces/<workspace_ID>/cross_workspace/*

Use Basic Authentication



The screenshot shows a dialog box titled "OData feed" with a close button (X) in the top right corner. On the left is a dark sidebar with five options: "Anonymous", "Windows", "Basic" (highlighted with a light blue bar), "Web API", and "Organizational account". The main area of the dialog displays the URL "https://almoctane-ams.saas.microfocus.com/odata/..." with a small icon to its left. Below the URL are two input fields: "User name" containing the text "DemoOnly_opynro6d6zzyapgm6ojxre4vw" and "Password" filled with black dots. Underneath these is a dropdown menu labeled "Select which level to apply these settings to" with the selected value "https://almoctane-ams.saas.microfocus.com/odata/v4/shared_space/322...". At the bottom are three buttons: "Back", "Connect" (in a green box), and "Cancel".

Use Basic authentication and enter API Key for “User name” and Secret for “Password”

Select VE Collection to load

Navigator

Display Options ▾

☐ sprints

☐ stories

☐ suite_run

☐ tasks

☐ taxonomy_category_nodes

☐ taxonomy_item_nodes

☐ taxonomy_nodes

☐ team_members

☐ team_sprints

☐ teams

☐ test_runners

☐ test_suite_link_to_automated_tests

☐ test_suite_link_to_gherkin_tests

☐ test_suite_link_to_manual_tests

☐ test_suite_link_to_tests

☐ test_suites

☐ test_versions

☒ tests

☐ transitions

☐ uft_test_runners

tests

Preview downloaded on Thursday, June 15, 2023

creation_time	version_stamp	workspace_id	id	last_m
6/16/2023 12:00:26 AM +00:00		4	27001 77001	6/1
6/16/2023 12:00:26 AM +00:00		4	27001 77002	6/1
6/16/2023 12:00:26 AM +00:00		4	27001 77003	6/1
6/16/2023 12:00:26 AM +00:00		4	27001 77004	6/1
6/16/2023 12:00:27 AM +00:00		7	27001 77005	6/1
6/16/2023 12:00:27 AM +00:00		7	27001 77006	6/1
6/16/2023 12:00:27 AM +00:00		6	27001 77007	6/1
6/16/2023 12:00:27 AM +00:00		7	27001 77008	6/1
6/16/2023 12:00:27 AM +00:00		3	27001 77009	6/1
6/16/2023 12:00:27 AM +00:00		7	27001 77010	6/1
6/16/2023 12:00:27 AM +00:00		3	27001 77011	6/1
6/16/2023 12:00:27 AM +00:00		8	27001 77012	6/1

The data in the preview has been truncated due to size limits.

<

>

Select Related Tables

Load

Transform Data

Cancel

Select the collection from the connection. There are 59 collections available.

Transform Data

FileHomeTransformAdd ColumnViewToolsHelp

Close & ApplyClose

New SourceNew Query

Recent SourcesEnter Data

Data source settingsData Sources

Manage ParametersParameters

Refresh PreviewQuery

PropertiesAdvanced Editor

Choose ColumnsRemove ColumnsManage Columns

Keep RowsRemove Rows

Sort

Split ColumnGroup By

Data Type: TextUse First Row as HeadersReplace ValuesTransform

Merge QueriesAppend QueriesCombine FilesCombine

Text AnalyticsVisionAzure Machine LearningAI Insights

Queries [1]

fx= Table.RenameColumns("#Expanded covered_requirement",{{"covered_requirement.id", "Requirement Id"}})

	AB_C Test ID	AB_C Test Name	AB_C Phase	AB_C Requirement Id	AB_C Requirement Name
1	77001	Customer adds item to cart	null	null	null
2	77002	Adding multiple items to cart	null	null	null
3	77003	Customer adds item to cart	null	null	null
4	77004	Adding multiple items to cart	null	null	null
5	77005	Open live chat from FierFox	New	62002	Advantage Online Store Database
6	77006	Check that user can log in to the web interface using his account	New	62003	Accounts
7	77007	Delete item from basket	New	62003	Accounts
8	77008	I can request to block my account when account hijacking is suspected	New	62004	Personal account details
9	77009	Transfer money from one account to other	New	62004	Personal account details
10	77010	live chat from Advantage Online Store	New	62004	Personal account details
11	77011	Verify Mobile app in Chrome	New	62002	Advantage Online Store Database
12	77012	Credit card - Verify that there is a validation on CCV field	New	62002	Advantage Online Store Database
13	77013	PayPal Verification	New	62004	Personal account details
14	77014	SSL 256 verification	New	62004	Personal account details
15	77015	Update password	New	62002	Advantage Online Store Database
16	77016	Verify user details are correct in user profile	New	62002	Advantage Online Store Database
17	77017	Check that future action can be viewed	New	62002	Advantage Online Store Database
18	77018	Verify limitation for single purchase	New	62002	Advantage Online Store Database
19	77019	Regression set Billing	New	62002	Advantage Online Store Database
20	77020	Verify search my account by entering the last name	New	62002	Advantage Online Store Database
21	77021	Regression set Live chat	New	62002	Advantage Online Store Database
22	77022	Regression set Search	New	62003	Accounts
23	77023	Send image in existing chat via API	New	62003	Accounts
24	77024	Exchange from Dollar to Euro	New	62003	Accounts
25	77025	Add item to Shopping basket	New	62004	Personal account details
26	77026	Pay from Advantage Mobile Store	New	62004	Personal account details
27	77027	Send messages with different emoji	New	62004	Personal account details
28	77028	Permissions - Sanity	New	62004	Personal account details
29	77029	Printing invoice	New	62004	Personal account details
30	77030	Recent transaction can be seen	New	62002	Advantage Online Store Database
31	77031	Verify purchase cancellation	New	62002	Advantage Online Store Database
32	77032	New account creation	New	62002	Advantage Online Store Database
33	77033	Install app on IOS	New	62002	Advantage Online Store Database
34	77034	Verify user notify on billing	New	62003	Accounts

5 COLUMNS, 68 ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name

tests

All Properties

APPLIED STEPS

Source

Navigation

Removed Other Columns

Renamed Columns

Expanded phase

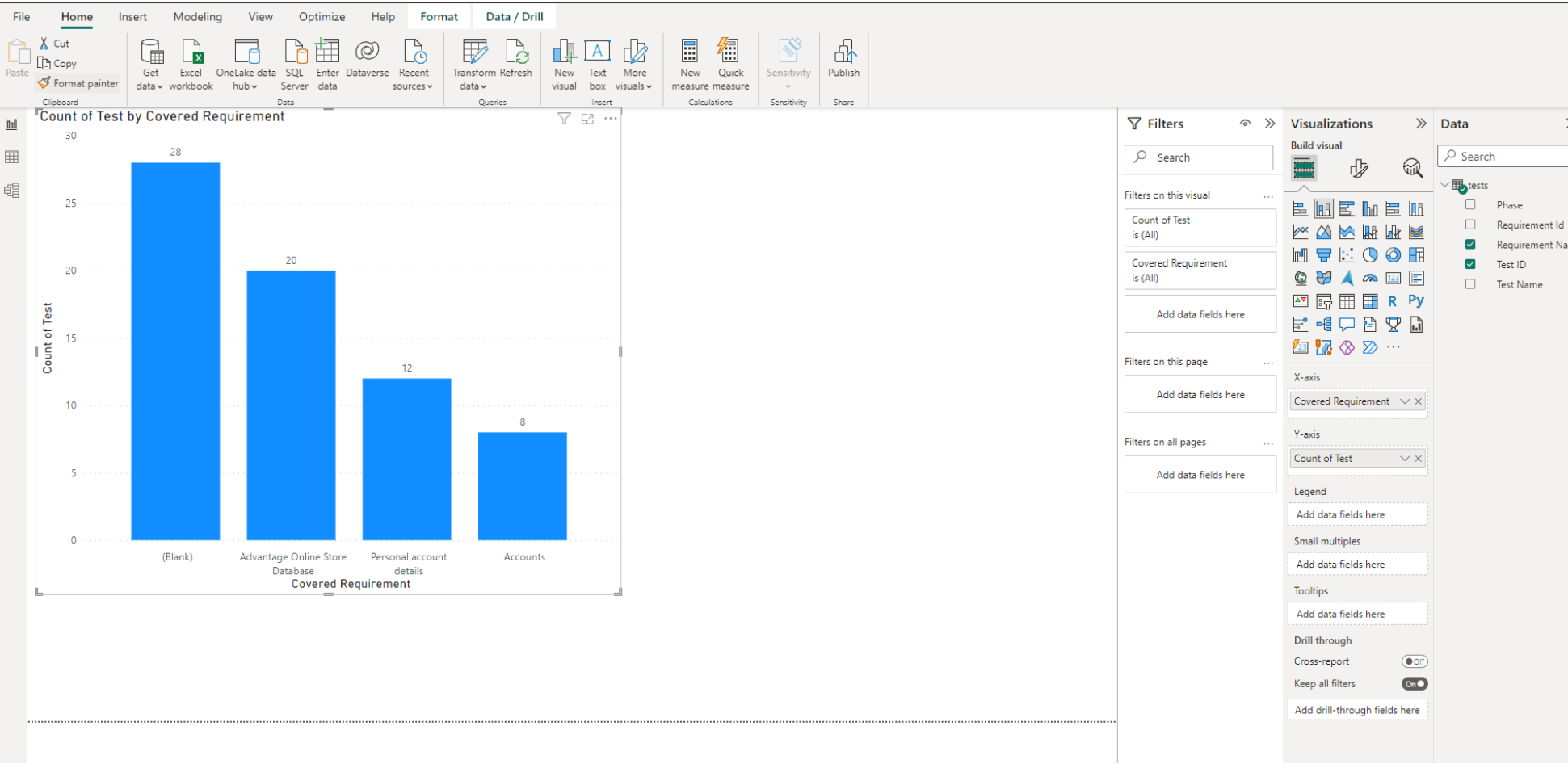
Renamed Columns1

Expanded covered_requirement

Renamed Columns2

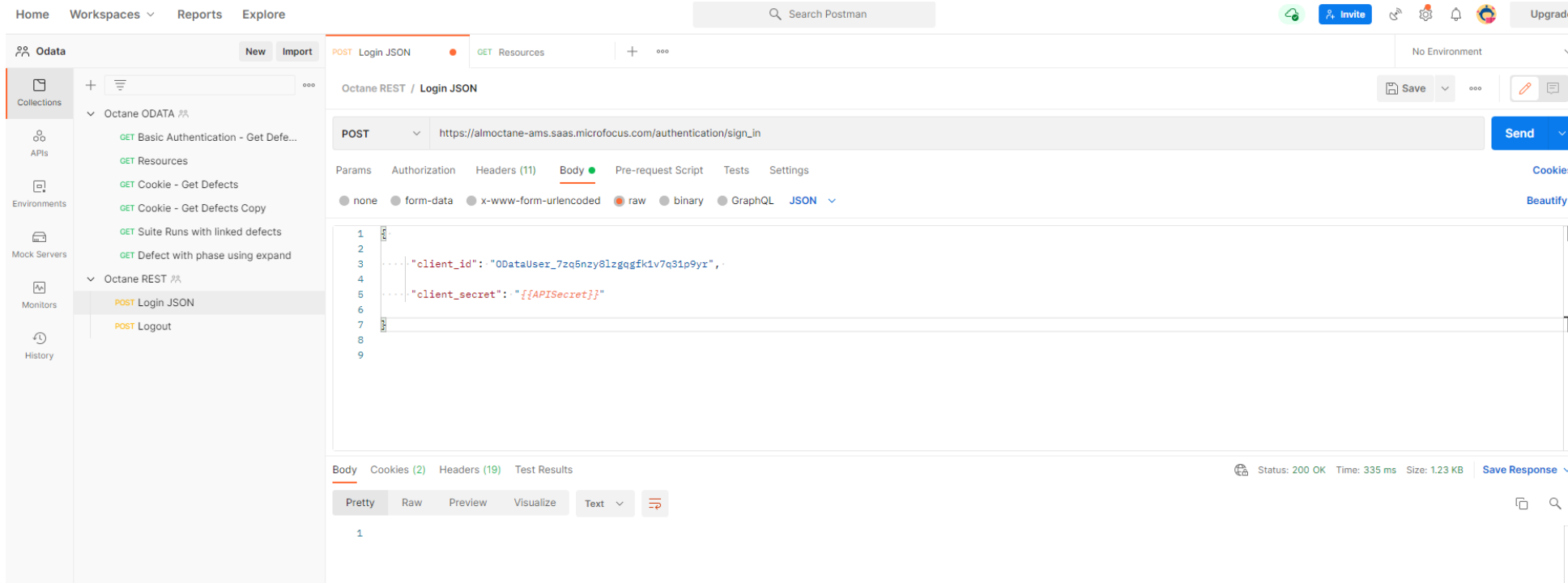
Transform data by applying column selection, filter, rename and etc.

Graph Data



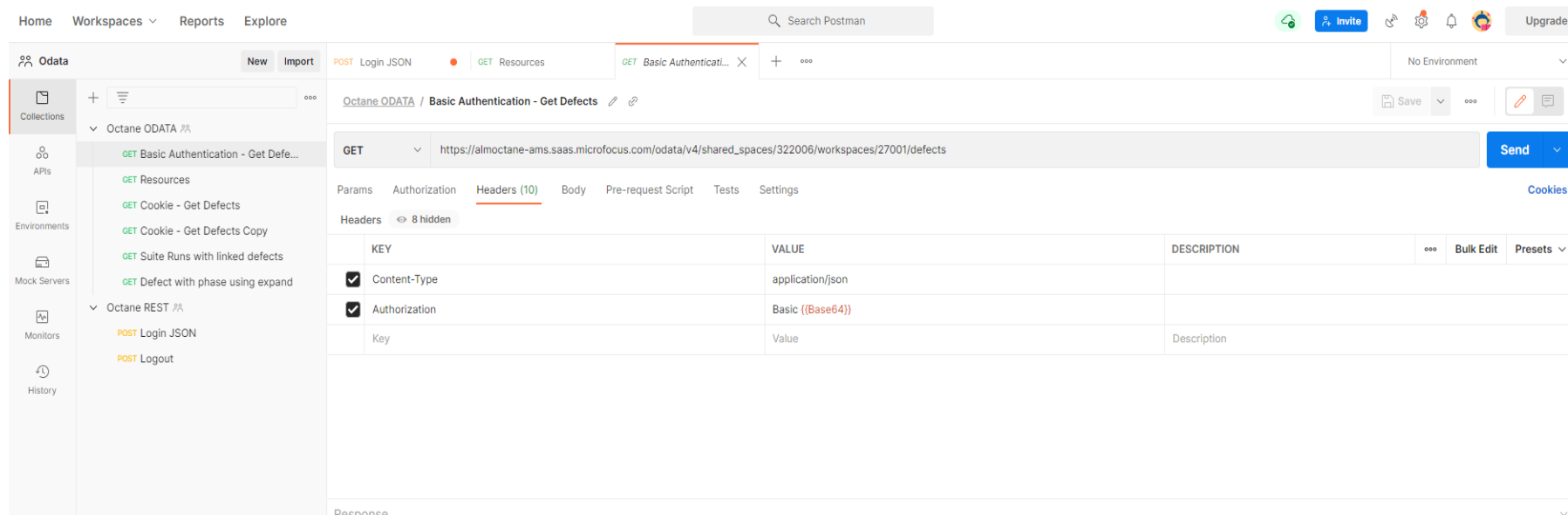
Graph data
using the data
load in PowerBI

Odata for Developers – Authentication using JSON



Add JSON string containing API and Secret or username and Password.

Odata for Developers – Authentication using Basic Authentication



Add Authorization Header with Base64 encrypted username:password or apikey:secret prefixed by Basic string

Odata for Developers: metadata

The screenshot shows the Postman interface with a REST client request configured to retrieve OData metadata. The request is a GET to the URL `https://almoctane-ams.saas.microfocus.com/odata/v4/shared_spaces/322006/workspaces/27001/$metadata`. The response is a 200 OK status, and the body is displayed in XML format. The XML represents an Entity Type named 'test' with various properties and navigation properties.

Request Details:

- Method: GET
- URL: `https://almoctane-ams.saas.microfocus.com/odata/v4/shared_spaces/322006/workspaces/27001/$metadata`
- Headers: 10
- Body: Pre-request Script, Tests, Settings

Response Details:

- Status: 200 OK
- Time: 1308 ms
- Size: 131.08 KB
- Save Response

XML Response Body:

```
<?xml version='1.0' encoding='utf-8'>
<EntityType Name="test">
  <Key>
    <PropertyRef Name="id"/>
  </Key>
  <Property Name="creation_time" Type="Edm.DateTimeOffset"/>
  <Property Name="version_stamp" Type="Edm.Int64"/>
  <Property Name="workspace_id" Type="Edm.Int64"/>
  <Property Name="id" Type="Edm.String"/>
  <Property Name="last_modified" Type="Edm.DateTimeOffset"/>
  <Property Name="estimated_duration" Type="Edm.Int64"/>
  <Property Name="steps_num" Type="Edm.Int64"/>
  <Property Name="class_name" Type="Edm.String"/>
  <Property Name="has_attachments" Type="Edm.Boolean"/>
  <Property Name="component" Type="Edm.String"/>
  <Property Name="client_lock_stamp" Type="Edm.Int64"/>
  <Property Name="package" Type="Edm.String"/>
  <Property Name="has_comments" Type="Edm.Boolean"/>
  <Property Name="name" Type="Edm.String"/>
  <Property Name="description" Type="Edm.String"/>
  <Property Name="testorder_udf" Type="Edm.Int64"/>
  <Property Name="subtype" Type="Edm.String"/>
  <NavigationProperty Name="program" Type="OData.Octane.program"/>
  <NavigationProperty Name="phase" Type="OData.Octane.phase" Nullable="false"/>
  <NavigationProperty Name="user_tags" Type="Collection(OData.Octane.user_tag)/>
  <NavigationProperty Name="testing_tool_type" Type="OData.Octane.list_node"/>
  <NavigationProperty Name="automation_status" Type="OData.Octane.list_node"/>
  <NavigationProperty Name="attachments" Type="Collection(OData.Octane.attachment)/>
  <NavigationProperty Name="link_to_test_suite" Type="Collection(OData.Octane.test_suite_link_to_test)/>
  <NavigationProperty Name="quality_stories" Type="Collection(OData.Octane.work_item)/>
  <NavigationProperty Name="test_level" Type="OData.Octane.list_node"/>
  <NavigationProperty Name="test_type" Type="Collection(OData.Octane.list_node)/>
  <NavigationProperty Name="zsanework" Type="OData.Octane.list_node"/>
</EntityType>
```

GET: `<https://server> :<port>
/odata/v4/shared_spaces/<space_ID>/workspaces/<workspace_ID>/metadata`

Query metadata to get the odata REST resources

Odata for Developers: Options and Operators

Area	Supported conventions
Options	<p>\$select, \$search, \$filter, \$orderby, \$top, \$count, \$paging, \$skip, \$format, \$expand, \$link & \$count, and returning the raw value.</p> <p>Note: When using the \$skip option with the history_records entity, add two additional parameters: \$originalSkip and \$innerOffset. For details, see Specify an offset within history records - OData (technical preview).</p>
\$filter operators	<p>Logical operators: eq, ne, gt, ge, lt, le, and, or, not, (). -</p> <p>Filtering with logical operators on entities that have associations is not always supported.</p> <p>↑ How do I know if I can filter an entity with logical operators?</p> <p>You cannot filter entities involved in associations with a multiplicity of *.</p> <p>Check the OData \$metadata file to look for the entity's associations.</p> <p>The following OData metadata excerpt demonstrates that runs and releases have an association:</p> <pre><Association Name="run_to_release"> <End Type="OData.Octane.run" Multiplicity="*" Role="run->release"/> <End Type="OData.Octane.release" Multiplicity="1" Role="release->run"/> </Association></pre> <ul style="list-style-type: none">• The release's multiplicity is 1, so you can filter the run entity for a specific release with logical operators. Only one release can be associated with a run.• The run's multiplicity is *, so you cannot filter the release entity for a specific run with logical operators. Many runs can be associated with a release.
Functions	<p>String functions: bool substringof, bool endswith, bool startwith</p>

THANK YOU