DataAPI >> OData

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Three parts

Some context and information

Demonstration

Discussion

Context

From Clay

OData becoming a direct leg into Claris Server

- ODBC then becomes translated, additional server for load

DataAPI is getting put into the long grass

- It works but no further development, like XML

OData now the main way of transferring between Studio and FMP

- Getting some additional 'FileMaker' sugar on top

What do we get with DataAPI?

You are in control of access, with a priv set just for that

Need for a session token –have to send the user:pass ONCE

You can modify returned output by editing a layout

Can run scripts – GET with params in URL

Seems a very FileMaker way??

- It compares to XML/CWP/PHP?

Put what you need on a layout, including portal to related

Additional script.presort etc which is more like XML query

What do we get with Odata?

- External standard, so wide knowledge-base
  - examples are plentiful, investigate if it works (not all examples work in FMP)
- Uses RG table occurrences, is aware of relationships
- Basic Authentication encoded user:pass sent EACH time
- Stateless
- Can also run scripts – POST with param as JSON body (bigger payload)
- You have to code everything, modify results by writing query
  - $filter, $select, $crossjoin == a new language dialect
- Difference in container support
  - limited file types and no name (fixed soon)

What are the issues? DataAPI

Performance

- created session, with virtual window
- can cause server to grind to a slow end – token management, make sure you delete after use

Dev can break it by changing layout

- field and table renaming always an issue

Length of URL string

Structure of the JSON?

What are the issues? OData

Security?

- try new Otto API keys and proxy? - /otto/fmi/odata/v4/

Acceptance resistance

- using DAPI why bother? looks difficult..

Writing the query, have to code crossjoins (like eSQL)

- how to get just the records I want, performance issues
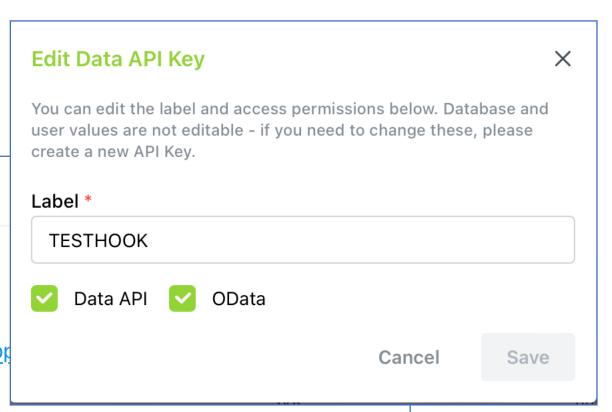- it's a moving target – only more not less

How many users is too many?

OttoFMS

4.11.0

Released: 5/27/2025

Download for [Linux](#), [Linux (arm)](#), [Windows](#), [Mac](#), [Mac (App](#)

Minor Changes

- OttoFMS now exposes an OData Proxy at /otto/fmi/odata. This proxy can be used with Data API Keys to make OData calls. The primary intent of this is to allow for usage of a removable key for OData rather than simple Basic Auth calls. Accordingly, Data API Keys can now be created with a flag to allow access to OData. Data API Keys that already existed will not have OData access by default, but it can be added from the Data API Keys page.

Edit Data API Key ✕

You can edit the label and access permissions below. Database and user values are not editable - if you need to change these, please create a new API Key.

Label *

TESTHOOK

☑ Data API   ☑ OData

Cancel   Save

What do I think is great…

- Basic Auth
- Feels more like coding, so possibly more powerful
- Separation of concerns
  - 3+ years running a big separated feature for a call centre
- This learning made MS Graph stuff easy to do
- This gives us an API into FileMaker – for free
- Viewing data in browser or excel
- And now proves to have been a fortuitous choice!

Demo?

- Browser
  - server/fmi/odata/v4/$metadata
- Excel
  - Data> data source >> Odata
  - Enter url, user, pass and connect
  - Transform data to remove columns
  - Close and apply
  - Boom!
- For further videos > LMGTFY
- filemaker odata john renfrew
  - Engage, EngageU, FMBug, RCTV

Strategy decision

- Keep calm and carry on
- Leave sleeping dogs lie
  - but learn OData and gradually include
- Out of the frying pan into the fire
  - rewrite all your existing code
  - does this reduce technical debt?
  - who is paying for this?

- How to measure performance differences between the two?
  - what things break when you rename stuff

Early thoughts

- work in reverse order
  - start from the layout and work out how to get that data
  - how to find the right set of records
- change the url and authentication
- what are the differences in returned result + $$HEADERS
- how to use extra features, like @count
- payload differences for create/update
  - container data
  - duplicate record?
  - pre-sort script?
  - record ID vs record Key