

Filtering RESTful APIs

This document is still a work in progress and is subject to change.

All filters will be available via the url querystring. This will allow users to be able use a standard web browser to make a request.

Filter format

A filter contains 3 parts separated by pipes ("|"):

1. Field Name
2. Operator
3. Value

https://<base_api_url>/<api_method>?apikey=<apikey>&filter=<field1>|<operator>|<value1>;<field2>|<operator>|<value2>;<field3>|<operator>|<value3>

Example

<https://ehsapi.fldata.com/api/v1/users?apikey=12345&filter=lastname|eq|Smith>

The above request would return all users in the database that have a last name of Smith.

Multiple Filters

Multiple filters are separated by **semi-colons**. When multiple fields are used in a filter they will always be AND'd together.

Example

<https://ehsapi.fldata.com/api/v1/users?apikey=12345&filter=lastname|eq|Smith;birthday|lt|2001-01-01>

Assuming today's date is 2022-01-01. The above request would return any users with the last name of Smith and are 21 or older.

Operators/Equality Functions

To allow for more than simple equality filtering we will implement the following operators.

- eq – equal
- ne – not equal

- gt - greater than
- gte - greater than or equal to
- lt – less than
- lte - less than or equal to
- in –compares a field value to an array of values.
- notin –compares a field value to an array of values.
- contains – searches for text within a field
- startswith – compares the starting characters of a text field with the supplied value
- endswith - compares the ending characters of a text field with the supplied value

Examples

- Find all users with a first name of John or Jane
 - filter=firstname|in|John,Jane
- Find all users that do not have a John or Jane as their first name
 - filter=firstname|notin|John,Jane
- Find all MOCs that were completed in Q1 of 2022
 - filter=competedOn|gte|2022-01-01;completedOn|lte|2022-03-31;status|eq|closed