



UC23 | October 3-5, 2023

API Deep Dive

Tabor Ellison, Director of Engineering, TMA Systems



Tabor Ellison

Tabor Ellison, Director of Engineering
tabor.ellison@tmasystems.com

—
I've been with TMA for more than 16 years and have been involved with almost every product TMA offers in one form or fashion. I currently manage development for the Eagle CMMS and Maxpanda products.



Agenda

1. Brief Introduction to API's
2. Tools and Documentation to use
3. Quick Walkthrough with Postman
4. List Query Parameters
5. Super Simple App Walkthrough



Brief Introduction to WebTMA API's:

API = Application Programming Interface

01

Who are WebTMA API's for?

The Basic Answer is:

Clients that want to extend current WebTMA functionality.

- Build your own Work Request Interface
- Interface with 3rd party or vendor systems
- Build simple standalone charts

02

What are the API Capabilities?

- Get a detailed single record
- Get a list of records, filtered or unfiltered – Using OData 4.0 style filter syntax
- Create, Update, and Delete records

03

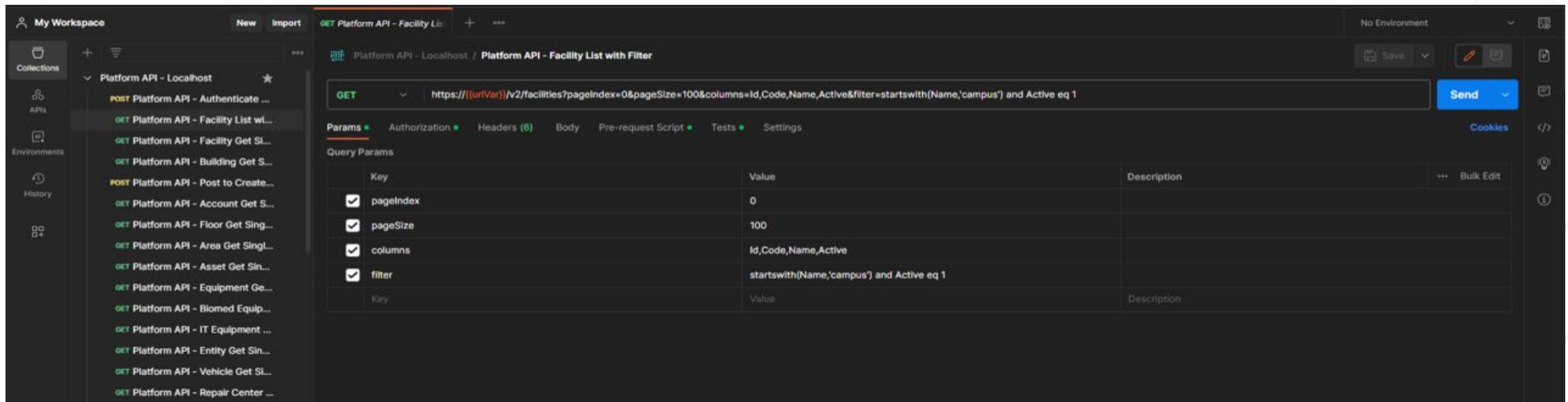
How to Set Your User Account up for API Access?

- Your client license must include some form of API access – Please reach out to your Account Manager.
- Inside WebTMA: User Management > Records > API Roles Tab
- Let's have a quick look at the API Roles and Permissions – I will make this document available to all



Tools and Documentation

- WebTMA Platform API's have Swagger documentation available. A sample can be seen at <https://app.webtma.com/platformapi/swagger>
- Postman is the easiest way to connect to and test our API endpoints. Postman is a free download: <https://www.postman.com/downloads/>
- If you prefer command line tools, cURL is available and works quite well
- However, most API usage is likely to be through custom code created by you or your vendors (for integrations)



Quick Postman Walkthrough



List Endpoints Parameters and Filter Operators

Parameters

- **pageIndex** – integer indicating the index of paged results returned (defaulted to 0)
- **pageSize** – integer indicating the numeric size of each paged record set (defaulted to 100)
- **columns** – comma separated string of fields to return (defaulted to most common identifiers)
- **sort** – name of field records should be sorted by
- **filter** – string constructed of field names, available query operators, and query conditions to pare list of records returned. Uses OData v4 syntax and supports all logical operators except “has” and “in”. Strings should be enclosed in single quotes (‘example’).

Available Filter Operators

- “eq” = “equal to” or “=”
- “neq” = “not equal to” or “!=”
- “startswith([text], ‘tr’)” = [text] starts with “tr”
- “endswith([text], ‘ed’)” = [text] ends with “ed”
- “contains([text], ‘ust’)” = [text] contains “ust”
- “lt” = “less than (<)”
- “gt” = “greater than (>)”
- “lte” = “less than or equal to (<=)”
- “gte” = “greater than or equal to (>=)”
- “day([date])” = “day of the date”
- “month([date])” = “month of date”
- “year([date])” = “year of the date”
- “hour([datetime])” = “hour of the datetime”
- “minute([datetime])” = “minute of the datetime”
- “and”, “or”
- “(,)”





Super Simple Application Walkthrough



Thank You.

marketing@tmasystems.com | tmasystems.com





Register today for UC23: Discover, Connect Collaborate! October 3-5, 2023

Please email uc2023@tmasystems.com with any questions or requests