

## API

Since [Tiki24](#) an API has been available, leveraging [swagger-api/swagger-ui](#)

See it in action here: <https://doc.tiki.org/api/>

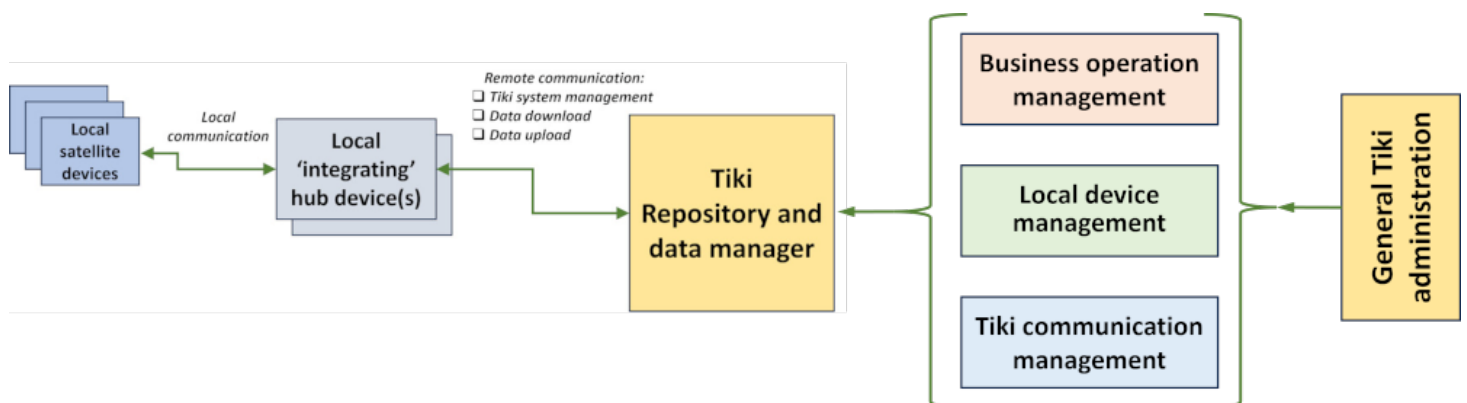
First commit: [https://gitlab.com/tikiwiki/tiki/-/merge\\_requests/1028](https://gitlab.com/tikiwiki/tiki/-/merge_requests/1028)

## Tiki 27+

Significant updates made in [Tiki27](#), particularly to support Internet of Things (IoT) deployments, enhancing and adding support for:

- Trackers
- File galleries

The schematic below illustrates a generic IoT system with Tiki at its centre, where the left-hand side shows the different types of field deployed devices and their communications, and the right-hand side segments the different types of Tiki user that can each be supported with various types of reporting and analysis:



More information on the use of the API for IoT deployment can be found [here](#) with:

- details about example software for field deployed devices that automates the upload of data to Tiki using the API, and how
- customised reporting and analysis can be configured with, for example, automated notification emails for sensed alarm conditions.

## Tiki 24+

A self-documented REST API is available since Tiki 24. This new feature is exposing the most commonly used elements of the system, notably:

- Categories
- Comments
- Groups
- Search
- Trackers
- Translation
- Users
- and Wiki

To start using Tiki API, you may need to refer to this [documentation](#) which details its endpoints.

## Requirements

`.htaccess` file must be enabled to make the `/api/` URL work, which is standard practice to have [SEFURLs](#).

## Getting Started

Enable the preference `auth_api_tokens` via the admin page.

## Documentation

The Documentation is embedded in Tiki. See `/api/` on your target Tiki 24+ installation for an [OpenAPI 3.0 documentation](#) of the API.

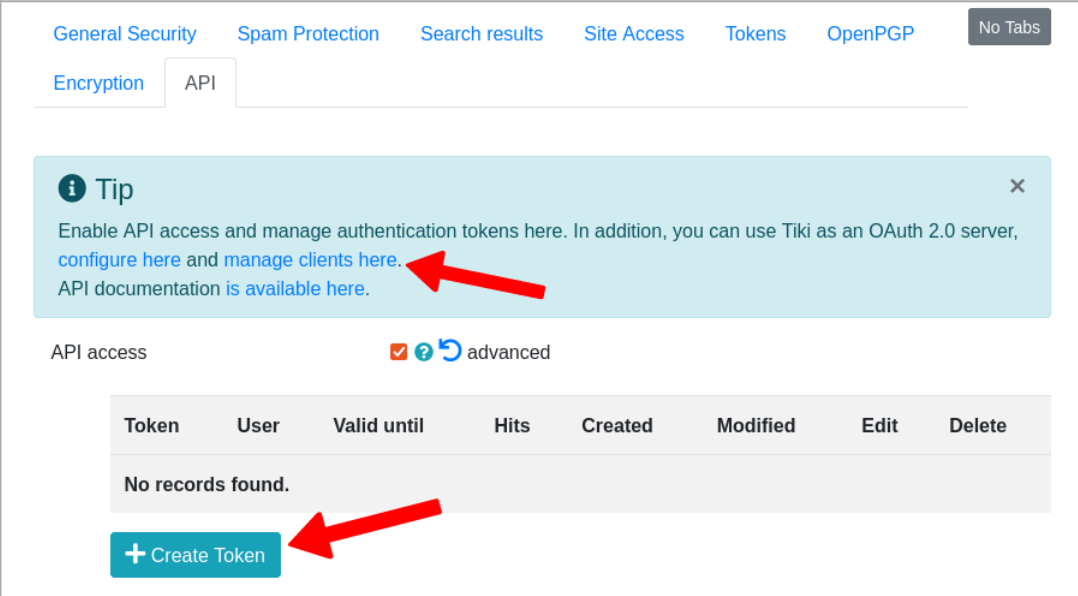
See [GET/version reference](#) in documentation.

## Authorization

API requests should be authenticated with a token created by Tiki admin (via Admin -> Security tab). Each token gives their owner access with one and only one Tiki user. [Permissions](#) configuration is then based on that Tiki [user's groups](#).

### Tokens can be created in two ways:

1. Using Tiki OAuth 2.0 server. The documentation contains endpoints and parameters for different grant types.
2. Manually, in the Control Panel via Admin -> Security tab. Each token is associated with a user. Any API call using the token will act as the user observing all user's permissions.



The screenshot shows the Tiki Admin interface for the Security tab, specifically the API section. At the top, there are navigation tabs: General Security, Spam Protection, Search results, Site Access, Tokens, OpenPGP, and No Tabs. Below these, there are sub-tabs for Encryption and API. A tip box is visible, stating: "Enable API access and manage authentication tokens here. In addition, you can use Tiki as an OAuth 2.0 server, [configure here](#) and [manage clients here](#). API documentation is available [here](#)." A red arrow points to the "manage clients here" link. Below the tip, the "API access" section is checked and labeled "advanced". A table with columns: Token, User, Valid until, Hits, Created, Modified, Edit, and Delete is shown. The table contains the text "No records found." A red arrow points to a "+ Create Token" button at the bottom left of the table area.

Using Tiki as OAuth 2.0 server or Create a user token

## OAuth 2.0 Server

[OAuth 2](#) provides authorization flows for third-party applications.

Authorization flow can be:

1. Machine-to-machine - use client authorization grant type. Send your credentials directly to `access_token` endpoint to retrieve the access token.
2. End-user-to-machine - use auth flow grant type. Start by sending the user to authorize endpoint. This allows Tiki to ask target user for permission to grant access token with their user privileges. Once agreed, user is redirected back to your app/web app/machine where you do a machine-to-machine request to `access_token` endpoint to get the actual access token.

Access tokens generated by Tiki OAuth server are JWT encoded.

## Tiki Restful API Coverage

[CRUD operations](#)(Create, Read, Update and Delete) are available for Category, Comments, Groups, Trackers/Fields/Items, Users and Wiki pages.

The endpoints include:

1. Authorization flow.
2. API version.
3. Category: Object categorization and and CRUD.
4. Comments: Thread locking, moderation and CRUD.
5. Groups: User association and CRUD.
6. Search index rebuild and lookup.
7. Trackers/Fields/Items: Special features like dump/export, clone, duplicate, clear and CRUD.
8. Manage object translations.
9. User registration and CRUD operations, messaging and emailing wiki pages.
10. Wiki pages: Locking and parsing/display and CRUD.

Major items in wishlist for next versions of the API:

1. Files and file galleries (added in Tiki27)
2. Articles, blogs, other wiki-related elements.
3. Calendars.

See all the references in the [documentation](#).

Example Tracker API usage with JavaScript here <https://dev.tiki.org/API-Access-Example>.

## Pre-Tiki 24 notes

[+]

## Use of Tiki services

Tiki's services live in `lib/core/Services/`. One can extrapolate the service URL from the file names and the names of the classes in the `Controller.php` files.

This only works if you have activated SEFURL feature.

Example:

For accessing information which is also available from searches in the Tiki site, the class is `action_lookup()` in file `lib/core/Services/Search/Controller.php`.

The path on tiki.org is: <https://tiki.org/tiki-search-lookup>

To refine the search, the arguments are the same as for <https://doc.tiki.org/PluginList-filter-control-block>

For example, in order to access the 45 first items from tracker 22, the syntax would be:

[https://tiki.org/tiki-search-lookup?filter~type=trackeritem&filter~tracker\\_id=22&maxRecords=45](https://tiki.org/tiki-search-lookup?filter~type=trackeritem&filter~tracker_id=22&maxRecords=45)

This works fine if called as ajax services from a page on the same Tiki.

If done from outside Tiki from another online server, only data visible for *anonymous user* (not logged in) will be shown.

In order to access data which is not visible to *anonymous user*, you may want to have a look at <https://doc.tiki.org/Token-Access>.

## Controller pages

Where you can find more specific information and samples for the different controllers

- [API Tracker](#)

## Aliases

- [service URL](#)
- [URL arguments](#)