

Offline Trackers

Tiki Wiki CMS Groupware offers a robust and flexible system for managing data through Trackers. The Offline Tracker feature allows users to interact with Tiki Trackers without requiring a continuous internet connection. This feature ensures that users can continue their work seamlessly, even in environments with unreliable or no internet connectivity. With Offline Trackers, you can cache necessary data, insert items into trackers, and sync your changes once you're back online.

For this we use the Progressive Web Application (PWA) feature.

Why this Feature in Tiki?

The Offline Tracker feature enhances the flexibility and accessibility of Tiki Trackers by ensuring that users can continue their work without interruption, regardless of their connectivity status. It allows for uninterrupted data entry and management, making Tiki more robust and versatile for users in remote or mobile environments.

Tiki had PWA feature for a while and was a bit experimental, it needed more work, it wasn't improving. The improvement has resumed in Tiki27 and Tiki28 in these commits:

- https://gitlab.com/tikiwiki/tiki/-/merge_requests/3949
- https://gitlab.com/tikiwiki/tiki/-/merge_requests/4654

PWA feature therefore works better in Tiki28.

Requirements

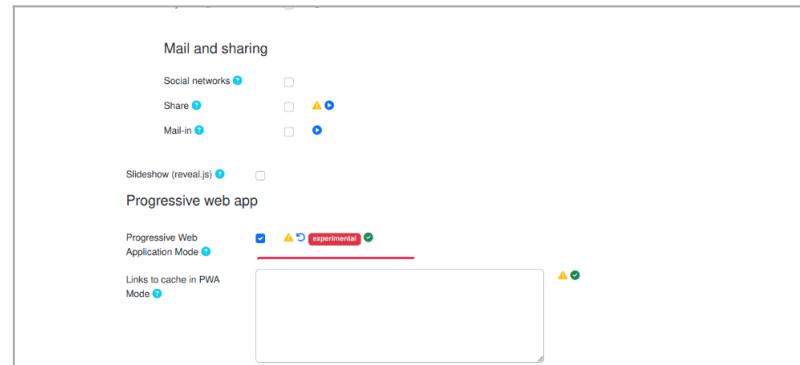
To use Trackers in offline mode, you need:

- Tiki instance (Tiki28 recommended!),
- PWA feature enabled and the package Dexie installed from Admin Panel,
- Trackers well setup.

Setup

1. Enable the Progressive Web Application feature:

- Ensure the PWA feature is enabled by navigating to **Settings > Control Panel > Features**.
- Under the Global Features tab, enable the Progressive Web Application option.



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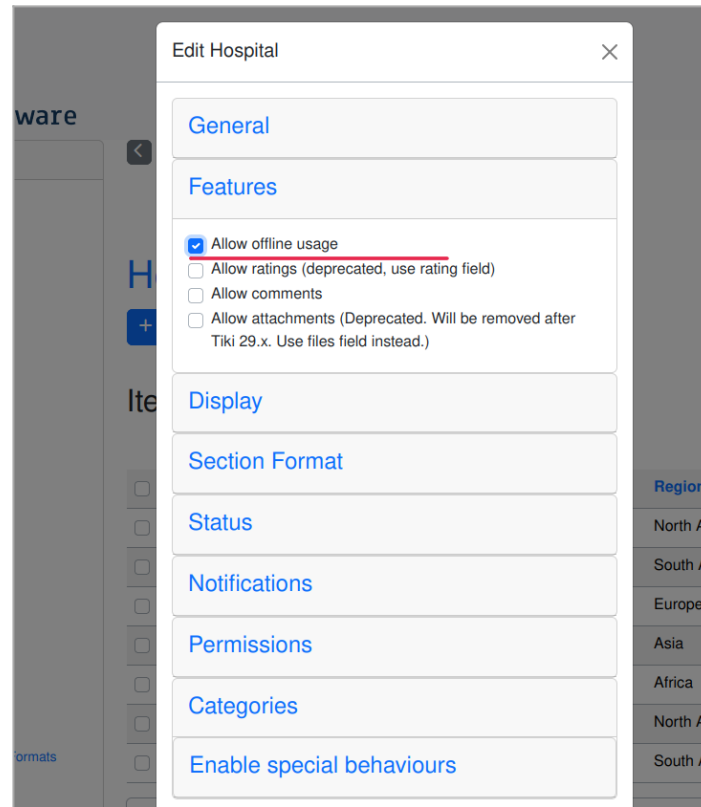
2. Install the Dexie package:

- Check if the Dexie package is installed. If not, you can install it by going to **Settings > Control Panel > Packages**.
- On the Packages page, search for npm-asset/dexie in the list and proceed with the installation.

3. Choose Trackers Allowed for offline usage:

- Navigate to your Tiki Trackers page
- Select the Tracker you want to make available offline.
- Click the Properties tab.

- In the popup, select the Features section



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- Check the Allow offline usage option to enable offline functionality for this selected tracker

How it works

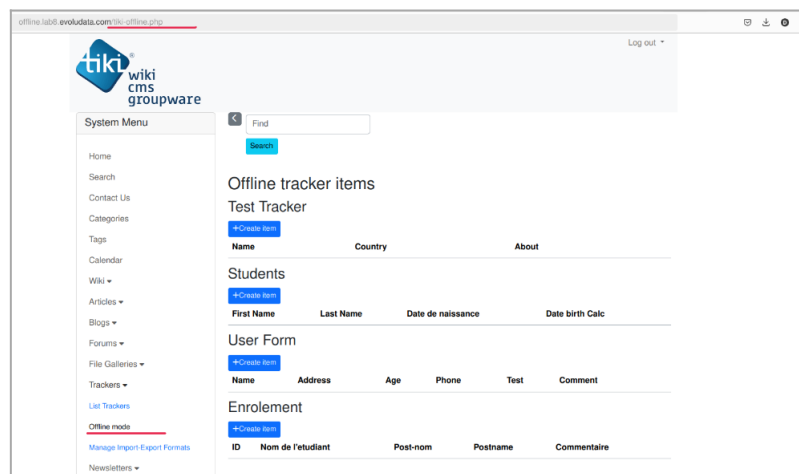
Note: Currently we support the following fields.

Field	Notes
Text	Support all options but the multilingual option.
TextArea	Supports all options except multilingual and WYSIWYG (requires Vue initialization)
Dropdown	Supports all forms: radios, checkboxes, select, multi-select, select with other

DateTime	Traditional datetime field with dropdowns for month, year, etc
ItemLink	Single/multi-selection with field formatting. Advanced display options to be added later
ItemsList	Relatively full support in both input and output modes
Files	Supports basic options: type/name filtering, maximum uploads.
UserSelector	Fully supported except group-list selection (users by groups).
AutoIncrement	Fully supported
Checkbox	Fully supported
Calendar	Reuses datetime-picker Vue widget, mostly fully supported.
DynamicList	Relatively full support similar to ItemsList.

Steps:

- **Choose Trackers for Offline Use:** Select the trackers you want to use offline by enabling the "Allow offline usage" option in the tracker's properties.
- **Load Offline Page:** While connected to the internet, load the offline page to cache the necessary data for offline use.
- **Navigate to the Offline mode page** Access offline trackers



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- **Work Offline:** Insert items into all available trackers even without an internet connection.
- **Manage Stored Items:** If you make a mistake, you can delete temporarily stored items or edit them as needed.
- **Sync Items When Back Online:** Once you regain internet access, sync the offline changes with the server to update your trackers.



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- **Auto-Sync:** If you are online while using the offline page, your changes will automatically sync with the server.
- **Validation:** jQuery validation works with Vue components, ensuring that required fields are validated. Other validation types, such as uniqueness or format checks that require remote verification, are still under development.

Conclusion

Offline Tracker feature in Tiki is a powerful tool that allows users to manage their data seamlessly, even in offline environments. By enabling this feature, users can maintain productivity without worrying about internet connectivity, ensuring that important data can be captured and managed anywhere, anytime. While the feature already supports a wide range of fields, ongoing improvements will continue to enhance its capabilities, particularly in terms of validation and advanced field types.