Wiki Image Manager

A comprehensive guide bridging the gap between Admin convenience and Technical architecture.

For Everyone

What does this tool do?

The **Wiki Image Manager** allows Superadmins to easily search for articles on the company Wiki and directly manage the images inside those articles—all from a single, modern dashboard.

You no longer need to log into the Wiki separately, figure out its complex upload systems, or worry about resizing images.

Key Features

- **Search Pages:** Instantly search for any wiki page (like "College").
- **Replace Existing Images:** Select an outdated image on a page and upload a new one. The system automatically keeps the original filename so that the wiki article doesn't break.

- **Add New Images:** If a page has no images, you can upload a fresh one. The system will automatically place it at the bottom of the wiki article.
- **Automatic Optimization:** Before uploading, images are automatically resized (max 1920px) and compressed so your wiki loads incredibly fast without losing quality.

For Developers

Technical Architecture

This tool integrates a Next.js (App Router) application with a MediaWiki backend. It uses MediaWiki's native API (`api.php`) rather than direct database or filesystem modifications. This ensures MediaWiki remains the single source of truth for file metadata, permissions, and revision histories.

1. Authentication Flow

The application sits behind the primary dashboard's JWT proxy. For MediaWiki operations, we use a dedicated Wiki admin account stored in environment variables (`MEDIAWIKI_USERNAME`).

- **API Used:** `action=clientlogin`
- **Session Management:** Cookies received from MediaWiki are cached in memory for the duration of the Node process (or until they expire).

- **CSRF Tokens:** Every write operation (Upload, Edit) requires a CSRF token fetched via `action=query&meta=tokens&type=csrf`.
- **Graceful Read-Only Fallback:** If the Wiki server has `$wgEnableWriteAPI = false`, the login fails. The system catches this and proceeds with an unauthenticated session, allowing Read-only operations (Search, View Gallery) to still function flawlessly.

2. Fetching Data

All data retrieval is done using `action=query`.

Searching Pages:
`list=search` and `srsearch=[query]`
Retrieves page IDs, titles, and snippets.

Fetching Page Images:
`prop=images` followed by `prop=imageinfo`.
Retrieves image URLs, sizes, MIME types, and upload timestamps.

3. Image Processing

Before interacting with MediaWiki, the Next.js backend intercepts the upload and uses the **Sharp** library. It determines the target format (WebP, PNG, JPEG) based on the target wiki filename, resizes it to fit within 1920x1920 pixels, and applies aggressive compression.

4. Editing: Replace vs. Add

The system intelligently routes uploads based on a `mode` flag passed from the frontend.

Mode: Replace

The backend uses `action=upload` and targets the *existing* filename on the wiki while passing `ignorewarnings=1`. MediaWiki automatically archives the old image as a previous revision and sets the new image as the active version. No wiki page text needs to be edited, because the filename hasn't changed.

Mode: Add New

This is a multi-step operation:

1. **Upload:** Uploads the file via `action=upload` using the file's original name.
2. **Fetch Content:** Calls `action=query&prop=revisions&rvprop=content` to get the raw wikitext of the target page.
3. **Parse:** The custom `wikiContentParser.js` helper checks if the image already exists. If not, it safely appends `[[File:filename.jpg|thumb|center|...]]` to the content.
4. **Update:** Calls `action=edit` with the new content and the required CSRF token.

Server Prerequisites

To ensure the "Add" and "Replace" features work in production, the MediaWiki server (e.g., `wiki.honour.app`) must permit API write operations.

Ensure the following is set in MediaWiki's `LocalSettings.php`:

```
$wgEnableWriteAPI = true;
```

If this is set to false, users will be able to search and browse images, but uploads will fail with a clear "MediaWiki upload failed" error.