

### Release Notes

View release notes for a HUBzero CMS version by selecting from the list to the left.

### 2.2.1

<https://github.com/hubzero/hubzero-cms/tree/2.2.1>

#### Changes

- [PHP 5.6](#) minimum requirement
- [PHP 7](#) ready
- migrations directories added to all components and plugins with initial install migrations
- Automatic API endpoints for ORM models - If a component has ORM models, the system will automatically make available API endpoints for the basic CRUD actions. Models must be named as a singular entity and endpoints are reached via the plural of those entity names. For example, if the Blog component has a model named Entry, then the API endpoint would be `https://yourhub.org/api/blog/entries`.

Automatic API endpoints will only be available if a component has not already implemented an API interface (i.e., if a component does **not** have an `/api` sub-directory).

- Support for un-prefixed component and module directories. This allows for the removal of the redundant `com_` and `mod_` prefixes on directories.

```
old:
app/components/com_example/
app/modules/mod_example/
```

```
new:
app/components/example/
app/modules/example/
```

**Note:** Prefixed directories will be deprecated in the next version.

- Autoloading of PHP files for un-prefixed components. No include or require statements needed. Class namespace directly maps to case insensitive path.

```
// Path:
app/components/example/models/foo.php
```

```
// Directly maps to a class of
ComponentsExampleModelsFoo
```

```
// Calling the class the first time autoloads it, so no include s
tatement is needed:
class Examples extends SiteController
```

```
{
    public function displayTask()
    {
        $model = new ComponentsExampleModelsFoo();
    }
}
```

- HubzeroDatabaseManager class added. Class is used to manage database connections.
  - HubzeroDatabaseRelational::connection property changed from object (HubzeroDatabaseDriver) to (string) name of the connection to be resolved by the manager.
  - HubzeroDatabaseDriverPdo is generic PDO driver class.
  - HubzeroDatabaseDriverMysql added, extends DriverPdo
  - HubzeroDatabaseDriverSqlite added, extends DriverPdo
  - HubzeroDatabaseDriverPgsql added, extends DriverPdo
- Projects now use global activity log.
- core/libraries/simplepie changed to a Composer package
- HubzeroDatabaseTable added as temporary replacement for Joomla's JTable

- Joomla constants replacement:

Joomla	HUBzero
JPATH_COMPONENT	PATH_COMPONENT
JPATH_COMPONENT_SITE	N/A
JPATH_COMPONENT_ADMINISTRATOR	N/A

- End of life for Joomla-based code
- Base install migrations added to every component
- Suggestions for alternate search terms if a term returns no results

### Removed

- com\_admin removed from core
- com\_store removed from core
- plg\_quickicon\_extensionupdate removed from core
- plg\_quickicon\_joomlaupdate removed from core
- plg\_xmessage\_im removed from core
- plg\_xmessage\_rss removed from core
- plg\_xmessage\_smstxt removed from core
- tpl\_hubbasic2012 removed from core
- tpl\_hubbasic2013 removed from core
- tpl\_baselayer removed from core

### Added

- com\_activity added - Admin interface and API endpoint for browsing/inspecting site activity

### Changed

- com\_citations rewritten to use the ORM
- com\_config rewritten from Joomla-based code
- com\_plugins rewritten to use the ORM
- com\_resources rewritten to use the ORM
- com\_support rewritten to use the ORM
- com\_wishlist rewritten to use the ORM

## 2.2.2

<https://github.com/hubzero/hubzero-cms/tree/2.2.2>

### **2.2.3**

<https://github.com/hubzero/hubzero-cms/tree/2.2.3>

### **2.2.4**

<https://github.com/hubzero/hubzero-cms/tree/2.2.4>

## 2.2.5

<https://github.com/hubzero/hubzero-cms/tree/2.2.5>



### **2.2.6**

<https://github.com/hubzero/hubzero-cms/tree/2.2.6>

### **2.2.7**

<https://github.com/hubzero/hubzero-cms/tree/2.2.7>

### **2.2.8**

<https://github.com/hubzero/hubzero-cms/tree/2.2.8>

## 2.2.9

<https://github.com/hubzero/hubzero-cms/tree/2.2.9>

### **2.2.10**

<https://github.com/hubzero/hubzero-cms/tree/2.2.10>

### **2.2.11**

<https://github.com/hubzero/hubzero-cms/tree/2.2.11>

## 2.2.12

<https://github.com/hubzero/hubzero-cms/tree/2.2.12>

### 2.2.13

<https://github.com/hubzero/hubzero-cms/tree/2.2.13>

#### Changes

- General bug fixes.
- Accessibility fixes.

#### New Features

- Add publication cron job for FTP links. Embargoed publications need to be added/removed based on embargo date.
- Search Components previously only allowed indexable models to be added and show as a main type. Now custom queries can be provided as a main category.
- Add ability to re-send e-mail confirmation link. Administrators will see a re-send Confirmation E-mail button on the edit page of users that haven't confirmed their e-mail.
- Added module for displaying cookie policy (GDPR compliance).
- Administrator > Site Configuration: This will suggest a 4-character alpha-numeric "site code" based off the sitename if one isn't already provided.

#### Developer Features

- Initial install migrations added to several modules that were missing them.
- Front-end of com\_content rewritten to remove remaining Joomla code.
- Course emails now use global email template.
- Start of refactoring extensions to remove inline CSS and Javascript. This allows for a potentially stricter Content Security Policy that better guards against Cross-Site Scripting attacks.



### 2.2.14

<https://github.com/hubzero/hubzero-cms/tree/2.2.14>

#### Changes

- General bug fixes.
- Browser Support for IE is now only IE11 or greater.
- Feed aggregator component removed.
- Full screen option for videos in resources deprecated.
- Form validation improvements.
- Projects: Delete project link and warning box moved to sidebar from bottom of the page to be a little easier to find.
- Reworked several modules, plugins, and components to remove inline styles and scripts. This moves CSS and JS to external files and potentially allows for a stricter Content Security Policy with better guards against Cross-Site Scripting attacks.
- Reworked extensions to use the Media Manager's configuration for max upload file size and allowed file types. This consolidates configuration options to one spot rather than being duplicated in multiple components. The Support component still allows for overriding Media Manager settings as anyone—even logged-out users—can upload files so some stricter options may be in order.
- Added extra logging to error handler. 500 pages will not log the error to PHP's `error_log()`
- Where applicable, changed HTML input type to "email" (e.g., `<input type="email" />`). On mobile devices, this can single the device to use an alternate keyboard layout geared more towards entering email addresses.

#### New Features

- Administrator: Tools: Added a column for DOI to the list of tool versions. This also allows for editing some of the DOI info tied to the tool version. This does not issue DOIs, however.
- Administrator: Members: Added option to delete member picture. For auto-generated pictures, this will re-generate a new picture.
- Added configuration option to disable comments on wiki pages or disable ratings on wiki comments (if comments are enabled).
- Kimera template: Site header has an indicator next to user picture when logged in as an admin.
- Refactored administrator's Media Manager interface. Includes drag & drop upload, new file icons, better image preview, "get link to file" option, and easier file browsing.

#### Developer Features

- Added view handlers (plugins/handlers) for Jupyter Notebooks (.ipynb), scripts with syntax highlighting, HTML5 video & audio, and Markdown (.md) files.

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- Deprecated Mootools JavaScript libraries removed.

## Github

- Templates for Feature request & Bug reports now available.

### 2.2.15

<https://github.com/hubzero/hubzero-cms/tree/2.2.15>

#### Changes

- Administrator template: Toolbar button styles tweaked to make icons more visible and template themes reworked to reduce the number of files being loaded.
- Login views and code copied from (deprecated) `com_users` to `com_login`.

Note: `com_users` will be removed in a future version. Login links should point to `com_login`.

- LinkedIn OAuth library was moved from `core/libraries/` to `core/plugins/authentication/linkedin/`.
- Twitter OAuth library was moved from `core/libraries/` to `core/plugins/authentication/twitter/`.
- Administrative JavaScript reworked to move event logic for toolbar buttons into functions so that event handlers can be removed or overridden as needed.
- Default value of DateTime database columns changed from 0000-00-00 00:00:00 to NULL to comply with MySQL strict mode.
- Default language file `en-GB.lib_joomla.ini` replaced by `en-GB.lib_hubzero.ini`.
- Colors and logos updated for authenticator buttons (e.g., Google, Facebook, etc)

#### Removed

- Removed deprecated `plg_extensions_joomla` plugin.
- Removed unused `plg_user_profile` plugin.
- Remove several unused assets from `core/assets/`. See [the full list of removed files on GitHub](#).

#### New Features

- Course image can now be set from the front-end.
- Managers and instructors of a course can now copy an entire course from the front-end.
- If the creator of a course marks it as allowing forks, a logged-in user may "fork" a course. This creates a complete copy of the course, removes all managers and instructors, and marks the person who created the fork as the current manager.
- Add South Sudan to the list of the countries
- Wiki - Page History: Any prior revision can now be set to "current", effectively allowing a page to be reverted to an older state.
- Add content plugin (Content - External Links) for automatically adding `rel="nofollow"` to external links in posted content.
- Admin Modules, Plugins, and Templates list will now mark extensions with missing files as such, mark them as unpublished, and disallow editing of the extension entry. This

better clarifies what extensions are actually installed.

### New Developer Features

- Added `log()` helper to base migration class as well as logging statements to helper methods such as `addComponentEntry`, `deleteComponentEntry`, etc. Documentation available at [Web Development: migrations](#)
- Added methods to the query builder for dealing with null values. Methods added are:
  - `whereIsNull($column)`
  - `orWhereIsNull($column)`
  - `whereIsNotNull($column)`
  - `orWhereIsNotNull($column)`
- Added helper methods to the query builder for the various SQL joins. Methods added are:
  - `innerJoin()`
  - `leftJoin()`
  - `rightJoin()`
  - `fullJoin()`
- Added `clear($clause)` method for clearing portions of a SQL statement. Example:

```
$query = $db->getQuery();
$query->select('*')
    ->from('#__users')
    ->whereEquals('name', 'Foo Bar')
    ->clear('where');

// Outputs: SELECT '*' FROM `#__users`
echo $query->toString();
```

- Added database driver and syntax class for MariaDB.
- Added database driver for Percona. Percona is a drop-in replacement for MySQL but includes a couple extra features such as a proprietary engine (xtradb), thus its own driver to add Percona-specific features to.
- `checkin()` and `checkout()` methods on relational models can now be safely called for models/tables that do not implement the `checked_out` or `checked_out_time` columns.
- Admin menu adds more (CSS) classes to menu items and marks active items for more/easier styling options.
- Namespace in core javascript changed to Hubzero. This means developers should call `Hubzero.submitbutton()`, `Hubzero.submitform()`, etc. Joomla.{method} layer added for backwards compatibility.

Note: Joomla compatibility will be removed in a later release. Update your code as soon as possible.

- Added event hook for /file client on file download. This allows for logging or other actions

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once a file has successfully be downloaded.

- Added Create, Read, Update, and Delete methods for to Projects API.
- Added onCitationBeforeSave and onCitationAfterSave events to Citations component.
- Started adding common [Bootstrap](#) class names to form elements.

## 2.2.16

<https://github.com/hubzero/hubzero-cms/tree/2.2.16>

### Changes

- Upgraded [jQuery](#) to 3.3.1 and [jQuery.ui](#) to 1.12.1
- Upgraded [D3 Javascript framework](#) to v5.9.2 (core/assets/js/d3.js)
- LaTeX math formula support changed to use [MathJax](#). This will remove an approximately 3Gb dependency on the HUBzero install in future releases.
- Moved several duplicated language strings down to a single core language string.
- Projects /projects/browse page has been redesigned to use "cards" instead of a table.
- Projects now use the standard access column (Admin > Users > Access Levels) to control visibility, allowing projects to be assigned to specialized access levels and, thus, only viewable/findable by people who can view said access level.
- HUBzero copyright block (found at the top of all the code files) updated, simplified, and significantly reduced in size.

### Removed

- Removed select2.js and associated CSS. Use jquery.fancyboxselect.js instead.
- Removed core/libraries/fpdf and core/libraries/fpdf libraries. Code using them was refactored to use TCPDF instead.
- Removed core/libraries/nusoap. Library was unused.
- Removed core/libraries/simplepie. SimplePie is included via Composer instead.
- Removed unused views/\*/tmpl/{view name}.xml files. View XML files are used for providing params for menu items and aren't currently supported for plugin views.

### New Features

- More filters for Activity API. You can now provide a start\_date and end\_date to retrieve activity in a specified time range.
- Group Forums: Added configuration option for default sorting of threads (last activity, created, number of replies, thread title).
- Previously only supported by components, all extension types now support a /config directory for configuration options.

```
/modules
.. /mod_foo
.. .. /config
.. .. .. config.xml
```

This keeps the structure of extensions more consistent.

- Courses: Add ability to add tools + files to be used with the tool when invoking a session

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from a course.

### 2.2.17

#### Changes

- Accessibility fixes.
- Numerous bug fixes, mostly related to Javascript issues.
- Moved more inline Javascript to external files.
- Trouble Report form (mode\_reportproblems) is now loaded upon demand rather than included on every page.
- Resources: COiNs microformat generator moved to plugin and now included for each resource in the listing (/resources/browse).
- Login now uses com\_login instead of com\_users. A migration was added to update menu items and all core code now points to com\_login. com\_users is now a proxy for com\_login, to maintain backwards compatibility. Note: This removed the remaining Joomla-based code still in use.

This may require additional redirect URIs to be added to the OAuth configuration for individual authenticators. The following URIs should be added:

- {your hub}/index.php?option=com\_login&task=login&authenticator={authenticator}
- {your hub}/index.php?option=com\_login&task=link&authenticator={authenticator}

#### New

- Added SVG file type icons to /core/assets/images/filetypes and changed the media manager and Project Files to use said icons. Example usage:

```
// Try to load an icon for the .doc file type
$icon = Html::asset('image', 'assets/filetypes/doc.svg', '', null
, true, true);

// If filetype isn't found, load a generic 'file' icon
if (!$icon)
{
    $icon = Html::asset('image', 'assets/filetypes/file.svg', '',
    null, true, true);
}
```

- DOIs in citations should now automatically be linked to <https://doi.org/{doi}>.



### 2.2.18

#### Changes

- Performance increase for Publication image.
- Publication Citations are now associated with individual versions of a Publication, rather than the Publication as a whole.
- Publication Tags are now associated with individual versions of a Publication, rather than the Publication as a whole.
- Administrator Interface: Member status is simplified for easier understanding with quick options for blocking, approving, etc.
- Groups: When deleting, the member must type the alias of the group to confirm deletion. This is an extra guard against accidental deletions.

#### New

- "My Publications" dashboard module. This module is sub-divided into two tabs: "Drafts" and "Published". Each tab displays publications you're currently working on or have published.

### 2.2.19

<https://github.com/hubzero/hubzero-cms/tree/2.2.19>

#### New Features

- Files can now be removed from forum posts via the component's administrator interface
- Tool status figures can now be reviewed at [examplehub.org/tools/status](https://examplehub.org/tools/status)

#### New Developer Features

- Updated composer to version 1.8.6

### 2.2.20

<https://github.com/hubzero/hubzero-cms/tree/2.2.20>

#### Removed

- The option to version control projects has been removed from the administrative portal as the feature has been deprecated.

#### New Features

- Solr search result [boosting](#) has been added.

### 2.2.22

The Spring 2021 release contains commits from Mar 3, 2020 to present.

## Admin functions

Blocking a user now expires the account password.

Users can now be blocked by selecting multiple users from the list in /administrator  
/admin should now redirect to /administrator.

## Collections

Added an administrator option to disable comments from collections.

## Courses

Javascript fixes.

Simulation tools now in a new window from within a course.

Limited number of courses are displayed with more\_courses link on the course introduction page.

## Events

Fixed registration emails regex.

Properly display events in time / ordering.

## Extension Manager

The CMS Extension Manager has been updated to allow custom extensions to be managed directly by the CMS interface. Instructions are located at:

<https://help.hubzero.org/documentation/22/managers/extensions/extmanger>

## Groups

Fixed group calendar event times.

Fixed super group page scanner when R markdown or JS is entered.

Added guest login prompt to group pages.

## Forum

Fixed sorting issue when deleting a discussion

### Members Dashboard

Fixed dashboard widgets resizing issue.

### Projects

User timezone in todo item fixed.

Removed automatic addition of project members when selecting new project membership options.

Improved com\_projects zip archive dir detection fixes.

### Publications

Citations are not attached to publication versions.

Fixed issue where attachments were not copying when forking a publication.

### Resources

Hub Presenter video will no longer autoplay.

A message will now be displayed to login in order to see all supporting docs if the user is not logged in and the supporting docs are private.

Updated import result rendering.

### User Login

Added the ability for unapproved users to submit tickets.

### Tags

Refactored tagged list pagination logic in /administrator.

Fixed sorting and pagination display limit at the same time issue.

### Tools

Fixed check if submitted users and groups exist in the tool edit info page.

### Support

ACL fixes.

Closed tickets should reopen when a new comment is posted.