

The “local metadata” plugin has been created to allow extra, “metadata” to be defined and assigned to various context level elements in Moodle. It is an abstraction of the current “user profile field” functionality in Moodle and contains much of the same code.

The data model includes context level identifiers to allow the same data tables and API’s to be used for all of the different context levels. The plugin has been designed with the ability to be adopted into core, and completely replace the current user profile field feature if desired.

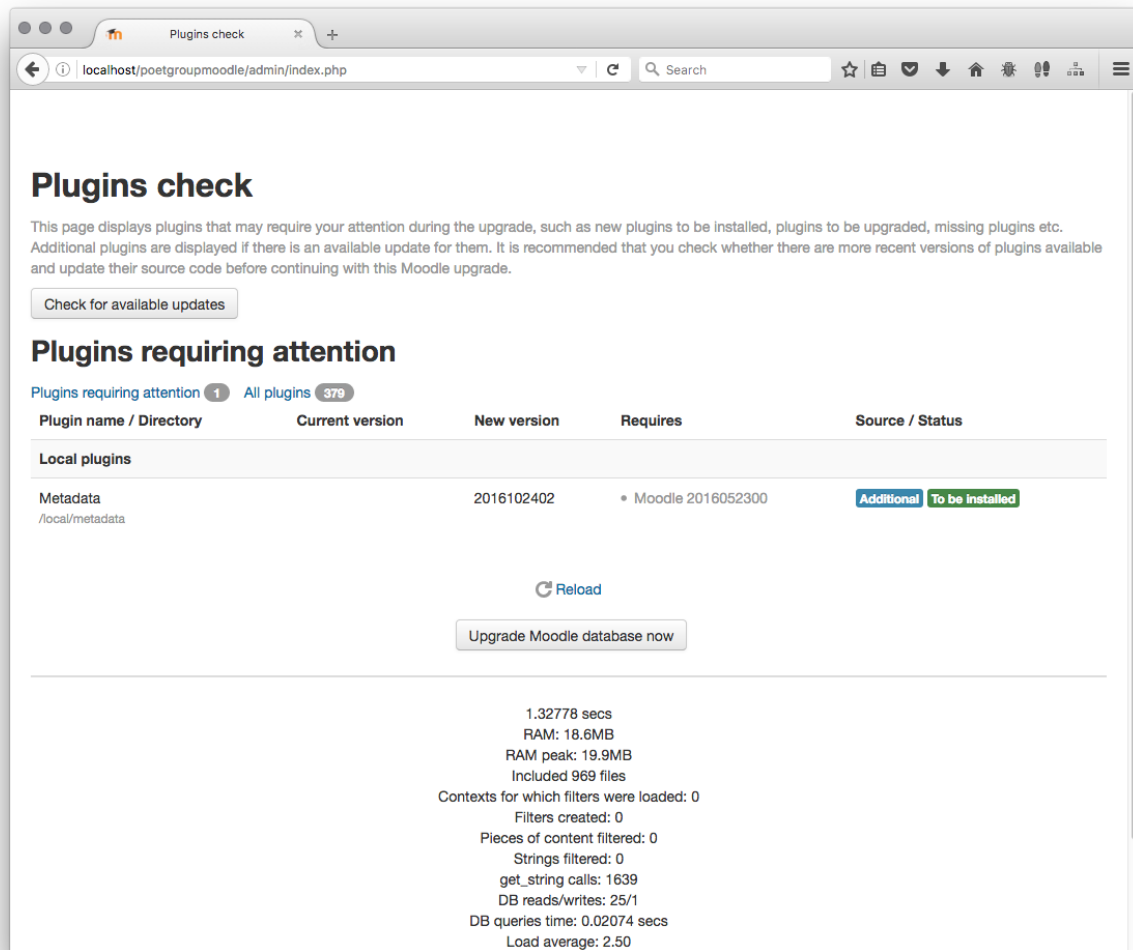
In its current concept state, the plugin provides metadata functionality for users, courses and activity modules. Other context levels can be added reasonably easily (e.g. categories, blocks). Note, that the user metadata provided by the plugin is “in addition to” the current profile data rather than replacing it. For now, it is really intended to show/prove that this could replace the user profile data feature.

Since it is a plugin, it can only provide interfaces that are available to plugins. For example, adding specific data to defined course metadata elements must be done through a different interface form than the main course settings form. The plugin takes advantages of Moodle hooks and callbacks that allow screens and menus to be added to, where they exist. If brought into core, these would be able to be more tightly integrated (this could also be better integrated if/when the proposed “hook” system provides more hooking points).

The plugin can be retrieved from https://github.com/POETGroup/moodle-local_metadata. It should be installed into the Moodle “/local/metadata/” directory (the “metadata” subdirectory needs to be created). Make sure that the “/local/metadata/” directory contains the root of the plugin.

Following is a walkthrough of the plugin in its current state:

Installation



The screenshot shows the Moodle 'Plugins check' page in a web browser. The browser's address bar shows 'localhost/poetgroupmoodle/admin/index.php'. The page title is 'Plugins check'. Below the title, there is a paragraph explaining that this page displays plugins that may require attention during an upgrade, such as new plugins to be installed, plugins to be upgraded, or missing plugins. A button labeled 'Check for available updates' is present. Below this, the section 'Plugins requiring attention' is shown, with a sub-header 'Plugins requiring attention 1 All plugins 379'. A table lists the plugins requiring attention. The table has columns: 'Plugin name / Directory', 'Current version', 'New version', 'Requires', and 'Source / Status'. Under the 'Local plugins' section, there is one entry: 'Metadata' with the directory '/local/metadata'. The 'Current version' is empty, and the 'New version' is '2016102402'. The 'Requires' column shows 'Moodle 2016052300'. The 'Source / Status' column shows 'Additional' and 'To be installed'. Below the table, there is a 'Reload' button and an 'Upgrade Moodle database now' button. At the bottom of the page, there is a list of performance statistics: 1.32778 secs, RAM: 18.6MB, RAM peak: 19.9MB, Included 969 files, Contexts for which filters were loaded: 0, Filters created: 0, Pieces of content filtered: 0, Strings filtered: 0, get_string calls: 1639, DB reads/writes: 25/1, DB queries time: 0.02074 secs, and Load average: 2.50.

Plugins check

This page displays plugins that may require your attention during the upgrade, such as new plugins to be installed, plugins to be upgraded, missing plugins etc. Additional plugins are displayed if there is an available update for them. It is recommended that you check whether there are more recent versions of plugins available and update their source code before continuing with this Moodle upgrade.

[Check for available updates](#)

Plugins requiring attention

Plugins requiring attention **1** All plugins **379**

Plugin name / Directory	Current version	New version	Requires	Source / Status
Local plugins				
Metadata /local/metadata		2016102402	• Moodle 2016052300	Additional To be installed

[Reload](#)

[Upgrade Moodle database now](#)

1.32778 secs
RAM: 18.6MB
RAM peak: 19.9MB
Included 969 files
Contexts for which filters were loaded: 0
Filters created: 0
Pieces of content filtered: 0
Strings filtered: 0
get_string calls: 1639
DB reads/writes: 25/1
DB queries time: 0.02074 secs
Load average: 2.50

The plugin will install on 3.1 and the new 3.2 versions of Moodle.

Settings

The screenshot shows a web browser window with the address bar displaying 'localhost/poetgroupmoodle/admin/upgradesettings.php'. The page title is 'POET Group'. Below the title, a message states: 'The settings shown below were added during your last Moodle upgrade. Make any changes necessary to the defaults and then click the "Save changes" button at the bottom of this page.'

New settings - Settings

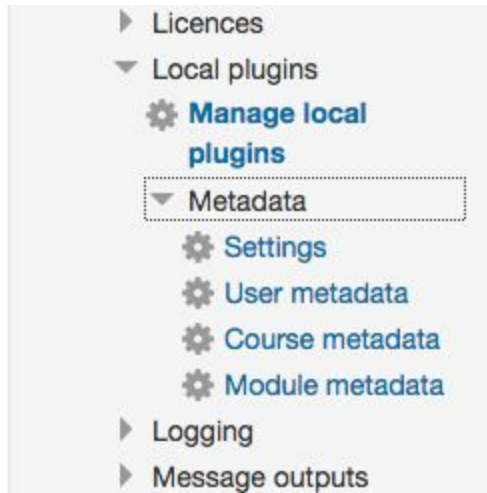
- Use metadata for users** ☐ Default: No
local_metadata | usermetadataenabled
- Use metadata for courses** ☒ Default: Yes
local_metadata | coursemetadataenabled
- Use metadata for modules** ☐ Default: No
local_metadata | modulemetadataenabled

A blue 'Save changes' button is located at the bottom of the settings section.

3.767921 secs
RAM: 19.2MB
RAM peak: 20.9MB
Included 1394 files
Contexts for which filters were loaded: 1
Filters created: 3
Pieces of content filtered: 2
Strings filtered: 0
get_string calls: 2816
DB reads/writes: 198/0
DB queries time: 0.0659 secs
Load average: 2.26
Session (core\session\file): 7.5KB
Caches used (hits/misses/sets)

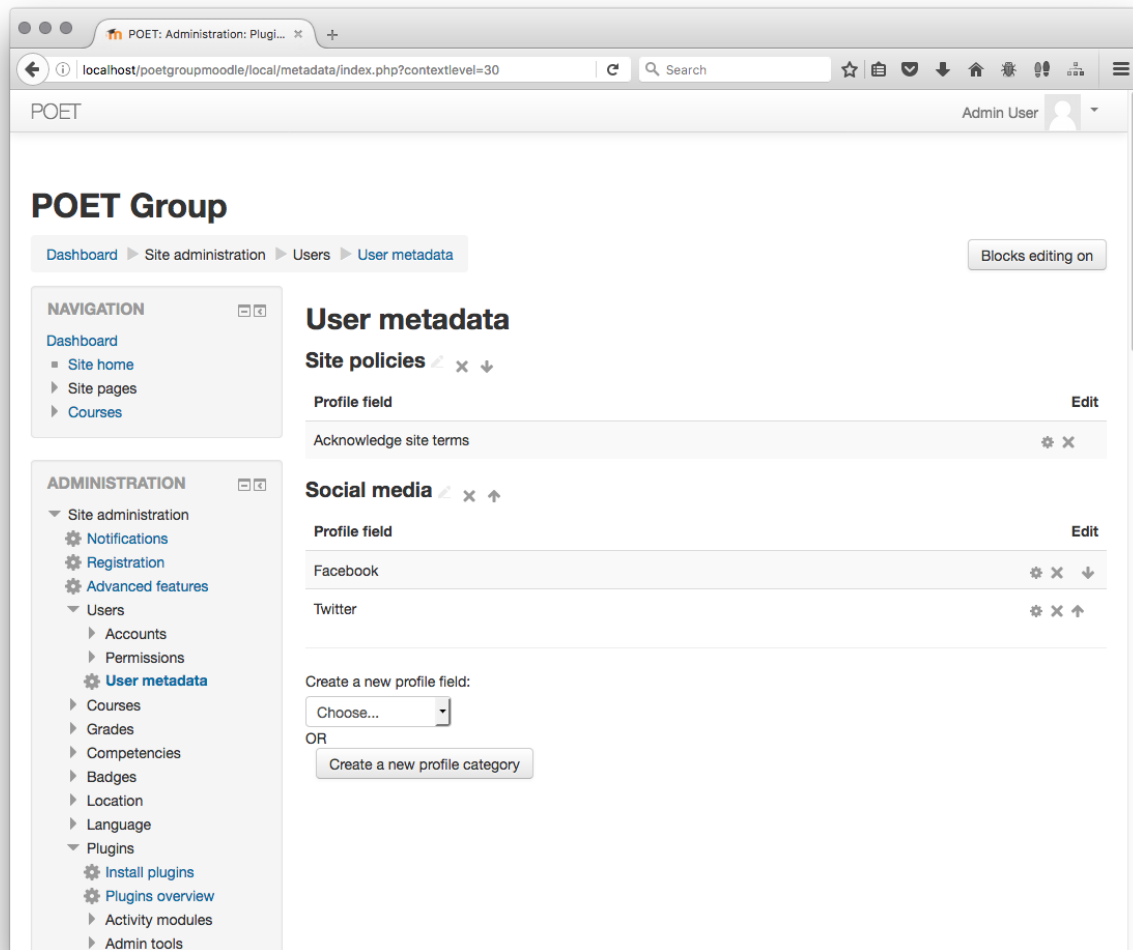
The main settings allow the site to select what context levels metadata can be used for. Currently this allows users, courses, and activity modules. Enabling one, enables the data management interfaces for the corresponding context level. This setting screen can be accessed from the local plugin settings menu in the main administration navigation.

Local plugin navigation



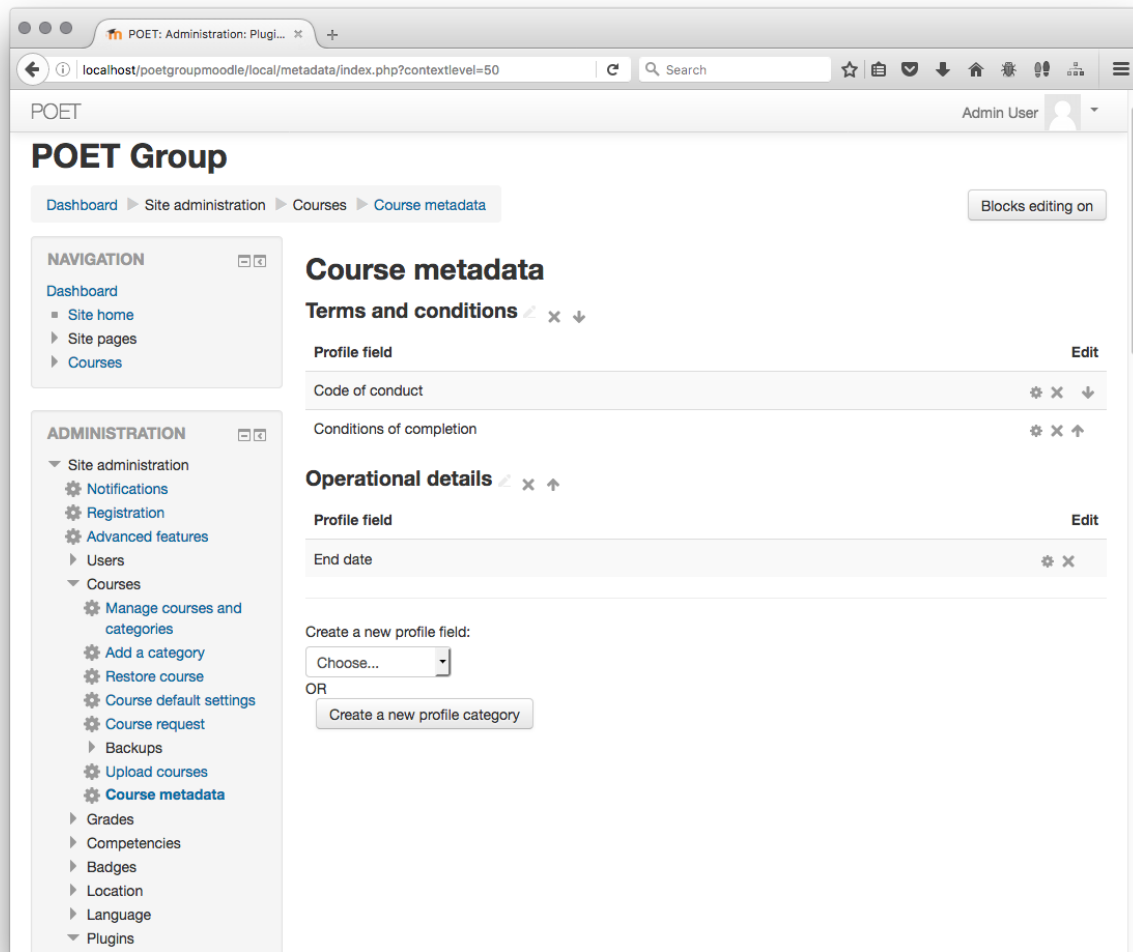
In the site administration menu, under “Plugins / Local plugins” you’ll find the settings interface (previous), as well as interfaces to define data fields for the various contexts. These data field interfaces can also be accessed from the main site admin sections for the specific context levels (where they exist).

User metadata



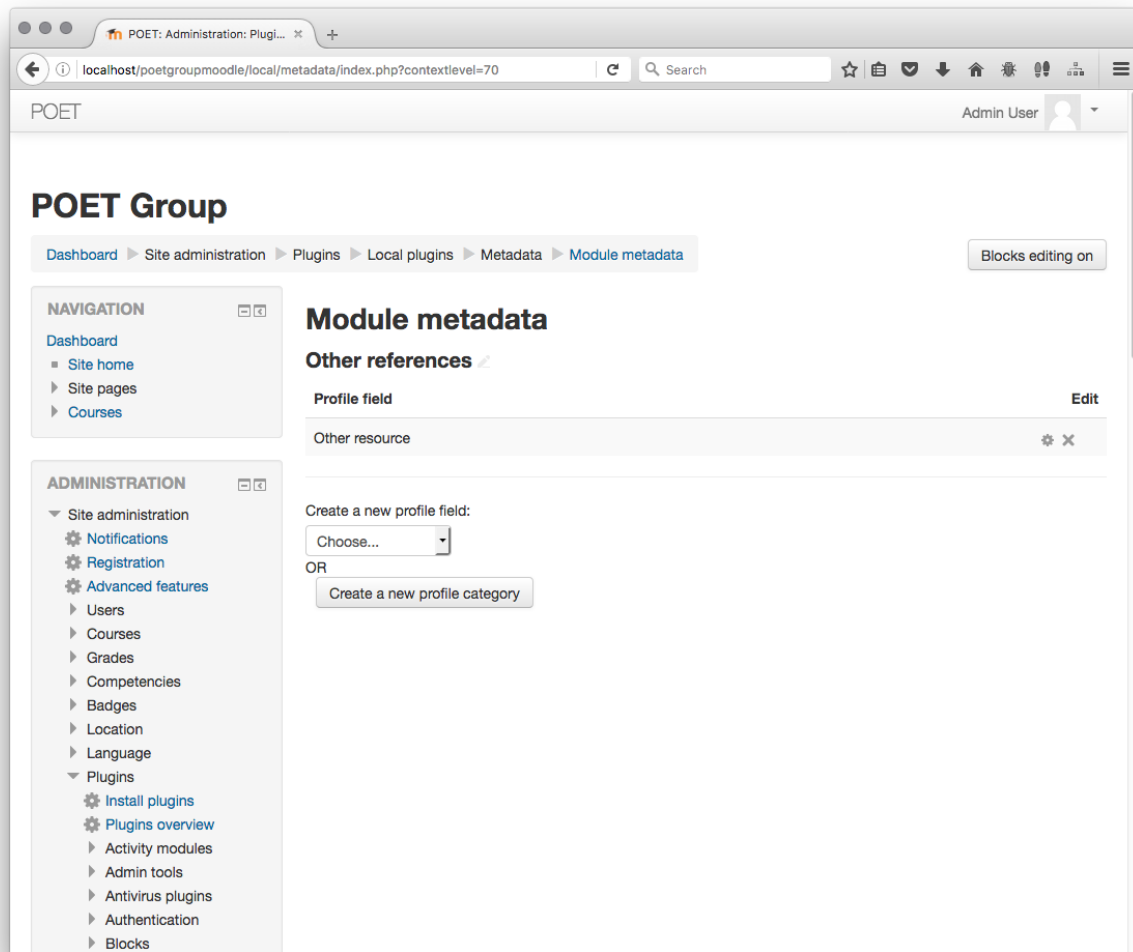
The “User metadata” screen can be accessed from the plugins menu (previous) or from the user administration menu (as shown above). The user admin menu option will only appear if the metadata for users is enabled in the plugin settings. Adding fields and categories works the same as the current user profile functions. Some of the functionality has been updated to use newer editing features of Moodle (for example, in line editing of category text).

Course metadata



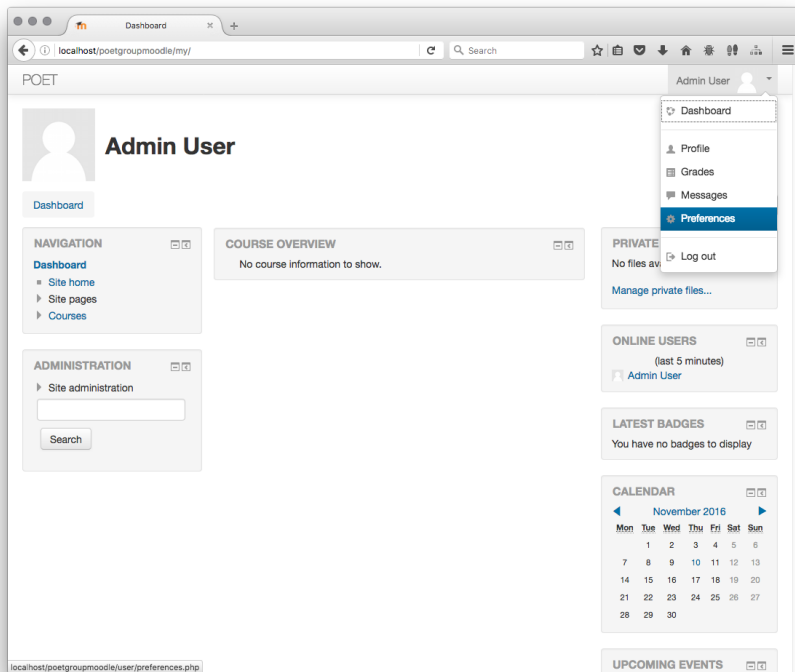
The “Course metadata” screen can be accessed from the plugins menu (previous) or from the course administration menu (as shown above). The course admin menu option will only appear if the metadata for courses is enabled in the plugin settings. Adding fields and categories works the same as the current user profile functions.

Module metadata

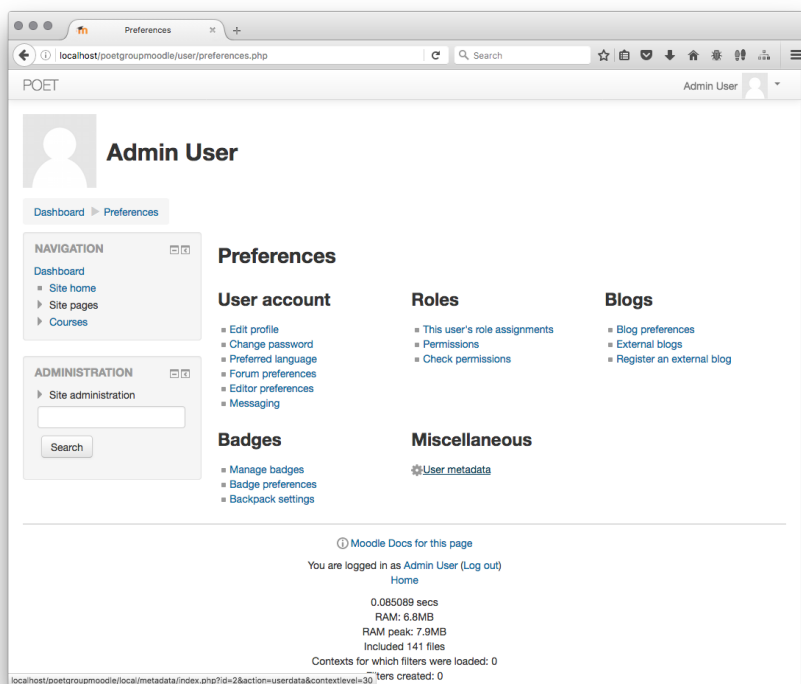


The “Module metadata” screen can only be accessed from the metadata plugins menu. Adding fields and categories works the same as the current user profile functions.

User data management



To add metadata to a specific user, access the “Preferences” screen.



From there, specific entries can be made for any user.

The screenshot shows a web browser window with the address bar displaying `localhost/poetgroupmoodle/local/metadata/index.php`. The page title is "POET" and the user is logged in as "Admin User". The main heading is "Admin User" with a placeholder profile picture. Below this is a breadcrumb trail: "Dashboard > Site administration > Users > User metadata". A green notification bar at the top of the main content area says "Metadata saved." with a close button. The left sidebar contains two sections: "NAVIGATION" with links for "Dashboard", "Site home", "Site pages", and "Courses"; and "ADMINISTRATION" with a tree view including "Site administration", "Notifications", "Registration", "Advanced features", "Users" (with sub-items "Accounts", "Permissions", and "User metadata"), "Courses", "Grades", "Competencies", "Badges", "Location", "Language", "Plugins", "Install plugins", "Plugins overview", and "Activity modules". The main content area is titled "User metadata" and contains two expandable sections: "Site policies" with a checked "Acknowledge site terms" option, and "Social media" with "Facebook" unchecked and "Twitter" checked. At the bottom of the main content area are "Save changes" and "Cancel" buttons.

User metadata

Metadata saved.

Blocks editing on

NAVIGATION

- Dashboard
- Site home
- Site pages
- Courses

ADMINISTRATION

- Site administration
 - Notifications
 - Registration
 - Advanced features
 - Users
 - Accounts
 - Permissions
 - User metadata
 - Courses
 - Grades
 - Competencies
 - Badges
 - Location
 - Language
- Plugins
 - Install plugins
 - Plugins overview
 - Activity modules

Site policies

Acknowledge site terms ☒

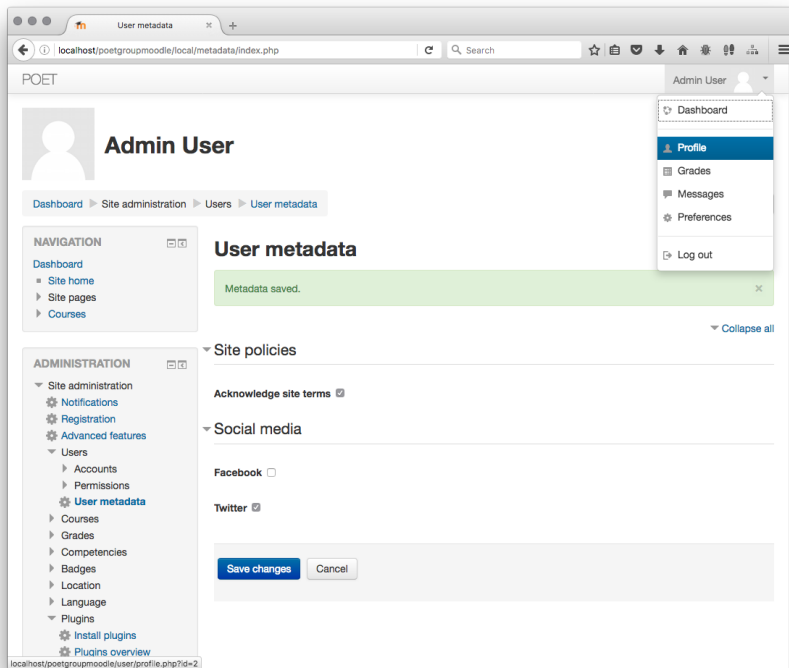
Social media

Facebook ☐

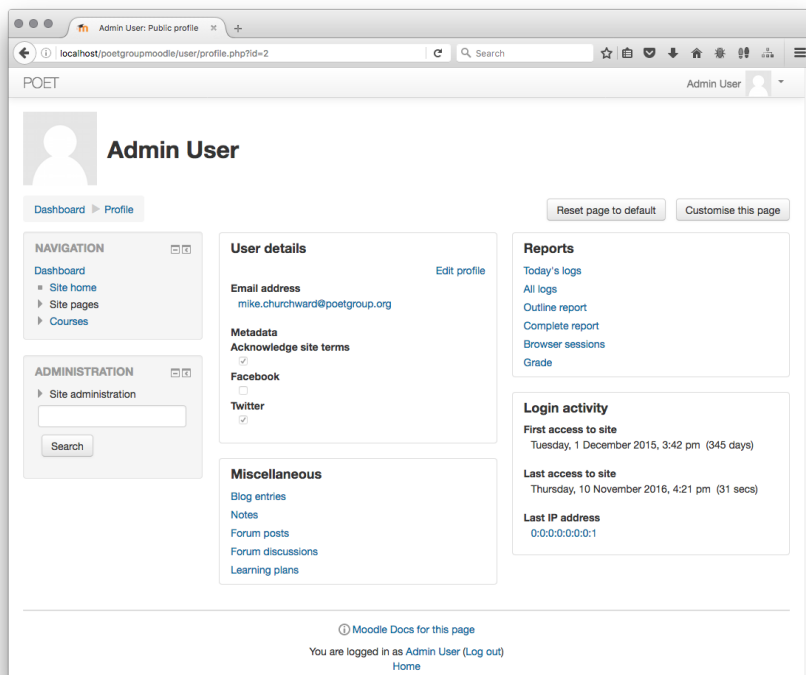
Twitter ☒

Save changes Cancel

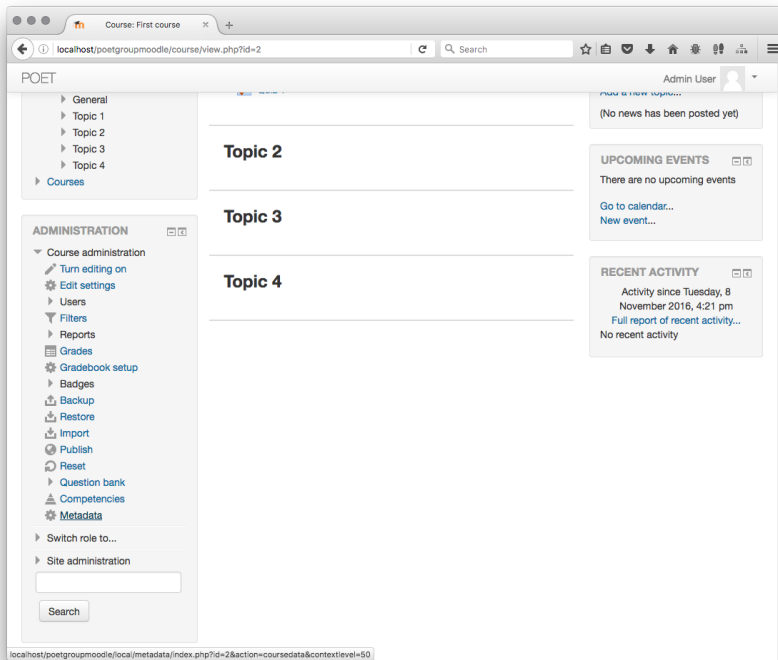
User profile



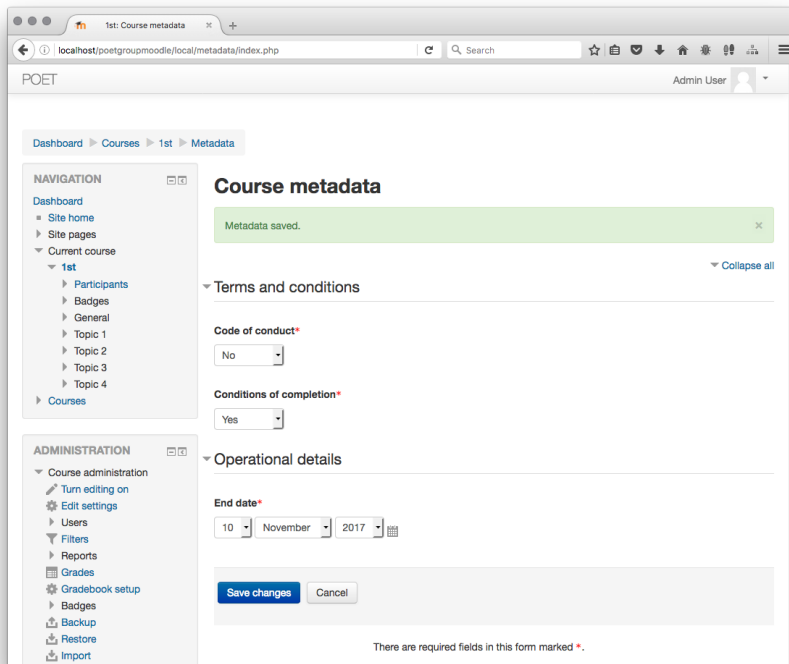
The user metadata for any user can be seen on the user profile screen.



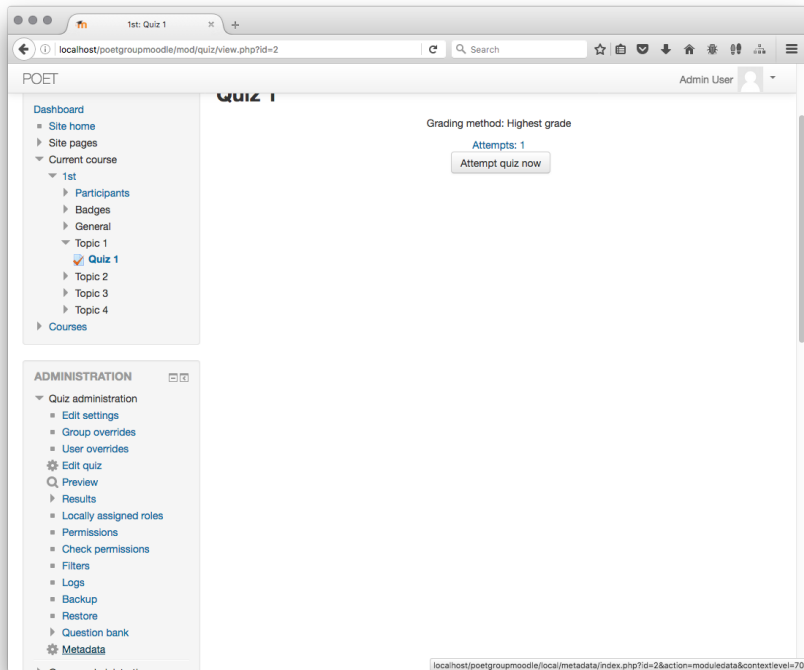
Course data management



To add metadata to a course (if course metadata has been enabled), access the “Metadata” link in the course administration menu for the course.



Module data management



To add metadata to an activity module (if module metadata has been enabled), access the “Metadata” link in the specific activity’s administration menu.

