

Chamilo LMS - Bug #6884

Exercise time limits change when including it in learning path

21/12/2013 03:30 - Yannick Warnier

Status:	Bug resolved	Start date:	20/12/2013
Priority:	High	Due date:	20/12/2013
Assignee:	Daniel Barreto	% Done:	100%
Category:	Exercises	Estimated time:	2.00 hours
Target version:	1.9.8	Spent time:	0.94 hour
Complexity:	Challenging	SCRUM pts - complexity:	?

Description

There's an issue with the current flow of creating an exercise with time limits and including it in a learning path.

The first data is that the `exercise.class.php::save()` function assumes the data set as the object comes from a form, readable by a human, and that the incoming date is in local time, and that it has to convert it to UTC time before saving it to the database.

The second data is that, when adding an exercise to a learning path, we use the `exercise::read()` function (which reads data straight from the database), then use the `save()` function (almost straight away after `read()`).

In this latter situation, the data saved does **not** come from a form with a localized time. It comes straight in UTC, which means that, when processed by `save()`, it is incremented (or subtracted) by the number of hours that you have in difference with UTC!!!

One solution could be to update the time manually inside the LP to counterweight the change, but that would mean a double operation for nothing.

Another solution, which seems much better to me, would be to convert the time from the different forms **before** calling `save()`, so the `save()` function remains safe, so to speak.

A third solution would be to keep two additional attributes in the exercise class: `start_time`, `end_time` (the current ones, in UTC), and then `start_time_local` and `end_time_local`. This third way would make sure there is no possible error... (right?).

Associated revisions

Revision 3a4c9441 - 21/12/2013 06:50 - Yannick Warnier

Fix issue with exercise time limits being changed relatively to UTC time difference - refs #6884 refs BT#7165

History

#1 - 21/12/2013 05:57 - Yannick Warnier

The logic to fix it will be the second one: to only change from UTC to the local time when printing a form, something on screen, or (the reverse process) before sending a call to `save()`.

In `exercise.class.php`, several functions manage the date saving/printing:

- `create_quiz()` (inserts `start_time` and `end_time` **directly** to the `c_quiz` table)
- `is_visible()` uses the (UTC) `start_time` and `end_time` from the current object attributes and transforms them only when printing user messages
- `processCreation()` is called as a `save()`-caller, so it would be a right place to change the time! (provided everything passes through there)
- `createForm()` shows the current time (somehow **without** adapting to local time)
- `save()` (obviously where the local to UTC conversion **shouldn't** go)
- `read()` **just** reads the data from the database. It doesn't process it in anyway, so by calling `read()`, you are getting the UTC values

#2 - 21/12/2013 06:29 - Yannick Warnier

- % Done changed from 10 to 20

From a series of cases in `exercice.php`, it really looks like the `save()` function is generally called with the only intention of saving the data that was already there, meaning that having a time change in the `save()` function would alter time **most of the time** when doing any kind of change to the exercise.

And... that is verified when changing an exercise's visibility: +5h if I'm at GMT+5... OK, this is crazy now. How could nobody report this in the past!?

#3 - 21/12/2013 06:39 - Yannick Warnier

- % Done changed from 20 to 70

I proceeded with removing the `api_get_utc_datetime()` and `api_get_local_time()` from the `save()` function, and tested the creation, edition and assignment of several tests to a learning path. As a student, you can see the right expiration dates (local time). In the database, you have the UTC time as expected, after creation and update of the course.

#4 - 21/12/2013 06:53 - Yannick Warnier

- Status changed from *Assigned* to *Needs testing*

- Assignee changed from *Yannick Warnier* to *Daniel Barreto*

- % Done changed from 70 to 90

In the end that was just that: moving the time change code out of `save()` and into `processForm()`! Needs testing. Easy to test out: just try and create an exercise with start and/or end date, then change the visibility or include it in a learning path and check afterwards (editing the exercise) that the time remained the same (it didn't do so, previously).

#5 - 23/12/2013 19:48 - Daniel Barreto

- Status changed from *Needs testing* to *Bug resolved*

- % Done changed from 90 to 100

Tested and worked fine, the date didn't change