

Chamilo LMS - Feature #4467

Add gettext support

11/03/2012 11:53 - Julio Montoya

Status:	Needs more info	Start date:	11/03/2012
Priority:	Normal	Due date:	
Assignee:	Yannick Warnier	% Done:	70%
Category:	Global / Others / Misc	Estimated time:	0.00 hour
Target version:	2.0	Spent time:	17.98 hours
Complexity:	Normal	SCRUM pts - complexity:	?

Description

So we can use launchpad as a language repository instead of CTA

Related issues:

Related to Chamilo LMS - Bug #4511: get_lang() doesn't manage well empty tra...	Bug resolved 23/03/2012
Related to Chamilo LMS - Feature #4557: Add languages folder and files for ...	Feature implemented 27/03/2012
Related to Chamilo LMS - Feature #5523: Replace custom autoloader with Composer	Feature implemented 23/03/2012
Blocked by Chamilo LMS - Feature #5349: Fix typo in old database settings va...	Assigned 26/08/2012

Associated revisions

Revision c4c328bc - 12/03/2012 15:03 - Julio Montoya

Adding commented code in order to use gettext see #4467

Revision 2e89bc4b - 06/03/2013 20:21 - Julio Montoya

Adding support to \$app container in all files see #4467 and #5523

Revision 3a2cd26a - 13/06/2013 17:03 - Julio Montoya

Adding export language to po files command see #4467

Revision 5ee28817 - 26/06/2013 18:10 - Julio Montoya

Adding locale gettext translations demo translations (fr, en, es, de, pt-br) see #4467

Revision 29b543aa - 22/10/2013 09:16 - Yannick Warnier

Export to gettext command: avoided CRLF creating parse errors in resulting gettext files - refs #4467

Revision 3be68d97 - 22/10/2013 12:31 - Yannick Warnier

Export to gettext command: more fixes to CRLF and added commented section to get all languages at once - refs #4467

Revision 4b78dc64 - 22/10/2013 15:29 - Yannick Warnier

Fixed default English variables in conversion to gettext - refs #4467

Revision 0fd303d7 - 20/02/2015 02:21 - Yannick Warnier

Remove chat.inc.php language file in all languages upon upgrade (variables have been moved to trad4all.inc.php) - refs #4467

Revision e127612c - 20/02/2015 05:37 - Yannick Warnier

Remove slideshow.inc.php language file in all languages upon upgrade (variables have been moved to trad4all.inc.php) - refs #4467

Revision f244283e - 20/02/2015 06:38 - Yannick Warnier

Remove course_description, external_module, myagenda and scormbuilder language file in all languages upon upgrade (variables have been moved to trad4all.inc.php) - refs #4467

Revision 0bf126df - 16/03/2015 23:37 - Yannick Warnier

Remove all get_lang('lang...') - refs #4467

Revision 92c66317 - 17/03/2015 02:21 - Yannick Warnier

Remove language files with little use and clean deprecated language variables - refs #4467

Revision 96a8d509 - 17/03/2015 02:30 - Yannick Warnier

Update upgrade procedure to remove old language files - refs #4467

Revision cd0dc1ee - 17/03/2015 04:04 - Yannick Warnier

Remove language files with little use and clean deprecated language variables (part 2) - refs #4467

Revision 422fa36e - 23/03/2015 19:14 - Yannick Warnier

Remove link language file - refs #4467

Revision fcbf64bd - 23/03/2015 19:14 - Yannick Warnier

Remove link language file - refs #4467

Revision 99689646 - 23/03/2015 19:14 - Yannick Warnier

Remove md_link and md_scom language files - refs #4467

Revision 6d4f1bcd - 24/03/2015 01:19 - Yannick Warnier

Move coursebackup language file to trad4all - refs #4467

Revision d484a132 - 24/03/2015 01:28 - Yannick Warnier

Move courses language file to trad4all - refs #4467

Revision 75bc0af5 - 24/03/2015 01:29 - Yannick Warnier

Move courses language file to trad4all - refs #4467

Revision 03690fed - 24/03/2015 01:42 - Yannick Warnier

Move md_document language file to trad4all - refs #4467

Revision ffc5f31f - 24/03/2015 01:51 - Yannick Warnier

Move blog language file to trad4all - refs #4467

Revision f47af4ae - 24/03/2015 01:58 - Yannick Warnier

Move videoconf language file to trad4all - refs #4467

Revision 652c6ecf - 24/03/2015 03:23 - Yannick Warnier

Move index language file to trad4all - refs #4467

Revision 3b96011d - 24/03/2015 03:29 - Yannick Warnier

Move work language file to trad4all - refs #4467

Revision 393af5fe - 24/03/2015 03:31 - Yannick Warnier

Remove previous language files that were moved to trad4all - refs #4467

Revision 926c095e - 24/03/2015 04:39 - Yannick Warnier

Remove group and forum language files - refs #4467

Revision 8265d4be - 24/03/2015 04:39 - Yannick Warnier

Move group and forum language file to trad4all - refs #4467

Revision 5c7ad62b - 24/03/2015 05:11 - Yannick Warnier

Remove dropbox, course_info and userInfo language files - refs #4467

Revision b87882c5 - 24/03/2015 05:14 - Yannick Warnier

Move dropbox, userInfo and course_info language file to trad4all - refs #4467

Revision cd83504a - 24/03/2015 05:33 - Yannick Warnier

Remove create_course and registration language files - refs #4467

Revision 5ff09937 - 24/03/2015 06:00 - Yannick Warnier

Move registration and create_course language files to trad4all - refs #4467

Revision b3f0569c - 24/03/2015 23:35 - Yannick Warnier

Forgotten change about moving create_course language file to trad4all - refs #4467

Revision 4f761602 - 26/03/2015 02:06 - Yannick Warnier

Remove reservation language file as the tool has been removed previously - refs #4467

Revision d575fa47 - 26/03/2015 04:52 - Yannick Warnier

Move survey, gradebook, wiki, learnpath, tracking, document, exercice, help and admin language files to trad4all - refs #4467

Revision 106040ab - 26/03/2015 05:07 - Yannick Warnier

Update a few language variables' case to match new language files - refs #4467

Revision 9879b14a - 26/03/2015 05:54 - Yannick Warnier

Remove deprecated language files during upgrade: update list - refs #4467

Revision 874a2744 - 26/03/2015 22:26 - Yannick Warnier

Fix issue in installer with admin language file removal - refs #4467

Revision d75f753f - 22/04/2015 19:02 - Yannick Warnier

Remove install language file - refs #4467

Revision 55243536 - 22/04/2015 19:13 - Yannick Warnier

Added new trad4all that includes install.inc.php - refs #4467

Revision f8ec8fca - 22/04/2015 19:14 - Yannick Warnier

Integrate install.inc.php to trad4all.inc.php - refs #4467

Revision bf87e869 - 22/04/2015 19:27 - Yannick Warnier

Fix lang variable Firstname -> FirstName - refs #4467

Revision 3b3323ef - 22/04/2015 19:43 - Yannick Warnier

Alter language vars to match conventions - refs #4467

Revision 99cb9145 - 22/04/2015 19:45 - Yannick Warnier

Alter language vars to match conventions (bis) - refs #4467

Revision 06dc7d63 - 22/04/2015 19:52 - Yannick Warnier

Remove shibboleth and reportlib language files from language dirs and integrate translation strings into trad4all.inc.php - refs #4467

Revision 68dd30ea - 22/04/2015 20:00 - Yannick Warnier

Remove references to reportlib and shibboleth language files - refs #4467

History

#1 - 11/03/2012 11:56 - Julio Montoya

- *Tracker changed from Bug to Feature*

#2 - 21/03/2012 12:45 - Julio Montoya

- *File translate_array_to_po.php added*

- *% Done changed from 0 to 30*

I created a script in order to convert the main/lang/* files into po files. (see attached file, only works with english/spanish)

The problem that I'm facing right now is to replace **ALL** the get_lang("PlatformSetting") in the chamilo code with something like gettext("Platform Settings") or _("Platform Settings") in **ALL PHP** files and with all the variables in main/lang/english. This will take a lot of time in order to develop/test a script that do that kind of replacement ...

#3 - 06/04/2012 11:29 - Julio Montoya

well I have a new **idea** here:

We don't replace **all** get_lang variables everywhere in the platform we leave it like that.
So In my code I will have:

```
$var = get_lang("WelcomeUser");
```

but get_lang will be changed:

so we are going to do this:

```
function get_lang($var) {  
    // look for the english variable in main/lang/english/trad4all.inc.php for example  
    $var = get_lang_from_lang_folder($var); // this variable will have this value: "Welcome user";  
    // With this variable I can use gettext()!  
    $translated_variable = gettext($var);  
}
```

for new variables get_lang variables we will use directly gettext or "_"()

I'm going to do a fast test ...

#4 - 06/04/2012 12:37 - Julio Montoya

- Status changed from New to Needs more info

- Assignee set to Yannick Warnier

I did some test and if we use gettext some things are going to change:

1. we can have multiple po files (admin.po, announcements.po, etc) but we are going to merge (using msgmerge, msgcat) all files in a single file called: default.po or all.po.
2. gettext doesn't like repeated values so we have to have only one value everywhere. (using msguniq)
3. we are going to use both utilities, the chamilo get_lang and gettext
4. total revision of all main/lang/english/*.php files in order to have a clean english translation according to gettext
5. for new translations get_lang will received the variable ("My new variable in my new tool") if it doesn't found it he's going to send it directly to gettext if gettext found something in locale/es_ES/LC_MESSAGES/all.po it's going to answer with the translated variable, otherwise it's going to print simply "My new variable in my new tool"

All this tricks are needed unless someone wants to change every "get_lang" call in all the platform.

more info here: http://www.gnu.org/software/gettext/manual/html_node/Manipulating.html#Manipulating

#5 - 06/04/2012 12:40 - Julio Montoya

Notes:

```
to view duplicates: msguniq LC_MESSAGES/announcements.po -d
```

```
to merge po files msgcat LC_MESSAGES/*.po > all.po
```

#6 - 07/04/2012 07:56 - Yannick Warnier

I'll have to have a chat with you to review the details. In particular, the fact that there would be only one single language file seems a bit dangerous to me in terms of load on the application (some large files are only loaded when required, against a complete load for every page, so if we implement a single file we might **need** caching of some sort).

#7 - 11/04/2012 14:09 - Julio Montoya

well, po files (human readable) generate mo files some kind of binary mode (see <http://www.gnu.org/software/gettext/manual/gettext.html#Files>)

There are also some server restrictions:

<http://www.php.net/manual/en/gettext.requirements.php>:

The GNU gettext library works on a per-process, not per-thread basis

<http://www.php.net/manual/en/gettext.installation.php>

Also we have to add gettext in the server configurations ...

#8 - 11/04/2012 14:34 - Julio Montoya

Another solution is to use the **translation Symfony2 component** that actually right now reads arrays like us, see:

<http://symfony.com/doc/current/book/translation.html>

```
// messages.fr.php
return array(
    'Symfony2 is great' => 'J\'aime Symfony2',
);
```

I also heard they're going to provide gettext support in symfony version 2.1 or someday so we can rely on them, we can focus in other chamilo tasks instead of rewriting our core??

This is the ticket:

<https://github.com/symfony/symfony/pull/634>

#9 - 11/04/2012 19:05 - Yannick Warnier

- Target version set to 1.9.2

#10 - 17/04/2012 11:25 - Laurent Opprecht

I noticed there are a lot of global variables - I mean really a lot. Looks like the translations variables are being made globals. Could we try to get rid of that for the next release? This is killing me when using the debugger. Not speaking of globals being a source of troubles.

#11 - 20/04/2012 17:20 - Julio Montoya

yeah, it will be great if we use a symfony component to manage that, task moved to 1.9.X

#12 - 27/04/2012 10:14 - Laurent Opprecht

I happened to notice that get_lang actually include language files several times. That is caches only the translation it found. So if you call

```
get_lang('text1')
get_lang('text2')
```

and that text1, text2 are included in the same file - let's say admin - it will be included twice, etc. Which happens to be slow.

Looking forward to move that to symphony.

#13 - 02/08/2012 00:43 - Yannick Warnier

- Target version changed from 1.9.2 to 2.0

#14 - 13/06/2013 17:04 - Julio Montoya

I added a new command that export our lang to po files:

```
php console.php translation:export_to_gettext
```

Only works from english to spanish now.

The current format that launchpad accept is something like that:

```
Sample directory layout
We recommend the standard GNU Gettext directory and file layout:
  template1/template1.pot
  template1/es.po
  template1/de.po
  ...
  template2/template2.pot
  template2/es.po
  template2/de.po
```

So I'm generating files like this for now:

```
temp/lang/accessibility/es.po
temp/lang/blog/es.po
temp/lang/trad4all/es.po
```

etc...

I did not investigate yet if that works.

I copy/paste a code I have and then transformed in a command.

See :

<https://github.com/chamilo/chamilo-lms/commit/3a2cd26a40ecf4c99668b156d138d1f16c8c3b68>

#15 - 13/06/2013 17:05 - Julio Montoya

I found some notices because some languages contains arrays which is bad.

```
PHP Notice: Undefined variable: langNameOfLang['ukrainian'] in /var/www/chamilogits/src/ChamiloLMS/Command/Translation/ExportLanguagesCommand.php on line 83
```

#16 - 13/06/2013 17:06 - Julio Montoya

- File *spanish.tar.gz* added

An example ...

#17 - 13/06/2013 19:48 - Yannick Warnier

- Status changed from *Needs more info* to *Assigned*

- Assignee changed from *Yannick Warnier* to *Julio Montoya*

Any idea how to fix the array issue (there are not so many terms that use array, as far as I know that's just days of the week, months of the year and languages)?

I would be happy to put the first two cases (days and months) as different variables, but the languages list is much more... variable (although I'm not sure we actually use it - I think we get it from the name of the language itself in the language table, and we don't translate it).

#18 - 14/06/2013 13:44 - Julio Montoya

I can't configured correctly a project in launchpad.net. I create a project and try to test the import to "po files" then after some hours they deleted my project. I'm probably doing something wrong ...

#19 - 14/06/2013 13:47 - Julio Montoya

The po files are build this way:

1. Chamilo

```
msgid "AllEvents"
msgstr "Todos los eventos"
```

2. Default way

```
msgid "All events"
msgstr "Todos los eventos"
```

But because we have this type of calls `get_lang('AllEvents')` we are forced to use the first method.

#20 - 14/06/2013 14:37 - Julio Montoya

After uploading a file that contains some translations I have this message:

```
Thank you for your upload. 49 files from the tarball will be automatically reviewed in the next few hours. If that is not enough to determine whether and where your files should be imported, they will be reviewed manually by an administrator in the coming few days. You can track your upload's status in the Translation Import Queue
```

But I don't have a direct feedback if my translations matches the launchpad policy. I don't think they are going to accept translations like this:

```
msgid "AllEvents"
msgstr "Todos los eventos"
```

my demo project

<https://translations.launchpad.net/testlms3/trunk/+imports>

#21 - 14/06/2013 15:03 - Julio Montoya

Yannick Warnier wrote:

Any idea how to fix the array issue (there are not so many terms that use array, as far as I know that's just days of the week, months of the year and languages)?

I would be happy to put the first two cases (days and months) as different variables, but the languages list is much more... variable (although I'm not sure we actually use it - I think we get it from the name of the language itself in the language table, and we don't translate it).

We don't need to translate those strings. We can use the Locale symfony component. They already resolve that problem:

```
$formatter = new \IntlDateFormatter(\Locale::getDefault(), \IntlDateFormatter::NONE, \IntlDateFormatter::NONE)
;
$formatter->setPattern("EEEE d MMMM Y");
echo $formatter->format(time());
```

// the result is:

viernes 14 junio 2013

Because I set up my locale value as "es" in the translation service provider:

```
// Implements Symfony2 translator (needed when using forms in Twig)
$app->register(new Silex\Provider\TranslationServiceProvider(), array(
    'locale' => 'es',
    'locale_fallback' => 'es'
));
```

They use this format patterns

<http://userguide.icu-project.org/formatparse/datetime> for date formats

#22 - 14/06/2013 21:41 - Yannick Warnier

Julio Montoya wrote:

The po files are build this way:

1. Chamilo

[...]

2. Default way

[...]

But because we have this type of calls `get_lang('AllEvents')` we are forced to use the first method.

The idea is that `gettext` originally uses strings in `en_US` to identify the translations. Considering this, a conversion script (to import them in the first place) should use the corresponding English translation, and not the variable name.

We can still put an intermediate script (for now) between the `get_lang()` and `gettext()`, to take the English string and **then** ask for the translation. I don't think there will be many overrides (if two strings with two different language variables have the same English translation, there will, but I don't think there will be so many).

#23 - 26/06/2013 18:12 - Julio Montoya

- % Done changed from 30 to 50

I sent some sample code because the old translations files (`lang/english/trad4all.php`, etc) didn't work with the new structure.

#24 - 27/06/2013 13:00 - Julio Montoya

- % Done changed from 50 to 70

#25 - 17/07/2013 11:43 - Julio Montoya

The current state in 1.10 is:

Po files are generated in the main/locale folder with 1 file per language.

Example:

```
main/locale/es.po
main/locale/en.po
main/locale/fr.po
```

The format is "CourseHome" => "Course home".

The idea to use "Course home" => "Course home" is nice but it needs to read all variables first from the old system (main/lang) in order to detect the correct "key" ("CourseHome" to "Course home").

In order to generate those po files:

1. Update the main/lang folder with the zip file generated by in <https://translate.chamilo.org>
2. Execute a command

```
php console.php translation:export_to_gettext
```

3. The main/locale/* files are going to be updated. The command is **hardcoded** in order to update **only** spanish, english and french.

#26 - 22/10/2013 12:55 - Yannick Warnier

I'm currently uploading all translations (transformed into .po) to transdev.chamilo.org (a temporary install).

#27 - 23/10/2013 02:44 - Yannick Warnier

There was apparently a problem with the upload and some languages appear with all variables in English

#28 - 25/10/2013 01:16 - Yannick Warnier

- Category set to Global / Others / Misc

#29 - 17/03/2015 02:55 - Yannick Warnier

I removed a series of language files again, moving all variables that were not already defined to trad4all.inc.php. Apparently this already freed around 4MB in language terms... (and I'm only about 20% into the process)

#30 - 17/03/2015 03:05 - Yannick Warnier

My technique:

```
locally:
cd main/lang/english/
ls -lahS
find the smallest file
on the server:
mysql> select * from cda_language_pack; (identify the smallest file's ID)
mysql> select id, variable from cda_variable where language_pack_id = 64 and variable in (select variable from
  cda_variable where language_pack_id = 77);
* I remove or rename the duplicates in web (https://translate.chamilo.org/run.php?go=admin_browse_language_pac
ks&application=cda)
mysql> update cda_variable set language_pack_id = 64 where language_pack_id = 77;
locally:
search for all references to the file and remove them:
rgrep -n "\$language_file" | grep 'thefilewithout.inc.php'
also check main/cron/lang (two langstats files there declare the use of the language files)
add the removed files to update-files-1.9.0-1.10.0.php
remove the files from git:
cd main/lang/
git rm */thefile.inc.php
git commit
```

#31 - 17/03/2015 14:36 - Julio Montoya

- Status changed from Assigned to Needs more info

- Assignee changed from Julio Montoya to Yannick Warnier

All lang vars should be moved to trad4all isn't it?

#32 - 23/03/2015 18:25 - Yannick Warnier

Yes. This is a long process because we cannot remove anything else than the duplicated strings, and we have to make sure these are really duplicates (sometimes they have the same variable name but the meaning is different).

If it was easier (no double-meaning duplicates), I could just do it in one single query :-)

#33 - 24/03/2015 03:45 - Yannick Warnier

- Status changed from Needs more info to Assigned

Already passed from 24M to 18M only cleaning a few variables, removing duplicates, and moving the rest to trad4all.inc.php.

#34 - 24/03/2015 06:04 - Yannick Warnier

I removed about 14 more files now. There are only 13 left, but it took me about 6h for these 14 files and it's bound to take more for the last ones.

Current lang folder size: 16736KB

Solo quedan:

id	name	branch	type
45	reservation	1	2
52	install	1	1
57	admin	1	2
61	learnpath	1	2
63	exercice	1	2
64	trad4all	1	1
65	gradebook	1	2
71	hotspot	1	2
72	wiki	1	2
73	tracking	1	2
75	document	1	2
79	help	1	2
81	survey	1	2

As mentioned by Pestr on IRC today, this actually breaks (in a way) possible updates of language files in 1.9.x. I told him this was an intermediate stage before moving to gettext. Apparently **just** overwriting the trad4all.inc.php (and leaving all the other files there) gives acceptable results in this case.

#35 - 24/03/2015 08:33 - Julio Montoya

the "reservation" tool was removed.

#36 - 26/03/2015 06:36 - Yannick Warnier

- Status changed from Assigned to Needs more info

- Assignee changed from Yannick Warnier to Julio Montoya

I've done all files that I could without too many doubts.

There are just three files left now:

- trad4all
- install (I'm not sure I can safely remove that one as it is included directly from the installer)
- hotspot (we need to check how this file is included from the Flash code of hotspot)

After that, there are a few files left in main/lang/english/ that do not correspond to any file in translate.chamilo.org:

- reportlib.inc.php
- shibboleth.inc.php

Not sure if we can also remove these ones... any idea?

#37 - 22/04/2015 19:06 - Yannick Warnier

For hotspot, I am removing the file from translate.chamilo.org but **not** from Git. This way, we'll maintain the translations we have there until we can switch to a non-flash-based plugin for image zones, but the file is not in our way anymore.

#38 - 22/04/2015 20:01 - Yannick Warnier

OK, the final size for the lang dir is 15M (so we gained about 9M from 1.9.x, and that's taking into account the **new** variables that have been added since then).

Now we're ready to make a greater move and leave this task hanging until we release 1.10.x (but we could already start making the languages files into an array format if necessary).

#39 - 23/04/2015 08:54 - Julio Montoya

- Assignee changed from Julio Montoya to Yannick Warnier

This is great. :)

Next steps might be:

- Changing the php files to po files (I remember that I wrote a script for that).
- Rename files from main/lang/english/trad4all.inc.php to main/lang/all.en.po
- Move files inside the new structure "src/Chamilo/CoreBundle/Resources/translations"
- Implement loading translations in Chamilo using the "Translation symfony2 component"
- Fix sub languages.
- Upload po files <https://crowdin.com/> and deprecate translate.chamilo.org
- (Optional, depends if we take this risk) rename variables from "SearchAllVariable" to "Search all variables".

#40 - 23/04/2015 09:07 - Yannick Warnier

Reordering the steps a little:

- Changing the php files to po files (I remember that I wrote a script for that).
- Rename files from main/lang/english/trad4all.inc.php to main/lang/all.en.po
- Move files inside the new structure "src/Chamilo/CoreBundle/Resources/translations"
- Rename variables from "SearchAllVariable" to "Search all variables" (both in Chamilo code and in .po)
- Implement loading translations in Chamilo using the "Translation symfony2 component"
- Fix sub languages.
- Upload po files <https://crowdin.com/> and deprecate translate.chamilo.org
- Communicate to everyone about the change and design a small guide (or record a video) of how to import the files into their Chamilo installation

Files

translate_array_to_po.php	2.07 KB	21/03/2012	Julio Montoya
spanish.tar.gz	228 KB	13/06/2013	Julio Montoya