Chamilo  LMS - Feature #7338

REST webservice for personal messages reading

20/10/2014 05:31 - Yannick Warnier

<table>
<thead>
<tr>
<th>Status: Feature implemented</th>
<th>Start date: 20/10/2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority: Normal</td>
<td>Due date:</td>
</tr>
<tr>
<td>Assignee: Angel Quiroz</td>
<td>% Done: 100%</td>
</tr>
<tr>
<td>Category: Web services</td>
<td>Estimated time: 0.00 hour</td>
</tr>
<tr>
<td>Target version: 1.9.10</td>
<td>Spent time: 10.89 hours</td>
</tr>
<tr>
<td>Complexity: Normal</td>
<td>SCRUM pts - complexity: ?</td>
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</tbody>
</table>

Description

In order to develop the mobile app to get your personal Chamilo messages on your smartphone, we need a series of webservices as described below. The objective of this task is to develop these web services.

File

In order to develop REST webservice (which don't really exist in any coordinated fashion in Chamilo), we will create a main/webservices/rest.php file which contains the main controller and the available webservices, and will call Chamilo functions/methods as needed.

Authentication

We want to ensure an authentication that is as secure as possible, but this will require HTTPS (we cannot ensure security in the communication with a non-HTTPS Chamilo portal).

The first connection with any Chamilo portal, in the mobile app, will require the URL of the portal and the introduction of the login/password information. This will generate a new API key (a new user field of type "text" called api_key_message, or the existing one if one already exists). The API key is a random SHA1 key.

The SHA1 key is returned by the webservice, so the mobile application can store it.

So, something like this (all the function names are invented):

```php
if (isValidPassword($username, $password)) {
    $userInfo = api_get_user_info($username);
    if (UserField::fieldExists('api_key_message')) {
        $apiKey = UserField::get_field_value('api_key_message', $username);
        return json_encode('result' => $apiKey);
    } else {
        UserField::createUserField('api_key_message');
        $apiKey = generateApiKey();
        $result = UserField::create('api_key_message', $username, $apiKey);
        if ($result) {
            return json_encode('result' => $apiKey);
        } else {
            return json_encode('result' => false);
        }
    } else {
        return json_encode('result' => false);
    }
}
```

Later on, all other webservices will only work with the API key.

Web services

Get new messages count

```php
public function getNewMessagesCount($username, $apiKey, $last = 0) {
```
Get new messages

```php
public function getNewMessages($username, $apiKey, $last = 0) {
    $userInfo = api_get_user_info_from_username($username);
    // get new messages for this user, since the last message already received
    $messages = ...
    // $messages should be an array something like this:
    // 0 => array('id' => $row['id'], 'title' => $row['title'], 'sender' => $row['sender'], 'content' => $row['content']),
    // 1 => array('id' => ...),
    // 2 => array('id' => ...), ...
    return json_encode(
        'result' => $count,
        'messages' => $messages
    );
}
```

## Associated revisions

**Revision c8f940be - 21/10/2014 01:49 - Angel Fernando Quiroz Campos**
Add REST web service for get personal messages - refs #7338

**Revision 4a5c020e - 21/10/2014 17:26 - Angel Fernando Quiroz Campos**
Count the messages from the last received message - refs #7338

**Revision 8879b58e - 21/10/2014 17:39 - Angel Fernando Quiroz Campos**
Minor - Update PHPDoc - refs #7338

**Revision 34bc804a - 21/10/2014 18:08 - Angel Fernando Quiroz Campos**
Get messages data from the last received message - refs #7338

**Revision eb007dd0 - 21/10/2014 18:10 - Angel Fernando Quiroz Campos**
Minor - Update PHPDoc - refs #7338

**Revision 2f0d9334 - 21/10/2014 21:49 - Angel Fernando Quiroz Campos**
Generate api keys - refs #7338

**Revision 1825fc0b - 21/10/2014 22:40 - Angel Fernando Quiroz Campos**
Update the getNewMessages method - refs #7338

**Revision 63c4c4a3 - 23/10/2014 00:17 - Angel Fernando Quiroz Campos**
Minor - Fix PHPDoc - refs #7338

**Revision 44decb8 - 23/10/2014 00:40 - Angel Fernando Quiroz Campos**
Filter before calling a database method - refs #7338

**Revision 858e6042 - 23/10/2014 00:44 - Angel Fernando Quiroz Campos**
Update the API key generator method - refs #7338

**Revision 67dab3c - 23/10/2014 00:45 - Angel Fernando Quiroz Campos**
Remove unnecessary filters - refs #7338

**Revision f21a0ac5 - 23/10/2014 00:52 - Angel Fernando Quiroz Campos**
Add links to the portal and messaging tool - refs #7338
Revision cce71ec4 - 23/10/2014 07:00 - Angel Fernando Quiroz Campos
Add webservices classes for autoload - refs #7338

Revision 8ee9d1d8 - 23/10/2014 17:40 - Angel Fernando Quiroz Campos
Fix undefined index E_NOTICE - refs #7338

Revision 9301494d - 23/10/2014 17:40 - Angel Fernando Quiroz Campos
Add status for right response - refs #7338

Revision 47922c72 - 23/10/2014 17:56 - Angel Fernando Quiroz Campos
Fix define a method like abstract static E_STRICT - refs #7338

Revision 4c39ea00 - 23/10/2014 20:00 - Angel Fernando Quiroz Campos
Add information about whether there is attachments - refs #7338

Revision d4d5d77a - 23/10/2014 20:19 - Yannick Warnier
Merge pull request #391 from AngelFQC/7338
Add REST web service for get personal messages - refs #7338

Revision 5eb945a5 - 26/11/2014 05:58 - Angel Fernando Quiroz Campos
Sort messages by recent date - refs #7338

Revision 3e500c8e - 26/11/2014 05:58 - Angel Fernando Quiroz Campos
Add sent date to message - refs #7338

Revision b852f740 - 26/11/2014 05:58 - Angel Fernando Quiroz Campos
Add content type header to JSON response - refs #7338

Revision 7bdff7db2 - 26/11/2014 05:58 - Angel Fernando Quiroz Campos
Add CORS header to JSON response - refs #7338

Revision 5ec47155 - 26/11/2014 06:42 - Yannick Warnier
Merge pull request #445 from AngelFQC/7338
Update REST web service - refs #7338

Revision 5b634884 - 07/12/2014 01:56 - Angel Fernando Quiroz Campos
Fix get message sender - refs #7338

Revision 6dc7648c - 07/12/2014 20:43 - Yannick Warnier
Merge pull request #450 from AngelFQC/7338
Fix get message sender - refs #7338

Revision f887d25a - 22/01/2015 14:29 - Angel Fernando Quiroz Campos
Minor - Fix rest webservice PHPDoc - refs #7338

Revision f74e1bb2 - 22/01/2015 14:31 - Angel Fernando Quiroz Campos
Move REST webservice to main directory - refs #7338

Revision 81460571 - 22/01/2015 14:35 - Julio
Merge pull request #453 from AngelFQC/7338
Fix PHPDoc and move REST webservice to main directory - refs #7338

Revision 19a0b74a - 22/01/2015 14:46 - Angel Fernando Quiroz Campos
Fix require libs and classes - refs #7338
Revision 04d49f5f - 24/01/2015 00:30 - Yannick Warnier
Merge pull request #454 from AngelFQC/7338
Fix require libs and classes - refs #7338

Revision fe8646d7 - 06/07/2015 06:49 - Angel Fernando Quiroz Campos
Fix valid user for web service - refs #7338

Revision 8220115c - 06/07/2015 06:58 - Angel Fernando Quiroz Campos
Fix valid user password when username doesn't exists - refs #7338

History
#1 - 20/10/2014 05:35 - Yannick Warnier
- Description updated

#2 - 21/10/2014 02:00 - Angel Quiroz
- % Done changed from 10 to 20

At the moment
I started with create the rest.php and classe for the web service
Add methods for get the user api key, check if the api is valid for a user, check whether the username and password are valid

https://github.com/angelfqc/chamilo-lms/tree/7338

#3 - 21/10/2014 22:17 - Angel Quiroz
POST Request to /webservices/rest.php

To get api key
Params
  action = loginNewMessages
  username
  password

Success return

{"status": "true", "apiKey":"The api key"}

Failed return

{"status":false}

To count new messages
Params
  action = countNewMessages
  username
  api_key

Success return

{"status": "true", "count":"12"}

Failed return

{"status":false}

To get new messages data
Params
  action = getNewMessages
  username
Success return

{"status": "true", "messages": [{id: 0, title: ",", sender: {id: 0, lastname: ",", firstname: ",", completeName: ","}, content: ","}, {,...}]

Failed return

{"status":false}

PR: https://github.com/chamilo/chamilo-lms/pull/391

#4 - 23/10/2014 01:02 - Angel Quiroz
- % Done changed from 20 to 50

What I need to do is check for attachments

Updated PR

#5 - 23/10/2014 19:57 - Angel Quiroz
- Assignee changed from Angel Quiroz to Yannick Warnier

Add information about whether there is attachments

PR: https://github.com/chamilo/chamilo-lms/pull/391

#6 - 24/10/2014 00:17 - Angel Quiroz
- Status changed from Assigned to Needs testing
- Assignee deleted (Yannick Warnier)

#7 - 24/10/2014 01:26 - Yannick Warnier
- Status changed from Needs testing to Feature implemented
- Assignee set to Angel Quiroz
- % Done changed from 50 to 100

This is a new feature that does not appear directly to the normal final users, so it can be closed without specific testing.

Good job!

#8 - 26/11/2014 06:41 - Yannick Warnier
https://github.com/chamilo/chamilo-lms/pull/445

#9 - 07/12/2014 02:01 - Angel Quiroz
Receiver information is sent but not the sender

https://github.com/chamilo/chamilo-lms/pull/450

#10 - 22/01/2015 14:36 - Angel Quiroz
Move the REST webservice to main directory and fix the PHPDoc package name