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

### File

In order to develop REST web services (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 web services, 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 web service, 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 web services 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 44decfb8 - 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 webservises 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 7bdf7db2 - 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

18/03/2020
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