

Testing instructions MDL-21342

1- Try to login successfully with an account and login_attempt table empty

- Delete all record in table login_attempt
- Access page login/index.php
- Enter a valid login and password
- You should log into the system with success and the table login_attempt should contain a record like this one :

id	userid	loginstatus	agent	ip	timecreated
1	4	0	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242337

- Logout
- Access page login/index.php
- Enter a valid login and password
- You should log into the system with success and the table login_attempt should contain a record like this one :

id	userid	loginstatus	agent	ip	timecreated
1	4	0	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242337
2	4	0	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242499

2- Suspend an account by having it failed a number of time greater than maxfailedloginattempt

- Check the value of maxfailedloginattempt and suspensiontimeout
- Access page login/index.php
- Enter a valid login and a wrong password a number of time greater than maxfailedloginattempt
- At each try you should see the message "Invalid login, please try again" (invalidlogin)
- The last time you should see the message "Sorry, your account is suspended because you have exceeded the allowed number of login attempts. You will be unsuspended in 3 minutes." (errortoomanylogins) where the number of minutes should be the same as suspensiontimeout configuration
- The user should get an email with the suspendedtomanyattempttext message
- Access page login/index.php
- Enter a valid login and a wrong password again
- You should see the errortoomanylogins again

- Table login_attempt should contain

id	userid	loginstatus	agent	ip	timecreated
3	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242710
4	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242723
5	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242783
6	4	2	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242783
7	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352242790

3- An account suspend by having it failed a number of time greater than maxfailedloginattempts is unsuspended by the login process

- Verify the value of maxfailedloginattempt and suspensiontimeout
- Access page login/index.php
- Enter a valid login and a wrong password a number of time greater than maxfailedloginattempt
- Wait for the time specify by suspensiontimeout
- Enter a valid login and password
- You should log into the system with success and the table login_attempt should contain records like this :

id	userid	loginstatus	agent	ip	timecreated
58	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311239
59	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311241
60	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311243
61	4	2	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311243
62	4	4	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352312709
63	4	0	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352312752

- The user should get an email with the unsuspendedtomanyattempttext message

4- An account suspend by having it failed a number of time greater than maxfailedloginattempt is unsuspended by the cron.php process

- Verify the value of maxfailedloginattempt and suspensiontimeout
- Access page login/index.php
- Enter a valid login and a wrong password a number of time greater than maxfailedloginattempt
- Run the cron.php
- The account should remain suspended
- Wait for the time specify by suspensiontimeout
- Run the cron.php
- The user should get an email with the unsuspendedtomanyattempttext message
- Enter a valid login and password
- You should log into the system with success and the table login_attempt should contain a record like this one :

id	userid	loginstatus	agent	ip	timecreated
58	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311239
59	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311241
60	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311243
61	4	2	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352311243
62	4	5	cron.php	cron.php	1352312709
63	4	0	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352312752

5- An account suspend by having it failed a number of time greater than maxfailedloginattempt is unsuspended by an admin – Eye icon

- Verify the value of maxfailedloginattempt and suspensiontimeout
- Access page login/index.php
- Enter a valid login and a wrong password a number of time greater than maxfailedloginattempt
- Open another browser
- Log in as an admin
- Access the page admin/user.php and search for the user that got suspended
- The user should have the eye close
- Click on the eye to unsuspend the account
- The user should have the eye open
- Return in the first browser and enter a valid login and password
- You should log into the system with success and the table login_attempt should contain records like this :

id	userid	loginstatus	agent	ip	timecreated
43	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295566
44	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295569
45	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295573
46	4	2	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295573
47	2	0	Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:16.0) G...	127.0.0.1	1352295587
48	4	3	Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:16.0) G...	127.0.0.1	1352295612
49	4	0	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295631

6- An account suspend by having it failed a number of time greater than maxfailedloginattempt is unsuspended by an admin – Edit icon

- Verify the value of maxfailedloginattempt and suspensiontimeout
- Access page login/index.php
- Enter a valid login and a wrong password a number of time greater than maxfailedloginattempt
- Open another browser
- Log in as an admin
- Access the page admin/user.php and search for the user that got suspended
- The user should have the eye close
- Click edit icon
- The checkbox "Suspended account" should be check
- Uncheck the "Suspended account" checkbox and click on "Update profile" button
- The user should have the eye open
- The user should get an email with the unsuspendedtomanyattempttext message
- Return in the first browser and enter a valid login and password
- You should log into the system with success and the table login_attempt should contain a record like this one :

id	userid	loginstatus	agent	ip	timecreated
43	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295566
44	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295569
45	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295573
46	4	2	Mozilla/5.0 (X11; Linux x86_64)	127.0.0.1	1352295573

			AppleWebKit/537.11...		
47	2	0	Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:16.0) G...	127.0.0.1	1352295587
48	4	3	Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:16.0) G...	127.0.0.1	1352295612
49	4	0	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352295631

7- An account is suspended (but not for too many attempt) by an admin – Eye icon

- Open another browser
- Log in as an admin
- Access the page admin/user.php and search for the user that you want to suspend
- The user should have the eye open
- Click on the eye to suspend the account
- The user should have the eye close
- Return in the first browser and enter a valid login and password
- You should see the message "Invalid login, please try again" (invalidlogin)
- You should be able to enter as many failed attempt as you want. You should never see the message errortoomanylogins
- The table login_attempt should contain records like this :

id	userid	loginstatus	agent	ip	timecreated
66	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313111
67	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313141
68	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313143
69	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313146
70	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313148
71	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313150
72	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313153

8- An account is suspended (but not for too many attempts) by an admin – Edit icon

- Open another browser
- Log in as an admin
- Access the page admin/user.php and search for the user that you want to suspend

- The user should have the eye open
- Click on the edit icon
- The checkbox "Suspended account" should be checked
- Uncheck the "Suspended account" checkbox and click on "Update profile" button
- The user should have the eye close
- Return in the first browser and enter a valid login and password
- You should see the message "Invalid login, please try again" (invalidlogin)
- You should be able to enter as many failed attempts as you want. You should never see the message errortoomanylogins
- The table login_attempt should contain records like this :

id	userid	loginstatus	agent	ip	timecreated
66	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313111
67	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313141
68	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313143
69	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313146
70	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313148
71	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313150
72	4	1	Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.11...	127.0.0.1	1352313153

9- Change password

- Access page login/index.php
- Enter a valid login and password
- Access the change password interface (/login/change_password.php?id=1)
- Enter your current password
- Enter your new password 2 times
- Click on "Save changes"
- Logout
- Access page login/index.php
- Enter a valid login and the new password
- You should log successfully

10- Change password - Suspend by having it failed a number of times greater than maxfailedloginattempt

- Access page login/index.php
- Enter a valid login and password
- Access the change password interface (/login/change_password.php?id=1)
- Enter an invalid password in the field current password
- Enter anything you want in the 2 fields new password
- Click on the button "Save changes"
- Repeat the last 3 steps a number of time greater than maxfailedloginattempt
- At each try you should see the message "Invalid login, please try again" (invalidlogin)
- The last time you should see the message "Sorry, your account is suspended because you have exceeded the allowed number of login attempts. You will be unsuspended in 3 minutes." (errortoomanylogins) where the number of minutes should be the same as suspensiontimeout configuration
- The user should get an email with the suspendedtomanyattempttext message

11- Forgot password

- Access the forgot password page (/login/forgot_password.php)
- Enter your login
- Click on the search button
- You should got an email
- Click the link in the email
- You should got an another email
- Try to login with your new password
- You should log successfully
- Update your password
- Logout
- Access page login/index.php
- Enter a valid login and the new password
- You should log successfully

12- Delete old logs of login_attempt

- Check that your table login_attempt contain records
- Run this SQL to artificially age the record
 - o UPDATE mdl_login_attempt
SET timecreated = UNIX_TIMESTAMP(TIMESTAMPADD(MONTH , -14,
FROM_UNIXTIME(timecreated)))
- Run the cron.php and check for the sentence "Deleted old login_attempt records"
- Check that the table login_attempt is empty

Note: You may have to run the cron.php more than one time because the cleanup routine is not launch every time.

New configurations

1- Manage authentication

- Log in as an admin
- Access the page /admin/settings.php?section=manageauths
- At the bottom you should see 2 new configurations
 - maxfailedloginattempt
 - suspensiontimeout

Maximum number of failed login attempt Default: 3
maxfailedloginattempt After that number of failed login attempts, the account will be suspended for a period specify by the parameter *Timeout of suspension*.

Timeout of suspension Default: 5 minutes
suspensiontimeout Timeout of suspension for an account that failed to login successfully for a number time greater than *Maximum number of failed login attempt*

[Save changes](#)

2- Cleanup

- Log in as an admin
- Access the page /admin/settings.php?section=cleanup
- You should see a new configuration
 - loginattemptlifetime

Keep status of login attempts for Default: 365 days
loginattemptlifetime This specifies the length of time you want to keep the status of the login attempts. Logs that are older than this age are automatically deleted. It is best to keep logs as long as possible, in case you need them, but if you have a very busy server and are experiencing performance problems, then you may want to lower the login attempt status lifetime.

Installation process

1- Install Moodle from scratch

- Make a clean install of Moodle
- Check that the table login_attempt exist
 - o Check the type and the lenght of each columns
 - o Check that the index a present

2- Upgrade the moodle version

- Make a clean install of Moodle 2.3
- Get the code of the version 2.4
- Upgrade Moodle
- Check that the table login_attempt exist

- Check the type and the length of each columns
- Check that the index a present