

# OpenEMR

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Goal : Change the log source and let OpenEMR saves the log for simple mouse capturing actions.

## Steps

1. Find the part where OpenEMR saves each logs
2. Find Mouse capturing codes for PHP
3. Modify the codes inside the OpenEMR log code

## Hypothesis

1. Each of the actions (ex, log in, log out, or export which log saves the actions) has the code line which saves its action into the log files. (Each of the action codes have Log saving code end of it)
2. There is one PHP files which set every log saving conditions.

## Answers

1. I tried to open the detail action codes such as Login/Logout which records their action in the logs.
2. But there is no code line for saving logs at all
3. Tried to search all the 'log' inside the actions files, but there is nothing related to log.
4. So I realized that my first Hypothesis is not true ( Each of the actions has log writing codes inside it)
5. So I moved into second hypothesis (There is a PHP file which set every log savings)
6. I looked over all the files inside OpenEMR, but Most related one was only logview.php or server-log files.
7. After I got problem in this step, I realized that our previous report which related to the Gacl, which gives the permission to each user.
8. In log file, every users' actions are recorded in log, even the admin, and registering, making new account, and even making new databases.
9. I made new Hypothesis that "log" source is not in OpenEMR, they might be in upper directories which can control above OpenEMR (such as XAMPP)
10. I started me XAMPP initiating files to find the log sources.
11. But there was nothing about log inside it.
12. Found the online source which explains how the log writing codes acts.
  - A. [https://httpd.apache.org/docs/2.4/mod/mpm\\_common.html#pidfile](https://httpd.apache.org/docs/2.4/mod/mpm_common.html#pidfile)
13. I saw that most of the log works are done by apache or mysql so I started from

apache folder

14. On php.ini file, I found the error log message source inside it.

15. There are few more options for log sending (Ex, where they save error log( php\_errors.log in this case) and do they show that errors, and listening ports)

16. Our original log source is working properly, so I just keep the default settings. ( I allowed all listening ports when I first installed OpenEMR so that will not make any errors)

17. I was not sure about that is this php.ini file only covers error log or both error logs and actions logs but I found this log settings on middle of php.ini file

```
; The path to a log file that will log all mail() calls. Log
entries include
; the full path of the script, line number, To address and
headers.
```

```
;mail.log =
; Log mail to syslog (Event Log on Windows).
;mail.log = syslog
```

18. This makes new setting for the mail logs, so I realize that this php.ini file also can handle actions logs, so I decided to put my new mouse capturing coes inside this file.

19. The first source that I found was

```
var coords=[];
var callback = function(e) {
// save your mouse coordinates somewhere
coords.push({x:e.clientX,y:e.clientY});
}
```

```
document.body.addEventListener('mousemove',callback,true);
```

20. Also, I found that

bool ncurses\_getmouse( array \$mevent ) returns false if a mouse event is actually visible in given window, otherwise returns true.

21. So I changed it to

```
switch (ncurses_getch()){
case NCURSES_KEY_MOUSE:
if (!ncurses_getmouse($mevent)){
if ($mevent["mmask"] & (NCURSES_MOUSE_BUTTON1_PRESSED
|| NCURSES_MOUSE_BUTTON1_PRESSED)){
$mouse_x = $mevent["x"]; // Save mouse position
$mouse_y = $mevent["y"];
}
}
break;
```

22. On new php.ini file has line with

```
; The path to a log file that will log all mail() calls. Log entries
```

