

# Activate and Use Xdebug



One of Xdebug's most powerful features is its ability to profile a PHP script and produce detailed statistics on how long each function call or line of code takes to execute. This can be very useful for performance analysis of complex scripts. To turn on script profiling, follow these steps:

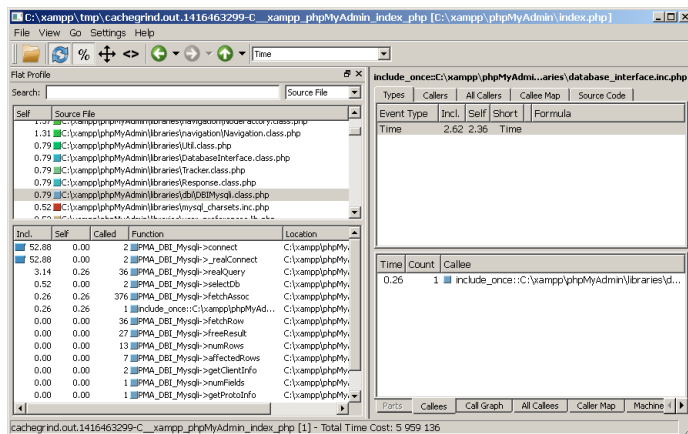
1. Edit the `php.ini` file in the `php\` subdirectory of your XAMPP installation directory. Within this file, find the [XDebug] section and within it, uncomment and modify the lines below so that they look like this:

```
xdebug.profiler_append = 0
xdebug.profiler_enable = 1
xdebug.profiler_enable_trigger = 0
xdebug.profiler_output_dir = "C:/xampp/tmp"
xdebug.profiler_output_name = "cachegrind.out.-%t-%s"
```

2. Restart the Apache server using the XAMPP control panel.

At this point, Xdebug profiling is active. Every PHP script that you run will be profiled and the results will be placed in the `C:\xampp\tmp` as a so-called cachegrind file. You can view this cachegrind file with a tool like [WinCacheGrind](#), which you must download and install separately.

To illustrate how this works, consider the screenshot below, which shows the profiled output of a script using WinCacheGrind. As the screenshot illustrates, it's easy to see the entire life cycle of a PHP script, including the call sequence and the amount of time taken by each function, and thereby find targets for further optimization.



**TIP**

To find out more about Xdebug's powerful features, [read the Xdebug documentation](#).