

Using the Profiler Window

Using the Profiler, you can learn about different aspects of your project's performance, such as how much memory it's using, how much CPU time is being used for different tasks, and how frequently physics calculations are being performed. Most importantly, you can use this data to help identify performance problems.

1. Open the Profiler window by going to the to the menu bar and clicking Window > Analysis > Profiler or Ctrl + 7.

2. Once it's open, run your project in the Editor window so the Profiler can begin to collect performance data from your project (**Figure 02**).

On the left side of the Profiler window, you'll see a column of profilers. Each of these displays information about a specific aspect of your project. There are different profilers for CPU usage, Graphics Processing Unit (GPU) usage, rendering, memory usage, audio, physics, and networking.

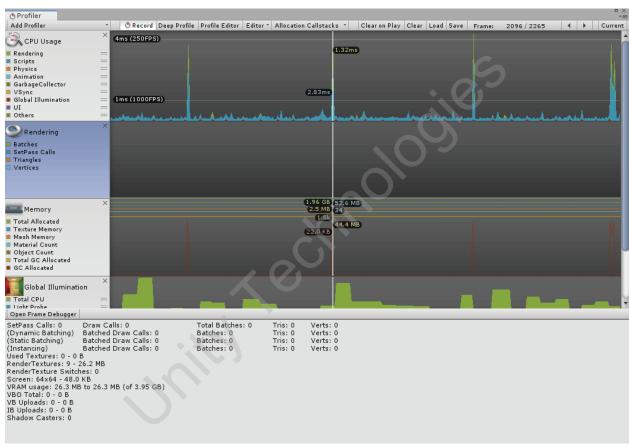


Figure 02: Profilers with some recorded data

The bottom half of the Profiler Window displays detailed information from the currently selected profiler.

1. Select a profiler on the left side. For this lesson, select CPU usage.

2. The bottom half of the profiler window will now populate with additional information (**Figure 03**).

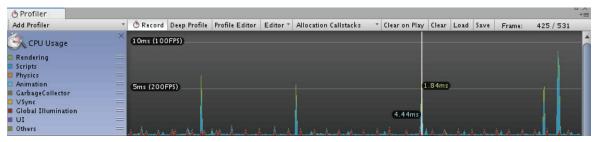


Figure 03: Detailed information on CPU usage

The data shown here depends on the selected profiler. For example, if you have the memory profiler selected, it will show you which assets are using the most memory and the total amount of memory being used. This is useful for determining which asset is costing the most resources and helps you pinpoint the exact cause(s) of any performance problems you may be experiencing in.

Information in the Profiler window might be overwhelming at first. It's recommended you begin with one or two profilers, depending on the problem you're facing. For example, if your project is running slow, CPU usage would be an ideal starting point.

- 1. To remove a profiler from the window, select the profiler you wish to remove.
- 2. In the top right corner, click the 'X' icon to remove it (**Figure 04**).



Figure 04: Removing a profiler

Likewise, we can add profilers to the Profiler window.

- 1. Click the Add Profiler dropdown.
- 2. Select the profiler you wish to add (Figure 05).

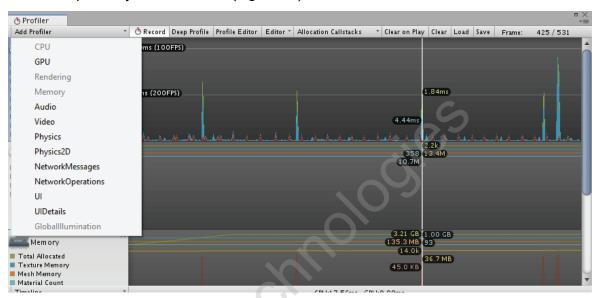


Figure 05: Adding a profiler