

A graphical performance analysis and exploration tool for Linux-perf

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Application performance is often assessed using the Performance Monitoring Unit (PMU) capabilities present in modern processors. One popular tool that can read the PMU's performance counters is the Linux-perf tool. pmu-tools is a toolkit built around Linux-perf that provides a more powerful interface to the different PMU events and give a more abstracted view of the events. Unfortunately pmu-tools report results only in text form or simple static graphs, limiting their usability.

We report on our efforts of developing a web-based front-end for pmu-tools allowing the application developer to more easily visualize, analyse and interpret performance monitoring results. Our contribution should boost programmer productivity and encourage continuous monitoring of the application's performance. Furthermore, we discuss our tool's capability to quickly construct and test new performance metrics for characterizing application performance. This will allow the user to experiment with new high level metrics that reflect the performance requirements of his application more accurately.

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Software development process and tools

Secondary Keyword (Optional)

Computing facilities

Tertiary Keyword (Optional)

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