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## Towards generic volunteer computing platform

Computational power that is distributed amongst user hardware: laptops, PCs and even smartphones is enormous. It is not exceptional that volunteer computational networks provide computational power comparable to the power of the modern supercomputers. The problem is that utilization of those resources is difficult from volunteer (user) point of view as well as from computation provider (client) point of view. Users have to install special software, clients have to convert essential computational algorithms into special format and test it thoroughly.

Dibrocop project makes an attempt to use modern in-browser computation platforms to solve those problems. Modern browsers have special code paths for low overhead calculations, e.g. ASM.js by Firefox and PNaCl by Chromium. In contrast to SETI@Home and other public volunteer computing projects, our approach requires no software installation and starts as soon as you open provider's page in your web browser. It doesn't have any requirements for operating system or device capabilities.

In this paper we are going to share our experience in moving computational tasks for Monte Carlo event simulation and processing from regular GRID resources to ASM.js and PNaCl. Algorithms used for demonstration of Dibrocop are taken from newly developed SHiP experiment at CERN.

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