A Distributed Computing Platform ----BOINC*

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ABSTRACT

In recent years, distributed computing has become an increasingly popular source of computing power. And more and more people have known that distributed computing is a science which solves a large problem by giving small parts of the problem to many computers to solve and then combining the solutions for the parts into a solution for the problem. What's more, recent distributed computing projects have been designed to use the computers of hundreds of thousands of volunteers all over the world, via the Internet, to look for extra-terrestrial radio signals, to look for prime numbers so large that they have more than ten million digits, and to find more effective drugs to fight the AIDS virus. These projects are so large, and require so much computing power to solve, that they would be impossible for any one computer or person to solve in a reasonable amount of time.

However computing Platforms are software client applications that we can run on our computers and that host various, often unrelated, project applications. As a distributed computing platform, Berkeley Open Infrastructure for Network Computing (BOINC) is a software platform for projects, like distributed.net and SETI@home (SETI, Search for Extraterrestrial Intelligence), that use millions of volunteer computers as a parallel supercomputer." Source code is available for the platform, and interested C++ developers are encouraged to help develop the platform code.

Keywords: Distributed Computing, BOINC, SETI

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