



Tech Notes

Volunteer computing with BOINC

Marco Ruocco, January 11th, 2010

<http://www.mruproject.com>

Ambitious computing applications dedicated to solving large-scale problems transcend the humble scope of a desktop system. In order to reach such heights and also be involved in a purposeful research effort, you can join with your PC a public project of volunteer distributed computing.

Volunteer your hardware, managing “hassle-free” a real render node. Projects reward you with the achievement of various goals, keeping track of your contribution through the accumulation of credit, which is reported in worldwide standings.

Join different **research projects**, notably protein folding simulations that help curing diseases, or the mapping of galactic arms and scanning the sky for pulsars. They are all organized under a platform called BOINC. Find out what projects you think are most useful.

Watch the **BOINC client** visualizing the analyses while it automatically downloads work units from the central server and uploads results. BOINC stops at shutdown and restarts at boot-up in the background and without any user intervention, and it functions transparently utilizing just unused resources.

Check-out **research results** coming out periodically. They make a concrete base of predictions: a groundwork which induces scientific progress in the long run.

At this moment, 326,998 volunteers with 576,647 computers in the world make available 4,251 TeraFLOPS, a huge resource tapped by more than 30 projects. The individual experience is a realistic partake in a joint effort that **extends your computer and your use of it**.

[BOINC Website](#)

[BOINC project summary paper \[PDF\]](#)

[Computational issues in BOINC \[PDF\]](#)