sGrid: Centralized management of BOINC-based research projects - Summary

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To speed up computionally intensive research projects, work can be distributed among computers of volunteers. This process is called desktop grid computing. The Open-Source Software BOINC (Berkeley Open Infrastructure for Network Computing)[1] provides a platform for grid based volunteer computing and forms a de-facto standard.

However, BOINC was introduced in 2002, when web services like social media sites did not exist. Furthermore, BOINC is highly decentralized. There exists an API for so-known BOINC account managers, which enable users to join multiple BOINC projects using only one account. The management of scoreboards and other similar features is still handled by each project itself.

sGrid, an acronym for social grid, tries to overcome these gaps between BOINC projects, by providing a web based application which unifies and interconnects projects. To achieve this goal, sGrid offers the following features:

- Login opportunities using social network accounts.
- Central selection and comparison of projects, using only a single account.
- A cross-project reward system.
- A custom BOINC client application wrapper wich is built do be easy to use.

Using this approach, an additional appeal to share their computer for research purposes is given to internet users.

[1] BOINC, University of California, Berkeley, http://boinc.berkeley.edu