

Information security of an average computer user depends more and more on the way she installs her software. Apt/GNUnet project tries to address this issue by providing an easy-to-use installation system an extremely secure, fail-safe and server-load-balancing way of providing installable packages.

Apt is a system which attempts to make installation of computer software as easy as possible. A user chooses programs to be installed, after which apt retrieves all needed software packages from the Internet or a CD-ROM and installs them. Apt is the default way of installing software on Debian and Ubuntu systems.

GNUnet is a P2P network which targets to provide extreme security for its users. It is also able to anonymize its users. GNUnet is fault-tolerant and balances load between peers of the network. GNUnet is an official part of the GNU operating system, which consists of free software.

Apt/GNUnet is the project suggestion of Toni Ruottu for Kesäkoodi 2006 summer job challenge. The goal is enabling apt to use GNUnet for retrieving packages from the Internet. Information security of apt users and apt repositories would be improved by its use. Anonymizing users and package repository administrators would also be possible.

Administrator of an apt/GNUnet repository could have the packages shared on one or multiple GNUnet nodes, which could be located anywhere in the world. Any user could also take part in sharing software packages, thus taking part in load balancing. Every GNUnet node acts by default as a cache for file transfers, transparently balancing the load even further as the network is used.

The biggest visible change for users of apt would be the apt/GNUnet repository URL starting with `gnunet://`. Finally, a user concerned about his privacy could install software anonymously, avoiding surveillance performed by repository administrators or third parties.