XtreemOS is an open-source distributed operating system for large scale dynamic Grids. XtreemOS can be seen as an alternative to traditional Grid middleware, facilitating the use of federated resources for scientific and business communities. XtreemOS aims at making grids easier and it also paves the way to cloud computing as it provides a good base platform for developing advanced Cloud computing functionality.

Technological breakthrough: the main particularity of XtreemOS is that it provides for Grids what a traditional operating system offers for a single computer: hardware transparency and secure resource sharing between different users. It thus simplifies the work of users by giving them the illusion of using a traditional computer while removing the burden of complex resource management issues of a typical Grid environment.

Potential application fields: Science in general, whenever lots computing is involved a lot of computational power is required.

Key words: operating system, grid/cloud computing, virtual organizations, Linux

Coding and software environment: mainly developed in C, C++ and Java. The various software components are Linux- and POSIX-compatible.

License: open source software licensed under GNU GPLv2 and BSD

Partners: