

SURFsara OpenSource Projects

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OpenSource projects developed at SURFsara

Config Management Tool: to administer your resources and for example automatically create DHCP/DNS configuration

SALI: Eases the installation of servers and therefor clusters

PXE-utilities: Expand the capabilities of the Preboot eXecute Environment

pbs_python: A library which enables Python to communicate with Torque

stopos: The Stopos software gives the opportunity to define and get lines, which can be used as parameters. This way it is easy to build jobs that makes optimal use of the cluster

Opensource software at SURFsara

Config Management Tool

Config Management Tool is a Django powered database and file generation utility. It provides a central database to store all machine properties such as support tag, mac address, networks, etc, and then allows for the generation of (config) files with this information.

disparm

Disparm is a tool to deliver tokens. Normally, Disparm takes care that tokens, represented by ASCII strings, are produced only once, no matter how many clients are requesting tokens simultaneously. Disparm is based on a file in a global file system and does not require a central server. The interface is implemented as a command-line tool.

email2trac

Utilities to facilitate the connection between an e-mail system and the trac ticket system. We use this software to keep track of user questions directed to the helpdesk. The initial setup of this system was made by Daniel Lundin from Edgwall Software. SURFsara rewrote it and added a lot of enhancements

Job Monarch

Job Monarch is an addon to the Ganglia Monitoring System that provides (batch) job monitoring and graphical overview of clusters and assorted batch systems.

OMSA 2 deb

This software, based on Dell's Open Manage Server Administrator (software to manage compute clusters) has been adapted to Debian and Ubuntu flavours of Linux.

pbs_python

The pbs_python package is a wrapper class for the Torque C library. With this package you now can write utilities/extensions in Python instead of C.

PXE-utilities

PXE stands for Preboot eXecute Environment. This is needed for booting a computer from the network, which is typically done with compute clusters. We developed some utilities to facilitate this method of booting.

SALI

This software is based on SystemImager: a tool to clone a running computer system. We developed SALI to make this cloning process more reliable and easier. For cloning several protocols can be used, eg: rsync, bittorrent

spvfs2

spvfs2 is an innovation project to test and implement a suitable file system to be used for MPI programs on the Lisa system. The file system will be implemented using the pvfs2 software, uses the local scratch disks for storage and runs in user space.

stopos

Stopos is a tool to store and deliver text lines. Normally, stopos takes care that lines are produced only once, no matter how many clients are requesting lines simultaneously. Stopos is based on a client-server model. The interface is implemented as a command-line tool.

torque_2_deb

This software creates a debian package that can be installed on Debian and Ubuntu systems from the source of the Torque software. This makes it easy for system managers to install the package on their Debian or Ubuntu systems.

<https://oss.trac.surfsara.nl>

SURF is the collaborative ICT organisation for Dutch research and higher education. SURF offers scientists, students and lecturers in the Netherlands access to the best possible network, data storage and compute resources and technical advice and support.

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