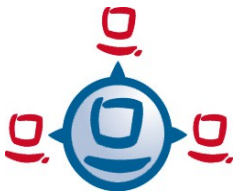
Open Source Client Management System opsi

opsi Linux Support



- **A Management Tool for Windows and Linux**
- **Linux Distribution independent**
- **Debian, Ubuntu, SLES, OpenSuse, Fedora, RHEL, CentOS**
- **OS Installation per Netboot**
- **opsi-client-agent for Linux**
- **Software Installation and Configuration**
- **Inventory**
- **Roadmap**
- **Co-financing project Linux Agent**

A Management Tool for Windows and Linux

The scope of extending opsi with Linux support is to provide a comprehensive Client Management system to support heterogeneous environments. The focus is on the complete integration of both worlds into the same management process with one single tool.

This allows handling Linux installations the same way as Windows installations. The Linux opsi-client-agent is based on the same code as the Windows opsi-client-agent and uses the same commands.

Linux Distribution independent

The opsi Linux Support is distribution independent. The currently supported distributions are:

- Debian
- Ubuntu
- OpenSuse / SLES
- Fedora / RedHat
- CentOS

OS Installation per Netboot

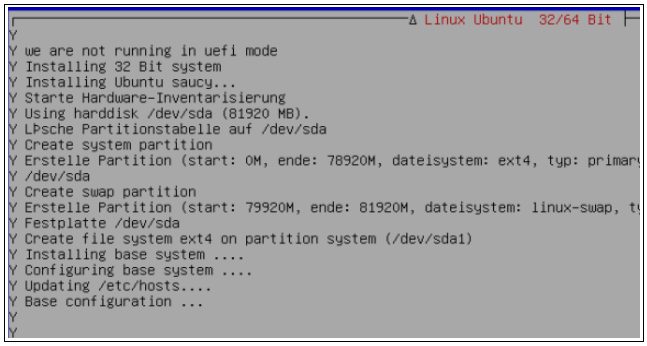
The installation of the Linux Operating System starts per Netboot from the Standard opsi-linux-bootimage (the same as used for the Windows installations).

After starting the bootimage, the target drive automatically will be partitioned (/ and swap) and formatted. The next step is the basic Linux installation (with net and ssh, but no X11). The installation process itself depends on the distribution, but for each distribution it is done from the original distribution packets.

Based on the generic OS installation, as an option, additional opsi packets can be installed to turn the new system into an opsi-server (a new depot server for instance).

Also as an option, the opsi-client-agent for Linux can be installed, which is capable to install and configure additional software.

The opsi netboot products for Linux installation are released as Open Source from the start.



opsi-client-agent for Linux

The opsi-client-agent for Windows has basically two components:

- the opsiclientd service
- the action processor opsi-winst / opsi-script

The opsi-client-agent for Linux is based on a Linux port of the Windows client agent.

The port of the opsiclientd has not completed yet, so it is not available with the first release and is replaced by an opsi-script-starter, which performs the opsiclientd tasks at system start:

- contact the opsi-server and check whether any actions and installations should be performed.
- mount the depot shares
- start the action processors
- unmount the depot shares
- send the logfile to the server

The Linux action processor is named opsi-script and is built from the same sources as the Windows opsi-winst. So for Linux the same script language with the same syntax is available as for Windows. Furthermore all the not platform specific functions and commands are available, as there are for instance:

- File handling
- string and string list functions
- executing external scripts and programs
- communicating with the opsi-server
- patching configuration files

Of course the Linux version requires no functions for patching the registry, but there also are some new Linux specific functions, like:

- getLinuxDistroType
- getLinuxVersionMap

Logging features of the opsi-script are comparable to the logging of the Windows version.

But different from the Windows version, the opsi-script is available as a GUI version for working under X-Windows, and a noGUI version for command line systems without GUI.

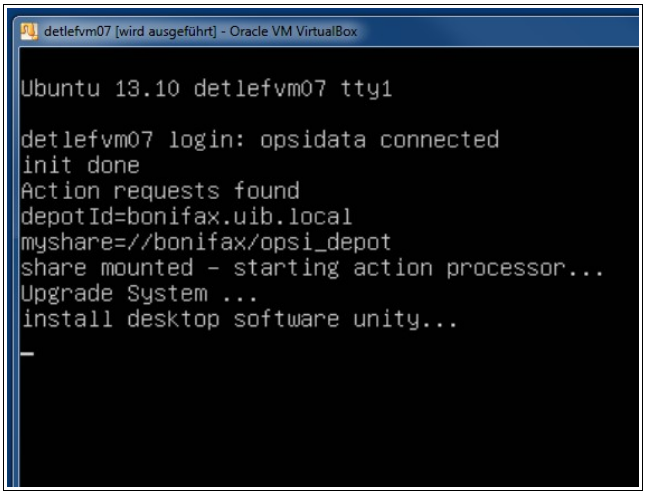
Software Installation and Configuration

For Windows can be said, that the installation of software is as important as the subsequent configuration of the software.

For Linux most packets are available from the distribution repositories. So the installation part is less work, but the configuration part stays the same.

Furthermore there are applications, which are not available through standard repositories. So eventually additional repositories or installation sources are added to the system.

The important feature is, that all installation and configuration tasks, including logging, are managed by the opsi-server.



Inventory

To create and manage inventories, the inventory data are sampled by the client agent and then sent to the server. The hardware inventory is based on the methods implemented in the bootimage. The software inventory is based on the packet management data of the respective distribution.

Roadmap

Linux support is a new opsi feature. So with the first release, not all of the planned features are available yet.

Some more features to follow are:

- UEFI / GPT support
- Linux port of the opsiclientd
- configurable partitioning
- logical volume management
- patching XML files
- patching of hierarchical configuration files like dhcpd.conf

Co-financing project Linux Agent

The opsi-client-agent for Linux is part of the co-financing project 'Linux Agent' and liable to pay costs.

Contact

For further Informations about **opsi** please refer to our website **www.uib.de**
and the project pages on opsi.org.
Do you have any questions or would you like to have a presentation? Please contact us:

uib gmbh ▪ Bonifaziusplatz 1B ▪ D - 55118 Mainz
Tel.: +49 6131 275610 ▪ info@uib.de