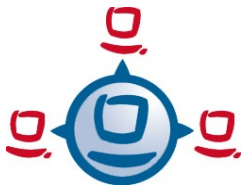


Open Source Client Management

opsi

For Windows clients based on Linux servers



- Automatic OS Installation
- Automatic Deployment of Software and Delivery of Patches
- Hard- and Software Inventory
- Distributed Software Depots

Concept Open Source

Automated and non interactive software installation is in large PC-networks an important tool for standardization, maintainability and cost saving. Using such components in the most cases is accompanied by license payments.

The cost of this system administration may be reduced using an open source tool like opsi. All core components of opsi are (GPLv3 licensed) open source software. Opsi has been open source since its very beginnings ten years ago. Additionally, commercial support is available. Based on a background of long term support experience, uib gmbh as the opsi developer offers a variety of support models (http://uib.de/en/opsi_support/). For free support, there also exists an active community of opsi users (<http://forum.opsi.org>).

Software Deployment

Just the opsi-client-agent service has to be installed on a client PC (Windows XP/Vista/7/2008). Even this can be done remotely. Then the PC is integrated in the opsi system, and can be managed from the administrators console resp. each web browser in the local network.

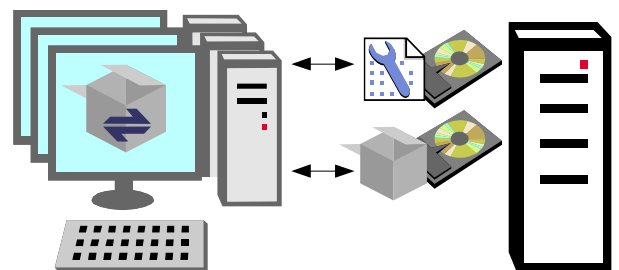
Without any user interaction at the local PC it is possible e.g. to

- ➔ deploy standard software packages,
- ➔ adapt them to your organizational needs,
- ➔ update installed software packages,
- ➔ deliver service packs or security patches.

The opsi-client-agent

- hooks into the Windows logon process and starts as a system service,
- connects to a preconfigured SMB share in the network and fetches the configuration data via a web service,
- initiates and executes the required installation processes on the workstation,
- writes back any changed configuration data as well as failure reports,
- and finally, when everything is complete, enables the user logon.

- Installations may also be 'pushed' by the server while the user is working.



The opsi-winst

If an action request is initiated by the opsi-client-agent, the script driven installation program **opsi-winst** starts.

The required scripts and software packages are stored on a file share. During the installation there is no need and no possibility for the user to manipulate the installation process.

The opsi-winst program supports different ways of automated software installation:

- "Silent" or "unattended" setup:
Existing setup programs from the original software manufacturer can be executed within an opsi-winst script in 'silent' or 'unattended' mode.
- Microsoft Installer based setup:
(customized) MSI-packages will be invoked by the installer service.
- Automated installation with the original setup program and prerecorded answers (using for example free tools like AutoIT)
- Completely script based setup:
The opsi-winst program manages all installation tasks directly via script. Usually that is something like file installation to the local file system and patching the registry.

Usually a combination of all different ways in one script does the job best, to customize a package according to a customers requirements.

OS Installation

If the clients have an enabled network boot before other boot media, there is a second category of opsi products, called netboot products.

An opsi netboot product is constituted by a boot image, which is delivered to the client via the PXE protocol from the PXE boot server.

In most cases, the opsi netboot product is a Linux OS image in which some specific script is integrated. This script fulfills a specific task.

E.g. in the case that Windows is to be installed on the client, the script prepares the local partitions and copies installation and configuration files to the local disk as required for a local Windows setup. Furthermore it patches the configuration file so that the Windows setup proceeds unattended. Even the installation of additional driver files is automated if the required files exist in a prefilled driver repository. As a result, a Windows PC can be installed in a completely automated way.

For clients which have no PXE boot option, or for which PXE cannot be enabled, a client boot CD is available, which initiates the installation processes.

opsi focuses an unattended setup process for Windows (since this is the easiest way of installations for heterogeneous hardware), but opsi as well provides a netboot product for an image based Windows installation, which may be used to backup special installations for example.

opsi Management Interface

For the daily work there are comfortable tools which reduce the administration work to some mouse clicks.

The central management interface is the **opsi-configuration-editor**. It exists as a stand alone java app, but also as a java applet or webstart app, which can be called from anywhere in the network. It provides

- ➔ a comprehensive centralized client management, even for distributed locations,
- ➔ selection of multiple clients and a combined configuration for selected clients
- ➔ free definition of client groups, group membership being one criterion for client selections
- ➔ an easy to use filter mechanism for clients e.g. by installed software version or hardware conditions.

Transparent, Flexible Data Backends

The opsi-configuration-editor and all other components communicate via HTTPS with the opsi web service.

The web service retrieves data from and writes data to specified backends. Which backends are used is completely transparent for the other opsi components. The most important data backends are property file based, or MySQL based.

System administrators acknowledge the completely open architecture of the opsi system: Everything can be analyzed down to the elementary configuration item.

Hard- and Software Inventory

The opsi management interface comprises a detailed hard- and software inventory for each client. There are opsi products for client data collection to fill the inventories, so they can be used for planning and support tasks. If a history of inventory data is needed, a MySQL backend can be configured.

opsi Extensions

Beyond the current features, the free opsi components are in a continuous development process to respond to new challenges of the software installation requirements!

Nevertheless the development of new opsi modules is expensive. So uib uses a co-founding process as an instrument for financing the open source development. This means, that these parts are only available for those customers who pay a contribution to the development costs. As soon as the development of a co-funding project is refinanced, the component will be part of the free opsi-distribution

Testing opsi

Download the opsi Virtual Appliance and verify the extreme usefulness of opsi! It is as easy as:

(<http://www.opsi.org/download>)

- (1) Get the opsi 'Getting Started' manual and follow the detailed instructions e.g. for updating the VM and creating your test clients.
- (2) Download the current version of the opsi server as a VMWare machine.
- (3) For questions during the evaluation of opsi you will find help in the community forum (<http://forum.opsi.org>).
- (4) Enjoy.

Contact

Please visit us at the opsi.org project web site <http://www.opsi.org> or for commercial support at http://uib.de/en/opsi_support/



uib gmbh ▪ Bonifaziusplatz 1B ▪ D - 55118 Mainz
Tel.: +49 6131 / 275610 ▪ Fax: +49 6131 / 2756122 ▪ info@uib.de