

Open Source Desktop Management

opsi
Version 3.x

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

Concept Open Source

All components of opsi are (GPL licensed) open source software. Opsi has been open source since its very beginnings ten years ago.

Since opsi is open source and well documented, anybody may get the benefits of opsi for free.

Additionally, commercial support is available. Based on a background of long term support experience uib offers a variety of support models (<http://www.uib.de>).

Every network-administrator should have a glance at the opsi system. There is a high probability that it perfectly meets his or her specific needs of operating system installation and/or software distribution.

And if not yet completely, opsi is in continuing development! There also exists an active community of opsi users (<http://forum.opsi.org>).

Software deployment

Just the opsi-preLoginLoader service has to be installed on a client pc (Windows 2000/XP/Vista). Even this can be done remotely. Then the pc is integrated in the opsi system, and can be managed from the administrator's console resp. each Web Browser in the local network.

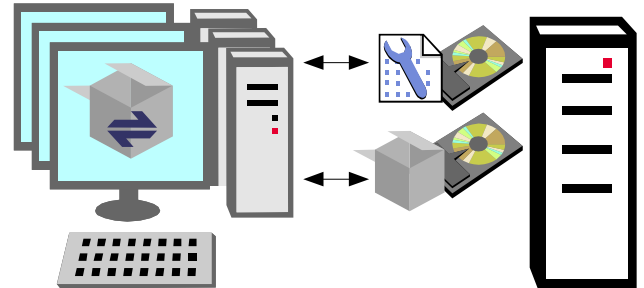
E.g. without any user interaction at the local pc it is possible

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

Note: The opsi modules for Windows Vista are already in production use, but are not yet released as open source.

The opsi-preLoginLoader

- 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 work station,
- writes back any changed configuration data as well as failure reports,
- and finally, when everything is complete, lets the user do her or his logon.

Making Software Packages

The program opsi-wlnst controls the software installation processes.

Opsi-wlnst implements a simple and easy to learn scripting language. It can fulfill installation tasks by low level commands, and can handle external installers, e.g. setup programs using MSI files. The execution of native commands as well as responses from external calls can be logged to a fine degree.

Any automatic software installation must proceed (and finish!) without any user interaction. Often, only a **combined strategy of using different techniques** will succeed. In order to get the desired effects it may be necessary

1. to use wlnst commands to clean the Windows registry and the file system of the PC beforehand (if an old version of the requested software already exists on the PC);
2. to call the preconfigured manufacturer's setup program parametrized to proceed without interaction;
3. to execute some supplementary software via an Autolt (www.autoitscript.com) or AutoHotKey call (www.ahkey.com);
4. finally to let wlnst do some correction work (e.g. change start menu entries).

OS Installation

For clients with a PXE enabled network interface (with activated network boot in BIOS), there is a second category of opsi products the so called Netboot Products.

An opsi Netboot Product is constituted by an boot image which is delivered to the client via the PXE protocol from the PXE boot server.

In most cases, an opsi Netboot Product is a Linux OS image in which a specific script is integrated. This script fulfills a specific task.

E.g. in the case that Windows shall be set up it prepares the local partitions and copies files to the local disk as required for a local Windows setup. Furthermore it patches the configuration file so that the Windows setup proceeds unattendedly. Even the selection of additional driver files is automatic if the required files exist in a prefilled driver depository. The result is, that a windows PC can be installed in a completely automatic way.

For clients which have no PXE boot option or for which PXE must not be enabled there a client boot CD is provided which triggers the installation processes.

Traditionally opsi featured 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 if you prefer this method.

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 an Java applet which can be called from anywhere in the network. It provides

- a comprehensive centralized client management, even for distributed locations,
- multi selection of 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 over 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 LDAP based.

System administrators acknowledge the completely open architecture of the opsi system: Everything can be analyzed up 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 which can be activated to get current valid data for these inventories so that they can used for planning and support task. If a history of inventory data is needed a MySQL backend can be configured.

Testing opsi

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

- (1) Download the current version of the opsi server as a VMWare machine (<http://download.uib.de>).
- (2) Get the opsi server installation manual (<http://download.uib.de>) and follow the detailed instructions e.g. for updating the VM and creating your test clients.
- (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>



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