

Project Specification

Easy-LTSP

by Jan Weber

Mentored by: Jigish Gohil, Lars Vogdt

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openSUSE

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1. Project description

Easy-LTSP is a graphical configuration front end for the Linux Terminal Server Project. It makes setup and configuration of an LTSP-Server easier. With Easy-LTSP it is also possible to monitor thin-clients.

2. Project features

- GUI for server setup
- GUI for changing lts.conf
- GUI for thin-client monitoring
- Modular design with libraries

3. Tools and used software

Tool	Version	URL
Mono	1.9	http://www.mono-project.com
MonoDevelop	1.0	http://monodevelop.com
Vim	7.1	http://www.vim.org

Table 1: Tool and Software overview

4. Modules

- Main GUI
- Server configuration
- Server setup / Image Building
- Thin-client configuration
- Thin-client monitoring

5. Module specification

Every Module can be considered to be a library.

5.1 Main GUI

The main GUI module hosts all other modules, it is the entry point for all other modules/libs. With the main GUI the user can control the whole application. The user can choose what he wants to do in the main GUI, which then calls all needed libs to perform the operation specified by the user.

5.2 Server configuration

This module is used to make all necessary configuration before building images, setting up the server. It is distribution specific and doesn't need to be there. This module also provides a GUI for editing the configuration file. At first this module will only be available with openSUSE.

5.3 Server setup / Image Building

This is the second distribution specific module, it calls the necessary scripts to build an client image and setup the server. The "terminal emulation" window is used for this. At first this module will only be available for openSUSE.

5.4 Thin-client configuration

This module is used to configure thin-clients, it reads the lts.conf file and produces an XML file out of it, the user can then edit all settings assisted by the Thin-client configuration GUI. After all changes took place the XML file is written back in the lts.conf file. XML is used to be more flexible and portable.

5.5 Thin-client monitoring

This module is also distribution dependent. It provides a GUI showing the output of control scripts, the LTSP implementation has to provide. At first also only openSUSE.

5.6 Thin-client configuration GUI

This module contains the GUI for editing the lts.conf file, it takes an XML from the thin-client configuration module and visualizes it. The user can make changes to the configuration which is then transferred to the thin-client configuration module as an XML file. The user gets a window showing him a list of thin-clients in the configuration, with the option to add more. The second part of the window shows the current configuration of this client, the user can add variables and values as needed. The user only sees the configured variables. The second part of the window will be tabbed to group variables.

5.7 Terminal GUI

This module provides a “terminal emulation”. It visualizes terminal output of an script in a GTK# window fitting the general look and feel of the application. It starts the according process and shows it standard output in the window, with a progress bar to show process is running, needed for the script calls during server setup and image building.

6. Time line

For a concrete time line see the Google summer of code calendar (http://code.google.com/opensource/gsoc/2008/faqs.html#0.1_timeline).

The modules will be developed in the order they are described in 5, except for 5.7 which will be developed with 5.1.