

ABSTRAK

JARINGAN KOMPUTER *DISKLESS CLIENT* BERBASIS SISTEM OPERASI GNU/LINUX MENGUNAKAN *LINUX TERMINAL SERVER PROJECT*

FX. Eko Budi Kristanto
Universitas Sanata Dharma
Yogyakarta
2004

Tujuan penelitian ini adalah mempelajari cara membangun jaringan komputer *diskless client* berbasis sistem operasi GNU/Linux menggunakan *Linux Terminal Server Project (LTSP)*.

Penelitian ini dilakukan di laboratorium jaringan komputer FMIPA Universitas Sanata Dharma Yogyakarta. Dalam penelitian *software* yang digunakan adalah Red Hat Linux 9 dan *LTSP* versi 4, sedangkan *hardware* menggunakan 11 unit komputer sebagai *client* dan 1 unit komputer sebagai *server*. Dalam melakukan penelitian langkah-langkah yang digunakan meliputi: perancangan jaringan, instalasi *server*, konfigurasi *server*, dan konfigurasi *client*. Dalam perancangan jaringan diuraikan tentang *hardware* dan *software* yang digunakan, *topologi* jaringan, perencanaan *IP address* dan identifikasi jaringan. Dalam instalasi *server* diuraikan tentang: instalasi Red Hat Linux 9 dan instalasi paket *LTSP*. Dalam konfigurasi *server* diuraikan tentang: konfigurasi menggunakan *tool* *ltspcfg*, mengedit *file* konfigurasi, konfigurasi *remote desktop*, konfigurasi akses *internet*, konfigurasi *printer*, konfigurasi akses lokal *floppy disk*, dan konfigurasi *service*. Sedangkan dalam konfigurasi *client* diuraikan tentang pembuatan *boot floppy*.

Model jaringan ini dapat digunakan sebagai solusi alternatif dalam memanfaatkan komputer *diskless*, menunjang kegiatan perkuliahan, mengurangi pembajakan *software*, dan penghematan biaya.

ABSTRACT

THE COMPUTER NETWORK OF DISKLESS CLIENT BASED ON OPERATING SYSTEM GNU/LINUX USING LINUX TERMINAL SERVER PROJECT

**FX. Eko Budi Kristanto
Sanata Dharma University
Yogyakarta
2004**

The purpose of this research was to study the way to develop computer network of diskless client based on operating system GNU/Linux using Linux Terminal Server Project (LTSP).

This research was performed at laboratory of computer network FMIPA, Sanata Dharma University, Yogyakarta. In the research of the used software was Red Hat Linux 9 and LTSP version 4, meanwhile the used hardware was 11 units of computers as client and 1 unit as server. In performing the research, the steps used to cover were: design of network, server installation, server and client configuration. In designing the network, it was explained about the hardware and software used, network topology, planning of IP address and the network identification. In installing server, it was explained about: installation of Red Hat Linux 9 and installation of LTSP package. In configuring one, it was explained about: configuration of using the `ltspcfg` tool, editing configuration file, configuration of remote desktop, configuration internet access, configuration printer, configuration of local floppy disk access, and configuration of service. While in configuring client, it was explained about making of boot floppy.

This network model could be used as alternative solution in exploiting diskless computer, supported the lecture activity, reduce the illegally software copy, and cost savings.