LeIco installation instructions

BASE SYSTEM

<table>
<tr><td>WARNING:
LAN USE ONLY!!! DO NOT connect the LeIco Server to the internet.</td></tr>
</table>

Use the LeIco Server in a LAN where you thrust your users. There are some security holes that are open.
I am working on that – hopefully somebody will help me.

Help

Project page: http://leico.sourceforge.net/
Forum: http://leico.sourceforge.net/phpbb/
eMail: pi_bex at users.sourceforge.net   (don't hesitate to ask!)

Requirements

- Internetconnection
- Ubuntu Server 7.04 Feisty Fawn installation CD (download and burn guide: www.ubuntu.com)
        should also work width 7.10, then replace „feisty" by „gutsy"

        should also work width other Linux distributions
        (both not tested, please report your experiences to pi_bex at users.sourceforge.net)
- Knowledge about how to change BIOS configuration (look at motherboard manual)
- Knowledge about some TCP/IP fundamentals, basic Linux commands
- Hardware: please visit vendor of host operation system for detailled information (normally very low)

Minimal installation of Linux Ubuntu Server 7.04

(If there is a woking DHCP Server in your LAN it is advisable to disconnect your LAN cable until next reboot.
Then the installation routine will ask you for your desired network configuration)
preparations
- change BIOS: booting from cdrom
- insert installation CD
bootmenu *(optional)*
- press F2: select language
- Install to the hard disk
manual network configuration
- IP-Address: 192.168.100.10 (example)
- Netmask: 255.255.255.0 (class C)
- Gateway: 192.168.100.1 (example: address of your router to the internet)
- DNS-Server: 212.6.108.140 (example, please ask your internet connection provider)
- Hostname: coruscant (example)
partition of harddisks
- guided – use entire harddisk and set up LVM
- choose harddisk
- save changes: yes
- write changes: yes
miscellaneous configuration
- is system time set to UTC: no
- complete name of user: Juergen Harms (example)
- username: jharms
- Password: ******** (2x)
softwareselection
[*] DNS server
[*] LAMP server
complete installation
- change BIOS back to "booting from harddisk" (leave CD in drive)
- continue

In Low Memory mode there are some differences to the above described way. If you have a Server with low
memory please look for help on your Linux distributors homepage.

Login, first modifikations and upgarde

login as normal user:

```
echo "alias su='sudo su'" >> ~/.bashrc
```
(optional)

as root:

add `setterm -blank 0` to /etc/rc.local before "exit 0" (for example width nano)(optional)

adjust /etc/apt/sources.list:

```
deb http://archive.ubuntu.com/ubuntu feisty main restricted
deb-src http://archive.ubuntu.com/ubuntu feisty main restricted

deb http://archive.ubuntu.com/ubuntu feisty-updates main restricted
deb-src http://archive.ubuntu.com/ubuntu feisty-updates main restricted

deb http://archive.ubuntu.com/ubuntu feisty universe
deb-src http://archive.ubuntu.com/ubuntu feisty universe

deb http://security.ubuntu.com/ubuntu feisty-security main restricted
deb-src http://security.ubuntu.com/ubuntu feisty-security main restricted

deb http://security.ubuntu.com/ubuntu feisty-security universe
deb-src http://security.ubuntu.com/ubuntu feisty-security universe

deb http://archive.ubuntu.com/ubuntu feisty multiverse
deb-src http://archive.ubuntu.com/ubuntu feisty multiverse
```

```
apt-get update
apt-get -y dist-upgrade
apt-get -y upgrade
echo "alias ll='ls -lah'" >> ~/.bashrc
```
(optional)
```
apt-get -y install mc
apt-get -y install ntp ntpdate
```

From now on I assume that you are logged in as root.

Installation of some administration tools (optional)

SSH
```
apt-get -y install openssh-server
```
Webmin
```
mkdir ~/install
mkdir ~/install/webmin
cd ~/install/webmin
apt-get -y install perl libnet-ssleay-perl openssl libauthen-pam-perl libpam-runtime libio-
pty-perl libmd5-perl
wget http://prdownloads.sourgeforge.net/webadmin/webmin_1.360_all.deb
```
(if the server could not be found: wget http://66.35.250.217/webadmin/webmin_1.360_all.deb)
```
dpkg -i webmin_1.360_all.deb
```
(if the server tells you that he couldn't find some libraries: `apt-get -y install -f`)

install phpMyAdmin
```
apt-get -y install phpMyAdmin
```
set mysql password (for example width Webmin)

PXE Installserver

(also look up: https://help.ubuntu.com/community/PXEInstallServer)
preparation
`apt-get -y install netkit-inetd tftpd-hpa dhcp3-server` (for feisty)
`apt-get -y install inetutils-inetd tftpd-hpa dhcp3-server` (for gutsy)
For starting DHCP Server, content of /etc/dhcp3/dhcpd.conf should be similar to:

```
option domain-name "domainname.com";
option domain-name-servers 212.6.108.140, 212.6.108.141;
option routers 192.168.100.1;
option ntp-servers 192.168.100.1;
option lpr-servers 192.168.100.1;
option netbios-name-servers 192.168.100.1;
default-lease-time 8640000000;
ddns-update-style none;
log-facility local7;

subnet 192.168.100.0 netmask 255.255.255.0 {

        server-name "coruscant";
        option ntp-servers 192.168.100.1;
        option time-servers 192.168.100.1;
        option broadcast-address 192.168.100.255;
        option routers 192.168.100.1;
        range 192.168.100.50 192.168.100.100;
        default-lease-time 864000000;
        max-lease-time 172800;

        filename "pxelinux.0";
}
```

(Re-)start to take changes affect:
`/etc/init.d/dhcp3-server start`
or
`/etc/init.d/dhcp3-server restart`
copy TFTP kernel
`cp -r /media/cdrom/install/netboot/* /var/lib/tftpboot/`
make pakets available via http
`mkdir /var/www/ubuntu`
`cp -r /media/cdrom/* /var/www/ubuntu`

preparation of configuration files
`cd /etc/dhcp3/`
`cp dhcpd.conf dhcpd.conf.backup`
`chown www-data.www-data dhcpd.conf`

set the content of /var/lib/tftpboot/pxelinux.cfg/default to:

```
default local
prompt 1
timeout 2
label local
LOCALBOOT 0
```

LeIco Server

make some files writeable to Apache:
```
chmod u+w /var/lib/tftpboot/ubuntu-installer/i386/pxelinux.cfg
chown www-data.www-data /var/lib/tftpboot/ubuntu-installer/i386/pxelinux.cfg
```

Download latest LeIco Software from http://sourceforge.net/projects/leico/
Unpack it and put it to: /var/www/
Structure:
/var/www/system/   LeIco System
/var/www/ks.cfg/   kickstart files
/var/www/iserver/   scripts
Make sure that ks.cfg and iserver are writeable to the apache server.

Create mysql structure and content (for example with phpMyAdmin) out of the sql_dump file in the downloaded package.

Set password of admin in your database, table user. It must be md5 encrypted.
You can find a tool for md5 encryption in: http://YourLeicoServer/system/generate_pw.php

Edit /var/www/system/global/config.php to set your MySQL username and password.

Go to http://YourLeicoServer/system/
Log in and start installing your Clients.