

How-To Build a Meteohub x86 System

The Meteohub x86 system is based on a Debian "etch-and-a-half" distribution with additional packages loaded or compiled. On top of this so called "Meteohub base image" the Meteohub application files are loaded and build a complete Meteohub System. The Meteohub base Image applies to the same license terms as the Debian distribution it is derived from. See details here: <http://www.debian.org/legal/licenses/>.

This step by step instruction tells how to create a Meteohub base image.

To use/distribute Meteohub base image you have to accept the Debian license terms (<http://www.debian.org/legal/licenses/>).

Files/links you need:

1. Debian installation guide: <http://www.debian.org/releases/stable/i386/>
2. Setup USB stick: <http://www.debian.org/releases/stable/i386/ch04s04.html>
3. boot.img.gz for USB stick setup: <http://ftp.nl.debian.org/debian/dists/lenny/main/installer-i386/current/images/hd-media/boot.img.gz>
4. Net-Install Debian ISO image: http://cdimage.debian.org/debian-cd/4.0_r5/i386/iso-cd/debian-40r4a-etchnhalf-i386-netinst.iso
5. setup.tgz: From Meteohub download section, area "Meteohub x86 Images": <http://www.meteohub.de>

If links above don't work, please drop a mail to "info@meteohub.de" to have this fixed.

STEP 1: Build USB stick as basic installation media

Build a bootable USB stick that installs a minimal Debian Etch linux to your system according to (1). Follow instructions in (2) to download and install (3) via "zcat boot.img.gz >/dev/sda" to an USB stick at /dev/sda. Next a Debian ISO image (4) has to be added to the USB stick. Mount "/dev/sda" and copy the ISO image onto the mounted partition.

STEP 2: Install Debian Etch-and-a-half

Plug in future primary storage media into the Meteohub system and plug in USB installation stick prepared in step 1. Connect target system to your LAN. Installation process will need connection to the Internet to load additional packages. Boot from USB stick.

Fit-PC Slim Remark: When you have a fit-PC Slim, you have to select drive C as "Nand Flash" and drive D as the drive to do the installation onto (Ide 0/Pri Master). Specify drive C as first boot device.

Debian logo should appear, select graphical install, choose installation language, country, character set, keyboard layout of your choice. After that additional components are loaded from the ISO image on USB stick. After automatic hardware detection, network installation asks for host name and domain. After that partitions of the primary storage media have to be setup. Choose manual

mode and setup partitions as follows:

- Partition 1: ext3 1 GB (mount as "/", will need 2GB when installing & compiling kernel sources)
- Partition 2: swap 200 MB
- Partition 3: ext3 all remaining (don't mount)

File systems are installed on primary storage media, set "meteohub" as root password and wait until base system has been installed. Don't select a network mirror, the minimal base system will do. Select no additional software packages and continue installation of standard system. Install GRUB into master boot record, wait until installation has finished, plug off USB stick and reboot from primary installation media.

STEP 3: Install additional Packages

After login as root, a couple of additional packages have to be installed. Copy file "setup.tgz" (5) onto USB stick, plug in USB stick and give these commands:

- `mount /dev/sda /mnt`
- `cd /root`
- `tar xzpf /mnt/setup.tgz`
- `./install-easy.sh` (When asked to setup samba give "workgroup" as domain name, no wins settings)
- You will find additional scripts for doing kernel or kernel-module compilation in "/root". Please just check-out the corresponding ".sh" files.