

Ubuntu On HP Proliant DL360/380 G5

Administrator's Guide

Release 5.0

Table of Contents

Preface	iii
1. Installation	1
1.1. How to customize debian-installer for HP Proliant DL360/DL380 G5	1
1.2. Installation	2

Preface

Debian Linux is a brand-new kind of Linux distribution. Rather than being developed by one isolated individual or group, as other distributions of Linux have been developed in the past, Debian is being developed openly in the spirit of Linux and GNU. The primary purpose of the Debian project is to finally create a distribution that lives up to the Linux name. Debian is being carefully and conscientiously put together and will be maintained and supported with similar care.

It is also an attempt to create a non-commercial distribution that will be able to effectively compete in the commercial market. It will eventually be distributed by The Free Software Foundation on CD-ROM, and The Debian Linux Association will offer the distribution on floppy disk and tape along with printed manuals, technical support and other end-user essentials. All of the above will be available at little more than cost, and the excess will be put toward further development of free software for all users. Such distribution is essential to the success of the Linux operating system in the commercial market, and it must be done by organizations in a position to successfully advance and advocate free software without the pressure of profits or returns.

The GNU/Linux Debian web site [<http://www.debian.org>] carries details on the latest release and other information to make your work or play with GNU/Linux Debian more productive. And The mailing lists are a good place to have your questions answered, to share experiences with other users, and to contact the developers.

1

Installation

We want automate installation in order to install quickly many servers : 50, 100 or more ... many solution exist FAI for Debian, Kickstart for RedHat. IMHO, Kickstart is more simple, we propose to use this tools. HP Proliant G5 Server are very newest hardware, we must use fresh version of drivers. And up-to-date version of installer. TODO : expliquer le principe qu'on utilise 1 serveur sur lequel on met un installeur réseau et que chaque machine cible va s'installer automatiquement sans poser de questions à partir d'un boot PXE

1.1. How to customize debian-installer for HP Proliant DL360/DL380 G5

infinite USB detection loop with dapper version provide bad support of cciss disk ... Download last update of edgy netboot image and unpack archive

```
mkdir /var/lib/tftpboot/  
cd /var/lib/tftpboot/  
wget http://archive.ubuntu.com/ubuntu/dists/edgy-updates/main/installer-i386/current/images/netboot/netboot.tar.gz  
tar xzf netboot.tar.gz
```

We must unpack initrd use by installer

```
mkdir /tmp/custom-initrd  
cd /tmp/custom-initrd  
gzip -dc /var/lib/tftpboot/ubuntu-installer/i386/initrd.gz |cpio -i
```

copy network module (from your laptop or other installed ubuntu edgy)

```
cp /lib/modules/2.6.17-10-386/kernel/drivers/net/bnx2.ko lib/modules/2.6.17-10-386/kernel/drivers/net
```

copy scsi hard disk module (from your laptop or other installed ubuntu edgy)

```
cp /lib/modules/2.6.17-10-386/kernel/drivers/block/cciss.ko lib/modules/2.6.17-10-386/kernel/drivers/block
```

register two modules, add two lines in lib/modules/2.6.17-10-386/modules.dep

```
/lib/modules/2.6.17-10-386/kernel/drivers/net/bnx2.ko:  
/lib/modules/2.6.17-10-386/kernel/drivers/block/cciss.ko: /lib/modules/2.6.17-10-386/kernel/drivers/scsi
```

fix detection disk on /bin/list-devices script

```
svn di -r42868:42869 svn://svn.debian.org/svn/d-i/trunk/packages/debian-installer-utils/list-devices  
Index: list-devices  
=====
```

```

--- list-devices      (révision 42868)
+++ list-devices      (révision 42869)
@@ -58,8 +58,20 @@
                match=:
                fi
                fi
+               if ! $match && [ "$TYPE" = disk ]; then
+               case $devpath in
+                   /block/cciss\!*/|/block/ida\!*/|/block/rd\!*)
+                       match=:
+                       ;;
+                   esac
+               fi
-               if $match; then
+               echo "/dev/$(udevinfo -q name -p "$devpath")"
+               if ! name="$(udevinfo -q name -p "$devpath" \
+                   2>/dev/null)"; then
+                   name="$(printf %s "${devpath##*/}" | \
+                       sed 's,!/,/,g')"
+               fi
+               echo "/dev/$name"
                fi
            done
        else

```

Modify `./kickseed/handlers/post.sh` in order to use others interpreter than `/bin/sh` compress `initrd`

```

find . | cpio --create --format='newc' > ../initrd
cd ..
gzip -9 initrd /var/lib/tftpboot/ubuntu-installer/i386/

```

copy `initrd.gz` on netboot directory

```

cp initrd.gz /var/lib/tftpboot/ubuntu-installer/i386/

```

Edit `/var/lib/tftpboot/pxelinux.cfg/default` in order to declare kickstart file

```

label linux
    kernel ubuntu-installer/i386/linux
    append ks=http://sharengo.org/ks.cfg vga=normal
    initrd=ubuntu-installer/i386/initrd.gz ramdisk_size=16432 root=/dev/rd/0 rw --

```

1.2. Installation

Install DHCP and TFTP server :

```

apt-get install dhcp3-server tftpd-hpa tftp-hpa

```

Edit `/etc/dhcp3/dhcpd.conf` :

```

subnet 192.168.0.0 netmask 255.255.255.0 {
    range 192.168.0.100 192.168.0.200;
    filename "pxelinux.0";
}

```

Edit `/etc/inetd.conf` :

```
tftp dgram udp wait root /usr/sbin/in.tftpd /usr/sbin/in.tftpd -s /var/lib/tftpboot
```

Edit /etc/default/tftpd-hpa

```
RUN_DAEMON="yes"
```

Edit /etc/hosts.allow in order to authorize network (just if you are paranoid sysadmin and use hosts.allow file ;-))

```
in.tftpd: 192.168.0.0
```

Execute section unlink "How to"... or copy this ulink netbootArchive in /var/lib/tftpboot

```
wget http://sharengo.org/haplatform/HP-G5-netboot.tar.gz
tar xzf HP-G5-netboot.tar.gz
rm HP-G5-netboot.tar.gz
```

Note

You can customize boot prompt in TODO resource systemitem /var/lib/tftpboot/pxelinux.cfg/default file

Restart services on master server :

```
/etc/init.d/dhcp3-server restart
/etc/init.d/tfpa restart
```

And boot all target server with PXE (type F12 on boot and drink a coffee for twenty minutes)

Thanks Colin Watson for help and Ubuntu Team for this marvellous distribution ! And another Ubuntu/Canonical Guys : Kurt von Finck and Marc Tardif You can contact sharengo mailing List, this experience is shared on Big E-commerce platform provide by Sharen'Go HA Platform : www.sharengo.org You can download custom netboot image here : <http://sharengo.org/haplatform/>