

Teron Board Series

Yellow Dog Linux 3 Installer Manual

This manual outlines a clean install of Yellow Dog Linux 3.0 on a Teron Series PPC board.

Required Software:

You will need to download 4 installer CD images and burn them on CD media to perform the installation. The images are listed below, along with the checksums to verify a successful download.

```
YDL3 - Bootdisk
ftp://ftp.mai.com/maitest/Linux/ydl3/installer/ydl3boot.iso
YDL3 - Disk #1
ftp://ftp.mai.com/maitest/Linux/ydl3/installer/ydl3-d1.iso
YDL3 - Disk #2
ftp://ftp.mai.com/maitest/Linux/ydl3/installer/ydl3-d2.iso
YDL3 - Disk #3
ftp://ftp.mai.com/maitest/Linux/ydl3/installer/ydl3-d3.iso
Mai Application Install CD
ftp://ftp.mai.com/maitest/Linux/ydl3/installer/mai-app-install.iso
MD5 checksums
ftp://ftp.mai.com/maitest/Linux/ydl3/installer/instmd5sums.txt
```

U-boot Setup:

Changes need to be made to the U-boot environment variable to enable the installer to boot correctly. Press 'ESC' after booting the Teron board to get a command prompt in U-boot. Once at the command line, do:

Insert the YDL3 - Bootdisk in the CD tray

Enter the follow commands, pressing return after each:

-] setenv ide reset
-] setenv bootargs root=/dev/ram rw ramdisk=22000 l2cr=0x80000000
-] diskboot 1000000 X:0
-] bootm

(Where X is the CDROM device number.)

Linux Installer:

The installer will initially begin in text mode. Select your language, and CD install. Insert YDL3 – Disk #1 when prompted.

*****NOTE !** When prompted if you wish to test CD media, select Skip.

The graphical installer will start after selecting Skip.

This is the Welcome Screen you will see after the Graphical installer Loads.

There is a help section on the left hand side of the screen.

This manual will cover the tricky parts of the installer as pertains to the Teron Board.

This installer is supported by Mai Logic Labs, and is not an supported by Yellow Dog Linux.



The installation type selection is important because it decides which features to install by default.

We recommend the "Workstation" selection.

Disk partitioning will very upon hard disk size, previous installations, and the formating of the disk.

We recommend using the Disk Druid because of easy use without giving up control.



Select the hardisk to use Fdisk on and select 'Next'.

Needed Fdisk commands :

Skip this Section if you are not using a brand new disk, or do not need greater control over the locations of the partitions.

Choose the Manually Partition with fdisk if you need greater controll.

The instructions to the right are for using fdisk.

p – print partition table
n – create new partition
w – write new partition table
q - quite fdisk
d – delete partitions

To delete a partition:

- Press 'd'
- Type in partition number

To add a partition:

- Press 'n' for new partition
- Press 'p' for primary partition
- Press the number of the partition
- Press 'Enter' to accept the starting block default
- Type "+<size>M" where <size> is the size you want the partition.

To finish, and write partition.

- Press 'w' to write the partition and exit.
- Continue onto the Disk Druid section to define file system.

This is the recommended partition map for the Teron Series boards.

/dev/hda1 will be used to install a 2.4.22 kernel to later in the process.

/dev/hda2 will be used for data storage

/dev/hda3 will be used for the YDL3 operating system (mount point '/' is required)

/dev/hda4 will be used for swap space.

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Indine Help Disk Setup Choose where you would like Red Hat Linux to be installed.	Partitioning Drive /dev/hda (G hda2 7629 MB	eom: 79656/16 / hda3 28696 MB	63) (Model: Ma	axtor 6E0	40L0)			hda4 2783
If you do not know how to partition your system or if you need help with using the manual partitioning tools, refer to the <i>Red Hat Linux Installation</i> <i>Guide</i> .	Ne <u>w</u> Device	Mount Point	dit Type	<u>D</u> ele Format	te Size (MB)	Start	<u>R</u> eset End	
If you used automatic partitioning, you can either accept the current partition settings (click Next), or modify the setup using the manual partitioning tool.	✓ Hard Drives ✓ /dev/hda /dev/hda1 /dev/hda2 /dev/hda3 /dev/hda4	1	Linux native Linux native ext3 swap	1 1	96 7630 28696 2784	1 196 15698 74001	195 15697 74000 79656	
ryou used Idisk to partition, you must define <i>mount points</i> or your partitions. Use the Edit putton, once you have selected a partition, to define its mount				r				

From the screen above, creating a new partition pops up a screen like this.

Every partition table requires one partition to have the '/' mount point to install Linux.

This screen allows you to select the mount point, size, and type of partition.

		Add P	artition			
Mount Point:	1					~
File System <u>T</u> ype:	ext3					ž
		hda	39206 MB	Maxtor 6E04	0L0	
Allowable <u>D</u> rives:						
<u>S</u> ize (MB):	1					* >
Additional Size Optio	ns					
Fill all space up to	o (MB):		1			<u>^</u>
 Fill to maximum <u>a</u> 	llowable size					· •
Force to be a prima	ary partition					
Check for <u>b</u> ad bloc	ks					
				V Canco		7

The boot loader the Teron boards use is the same as the bios, U-boot.

The only action required on this screen is the top button to change the bootloader.

The default configuration is to install a bootable 2.4.22 kernel to /dev/hda1.

You can disable this by selecting the 'change boot loader' button.

This screen allows you to define your network settings.

To edit the IP configuration, highlight eth0 in the upper box and press edit.

The host name, Gateway/ router, DNS, or DHCP settings can be defined on this screen.

Yellow Dog Linux Installer yellow dog. Boot Loader Configuration The U-boot image will be installed on /dev/hda1. Change boot loader **Boot Loader** Configuration Please choose if you would like a U-boot kernel installed? By default, the GRUB boot Ignore the box below, it is an artifact of Mac systems loader will be installed on the Default Label Device system. If you do not want to install GRUB as your boot Add ✓ linux /dev/hda3 Edit loader, select Change boot <u>D</u>elete loader. You can also choose which OS Do not use this box (if you have more than one) should boot by default. Select **Default** beside the preferred boot partition to choose your default bootable OS. You will not be able to move forward in the installation unless you choose a default boot image You may add, edit, and delete the boot loader entries by selecting a partition with your 🔯 Hide <u>H</u>elp Release Notes De Back ✓ Yellow Dog Linux Installer vellow dog



After pressing 'Edit' above, this screen appears.

You can either enable DHCP or define a static IP for your computer.



This screen allows you to define and configure the firewall for your system.

Refer to the help section on the left side of the screen for details.

Yellow Dog Linux Installer yellow dog. Online Help Firewall Configuration Select a security level for the system **Firewall Configuration** () High Medium O No firewall A firewall sits between your O Use <u>d</u>efault firewall rules computer and the network, and determines which resources on Oustomize Trusted devices: the etho your computer remote users on the network are able to access. A properly configured firewall Allow incoming: WWW (HTTP) can greatly increase the out-of-🗌 FTP the-box security of your system. SSH Choose the appropriate security level for your system 🗌 Mail (SMTP) Telnet High Security - By choosing High Security, your system will not accept connections that are Other ports: not explicitly defined by you. By default, only the following connections are allowed: DNS replies • DHCP - so any network 🔯 Hide <u>H</u>elp Release Notes 🖨 <u>B</u>ack



This screen allows you to set your current time zone.

This screen allows you to set up the initial accounts for the system.

A root password is required.

A personal account is recommended for security reasons and can be added by selecting the 'Add' button.

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line Help	Account Configurati	on		
Account Configuration	Enter the ro	oot (administrator) password for the	system.	
Note: Setting up a root	Root Password:	-		
ccount and password is one of	Confirm:	-		
the most important steps during		Root password accept	ed.	
ccount enables you to install ackages, upgrade RPMs and	It is reco for norma also be c	mmended that you create a person al (non-administrative) use. Accour reated for additional users.	nal account its can	
o most system maintenance.	Account Name Fu	II Name		Add
omplete control over your				Edit
stem and is very powerful.				Delete
se the root account <i>only</i> for dministration. Create a non- ot account for your general se and su – to gain root ccess when you need to fix omething quickly. These basic iles will minimize the chances f a typo or incorrect command oing damage to your system.				
nter a password for the root				
Hide Help			Back	Nex

Add a U	ser Account
Add a New User	
Enter a user <u>n</u> ame:	mailogic
Enter a user <u>p</u> assword:	*****
Pass <u>w</u> ord (confirm):	telelelelelet
<u>F</u> ull Name:	
User passv	vord accepted.
	Cancel A OK

To add a personal account, all you need is to input a user name and password.

The last sections are selecting any added components and installing.

Booting the New Installation:

- Reboot the board and press 'ESC' to get a Uboot prompt.
- Type in the following commands (assumes recommended partition map) :
 -] setenv bootargs root=/dev/hda3 l2cr=0x80000000] setenv bootcmd "diskboot 1000000 0:1; bootm"] saveenv
- Reboot the board once again, and it should boot into Linux automatically.

Finishing Up :

Yellow Dog Linux will load and bring up a Graphical Login screen, from here it is easy to work with.

If it does not load the graphical interface, then the default configuration is incorrect. When you are able to log in the text mode, type:

```
bash# Xautoconfig
bash# startx
```

The other possible bug is in first starting the Mozilla Web Browser. If it fails to load, open a shell and type the following:

```
bash# /usr/lib/mozilla-1.2.1/mozilla-rebuild-databases.pl
```

Application CD Install

Once the system is up and running, insert the Mai Application CD.

- Right click the desktop, Select 'Drives' -> 'Cdrom'
- Double click the 'Mai_application_installer.py' icon
- Select 'Run in Terminal' so you can watch the progress
- Check the packages you wish to install, and click install
 ** Recommend installing Manuals **
- Once finished, exit and enjoy.
- Once ministred, exit and enjo

Any other issues should be sent to:

williamm@mai.com With Subject = "YDL3 Installer"