

Morphix

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Outline

what is morphix?

parts of morphix

syslinux

morphix base

morphix main modules

morphix mini modules

morphix example cd's

building your own

What is morphix?

based on knoppix

based on debian unstable

livecd distribution

modular for easy customization

designed to make custom distributions

parts of morphix

syslinux boot loader

MorphixBase

MorphixMain modules

MorphixMini modules

syslinux

2.88mb floppy image

loads linux kernel

loads miniroot.gz image

uncompresses MorphixBase

Morphix base

base os

base X and network config.

32MB compressed

~80MB uncompressed

compressed loop fs

Morphix Main modules

specialized packages

any custom packages

chrooted by main module

morphix/ directory has init.sh

init.sh run by base module.

Morphix Mini modules

config files.

custom scripts

morphix/ directory has init.sh

init.sh run after main modules

typically very small

not chrooted

morphix example cd's

morphix project provides 4 cd images

- LightGUI
- KDE
- Gnome
- Game

Base your cd on one, or make your own.

Building your own morphix

Tools needed:

- cloop-utils (compress and uncompress compressed loop file systems)
- mkisofs / cdrecord
- disk space

Start with one of the morphix images

Mount the image and look around: 'mount -o loop Morphix.iso /mnt/'

Building your own morphix

syslinux image is in base/boot.img

base morphix is in base/morphix

main modules are in /mainmod

mini modules are in /minimod

Building your own Morphix

syslinux image is a fat/dos 2.88mb floppy image.

base, main, mini modules are all compressed loop filesystems.

Building your own Morphix

```
extract_compressed_fs module > module.iso
```

```
create_compressed_fs module module.iso >  
module
```

Building your own Morphix

```
extract main > main.iso
```

```
mount -o loop main.iso /mnt/main
```

```
mkdir /tmp/main
```

```
cp -a /mnt/main/* /tmp/main/
```

```
chroot /tmp/main/
```

Can now use dpkg, apt-get, etc

Building your own Morphix

can support multiseession adding modules.

new versions based on 2.6.x kernels.

Some Morphix Examples

clusterix

Gnoppix

PilotLinux

Ubuntu Live

GIS Morphix

references

<http://www.morphix.org>

<http://www.debian.org>

<http://www.knopper.net/knoppix/>