

So you want to live on the... BLEEDING EDGE

Mandrake Cooker helps to bring the MandrakeSoft developer closer to Mandrake Linux Users. Formi and Colin Murphy explain how to get involved

Mandrake cooker

MandrakeSoft prides itself on producing a cutting edge Linux distribution, with the latest packages and the most recent versions. Mandrake Linux is one of the larger distributions, so keeping an eye on all of the packages is no small task. Making sure they all work smoothly together is an even greater problem.

It is here that the bright idea of Mandrake Cooker comes to the forefront, enlisting the help of the community to prove that many hands can make light work. It's reasonable to assume that keeping a structure to such a large base of developers and testers would prove to be a big problem, but this doesn't seem to be the case. This must be put down to nothing more than the good will and kind nature found with the community spirit.

The mailing list

At the heart of Cooker lies the mailing list: a busy melting pot of suggestions, discussions, announcements and bug reporting. It is through this list, where at its busiest hundreds of messages can pass a day, that the buzz for development and sense of activity can be felt most strongly.

The Cooker distribution is made available for download from a range of mirrored FTP sites throughout the world. From these you can regularly take the updates to keep your Cooker system current.

A word of caution

Cooker is most definitely a development distribution, so you must treat it with caution. It is not designed for every day use, so you should not be using Cooker on systems you rely on. Because it is in flux – always improving and developing – things will go wrong and packages will stop working. That, in a way, is Mandrake Cooker's *raison d'être*. Without the inherent bugs there would be little point going to the effort of running it. Bugs are usually fixed quickly, but there is no guarantee that the system will be working if you need it to be working.

Cooker is also quite big. Even if you just limit yourself to the i586 processor versions, you are still looking at downloads of up to 4Gb to get started, and you might be looking at a good chunk of that again after an update of one of the major libraries, for example. As such, this is only something that you can consider as an undertaking if you have the network bandwidth to make it worthwhile. On a 512Kbps cable connection it can take about three hours to download a 650Mb CD image, so you're looking at the best part of a whole day. A lot of this can go on in the background though, so for some it will prove to be no great stumbling block.

Here's how to start

The patching of cooker occasionally freezes, enabling the MandrakeSoft Cooker organisers to raise an .iso image of the work done so far. This image can be downloaded or even bought from some vendors and can be treated as any other version of Mandrake Linux, with the exception that it is still a Cooker version of Mandrake and so should still be used for testing purposes only. You can consider it as a pre-release version of a proper Mandrake Linux release. The procedure for downloading and making your own .iso is simple enough (see the Downloading Cooker boxout for more details).

Cooker develops and grows daily, as patches are added with their accompanying bugs, and new packages either replace and improve or add functionality. For the developers and those committed to testing, a fixed version would be of little use, so updates need to be done on a regular basis, maybe even daily. If Cooker is to be of any value to you then you too will need to make regular updates.

You can use the mirror utilities as described above but once you have a version running, you might want to update it with the *urpm* utilities. *urpm* (*user rpm*) is a Perl script that works as wrapper for, or sometimes a front-end to, the rpm package management system. For those of you familiar with

Debian Linux, *urpm* is to *rpm* as *apt-get* is to *dpkg*, the Debian package manager.

rpms are the packages that Mandrake uses to install all of its software. Once *urpm* is configured it can be called upon to automatically resolve dependencies that need to be met for a package which you are trying to install. It will even fetch other packages, as needed, and install them to meet any dependencies that arise.

The configuration of *urpm* revolves around two utilities, *urpmi.addmedia* which adds a source of *rpms* to its database and *urpmi.removemedias* which does the opposite.

So, to add a new source to use you would input:

```
urpmi.addmedia local file://home/colin/rpms
```

if you had a collection of *rpms* in your local */home* directory. But they don't need to be local.

Changing the path to that of an FTP site would work just as well, albeit a tad slower. The important thing to remember is that the *file://* element in the above example would change to *ftp://* or even *http://*.

To then get a package installed you would do enter:

```
urpmi name_of_the_package
```

If the name we provide is ambiguous, *urpmi* will print a list with all packages that match and exit.

You can modify this behaviour with the option *-a*:

```
urpmi -a gnome
```

This command will install or update all packages with the string *gnome* in their name.

If the supplied name matches a package, it will be installed, and downloaded first if necessary. If the package needs other packages to be installed, you will first be asked for permission to install them. The option *—auto* will install the package and all required dependencies without asking for confirmation.

One last option to mention is *—auto-select* which checks all configured sources for more recent versions

Downloading Cooker

You can create your own *.iso* image of Cooker without too much hardship. You will need to keep a local copy of the Cooker directory. Initially, you will need to download a copy from one of the current Cooker mirrors, a list of which can be found on the Mandrake Cooker Web page. You can download this with your favourite FTP utility or by using one of the mirroring tools available. The advantage of using a mirroring tool is that it will compare the timestamps of the files in the archive. When you come to update your local version of this mirror, you will only have to update the files that have changed.

Something like:

```
cd /mnt/localcookerdir
lftp -c 'open ftp.somemirror.org; cd somemirror/dir/cooker; mirror'
```

only changing the bits in *italics* for sensible values. After the mirroring is done, use the *mkcds* script, in the *misc/* directory, to build the *iso*.

of those packages already installed, lists them and asks if they should be installed. You can even add the *—auto* option to this.

With Cooker in mind, it would be tempting just to configure *urpm* to a Cooker FTP site and run:

```
urpmi --auto-select --auto
```

nightly. This would be unwise and you should really look to viewing the recent changes made to Cooker, as announced in the mailing lists, and pick only those packages that you feel confident about.

When you come across a bug or problem you must make sure it gets reported. Firstly, check for previous reports on the MandrakeSoft Bugzilla Web page and, if you have found something new or further to report, then you get to post details to the Cooker mailing list. This chain of events really is important because the last thing the Cooker list needs is for everyone to post the same problem.

Info

The MandrakeSoft Cooker Web site

<http://www.linux-mandrake.com/en/cookerdevel.php3>

How to create a bootable CD

Though not strictly necessary, once you have a local version of Cooker, you might find it convenient to burn to a CD. Here is a reminder of how to do that:

```
mkisofs -R -b images/boot.img -c
images/boot.cat -o cooker.iso cooker
```

This makes an *.iso* image, complete with the

boot.img and *boot.cat* files that will make the resulting CD bootable.

```
cdrecord -eject -v speed=4 dev=4,0 cooker.iso
```

will burn the *.iso* image to the CD. The *dev=4,0* entry will differ depending on your hardware. To find out exactly what device your CD writer is use the *cdrecord -scanbus* command.