

MirPorts

MirPorts—a derivative of the OpenBSD ports tree—is our solution for installing additional software packages not contained in the base system.

After the first checkout or after updates, “**make setup**” in /usr/ports (or /usr/mirports for parallel installations) installs the package tools and configures the MirPorts infrastructure. The ports themselves are in subdirectories, sorted by category. Just executing “**mmake install**” in such a directory will download the source code, compile it, create a binary package and install it. Dependencies are automatically installed when necessary. Some ports exist in different “flavours”, e.g. with or without X support.

Both MirOS and MirPorts should put most of the “dotfiles” in users’ home directories in a single directory named “.etc”. You can have your own programs and scripts in ~/.etc/bin.

MirPorts is portable. It has support for the following operating systems:

- MirOS BSD (-stable and -current)
- OpenBSD (-stable and -current)
- MidnightBSD
- Mac OS X (10.4 and newer) / Darwin
- Interix / SFU 3.5

Even on stable releases, using the newest MirPorts version is recommended. For all platforms, we are still searching for developers as well as testers to build packages and to submit bug reports to the developers.

Our mid-term goal is to provide at least a part of the MirOS base system as a port or a package.

mksh, the MirOS Korn Shell

The standard shell in MirOS is mksh, derived from the Korn Shell. bash users should immediately feel at home as the commands are very similar.

mskh is smaller and much faster than other shells, such as bash or zsh. It contains the features from OpenBSD ksh and many, many bugfixes. It features very clean code (warnings, const cleanup) that has been checked for security problems by the developers and Coverity, Inc.

mksh is is great for interactive use but lends itself equally well for shell scripting purposes. Even with its small size, no important features are missing. UTF-8 is fully supported, of course.

mksh is portable and runs on a wide variety of architectures and operating systems, e.g. BSD, Linux, Mac OS, Solaris, HURD, HP-UX, AIX, IRIX, Tru64, Ultrix and even Windows. The following systems come with an mksh package:

- Debian, Gentoo, FreeWRT, grml, other GNU/Linux distributions, and the OpenSUSE build service
- NetBSD® pkgsrc® and FreeBSD® ports
- fink, MacPorts, and other mac toolkits

MirLibtool

Libtool is used by many packages to build shared libraries in a portable way. However, there are many problems with it—for example, it breaks when no C++ compiler is installed. Therefore, MirPorts contains a modified version named MirLibtool.

MirLibtool is based on GNU libtool 1.5. It is compatible with all versions of autotools. The MirPorts infrastructure installs it automatically whenever a port uses autoconf to recreate its configure script.

ENGLISH

WTF is the MirOS Project?



Current Version

MirOS #10

The CD distributed at this exhibition contains MirOS #10, released on March 16, 2008. Important changes from older releases include:

- Improved compatibility to other BSDs, Linux
- Integrated support for internationalisation, Unicode and UTF-8
- Integrated libiconv from the Citrus project
- General speedup, many bugfixes
- Optional support of pkgsrc as a complement to MirPorts
- Cleanup of large parts of MirPorts
- Based on OpenBSD (-current and older releases)
- Better handling of interdependencies between shared libraries
- New version of mksh, the MirOS Korn Shell
- GNU CVS 1.12 with custom extensions
- Binary compatible with OpenBSD via emulation
- gcc 3.4 with Propolice Stack Smashing Protector: C, C++, Pascal, Objective-C, Ada

Live CD

In current MirOS versions, such as the one distributed here, the installation CD is also a live CD. This means that you can boot a full MirOS system from the CD without having to write to the hard drive. A few ports, such as the IceWM window manager, a web browser and the game Frozen Bubble, are preinstalled.

For booting in text mode, at least 80 MiB of RAM are required. For booting the graphical interface, your computer should have 128 MiB of RAM or more.

MirOS BSD (MirBSD)

MirOS BSD is a secure computer operating system from the BSD family. It is a derivative of OpenBSD. Source code from OpenBSD is regularly imported and merged. A lot of code and ideas is taken from NetBSD® and other sources.

MirOS was started after some differences in opinion between Theo de Raadt, the OpenBSD project leader, and Thorsten Glaser, who is now our lead developer. The principal maintainer of MirPorts is Benny Siegert. There are several more persons working as contributors on the project.

MirOS BSD often anticipates bigger changes in OpenBSD and includes them before OpenBSD itself. For example, ELF on i386 and support for gcc3 were available in MirOS first. Controversial decisions are often made differently from OpenBSD; for instance, SMP as implemented in OpenBSD is not supported in MirOS.

The base system has been trimmed down. Seldomly used components like NIS, Kerberos, Bind and the BSD games have been removed. The latter two are installable as ports.

Other differences to OpenBSD are:

- Good support for cross compiling via scripts
- Completely rewritten bootloader and boot manager
- Binary security updates for stable releases
- ISDN drivers
- IPv6 support in the web server software
- wtf, a database of acronyms
- Improved random number generator (PRNG)
- New archive formats for tar, cpio as the package format

We are legally bound to point out the advertising clauses. They are too many to print them here but you can find them at <http://www.mirbsd.org/about.htm> .

Enjoy MirOS!

The developer team

Thorsten Glaser

Benny Siegert



Contact

home page: <http://mirbsd.de/>
<http://www.mirbsd.org/>
IRC: [#mirbsd](http://irc.freenode.net) on irc.freenode.net

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25C3 (Dec 27–30, Berlin)