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 (to a lesser degree)

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.

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.

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

mksh 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, QNX, Minix 3, Tru64, Ultrix and even Windows. The following systems (and many more) come with an mksh package:

- Debian, Gentoo, FreeWRT, Fedora, other GNU/Linux distributions, and the OpenSUSE build service
- NetBSD® pkgsrc®, FreeBSD® ports, MidnightBSD
- 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.

WTF
is the
MirOS
Project?

Current Version

MirOS #10-current

The CD distributed at this event contains MirOS #10-current—a beta version of MirOS #11. This system is based on OpenBSD-current and older versions. MirOS BSD also includes an improved shell (mksh), ports tree (MirPorts), acronym database (wtf) and GNU cvs 1.12 with custom extensions.

The bootloader has been mostly rewritten and is now multiboot compliant so it can be called from GRUB. The random number generator (SRNG) has been improved, and many core components have been updated. pkgsrc® can be installed in parallel to and as a complement of MirPorts. MirPorts provides many ports in new versions.

The included gcc 3.4 compiler has the Propolice Stack Smashing Protector and supports C, C++, Pascal, Objective-C and Ada.

"Triforce" Live CD

The "Triforce" live CD allows to boot three systems: MirOS/i386, MirOS/sparc and Grml.org (a GNU/Linux based rescue system). The MirOS part can be used either for installation or as a live CD, allowing to use a full MirOS system with some pre-installed ports without writing to the hard drive.

For booting the live CD, your computer should have at least 80 MiB of RAM for text mode or 128 MiB for booting the graphical interface. The CD can also be written (using dd) to a hard drive, USB stick or memory
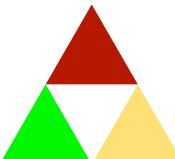
MirOS BSD (MirBSD)

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 are adopted 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. Adam Hoka is helping with mksh development. Several more persons are contributors for 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.

Most of the differences between OpenBSD and MirOS are numerous small details. The end result is, hopefully, a more refined BSD experience.

The base system has been trimmed down. Seldom used components like NIS, Kerberos, Bind and the BSD games have been removed. The last two are installable as ports. Support for internationalisation, Unicode and UTF-8 is integrated, Citrus libiconv is also available.

For the stable releases, binary security updates are available and can be directly selected during install.

IPv6 is supported everywhere, even in the Apache 1.3-based web server. ISDN drivers are also included.

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

Enjoy MirOS!

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Contact

home page: http://mirbsd.de/
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