MirPorts

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

Using MirPorts is straightforward. After the first checkout or after updates, “make setup“ in /usr/mirports automatically installs the package tools and configuration. The ports themselves are in subdirectories, sorted by category. Just executing “make 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 several “flavours“, e.g. with or without X support.

Many ports removed for political reasons in OpenBSD (e.g. all the DJB software or the Flash Plugin) have been kept in MirPorts and can continue being used. We also want to be a place for unofficial or rejected OpenBSD ports.

MirPorts does not use the package tools from OpenBSD, which are written in Perl, but continues to maintain the previous C-based tools. New features are in-place package upgrades and installing your own MirPorts instance as a non-root user.

„Dotfiles“ in .etc

Both MirOS and MirPorts should put most of the “dotfiles“ in users’ home directories in a single directory named “.etc“. For example, ssh uses “.etc/ssh“ for its configuration files.

This greatly reduces the clutter of hundreds of hidden files in the home directory. All of the base system uses this convention, but at the moment, only a few ports do.

MirPorts: What’s Special

Supported Platforms

Out of the box, MirPorts has support for the following operating systems:

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

Even on stable releases, using the newest MirPorts version is recommended.

The support for Darwin and Interix is still fairly new. On Darwin, MirPorts is usable, Interix support is in the alpha stage. Both the BSD build system and the autotools/libtool infrastructure has been ported and support shared libraries on this platform. Our mid-term goal is to provide at least a part of the MirOS base system as a port or a package.

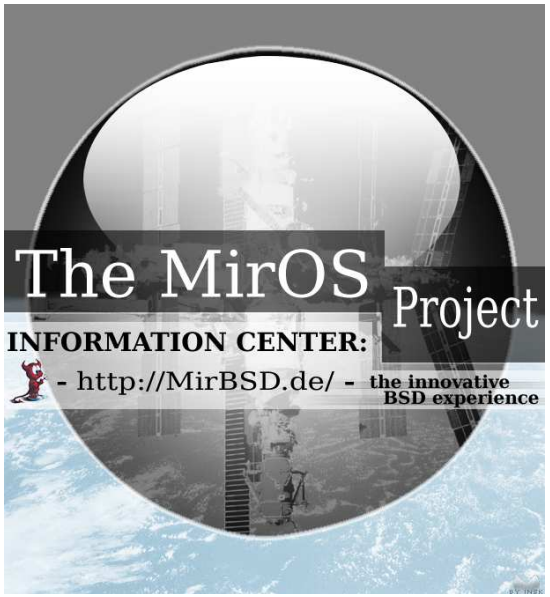
For all platforms, we are still searching for developers as well as testers to build packages and to submit bug reports to the developers.

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 #8

Release #8 was published on December 23, 2005. It marks a giant step forward compared to the #7 series, which is over two years old now. Important changes include:

- Based on OpenBSD (-current and older releases)
- 64-bit time handling routines (time_t)
- Correct handling of leap seconds
- Full GCC 3.4 support: C, C++, Pascal, Objective-C, Ada and even Java
- Current versions of the GNU developer toolchain (rcs, binutils, gdb, texinfo, lynx etc.)
- GNU CVS 1.12 with custom extensions
- Uses “MirBSD“ as its uname
- Binary compatibility with OpenBSD and MirOS #7 via emulation
- Improved random number generator
- Uses sv4cpio with/without CRC instead of tar archives as its package format; support for new formats in cpio

Live CD

In current MirOS versions, such as the one distributed here, the installation CD is also a live CD. That means that you can boot a full MirOS system (although without any ports installed) from the CD without having to write to the hard drive.

For booting in text mode, at least 64 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 started after some differences in opinion between Theo de Raadt, the OpenBSD project leader, and Thorsten Glaser, who is now our lead developer. The main 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, there won’t be any support for SMP in MirOS.

The most important differences to OpenBSD are:

- Completely rewritten bootloader and boot manager without an 8 GiB limit and with Soekris support
- Slim base system (without NIS, Kerberos, Bind, i18n, BSD games, etc.), Bind and the BSD games being available as a port
- Binary security updates for stable releases
- ISDN support
- IPv6 support in the web server software
- wtf, a database of acronyms
- Some of the GNU tools (like gzip and *roff) were replaced by original UNIX code released by Caldera (SCO) under a BSD licence

We are legally bound to point out the advertising clauses. They are too many to print them here but you can find them on the T-shirts (which you can get by giving a donation) or at http://mirbsd.mirsolutions.de/?about .

Enjoy MirOS!

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FROSCON 2006 (06/06/24–25, Bonn, de)