

# FIREFOX HACKS™

*Tips & Tools for Next-Generation  
Web Browsing*



O'REILLY®

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HACK  
#92

## Get a Custom, Prebuilt Version

Find versions of Firefox that are different than the standard installation.

Firefox, and Mozilla technology in general, are under constant development by the Mozilla Foundation. The Firefox source code is also freely available for anyone to compile, so executable or installable versions of Firefox could come from anywhere. Most such distributions aren't widely known, though. This hack explains what's out there, where to find it, and what makes sense to try out.

### Rebundled Firefox Versions

Some people take standard Firefox installers and rebundle the same product up into a form that provides an alternate install process. It's the same old Firefox, just packaged slightly differently. Such things aren't full rebuilds.

**Windows versions.** Here are some examples of alternate versions for Windows:

- **PortableFirefox** [Hack #31] rebundles Firefox for USB use.
- The MozOO distribution (<http://www.mozoo.org>) includes Firefox.
- The U3 project (no URL at the time of this writing) is a consortia interested in bundling applications on Flash USB devices. Firefox is to be one such application.
- Microsoft Installer (MSI) bundles. This rebundling of Firefox 1.1 and Mozilla 1.8 betas is described in Mozilla bug 231062

**Linux versions.** Here are some versions for Linux (there are numerous others):

- The BeatrIX Bootable CD distribution ([www.watsky.net](http://www.watsky.net)).
- Sun's Java Desktop System provides Firefox RPMs.
- RedHat and Fedora Core provide downloadable Firefox RPMs.
- Linspire (<http://www.linspire.com>) provides Firefox via its CNR Warehouse.

### Alternate Builds of Standard Firefox

There's an unending stream of changes being made to the source code that Firefox derives from, and experimental builds are being made constantly and automatically for several platforms. There are many different Firefox builds, but they can be divided into three rough categories:

### *Developer builds*

These are based on Firefox source code of no particular significance. Typically, these builds are experimental and unstable. Examples include *nightly builds*, *trunk builds*, and *debug builds*.

### *Branch point builds*

These are builds of special significance and are marked in the source code repository with a CVS tag and a CVS branch tag. Such builds are given a name. Examples include *alphas* (1.8alpha2), *betas* (1.8beta3), *release candidates* (Firefox 1.0 RC3), *minor versions* (Firefox 1.1), and *major version* (Firefox 2.0). Such builds are usually built optimized.

### *Branch patch builds*

Once a branch point is made, no more features are added to the branch, only bug fixes. Those few fixes will be lost to all other builds unless extra steps are taken to copy them from the branch. Often a branch has none of these fixes at all, as the developers are already moving on to more important changes. Examples include *minor security releases* (Mozilla 1.7.3).

In this system, CVS branches are rarely used for innovative development of Firefox or Mozilla. The branches are used just to quash bugs. Nearly all new work is done on the CVS *trunk*, which is not a *branch*. There is some confusion about this. While Firefox was in early development, development was done on a special branch (a *long-lived branch*) called *aviary*. Now that Firefox has reached 1.0, that long-lived branch is no longer required, and the trunk is being used for most things again, including all new Firefox development.

Generally speaking, the developer builds carry small risks of strange bugs and strange side effects that might confuse your desktop. Don't use them on an important computer, unless you know what you're doing. If they're debug builds, as many are, they will generally run more slowly than standard Firefox.

Developer builds don't always have full installers. To proceed on Windows, first install standard Firefox. Next, rename the folder that holds the Firefox install area. Unarchive the downloaded build into a temporary folder. Rename the temporary folder to the original install area folder's name. Start the Firefox executable in that replacement folder. On Unix/Linux and Macintosh, just unarchive the build into any folder and run.

To get any or all of these builds, visit the Mozilla download site at <http://ftp.mozilla.org/pub/mozilla.org/firefox/>.

Mozilla developers sometimes make experimental builds with special features in place. They're examples of *custom builds*.

## Treasure-Hunting Custom Builds

To build Firefox from source code, an enthusiast needs four things in place: a baseline, a target, a *.mozconfig* file [Hack #93], and source code. The *baseline* is the set of tools used to build Firefox; the *target* is the platform the new Firefox is meant for; a *.mozconfig* file specifies all the options that will apply to the build; and the *source code* is some set of Firefox source files from somewhere in CVS. Amidst all these factors, any number of subtly different builds might be created.

The main motivation for such custom builds is to add back features that are available in the source code but that aren't in the standard install. Popular examples include MNG image support; SVG support (with or without Cairo); Pango, Xft, or Qt support on Linux; optimizations; and experiments with alternate compilers.

For gossip on builds, try the MozillaZine “Third Party/Unofficial Builds” Forum (<http://forums.mozillazine.org>). There's a Sticky Thread near the top that lists the more organized custom builders. The Mox builds are noteworthy for their speed improvements on modern Windows hardware. An orderly list of some custom builds is located at <http://www.pryan.org/mozilla/firefox/>. For a glimpse of the possibilities of the *.mozconfig* file, have a look at <http://webtools.mozilla.org/build/config.cgi>.

All of these build alternatives are fairly harmless, but finding someone willing to commit to fully maintaining their special build is almost impossible. Such builds should be seen as wonderful experiments, not as mainstream products—at least not until the builders become more organized.

Some semi-official examples of custom builds can also be found at <http://ftp.mozilla.org/pub/mozilla.org/firefox/nightly/contrib/>.