

mono.txt  
Mono(tm) Binary Kernel Support for Linux

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To configure Linux to automatically execute Mono-based .NET binaries (in the form of .exe files) without the need to use the mono CLR wrapper, you can use the BINFMT\_MISC kernel support.

This will allow you to execute Mono-based .NET binaries just like any other program after you have done the following:

- 1) You MUST FIRST install the Mono CLR support, either by downloading a binary package, a source tarball or by installing from CVS. Binary packages for several distributions can be found at:

<http://go-mono.com/download.html>

Instructions for compiling Mono can be found at:

<http://www.go-mono.com/compiling.html>

Once the Mono CLR support has been installed, just check that /usr/bin/mono (which could be located elsewhere, for example /usr/local/bin/mono) is working.

- 2) You have to compile BINFMT\_MISC either as a module or into the kernel (CONFIG\_BINFMT\_MISC) and set it up properly. If you choose to compile it as a module, you will have to insert it manually with modprobe/insmod, as kmod cannot be easily supported with binfmt\_misc. Read the file 'binfmt\_misc.txt' in this directory to know more about the configuration process.
- 3) Add the following entries to /etc/rc.local or similar script to be run at system startup:

```
# Insert BINFMT_MISC module into the kernel
if [ ! -e /proc/sys/fs/binfmt_misc/register ]; then
    /sbin/modprobe binfmt_misc
    # Some distributions, like Fedora Core, perform
    # the following command automatically when the
    # binfmt_misc module is loaded into the kernel.
    # Thus, it is possible that the following line
    # is not needed at all. Look at /etc/modprobe.conf
    # to check whether this is applicable or not.
    mount -t binfmt_misc none /proc/sys/fs/binfmt_misc
fi

# Register support for .NET CLR binaries
if [ -e /proc/sys/fs/binfmt_misc/register ]; then
    # Replace /usr/bin/mono with the correct pathname to
    # the Mono CLR runtime (usually /usr/local/bin/mono
    # when compiling from sources or CVS).
    echo ':CLR:M::MZ::/usr/bin/mono:' > /proc/sys/fs/binfmt_misc/register
else
    echo "No binfmt_misc support"
    exit 1
```

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fi

- 4) Check that .exe binaries can be ran without the need of a wrapper script, simply by launching the .exe file directly from a command prompt, for example:

/usr/bin/xsd.exe

NOTE: If this fails with a permission denied error, check that the .exe file has execute permissions.