NAME

    rescue - rescue utilities in */rescue*

DESCRIPTION

    The */rescue* directory contains a collection of common utilities intended for use in recovering a badly damaged system. With the transition to a dynamically-linked root beginning with FreeBSD 5.2, there is a real possibility that the standard tools in */bin* and */sbin* may become non-functional due to a failed upgrade or a disk error. The tools in */rescue* are statically linked and should therefore be more resistant to damage. However, being statically linked, the tools in */rescue* are also less functional than the standard utilities. In particular, they do not have full use of the locale, pam(3), and nsswitch libraries.

    If your system fails to boot, and it shows a prompt similar to:

        Enter full pathname of shell or RETURN for /bin/sh:

    the first thing to try running is the standard shell, */bin/sh*. If that fails, try running */rescue/sh*, which is the **rescue** shell. To repair the system, the root partition must first be remounted read-write. This can be done with the following mount(8) command:

        /rescue/mount -uw /

    The next step is to double-check the contents of */bin*, */sbin*, and */usr/lib*, possibly mounting a FreeBSD rescue or "live file system" CD-ROM and copying files from there. Once it is possible to successfully run */bin/sh*, */bin/ls*, and other standard utilities, try rebooting back into the standard system.

    The */rescue* tools are compiled using crunchgen(1), which makes them considerably more compact than the standard utilities. To build a FreeBSD system where space is critical, */rescue* can be used as a replacement for the standard */bin* and */sbin* directories; simply change */bin* and */sbin* to be symbolic links pointing to */rescue*. Since */rescue* is statically linked, it should also be possible to dispense with much of */usr/lib* in such an environment.

    In contrast to its predecessor */stand*, */rescue* is updated during normal FreeBSD source and binary upgrades.

FILES

    /rescue Root of the **rescue** hierarchy.

SEE ALSO

    crunchgen(1), crash(8)

HISTORY

The **rescue** utilities first appeared in FreeBSD 5.2.

AUTHORS

The **rescue** system was written by Tim Kientzle *<kientzle@FreeBSD.org>*, based on ideas taken from NetBSD. This manual page was written by Simon L. Nielsen *<simon@FreeBSD.org>*, based on text by Tim Kientzle *<kientzle@FreeBSD.org>*.

BUGS

Most of the **rescue** tools work even in a fairly crippled system. The most egregious exception is the **rescue** version of vi(1), which currently requires that */usr* be mounted so that it can access the termcap(5) files. Hopefully, a failsafe termcap(3) entry will eventually be added into the ncurses(3) library, so that */rescue/vi* can be used even in a system where */usr* cannot immediately be mounted. In the meantime, the **rescue** version of the ed(1) editor can be used from */rescue/ed* if you need to edit files, but cannot mount */usr*.