NAME

    chroot — execute with alternate filesystem root

SYNOPSIS

    chroot [**--userspec**=*user*[:*group*]] [**-u** *ser*] [**-g** *roup*] [**-G** *roup*[,*group*]...] *root*
           [*program* [*argument*]...]
    chroot --skip-chdir [**--userspec**=*user*[:*group*]] [**-u** *ser*] [**-g** *roup*]
           [**-G** *roup*[,*group*]...] **/** [*program* [*argument*]...]

DESCRIPTION

    Sets the filesystem root to *root*, alters credentials as specified, then executes *program arguments*
    (SHELL **-i** if not specified).

    User and group names are first sought in the initial root, then overriden from the alternate root. Numeric
    IDs are used verbatim.

OPTIONS

--userspec=*user*[:*group*]	Become *user* and *group* (or the *user*'s primary group if omitted).
-u *user*	Become *user*.
-g *group*	Become *group*.
-G, **--groups**=*group*[,*group*]...	Set the supplementary group list to *group*s.
--skip-chdir	Don't move to the root after switching root directories. Only valid when switching to the current root directory.

ENVIRONMENT

    PATH   In which *program* is searched when requested, confer execvp(3).
    SHELL The shell to execute for an interactive session instead of the default /bin/sh.

EXIT STATUS

127	*program* wasn't found.
126	*program* exists, but couldn't be executed for a different reason.
125	an error occurred in **chroot**.
All others	returned by *program*.

SEE ALSO

    chroot(2)

STANDARDS

    Conforms to X/Open Portability Guide Issue 2 ("XPG2") (CB-UNIX), compatible with 4.3BSD−Reno.
    Long options and name resolution scheme compatible with the GNU system. Short options compatible
    with NetBSD 1.4.

HISTORY

    The **chroot**() system call appeared in Version 7 AT&T UNIX as part of chdir(2) — "change default
    directory" — noting it to not be unlike that of today:
        Chroot sets the root directory, the starting point for path names beginning with '/'.

    chroot first appeared in CB-UNIX at or before version 2.1 as chroot(1M) — "change root directory
    for a command":
        chroot newroot command
    The page hints at special handling of "**/bin/sh** shellfile"-style *command*s and *newroot* being always
    relative to the real root. This is inconsistent with the Version 7 AT&T UNIX version of the chroot system
    call, and potentially inconsistent with CB-UNIX's own chroot(2), which says
        Arguments to *chroot* are always absolute: no special meaning is given to inital slashes even if a
        chroot is currently in effect.
    Which is unclear so as to meaning "path resolution is unaffected" (like in Version 7 AT&T UNIX) or

"paths are always resolved from the real root". It's impossible to truly tell, but the documented behaviour is likely wrong and both are compatible with Version 7 AT&T UNIX.

CB-UNIX was, among others, the basis for AT&T System III UNIX, where it first saw light outside of AT&T with an incorrect

>   **chroot** newroot command

SYNOPSIS; — the usage string properly shows that arguments are forwarded:

```
chroot rootdir command arg ...
```

No special handling of any sort is found, and the system call resolves the names normally.

chroot(8) appears in 4.3 BSD−Reno, as

>   **chroot newroot [command]**

With the familiar SHELL (/bin/sh) **−i** default.

A specification for a CB-UNIX-style(? possibly, no digital copies seem to be extant) **chroot** appears in X/Open Portability Guide Issue 2 ("XPG2"), but was removed in X/Open Portability Guide Issue 4 ("XPG4").