NAME

rsh, restricted_shell – restricted shell command interpreter

SYNOPSIS

/usr/lib/rsh [**–acefhiknprstuvx**] [*argument*. . .]

AVAILABILITY

SUNWcsu

DESCRIPTION

rsh is a limiting version of the standard command interpreter **sh**, used to restrict logins to execution environments whose capabilities are more controlled than those of **sh** (see **sh**(1) for complete description and usage).

When the shell is invoked, it scans the environment for the value of the environmental variable, **SHELL.** If it is found and **rsh** is the file name part of its value, the shell becomes a restricted shell.

The actions of **rsh** are identical to those of **sh**, except that the following are disallowed:

changing directory (see **cd**(1)),
setting the value of **$PATH,**
specifying path or command names containing **/**,
redirecting output (**>** and **>>**).

The restrictions above are enforced after *.profile* is interpreted.

A restricted shell can be invoked in one of the following ways:

(1) **rsh** is the file name part of the last entry in the **/etc/passwd** file (see **passwd**(4));

(2) the environment variable **SHELL** exists and **rsh** is the file name part of its value; the environment variable **SHELL** needs to be set in the **.login** file;

(3) the shell is invoked and **rsh** is the file name part of argument 0;

(4) the shell is invoke with the –**r** option.

When a command to be executed is found to be a shell procedure, **rsh** invokes **sh** to execute it. Thus, it is possible to provide to the end-user shell procedures that have access to the full power of the standard shell, while imposing a limited menu of commands; this scheme assumes that the end-user does not have write and execute permissions in the same directory.

The net effect of these rules is that the writer of the *.profile* (see **profile**(4)) has complete control over user actions by performing guaranteed setup actions and leaving the user in an appropriate directory (probably *not* the login directory).

The system administrator often sets up a directory of commands (that is, **/usr/rbin**) that can be safely invoked by a restricted shell. Some systems also provide a restricted editor, **red**.

EXIT CODES

Errors detected by the shell, such as syntax errors, cause the shell to return a non-zero exit status. If the shell is being used non-interactively execution of the shell file is abandoned. Otherwise, the shell returns the exit status of the last command executed.

SEE ALSO

cd(1), **intro**(1), **login**(1), **sh**(1), **exec**(2), **passwd**(4), **profile**(4)

NOTES

The restricted shell, **/usr/lib/rsh**, should not be confused with the remote shell, **/usr/bin/rsh**, which is documented in **rsh**(1).