

## 如何列出所有的 Bash Shell 内置命令

### 内容

-- Vivek Gite 内置命令包含在 `bash shell` 本身里面。我该如何在 Linux / Apple OS X / \*BSD / Unix 类操作系统列出所有的内置 `bash` 命令，而不用去读大篇的 `bash` 操作说明页？

`shell` 内置命令就是一个命令或一个函数，从 `shell` 中调用，它直接在 `shell` 中执行。`bash shell` 直接执行该命令而无需调用其他程序。你可以使用 `help` 命令查看 `Bash` 内置命令的信息。以下是几种不同类型的内置命令。

### 内置命令的类型

⊙ Bourne Shell 内置命令：内置命令继承自 Bourne Shell。⊙ Bash 内置命令：特定于 `Bash` 的内置命令表。⊙ 修改 Shell 行为：修改 `shell` 属性和可选行为的内置命令。⊙ 特别的内置命令：由 POSIX 特别分类的内置命令。

### 如何查看所有 bash 内置命令

有以下的命令：

```
$ help
$ help | less
$ help | grep read
```

样例输出：

```
GNU bash, version 4.1.5(1)-release (x86_64-pc-linux-gnu)
These shell commands are defined internally. Type `help' to see this list.
Type `help name' to find out more about the function `name'.
Use `info bash' to find out more about the shell in general.
Use `man -k' or `info' to find out more about commands not in this list.
```

A star (\*) next to a name means that the command is disabled.

|   |  |
|---|--|
| job_spec [&]  | history [-c] [-d offset] [n] <b>or</b> hist>               |
| (( expression ))  | <b>if</b> COMMANDS; <b>then</b> COMMANDS; [ <b>elif</b> C> |
| . filename [arguments]  | jobs [-lnprs] [jobspec ...] <b>or</b> jobs >               |
| :   | <b>kill</b> [-s sigspec   -n signum   -sigs>               |
| [ arg... ]  | let arg [arg ...]  |
| [[ expression ]]  | <b>local</b> [option] name[=value] ...                     |
| <b>alias</b> [-p] [name[=value] ... ]   | logout [n]   |
| bg [job_spec ...]   | mapfile [-n count] [-O origin] [-s c>                      |
| bind [-lpvsPVS] [-m keymap] [-f file]> popd [-n] [+N   -N]  |  |
| <b>break</b> [n]  | <b>printf</b> [-v var] format [arguments]                  |
| builtin [shell-builtin [arg ...]]   | pushd [-n] [+N   -N   <b>dir</b> ]                         |
| <b>caller</b> [expr]  | <b>pwd</b> [-LP]   |
| <b>case</b> WORD <b>in</b> [PATTERN [  PATTERN...]> read [-ers] [-a <b>array</b> ] [-d delim] [-> |  |
| <b>cd</b> [-L -P] [ <b>dir</b> ]  | readarray [-n count] [-O origin] [-s>                      |
| command [-pVv] command [arg ...]  | readonly [-af] [name[=value] ...] <b>or</b> >              |
| compgen [-abcdefgjksub] [-o option] >   | <b>return</b> [n]  |
| complete [-abcdefgjksub] [- <b>pr</b> ] [-DE] >   | select NAME [ <b>in</b> WORDS ... ;] <b>do</b> COMM>       |
| comptopt [-o +o option] [-DE] [name ..>   | <b>set</b> [--abefhkmpntuvxBCHP] [-o option>               |
| <b>continue</b> [n]   | shift [n]  |
| coproc [NAME] command [redirections]  | shopt [-pqsu] [-o] [optname ...]                           |
| <b>declare</b> [-aAfFiltux] [-p] [name[=val>  | source filename [arguments]                                |
| dirs [-clpv] [+N] [-N]  | suspend [-f]   |
| disown [-h] [-ar] [jobspec ...]   | <b>test</b> [expr]   |
| <b>echo</b> [-neE] [arg ...]  | <b>time</b> [-p] pipeline                                  |
| enable [-a] [-dnps] [-f filename] [na>  | times  |
| <b>eval</b> [arg ...]   | trap [-lp] [[arg] signal_spec ...]                         |
| <b>exec</b> [-cl] [-a name] [command [argume>   | <b>true</b>  |
| <b>exit</b> [n]   | type [-afptP] name [name ...]                              |
| <b>export</b> [-fn] [name[=value] ...] <b>or</b> ex>  | typeset [-aAfFiltux] [-p] [name[=val>                      |
| <b>false</b>  | ulimit [- <b>S</b> Hacdefilmnpqrstuvx] [limit>             |
| fc [-e ename] [-lnr] [first] [ <b>last</b> ] o>   | umask [-p] [-S] [mode]                                     |
| fg [job_spec]   | unalias [-a] name [name ...]                               |
| <b>for</b> NAME [ <b>in</b> WORDS ... ] ; <b>do</b> COMMAND>                                      | <b>unset</b> [-f] [-v] [name ...]                          |
| <b>for</b> (( exp1; exp2; exp3 )); <b>do</b> COMMAN>  | <b>until</b> COMMANDS; <b>do</b> COMMANDS; <b>done</b>     |
| <b>function</b> name { COMMANDS ; } <b>or</b> name >  | variables - <b>Names and</b> meanings of so>               |
| getopts optstring name [arg]  | wait [ <b>id</b> ]   |
| hash [-lr] [-p pathname] [-dt] [name >  | <b>while</b> COMMANDS; <b>do</b> COMMANDS; <b>done</b>     |
| help [-dms] [pattern ...]   | { COMMANDS ; }   |

另外一种选择是使用下列命令：

```
compgen -b
compgen -b | more
```

## 查看 Bash 的内置命令信息

运行以下得到详细信息：

```
help command  
help read
```

要仅得到所有带简短描述的内置命令的列表，执行如下：

```
$ help -d
```

## 查找内置命令的语法和其他选项

使用下列语法去找出更多的相关内置命令：

```
help name  
help cd  
help fg  
help for  
help read  
help :
```

样例输出：

```
:::  
Null command.
```

```
No effect; the command does nothing.
```

```
Exit Status:  
Always succeeds
```

## 找出一个命令是内部的（内置）还是外部的

使用 `type` 命令或 `command` 命令：

```
type -a command-name-here  
type -a cd
```

```
type -a uname
type -a :
type -a ls
```

或者：

```
type -a cd uname : ls uname
```

样例输出：

```
cd is a shell builtin
uname is /bin/uname
: is a shell builtin
ls is aliased to `ls --color=auto'
ls is /bin/ls
l is a function
l ()
{
ls --color=auto
}
```

或者：

```
command -V ls
command -V cd
command -V foo
```