

## nix- (nix original command)

```
$nix-env --list-generations  $nix-env -G 42 or $nix-env --switch-generation 42
$nix-env --rollback
$nix-env -e firefox          $nix-env -e '.*'
$nix-store --delete          $nix-store --gc
$nix-collect-garbage -d
```

## nix (nix command improved)

```
$nix-env  nix profile
```

```
$nix-env -iA firefox      $nix profile install firefox  $nix profile install nixpkgs#hello
$nix-env -e firefox       $nix profile remove firefox
$nix-env -q               $nix profile list
$nix-env --list-generations $nix profile history
$nix-env --rollback       $nix profile rollback
$nix-env -qa
$nix-env -qaPs
```

```
$nix profile install  $nix profile remove  $nix profile rollback
$nix profile list     $nix profile history
```

```
nix-env App profile manifest.nix , nix profile App manifest.json . nix profile App profile
nix-env .
```

```
$nix-store -q --tree 'realpath ./result/bin/S4
$nix-store -q --referrers-closure 'realpath ./result/bin/S4'
```

## nixos

```
$nixos-rebuild switch --rollbackflake.nix >flake.nix
$sudo nixos-rebuild switch --flake .#syryuhds --impure
```

## flake

```
[flake.nix ]$nix build          nix build github:syryuauros/myflakes/masterflake.nix >flake.nix
$nix run                        nix run github:syryuauros/myflakes/master
$ nix run nixpkgs#gnuplot
```

```
$realpath ./result/bin/S4  $nix-store -q --tree 'realpath ./result/bin/S4'
```

```
$nix flake metadata github:edolstra/dwarffs
```

```
$nix flake show github:edolstra/dwarffs
```

```
$nix-store -q -referrers-closure 'realpath ./result/bin/S4
```

```
$ nix registry add nixpkgs github:NixOS/nixpkgs/5272327b81ed355bbed5659b8d303cf2979b6953
```

```
$nix-info -m
```

```
“https://github.com/<owner>/<project>/commit/<hash>”
```

example

```
https://github.com/nixos/nixpkgs/commit/ede02b4ccb13557b95058d66146640a2b0bb198f
```

```
$nix build (default package ) $nix build .#s4 .#gnuplot (default package package .)
```

## flake override

```
ex) (openblas.override { singleThreaded = true;})
```

```
or let openblas-single-thread = openblas.override { singleThreaded = true; };
```

## nix-shell

```
nix-shell -p 'lua.withPackages(ps: with ps; [ busted luafilesystem ])'
```

## nixpkgs

### confirm packages for nix-build, nix-instantiate, nix-channel

```
1 $nixrepl [Ret] nix-repl>:l <nixpkgs> [Ret] nix-repl>keyword(ex:rust) + TAB
2 /nix/var/nix/profiles/per-user/root/channels/nixos/pkgs/top-level/all-packages.nix
3 $cd 'nix-instantiate -eval -E '<nixpkgs>'' [Ret] cat > all-packages.nix
4 $NIX_PATH, all-packages.nix
```

### confirm packages for nix-env

```
1 $nix-env -qa 'keyword.*' or $nix-env -qaPs 'keyword'
2 $cd ~/.nix-defexpr/channels_root/nixos/pkgs/top-level, all-packages.nix
```

### confirm packages for flakes

```
1 flake.lock » “nixpkgs” “rev” term » github.com/[owner]/[repo]/tree/[rev]
```

**nix repl**

**nix-repl>**

:help  
TAB  
:doc keyword

**pictures**

```
./img/3_nix/flake input url.png
```

`./img/3_nix/real repo flake indicate.png`

`./img/3_nix/real repo flake indicate_2.png`

`./img/3_nix/real repo flake indicate_3.png`

```
./img/3_nix/repo find from flake.lock.png
```

```
./img/3_nix/repo find from flake.lock2.png
```



```
./img/3_nix/repo find from flake.lock3.png
```

`./img/3_nix/how to find packages_1.png`

./img/3\_nix/how to find packages\_2.png