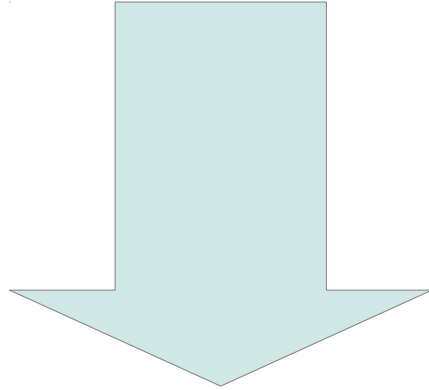


Syzix: heading off the beaten \$PATH

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@_devkev_

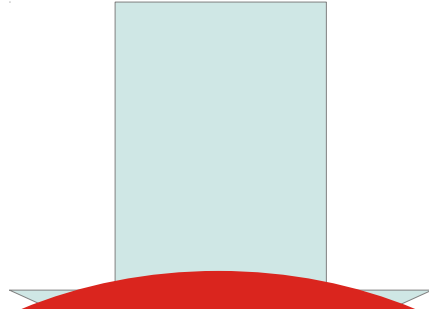


Traditional package install



<code>/bin</code>	<code>/usr/bin</code>
<code>/lib</code>	<code>/usr/lib</code>
<code>/sbin</code>	<code>/usr/sbin</code>
<code>...</code>	<code>/usr/share</code>

Traditional package install



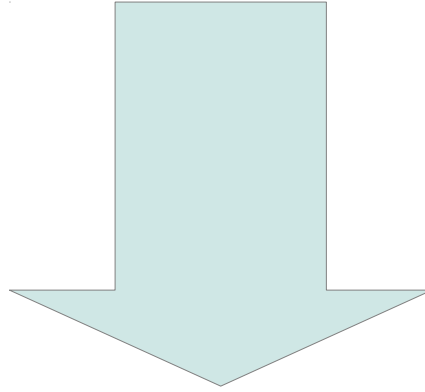
~~`/usr/bin` `/usr/bin`
`/usr/bin` `/usr/bin`
`/usr/bin` `/usr/bin`
`/usr/bin` `/usr/bin`~~

Single
package
version



Single
package
version

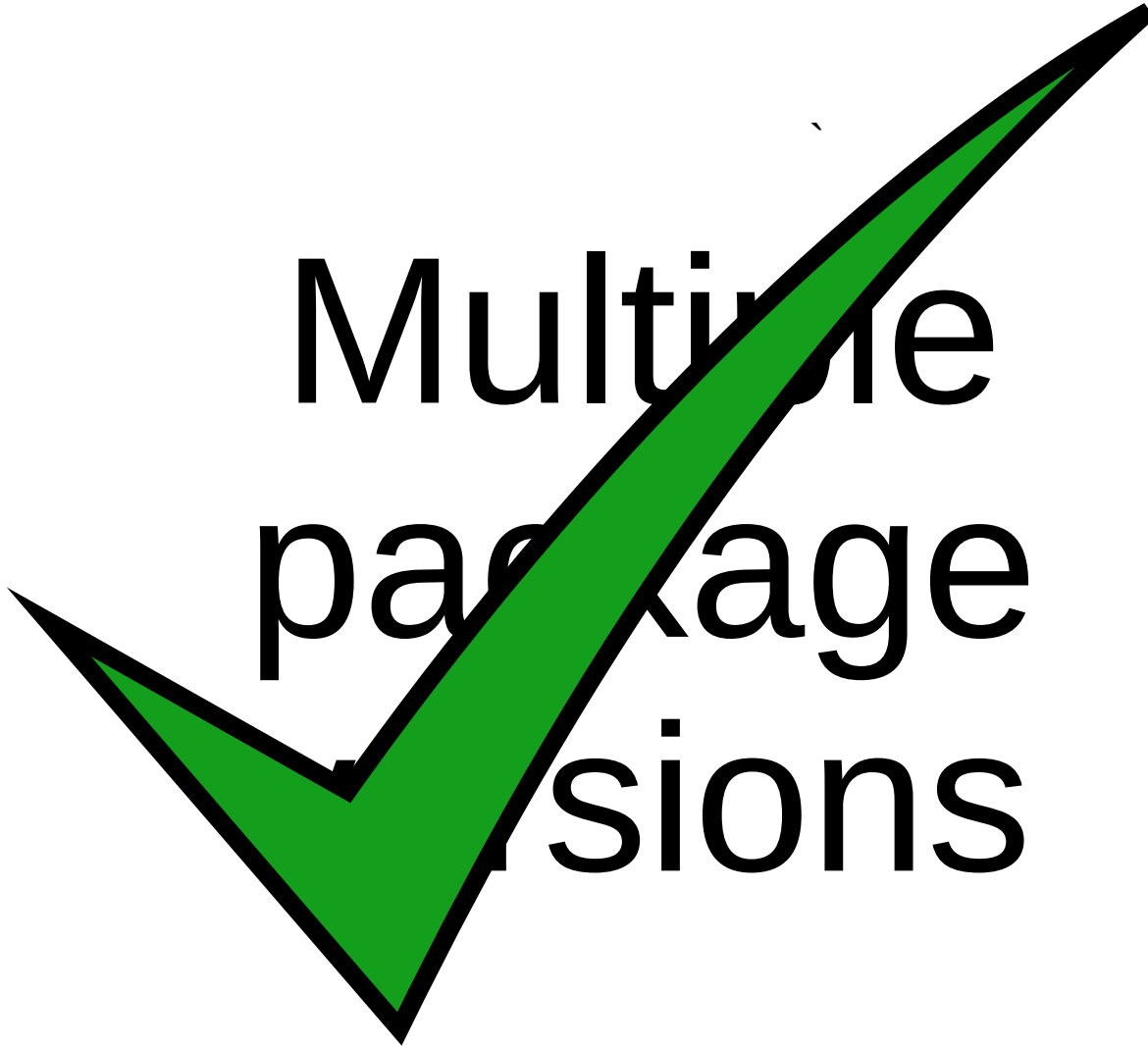
Syzix package install



/sw/\$repo/\$arch/\$pkgname/\$version

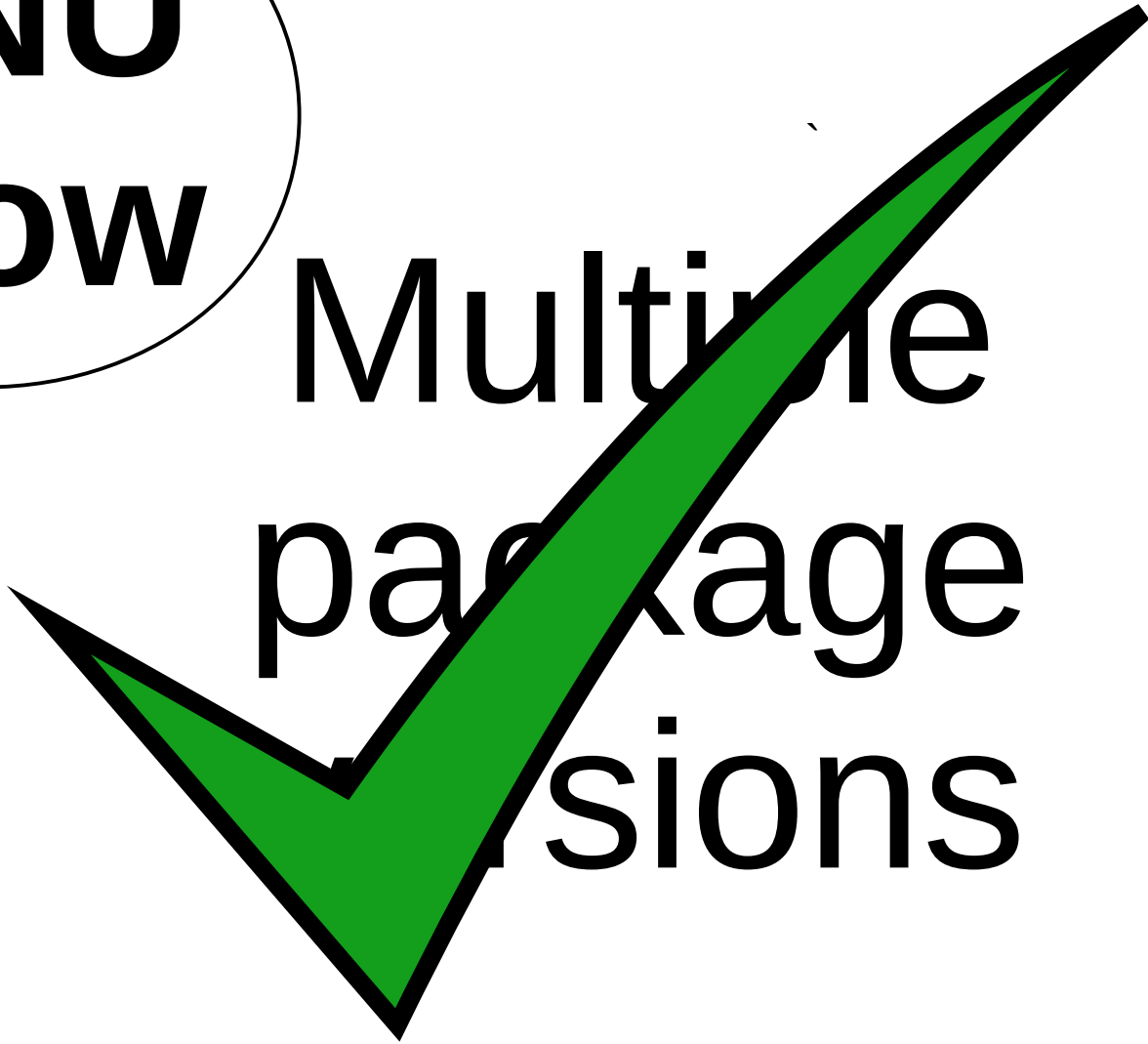
Multiple
package
versions

Multiple
package
versions





Multiple
package
versions



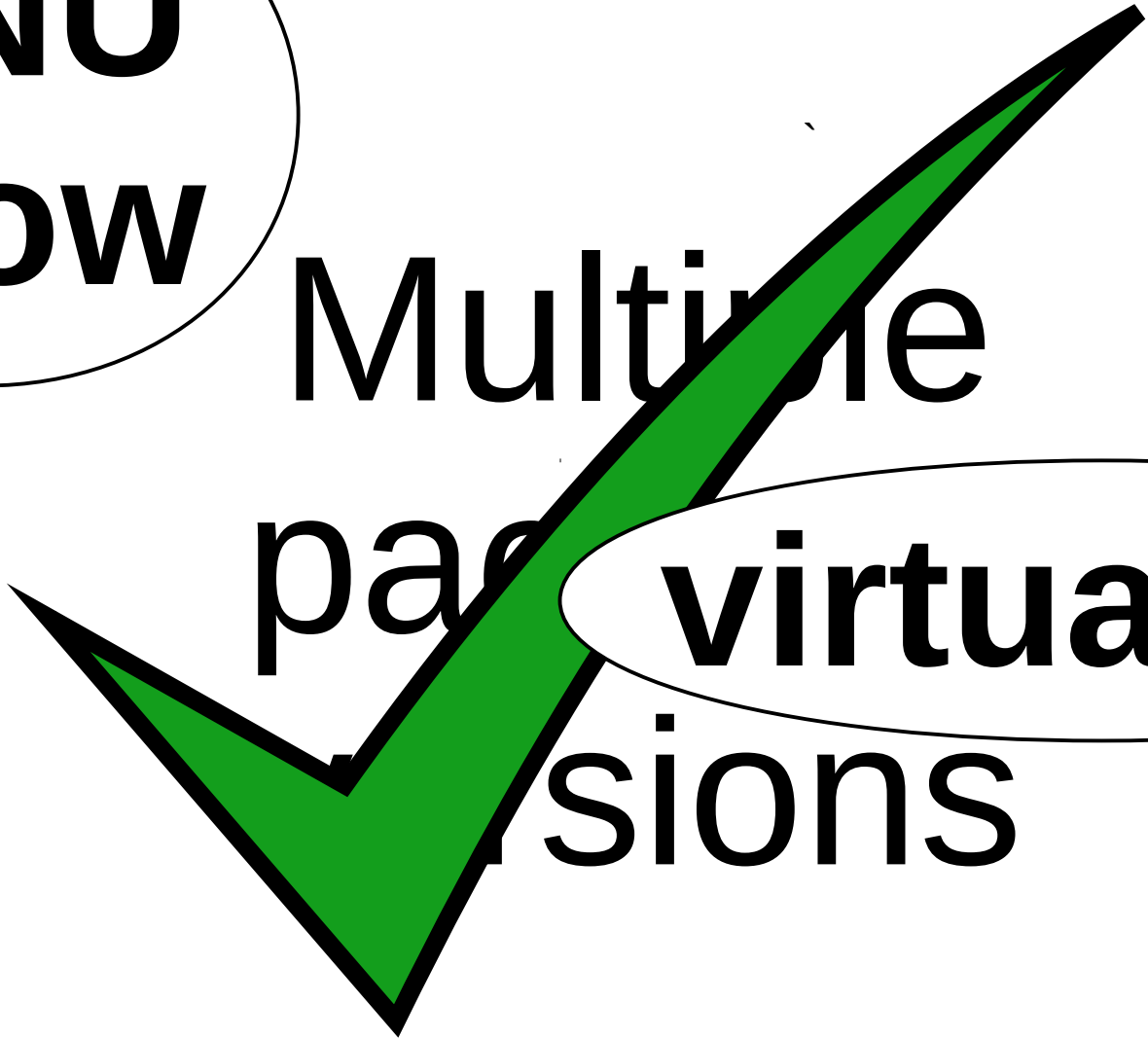
**GNU
Stow**

Multiple

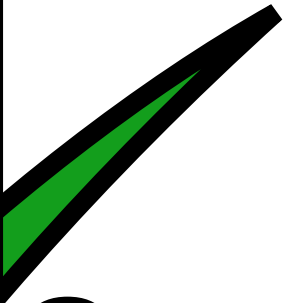
packages

virtualenv

versions



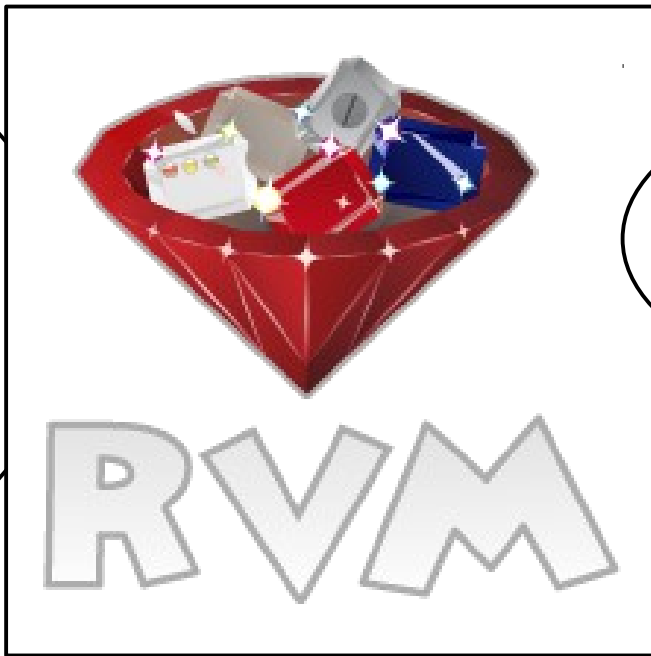
**GNU
Stow**



virtualenv

pa
sions

**GNU
Stow**



OSTree

par
sions

virtualenv



**GNU
Stow**



OSTree

pa

virtualenv

GlobalLinux

**GNU
Stow**



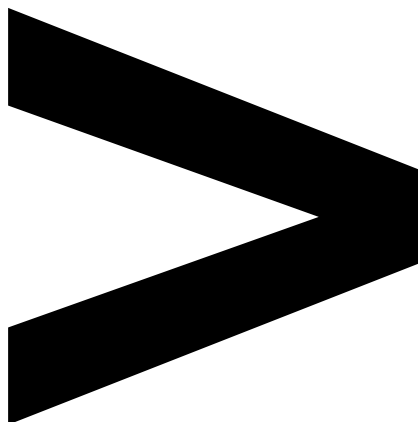
OSTree



NixOS

actualenv

Gobolinux







\$PATH

Dynamic
runtime
version
selection

Dynamic
runtime
version
selection





Environment Modules

modules.sourceforge.net

\$ syz list

Currently Loaded Syzfiles:

- 1) modules/3.2.6
- 2) shwrapnel/devel
- 3) modext/devel
- 4) syz/devel

\$ python

-bash: python: command not found

\$ syz avail python

```
----- /sw/nix/x86_64-linux/.sf -----  
python/2.6.7                python/2.7.3-wrapper  
python/2.7.3(default)      python3/3.2.3
```

\$ syz load python/2.6.7

\$ python

Python 2.6.7 (r267:88850, Jul 20 2012, 19:59:23)

[GCC 4.6.3] on linux2

Type "help", "copyright", "credits" or "license" for more information.

>>>

\$

```
$ syz list
```

```
Currently Loaded Syzfiles:
```

- | | |
|------------------------------|--------------------|
| 1) modules/3.2.6 | 8) zlib/1.2.7 |
| 2) shwrapnel/devel | 9) gcc/4.6.3 |
| 3) modext/devel | 10) bzip2/1.0.6 |
| 4) syz/devel | 11) attr/2.4.46 |
| 5) linux-headers/2.6.35.14-2 | 12) acl/2.2.51 |
| 6) glibc/2.13 | 13) coreutils/8.15 |
| 7) bash/4.2-p24 | 14) python/2.6.7 |

```
$ syz swap python/2.7.3
```

```
$ python
```

```
Python 2.7.3 (default, Jul 20 2012, 19:54:40)
```

```
[GCC 4.6.3] on linux2
```

```
Type "help", "copyright", "credits" or "license" for  
more information.
```

```
>>>
```

```
$ syz unload python
```

```
$ python
```

```
-bash: python: command not found
```

```
$
```

A hand is shown in the foreground, pointing towards the Leaning Tower of Pisa. The tower is leaning to the right. The text 'Stable + Unstable' is overlaid in the center of the image. The background shows a cloudy sky and some buildings at the base of the tower.

Stable
+
Unstable



Rollback package updates



Safely test
new versions

Rolling release + Standard release



Binary packages

+

Source builds



Marcel van Schooten, CC-BY

<http://www.flickr.com/photos/mvs/3405603248/>



Victor Gregorio, PD

<http://hacktux.com/linux/wallpaper/apache/compile>



Builds parametrised
by \$version

Standalone install*



+



* Not yet

Hosted install

Multi-user systems

Power users

Developers



Tomorrow

10:40am

MCC5

<http://syzix.org/>