

THE DAILY SNAP

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15 COOL THINGS YOU DIDN'T KNOW YOU COULD DO WITH SNAPS!

In Linux, testing software is both easy and difficult at the same time. While the repository channels offer great availability to software, you can typically only install a single instance of an application. If you want to test multiple instances, you will most likely need to configure the remainder yourself. With snaps, this is a fairly simple task.

From version 2.36 onwards, snapd supports parallel install - a capability that lets you have multiple instances of the same snap available on your system, each isolated from the others, with its own configurations, interfaces, services, and more. Let's see how this is done.

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Igor Ljubuncic

- Developer Advocate
- Linux
- Books
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1. Snap development using LXD

- Develop using containers instead of virtual machines
- Allows nesting inside other virtualization/container technologies

```
snapcraft --use-lxd
```



2. Remote build

- Use Launchpad as your build service
- Target architectures you don't have locally

```
snapcraft remote-build --user "your Launchpad user id"
```



3. Shell after

- Step into the snap “world”
- Inspect & troubleshoot any errors

```
snapcraft --shell-after
```



4. Snap try

- Try snaps without “installing” them
- Quickly troubleshoot build errors

```
snap download “snap name”  
unsquashfs “snap name”.snap  
cd squashfs-root  
snap try
```

- snapcraft pack + snap try for maximum effect!



5. Snappy Debug

- Check for errors and denials during runtime
- Troubleshoot confinement and permissions errors

```
snap install snappy-debug
```

```
snappy-debug.security scanlog
```



6. Snap strace

- Troubleshoot runtime errors and application crashes

```
snap run --strace='optional arguments' "snap name"
```




7. Snap GDB

- Troubleshoot reproducible issues with your application (in a snap):

```
snap run --experimental-gdbserver "snapname"
```

```
Welcome to "snap run --gdbserver".
```

```
You are right before your application is run.
```

- In a separate shell:

```
gdb -ex="target remote :43041"
```



8. Review tools

- Check if your snap passes automatic Snap Store review BEFORE uploading
- Save time on possible errors

```
snap install review-tools
```

```
snap-review "snap"
```



9. Default track

- Multiple tracks, set default
- Useful if you have legacy versions of an application

```
snapcraft set-default-track "snap" "track"
```



10. Snap connections

- Check what resources your snap wants to use
- Disconnect any you don't want (or connect those not connected)

```
snap connections kompozer
```

Interface	Plug	Slot	Notes
content[gtk-2-engines]	kompozer:gtk-2-engines	gtk2-common-themes:gtk-2-engines	-
content[gtk-2-themes]	kompozer:gtk-2-themes	gtk-common-themes:gtk-2-themes	-
content[icon-themes]	kompozer:icon-themes	gtk-common-themes:icon-themes	-
desktop	kompozer:desktop	:desktop	-
desktop-legacy	kompozer:desktop-legacy	:desktop-legacy	-
home	kompozer:home	:home	-
removable-media	kompozer:removable-media	-	-



11. Aliases

- Create custom aliases for your snaps and applications

```
snap alias "snap name.application name" "alias"
```

```
snap aliases
```

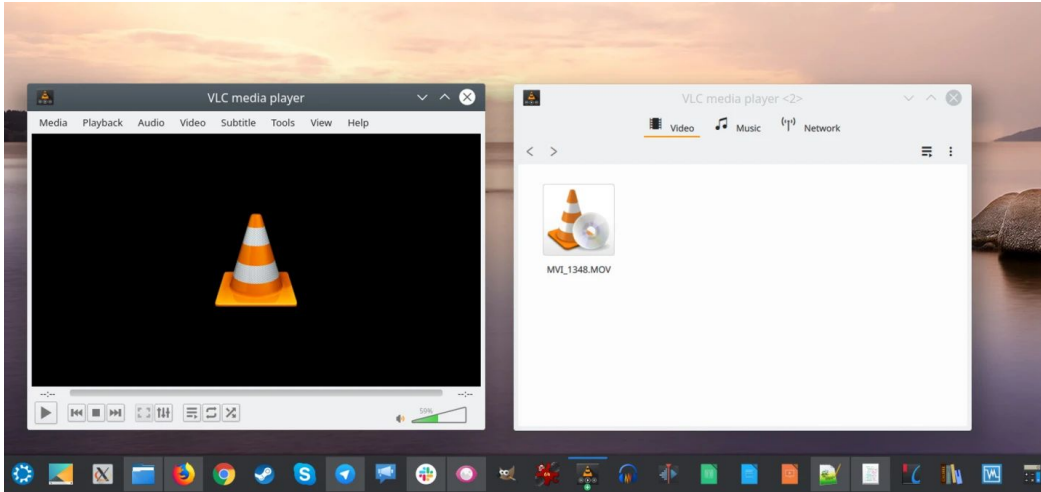
Command	Alias	Notes
icdiff.git-icdiff	git-icdiff	-
kompozer	kom	manual
lxd.lxc	lxc	-
node.npm	npm	-



12. Parallel installs

- Run multiple versions of the same snap
- Run multiple different versions of the same snap

```
snap set system experimental.parallel-instances=true  
snap install "name"_first "name"_second "name"_whatever
```





13. How many snap revisions to keep

- Minimum of 2, default 3
- Save space if needed

```
snap set system refresh.retain=N
```



14. Snap refresh control

- Set when snaps update

```
snap set system refresh.timer=01:00-02:00
```

- Specific dates (RFC 3339) 0.o
- Convert dates with:

```
date --date="TMZ YYYY-MM-DD HH:MM:SS" +%Y-%m-%dT%H:%M:%S%:z
```




15. Snap snapshots

How many snapshots could a snap snapshot if a snap could snap snapshots...

- Save snapshots of your applications
- Restore when needed

```
snap save "snap name"
```

```
snap saved
```

```
snap check-snapshot "number"
```



“Questions?”

-- Audience (you)





For any other questions, reach out to:

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Thank you!

