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
- Petrolhead
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):

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

Welcome to "snap run --gdbserver".
You are right before your application is run.

- In a separate shell:

```bash
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)

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<th>Interface</th>
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<td>gtk2-common-themes:gtk-2-engines</td>
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</table>
11. Aliases

- Create custom aliases for your snaps and applications

```bash
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) 0.0
- Convert dates with:

`date --date="TZ 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!