UbuCon
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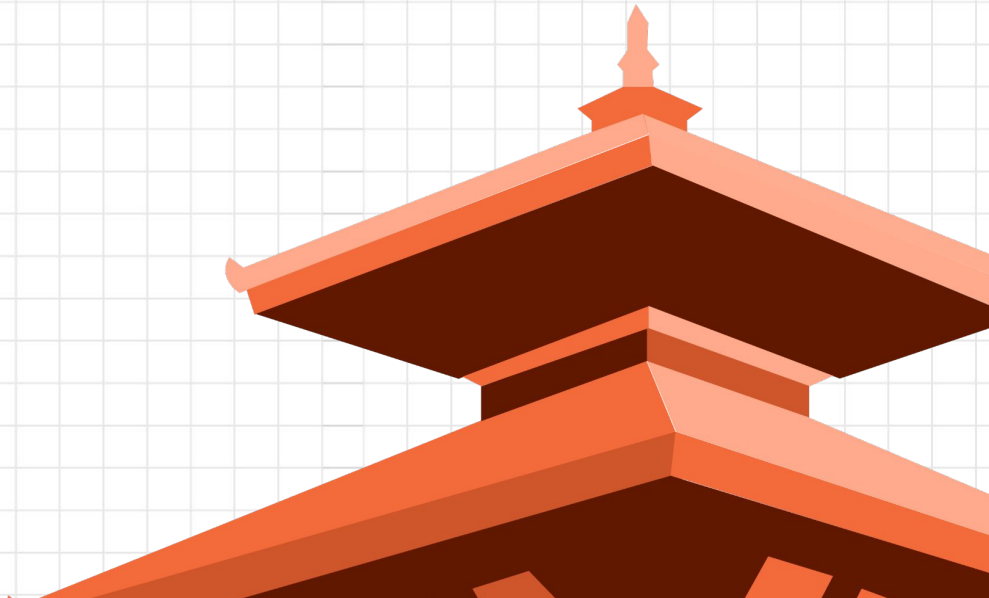
GNOME
NEPAL

GhVmCtl

Test your GUI apps from GitHub runners



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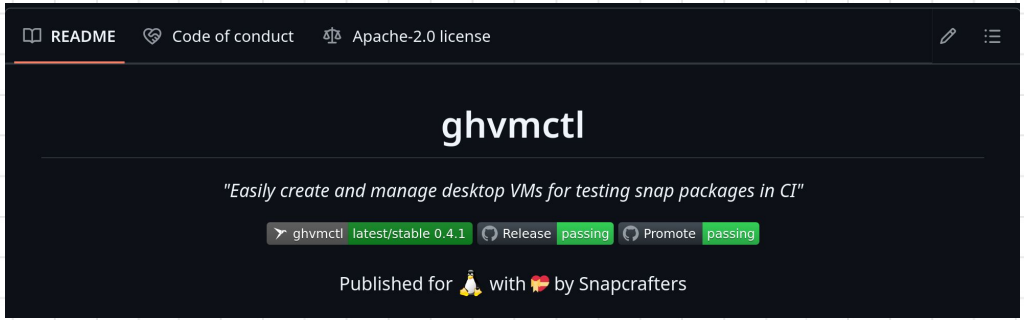
A small intro!

GhVmCtl is a utility for creating and manipulating desktop virtual machines using LXD, primarily for installing and running desktop applications in CI pipelines so that screenshots can be gathered automatically as part of the QA process.



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How does it work?

- Uses **LXD** to create and Launch an Ubuntu Desktop VM
- Prepares the DE before starting the app
- Uses a wrapper script (ghvmctl-runner) to execute commands inside the VM
- Allows users to install, run and manage snaps
- Captures **full-screen or active window** screenshots inside the VM.

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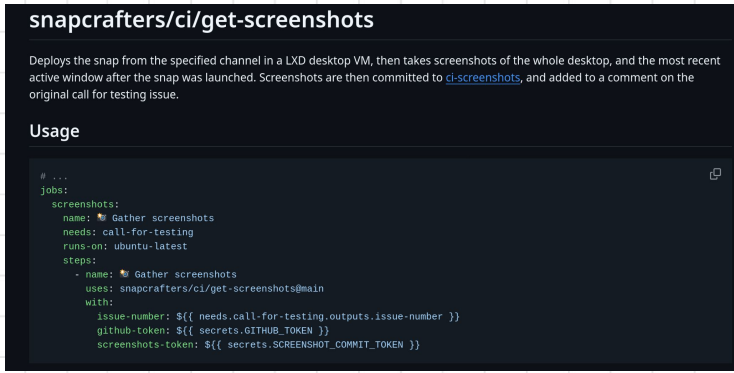
How do we use it?

- Created a CI script that uses the GhVmCtl snap
- Installs the snap inside the GitHub runner
- Collects the screenshots requested
- Our bot commits the screenshots in a separate GitHub repo for screenshots



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How this tool helps?

- Prepares the VM with needed changes
- Can be performed inside any CI/CD service (tested with GitHub runners)
- This can support any packaging format, not only snaps
- Does not need any special tools
- You can see any problem when your app is not running!

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Why LXD?

- Lightweight and Efficient
- Easy VM Management
- Powerful Snapshot & Restore Features
- Supports Both Containers & VMs
- Automation & Scalability

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Any Questions?
Shoot them...