

Mohammed Naser

# Stop Merging Broken Code!





\$ whoami

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OpenStack Ansible Project Team Lead

## Mohammed Naser

- Follow me on Twitter: [@\\_mnaser](#)

- Using Ansible in production to automate all the things for a few years

- Ansible OpenStack modules maintainer

# We're hiring!



VEXXHOST IS HIRING

## WE NEED YOUR BRAINS

[vexx.host/jobs](https://vexx.host/jobs)

If you like Ansible, CI/CD and like working in open source upstream projects, let's chat:

<https://vexx.host/jobs>



**Is anyone  
familiar with  
this?**



build

passing



**Enter Zuul**



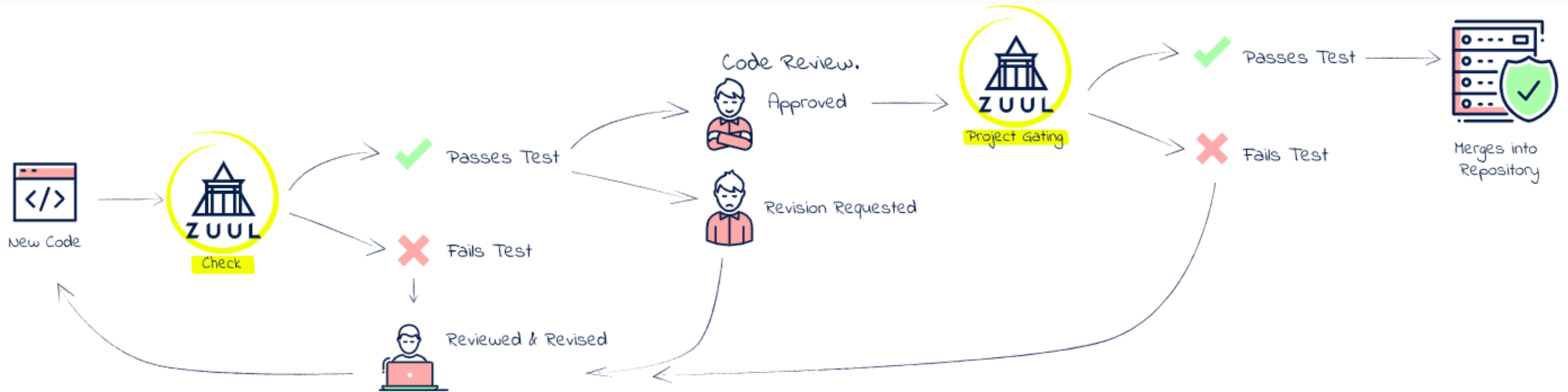
zuul gated



# Project Gating



Changes are merged only when they are confirmed to work without disruption through Zuul's systematic gatekeeping.





# Cross-Project Dependencies

You can specify that a change is dependent on another change in any known repository

This also includes changes in another project with projects residing in different systems

Testing of such changes can be done through both dependent or independent pipelines, always ensuring that dependencies are accounted for



# ***Cross-Project Testing***



Even if a code is dependent on several other systems, Zuul ensures that the systems are tested together through a shared queue before landing even a single patch.





## ***Testing in Parallel***

Queues changes based on the order in which they were approved

Creates speculative future states with a bunch of changes and tests them with the assumption they are all going to pass

Rearrange changes to make sure that they can merge



# *Multi-Tenant Design*

**CENTRALIZED POLICY  
AND COMPLIANCE**

**DECENTRALIZED  
ORGANIZATION FOR  
STABILITY AND VELOCITY**



# *Deep Ansible Integration*



**No new language - YAML**

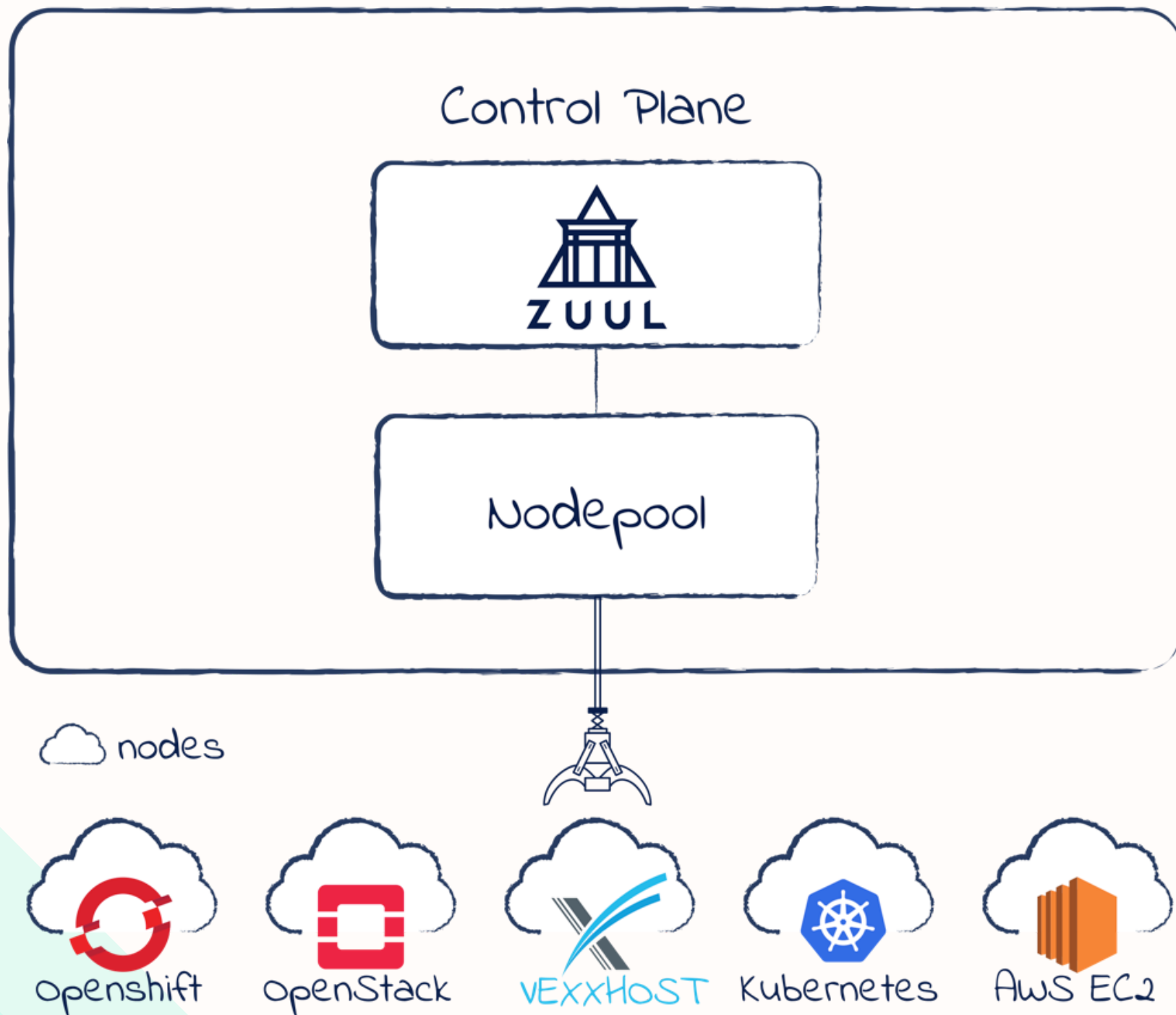
**Easy orchestration - Ansible  
Playbook**



# *Gerrit, GitHub Supported*



Flexible to configure and respects multi-repo dependencies



# Multi-cloud Compatibility



CI is automated and running  
irrespective of your cloud  
infrastructure provider.



# Fully Managed Zuul



**Support**



**Proactive Monitoring**



**Upgrades**

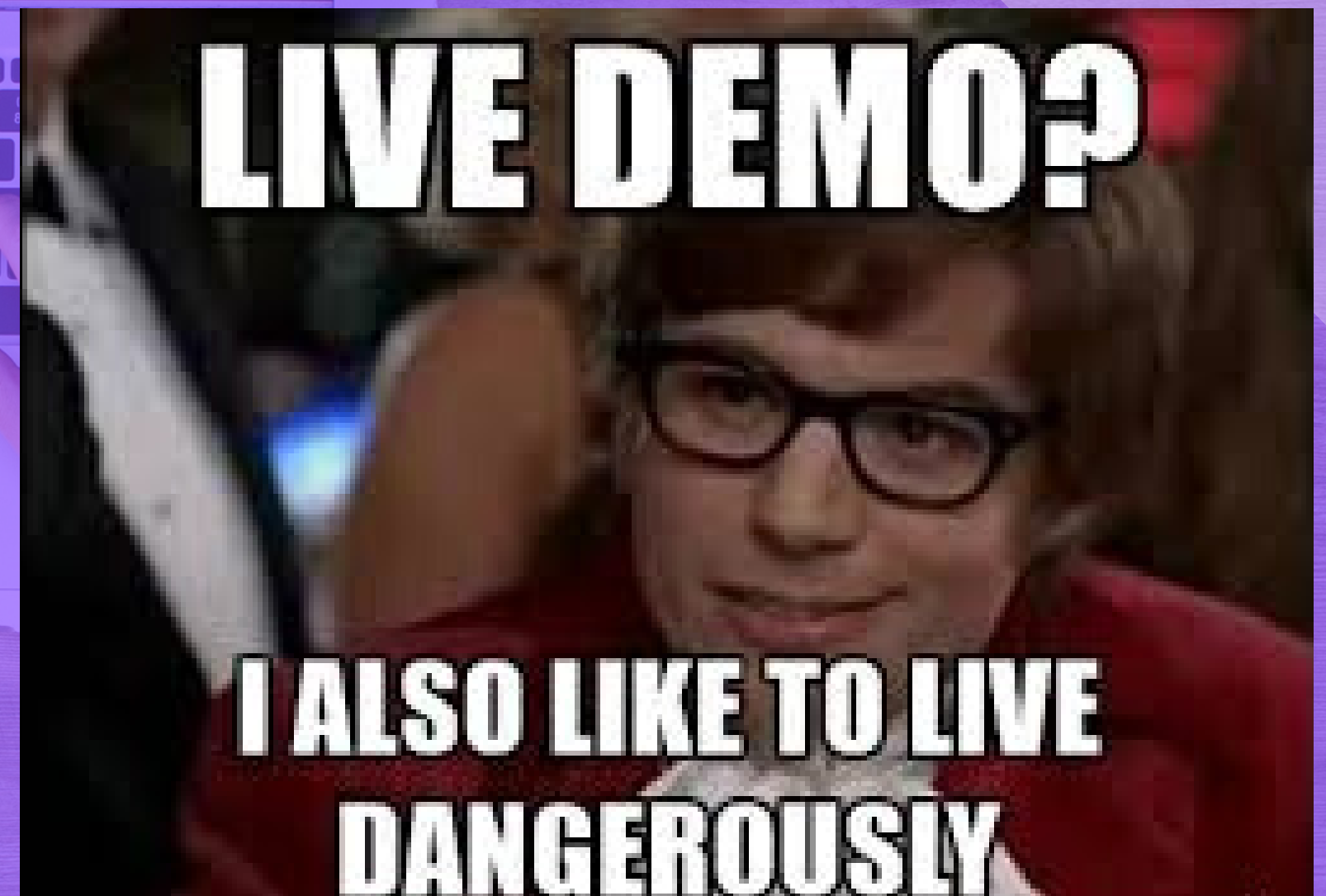




# Live Demo



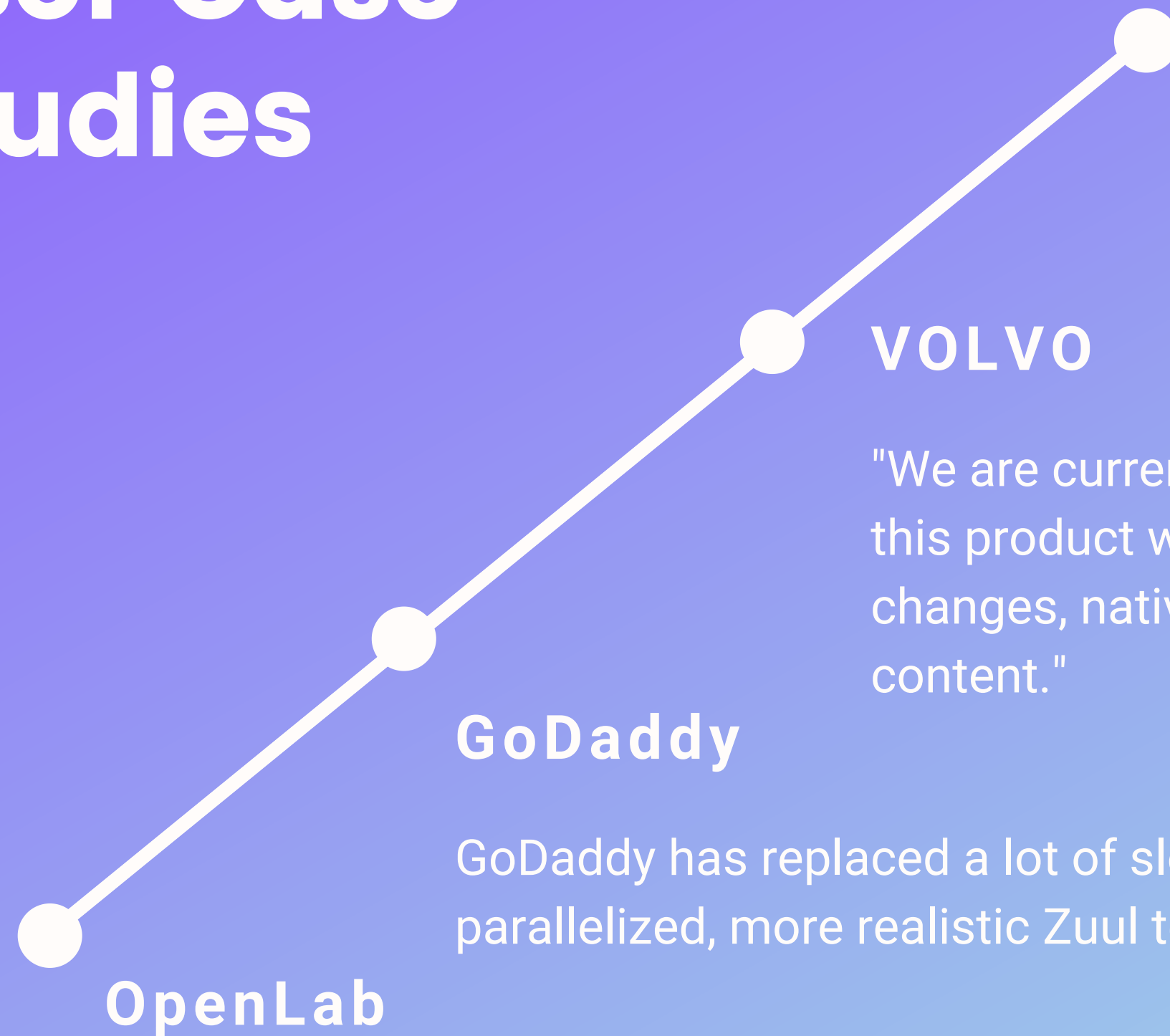
(currently undefeated in live demos)







# User Case Studies



## OpenLab

"With the companion tool Nodepool we're able to keep OpenStack VMs available, speeding up the process for developers of testing code changes."

## GoDaddy

GoDaddy has replaced a lot of slow, brittle Jenkins jobs with highly parallelized, more realistic Zuul test jobs.

## VOLVO

"We are currently investigating to move towards ZUUL v3, since this product will give us in-repo configuration, live configuration changes, native support for multi-node jobs and Ansible job content."

## BMW

"The Zuul solution fully supports all our requirements to provide a centrally hosted solution that can be shared by many internal software projects."





## Software Factory

With the addition of GitHub support to Zuul, Software Factory can now be used without Gerrit and people are looking into running their own gating CI/CD for GitHub organizations with SF to use the log processing features.

## OpenStack Foundation

Initially, Zuul was the coordinator for Jenkins and the two systems worked together, and around April 2016, Jenkins was replaced with an Ansible -based execution system to improve performance and reliability.

## Packet Host

"Working with the OpenStack Infra team has really opened my eyes up to the capabilities of Zuul and the frameworks they've put together"

# Interested?



VEXXHOST  
offers a fully  
managed Zuul  
platform

100% based on  
upstream, no  
secret sauce or  
extra features

If you **want** to use  
Zuul, but don't  
want to **operate**  
it, talk to us!

If you're  
curious about  
using Zuul, talk  
to us still :)



Test out our Managed  
Zuul Platform - for free



[vexx.host/mz-beta](https://vexx.host/mz-beta)

**We're looking for  
Beta Testers!**



# Questions?

