Stop Merging Broken Code

Zuul is an open source CI/CD platform specializing in gating changes across multiple systems and applications before landing a single patch.

Zuul is a git-driven system that facilitates collaboration between teams, built for a world where development, testing, and deployment of applications and their dependencies are one continuous process.

The platform is ideal for test-driven open source projects and software development organizations who need to gate against multiple projects and systems. Zuul is pluggable and supports multiple development platforms, including Gerrit, GitHub, and GitLab, and leverages the Ansible

CROSS PROJECT

DEPENDENCIES TESTED IN CI

Backend Change

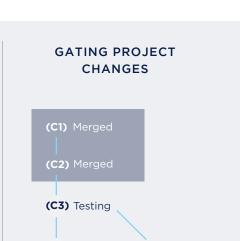
Frontend UI Change

Library Change

ecosystem for third-party modules. It's ideal for distributed development teams and built with security in mind. The code is available at zuul-ci.org.

Born out of the OpenStack community to integrate code reviews and automated testing at massive scale, Zuul is proven across millions of patches and now used by many software organizations, including Ansible, BMW, Volvo, the Wikimedia Foundation and Tungsten Fabric. User case studies are available at zuul-ci.org/users.

Zuul is a highly scalable and fault tolerant system that supports multiple clouds and zero-downtime upgrades. This enables non-stop collaboration between teams to help you realize development, testing, and deployment of applications and their dependencies as one continuous process.



(C4) Failed

(C5) Discarded



Use Zuul to test the future.



Multi-System Gating



Integrated with Gerrit, GitHub, and GitLab



Ansible-Based Jobs



OpenInfra FOUNDATION

HOSTED BY



Library Change

(C5) Testing

Why Zuul:

- Use Zuul to test the future; easily test changes to multiple systems together before landing a single patch.
- Multi-system gating (infrastructure to apps, multi-project, multi-cloud).
- Multi-tenant design enables a mix of decentralized organization for scalability and velocity with centralized policy and compliance.
- Built for distributed development teams with security top of mind.
- Ability to start small without the worry of switching tools as you scale.
- Proven at massive scale, but also used for small and medium-sized workloads.
- Makes use of common Ansible content (no unique or new language).

- Pluggable and extensible -- potential to have a large community of third party modules and greater support from the ecosystem.
- Compatibility with various code review systems including GitHub, GitLab, and Gerrit.
- Integration with a number of cloud systems including AWS, GCP, Azure, OpenStack, Kubernetes and OpenShift.
- Zuul operates with no single point of failure and can be upgraded with zero downtime.
- Truly open community at a foundation, not an open core model.
- To put it simply -- stop merging broken code!

Join the Community

Zuul is an independent open source community collaboratively developing code under the Apache 2 license. Anyone is welcome to join and contribute code, documentation, and use cases.

Website: zuul-ci.org
Git: https://git.zuul-ci.org
Matrix: #zuul:opendev.org
Mailing Lists: https://lists.zuul-ci.org

Docs: zuul-ci.org/docs

Select Case Studies: BMW and leboncoin

Excerpts from Zuul user case studies available at zuul-ci.org/users.

After using CI/CD systems for many years for an ever-increasing amount of projects, the limitations of the existing CI solutions were starting to impact our software development efforts. With the increasing size and complexity of today's software projects such as autonomous driving, the scaling capabilities of our CI/CD solution have become a crucial prerequisite of future development. The Zuul solution, especially after release of version 3.0, fully

supports all our requirements to provide a centrally hosted solution that can be shared by many internal software projects. This dramatically reduces operations overhead and frees up valuable developer time to continuously improve all aspects of our CI system setup. Zuul integrates seamlessly with our in-house OpenStack cloud and our repository systems Gerrit and GitHub. It also has an active community and provides the flexibility that our projects need.

BMW

In terms of jobs, we ran around 60,000 jobs per month which means ~around 2,500 jobs per day. Jobs average time is less than 5 minutes.
As leboncoin is growing very fast

(and microservices too), Zuul allows us to ensure everything can be tested and at scale. Zuul is also able to work with Gerrit and GitHub which permits us to open our CI to more teams and workflows.

leboncoin

Ready to explore Zuul? Take it for a ride at zuul-ci.org/start



CHAT WITH THE COMMUNITY