

# ODIM CI Process

## Tool used for CI

[GitHub Actions](#)

## Introduction

GitHub Action workflows are added to the ODIM repository. These workflows called as checks gets triggered whenever a Pull Request(PR) is raised against the master branch.

The result from the workflow execution is then updated to the PR.

PRs are allowed to review and merge, only if the checks are passed.

**Following checks are added as part of CI process:**

SI No.	Workflow Name	Description
1	build_unittest.yml	Builds and run Unit Tests with code coverage enabled
2	build_deploy_test.yml	Builds, Deploys, run sanity tests and upload build artifacts (like odimra logs)

These checks run in parallel and takes approximately 9 mins to complete.

## GitHub Action Workflows details

1. **build\_unittest.yml**
  - a. Brings up a Ubuntu 18.04 VM hosted on GitHub infrastructure with preinstalled packages mentioned in link <https://github.com/actions/virtual-environments/blob/master/images/linux/Ubuntu1804-README.md>
  - b. Installs Go 1.13.8 package
  - c. Installs and configures Redis 5.0.8 with two instances running on port 6379 and 6380.
  - d. Checks out the PR code into the Go module directory
  - e. Builds the code
  - f. Runs the unit tests
2. **build\_deploy\_test.yml**
  - a. Brings up a Ubuntu 18.04 VM hosted on GitHub infrastructure with preinstalled packages mentioned in link <https://github.com/actions/virtual-environments/blob/master/images/linux/Ubuntu1804-README.md>
  - b. Checks out the PR code
  - c. Build and deploys the following docker containers
    - i. Odimra
    - ii. Generic redfish plugin
    - iii. Kafka
    - iv. Zookeeper
    - v. Consul
    - vi. Redisdb
  - d. Runs the sanity tests
  - e. Uploads the build artifacts

***Note:** Build status notifications with the link to the GitHub Actions build job page will be sent to the developer's email.*

## Screen shots of the checks after they are executed

<> Code

Issues 2

Pull requests 4

Actions

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Workflows

New workflow

All workflows

build\_deploy\_test

build\_unittest

All workflows

Filter workflows

Event	Status	Branch	Actor	
✓ Create test-pr2.txt				
build_unittest #1: Pull request #68 opened by ashraf-vazeer				test-pr2
				2 days ago 7m 7s ...
✓ Create test-pr2.txt				
build_deploy_test #1: Pull request #68 opened by ashraf-vazeer				test-pr2
				2 days ago 8m 33s ...

<> Code

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✓ Create test-pr2.txt

test-pr2

ca@cc48

Re-run jobs

build\_unittest

on: pull\_request

Build

build\_unittest / Build

succeeded 2 days ago in 6m 46s

Search logs

Set up job

3s

Set up Go 1.13.8

11s

Setup Redis

1m 50s

Check out code into the Go module directory

0s

Build

2m 5s

Test

2m 37s

Post Check out code into the Go module directory

0s

Complete job

0s

<> Code

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✓ Create test-pr2.txt

test-pr2

ca@cc48

Artifacts 1

Re-run jobs

build\_deploy\_test

on: pull\_request

Deploy

build\_deploy\_test / Deploy

succeeded 2 days ago in 8m 12s

Search logs

Set up job

2s

Run actions/checkout@v2

1s

Build the Docker image & Deploy

8m 6s

Test

1s

Upload Build Artifact

1s

Post Run actions/checkout@v2

0s

Complete job

1s