



# RAZOROPS CI SPEC



Build great products at high velocity



# Overview

- Minimal approach configuration
- Configuration needs to present in code repo

```
.  
├─ Dockerfile           # application image  
├─ razorops.yml         # for orchestrating jobs  
└─ docker-compose.yml  # on-demand preview  
                        Environments (optional)
```

# Workflows

- Triggered when an event occurs within Git code
- Pull requests, branch/tag pushes
- Results in multiple jobs
- Filters
- Types of tasks
- Build, deploy, publish, run, docker

```
tasks:
  unittest:
    docker:
      image: golang:1.10
      commands:
        - go test
  build-web:
    build:
      image: demo/web
      dockerfile: src/Dockerfile
      environment:
        - DOCKER_ENGINE=1.18.0
  build-ui:
    build:
      image: demo/front-end
```

# Build Docker images

- Image Name
- Context, Dockerfile path
- Build arguments
- Artifacts

```
tasks:
  build-web:
    build:
      image: demo/web:${CI_COMMIT_SHA}
      dockerfile: src/Dockerfile
      environment:
        - DOCKER_ENGINE=1.18.0
        - NODE_ENV=production
```

# Docker task

- Docker image
- Environment Variables
- Commands

```
tasks:
  build-web:
    docker:
      image: golang:1.10
      commands:
        - go get -u github.com/golang/dep/cmd/dep
        - dep ensure
        - go test
      environment:
        - GIN_MODE=production
```

# Deploy to kubernetes

- Cluster
- Deployment template
- Manifests path

```
tasks:
  build-web:
    deploy:
      cluster: staging
      namespace: api
      template: kube/deployment.yaml
      manifest: kube/jobs/*.yaml
```

# One-Off commands

- Cluster
- Commands
- Image
- Environment Variables

```
tasks:
  build-image:
    build:
      image: web/demo:${CI_COMMIT_SHA}
  migrations:
    run:
      cluster: my-cluster
      image: {{ build-image }}
      commands:
        - bundle exec rake db:migrate
      environment:
        - DATABASE_PASSWORD=${THE_SECRET_VARIABLE}
        - RAILS_ENV=production
```