

GitLab Runner CI/CD

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Runner

.gitlab-ci.yml Runner Runner GitLab.

Runner GitLab

Runner Runner.

GitLab

RHEL/CentOS/Fedora

```
# For RHEL/CentOS/Fedora
curl -L https://packages.gitlab.com/install/repositories/runner/gitlab-runner/script.rpm.sh |
sudo bash

# For RHEL/CentOS/Fedora
sudo yum install gitlab-runner
```

Runner Shared Runners (Runner, GitLab), Specific Runners (Runner,), Group
Shared Runners GitLab Specific Runners Group Runners.

Step1: (token)

Specific Runners GitLab » CI/CD Runner Runner CI/
vue-element-admin

Step2: Executors

Shell

Shell

Docker

Docker

Step3:

Executors, Runner

Linux

```
sudo gitlab-runner register
```

2. GitLab instance URL, URL

Please enter the gitlab-ci coordinator URL (e.g. https://gitlab.com/):
https://gitlab.eaglesoftware.cn/

Please enter the gitlab-ci token for this runner:
xxxxxxxxxxxxxxxxxxxxxx

4. Runner CI/CD

Please enter the gitlab-ci description for this runner:
[localhost.localdomain]: vm-wuzhuangzhuang

5. Runner Runner, CI/CD

Please enter the gitlab-ci tags for this runner (comma separated):
vm-wzz,centos

6. Runner Executors

Please enter the executor: docker+machine, docker-ssh+machine, kubernetes, virtualbox,

```
docker, docker-ssh, parallels, shell, ssh, custom:
shell
```

7. Docker executor, .gitlab-ci.yml

vue-element-admin CI/CD

CI/CD (stages)

CI/CD

vue-element-admin npm CentOS

Version 1: Shell

Step1: Runner

Step2:

README.md, node 12.16.1, Development Tools. (.travis.yml

```
# nodejs
sudo yum remove nodejs
#
sudo yum clean all
# https://github.com/nodesource/distributions/blob/master/README.md#debinstall
curl -sL https://rpm.nodesource.com/setup_10.x | sudo bash -
# nodejs
sudo yum install -y nodejs
#
yum install gcc-c++ make
#
# yum groupinstall 'Development Tools'
#
npm version
```

:

```
{ npm: '6.13.4',
  ares: '1.15.0',
```

```
  brotli: '1.0.7',
  cldr: '35.1',
  http_parser: '2.9.3',
  icu: '64.2',
  modules: '64',
  napi: '5',
  nghttp2: '1.39.2',
  node: '10.19.0',
  openssl: '1.1.1d',
  tz: '2019c',
  unicode: '12.1',
  uv: '1.28.0',
  v8: '6.8.275.32-node.55',
  zlib: '1.2.11' }
```

Step3:

gitlab-runner docker gitlab-runner docker

```
sudo usermod -aG docker gitlab-runner
sudo -u gitlab-runner -H docker info
```

Step4: .gitlab-ci.yml

`.gitlab-ci.yml` | [GitLab CI/CD Pipeline Configuration Reference](#).

v1.1 -

1 `.gitlab-ci.yml`

```
stages:
  - build
  - deploy

# stage
before_script:
  - pwd
  - npm set registry https://mirrors.huaweicloud.com/repository/npm/

cache:
```

```

paths:
  - node_modules/
  - dist

build_job:
  stage: build
  tags:
    - centos
    - vm- wzz
  script:
    - echo ' '
    - npm install
    - rm -rf ./dist
    - npm run build

deploy_job:
  stage: deploy
  tags:
    - centos
    - vm- wzz
  script:
    - echo ' '
    - cd docker- compose
    - docker- compose stop
    - docker- compose up - d

```

, 03:06, build_job 02:03, deploy_job 01:02, deploy_job

deploy_job GitLab build_job node_modules/ dist/

```

116 ./public
1184 ./ .git
44 ./plop- templates
9324 ./dist
8 ./build
12 ./docker- compose
84 ./mock
450948 ./node_modules
2868 ./src
40 ./tests

```

v1.2 -

`.gitlab-ci.yml`

```
stages:
  - build

# stage
before_script:
  - pwd
  - npm set registry https://mirrors.huaweicloud.com/repository/npm/

cache:
  paths:
    - node_modules/
    - dist

build_job:
  stage: build
  tags:
    - shell
    - vm-wzz
  script:
    - echo ' + '
    - npm install
    - npm run build
    - cd docker-compose
    - docker-compose stop
    - docker-compose up -d
```

`package.json` | `npm install`

v1.3 - npm install

`.gitlab-ci.yml` | `package.json` | `npm install`.

01:23

```
stages:
```

```

- npm_install
- build

# stage
before_script:
- pwd
- npm set registry https://mirrors.huaweicloud.com/repository/npm/

cache:
  paths:
    - node_modules/

npm_install_job:
  stage: npm_install
  tags:
    - shell
    - vm-wzz
  script:
    - npm install
  only:
    changes:
      - package.json

build_job:
  stage: build
  tags:
    - shell
    - vm-wzz
  script:
    - npm run build
    - cd docker-compose
    - docker-compose stop
    - docker-compose up -d

```

docker-compose/

Docker

Git ?

Runner

:

1. The remote end hung up unexpectedly

```
Git /home/gitlab-runner/builds/z5U7Uaf7/0/opd/vue-element-admin/.git/
error: RPC failed; result=6, HTTP code = 0
fatal: The remote end hung up unexpectedly
ERROR: Job failed: exit status 1
```

2. Could not resolve host: gitlab.eaglesoftware.cn

Fetching changes with git depth set to 50...

00:01

```
Git /home/gitlab-runner/builds/z5U7Uaf7/0/opd/vue-element-admin/.git/
fatal: unable to access 'https://gitlab-ci-token:[MASKED]@gitlab.eaglesoftware.cn/opd/vue-
element-admin.git/': Could not resolve host: gitlab.eaglesoftware.cn; Unknown error
ERROR: Job failed: exit status 1
```

3. Could not resolve host: github.com (npm install)

```
npm ERR! Error while executing:
npm ERR! /usr/bin/git ls-remote -h -t https://github.com/nhn/raphael.git
npm ERR!
npm ERR! fatal: unable to access 'https://github.com/nhn/raphael.git/': Could not resolve
host: github.com; Unknown error
npm ERR!
npm ERR! exited with error code: 128
npm ERR! A complete log of this run can be found in:
npm ERR! /home/gitlab-runner/.npm/_logs/2020-03-09T07_25_38_871Z-debug.log
ERROR: Job failed: exit status 1
```

4. git fetch-pack: expected shallow list


```
Running on localhost.localdomain...
```

```
00: 00
```

```
Fetching changes with git depth set to 50...
```

```
00: 03
```

```
Git /home/gitlab-runner/builds/z5U7Uaf7/0/opd/vue-element-admin/.git/
```

```
fatal: git fetch-pack: expected shallow list
```

```
fatal: The remote end hung up unexpectedly
```

```
ERROR: Job failed: exit status 1
```

3 4 CentOS 7 Runner Git (git version 1.8.3.1), G

CentOS 7 [Git ius.io](#) :

```
yum install \
https://repo.ius.io/ius-release-el7.rpm \
https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
yum repolist
yum remove git
yum provides git
yum install git222
git --version
# git gitlab-runner,
yum install gitlab-runner
```

node

node node 12.16.1,

Docker,

Docker Engine

```
$ docker-compose stop
Couldn't connect to Docker daemon at http+docker://localhost - is it running?
If it's at a non-standard location, specify the URL with the DOCKER_HOST environment
variable.
ERROR: Job failed: exit status 1
```

Docker Engine

```
systemctl start docker
systemctl enable docker
```

Version 2: Docker

Why

docker ssh
runner IP

Step1: Runner

:

- gitlab-ci tags: vm-wzz, docker
- executor: docker
- default Docker image: node:10.19.0-buster ()

Step2: GitLab

passphrase,

```
$ ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/c/Users/96129/.ssh/id_rsa): id_rsa_ci_test
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in id_rsa_ci_test.
Your public key has been saved in id_rsa_ci_test.pub.
$ ssh-copy-id -i id_rsa_ci_test.pub root@10.44.111.27
$ cat id_rsa_ci_test
```

GitLab » CI/CD 3 :

- SERVER_HOST: IP , 10.44.111.27
- SERVER_USER: login, root
- STAGING_PRIVATE_KEY: cat id_rsa_ci_test

3 .gitlab-ci.yml

Step3: .gitlab-ci.yml

.gitlab-ci.yml

```
image: node:10.19.0-buster

stages:
  - npm_install
  - build_docker
  - deploy

variables:
  TARGET_DIR: ~/vue-element-admin/

# stage
before_script:
  - 'which ssh-agent || ( apt-get update -y && apt-get install openssh-client -y )'
  - mkdir -p ~/.ssh
  - eval $(ssh-agent -s)
  - '[[ -f /.dockerenv ]] && echo -e "Host *\n\tStrictHostKeyChecking no\n\n" >
~/.ssh/config'
  - ssh-add <(echo "$STAGING_PRIVATE_KEY")
  - npm set registry https://mirrors.huaweicloud.com/repository/npm/

stage_npm_install:
  stage: npm_install
  tags:
    - docker
    - vm-wzz
  cache:
    paths:
      - node_modules/
  script:
    - npm install
  only:
    changes:
      - package.json

stage_build_docker:
```

```

stage: build_docker
tags:
  - docker
  - vm- wzz
script:
  - ssh $SERVER_USER@$SERVER_HOST "mkdir -p $TARGET_DIR/docker-compose/"
  - scp -r docker-compose/* $SERVER_USER@$SERVER_HOST: $TARGET_DIR/docker-compose/
  - ssh $SERVER_USER@$SERVER_HOST "docker-compose -f $TARGET_DIR/docker-compose/docker-
compose.yml build"
only:
  changes:
    - docker-compose/**/*

stage_deploy:
  stage: deploy
  artifacts:
    paths:
      - dist/
  tags:
    - docker
    - vm- wzz
  cache:
    paths:
      - node_modules/
    policy: pull
  script:
    - npm run build
    - ssh $SERVER_USER@$SERVER_HOST "mkdir -p $TARGET_DIR/dist/"
    - scp -r dist/* $SERVER_USER@$SERVER_HOST: $TARGET_DIR/dist/
    - ssh $SERVER_USER@$SERVER_HOST "mkdir -p $TARGET_DIR/docker-compose/"
    - scp -r docker-compose/* $SERVER_USER@$SERVER_HOST: $TARGET_DIR/docker-compose/
    - ssh $SERVER_USER@$SERVER_HOST "cd $TARGET_DIR/docker-compose/ && docker-compose stop &&
docker-compose up -d"

```

3 1 npm_install, package.json

2 build_docker, docker-compose/ Dockerfile, nginx

3 deploy, 1 node_modules/,

3	1	1	package.json	.gitlab-ci.yml	package.json
GitLab	CI / CD	"	"		
docker	Version 1		GitLab	02:55 (package.json
			IP		

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