项目部署文档

服务器配置

阿里云云服务器

- Centos 7
- 1核2G 1M带宽 40G云盘
- ip:47.94.129.13

Jenkins安装

安装

- 在服务器上安装jdk11

```
yum install java-11-openjdk -y
java --version # 判断jdk是否安装成功
```

- 在jenkins官网上安装最新稳定版jenkins

认证失败解决办法sudo yum install -y ca-certificates

```
# 下载repo
sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo
sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key
# yum下载
yum install epel-release # repository that provides 'daemonize'
yum install java-11-openjdk-devel
yum install jenkins
# 启动jenkins
systemctl start jenkins
systemctl enable jenkins
```

- `vi /etc/sysconfig/jenkins`并修改端口为8082

```
# $JENKINS_HOME location. Do not enable this, "true", unless
# you know what you're doing. See JENKINS-23273.
#
#JENKINS_INSTALL_SKIP_CHOWN="false"

## Type: string
## Default:     "-Djava.awt.headless=true"
## ServiceRestart: jenkins
#
# Options to pass to java when running Jenkins.
#
JENKINS_JAVA_OPTIONS="-Djava.awt.headless=true"

## Type:        integer(0:65535)
## Default:     8080
## ServiceRestart: jenkins
#
# Port Jenkins is listening on.
# Set to -1 to disable
#
JENKINS_PORT="8082"

## Type:        string
## Default:     ""
## ServiceRestart: jenkins
#
# IP address Jenkins listens on for HTTP requests.
# Default is all interfaces (0.0.0.0).
#
JENKINS_LISTEN_ADDRESS=""

## Type:        integer(0:65535)
## Default:     ""
## ServiceRestart: jenkins
```

- 访问8082端口,初始化服务

端口修改失败？
https://blog.csdn.net/Lifereunion/article/details/123430619

配置

- 初始化账户
- 在jenkins全局配置中配置jdk、maven、git工具（maven、git的安装过程略）
- jenkins插件配置(除默认推荐外的)

```
blue ocean # pipeline的一个ui
ssh # 远程连接
nodejs # 插件
```

从初始化开始黄色的三行在浏览器输入ip:port回车配置

blue ocean
ssh
nodejs在Jenkins网页里面下载

docker安装

```
sudo yum remove docker \
                  docker-client \
                  docker-client-latest \
                  docker-common \
                  docker-latest \
                  docker-latest-logrotate \
                  docker-logrotate \
                  docker-engine



sudo yum install -y yum-utils
sudo yum-config-manager \
    --add-repo \
    https://download.docker.com/linux/centos/docker-ce.repo
```

```
sudo yum install docker-ce docker-ce-cli containerd.io


docker version
systemctl start docker && systemctl enable docker
```

mysql安装

```
wget https://dev.mysql.com/get/mysql80-community-release-el7-1.noarch.rpm

#安装yum源
yum localinstall mysql80-community-release-el7-1.noarch.rpm

#更新yum源
yum clean all
yum makecache

#开始安装MySQL
yum install mysql-community-server


systemctl start mysqld.service
systemctl enable mysqld.service

cat /var/log/mysqld.log | grep passwd

# 登录
mysql -uroot -p
# 修改密码
ALTER USER 'root'@'localhost' IDENTIFIED BY 'your_password';

#远程访问设置
mysql> use mysql;
mysql> update user set host='%' where user='root';
```

这条命令报错的话，前面加上一条yum module disable mysql

降低mysql密码安全性 https://blog.csdn.net/weixin_49891946/article/details/120791640

报错3：GPG key到期

登录后复制
The GPG keys listed for the "MySQL 5.7 Community Server" repository are already installed but they are not correct for this package.
1.
更新GPG key

rpm --import https://repo.mysql.com/RPM-GPG-KEY-mysql-2022

centos下yum方式安装mysql5.7,Error: GPG check FAILED与Unable to find a match: mysql-community-server https://blog.51cto.com/u_13691477/528548

nodejs安装

```
# As root
curl -fsSL https://rpm.nodesource.com/setup_16.x | bash

# 安装nodejs
yum install -y nodejs

# 测试安装是否成功
node -v
npm -v
```

nginx安装

这句不能执行，下面还是能执行

```
# 添加nginx源
sudo rpm -Uvh http://nginx.org/packages/centos/7/noarch/RPMS/nginx-release-centos-7-0.el7.ngx.noarch.rpm

# 安装nginx
sudo yum install -y nginx

# 设置开机自启动
sudo systemctl start nginx.service
sudo systemctl enable nginx.service
```

后端项目使用Jenkins创建流水线实现CI/CD

- 创建流水线项目 backend-pipeline
- 配置该流水线项目的Jenkinsfile
  - 项目代码与Jenkinsfile文件都保存在github仓库上便于版本管理
  - Jenkinsfile文件内容如下:

```
def VERSION = "v0"
def GITREPO = "git@github.com:zqrzxwkr-group/backend.git"
pipeline{
    agent { label 'master' }
    tools {
        jdk 'jdk11'
        maven 'maven3.6.3'
    }
    stages{
        stage("代码克隆"){
            steps{
                sh "cd /var/lib/jenkins/workspace/backend-pipeline && rm -rf ./*"
                git branch: 'main', credentialsId: '1', url: "${GITREPO}"
                echo "代码克隆完成"
            }
        }

        stage("代码构建打包"){
            steps{
                sh "cd /var/lib/jenkins/workspace/backend-pipeline/backend && mvn clean package"
                echo "代码构建打包完成"
            }
        }

        stage("更新服务"){
            steps{
                sh "cd /var/lib/jenkins/workspace/backend-pipeline/backend"
                sh "chmod +x restart_jar.sh"
                sh "./restart_jar.sh"
                echo "更新服务"
            }
        }
    }
```

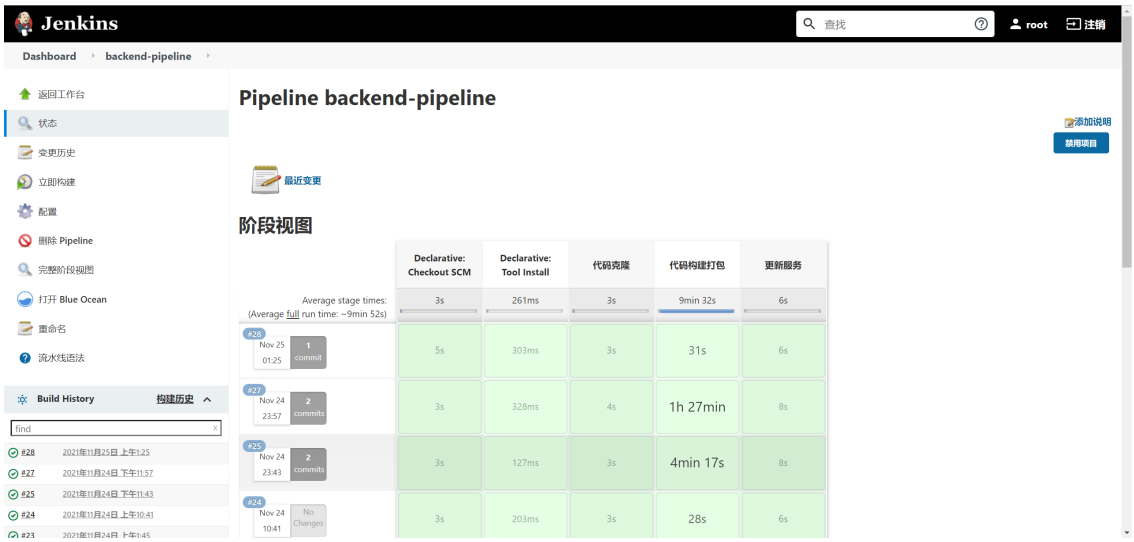
```
}
```

- 配置在服务器上面重启java服务的脚本 restart_jar.sh,内容如下:

```
export JENKINS_NODE_COOKIE=dontkillme
#!/bin/bash
APP_NAME=$(pwd)/backend/target/backend-0.0.1-SNAPSHOT.jar

#检查程序是否在运行
is_exist(){
  pid=`ps -ef|grep $APP_NAME|grep -v grep|awk '{print $2}'`
  #如果不存在返回1，存在返回0
  if [ -z "${pid}" ]; then
   return 1
  else
    return 0
  fi
}

#启动方法
start(){
  is_exist
  if [ $? -eq 0 ]; then
    echo "${APP_NAME} is already running. pid=${pid}"
  else
    echo "启动${APP_NAME}"
    nohup java -jar ${APP_NAME} > log.out 2>&1 &
    echo "启动结束"
  fi
}

#停止方法
stop(){
  is_exist
  if [ $? -eq "0" ]; then
    kill -9 $pid
  else
    echo "${APP_NAME} is not running"
  fi
}

#输出运行状态
status(){
  is_exist
  if [ $? -eq "0" ]; then
    echo "${APP_NAME} is running. Pid is ${pid}"
  else
    echo "${APP_NAME} is NOT running."
  fi
}

#重启
restart(){
  stop
  sleep 5
  start
}
```

```
restart
```

- 配置完成后,每次在本地push代码后,只需在服务器上点击构建就能自动部署了



- 可以访问 http://47.94.129.13:8081/swagger-ui.html 来查看接口文档

前端项目部署

- 在本地执行`npm run build`命令打包
- 将打包生成的`/dist`文件夹里的`static`、`index.html`上传到服务器
- 修改`nginx.conf`配置

- 访问服务器的80端口,测试前端界面是否部署成功

前端部署成功