

Gerrit 安装与使用

[Gerrit 官方文档](#)

Gerrit 安装

在Linux服务器上安装相关软件

1. 安装jdk
2. 安装Git
3. 安装httpd

创建Gerrit目录

```
mkdir /root/gerrit
```

下载Gerrit安装包

```
cd /root/gerrit
wget https://gerrit-releases.storage.googleapis.com/gerrit-3.2.7.war
```

启动Gerrit

```
java -jar gerrit-3.2.7.war init -d review_site

# Location of Git repositories      [git]: /root/gerrit/gitwork
# Authentication method            [openid?]: HTTP
# Canonical URL                    [http://localhost:8080/]:
http://39.105.47.81:8080/
# Install plugin codemirror-editor version v3.2.7 [y/N]? y
# Install plugin commit-message-length-validator version v3.2.7 [y/N]? y
# Install plugin delete-project version v3.2.7 [y/N]? y
# Install plugin download-commands version v3.2.7 [y/N]? y
# Install plugin gitiles version v3.2.7 [y/N]? y
# Install plugin hooks version v3.2.7 [y/N]? y
# Install plugin plugin-manager version v3.2.7 [y/N]? y
# Install plugin replication version v3.2.7 [y/N]? y
# Install plugin reviewnotes version v3.2.7 [y/N]? y
# Install plugin singleusergroup version v3.2.7 [y/N]? y
# Install plugin webhooks version v3.2.7 [y/N]? y

# 以上选项设置相关值，其他默认Enter
```

查看Gerrit配置

```
vim /root/gerrit/review_site/etc/gerrit.config
```

```
[gerrit]
  basePath = /root/gerrit/gitwork
  canonicalweburl = http://39.105.47.81:8080/
  serverId = 6718b3aa-2b8e-4a4a-bf5b-ac9738b42353
[container]
```

```

    javaOptions = "-
Dflogger.backend_factory=com.google.common.flogger.backend.log4j.Log4jBackendFac
tory#getInstance"
    javaOptions = "-
Dflogger.logging_context=com.google.gerrit.server.logging.LoggingContext#getInst
ance"
    user = root
    javaHome = /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.272.b10-3.e18_3.x86_64/jre
[index]
    type = lucene
[auth]
    type = HTTP
[receive]
    enableSignedPush = false
[sendemail]
    smtpServer = localhost
[sshd]
    listenAddress = *:29418
[httpd]
    listenUrl = http://*:8080/
[cache]
    directory = cache

```

Gerrit 命令行操作

```

# 查看gerrit状态
/root/gerrit/review_site/bin/gerrit.sh status
# 重启
/root/gerrit/review_site/bin/gerrit.sh restart
# 启动
/root/gerrit/review_site/bin/gerrit.sh start
# 关闭
/root/gerrit/review_site/bin/gerrit.sh stop

```

添加gerrit登录用户

```

# "-c"参数为创建，仅限第一次添加用户时使用，用户名和密码均为admin
htpasswd -cb /etc/httpd/passwords admin admin
# 第二次创建时不要加"-c"参数
htpasswd -b /etc/httpd/passwords user1 123456

```

设置httpd反向代理，http认证

```
vim /etc/httpd/conf/httpd.conf
```

```

Listen 8090
<VirtualHost *:8090>
    ServerName localhost
    ProxyRequests off
    ProxyVia off
    ProxyPreserveHost on

    <Proxy *>
        Order deny,allow
        Allow from all
    
```

Gerrit

CHANGES

YOUR

DOCUMENTATION

BROWSE

ADMIN

Repositories

Filter:

CREATE NEW

Groups

Repository Name Repository Browser Read only Repository Description

All-Projects

Access inherited by all other projects.

All-Users

view all

Individual user settings and preferences.

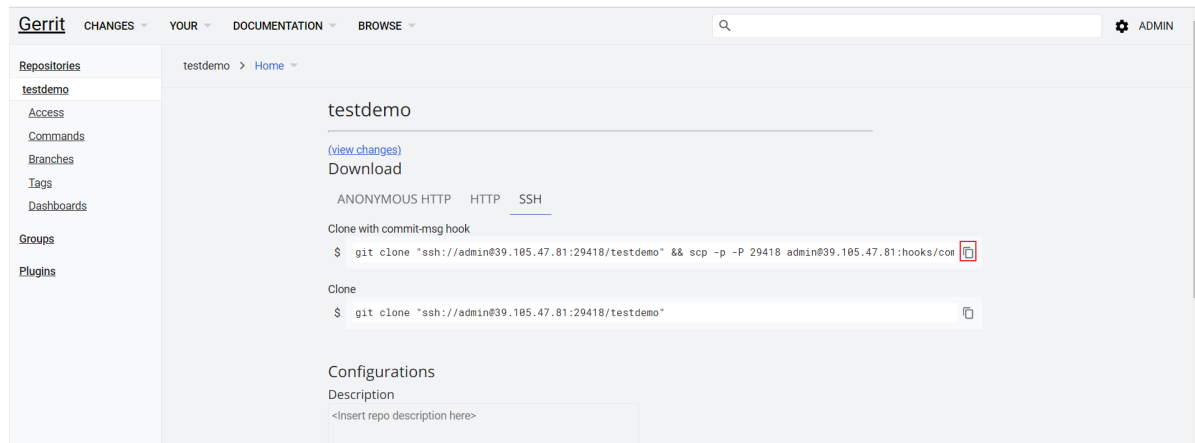
test1

view all

Plugins

Page 1

克隆项目到本地



```
# admin为项目所有者 testdemo为项目名称
git clone "ssh://admin@39.105.47.81:29418/testdemo" && scp -p -P 29418
admin@39.105.47.81:hooks/commit-msg "testdemo/.git/hooks/"
```

git 提交修改到Gerrit

```
vim hello.md
git add .
git commit -m 'add hello'
git push origin HEAD:refs/for/master
```

查看修改内容是否提交到Gerrit

Subject	Status	Owner	Assignee	Repo	Branch	Updated	Size	CR
Outgoing reviews (3)								
☆ add hello	-	admin	-	test2	master	10:47 AM	XS	
☆ aaaaa	-	admin	-	test1	master	10:26 AM	XS	
☆ add md1	-	admin	-	test1	master	10:26 AM	XS	
Incoming reviews								
No changes								
CCed on								
No changes								
Recently closed								
No changes								

查看修改内容是否提交到Git仓库

```
# 重新找个目录
git clone ssh://admin@39.105.47.81:29418/testdemo
# 修改内容没有被提交到Git仓库
```

查看修改内容

Gerrit

CHANGESYOURDOCUMENTATIONBROWSE

ADMIN

☆ Active

add hello

CODE-REVIEW+2REBASEABANDONEDIT

Updated10:47 AM

Owneradmin

Authoruser1

Committeruser1

AssigneeSet assignee...

ReviewersADD REVIEWER

CCADD CC

Repo**test2**

Branch**master**

Parent51e994b

TopicADD TOPIC

StrategyMerge if Necessary

HashtagsADD HASHTAG

REPLY

add hello

Change-Id: Ibef3ba45d546b5d09a80adb378398b65f9fa007d

Code-Review

No votes.

Files

Base

Patchset 1

b1e5acc

ADD PATCHSET DESCRIPTION

UPDATE CHANGEDOWNLOADEXPAND ALL

File	Comments	Size	Delta
Commit message			
A hello.md			+2 -0 Reviewed

Channel

Comment Thread

对代码进行建议

+2 直接可以进行提交

☆ Active

add hello

CODE-REVIEW+2REBASE

Updated10:47 AM

Owneradmin

Authoruser1

Committeruser1

AssigneeSet assignee...

ReviewersADD REVIEWER

CCADD CC

Repo**test2**

Branch**master**

Parent51e994b

TopicADD TOPIC

StrategyMerge if Necessary

HashtagsADD HASHTAG

REPLY

add hello

Change-Id: Ibef3ba45d546b5d09a80adb378398b65f9fa007d

Code-Review

No votes.

Files

Base

Patchset 1

b1e5acc

ADD PATCHSET DESCRIPTION

UPDATE CHANGEDOWNLOADEXPAND ALL

File	Comments	Size	Delta
Commit message			
A hello.md			+2 -0 Reviewed

Channel

Comment Thread

提交代码

☆ Ready to submit

add hello

SUBMITREBASEABANDONEDIT

Updated10:59 AM

Owneradmin

Authoruser1

Committeruser1

AssigneeSet assignee...

ReviewersADD REVIEWER

CCADD CC

Repo**test2**

Branch**master**

Parent51e994b

TopicADD TOPIC

StrategyMerge if Necessary

HashtagsADD HASHTAG

REPLY

add hello

Change-Id: Ibef3ba45d546b5d09a80adb378398b65f9fa007d

Code-Review

+2 admin

Files

Base

Patchset 1

b1e5acc

ADD PATCHSET DESCRIPTION

UPDATE CHANGEDOWNLOADEXPAND ALL

File	Comments	Size	Delta
Commit message			
A hello.md			+2 -0 Reviewed

Channel

Comment Thread

发现代码已经合并

继续查看Git仓库

```
git pull
# 发现代码已经在Git仓库
```

Gerrit 权限管理

code review +2 表示代码可以合并，有一个+2即可

code review +1 表示代码还行，但我不能让你合并

code review 0 表示没有任何意见，希望其他人处理

code review -1 表示代码还有问题，但是不影响其他人给你+2进行合并

code review -2 表示代码不能合并，其他人给你+2也不能合并

code review +1 +1 并不等于 +2

创建用户

创建dev, review两个用户

```
htpasswd -b /etc/httpd/passwords dev dev
```

```
htpasswd -b /etc/httpd/passwords review review
```

将用户注册到Gerrit上，需要用户登录一次Gerrit

退出登录，清除cookie即可

创建用户组

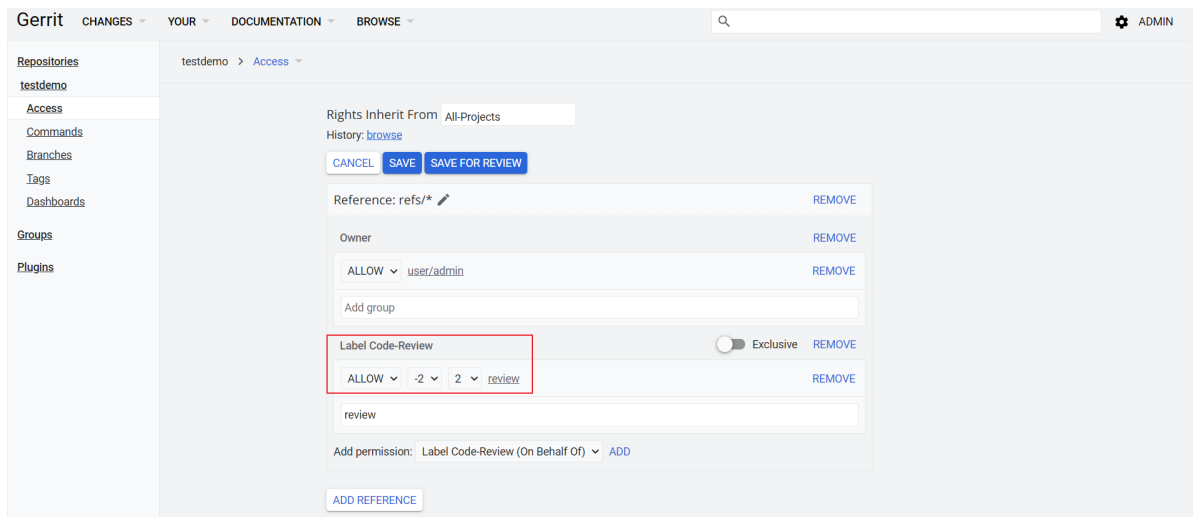
The screenshot shows the Gerrit Groups page. On the left sidebar, 'Groups' is selected. The main table lists groups: Administrators, Non-Interactive Users, dev, and review. A 'Create Group' modal dialog is open, showing 'dev' in the 'Group name' field. The 'CREATE' button is highlighted with a red box.

添加用户到用户组

The screenshot shows the Gerrit 'dev' group members page. The 'dev' group is selected. The 'Members' section shows 'dev' as a member, with an 'ADD' button highlighted by a red box. Below, the 'Included Groups' section is visible.

设置项目的reviewer

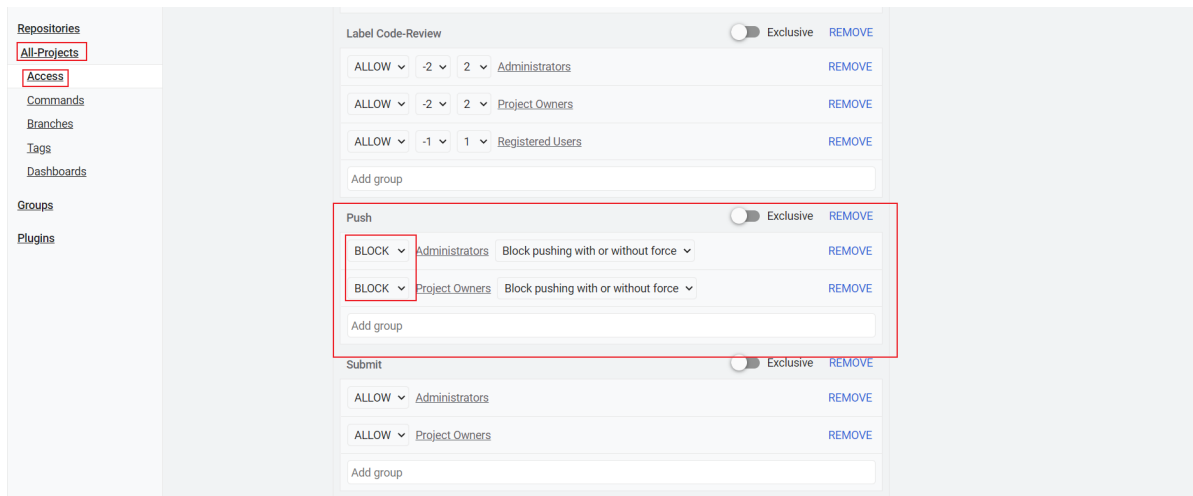
The screenshot shows the Gerrit 'testdemo' project access page. The 'Access' tab is selected. The 'Rights Inherit From' is set to 'All-Projects'. The 'Reference: refs/*' section shows the 'Owner' dropdown set to 'user/admin'. The 'EDIT' button is highlighted with a red box.



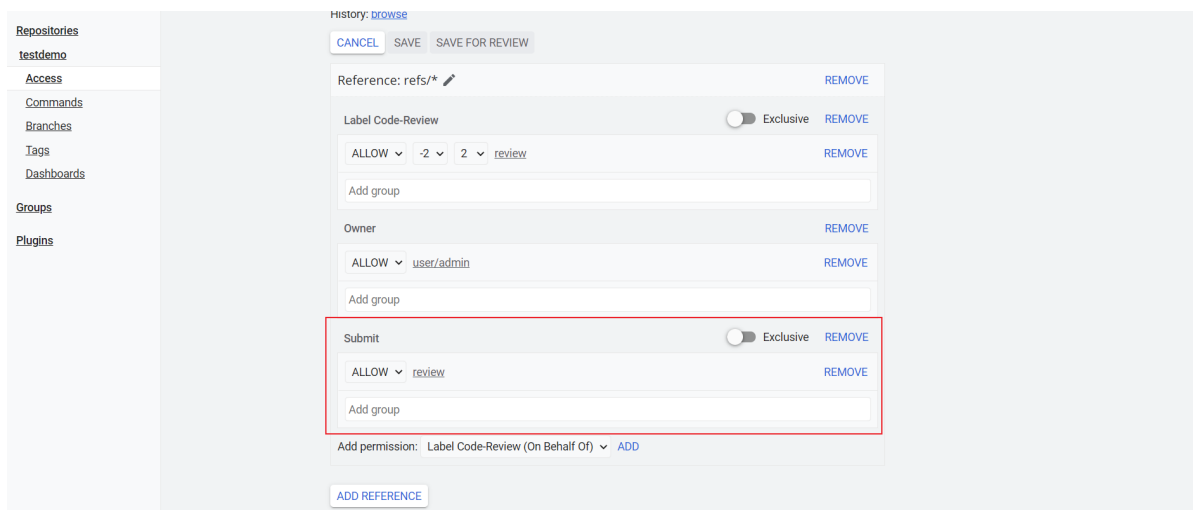
代码review

1. 项目owner可以直接code review +2 然后submit 代码合并
2. 项目owner可以添加reviewers code review 0
reviewer code review +2
owner submit
3. 提交者 git push origin HEAD:refs/for/master%r=review 指定review
owner submit

设置所有项目不能git push origin master



设置用户组有合并代码权限



遇到相关问题解决方案

在git push时未成功推送

```
[root@iZ2zeewcelgkyyw1ttadd5Z test2]# git push origin HEAD:refs/for/master
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Writing objects: 100% (3/3), 253 bytes | 253.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote: Processing changes: refs: 1, done
remote: ERROR: commit a9ab45a: missing Change-Id in message footer
remote:
remote: Hint: to automatically insert a Change-Id, install the hook:
remote:   gitdir=$(git rev-parse --git-dir); scp -p -P 29418 admin@39.105.47.81:hooks/commit-msg ${gitdir}/hooks/
remote: and then amend the commit:
remote:   git commit --amend --no-edit
remote: Finally, push your changes again
remote:
To ssh://39.105.47.81:29418/test2
! [remote rejected] HEAD -> refs/for/master (commit a9ab45a: missing Change-Id in message footer)
error: failed to push some refs to 'ssh://39.105.47.81:29418/test2'
```

```
# 执行提示内容
gitdir=$(git rev-parse --git-dir); scp -p -P 29418
admin@39.105.47.81:hooks/commit-msg ${gitdir}/hooks/
git commit --amend --no-edit

# 重新提交
git push origin HEAD:refs/for/master
```

在git commit时报错

```
[root@VM-0-4-centos test2]# git commit -m 'helll 222'
git: 'interpret-trailers' 不是一个 git 命令。参见 'git --help'。
cannot insert change-id line in .git/COMMIT_EDITMSG
```

安装git 2.0之后版本

```
# 卸载原来的git
yum remove git

# Git第三方仓库安装
url https://setup.ius.io | sh

# 查看git版本
yum search git

# 安装git224
yum install git224
```

小技巧

git 别名设置

```
vim ~/.gitconfig
```

添加内容

```
[alias]
cr = "!git push origin HEAD:refs/for/\${1}" #"
```

提交到到gerrit时，可以用git cr master 代替git push origin HEAD:refs/for/master

提交代码时设置reviewer

```
# reviewer1为审查者
git cr master%r=reviewer1

# 以上命令等价于
git push origin HEAD:refs/for/master%r=reviewer1
```