

The title "Git-Gerrit" is centered in a white sans-serif font. It is framed by white L-shaped lines: one on the top-left and one on the bottom-right, creating a partial rectangular border around the text.

Git-Gerrit

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Git Branching - Create, Delete, Checkout (1/2)

- Check the existing branch list.
 - `git branch` // This will show all the local branches.
 - `git branch -r` // This will show all the remote branches.
 - `git branch -a` // This will show all the local and remote branches.
- Note the asterisk (*) on master branch. This means you are currently in master branch.
- Create a local branch
 - `git branch <branch_name>`
 - Example:
`git branch my_local_branch`
- Now you can check the branch list again.
- Please note that you are still on your previous branch.
- To switch to your new branch you need to checkout to that branch.
`git checkout my_local_branch`

```
rubon@Rubon: /media/Projects/Proje
rubon@Rubon: /media/Projects/Projects/tes
t/newfolder$ git branch -a
* master
remotes/origin/HEAD -> origin/master
remotes/origin/foo2
remotes/origin/foo3
remotes/origin/hello_branch
remotes/origin/master
remotes/origin/testbranch
rubon@Rubon: /media/Projects/Projects/tes
t/newfolder$
```

```
rubon@Rubon: /media/Projects/Proje
rubon@Rubon: /media/Projects/Projects/tes
t/newfolder$ git branch my_local_branch
rubon@Rubon: /media/Projects/Projects/tes
t/newfolder$ git branch
* master
my_local_branch
rubon@Rubon: /media/Projects/Projects/tes
t/newfolder$
```

Git Branching - Create, Delete, Checkout (2/2)

- To create new branch and checkout to that branch in a single command
`git checkout -b my_local_branch`
- Delete the created local branch
`git branch -d my_local_branch`
- Note that you cannot delete the branch that you are currently in.
- You may not able to delete a branch if it has any changes that is not committed yet. If you still want to delete that branch, use the following command.
`git branch -D my_local_branch`

Git Ignore

- Specifies files that you don't want Git to track under version control.
- Commonly used for compiled files, binaries, large asset files (e.g. images).
- Can use wildcards (e.g. *.dat, *.png, images/*, temp/*, etc.)
- Create .gitignore file and specify files and folders

\$ touch .gitignore

Git Re-Installation to compatible with Gerrit for Windows User

- In order to connect with remote repository - Gerrit, we have to re-install Git with specific version only Windows User. You need to download the compatible version of Git from the following link and install it again.
- <https://github.com/git-for-windows/git/releases/download/v2.8.1.windows.1/Git-2.8.1-64-bit.exe>

Create SSH Key and Add SSH Key to review server

- Creating SSH key
 - Now from the GIT Bash command prompt or Windows default command prompt, type the following command.
ssh-keygen -t rsa
 - It will say “Enter file in which to save...” , don't type anything, press Enter
 - It will again ask for Passphrase, don't type anything, press Enter
 - It will again ask for confirmation on Passphrase, don't type anything, press Enter
 - Note: You may input passphrase / password during key file generation. But this will ask you for passphrase every time you clone, pull or push.
 - After completing aforementioned steps public key will be saved in a file under .ssh folder, for example “C:\Users\Rubon\.ssh\id_rsa.pub” file
- Adding SSH Key to review server
 - Go to review server from your browser, <https://review2.bjitgroup.com:8443/>
 - Sign in by using your LDAP credentials
 - Click on 'Settings' icon,
 - Now from the left pane, click on “SSH Keys”,
 - Open 'id_rsa.pub' file in a text editor which you created earlier under the .ssh folder located at user
 - Copy the file content and paste on the New SSH Key text field on your browser.
 - Now press 'ADD NEW SSH KEY' button, SSH key will be added.

Git Clone from Remote Repository – Gerrit (1/2)

- Git Clone means download remote repository in your local drive.
- Clone command
`git clone ssh://<user.name>@review2.bjitgroup.com:29418/<project_name>`
- Example:
`git clone ssh://sajidul.huq@review2.bjitgroup.com:29418/example`
`git clone ssh://sajidul.huq@review2.bjitgroup.com:29418/p0962_newns`
- The above command will download the repository on your current directory.
- If you want to download in a different directory, just mention the directory name or path in the command
`git clone ssh://<user.name>@review2.bjitgroup.com:29418/project_name <local_path>`
- Example:
`git clone ssh://sajidul.huq@review2.bjitgroup.com:29418/test NewFolder`
`git clone ssh://sajidul.huq@review2.bjitgroup.com:29418/test /home/rubon/workspace/NewNS/Source`
- If you want to work in Remote branch after downloading the remote repository to your local repository, you need to checkout that branch.
`$ git checkout origin/remote-branch-name`

Git Clone from Remote Repository – Gerrit (2/2)

- Clone remote repository with commit-msg hook.
- This will automatically add the change-id in your commit message.
- Go to review server and select **Browse->Repositories** from top menu.
- This will show the project list that you have access. From this project list select your project.
- Now you will have the download/clone options as below picture.
- Out of the two command options, copy the command from Clone with commit-msg hook.
- FYI, we have one repository “example” with full access for all. You can do git training and experiment here.

example

[\(view changes\)](#)

Download

ANONYMOUS HTTP HTTP **SSH**

Clone with commit-msg hook

```
$ git clone "ssh://sajidul.huq@review2.bjitgroup.com:29418/example" && scp -p -P 29418 sajidul
```



Clone

```
$ git clone "ssh://sajidul.huq@review2.bjitgroup.com:29418/example"
```



Git Push to Remote Repository - Gerrit

- Please understand that commit is stored in your local system. Your changes still in your PC only.
- Now you need to upload your changes for review to the review server.
 - `git push origin HEAD:refs/for/<remote_branch_name>`
 - `git push origin HEAD:refs/for/master`
 - `git push origin HEAD:refs/for/phase2`
- After push, go to the review server, <https://review2.bjitgroup.com:8443>, check your changes there.
- If you think your commit is okay and the reviewer can review now, please add reviewer from the review server.
- Suppose Hodayun Kabir is the TL/PM of your project and you want him to review your code. Then add him as reviewer if you feel that your commit is ready for review.

| Reviewer | Verified | Code Review |
|-----------------------------|-------------------------------------|-------------|
| Sajidul Huq | <input checked="" type="checkbox"/> | |

- Need Verified +1 (Verified)
- Need Code Review +2 (Looks good to me, approved)

Hodayun Kabir <hodayun.kabir@bjitgroup.com>

Add Reviewer

| Reviewer | Verified | Code Review |
|-------------------------------|-------------------------------------|-------------|
| Sajidul Huq | <input checked="" type="checkbox"/> | |
| Hodayun Kabir | <input checked="" type="checkbox"/> | |

- Need Verified +1 (Verified)
- Need Code Review +2 (Looks good to me, approved)

Add Reviewer

Gerrit Review

- For Gerrit Code review, go to the commit from home page
 - Reviewer can find in the **incoming reviews** section
 - Self reviewer can find in the **outgoing reviewer** section.
- Click on the file(s) for side by side diff view and review your code from there.

The screenshot displays the Gerrit web interface for a code review. At the top, there's a navigation bar with 'Gerrit', 'CHANGES', 'YOUR', 'DOCUMENTATION', and 'BROWSE' tabs, along with a search bar and a user profile 'SAJIDUL HUQ'. Below this, the review title '71007: gerrit test 2' is shown with an 'Active' status. Action buttons like 'REBASE', 'ABANDON', 'EDIT', and a menu icon are visible. The left sidebar contains metadata: 'Updated: Oct 29', 'Owner: Sajdul Huq', 'Assignee: Set assignee...', 'Reviewers: ADD REVIEWER', 'CC: ADD CC', 'Repo: p1303_freshers_training_2019_q3', 'Branch: master', 'Parent: 964f278', 'Topic: ADD TOPIC', 'Strategy: Merge if Necessary', and 'Hashtags: ADD HASHTAG'. The main area shows 'gerrit test 2' with a 'REPLY' button highlighted by a yellow circle. Below the title, the 'Change-Id' is 'I9de3db0d7a2de1086c47e7333aa6109860b6e727' and an 'EDIT' link is present. At the bottom, the 'Files' section shows a diff for 'Git Training/Rubon.txt' with a commit message 'Commit message' and a diff summary '+3 -1'.

GERRIT REVIEW – ADD REVIEW COMMENTS

File

```
1 Gerrit 3.0.3 testing...
2
3 adding patch-set
```

File

```
1 Gerrit 3.0.3 testing...
2
3 adding patch-set
DRAFT
Put your review comments here
☐ Resolved
4
5 Testing new commit.
```

CANCEL SAVE

this Resolved checkbox
is newly added.
This will help you to
track whether all review
comments has been
resolved or not.

Click on the line where
you would like to add
your review comments
and then Press C.
Comment editor will
appear.

GERRIT REVIEW – DOWNLOAD

REPLY (1)

gerrit

Change-Id

EDIT

Patch set 1 of 1

HTTP **SSH**

Checkout

```
$ git fetch "ssh://sajidul.huq@review2.bjitgroup.com:29418/p1303_freshers_training_2019_q3" r
```

Cherry Pick

```
$ git fetch "ssh://sajidul.huq@review2.bjitgroup.com:29418/p1303_freshers_training_2019_q3" r
```

Format Patch

```
$ git fetch "ssh://sajidul.huq@review2.bjitgroup.com:29418/p1303_freshers_training_2019_q3" r
```

Pull

```
$ git pull "ssh://sajidul.huq@review2.bjitgroup.com:29418/p1303_freshers_training_2019_q3" r
```

If you want to Cherry pick, copy this command and paste in your command prompt.

Patch file

[19a14bd.diff.base64](#) [19a14bd.diff.zip](#)

Archive

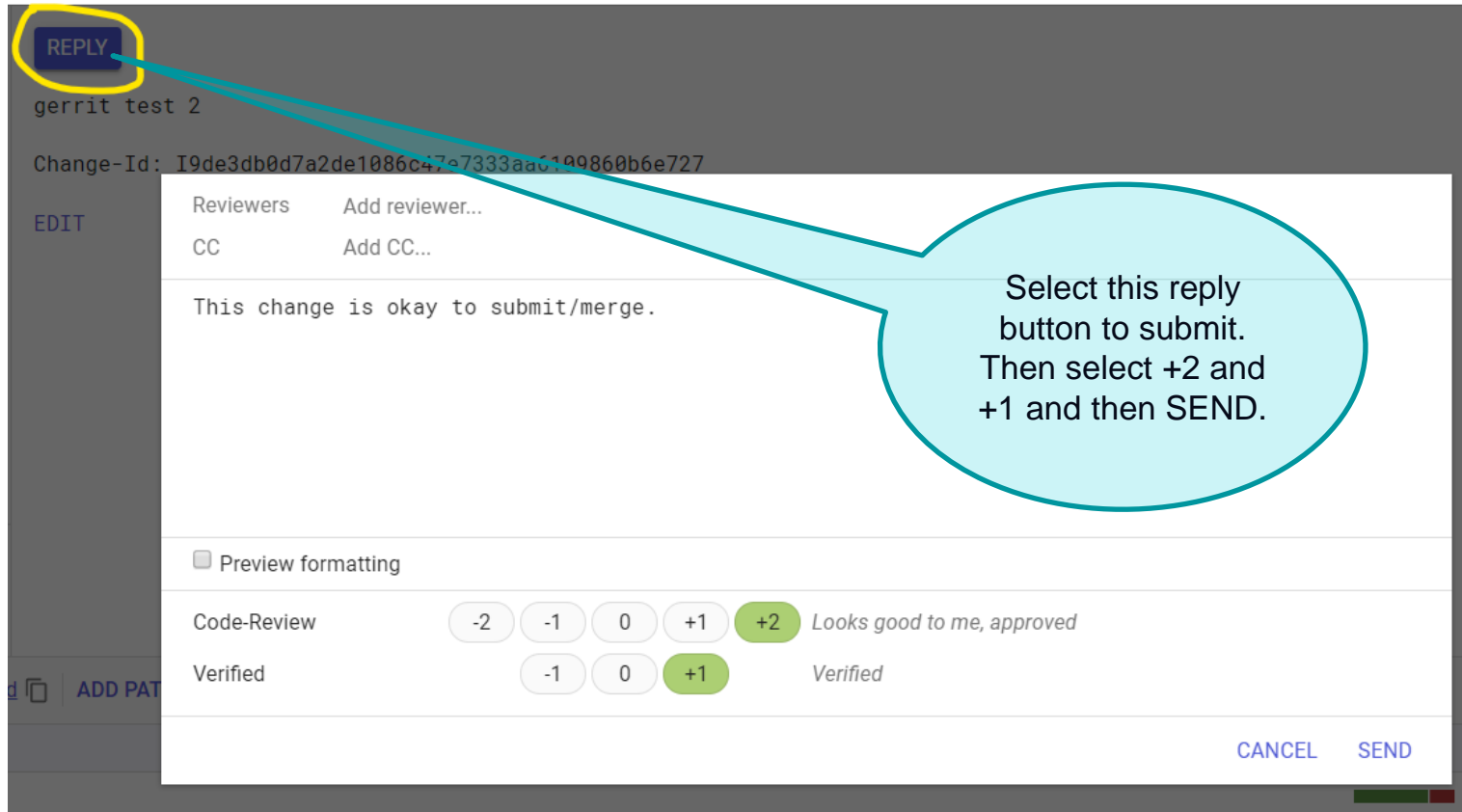
[tgz](#) [tar](#) [tbz2](#) [txz](#)

CLOSE

UPDATE CHANGE **DOWNLOAD** EXPAND ALL

| | | |
|-------|----------|---|
| | Reviewed | ▼ |
| +3 -1 | Reviewed | ▼ |
| +3 -1 | | |

GERRIT REVIEW – SUBMIT FOR MERGE (1/2)



The screenshot shows the Gerrit review interface for a change titled "gerrit test 2". The "Change-Id" is "I9de3db0d7a2de1086c47e7333aac199860b6e727". The "EDIT" button is visible on the left. The "Reviewers" and "CC" sections are empty. The review text states "This change is okay to submit/merge." Below this, there is a "Preview formatting" checkbox. The "Code-Review" section shows a row of buttons: -2, -1, 0, +1, and +2 (which is highlighted in green). To the right of these buttons is the text "Looks good to me, approved". The "Verified" section shows a row of buttons: -1, 0, and +1 (which is highlighted in green). To the right of these buttons is the text "Verified". At the bottom right, there are "CANCEL" and "SEND" buttons. A yellow circle highlights the "REPLY" button in the top left corner. A blue callout bubble points to the "+2" button in the "Code-Review" section, containing the text: "Select this reply button to submit. Then select +2 and +1 and then SEND."

gerrit test 2

Change-Id: I9de3db0d7a2de1086c47e7333aac199860b6e727

EDIT

Reviewers Add reviewer...

CC Add CC...

This change is okay to submit/merge.

☐ Preview formatting

Code-Review -2 -1 0 +1 +2 Looks good to me, approved

Verified -1 0 +1 Verified

CANCEL SEND

GERRIT REVIEW – SUBMIT FOR MERGE (2/2)

The screenshot shows a Gerrit review interface. At the top left, a yellow box highlights the 'Ready to submit' status. A callout bubble points to this status with the text 'Check this status after SUBMIT'. At the top right, a yellow box highlights the 'SUBMIT' button. A callout bubble points to this button with the text 'Press this SUBMIT button to submit(merge)'. The review details on the left include: Updated 1:01 PM, Owner Sajdul Huq, Assignee Set assignee..., Reviewers ADD REVIEWER, CC ADD CC, Repo p1303_freshers_training_2019_q3, Branch master, Parent 964f278, Topic ADD TOPIC, Strategy Merge if Necessary, and Hashtags ADD HASHTAG. The review content area shows 'gerrit test 2' and 'Change-Id: I9de3db0d7a2de1086c47e7333aa6109860b6e727'. The bottom section shows two reviews: 'Verified' by Sajdul Huq (+1) and 'Code-Review' by Sajdul Huq (+2).

Ready to submit 71007: gerrit test 2

Updated 1:01 PM
Owner Sajdul Huq
Assignee Set assignee...
Reviewers ADD REVIEWER
CC ADD CC
Repo p1303_freshers_training_2019_q3
Branch master
Parent 964f278
Topic ADD TOPIC
Strategy Merge if Necessary
Hashtags ADD HASHTAG

REPLY

gerrit test 2

Change-Id: I9de3db0d7a2de1086c47e7333aa6109860b6e727

EDIT

✓ Verified +1 Sajdul Huq
✓ Code-Review +2 Sajdul Huq

Check this status after SUBMIT

Press this SUBMIT button to submit(merge)

Git Help

If you are having trouble remembering commands or options for commands, you can use Git help.

- To see all the available options for the specific command

```
$ git command -help
```

- To see all possible commands

```
$ git help --all
```


A white L-shaped graphic consisting of a horizontal line and a vertical line meeting at a right angle, positioned to the left of the "Thank you for watching" text.

Thank you for watching

A white L-shaped graphic consisting of a horizontal line and a vertical line meeting at a right angle, positioned to the right of the "Thank you for watching" text.

Get in touch with us:

www.bjitgroup.com

