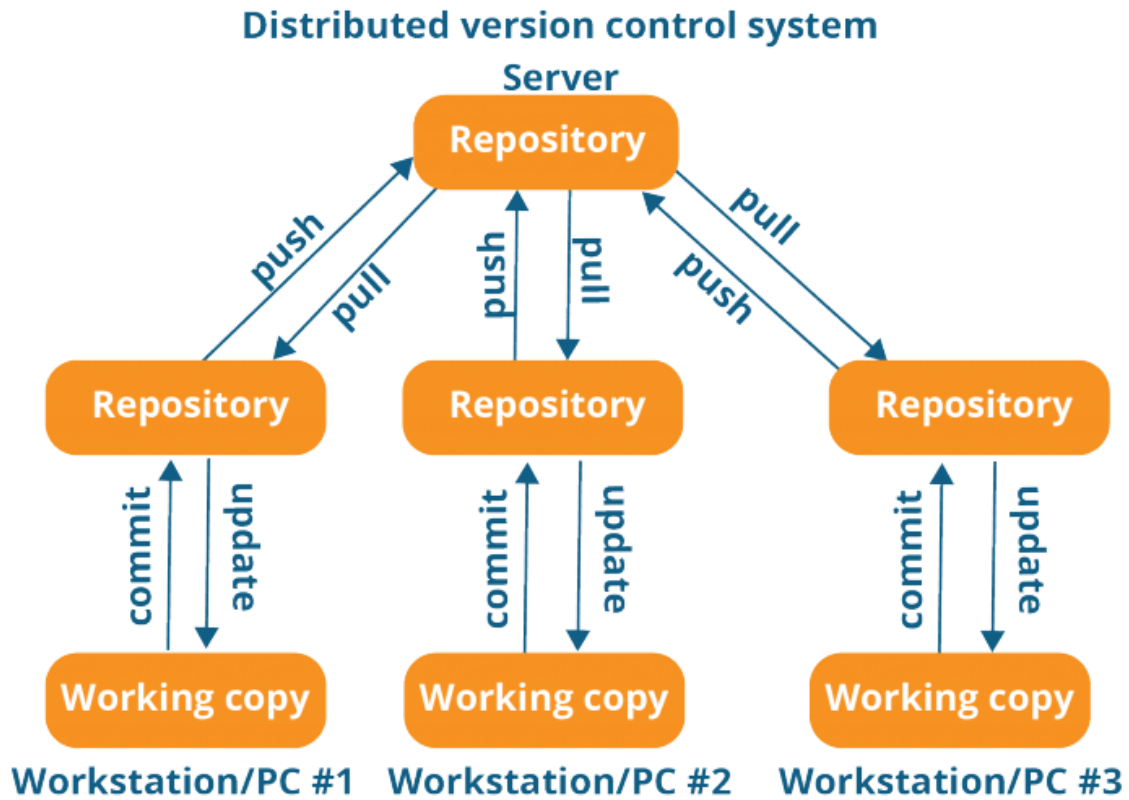
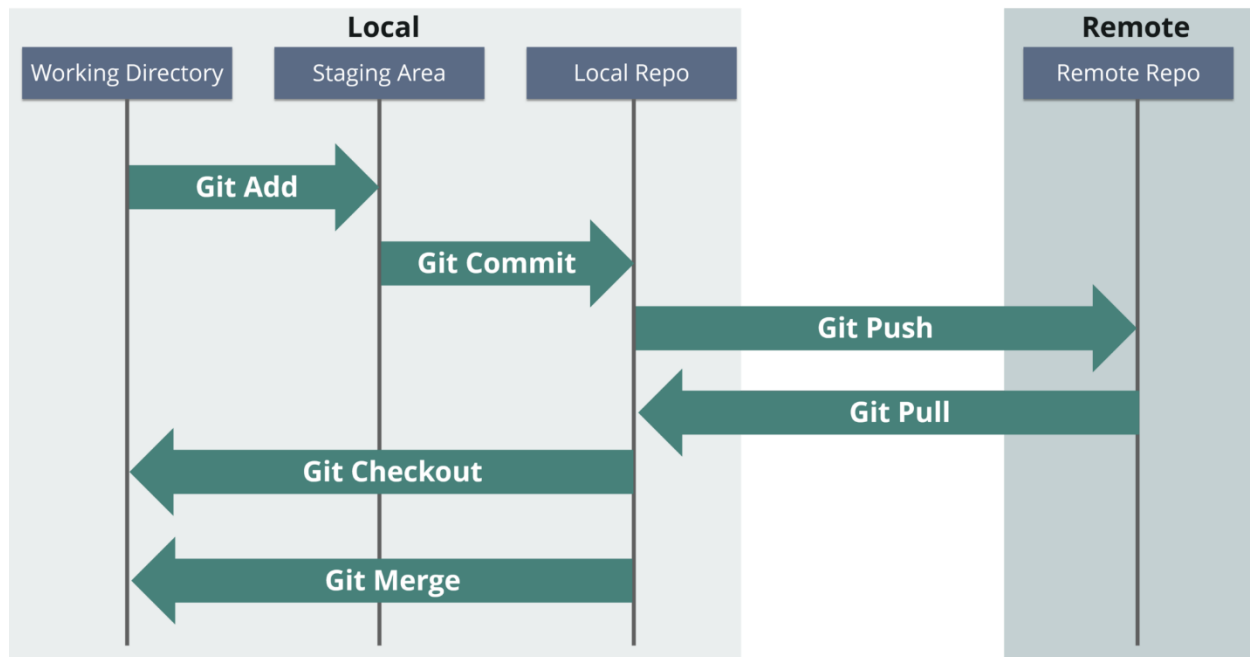


## Git Commands

### What is Git?



Git is a free, open-source distributed version control system. This tool handles everything from small to very large projects with speed and efficiency. Linus Torvalds created it in 2005 to develop the Linux Kernel. Git has the functionality, performance, security, and flexibility that most teams and individual developers need.



Tools like Git enable communication between the development and the operations team. When you are developing a large project with a huge number of collaborators, it is very important to have communication between the collaborators while making changes in the project. Commit messages in Git plays a very important role in communicating among the team. The bits and pieces that we all deploy lie in the Version Control system like Git. To succeed in DevOps, you need to have all of the communication in Version Control. Hence, Git plays a vital role in succeeding at DevOps.

### git init

**Usage:** `git init [repository name]`

This command creates a new repository.

```
Arvind.Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo
$ git init
Initialized empty Git repository in C:/Users/Arvind Phulare/Desktop/edureka-repo/.git/
```

### git config

**Usage:** `git config --global user.name "[name]"`

**Usage:** `git config --global user.email "[email address]"`

This command sets the author name and email address respectively. This is useful information with the commits.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git config --global user.name "arvind11"

Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git config --global user.email "arvind11@gmail.com"
```

## git clone

**Usage:** *git clone [url]*

This command lets you get a copy of a repository from an existing URL.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git clone https://github.com/ArvindEd/Edureka1.git
Cloning into 'Edureka1'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
```

## git add

**Usage:** *git add [file]*

This command adds a file to the staging area.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git add file.txt
```

**Usage:** *git add \**

This command adds one or more to the staging area.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git add *
```

## git commit

**Usage:** *git commit -m "[ Type in the commit message]"*

This command records or snapshots the file permanently in the version history.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git commit -m "first commit"
[master (root-commit) c025eb2] first commit
2 files changed, 4 insertions(+)
create mode 160000 Edureka1
create mode 100644 file.txt
```

**Usage:** *git commit -a*

This command commits any files you've added with the git add command and also commits any files you've changed since then.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git commit -a
On branch master
nothing to commit, working tree clean
```

## git status

**Usage:** *git status*

The git status command displays the state of the working directory and the staging area. This command lets you see the changes that are in the staging, those that are not staged and are not tracked by Git.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git status
On branch master
nothing to commit, working tree clean
```

## git show

**Usage:** *git show [commit]*

This command shows the metadata and content changes of the specified commit.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git show
commit c025eb2ca95ab7f94cfcb27bbf2aa017fdb87e65 (HEAD -> master)
Author: arvind11 <arvind11@gmail.com>
Date: Tue Sep 17 15:14:39 2019 +0530

    first commit

diff --git a/Edureka1 b/Edureka1
new file mode 160000
index 0000000..ab318e6
--- /dev/null
+++ b/Edureka1
@@ -0,0 +1 @@
+Subproject commit ab318e6cbc7121d628d544748007ac1a2aff67c0
diff --git a/file.txt b/file.txt
new file mode 100644
index 0000000..d433f38
--- /dev/null
+++ b/file.txt
@@ -0,0 +1,3 @@
+
+
+Hi, How are you?
```

```

Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git show f9b28577d0a8ee7cc1628d7ba2dd226605f1f308
commit f9b28577d0a8ee7cc1628d7ba2dd226605f1f308 (HEAD -> master)
Author: arvind11 <arvind11@gmail.com>
Date: Tue Sep 17 15:21:36 2019 +0530

    2nd file

diff --git a/file.py b/file.py
new file mode 100644
index 0000000..c40bc8f
--- /dev/null
+++ b/file.py
@@ -0,0 +1,3 @@
+
+
+print("Hello world")

```

## git rm

**Usage:** *git rm [file]*

This command deletes the file from your working directory and stages the deletion.

```

Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git rm file.py
rm 'file.py'

```

## git remote

**Usage:** *git remote add [variable name] [Remote Server Link]*

This command connects your local repository to the remote server.

```

Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo (master)
$ git remote add origin https://github.com/ArvindEd/Edureka.git

```

## git push

**Usage:** *git push [variable name] master*

This command sends the committed changes of the master branch to your remote repository.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (master)
$ git push origin master
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 291 bytes | 97.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/ArvindEd/Edureka1.git
   ab318e6..bf23c2b  master -> master
```

**Usage:** `git push [variable name] [branch]`

This command sends the branch commits to your remote repository.

**Usage:** `git push --all [variable name]`

This command pushes all branches to your remote repository.

**Usage:** `git push [variable name] :[branch name]`

This command deletes a branch on your remote repository.

## git pull

**Usage:** `git pull [Repository Link]`

This command fetches and merges changes on the remote server to your working directory.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (master)
$ git pull origin master
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
From https://github.com/ArvindEd/Edureka1
   * branch                master       -> FETCH_HEAD
   bf23c2b..16e249f  master       -> origin/master
Updating bf23c2b..16e249f
Fast-forward
 pqr.py | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 pqr.py
```

## git branch

**Usage:** `git branch`

This command lists all the local branches in the current repository.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (master)
$ git branch
* master
```

**Usage:** `git branch [branch name]`

This command creates a new branch.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (master)
$ git branch b1
```

**Usage:** *git branch -d [branch name]*

This command deletes the feature branch.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (master)
$ git branch -d b1
Deleted branch b1 (was 16e249f).
```

### git checkout

**Usage:** *git checkout [branch name]*

This command lets you switch from one branch to another.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (master)
$ git checkout b2
Switched to branch 'b2'
```

**Usage:** *git checkout -b [branch name]*

This DevOps Linux command creates a new branch and also switches to it.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (b2)
$ git checkout -b b3
Switched to a new branch 'b3'
```

### git merge

**Usage:** *git merge [branch name]*

This DevOps Linux command merges the specified branch's history into the current branch.

```
Arvind Phulare@DESKTOP-IEDC4TM MINGW64 ~/Desktop/edureka-repo/Edureka1 (b3)
$ git merge b3
Already up to date.
```

### git rebase

**Usage:** *git rebase [branch name]*

*git rebase master* – This command will move all our work from the current branch to the master.