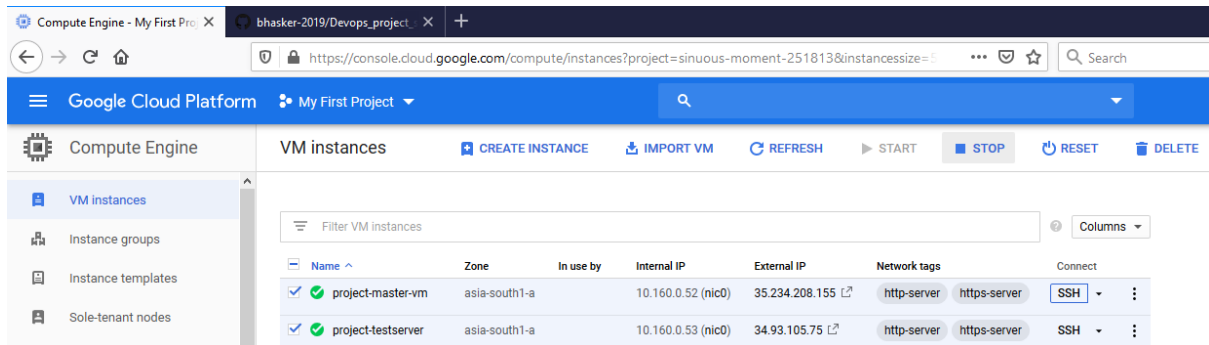


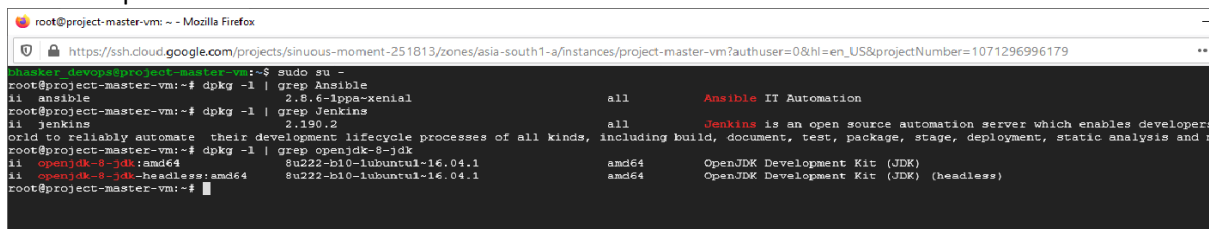
## DevOps Project by Bhasker S

Created the Project Master and TestServer on GCP cloud



Installed the following software on Master VM

1. Ansible
2. Jenkins
3. OpenJDK-8-JDK



Completed Jenkins configuration with build pipeline plugin

Compute Engine - My First P... Course Classroom | Edureka Installing Jenkins on Ubuntu Update Center [Jenkins]

34.93.181.112:8080/pluginManager/available

Jenkins

Back to Dashboard Manage Jenkins Update Center

Filter: build pipet

Updates Available Installed Advanced

Install	Name	Version
<input checked="" type="checkbox"/>	<a href="#">Build Pipeline</a> This plugin renders upstream and downstream connected jobs that typically form a build pipeline. In addition, it offers the ability to define manual triggers for jobs that require intervention prior to execution, e.g. an approval process outside of Jenkins. <b>Warning: This plugin version may not be safe to use. Please review the following security notices:</b> <ul style="list-style-type: none"><li>Stored XSS vulnerability</li></ul>	1.5.8
<input type="checkbox"/>	<a href="#">Pipeline timeline</a> An interactive build timeline to help you visualize your build pipeline and identify bottlenecks.	1.0.3
<input type="checkbox"/>	<a href="#">Webhook Step</a> Allows build pipelines to wait for notification from an external system before continuing.	1.3

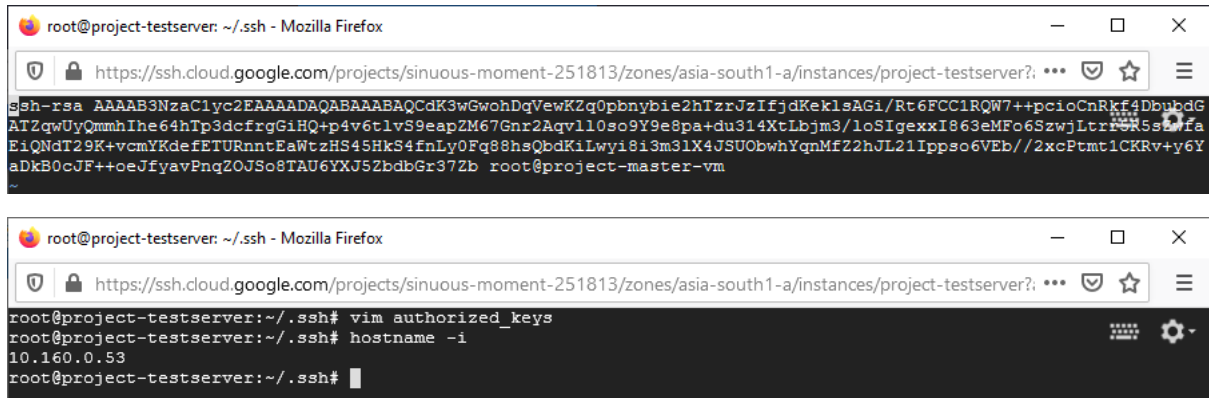
Install without restart Download now and install after restart Update information obtained: 53 min ago Check now

Page generated: Nov 7, 2019 10:03:07 AM UTC REST API Jenkins ver. 2.190.2

## Generating SSH keys in Master VM

```
root@project-master-vm: ~/.ssh - Mozilla Firefox
https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-master-vm
root@project-master-vm:~# ssh-keygen
Generating public/private rsa key pair.
Enter file in which to save the key (/root/.ssh/id_rsa):
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /root/.ssh/id_rsa.
Your public key has been saved in /root/.ssh/id_rsa.pub.
The key fingerprint is:
SHA256:1AlIDYN0VyCq4IVeJVe0vG1hsUuzTUmjml6JOEKMdVw root@project-master-vm
The key's randomart image is:
+---[RSA 2048]-----+
| .+oOOE.. o          |
| .B.B.o.o.o=.o       |
|o+ *   o.Boo         |
|= +   ..O O          |
|.o . o =SB .         |
| . o o               |
| .                   |
|+-----[SHA256]-----+
root@project-master-vm:~# cd .ssh
root@project-master-vm:~/.ssh# ls
authorized_keys id_rsa id_rsa.pub
root@project-master-vm:~/.ssh#
```

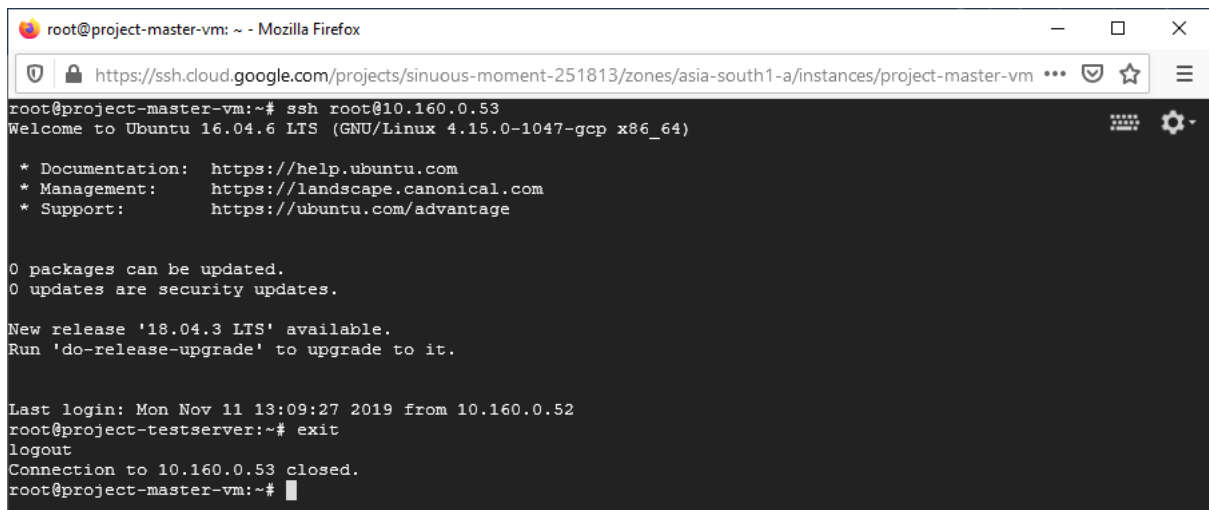
Added id\_rsa.pub key from master to slave



The screenshot shows a terminal window titled 'root@project-testserver: ~/.ssh - Mozilla Firefox'. The browser address bar shows 'https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-testserver?'. The terminal output shows a long SSH key being added to the 'authorized\_keys' file. The command 'hostname -i' is then executed, returning '10.160.0.53'.

```
root@project-testserver: ~/.ssh - Mozilla Firefox
https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-testserver?
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQCAK3wGwohDqVewKZq0pbnybie2hTzrJzIfjdKeklsAGi/Rt6FCC1RQW7++pcioCnRkf4DbubdG
ATZqwUyQmmhIhe64hTp3dcfrgG1HQ+p4v6tlvS9eapZM67Gnr2Aqv1l0so9Y9e8pa+du3l4XtLbjm3/loSIgexxI863eMfo6SzwjLtrfGR5s
EiQNdtI29K+vcmYKdefETURNntEaWtzHS45HkS4fnLy0Fg88hsQbdKiLwyi8i3m3lX4JSUObwhYqnMfZ2hJL2lIpps06VEb//2xcPtmt1CKRv+y6Y
aDkB0cJF++oeJfyavPnqZ0JS08TAU6YXJ5ZbdbGr372b root@project-master-vm
root@project-testserver: ~/.ssh# vim authorized_keys
root@project-testserver: ~/.ssh# hostname -i
10.160.0.53
root@project-testserver: ~/.ssh#
```

Successfully able to connect from master to slave



The screenshot shows a terminal window titled 'root@project-master-vm: ~ - Mozilla Firefox'. The browser address bar shows 'https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-master-vm'. The terminal output shows the command 'ssh root@10.160.0.53' being executed, resulting in a successful connection to the slave node. The output includes Ubuntu version information, package update status, and the last login time.

```
root@project-master-vm: ~ - Mozilla Firefox
https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-master-vm
root@project-master-vm:~# ssh root@10.160.0.53
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.15.0-1047-gcp x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

0 packages can be updated.
0 updates are security updates.

New release '18.04.3 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Nov 11 13:09:27 2019 from 10.160.0.52
root@project-testserver:~# exit
logout
Connection to 10.160.0.53 closed.
root@project-master-vm:~#
```

Successfully added the IP address of test server into /etc/Ansible/hosts file

```
root@project-master-vm: /etc/ansible - Mozilla Firefox
https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-master-vm?authuser=0&hl=en_US&projectNumber=1071296996179
GNU nano 2.5.3 File: hosts
## alpha.example.org
## beta.example.org
## 192.168.1.100
## 192.168.1.110
# If you have multiple hosts following a pattern you can specify
# them like this:
## www[001:006].example.com
# Ex 3: A collection of database servers in the 'dbservers' group
## [dbservers]
##
## db01.intranet.mydomain.net
## db02.intranet.mydomain.net
## 10.25.1.56
## 10.25.1.57
# Here's another example of host ranges, this time there are no
# leading 0s:
## db-[99:101]-node.example.com
[TestServer]
10.160.0.53
```

Successfully able to run ansible commands

```
root@project-master-vm: ~ - Mozilla Firefox
https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-master-vm?authuser=0&hl=en_US&projectNumber=1071296996179
root@project-master-vm:~# ansible -m ping TestServer
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 10.160.0.53 should use /usr/bin/python3, but is using /usr/bin/python for backward compatibility with prior
releases. A future Ansible release will default to using the discovered platform python for this host. See
https://docs.ansible.com/ansible/2.8/reference_appendices/interpreter_discovery.html for more information. This feature will be removed in version 2.12. Deprecation warnings
can be disabled by setting deprecation_warnings=False in ansible.cfg.
10.160.0.53 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "ping": "pong"
}
root@project-master-vm:~#
```

Installed default-jdk into the slave test-server

```
root@project-testserver: ~ - Mozilla Firefox
https://ssh.cloud.google.com/projects/sinuous-moment-251813/zones/asia-south1-a/instances/project-testserver?authuser=0&hl=en_US&projectNumber=1071296996179
root@project-testserver:~# dpkg -l | grep jdk
ii  default-jdk          2:1.8-56ubuntu2          amd64        Standard Java or Java compatible Development Kit (headless)
ii  default-jdk-headless 2:1.8-56ubuntu2          amd64        Standard Java or Java compatible Development Kit (headless)
ii  openjdk-8-jdk:amd64  8u232-b09-0ubuntu1~16.04.1 amd64        OpenJDK Development Kit (JDK)
ii  openjdk-8-jdk-headless:amd64 8u232-b09-0ubuntu1~16.04.1 amd64        OpenJDK Development Kit (JDK) (headless)
ii  openjdk-8-jre:amd64  8u232-b09-0ubuntu1~16.04.1 amd64        OpenJDK Java runtime, using Hotspot JIT
ii  openjdk-8-jre-headless:amd64 8u232-b09-0ubuntu1~16.04.1 amd64        OpenJDK Java runtime, using Hotspot JIT (headless)
root@project-testserver:~#
```

Added slave node in Jenkins master VM

Compute Engine - My First Project | Nodes [Jenkins] | bhasker-2019/Devops\_project

35.234.208.155:8080/computer/

# Jenkins

2

admin | log out

Jenkins > Nodes >

Back to Dashboard | Manage Jenkins | New Node | Configure

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
	master	Linux (amd64)	In sync	7.21 GB	0 B	7.21 GB	0ms
Data obtained				23 min	23 min	23 min	23 min

Refresh status

Build Queue

No builds in the queue.

Build Executor Status

- 1 Idle
- 2 Idle

Compute Engine - My First Project | slave Configuration [Jenkins] | 34.93.72.15:8080/computer/slave/configure

**Jenkins** 2 search admin | log out

Jenkins > Nodes > slave

Back to List  
Status  
Delete Agent  
Configure  
Build History  
Load Statistics  
Script Console  
Log  
System Information  
Disconnect

**Build Executor Status**

- 1 Idle
- 2 Idle

Name: slave

Description: DevOps project slave testserver

# of executors: 2

Remote root directory: /var/lib/jenkins

Labels: slave

Usage: Only build jobs with label expressions matching this node

Launch method: Launch agent agents via SSH

Host: 10.160.0.53

Credentials: root (master-root) Add

Host Key Verification Strategy: Non verifying Verification Strategy

Compute Engine - My First Project | Nodes [Jenkins] | 34.93.72.15:8080/computer/

**Jenkins** 2 search admin | log out

Jenkins > Nodes

Back to Dashboard  
Manage Jenkins  
New Node  
Configure

**Build Queue**

S	Name	Architecture	Clock Difference	Free Disk Space	Free Swap Space	Free Temp Space	Response Time
1	master	Linux (amd64)	In sync	6.95 GB	0 B	6.95 GB	0ms
2	slave	Linux (amd64)	In sync	6.47 GB	0 B	6.47 GB	50ms
Data obtained				1 min 39 sec	1 min 39 sec	1 min 39 sec	1 min 39 sec

Refresh status

## Creating Build Pipeline

Compute Engine - My First Project | bhaskar-2019/Devops\_project | New Item [Jenkins] | 34.93.105.75:8080/view/all/newJob

**Jenkins** 2 search admin | log out

Jenkins > All

Enter an item name

DevOps\_Project

Required field

**Freestyle project**  
This is the central feature of Jenkins. Jenkins will build your project, combining any SCM with any build system, and this can be even used for something other than software build.

**Maven project**  
Build a maven project. Jenkins takes advantage of your POM files and drastically reduces the configuration.

**Pipeline**  
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

**External Job**  
This type of job allows you to record the execution of a process run outside Jenkins, even on a remote machine. This is designed so that you can use Jenkins as a dashboard of your existing automation system.

**Multi-configuration project**  
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

**Folder**  
Create a container that organizes items in a folder to organize those together. Helps you which is not a file, a folder creates

**General** Build Triggers Advanced Project Options Pipeline

Description DevOps project build pipeline with infrastructure as code

[Plain text] [Preview](#)

☐ Discard old builds ?

☐ Do not allow concurrent builds

☐ Do not allow the pipeline to resume if the master restarts

☐ GitHub project

☐ Pipeline speed/durability override ?

☐ Preserve stashes from completed builds ?

☐ This project is parameterized ?

☐ Throttle builds ?

**Build Triggers**

☐ Build after other projects are built ?

General **Build Triggers** Advanced Project Options Pipeline

☐ This project is parameterized ?

☐ Throttle builds ?

**Build Triggers**

☐ Build after other projects are built ?

☐ Build periodically

☐ GitHub hook trigger for GITScm polling

☒ Poll SCM ?

Schedule \*/2 \* \* \* \*

⚠ Spread load evenly by using 'H/2 \* \* \* \*' rather than '\*/2 \* \* \* \*'

Would last have run at Thursday, December 19, 2019 11:24:38 AM UTC; would next run at Thursday, December 19, 2019 11:24:38 AM UTC.

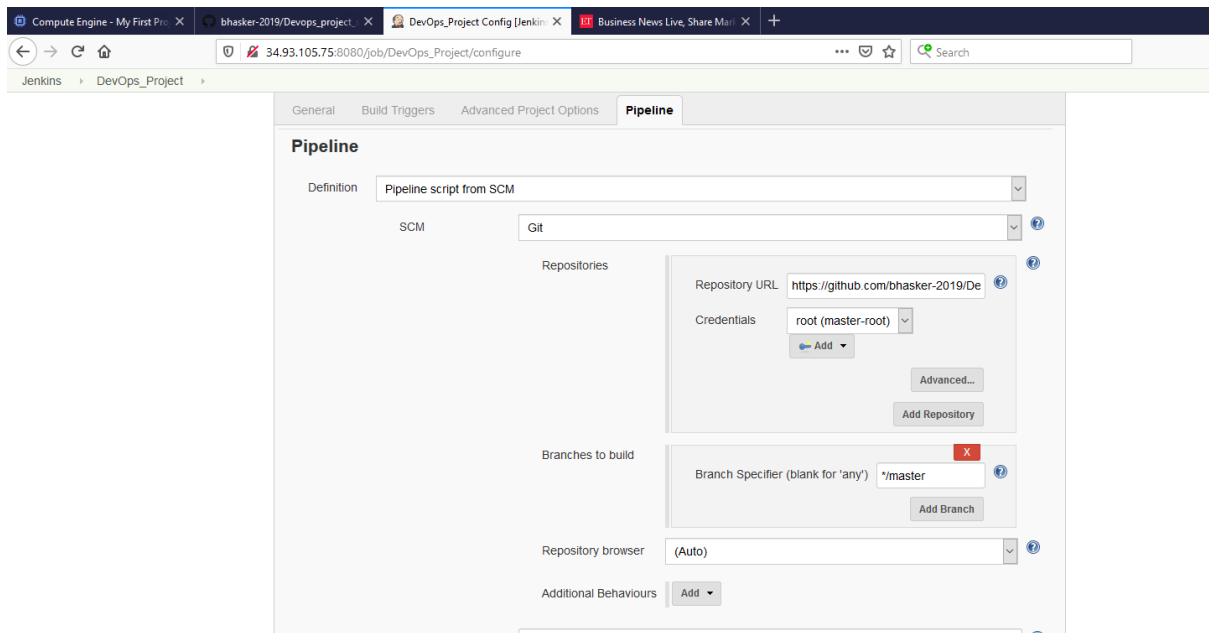
☐ Ignore post-commit hooks ?

☐ Disable this project ?

☐ Quiet period ?

☐ Trigger builds remotely (e.g., from scripts) ?

**Advanced Project Options**



**Pipeline DevOps\_Project**

DevOps project build pipeline with infrastructure as code

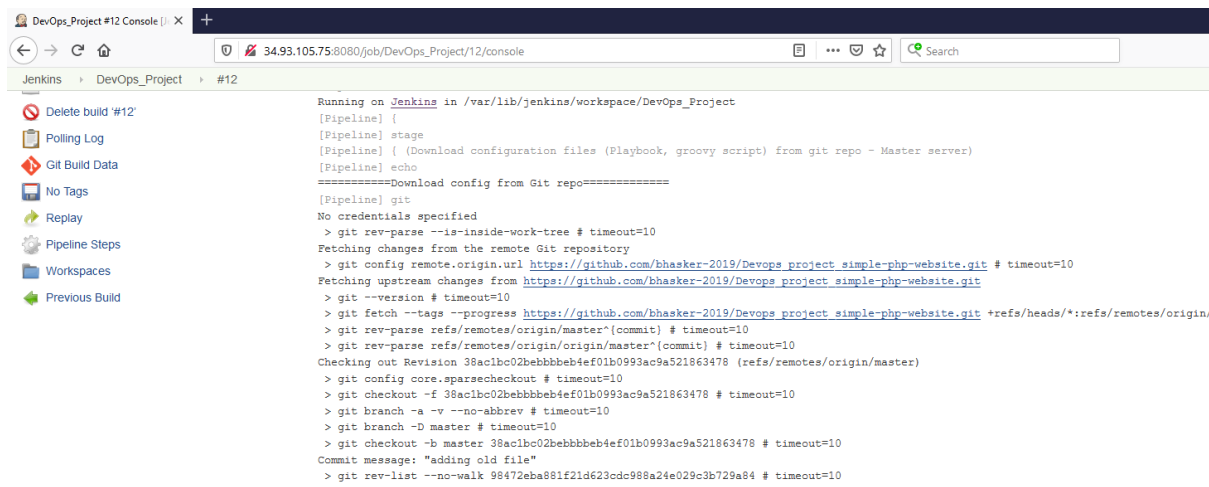
[Recent Changes](#)

**Stage View**

Download configuration files (Playbook, groovy script) from git repo - Master server	Run Ansible playbook from Master to install Docker on Test Server	Download PHP-Website files from git repository into Test Server	Build & Start container on Test Server	Test Webpage
1s	19s	2s	9s	31s
1s	18s	1s	17s	35s

**Build History**

#	Build	Timestamp
#12	Dec 19, 2019 11:18 AM	
#11	Dec 19, 2019 11:16 AM	
#10	Dec 18, 2019 1:10 PM	
#9	Dec 18, 2019 1:02 PM	
#8	Dec 18, 2019 12:56 PM	
#7	Dec 18, 2019 11:43 AM	



```
DevOps_Project #12 Console [X] +
34.93.105.75:8080/job/DevOps_Project/12/console
Jenkins > DevOps_Project > #12

[Pipeline] { (Run Ansible playbook from Master to install Docker on Test Server)
[Pipeline] echo
Start installation of Docker on Test Server
[Pipeline] sh
+ sudo ansible-playbook project_ansible_playbook.yml

PLAY [TestServer] *****

TASK [Gathering Facts] *****
ok: [10.160.0.53]

TASK [Install transport package] *****
[WARNING]: Could not find aptitude. Using apt-get instead
ok: [10.160.0.53]

TASK [Install certificates] *****
ok: [10.160.0.53]

TASK [Install curl] *****
ok: [10.160.0.53]

TASK [Install gnup] *****
ok: [10.160.0.53]

TASK [Install software properties] *****
ok: [10.160.0.53]

TASK [Add Docker GPG Key] *****
ok: [10.160.0.53]

TASK [Set up stable repository] *****
ok: [10.160.0.53]

TASK [Update the package index] *****

ok: [10.160.0.53]

TASK [Update the package index] *****
changed: [10.160.0.53]

TASK [Install the Docker and update repositories] *****
ok: [10.160.0.53]

PLAY RECAP *****
10.160.0.53 : ok=10 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[Pipeline] echo
Completed Docker installation
[Pipeline] }
[Pipeline] // stage
[Pipeline] echo
Script execution in master is complete
[Pipeline] }
[Pipeline] // node
[Pipeline] node
Running on slave in /var/lib/jenkins/workspace/DevOps_Project
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Download PHP-Website files from git repository into Test Server)
[Pipeline] echo
=====Downloading PHP-Website files=====
[Pipeline] git
No credentials specified
Fetching changes from the remote Git repository
> git rev-parse --is-inside-work-tree # timeout=10
> git config remote.origin.url https://github.com/bhasker-2019/Devops_project_simple-php-website.git # timeout=10
Fetching upstream changes from https://github.com/bhasker-2019/Devops_project_simple-php-website.git
> git --version # timeout=10
> git fetch --tags --progress https://github.com/bhasker-2019/Devops_project_simple-php-website.git --force --depth=1 --no-recurse-submodules
```

Successfully installed Docker on Test Server

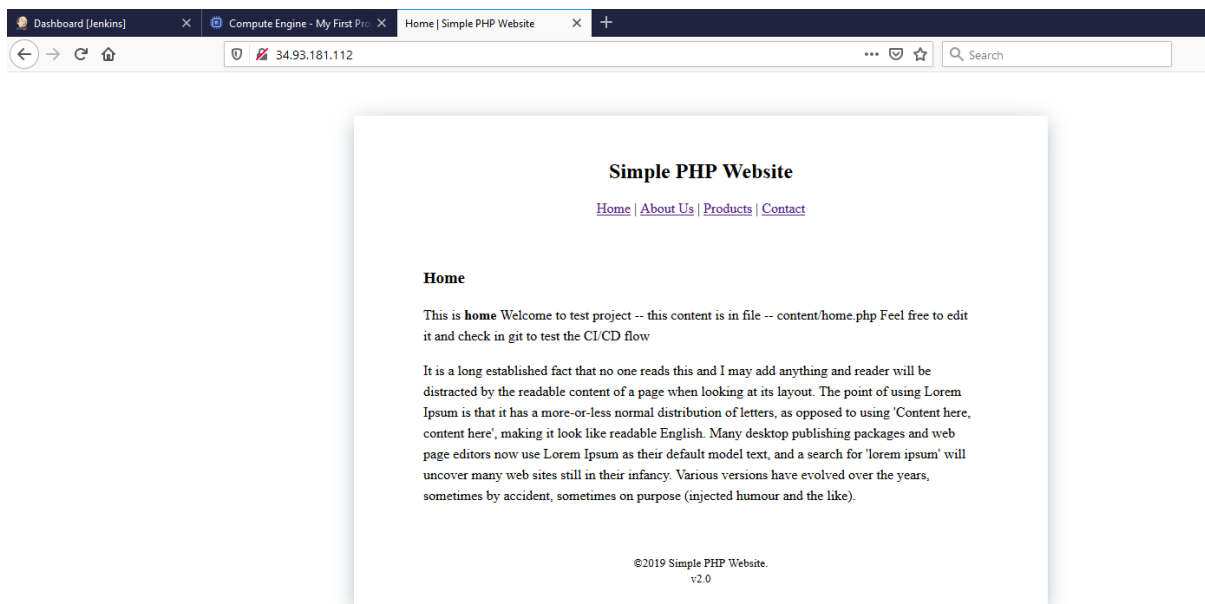


```
DevOps_Project #12 Console | X +
34.93.105.75:8080/jcb/DevOps_Project/12/console
Jenkins > DevOps_Project > #12

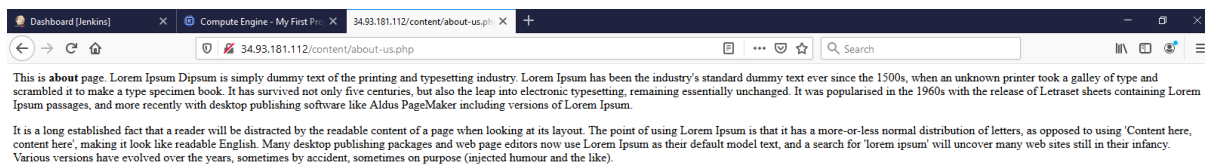
=====Build Image and Deploy=====
[Pipeline] echo
***checking if container exists and remove it ***
[Pipeline] sh
+ sudo docker rmi -f php-website
Error: No such image: php-website
[Pipeline] sh
+ sudo docker stop container_php
> git config core.sparsecheckout # timeout=10
> git checkout -f 38ac1bc02bebbb4ef01b0993ac9a521863478 # timeout=10
> git branch -a -v --no-abbrev # timeout=10
> git branch -D master # timeout=10
> git checkout -b master 38ac1bc02bebbb4ef01b0993ac9a521863478 # timeout=10
container_php
[Pipeline] sh
+ sudo docker rm container_php
container_php
[Pipeline] sh
+ sudo docker build . -t bhasker2019/php-website:12
Sending build context to Docker daemon 46.51MB

Step 1/5 : FROM devopsedu/webapp
--> 0ef91240e173
Step 2/5 : RUN rm -rf /var/www/html/*
--> Using cache
--> c868f330c1e2
Step 3/5 : ADD . /var/www/html
--> 76cad99a765b
Step 4/5 : EXPOSE 80
--> Running in 5e47610a97c7
Removing intermediate container 5e47610a97c7
--> 7cac39c6615d
Step 5/5 : CMD ["apachectl", "-D", "FOREGROUND"]
```

## Built and start container using image



## Successfully able to access the PHP website



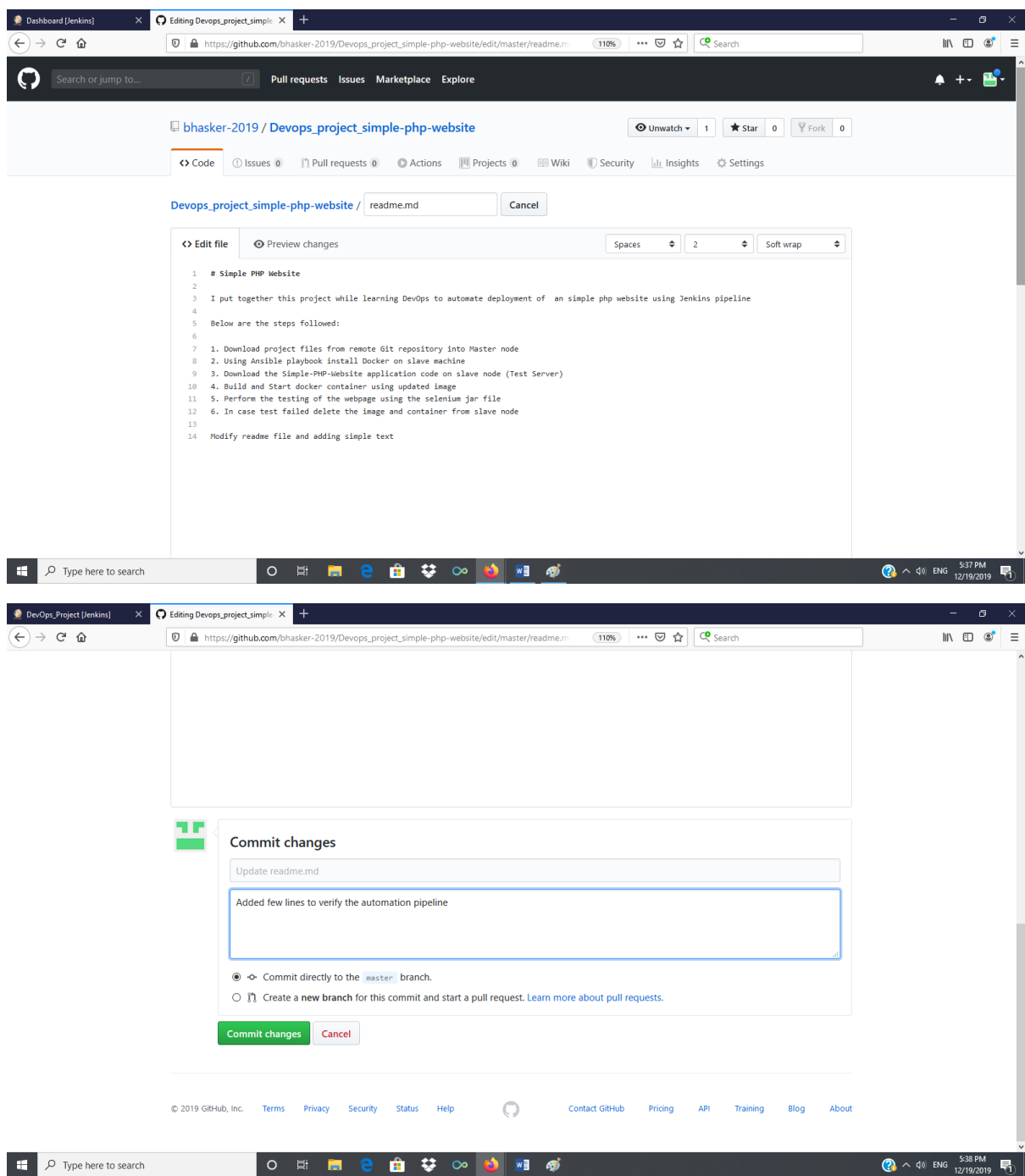
```
DevOps_Project #12 Console [X] +
34.93.105.75:8080/job/DevOps_Project/12/console
Jenkins > DevOps_Project > #12

Step 5/5 : CMD ["apache2ctl", "-D", "FOREGROUND"]
---> Running in c14e2e663eb8
Removing intermediate container c14e2e663eb8
---> b3c626b51e96
Successfully built b3c626b51e96
Successfully tagged bhasker2019/php-website:12
[Pipeline] sh
+ sudo docker run -itd -p 80:80 --name container_php bhasker2019/php-website:12
33ecca55b1ef557e8972acd564ebce20b7eac964137f3810f0f87bc31797a218
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { (Test Webpage)
[Pipeline] echo
=====Starting the Test=====
[Pipeline] sh
+ java -jar MyProject_Testing.jar
Starting ChromeDriver 2.41.578700 (2f1ed5f9343c13f73144538f15c00b370eda6706) on port 17734
Only local connections are allowed.
Dec 19, 2019 11:18:55 AM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
[Pipeline] echo
Test has Passed!!!
[Pipeline] sh
+ sudo docker push bhasker2019/php-website:12
The push refers to repository [docker.io/bhasker2019/php-website]
3284b6c98179: Preparing
e4fe68ea2707: Preparing
7a2921c5effc: Preparing
754d8c63561b: Preparing
059ad60bcacf: Preparing
8db5f072feec: Preparing
67885e448177: Preparing
```

Successfully completed testing of web-page

```
Jenkins > DevOps_Project > #12
Test has Passed!!!
[Pipeline] sh
+ sudo docker push bhasker2019/php-website:12
The push refers to repository [docker.io/bhasker2019/php-website]
3284b6c98179: Preparing
e4fe68ea2707: Preparing
7a2921c5effc: Preparing
754d8c63561b: Preparing
059ad60bcacf: Preparing
8db5f072feec: Preparing
67885e448177: Preparing
ec75999a0cbl: Preparing
65bdd50ee76a: Preparing
8db5f072feec: Waiting
67885e448177: Waiting
ec75999a0cbl: Waiting
65bdd50ee76a: Waiting
7a2921c5effc: Layer already exists
e4fe68ea2707: Layer already exists
754d8c63561b: Layer already exists
059ad60bcacf: Layer already exists
8db5f072feec: Layer already exists
67885e448177: Layer already exists
ec75999a0cbl: Layer already exists
65bdd50ee76a: Layer already exists
3284b6c98179: Pushed
12: digest: sha256:21539d3ed0d9498dclafb5bcfa44f7b387b8387be6130fc4d1811b9940635d6c size: 2195
[Pipeline] }
[Pipeline] // stage
[Pipeline] echo
Script execution in slave is complete
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

## Test Scenario 1 – Modify the readme text file and verify build pipeline



The image shows two screenshots of a GitHub repository page for 'bhasker-2019 / Devops\_project\_simple-php-website'. The top screenshot shows the 'readme.md' file being edited. The file content is as follows:

```
1 # Simple PHP Website
2
3 I put together this project while learning DevOps to automate deployment of an simple php website using Jenkins pipeline
4
5 Below are the steps followed:
6
7 1. Download project files from remote Git repository into Master node
8 2. Using Ansible playbook install Docker on slave machine
9 3. Download the Simple-PHP-Website application code on slave node (Test Server)
10 4. Build and Start docker container using updated image
11 5. Perform the testing of the webpage using the selenium jar file
12 6. In case test failed delete the image and container from slave node
13
14 Modify readme file and adding simple text
```

The bottom screenshot shows the 'Commit changes' dialog. The commit message is 'Update readme.md' and the description is 'Added few lines to verify the automation pipeline'. The 'Commit directly to the master branch' option is selected.

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Successfully committed changes into Github remote repository.

DevOps\_Project [Jenkins] x Devops\_project\_simple-php-... x +

34.93.105.75:8080/job/DevOps\_Project/?auto\_refresh=false

Jenkins 2 search admin | log out

Back to Dashboard  
Status  
Changes  
Build Now  
Delete Pipeline  
Configure  
Full Stage View  
Rename  
Pipeline Syntax  
Git Polling Log

## Pipeline DevOps\_Project

DevOps project build pipeline with infrastructure as code

[Recent Changes](#)

[edit description](#)  
[Disable Project](#)

### Stage View

Stage	Download configuration files (Playbook, groovy script) from git repo - Master server	Run Ansible playbook from Master to install Docker on Test Server	Download PHP-Website files from git repository into Test Server	Build & Start container on Test Server	Test Webpage
Average stage times: (Average full run time: ~1min 2s)	1s	19s	2s	11s	28s
#13 Dec 19 12:10 PM	1s	22s	1s	17s	
#12 Dec 19 11:48 AM	1s	18s	1s	17s	35s

Build History

#	Time	Status
#13	Dec 19, 2019 12:10 PM	Success
#12	Dec 19, 2019 11:18 AM	Success
#11	Dec 19, 2019 11:16 AM	Success
#10	Dec 18, 2019 1:10 PM	Success
#9	Dec 18, 2019 1:02 PM	Success
#8	Dec 18, 2019 12:56 PM	Success
#7	Dec 18, 2019 11:43 AM	Success
#6	Dec 18, 2019 11:33 AM	Success

34.93.105.75:8080/job/DevOps\_Project/?auto\_refresh=true

Build#13 – Jenkins successfully has triggered new build with stages showing green color.

DevOps\_Project #13 [Jenkins] x Devops\_project\_simple-php-... x +

34.93.105.75:8080/job/DevOps\_Project/13/

Jenkins 2 search admin | log out

Back to Project  
Status  
Changes  
Console Output  
Edit Build Information  
Delete build '#13'  
Polling Log  
Git Build Data  
No Tags  
Replay  
Pipeline Steps  
Workspaces  
Previous Build

## Build #13 (Dec 19, 2019 12:10:07 PM)

Started 4 min 17 sec ago  
Took 1 min 13 sec

[add description](#)

Changes

- 1. Update readme.md ([details](#) / [githubweb](#))

Started by an SCM change

Revision: 46ae5f6e27cb27cb6b1fc267f0d98721d4eb3b42

- refs/remotes/origin/master

Page generated: Dec 19, 2019 12:14:25 PM UTC [REST API](#) Jenkins ver. 2.190.2

The image displays two screenshots of a Jenkins console output for a pipeline named 'DevOps\_Project #13'. The first screenshot shows the initial steps of the pipeline, including installing Docker, downloading PHP-Website files from a Git repository, and preparing to build the Docker image. The second screenshot shows the continuation of the pipeline, where the Docker image is built, tagged, and then run as a container. The final output indicates that the container was successfully started.

```
TASK [Install the Docker and update repositories] *****
ok: [10.160.0.53]

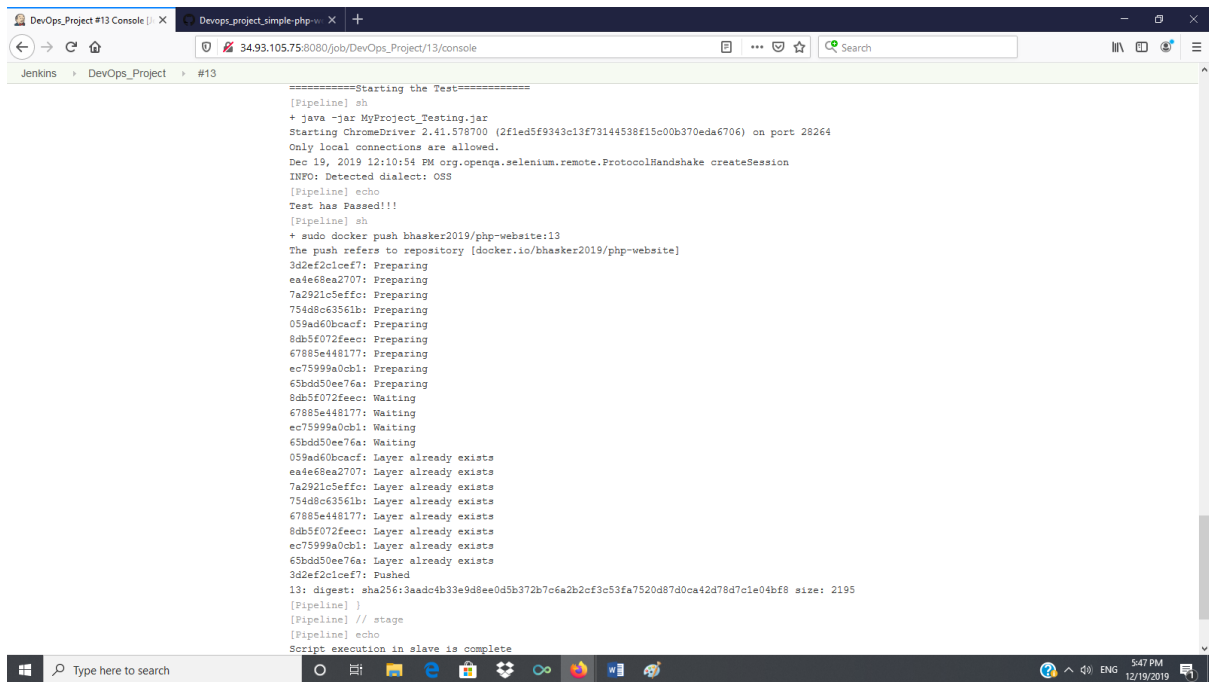
PLAY RECAP *****
10.160.0.53      : ok=10   changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

[Pipeline] echo
Completed Docker installation
[Pipeline] }
[Pipeline] // stage
[Pipeline] echo
Script execution in master is complete
[Pipeline] }
[Pipeline] // node
[Pipeline] node
Running on slave in /var/lib/jenkins/workspace/DevOps_Project
[Pipeline] {
[Pipeline] stage
[Pipeline] { [Download PHP-Website files from git repository into Test Server]
[Pipeline] echo
=====Downloading PHP-Website files=====
[Pipeline] git
No credentials specified
Fetching changes from the remote Git repository
> git rev-parse --is-inside-work-tree # timeout=10
> git config remote.origin.url https://github.com/bhasker-2019/Devops_project_simple-php-website.git # timeout=10
Fetching upstream changes from https://github.com/bhasker-2019/Devops_project_simple-php-website.git
> git --version # timeout=10
> git fetch --tags --progress https://github.com/bhasker-2019/Devops_project_simple-php-website.git +refs/heads/*:refs/remotes/origin/* # timeout=10
Checking out Revision 46ae5f6e27cb27cb6b1fc267f0d98721d4eb3b42 (refs/remotes/origin/master)
Commit message: "Update readme.md"
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
[Pipeline] { [Build & Start container on Test Server]
[Pipeline] echo
=====Build Image and Deploy=====

> git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
> git config core.sparsecheckout # timeout=10
> git checkout -f 46ae5f6e27cb27cb6b1fc267f0d98721d4eb3b42 # timeout=10
> git branch -a -v --no-abbrev # timeout=10
> git branch -D master # timeout=10
> git checkout -b master 46ae5f6e27cb27cb6b1fc267f0d98721d4eb3b42 # timeout=10
+ sudo docker rmi -f php-website
Error: No such image: php-website
[Pipeline] sh
+ sudo docker stop container_php
container_php
[Pipeline] sh
+ sudo docker rm container_php
container_php
[Pipeline] sh
+ sudo docker build . -t bhasker2019/php-website:13
Sending build context to Docker daemon 46.51MB

Step 1/5 : FROM devopsedu/webapp
--> 0e691240e173
Step 2/5 : RUN rm -rf /var/www/html/*
--> Using cache
--> c868f330c1e2
Step 3/5 : ADD . /var/www/html
--> clac8eaa133a
Step 4/5 : EXPOSE 80
--> Running in 67e4a5de7675
Removing intermediate container 67e4a5de7675
--> 434a53ced1b0
Step 5/5 : CMD ["apachectl", "-D", "FOREGROUND"]
--> Running in 4f3670bbddf8
Removing intermediate container 4f3670bbddf8
--> baf407c6a6ba
Successfully built baf407c6a6ba
Successfully tagged bhasker2019/php-website:13
[Pipeline] sh
+ sudo docker run -itd -p 80:80 --name container_php bhasker2019/php-website:13
135e49d635dce64c0138567de53e3251822b43e51fcb2a827ba6d8678c3ec2
[Pipeline] }
```

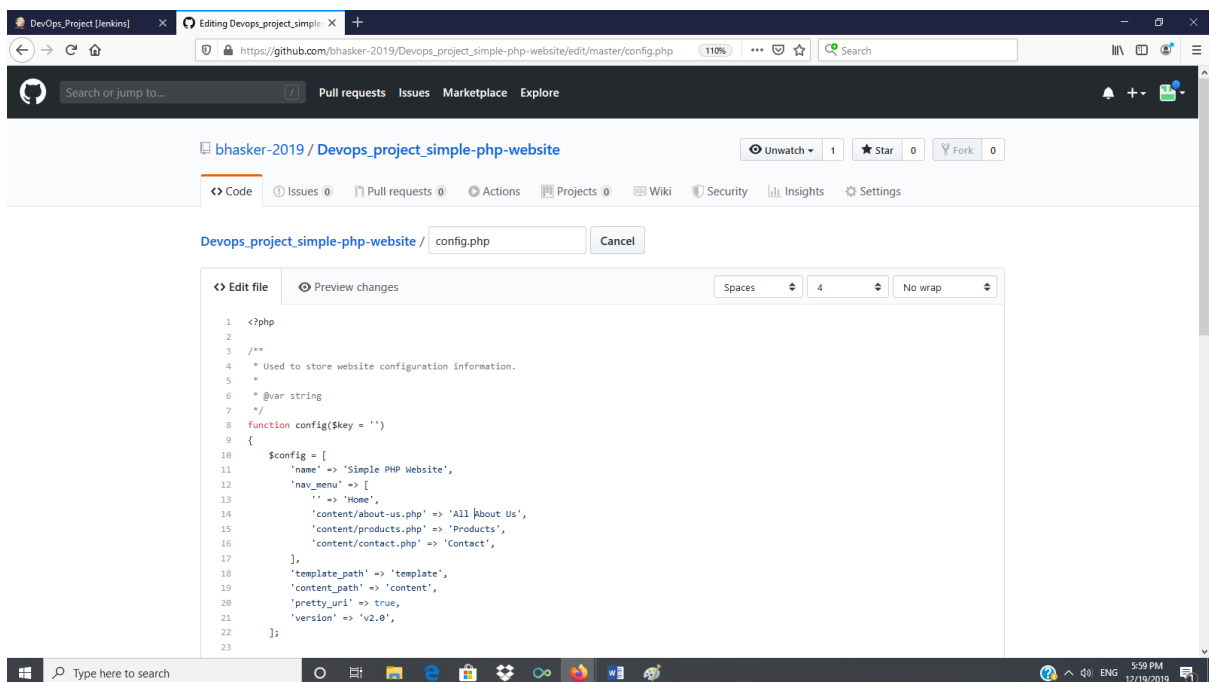
Successfully started the container with build#13



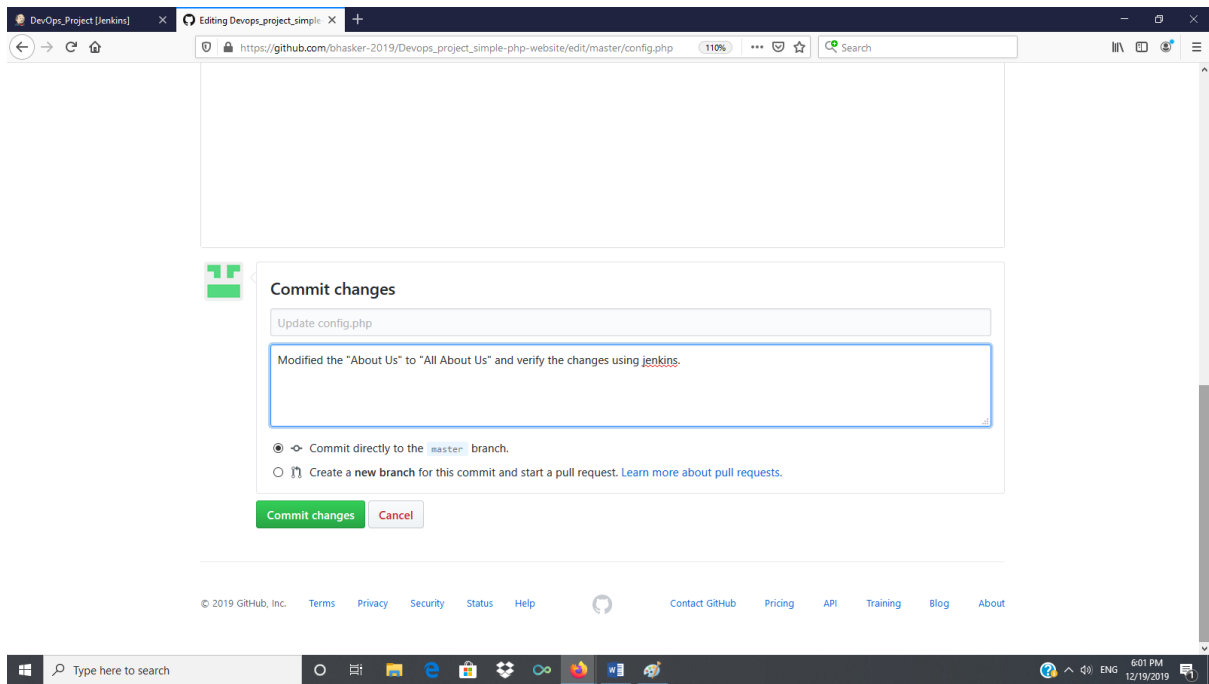
```
=====Starting the Test=====
[Pipeline] sh
+ java -jar MyProject_Testing.jar
Starting ChromeDriver 2.41.578700 (2f1ed5f9343c13f73144538f15c00b370eda6706) on port 28264
Only local connections are allowed.
Dec 19, 2019 12:10:54 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
[Pipeline] echo
Test has Passed!!!
[Pipeline] sh
+ sudo docker push bhasker2019/php-website:13
The push refers to repository [docker.io/bhasker2019/php-website]
3d2ef201ceef: Preparing
ea4e68ea2707: Preparing
7a2921c5eff0: Preparing
754d8c63561b: Preparing
059ad60bcacf: Preparing
8db5f072feec: Preparing
67885e448177: Preparing
ec75999a0cb1: Preparing
65bdd50ee76a: Preparing
8db5f072feec: Waiting
67885e448177: Waiting
ec75999a0cb1: Waiting
65bdd50ee76a: Waiting
059ad60bcacf: Layer already exists
ea4e68ea2707: Layer already exists
7a2921c5eff0: Layer already exists
754d8c63561b: Layer already exists
67885e448177: Layer already exists
8db5f072feec: Layer already exists
ec75999a0cb1: Layer already exists
65bdd50ee76a: Layer already exists
3d2ef201ceef: Pushed
13: digest: sha256:3aadc4b33e9d8ee0d5b372b7c6a2b2cf3c53fa7520d87d0ca42d78d7c1e04bf8 size: 2195
[Pipeline] }
[Pipeline] // stage
[Pipeline] echo
Script execution in slave is complete
```

Successfully completed testing and pushed bhasker2019/php-website:13 image to Docker registry.

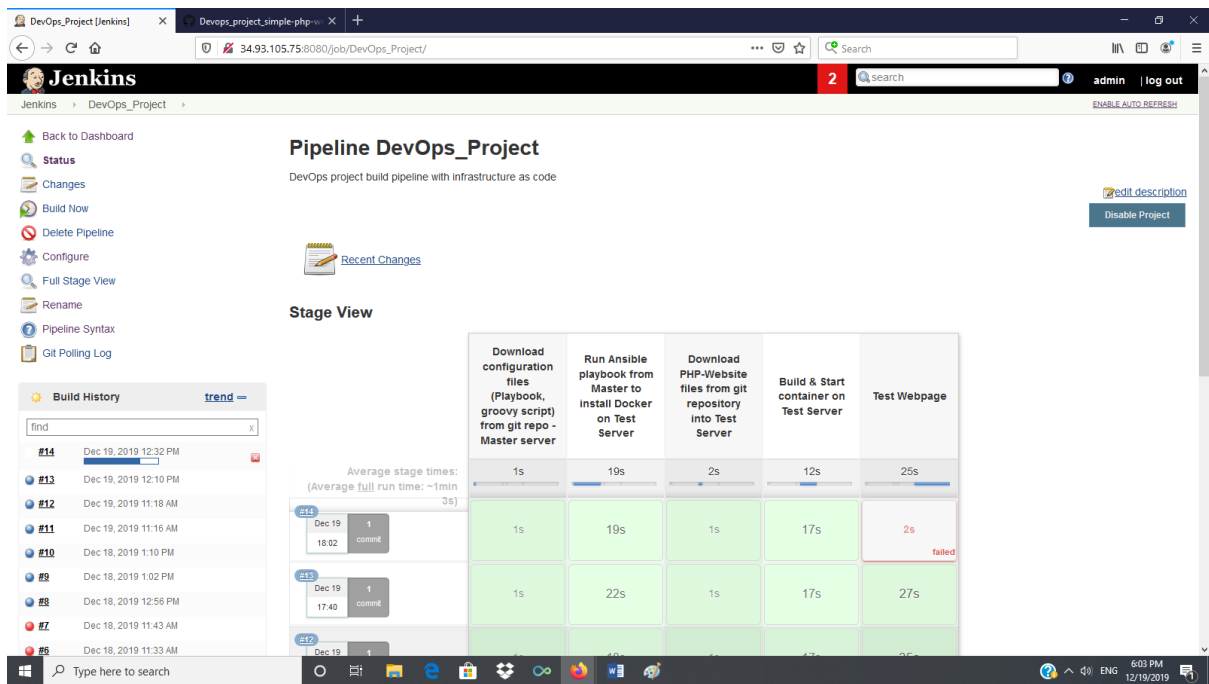
## Test Scenario 2 – Modify the config file and change from “About Us” to “All About Us”



```
1 <?php
2 /**
3  * Used to store website configuration information.
4  *
5  * @var string
6  */
7 function config($key = '')
8 {
9     $config = [
10         'name' => 'Simple PHP Website',
11         'nav_menu' => [
12             '' => 'Home',
13             'content/about-us.php' => 'All About Us',
14             'content/products.php' => 'Products',
15             'content/contact.php' => 'Contact',
16         ],
17         'template_path' => 'template',
18         'content_path' => 'content',
19         'pretty_url' => true,
20         'version' => 'v2.0',
21     ];
22 }
23
```



Successfully committed the changes into github remote repository



Jenkins successfully triggered a new build#14 but failed during testing as expected.

```
DevOps_Project #14 Console | X Devops_project_simple-php-... X +
34.93.105.75:8080/job/DevOps_Project/14/console
Jenkins > DevOps_Project > #14

Start installation of Docker on Test Server
[Pipeline] sh
+ sudo ansible-playbook project_nginx_playbook.yml

PLAY [TestServer] *****

TASK [Gathering Facts] *****
ok: [10.160.0.53]

TASK [Install transport package] *****
[WARNING]: Could not find aptitude. Using apt-get instead
ok: [10.160.0.53]

TASK [Install certificates] *****
ok: [10.160.0.53]

TASK [Install curl] *****
ok: [10.160.0.53]

TASK [Install gnupg] *****
ok: [10.160.0.53]

TASK [Install software properties] *****
ok: [10.160.0.53]

TASK [Add Docker GPG Key] *****
ok: [10.160.0.53]

TASK [Set up stable repository] *****
ok: [10.160.0.53]

TASK [Update the package index] *****
changed: [10.160.0.53]

TASK [Install the Docker and update repositories] *****
ok: [10.160.0.53]

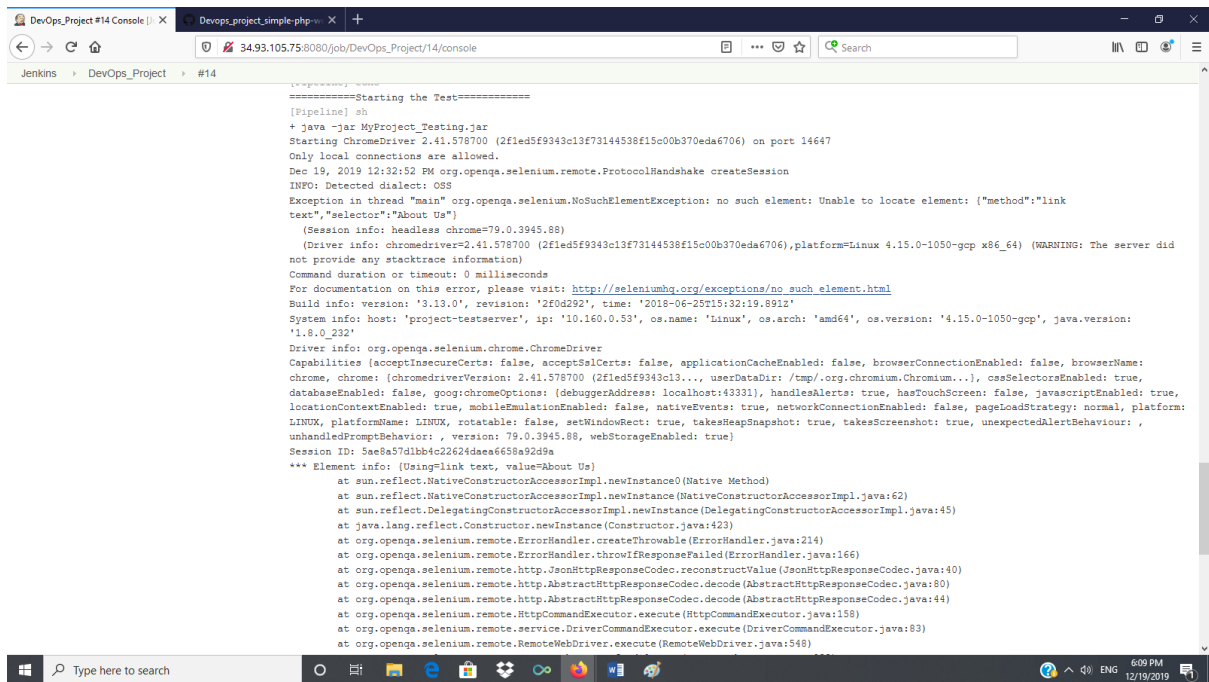
PLAY RECAP *****
10.160.0.53 : ok=10 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0
```

```
DevOps_Project #14 Console | X Devops_project_simple-php-... X +
34.93.105.75:8080/job/DevOps_Project/14/console
Jenkins > DevOps_Project > #14

> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git config core.sparsecheckout # timeout=10
> git checkout -f 719ab604d44c39b7c008a9c980b6d7ae970348e0 # timeout=10
> git branch -a -v --no-abbrev # timeout=10
> git branch -D master # timeout=10
> git checkout -b master 719ab604d44c39b7c008a9c980b6d7ae970348e0 # timeout=10
+ sudo docker stop container_php
container_php
[Pipeline] sh
+ sudo docker rm container_php
container_php
[Pipeline] sh
+ sudo docker build . -t bhasker2019/php-website:14
Sending build context to Docker daemon 46.52MB

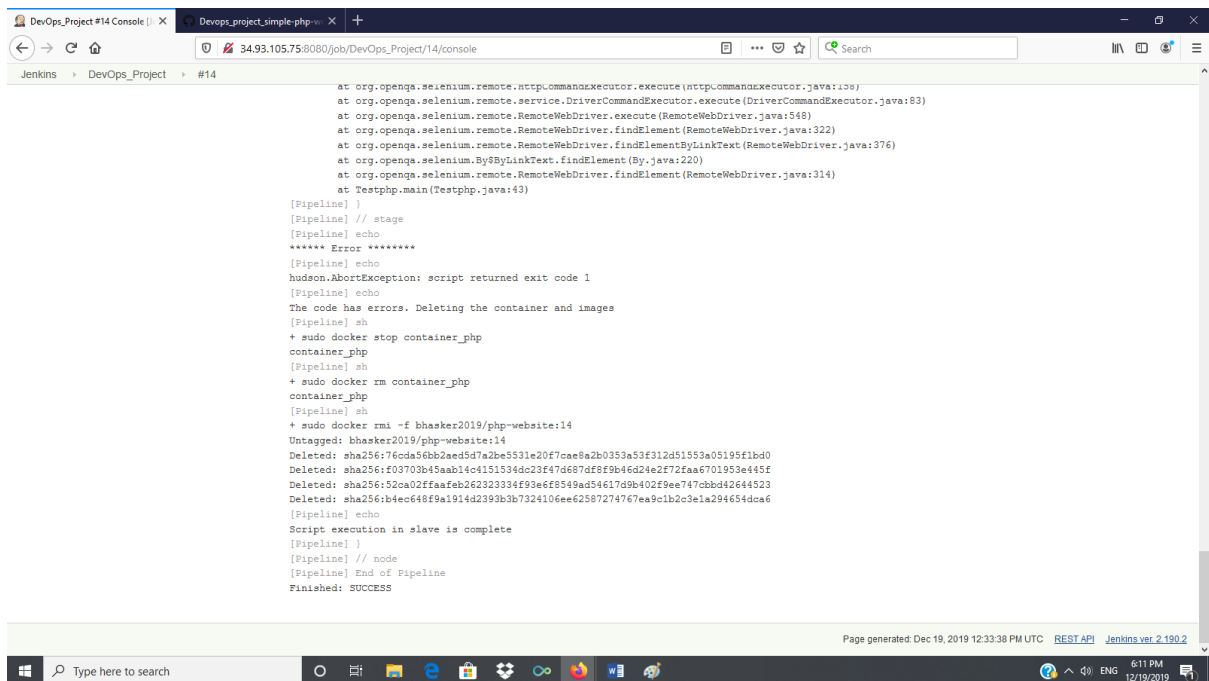
Step 1/5 : FROM devopsedu/webapp
--> 0ef91240e173
Step 2/5 : RUN rm -rf /var/www/html/*
--> Using cache
--> c868f330c1e2
Step 3/5 : ADD . /var/www/html
--> 52ca02ffa4fe
Step 4/5 : EXPOSE 80
--> Running in b36685d24a9c
Removing intermediate container b36685d24a9c
--> f03703b45aab
Step 5/5 : CMD ["apachectl", "-D", "FOREGROUND"]
--> Running in e49683ac0134
Removing intermediate container e49683ac0134
--> 76cda56bb2ae
Successfully built 76cda56bb2ae
[Pipeline] sh
+ sudo docker run -itd -p 80:80 --name container_php bhasker2019/php-website:14
a4e0617b16de302d6e269306c51101bf423eae9b1da10ca1b196fbcf2097b0a66
[Pipeline] }
[Pipeline] // stage
[Pipeline] stage
```





```
=====Starting the Test=====
[Pipeline] sh
+ java -jar MyProject_Testing.jar
Starting ChromeDriver 2.41.578700 (2f1ed5f9343c13f73144538f15c00b370eda6706) on port 14647
Only local connections are allowed.
Dec 19, 2019 12:32:52 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: GSS
Exception in thread "main" org.openqa.selenium.NoSuchElementException: no such element: Unable to locate element: {"method":"link
text","selector":"About Us"}
(Session info: headless chrome=79.0.3945.88)
(Driver info: chromedriver=2.41.578700 (2f1ed5f9343c13f73144538f15c00b370eda6706),platform=Linux 4.15.0-1050-gcp x86_64) (WARNING: The server did
not provide any stacktrace information)
Command duration or timeout: 0 milliseconds
For documentation on this error, please visit: http://seleniumhq.org/exceptions/no_such_element.html
Build info: version: '3.13.0', revision: '2f0d292', time: '2018-06-25T15:32:19.891Z'
System info: host: 'project-testserver', ip: '10.160.0.53', os.name: 'Linux', os.arch: 'amd64', os.version: '4.15.0-1050-gcp', java.version:
'1.8.0_232'
Driver info: org.openqa.selenium.chrome.ChromeDriver
Capabilities {acceptInsecureCerts: false, acceptSslCerts: false, applicationCacheEnabled: false, browserConnectionEnabled: false, browserName:
chrome, chrome: {chromedriverVersion: 2.41.578700 (2f1ed5f9343c13..., userDataDir: /tmp/.org.chromium.Chromium...), cssSelectorsEnabled: true,
databaseEnabled: false, googchromeOptions: {debuggerAddress: localhost:4331}, handlesAlerts: true, hasTouchScreen: false, javascriptEnabled: true,
locationContextEnabled: true, mobileEmulationEnabled: false, nativeEvents: true, networkConnectionEnabled: false, pageLoadStrategy: normal, platform:
LINUX, platformName: LINUX, rotatable: false, setWindowRect: true, takesHeapSnapshot: true, takesScreenshot: true, unexpectedAlertBehaviour: ,
unhandledPromptBehavior: , version: 79.0.3945.88, webStorageEnabled: true}
Session ID: 5ae8a57d1bb4c22624daae6658a92d9a
*** Element info: {Using=link text, value=About Us}
at sun.reflect.NativeConstructorAccessorImpl.newInstance0(Native Method)
at sun.reflect.NativeConstructorAccessorImpl.newInstance(NativeConstructorAccessorImpl.java:62)
at sun.reflect.DelegatingConstructorAccessorImpl.newInstance(DelegatingConstructorAccessorImpl.java:45)
at java.lang.reflect.Constructor.newInstance(Constructor.java:423)
at org.openqa.selenium.remote.ErrorHandler.createThrowable(ErrorHandler.java:214)
at org.openqa.selenium.remote.ErrorHandler.throwIfResponseFailed(ErrorHandler.java:166)
at org.openqa.selenium.remote.http.JsonHttpStatusCode.reconstructValue(JsonHttpStatusCode.java:40)
at org.openqa.selenium.remote.http.AbstractHttpStatusCode.decode(AbstractHttpStatusCode.java:80)
at org.openqa.selenium.remote.http.AbstractHttpStatusCode.decode(AbstractHttpStatusCode.java:44)
at org.openqa.selenium.remote.http.CommandExecutor.execute(HttpCommandExecutor.java:138)
at org.openqa.selenium.remote.service.DriverCommandExecutor.execute(DriverCommandExecutor.java:83)
at org.openqa.selenium.remote.RemoteWebDriver.execute(RemoteWebDriver.java:548)
```

As web element “About Us” not available the test stopped.



```
at org.openqa.selenium.remote.http.CommandExecutor.execute(HttpCommandExecutor.java:138)
at org.openqa.selenium.remote.service.DriverCommandExecutor.execute(DriverCommandExecutor.java:83)
at org.openqa.selenium.remote.RemoteWebDriver.execute(RemoteWebDriver.java:548)
at org.openqa.selenium.remote.RemoteWebDriver.findElement(RemoteWebDriver.java:322)
at org.openqa.selenium.remote.RemoteWebDriver.findElementByLinkText(RemoteWebDriver.java:376)
at org.openqa.selenium.By$ByLinkText.findElement(By.java:220)
at org.openqa.selenium.remote.RemoteWebDriver.findElement(RemoteWebDriver.java:314)
at Testphp.main(Testphp.java:43)

[Pipeline] }
[Pipeline] // stage
[Pipeline] echo
***** Error *****
[Pipeline] echo
hudson.AbortException: script returned exit code 1
[Pipeline] echo
The code has errors. Deleting the container and images
[Pipeline] sh
+ sudo docker stop container_php
[Pipeline] sh
+ sudo docker rm container_php
[Pipeline] sh
+ sudo docker rmi -f bhasker2019/php-website:14
Untagged: bhasker2019/php-website:14
Deleted: sha256:76cda56bb2aed5d7a2be5531e20f7cae8a2b0353a53f312d51553a05195f1bd0
Deleted: sha256:f03703b45aab14c4151534dc23f47d687df8f9b46d24e2f2f2faa6701953e445f
Deleted: sha256:52ca02ffaefeb262323334f93e6f8549ad34617a9b402f9ee7470bb042644523
Deleted: sha256:b4ec648f9a1914d2393b3b7324106ee62587274767ea81bc2c3e1a294654dcae6
[Pipeline] echo
Script execution in slave is complete
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS

Page generated Dec 19, 2019 12:33:38 PM UTC REST API Jenkins ver. 2.190.2
```

As part of exception handling the image and container from build#14 were successfully removed.

### Test Scenario 3 – Revert the configuration changes by modifying to old state “About Us”

The screenshot displays a web browser window with the GitHub interface for editing a file. The browser's address bar shows the URL: `https://github.com/bhasker-2019/Devops_project_simple-php-website/edit/master/config.php`. The file being edited is `config.php`, and the browser's address bar also shows the file path: `Devops_project_simple-php-website / config.php`. The file content is a PHP script that defines a configuration array and a function to retrieve values from it. The function `config($key)` returns the value of the key if it exists in the `$config` array, otherwise it returns `null`. The configuration array includes settings for the website name, navigation menu, content paths, pretty URLs, and version.

Below the file editor, a "Commit changes" dialog box is open. The dialog has a title bar "Commit changes" and a text input field containing the message: "Reverting back changes by modifying as 'About Us'". Below the text input, there are two radio buttons: "Commit directly to the master branch." (which is selected) and "Create a new branch for this commit and start a pull request. Learn more about pull requests." At the bottom of the dialog, there are two buttons: "Commit changes" (in green) and "Cancel".

The Windows taskbar at the bottom of the screen shows the time as 6:15 PM on 12/19/2019.

Successfully committed changes into github remote repository

Jenkins DevOps\_Project

## Pipeline DevOps\_Project

DevOps project build pipeline with infrastructure as code

[Recent Changes](#)

### Stage View

	Download configuration files (Playbook, groovy script) from git repo - Master server	Run Ansible playbook from Master to install Docker on Test Server	Download PHP-Website files from git repository into Test Server	Build & Start container on Test Server	Test Webpage
Average stage times: (Average full run time: ~1min 2s)	1s	19s	2s	11s	26s
#15 Dec 19, 2019 12:48 PM	1s	18s	1s	5s	30s
#14 Dec 19, 2019 12:32 PM	1s	19s	1s	17s	2s failed

**Build History**

#	Time
#15	Dec 19, 2019 12:48 PM
#14	Dec 19, 2019 12:32 PM
#13	Dec 19, 2019 12:10 PM
#12	Dec 19, 2019 11:18 AM
#11	Dec 19, 2019 11:16 AM
#10	Dec 18, 2019 1:10 PM
#9	Dec 18, 2019 1:02 PM
#8	Dec 18, 2019 12:58 PM
#7	Dec 18, 2019 11:43 AM

Jenkins has triggered successfully build#15 with all stages showing green color

Jenkins DevOps\_Project #15 Console

```

> git checkout -f 986c9d7300348f2bd4edca7ef3303f4d49b77404 # timeout=10
> git branch -a -v --no-abbrev # timeout=10
> git branch -D master # timeout=10
> git checkout -b master 986c9d7300348f2bd4edca7ef3303f4d49b77404 # timeout=10
+ sudo docker rmi -f php-website
Error: No such image: php-website
[Pipeline] sh
+ sudo docker stop container_php
Error response from daemon: No such container: container_php
+ true
[Pipeline] sh
+ sudo docker rm container_php
Error: No such container: container_php
+ true
[Pipeline] sh
+ sudo docker build . -t bhasker2019/php-website:15
Sending build context to Docker daemon 46.52MB

Step 1/5 : FROM devopsedu/webapp
--> 0ef91240e173
Step 2/5 : RUN rm -rf /var/www/html/*
--> Using cache
--> c868f330c1e2
Step 3/5 : ADD . /var/www/html
--> 0ff25f944ae5
Step 4/5 : EXPOSE 80
--> Running in 93bdc81f8a16
Removing intermediate container 93bdc81f8a16
--> d9d78f3e13aa
Step 5/5 : CMD ["apache2ctl", "-D", "FOREGROUND"]
--> Running in 16105a2dd14f
Removing intermediate container 16105a2dd14f
--> 8990625ffda95
Successfully built 8990625ffda95
Successfully tagged bhasker2019/php-website:15
[Pipeline] sh
+ sudo docker run -itd -p 80:80 --name container_php bhasker2019/php-website:15
dc6d295045121f59b0cf704591e445c0d73e11bab335f10d5fc4521cb145169b2
[Pipeline]

```

```
=====Starting the Test=====
[Pipeline] sh
+ java -jar MyProject_Testing.jar
Starting ChromeDriver 2.41.578700 (2fled5f9343c13f73144538f15c00b370eda6706) on port 21755
Only local connections are allowed.
Dec 19, 2019 12:48:38 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
[Pipeline] echo
Test has Passed!!!
[Pipeline] sh
+ sudo docker push bhasker2019/php-website:15
The push refers to repository [docker.io/bhasker2019/php-website]
26033f142c40: Preparing
e4e68ea2707: Preparing
7a2921c5effc: Preparing
754d8c63561b: Preparing
059ad60bcafc: Preparing
8db5f072feec: Preparing
67885e448177: Preparing
ec75999a0cb1: Preparing
65bdd50ee76a: Preparing
8db5f072feec: Waiting
67885e448177: Waiting
ec75999a0cb1: Waiting
65bdd50ee76a: Waiting
754d8c63561b: Layer already exists
059ad60bcafc: Layer already exists
e4e68ea2707: Layer already exists
7a2921c5effc: Layer already exists
8db5f072feec: Layer already exists
67885e448177: Layer already exists
ec75999a0cb1: Layer already exists
65bdd50ee76a: Layer already exists
26033f142c40: Pushed
15: digest: sha256:d971c8bb9d8c43b0ca173867f146f67d511ddb87b474d8194181e85ce2da0f5a size: 2195
[Pipeline] }
[Pipeline] // stage
[Pipeline] echo
Script execution in slave is complete
```

Successfully completed testing and pushed bhasker2019/php-website:15 image to Docker registry.

## Test Scenario 4 – Modify the description within aboutus.php page

bhasker-2019 / Devops\_project\_simple-php-website

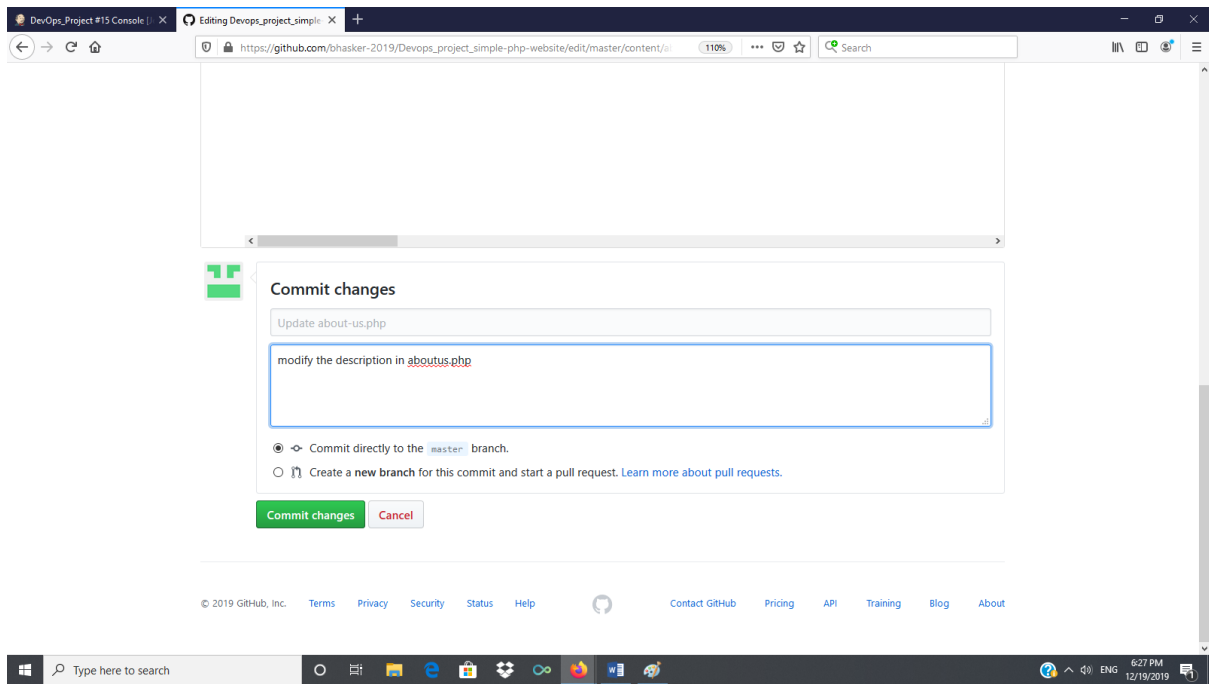
Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Actions Projects 0 Wiki Security Insights Settings

Devops\_project\_simple-php-website / content / about-us.php

Edit file Preview changes Spaces 2 No wrap

```
1 <p id="PID-ab2-pg">This is <b>about</b> pages. Lorem Ipsum Dipsun is simply dummy text of the printing and typesetting industry. Lorem Ipsum has
2 <p>It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of us
3
```



Successfully committed changes into github remote repository

The screenshot shows the Jenkins Pipeline DevOps\_Project dashboard. The pipeline is named "Pipeline DevOps\_Project" and is described as "DevOps project build pipeline with infrastructure as code". The dashboard shows a "Stage View" with a table of stages and their durations. The "Test Webpage" stage is highlighted in red, indicating a failure.

Back to Dashboard

Status

Changes

Build Now

Delete Pipeline

Configure

Full Stage View

Rename

Pipeline Syntax

Git Polling Log

edit description

Disable Project

Recent Changes

Stage View

Download configuration files (Playbook, groovy script) from git repo - Master server	Run Ansible playbook from Master to install Docker on Test Server	Download PHP-Website files from git repository into Test Server	Build & Start container on Test Server	Test Webpage
1s	19s	2s	11s	23s
1s	19s	1s	17s	2s failed
1s	18s	1s	5s	30s

Average stage times: (Average full run time: ~1min 25s)

Build History

#16 Dec 19, 2019 12:58 PM

#15 Dec 19, 2019 12:48 PM

#14 Dec 19, 2019 12:32 PM

#13 Dec 19, 2019 12:10 PM

#12 Dec 19, 2019 11:18 AM

#11 Dec 19, 2019 11:16 AM

#10 Dec 18, 2019 1:10 PM

#9 Dec 18, 2019 1:02 PM

#8 Dec 18, 2019 12:56 PM

Jenkins triggered a new build#16 and as expected stage testing got failed.



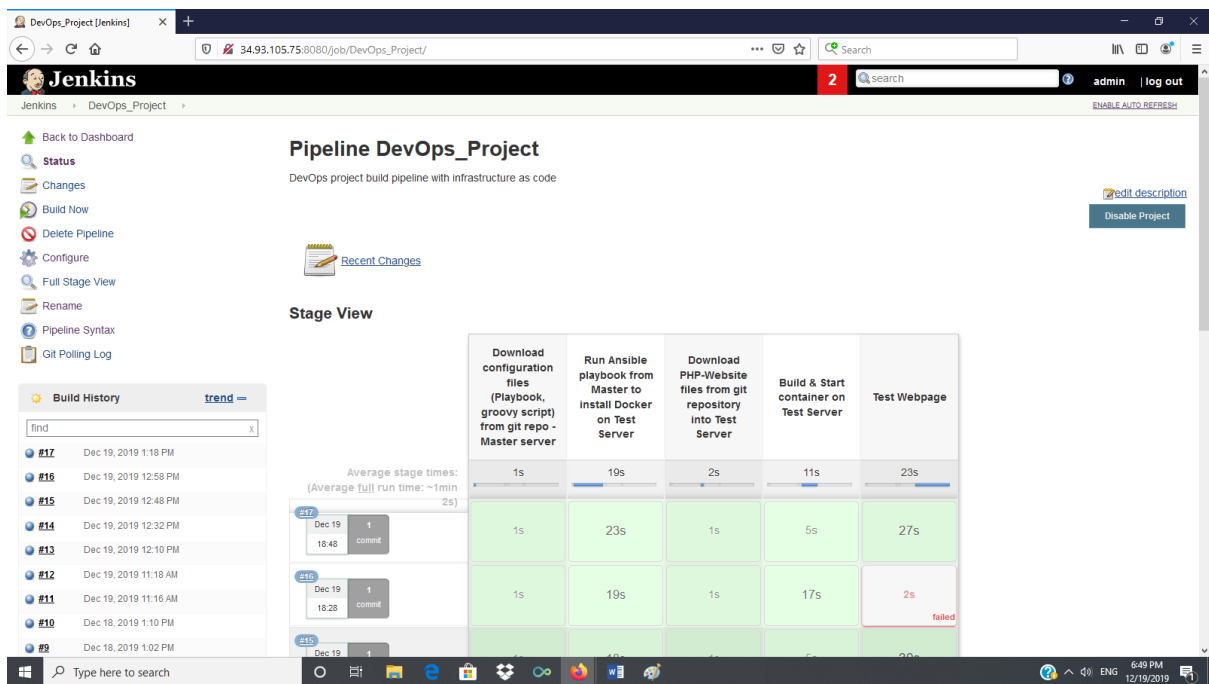
## Test Scenario 5 – Revert back the changes with about-us.php

The screenshot shows a web browser window displaying the GitHub repository editor for the repository `bhasker-2019 / Devops_project_simple-php-website`. The file `about-us.php` is being edited. The code in the editor is:

```
1 <p id="PID-ab2-pg">This is <b>about</b> page. Lorem Ipsum Dipsum is simply dummy text of the printing and typesetting industry. Lorem Ipsum has  
2 <p>It is a long established fact that a reader will be distracted by the readable content of a page when looking at its layout. The point of us  
3
```

Below the editor, a "Commit changes" dialog box is open. The commit message field contains the text "Reverting back the changes to the description." The dialog box also shows the option to "Commit directly to the master branch" (selected) and "Create a new branch for this commit and start a pull request." The "Commit changes" button is highlighted in green.

The browser window also shows the Windows taskbar at the bottom with the search bar and various application icons. The system clock indicates 6:44 PM on 12/19/2019.



Jenkins triggered build #17 with all stages showing green color.

```
=====Starting the Test=====
[Pipeline] sh
+ java -jar MyProject_Testing.jar
Starting ChromeDriver 2.41.578700 (2fled5f9343c13f73144538f15c00b370eda6706) on port 6264
Only local connections are allowed.
Dec 19, 2019 1:18:44 PM org.openqa.selenium.remote.ProtocolHandshake createSession
INFO: Detected dialect: OSS
[Pipeline] echo
Test has Passed!!!
[Pipeline] sh
+ sudo docker push bhasker2019/php-website:17
The push refers to repository [docker.io/bhasker2019/php-website]
092ec52b5f48: Preparing
ea4e68ea2707: Preparing
7a2921c5effc: Preparing
754d8c63561b: Preparing
059ad60bcacf: Preparing
8db5f072feec: Preparing
67885e448177: Preparing
ec75999a0cb1: Preparing
65bdd50ee76a: Preparing
8db5f072feec: Waiting
67885e448177: Waiting
ec75999a0cb1: Waiting
65bdd50ee76a: Waiting
059ad60bcacf: Layer already exists
7a2921c5effc: Layer already exists
ea4e68ea2707: Layer already exists
754d8c63561b: Layer already exists
8db5f072feec: Layer already exists
67885e448177: Layer already exists
ec75999a0cb1: Layer already exists
65bdd50ee76a: Layer already exists
092ec52b5f48: Pushed
17: digest: sha256:8a10b5f1b60ebfcb20beadb0c696bf311ef5cacf48add61f8c6dc8c24d7af46db size: 2195
[Pipeline] ]
[Pipeline] // stage
[Pipeline] echo
Script execution in slave is complete
```

Successfully completed testing and pushed bhasker2019/php-website:17 image to Docker registry.