Jenkins 실습

Master

```
ubuntu@ip-172-31-36-57:~$ sudo apt update
```

```
ubuntu@ip-172-31-36-57:~$ sudo apt install openjdk-8-jdk
```

```
ubuntu@ip-172-31-36-57:~$ wget -q -O - https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo apt-key add -
OK
ubuntu@ip-172-31-36-57:~$ sudo su -
root@ip-172-31-36-57:~# vim /etc/apt/sources.list
```

root@ip-172-31-36-57: ~

```
deb https://pkg.jenkins.io/debian-stable binary/
## Note, this file is written by cloud-init on first boot of an instance
## modifications made here will not survive a re-bundle.
## if you wish to make changes you can:
## a.) add 'apt_preserve_sources_list: true' to /etc/cloud/cloud.cfg
##     or do the same in user-data
## b.) add sources in /etc/apt/sources.list.d
## c.) make changes to template file /etc/cloud/templates/sources.list.tmpl

# See http://help.ubuntu.com/community/UpgradeNotes for how to upgrade to
# newer versions of the distribution.
deb http://us-east-2.ec2.archive.ubuntu.com/ubuntu/ bionic main restricted
# deb-src http://us-east-2.ec2.archive.ubuntu.com/ubuntu/ bionic main restricted

## Major bug fix updates produced after the final release of the
## distribution.
deb http://us-east-2.ec2.archive.ubuntu.com/ubuntu/ bionic-updates main restricted
# deb-src http://us-east-2.ec2.archive.ubuntu.com/ubuntu/ bionic-updates main restricted

## N.B. software from this repository is ENTIRELY UNSUPPORTED by the Ubuntu
## team. Also, please note that software in universe WILL NOT receive any
"/etc/apt/sources.list" 58L, 3401C                    1,48          Top
```

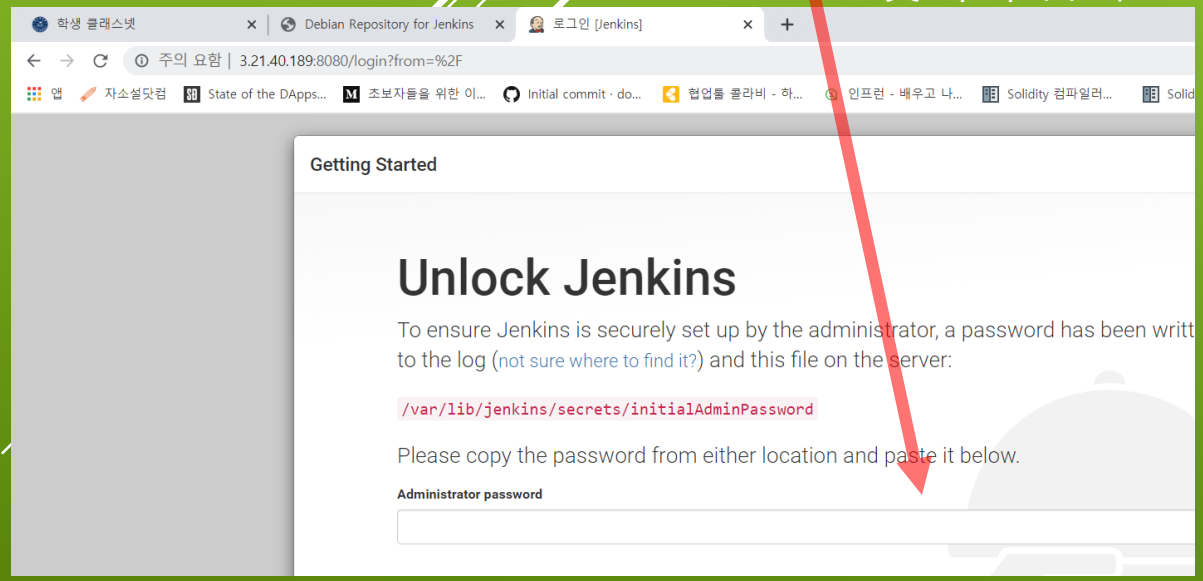
Java version 8이 필요

```
ubuntu@ip-172-31-36-57:~$ sudo apt-get update
```

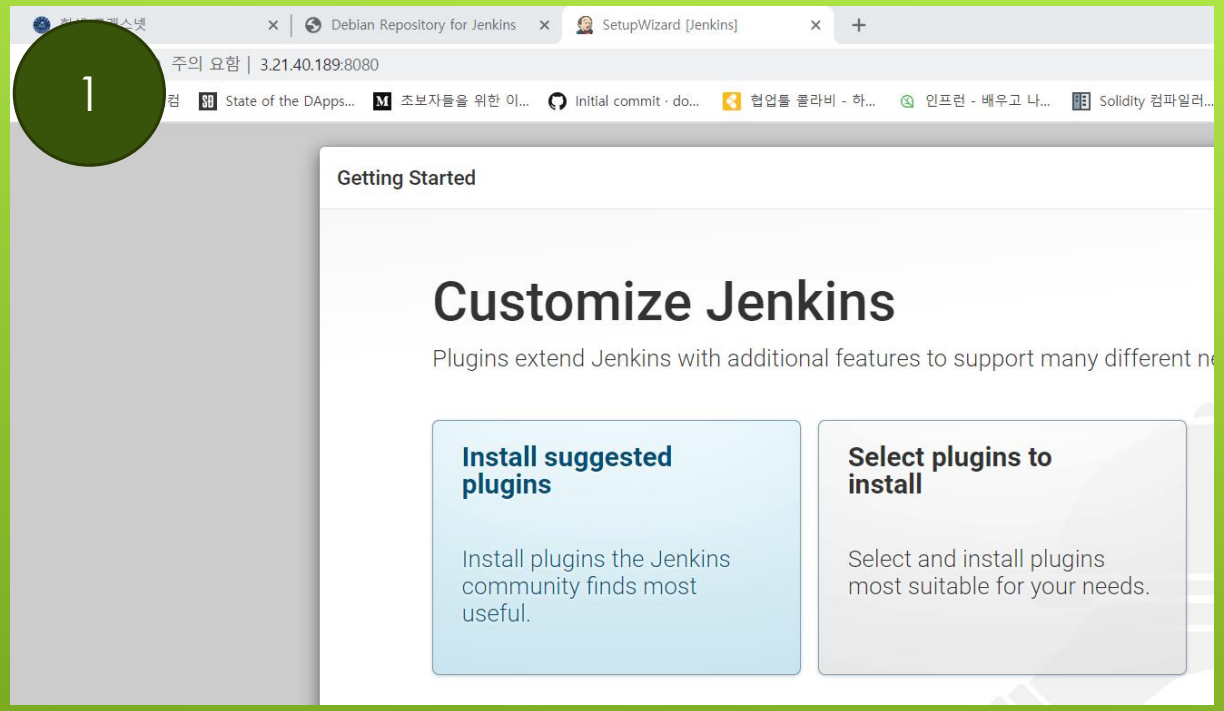
```
ubuntu@ip-172-31-36-57:~$ sudo apt-get install jenkins
```

```
ubuntu@ip-172-31-36-57:~$ java -version
openjdk version "1.8.0_252"
OpenJDK Runtime Environment (build 1.8.0_252-8u252-b09-1~18.04-b09)
OpenJDK 64-Bit Server VM (build 25.252-b09, mixed mode)
ubuntu@ip-172-31-36-57:~$ sudo cat /var/lib/jenkins/secrets/initialAdminPassword
435d0876708e420692720113c9d02518
ubuntu@ip-172-31-36-57:~$ ^C
ubuntu@ip-172-31-36-57:~$
```

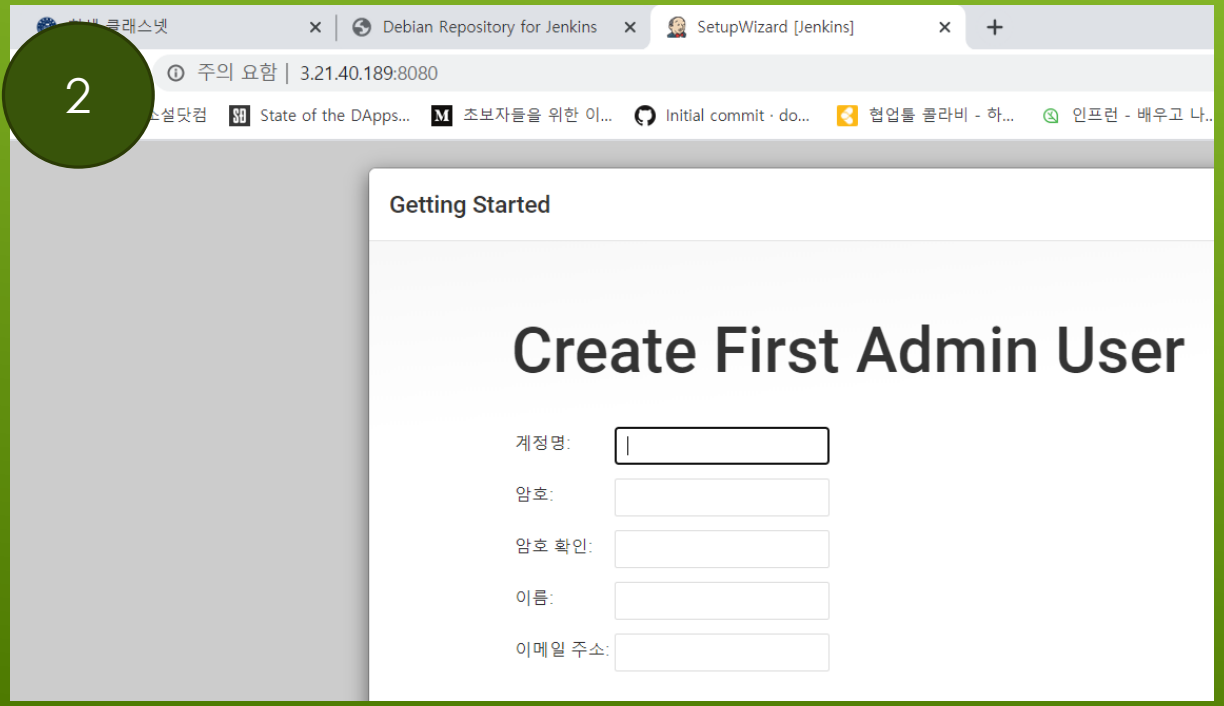
Jenkins install 후, password 찾아서 입력



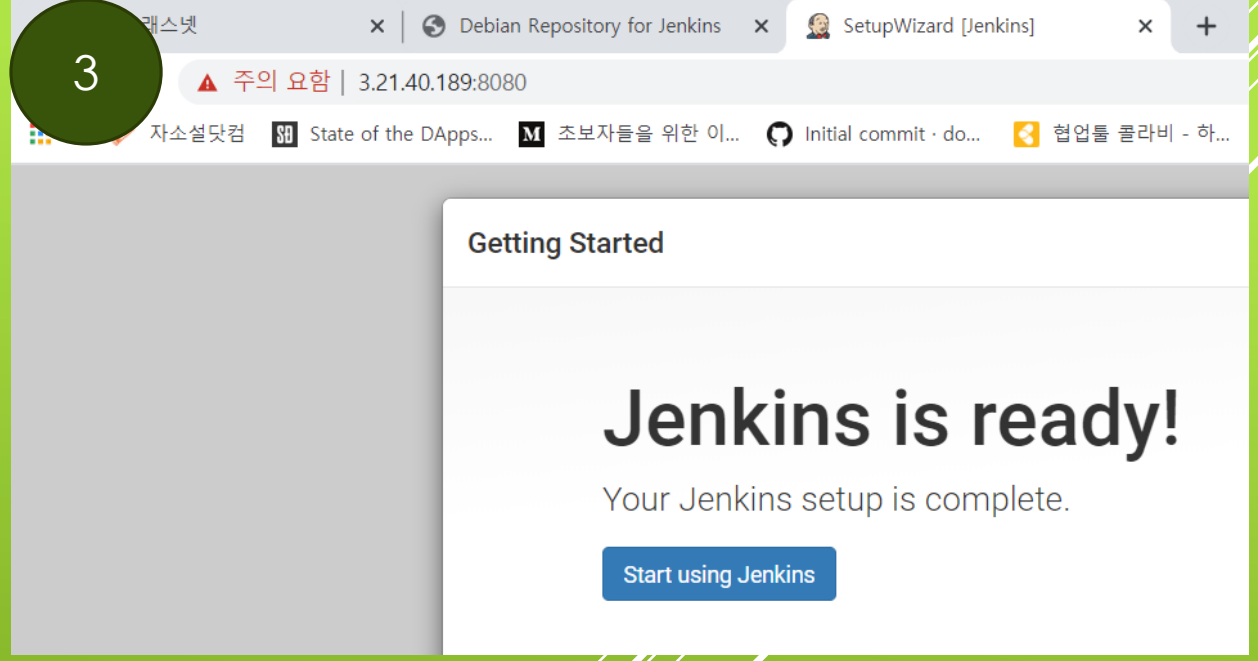
1


Debian Repository for Jenkins
SetupWizard [Jenkins]
주의 요함 | 3.21.40.189:8080
State of the DApps...
초보자들을 위한 이...
Initial commit · do...
협업툴 콜라비 - 하...
인프런 - 배우고 나...
Solidity 컴파일러...
Getting Started
Customize Jenkins
Plugins extend Jenkins with additional features to support many different ne
Install suggested plugins
Install plugins the Jenkins community finds most useful.
Select plugins to install
Select and install plugins most suitable for your needs.

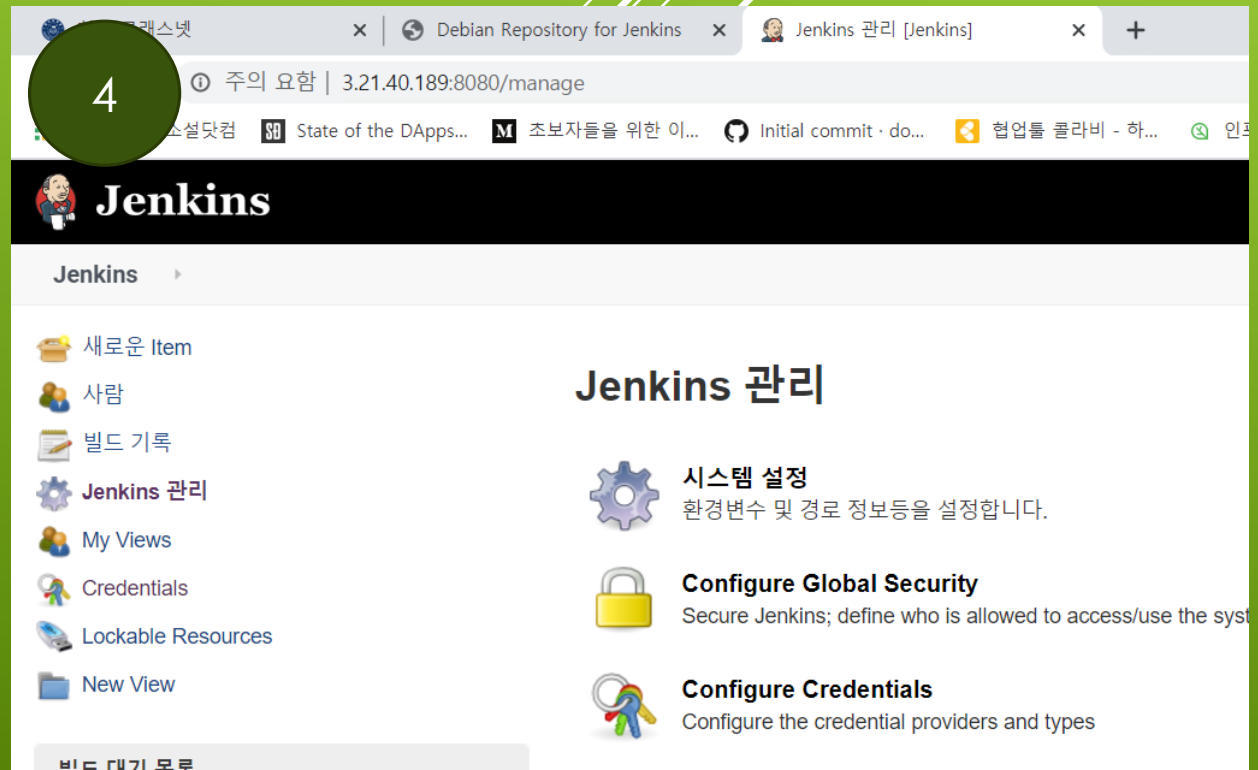
2


Debian Repository for Jenkins
SetupWizard [Jenkins]
주의 요함 | 3.21.40.189:8080
State of the DApps...
초보자들을 위한 이...
Initial commit · do...
협업툴 콜라비 - 하...
인프런 - 배우고 나...
Getting Started
Create First Admin User
계정명:
암호:
암호 확인:
이름:
이메일 주소:

3


Debian Repository for Jenkins
SetupWizard [Jenkins]
주의 요함 | 3.21.40.189:8080
State of the DApps...
초보자들을 위한 이...
Initial commit · do...
협업툴 콜라비 - 하...
Getting Started
Jenkins is ready!
Your Jenkins setup is complete.
Start using Jenkins

4


Debian Repository for Jenkins
Jenkins 관리 [Jenkins]
주의 요함 | 3.21.40.189:8080/manage
State of the DApps...
초보자들을 위한 이...
Initial commit · do...
협업툴 콜라비 - 하...
Jenkins
Jenkins
새로운 Item
사람
빌드 기록
Jenkins 관리
My Views
Credentials
Lockable Resources
New View
Jenkins 관리
시스템 설정
환경변수 및 경로 정보등을 설정합니다.
Configure Global Security
Configure Credentials
Configure the credential providers and types

5

Debian Repository for Jenkins | Configure Global Security [Jenki

주의 요함 | 3.21.40.189:8080/configureSecurity/

State of the DApps... | 조보자들을 위한 이... | Initial commit · do... | 협업툴 콜라비 - 하... | 인프런 - 배우고 나...

Jenkins › Configure Global Security

Treats all input as plain text. HTML unsafe characters like < and & are escaped to their respe

Agents

TCP port for inbound agents: Fixed : Random Disable

Agent protocols...

CSRF Protection

Crumb Issuer: Default Crumb Issuer

Enable proxy compatibility

6

Debian Repository for Jenkins | Jenkins

주의 요함 | 3.21.40.189:8080/computer/createItem

State of the DApps... | 조보자들을 위한 이... | Initial commit · do... | 협업툴 콜라비 - 하... | 인프런 - 배

Jenkins › Nodes

신규 노드

Configure Clouds

Node Monitoring

빌드 대기 목록

빌드 대기 항목이 없습니다.

빌드 실행 상태

1 대기 중

2 대기 중

# of executors: 1

Remote root directory: /home/ubuntu/jenkins

Labels:

Usage: Use this node as much as possible

Launch method: Launch agent by connecting it to the master

Disable WorkDir

Custom WorkDir path:

Internal data directory: remoting

Fail if workspace is missing

Use WebSocket

Availability: Keep this agent online as much as possible

Node Properties

Disable deferred wipeout on this node

Environment variables

Tool Locations

Save

7

주의 요함 | 3.21.40.189:8080/computer/build/

State of the DApps... | 조보자들을 위한 이... | Initial commit · do...

Jenkins

Jenkins › Nodes › build

목록으로 돌아가기

상태

Delete Agent

설정

빌드 기록

통계보기

로그

빌드 실행 상태

Agent build

Connect agent to Jenkins one of these ways:

- Launch — Launch agent from browse
- Run from agent command line:

```
java -jar agent.jar -jnlpUrl http://3.
"/home/ubuntu/jenkins"
```

Run from agent command line, with the se

```
echo 22dbcabf3db64e07d6ffe5ee19026584e
```

이 형식의 파일은
래도 slave-agent.j

8

Debian Repository for Jenkins | build [Jenkins]

github.com/doyun0916/github_demo

State of the DApps... | 조보자들을 위한 이... | Initial commit · do... | 협업툴 콜라비 - 하...

Code | Issues 0 | Pull requests 0 | Actions | Projects 0

No description, website, or topics provided.

Manage topics

7 commits | 2 branches | 0 packages

Branch: master | New pull request

doyun0916 Add files via upload

README.md	Update README.md
agent.jar	Add files via upload
secondtest.txt	Update secondtest.txt
slave-agent.jnlp	Add files via upload

README.md

github_demo

its the first github demo using GUI

Agent

```
ubuntu@ip-172-31-34-143:~$ sudo apt update
```

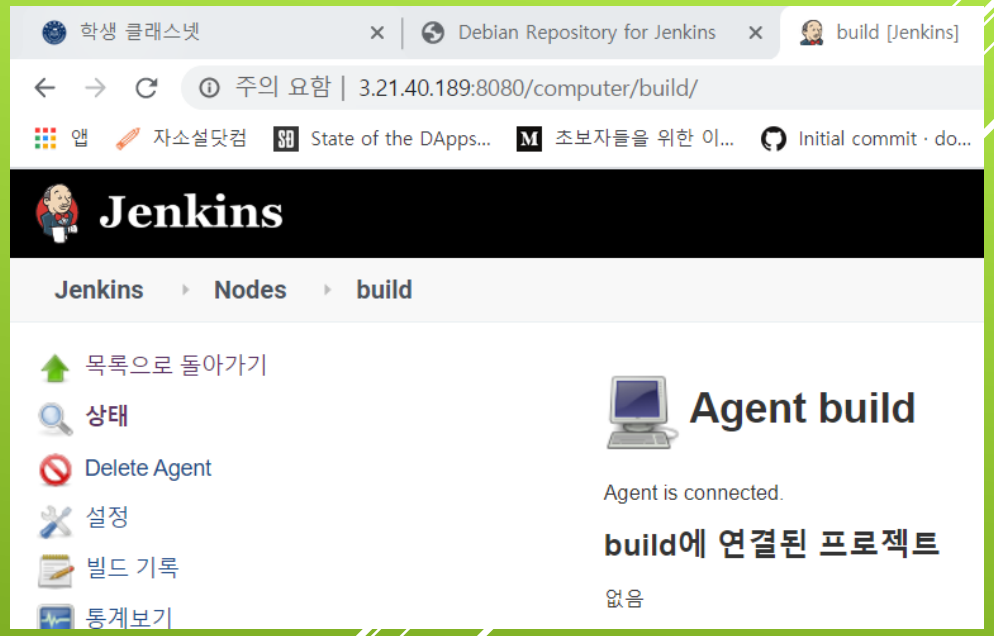
```
ubuntu@ip-172-31-34-143:~$ sudo apt install openjdk-8-jdk
```

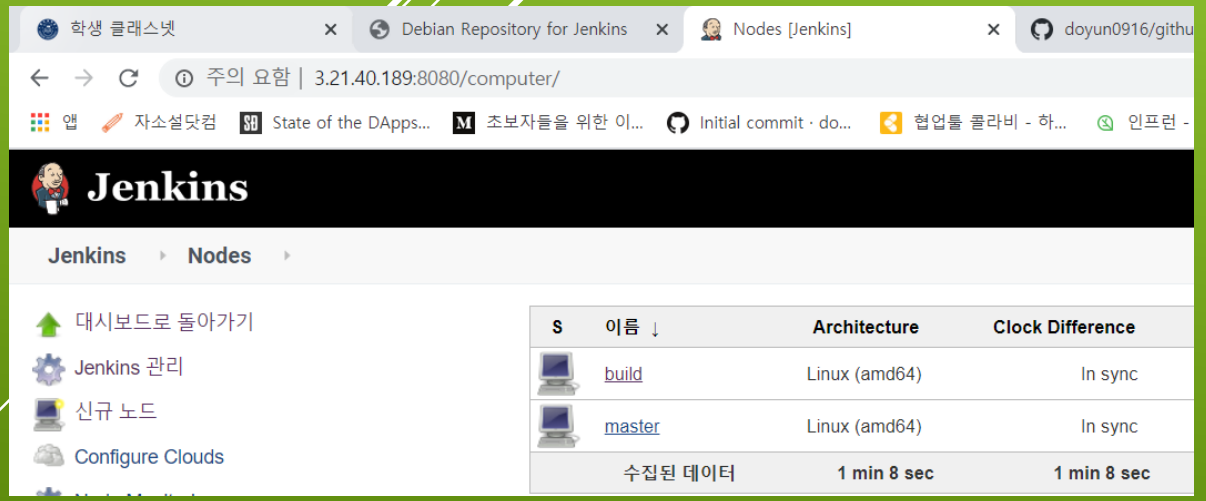
```
ubuntu@ip-172-31-34-143:~$ sudo apt install -y git
```

```
ubuntu@ip-172-31-34-143:~$ mkdir jenkins
ubuntu@ip-172-31-34-143:~$ cd jenkins
ubuntu@ip-172-31-34-143:~/jenkins$ git init
Initialized empty Git repository in /home/ubuntu/jenkins/.git/
```

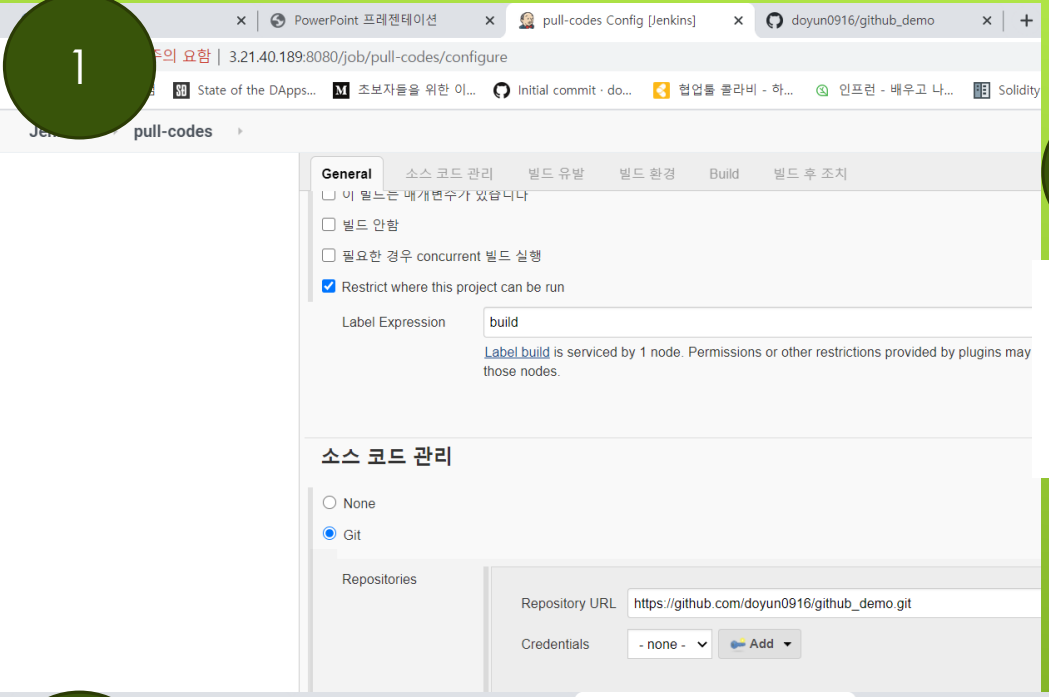
```
ubuntu@ip-172-31-34-143:~/jenkins$ git remote add origin https://github.com/doyu
n0916/github_demo.git
ubuntu@ip-172-31-34-143:~/jenkins$ git pull origin master
remote: Enumerating objects: 20, done.
remote: Counting objects: 100% (20/20), done.
remote: Compressing objects: 100% (16/16), done.
remote: Total 20 (delta 1), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (20/20), done.
From https://github.com/doyun0916/github_demo
 * branch            master     -> FETCH_HEAD
 * [new branch]      master     -> origin/master
```

```
ubuntu@ip-172-31-34-143:~/jenkins$ ls -la
total 1516
drwxrwxr-x 4 ubuntu ubuntu    4096 May 29 10:34 .
drwxr-xr-x 6 ubuntu ubuntu    4096 May 29 10:08 ..
drwxrwxr-x 8 ubuntu ubuntu    4096 May 29 10:34 .git
-rw-rw-r-- 1 ubuntu ubuntu      51 May 29 10:34 README.md
-rw-rw-r-- 1 ubuntu ubuntu 1522802 May 29 10:34 agent.jar
drwxrwxr-x 3 ubuntu ubuntu    4096 May 29 10:31 github_demo
-rw-rw-r-- 1 ubuntu ubuntu      81 May 29 10:34 secondtest.txt
-rw-rw-r-- 1 ubuntu ubuntu     777 May 29 10:34 slave-agent.jnlp
ubuntu@ip-172-31-34-143:~/jenkins$ java -jar agent.jar -jnlpUrl http://3.21.40.1
89:8080/computer/build/slave-agent.jnlp -secret 22dbcabf3db64e07d6ffe5ee19026584
e63bbf824bc56b7ce26718d28825fde4 -workDir "/home/ubuntu/jenkins"
May 29, 2020 10:34:40 AM org.jenkinsci.remoting.engine.WorkDirManager initialize
WorkDir
```

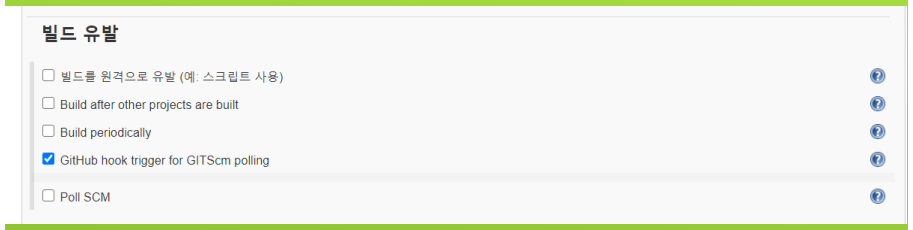




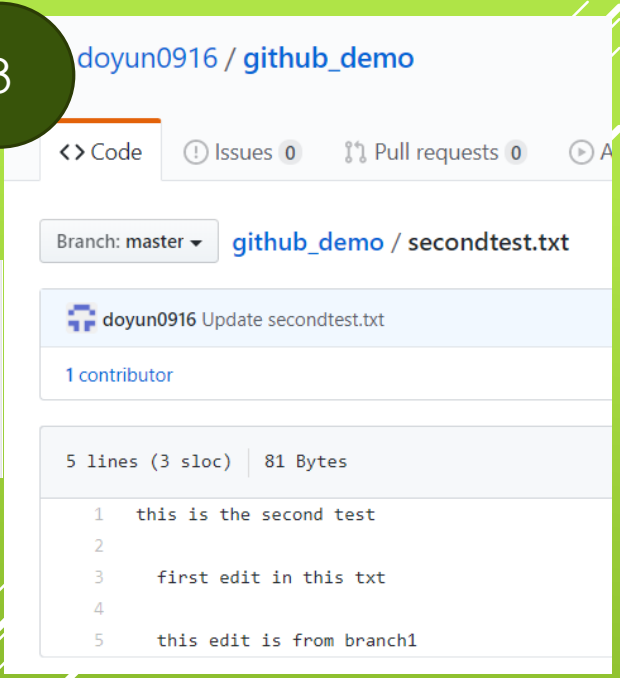
1


PowerPoint 프레젠테이션
pull-codes Config [Jenkins]
doyun0916/github_demo
3.21.40.189:8080/job/pull-codes/configure
pull-codes
General
소스 코드 관리
빌드 유발
빌드 환경
Build
빌드 후 조치
빌드 안함
필요한 경우 concurrent 빌드 실행
Restrict where this project can be run
Label Expression
build
Label build is serviced by 1 node. Permissions or other restrictions provided by plugins may
those nodes.
소스 코드 관리
None
Git
Repositories
Repository URL
https://github.com/doyun0916/github_demo.git
Credentials
- none -
Add

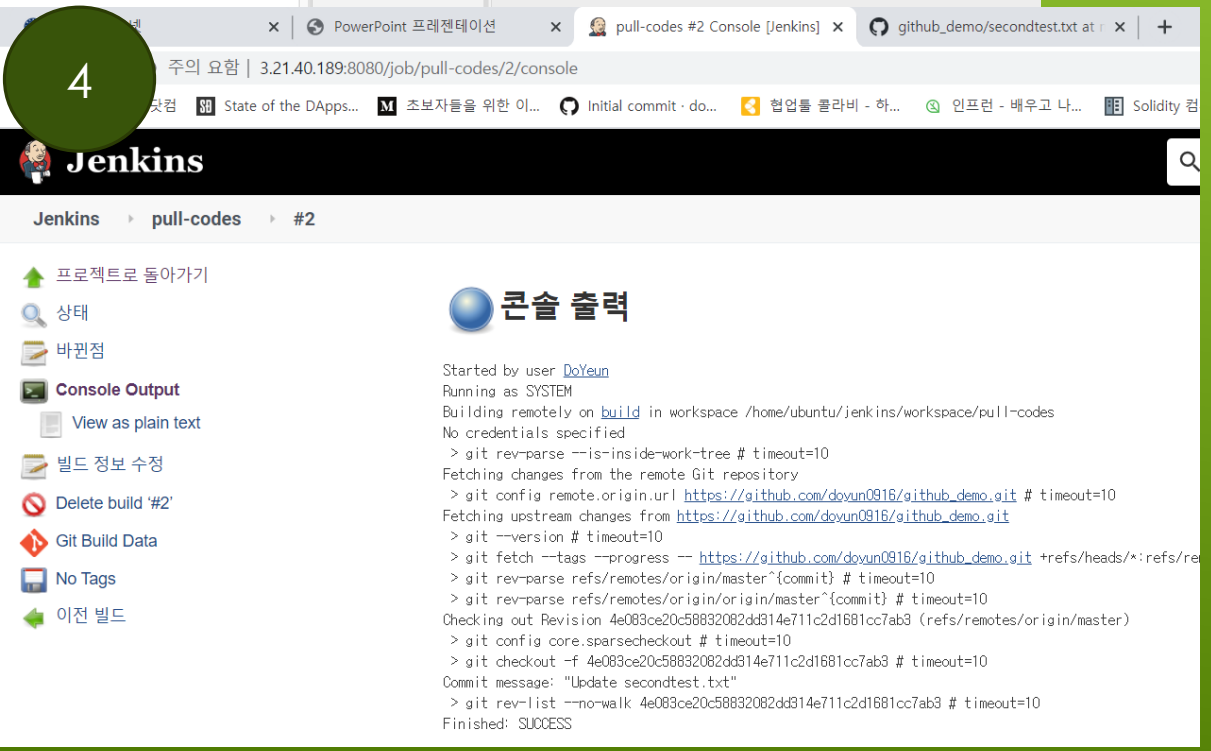
2


빌드 유발
빌드를 원격으로 유발 (예: 스크립트 사용)
Build after other projects are built
Build periodically
GitHub hook trigger for GITScm polling
Poll SCM

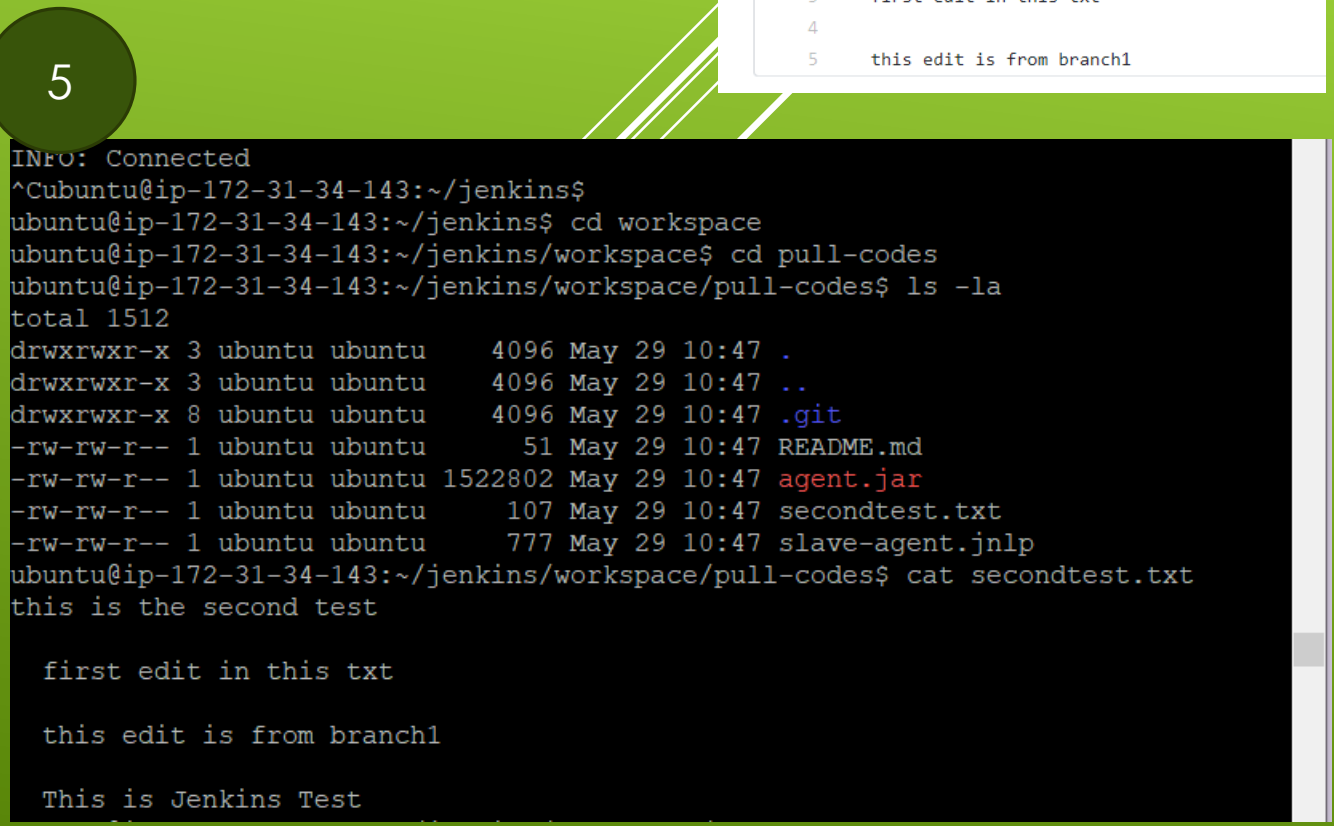
3


doyun0916 / github_demo
Code
Issues 0
Pull requests 0
Branch: master
github_demo / secondtest.txt
doyun0916 Update secondtest.txt
1 contributor
5 lines (3 sloc) 81 Bytes
this is the second test
first edit in this txt
this edit is from branch1

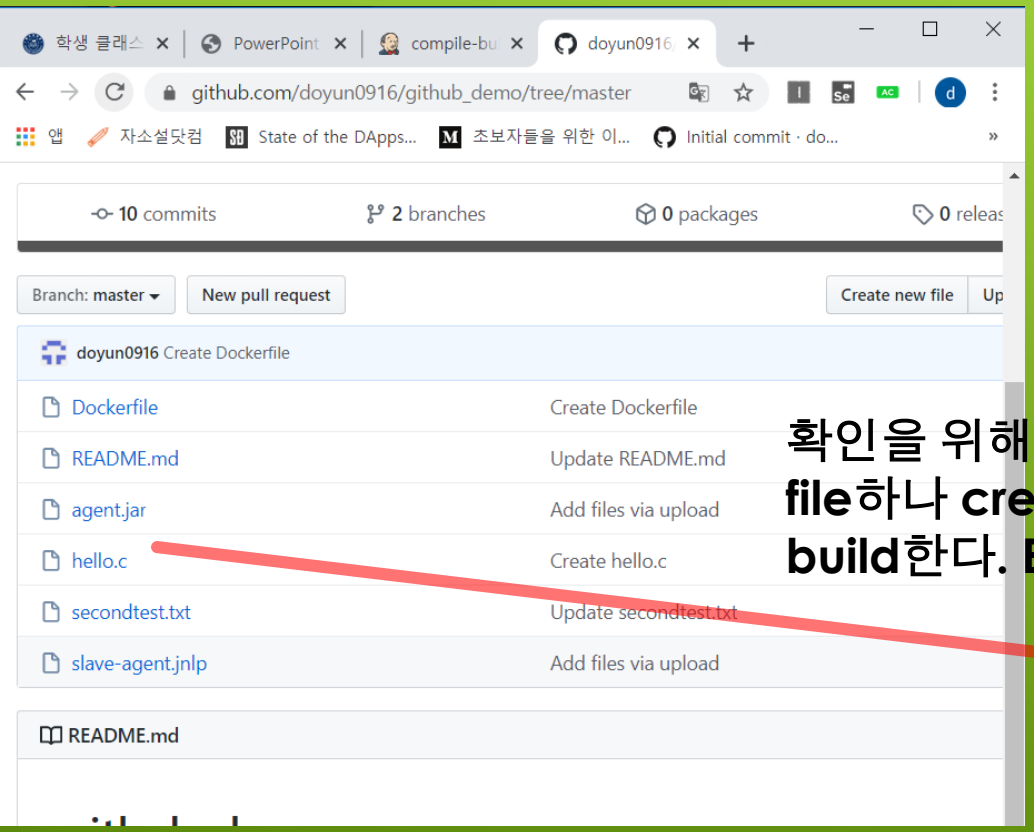
4


PowerPoint 프레젠테이션
pull-codes #2 Console [Jenkins]
github_demo/secondtest.txt at
3.21.40.189:8080/job/pull-codes/2/console
Jenkins
Jenkins
pull-codes
#2
프로젝트로 돌아가기
상태
바뀐점
Console Output
View as plain text
빌드 정보 수정
Delete build '#2'
Git Build Data
No Tags
이전 빌드
콘솔 출력
Started by user DoYeun
Running as SYSTEM
Building remotely on build in workspace /home/ubuntu/jenkins/workspace/pull-codes
No credentials specified
> git rev-parse --is-inside-work-tree # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/doyun0916/github_demo.git # timeout=10
Fetching upstream changes from https://github.com/doyun0916/github_demo.git
> git --version # timeout=10
> git fetch --tags --progress -- https://github.com/doyun0916/github_demo.git +refs/heads/*:refs/re
> git rev-parse refs/remotes/origin/master^{commit} # timeout=10
> git rev-parse refs/remotes/origin/origin/master^{commit} # timeout=10
Checking out Revision 4e083ce20c58832082dd314e711c2d1681cc7ab3 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 4e083ce20c58832082dd314e711c2d1681cc7ab3 # timeout=10
Commit message: "Update secondtest.txt"
> git rev-list --no-walk 4e083ce20c58832082dd314e711c2d1681cc7ab3 # timeout=10
Finished: SUCCESS

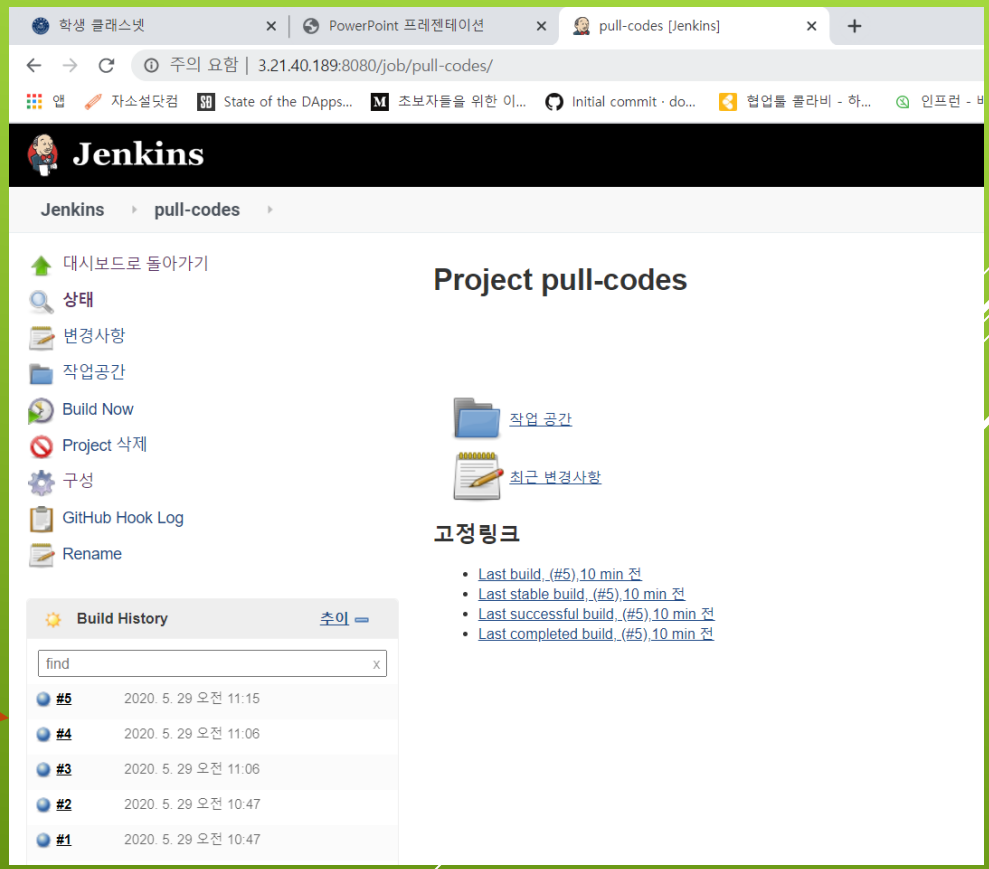
5


INFO: Connected
^Cubuntu@ip-172-31-34-143:~/jenkins$
ubuntu@ip-172-31-34-143:~/jenkins$ cd workspace
ubuntu@ip-172-31-34-143:~/jenkins/workspace$ cd pull-codes
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ ls -la
total 1512
drwxrwxr-x 3 ubuntu ubuntu 4096 May 29 10:47 .
drwxrwxr-x 3 ubuntu ubuntu 4096 May 29 10:47 ..
drwxrwxr-x 8 ubuntu ubuntu 4096 May 29 10:47 .git
-rw-rw-r-- 1 ubuntu ubuntu 51 May 29 10:47 README.md
-rw-rw-r-- 1 ubuntu ubuntu 1522802 May 29 10:47 agent.jar
-rw-rw-r-- 1 ubuntu ubuntu 107 May 29 10:47 secondtest.txt
-rw-rw-r-- 1 ubuntu ubuntu 777 May 29 10:47 slave-agent.jnlp
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ cat secondtest.txt
this is the second test
first edit in this txt
this edit is from branch1
This is Jenkins Test

```
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ sudo docker run -it -d u
buntu
6314fc19f1e14b3f5b08c718720e6cdae3000ae2c72f0521f6d6adfb52469a41
```



확인을 위해서 **html 출력하는 c file하나 create하고 pull-codes build한다. Build시 connect 필수!**



```
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ sudo apt-get install gcc
```

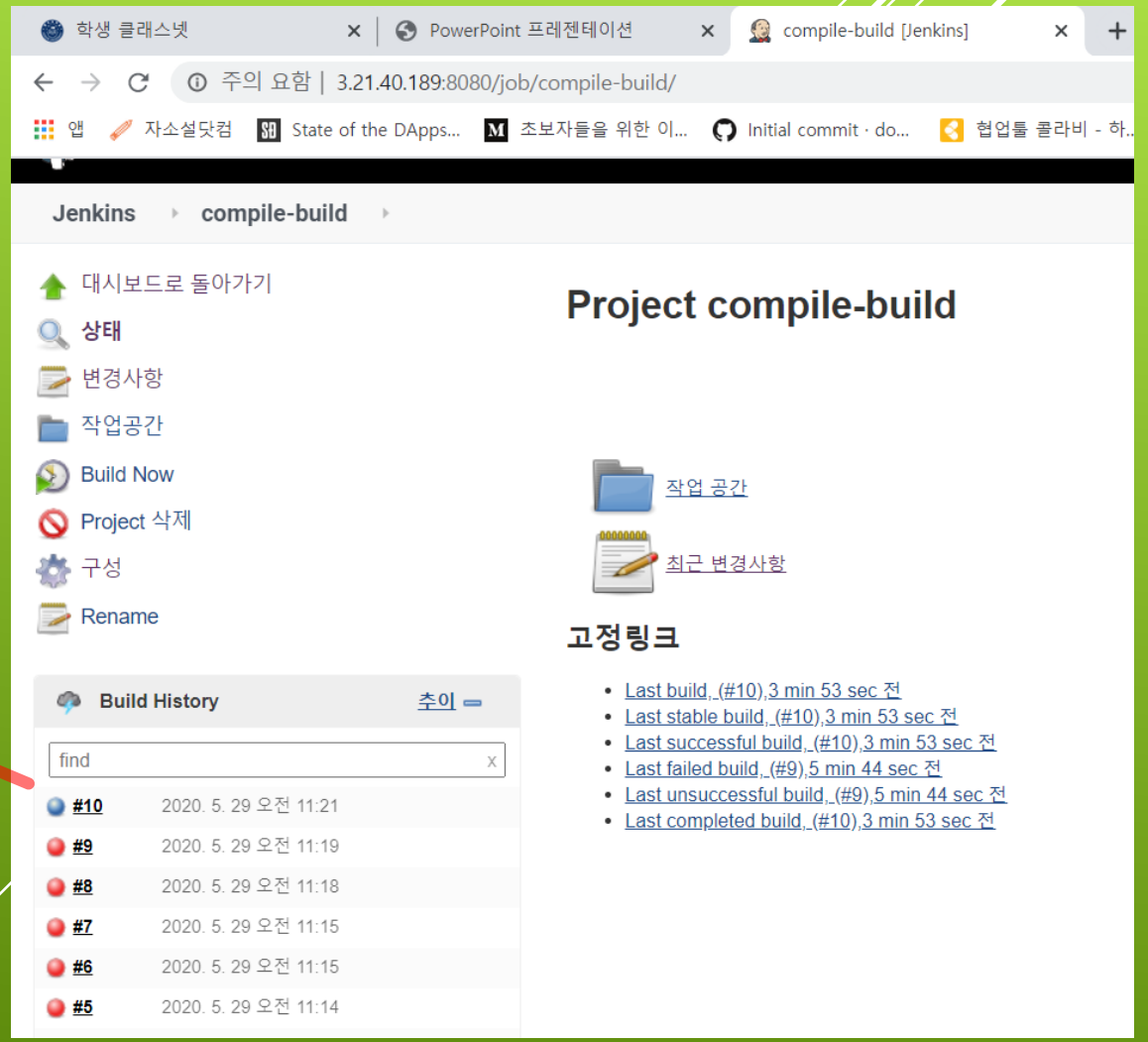
```
^Cubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ sudo apt-get install d
ker.io
```

```
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ sudo docker run -it -d u
buntu
6314fc19f1e14b3f5b08c718720e6cdae3000ae2c72f0521f6d6adfb52469a41
```

```
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ java -jar agent.jar -jnl
pUrl http://3.21.40.189:8080/computer/build/slave-agent.jnlp -secret 22dbcabf3db
64e07d6ffe5ee19026584e63bbf824bc56b7ce26718d28825fde4 -workDir "/home/ubuntu/jen
kins"
```

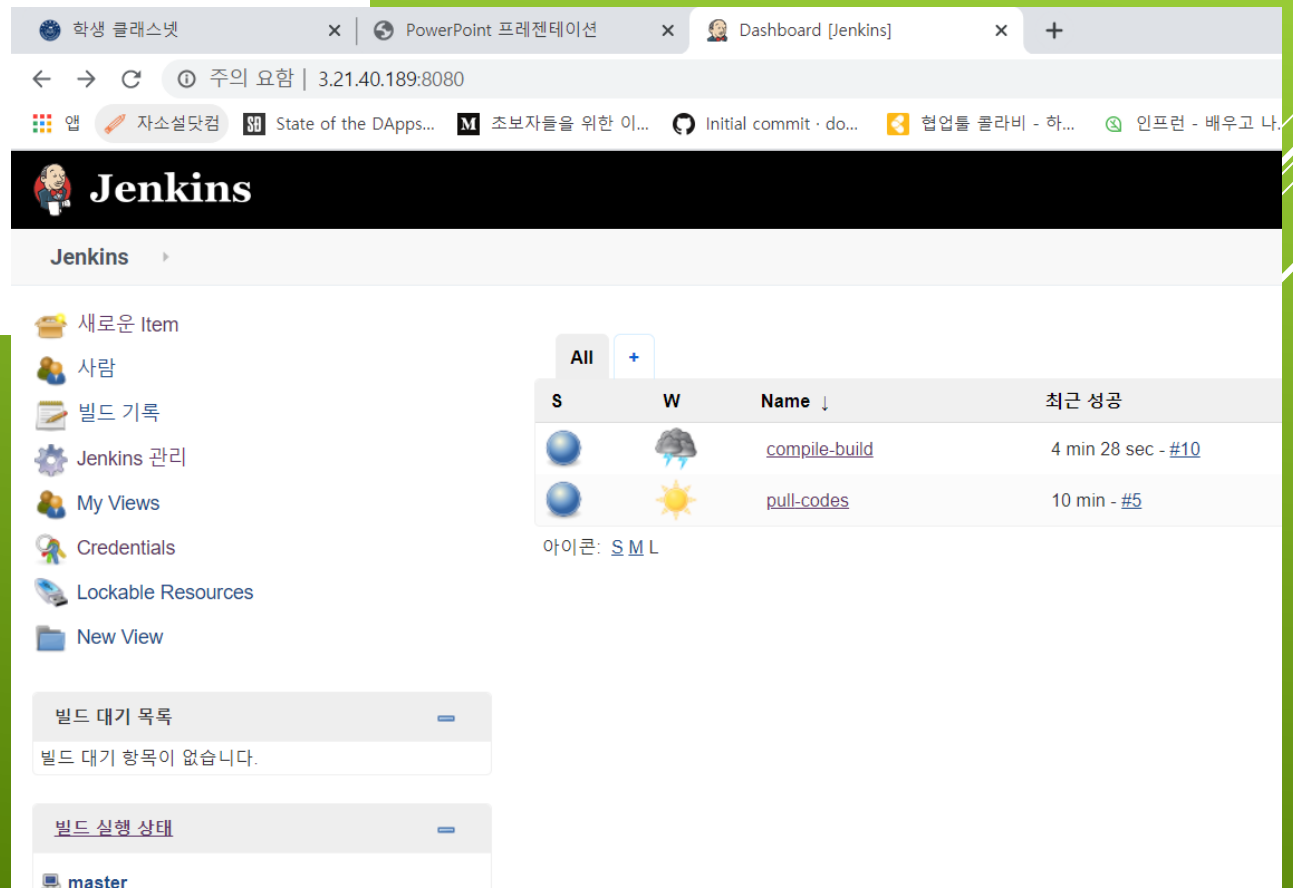
Build 후 결과!

```
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ ls -la
total 1536
drwxrwxr-x 3 ubuntu ubuntu    4096 May 29 11:21 .
drwxrwxr-x 4 ubuntu ubuntu    4096 May 29 11:06 ..
drwxrwxr-x 8 ubuntu ubuntu    4096 May 29 11:15 .git
-rw-rw-r-- 1 ubuntu ubuntu     181 May 29 11:06 Dockerfile
-rw-rw-r-- 1 ubuntu ubuntu      51 May 29 10:47 README.md
-rwxrwxr-x 1 ubuntu ubuntu    8304 May 29 11:21 a.out
-rw-rw-r-- 1 ubuntu ubuntu 1522802 May 29 10:47 agent.jar
-rw-rw-r-- 1 ubuntu ubuntu      88 May 29 11:15 hello.c
-rw-rw-r-- 1 ubuntu ubuntu      27 May 29 11:21 index.html
-rw-rw-r-- 1 ubuntu ubuntu     107 May 29 10:47 secondtest.txt
-rw-rw-r-- 1 ubuntu ubuntu     777 May 29 10:47 slave-agent.jnlp
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$ cat index.html
<h1>Hellok, Professor</h1>
ubuntu@ip-172-31-34-143:~/jenkins/workspace/pull-codes$
```



결과

학생 클래스넷
PowerPoint 프레젠테이션
compile-build #10 Console [Jen
주의 요함 | 13.59.66.25:5000
앱
자소설닷컴
State of the DApps...
초보자들을 위한 이...
Initial commit · do...
협업툴 콜라비 - 하...
Hellok, Professor


학생 클래스넷
PowerPoint 프레젠테이션
Dashboard [Jenkins]
주의 요함 | 3.21.40.189:8080
앱
자소설닷컴
State of the DApps...
초보자들을 위한 이...
Initial commit · do...
협업툴 콜라비 - 하...
인프런 - 배우고 나...
Jenkins
Jenkins
새로운 Item
사람
빌드 기록
Jenkins 관리
My Views
Credentials
Lockable Resources
New View
All
+
S
W
Name ↓
최근 성공
compile-build
4 min 28 sec - #10
pull-codes
10 min - #5
아이콘: S M L
빌드 대기 목록
빌드 대기 항목이 없습니다.
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