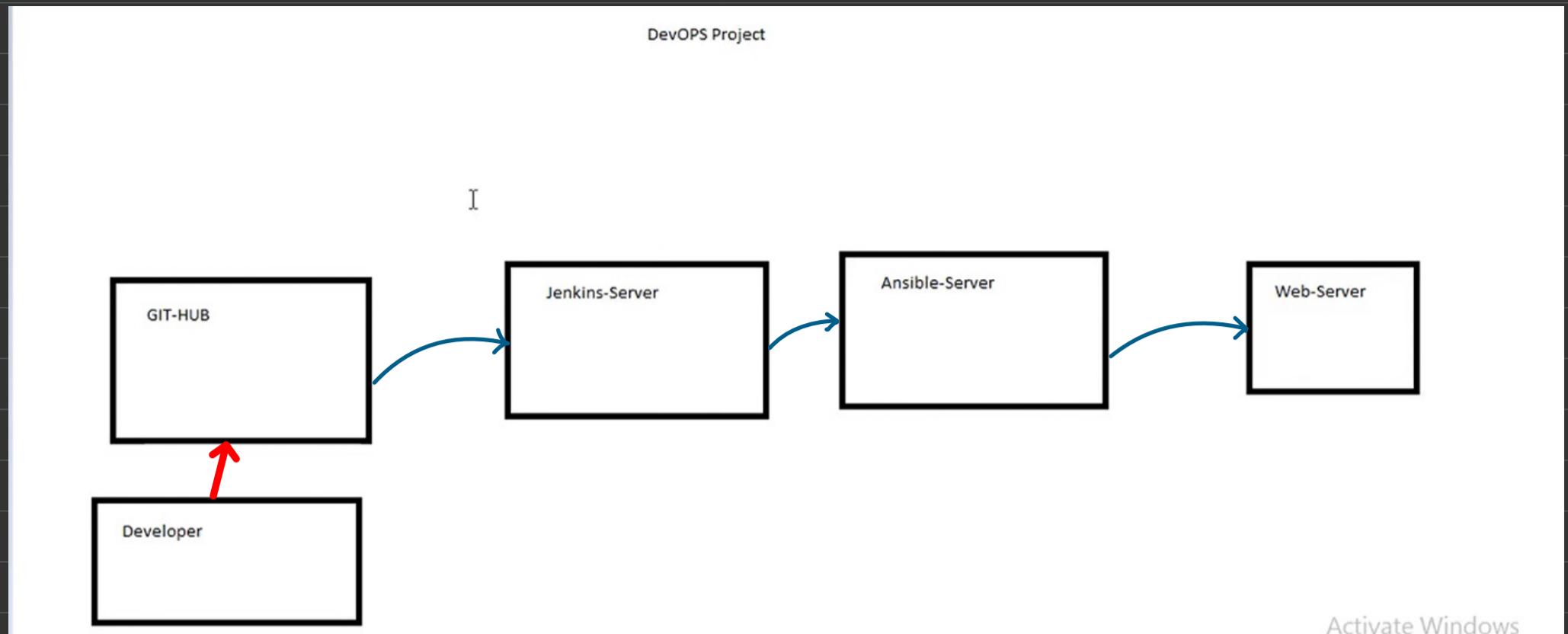


# Jenkins Integration with Ansible and web-server



Activate Windows

## Will use github for code push

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Public IPv4 ...
□	jenkins	i-047e8ae39cb6a2334	Running	t2.micro	2/2 checks passed	No alarms	65.1.2.219
□	ansible	i-0f8fe46046edefd5d	Running	t2.micro	2/2 checks passed	No alarms	43.205.229.19
□	web-server	i-02c254b5314b8d39e	Running	t2.micro	2/2 checks passed	No alarms	43.205.230.11

## Step1 ) we have configure the Jenkins server

## Step 2) To Setup Ansible Server

```

[root@ip-172-31-46-18 ~]# yum install ansible
Last metadata expiration check: 0:08:16 ago on Tue Dec  5 11:58:55 2023.
Dependencies resolved.
=====
 Package           Architecture Version       Repository      Size
=====
 Installing:
  ansible          noarch     8.3.0-1.amzn2023.0.1  amazonlinux   32 M
 Installing dependencies:
  ansible-core     x86_64     2.15.3-1.amzn2023.0.1  amazonlinux   2.5 M
  git-core         x86_64     2.40.1-1.amzn2023.0.1  amazonlinux   4.3 M
  sshpass          x86_64     1.09-6.amzn2023.0.1   amazonlinux   28 k

 Transaction Summary
=====
 Install 4 Packages

 Total download size: 39 M
 Installed size: 549 M
 Is this ok [y/N]: y

```

```

## green.example.com
## blue.example.com
## 192.168.100.1
## 192.168.100.10
[web]
172.31.46.18

```

*we have pasted private/public IP  
of web server in Ansible host file*

### Step 3) Now we will setup web-server will install apache package

```

[root@ip-172-31-34-56 ~]# yum install httpd
Last metadata expiration check: 0:55:51 ago on Tue Dec  5 11:58:57 2023.
Dependencies resolved.
=====
 Package           Architecture      Version       Repository
=====
Installing:
 httpd            x86_64          2.4.58-1.amzn2023
Installing dependencies:
 apr              x86_64          1.7.2-2.amzn2023.0.2
 apr-util         x86_64          1.6.3-1.amzn2023.0.1
 generic-logos-httpd    noarch        18.0.0-12.amzn2023.0.3
 httpd-core       x86_64          2.4.58-1.amzn2023
 httpd-filesystem    noarch        2.4.58-1.amzn2023
 httpd-tools      x86_64          2.4.58-1.amzn2023
 libbrotli        x86_64          1.0.9-4.amzn2023.0.2
 mailcap          noarch        2.1.49-3.amzn2023.0.3
Installing weak dependencies:
=====
Complete!
[root@ip-172-31-34-56 ~]# systemctl start httpd
[root@ip-172-31-34-56 ~]# systemctl enable httpd
Created symlink /etc/systemd/system/multi-user.target.wants/httpd.service → /usr/lib/systemd/system/httpd.service.
[root@ip-172-31-34-56 ~]#

```

```

[root@ip-172-31-34-56 html]# pwd
/var/www/html
[root@ip-172-31-34-56 html]# ll
total 0
[root@ip-172-31-34-56 html]#

```

*file is empty before Jenkins Job Triggered*

### Step 4) Now we will make key-based/password less connection between ansible and web-server.

```

[root@ip-172-31-46-18 ~]# 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:PymrntL2ramWQQ60d7INkYYPQeH0tCyWduNlYU2H5Rg root@ip-172-31-46-18.ap-south-1.compute.internal
The key's randomart image is:
+---[RSA 3072]---+
| .. ooEoo |
| o= o .o= |
| *o*.o . . |
| o+++ |
| . =.. S |
| o * .. . |
| = X. + |
| . O..= . |
| ==+.. |
+---[SHA256]----+
[root@ip-172-31-46-18 ~]#

```

**We are getting error because root login is disable on web-server**

```

[root@ip-172-31-46-18 .ssh]# ssh-copy-id -i id_rsa.pub root@172.31.34.56
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "id_rsa.pub"
The authenticity of host '172.31.34.56 (172.31.34.56)' can't be established.
ED25519 key fingerprint is SHA256:vx9PMMtT7Szpw6uNpkIg6RkWahcjzucjs+p+/7MI8s.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
root@172.31.34.56: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
[root@ip-172-31-46-18 .ssh]#

```

```
#LoginGraceTime 2m
PermitRootLogin prohibit-password
#StrictModes yes
#MaxAuthTries 6
#MaxSessions 10

PubkeyAuthentication yes

# The default is to check both .ssh/authorized_keys and .ssh/authorized_keys2
# but this is overridden so installations will only check .ssh/authorized_keys
AuthorizedKeysFile      ssh/authorized_keys
```

```
# Explicitly disable PasswordAuthentication. By presetting it, we  
# avoid the cloud-init set_passwords module modifying sshd_config and  
# restarting sshd in the default instance launch configuration.  
PasswordAuthentication yes  
PermitEmptyPasswords no
```

We have uncommented these two parameters and reloaded the sshd service

```
[root@ip-172-31-34-56 ~]# passwd root
Changing password for user root.
New password:                                we also
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:                         Root pass
passwd: all authentication tokens updated successfully.
[root@ip-172-31-34-56 ~]# systemctl reload sshd
[root@ip-172-31-34-56 ~]#
```

We also set  
Root password

```
[root@ip-172-31-46-18 .ssh]# ssh-copy-id -i id_rsa.pub root@172.31.34.56
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
root@172.31.34.56's password:
```

Number of key(s) added: 1 **Key added**  
Now try logging into the machine, with: "ssh 'root@172.31.34.56'"  
and check to make sure that only the key(s) you wanted were added.

[root@ip-172-31-46-18 .ssh]#

key added

```
[root@ip-172-31-46-18 .ssh]# ssh root@172.31.34.56
```

<https://aws.amazon.com/linux/amazon-linux-2023>

we can connect to without password

```
Last login: Tue Dec  5 13:34:03 2023 from 172.31.46.18  
[root@ip-172-31-34-56 ~]#
```

://aws.amazon.com/linux/amazon-linux-2023  
we can connect to Ansible  
without password.

## Step 5 ) Now we will make same connection between Jenkins and ansible server

### Generating key in Jenkins and sending it to Ansible server

```
[ec2-user@ip-172-31-42-55 ~]$ sudo su -  
Last login: Tue Dec  5 12:05:24 UTC 2023 on pts/0  
[root@ip-172-31-42-55 ~]# 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:  
SHA256:4PX/tlhomgVtjVPEGPTFEodw9HzgakzWrUF9ctyIwAc root@ip-172-31-42-55.ap-south-1.compute.internal  
The key's randomart image is:  
+---[RSA 3072]---+  
| .E++BBB+ |  
| . +B*BB |  
| . . .o *+* |  
| . o . = = o. |  
| . S o 0 o |  
| = o |  
| = . |  
| = +. |  
| o ..o. |  
+---[SHA256]---+  
[root@ip-172-31-42-55 ~]#
```

```
[root@ip-172-31-42-55 .ssh]# ssh-copy-id -i id_rsa.pub root@172.31.46.18  
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "id_rsa.pub"  
The authenticity of host '172.31.46.18 (172.31.46.18)' can't be established.  
ED25519 key fingerprint is SHA256:g/1/5hfDCBbsG21WK+a/rZJSjRmMkntfib/w0UMHX0Y.  
This key is not known by any other names  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed  
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys  
root@172.31.46.18: Permission denied (publickey,gssapi-keyex,gssapi-with-mic).  
[root@ip-172-31-42-55 .ssh]#
```

```
#LoginGraceTime 2m  
PermitRootLogin yes  
#StrictModes yes  
#MaxAuthTries 6  
#MaxSessions 10  
  
PubkeyAuthentication yes  
  
# The default is to check both .ssh/authorized  
# but this is overridden so installations will  
AuthorizedKeysFile      .ssh/authorized_keys
```

```
# Explictly disable password authentication. By default  
# avoid the cloud-init set_passwords module modifying  
# restarting sshd in the default instance launch configuration  
PasswordAuthentication yes  
PermitEmptyPasswords no  
  
# Change to no to disable s/key passwords  
#KbdInteractiveAuthentication yes  
  
# Kerberos options
```

```
[root@ip-172-31-46-18 ~]# passwd root  
Changing password for user root.  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: all authentication tokens updated successfully.  
[root@ip-172-31-46-18 ~]#  
[root@ip-172-31-46-18 ~]#
```

```
[root@jenkins .ssh]# ssh-copy-id -i id_rsa.pub root@172.31.46.18
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "id_rsa.pub"
/usr/bin/ssh-copy-id: INFO: attempting to log in with the new key(s), to filter out any that are already installed
/usr/bin/ssh-copy-id: INFO: 1 key(s) remain to be installed -- if you are prompted now it is to install the new keys
root@172.31.46.18's password:

Number of key(s) added: 1

Now try logging into the machine, with: "ssh 'root@172.31.46.18'"
and check to make sure that only the key(s) you wanted were added.

[root@jenkins .ssh]#
```

```
[root@jenkins .ssh]# ssh root@172.31.46.18
,#
~\ _### Amazon Linux 2023
~~ \### \
~~ \### |
~~ \#/ https://aws.amazon.com/linux/amazon-linux-2023
~~ V~' →
~~~ /
~~ ./. / /
~/m/ \
Last login: Tue Dec 5 13:18:35 2023
[root@ansible ~]# exit
logout
Connection to 172.31.46.18 closed.
[root@jenkins .ssh]#
```

Connection made

## Step 6 ) Now we will create one Playbook on Ansible server

```
[root@ansible ~]# cd source-code/
[root@ansible source-code]# pwd
/root/source-code we have created one folder
[root@ansible source-code]#
```

```
[root@ansible source-code]# vim web-playbook.yml
[root@ansible source-code]#
```

```
- hosts: all
  tasks:
    - copy:
        src: /opt/index.html
```

Now the question is from where this index.html file going to come in Ansible server

So this file will come , after compiling of code, Jenkins will send this file in /opt directory in ansible server

```
- hosts: all
  tasks:
    - copy:
        src: /opt/index.html
        dest: /var/www/html
```

## Step 7) we have created one file in github and will also integrate github with Jenkins

A screenshot of a web browser showing a GitHub repository named 'jenkins'. The repository has a single file, 'index.html', which contains the text 'Hello World v1'. The file was created by 'Rizwan00792' 2 minutes ago. The GitHub interface includes a sidebar with 'Files' and a main area with tabs for 'Code', 'Blame', and 'Raw'.

### API Token

Current token(s)

project1	1149f1f83eae19c611bfa8de55c8c95e1e	Copy	Delete
----------	------------------------------------	------	--------

**⚠ Copy this token now, because it cannot be recovered in the future.**

Add new Token

*we have copy token from Jenkins to github in webhook*

### Credentials

Credentials are only available to the user they belong to

A screenshot of a web browser showing a GitHub repository named 'jenkins'. The 'Webhooks' section is selected. It shows a single webhook entry with the URL 'http://65.1.2.219:8080/github-webhook... (push)'. There are 'Edit' and 'Delete' buttons next to the URL. A red arrow points from the 'Copy' button in the previous screenshot to the 'Edit' button here.

**Step 8) now we have to install a plugin called Publish-over-ssh, because when build is ready on Jenkins server**

**Jenkins server will transfer the build to ansible server over ssh**

**And the playbook which we have created on ansible that will also be trigger by Jenkins server that also will be done by over ssh**

The screenshot shows the Jenkins Dashboard. On the left, there are links for 'New Item', 'People', 'Build History', and 'Manage Jenkins'. The 'Manage Jenkins' link is highlighted with a green box. In the center, a table displays a single build entry: 'first-job' (Status: S, Last Success: 1 mo 20 days ago, Last Failure: N/A, Last Duration: 0.65 sec). Below the table are icons for 'Icon: S M L', 'Icon legend', and three 'Atom feed' options. At the bottom, there's a 'Build Queue (1)' section.

The screenshot shows the 'Manage Jenkins > Plugins' page. The left sidebar has links for 'Updates', 'Available plugins' (which is selected and highlighted with a blue box), 'Installed plugins', and 'Advanced settings'. The main area shows a search bar with 'Publish-over' and a list of plugins. The 'Publish Over SSH 1.25' plugin is selected and highlighted with a green box. It has a 'Released' status and was last updated '5 mo 2 days ago'. Other listed plugins include 'Infrastructure plugin for Publish Over X 0.22', 'Publish Over FTP 1.17', and 'Publish Over CIFS 0.16'. There is also a 'Install' button for the Publish-over plugin.

The screenshot shows the 'Manage Jenkins > Download progress' page. The left sidebar has links for 'Updates', 'Available plugins', 'Installed plugins', 'Advanced settings', and 'Download progress' (which is selected and highlighted with a blue box). The main area shows a 'Preparation' section with a list of tasks and their statuses:

Task	Status
Oracle Java SE Development Kit Installer	Success
SSH server	Success
Infrastructure plugin for Publish Over X	Success
JSch dependency	Success
Publish Over SSH	Pending
Loading plugin extensions	Pending
Restarting Jenkins	Pending

Below this, there are two buttons: 'Go back to the top page' and 'Restart Jenkins when installation is complete and no jobs are running' (which is highlighted with an orange box).



## Please wait while Jenkins is getting ready to work ...

Your browser will reload automatically when Jenkins is ready.

Dashboard > Manage Jenkins > Plugins

Updates

Available plugins

Installed plugins

Advanced settings

Publish

Enabled

Checks API plugin 2.0.2

This plugin defines an API for Jenkins to publish checks to SCM platforms.  
[Report an issue with this plugin](#)



2.0.0



Email Extension Plugin 2.102

This plugin is a replacement for Jenkins's email publisher. It allows to configure every aspect of email notifications: when an email is sent, who should receive it and what the email says  
[Report an issue with this plugin](#)



2.100



Infrastructure plugin for Publish Over X 0.22

Send build artifacts somewhere.



JUnit Plugin 1240.vf9529b 881428

Allows JUnit-format test results to be published.  
[Report an issue with this plugin](#)



1217.v4...



Publish Over SSH 1.25

Send build artifacts over SSH  
[Report an issue with this plugin](#)



## Step 9 ) now we will create the project/job

Dashboard > All >

Enter an item name

project-1

» 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.



**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.



**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**

Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a namespace, so you can have multiple things of the same name as long as they are in different folders.

**OK**

Now if you get this error then git package is not installed on Jenkins

The screenshot shows the Jenkins 'Git' configuration page. Under 'Repository URL', the value is 'https://github.com/sanjaydahiya332/demo-project.git'. A red error message below it states: 'Failed to connect to repository : Error performing git command: git ls-remote -h https://github.com/sanjaydahiya332/demo-project.git HEAD'. The 'Credentials' dropdown is set to '- none -'.

The screenshot shows a GitHub repository named 'jenkins'. It has 1 branch (master) and 0 tags. The repository contains files: README.md (Initial commit), index.html (Create index.html), and README.md. On the right, there's a 'Clone' section with options for Local, Codespaces, HTTPS (selected), SSH, and GitHub CLI. The HTTPS URL is 'https://github.com/Rizwan00792/jenkins.git'. Below it is a note: 'Use Git or checkout with SVN using the web URL.' There are also links to 'Open with GitHub Desktop' and 'About'.

The screenshot shows the Jenkins 'Configure' screen for a project. Under 'Source Code Management', the 'Git' option is selected. The 'Repository URL' field contains 'https://github.com/Rizwan00792/jenkins.git'. The 'Credentials' dropdown is set to '- none -'. The 'Advanced' button is visible at the bottom.

The screenshot shows the 'Branches to build' section. The 'Branch Specifier (blank for 'any')' field contains '/master'. There is an 'Add Branch' button at the bottom.

## Build Triggers

- Trigger builds remotely (e.g., from scripts) ?
- Build after other projects are built ?
- Build periodically ?
- GitHub hook trigger for GITScm polling ?
- Poll SCM ?

## Build Triggers

## Build Steps

Add build step ^

Filter

Execute Windows batch command

Execute shell

Invoke Ant

Invoke Gradle script

Invoke top-level Maven targets

Run with timeout

Send files or execute commands over SSH

Set build status to "pending" on GitHub commit

### Send files or execute commands over SSH ?

#### SSH Publishers

##### SSH Server

Name ?

Advanced ▾

##### Transfers

##### Transfer Set

Source files ?

! Either Source files, Exec command or both must be supplied

Remove prefix ?

Now you have to enter the details of server , that commands will be executed on this

Remove prefix:

Remote directory:

Exec command:

**! Either Source files, Exec command or both must be supplied**

All of the transfer fields (except for Exec timeout) support substitution of [Jenkins environment variables](#)

Advanced ▾

we want to send the output to ansible server from Jenkins server after build

This screenshot shows a Jenkins configuration step. A purple box highlights the note: "we want to send the output to ansible server from Jenkins server after build". A green box highlights the "Exec command" field, which is currently empty. A red error message at the bottom left states: "! Either Source files, Exec command or both must be supplied". Below the error message, it says: "All of the transfer fields (except for Exec timeout) support substitution of Jenkins environment variables". There is also an "Advanced" dropdown menu.

## Step 10) Go to manage jenkins

Jenkins

Dashboard > Manage Jenkins

+ New Item

People

Build History

**Manage Jenkins**

My Views

Build Queue

No builds in the queue.

Build Executor Status

Built-In Node (offline)

Manage Jenkins

System Configuration

System Configure global settings and paths.

Nodes Add, remove, control and monitor the various nodes that Jenkins runs jobs on.

Tools Tools Configure tools, their locations and automatic installers.

Clouds Clouds Add, remove, and configure cloud instances to provision agents on-demand.

Plugins Plugins Add, remove, disable or enable plugins that can extend the functionality of Jenkins.

This screenshot shows the Jenkins Manage Jenkins page. A green box highlights the "Manage Jenkins" item in the sidebar. Another green box highlights the "System Configuration" section. Handwritten blue text "click here" points to the "Add" button in the "SSH Servers" section. At the bottom, there are "Save" and "Apply" buttons.

Disable exec ?

SSH Servers

Add

Advanced ▾

Save Apply

This screenshot shows the Jenkins SSH Servers configuration page. A large blue box surrounds the entire form. Handwritten blue text "click here" points to the "Add" button. At the bottom, there are "Save" and "Apply" buttons.

Dashboard > Manage Jenkins > System >

### SSH Server

Name ?

Hostname ?

Username ?

Remote Directory ?

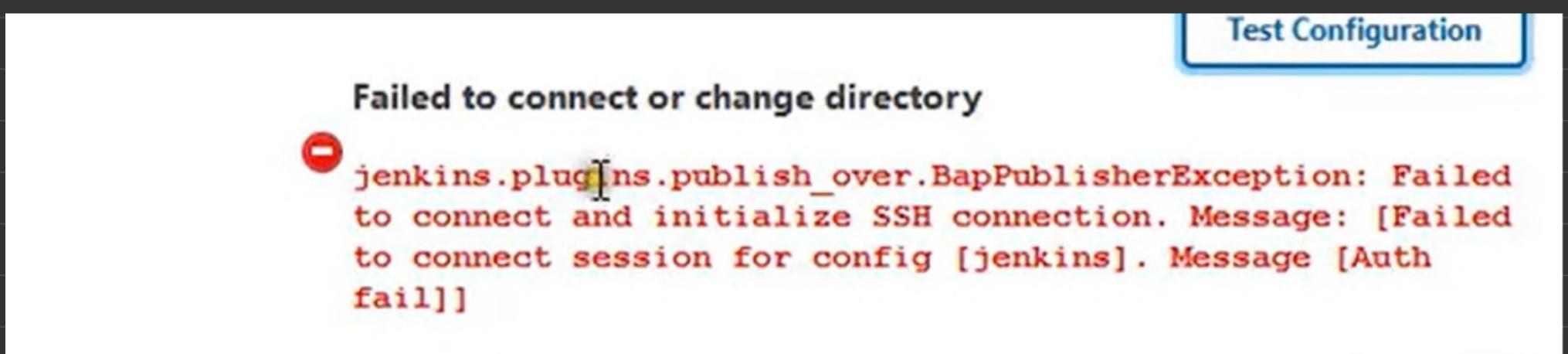
Avoid sending files that have not changed ?

Advanced ^ Edited

Use password authentication, or use a different key ?  
  
 ...

**will give name and private/pub ip of Jenkins server  
and we have also give password**

If you get the below error turn on password authentication in Jenkins server



Proxy user ?

Proxy password

Success

click on test configuration , it should success

Test Configuration

Add

Success

Test Configuration

Add

Advanced ^

Save Apply apply and save

## Step 11 ) now we again move to our job configuration

### Send files or execute commands over SSH ?

#### SSH Publishers

##### SSH Server

Name ?

jenkins

server name came here now

Advanced ▾

#### Exec command ?

```
rsync -avh /var/lib/jenkins/workspace/project-1/*.html root@172.31.46.18:/opt/index.html
```

we are asking rsync command to copy build from "/var/lib/Jenkins/workspace/project-1/

and to paste it in the ansible location what we have mentioned because we have mentioned in playbook  
after send the build to this location

All of the transfer fields (except for Exec timeout) support substitution of Jenkins environment variables

Advanced ▾

#### Exec command ?

```
rsync -avh /var/lib/jenkins/workspace/project-1/*.html root@172.31.46.18:/opt/index.html
```

```
- hosts: all
  tasks:
    - copy:
        src: /opt/index.html
        dest: /var/www/html
```

All of the transfer fields (except for Exec timeout) support substitution of Jenkins environment variables

Advanced ▾

apply and save

Save

Apply

## Step 12 ) Now we have triggered the job

The screenshot shows the Jenkins project-1 dashboard. On the left, there's a sidebar with options: Status, Changes, Workspace, Build Now, Configure, Delete Project, and Rename. The main area is titled "project-1" and contains a "Permalinks" section. Below it is a "Build History" section with a table. The first row in the table has a blue circle icon, the number "#1", and the status "(pending—Waiting for next available executor)". There are also "Atom feed for all" and "Atom feed for failures" links.

The screenshot shows the Jenkins job #1 console output. The sidebar on the left includes: Changes, Console Output (which is selected), View as plain text, Edit Build Information, Delete build '#1', and Git Build Data. The main pane displays the build logs:

```
Started by user rizwan
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/project-1
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/Rizwan00792/jenkins.git
> git init /var/lib/jenkins/workspace/project-1 # timeout=10
Fetching upstream changes from https://github.com/Rizwan00792/jenkins.git
> git --version # timeout=10
> git --version # 'git version 2.40.1'
> git fetch --tags --force --progress -- https://github.com/Rizwan00792/jenkins.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/Rizwan00792/jenkins.git # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse origin/master^{commit} # timeout=10
Checking out Revision 5197fcdbe6b35318283617a0d203e4b29fa0876b (origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 5197fcdbe6b35318283617a0d203e4b29fa0876b # timeout=10
Commit message: "Delete sample.java"
First time build. Skipping changelog.
SSH: Connecting from host [jenkins]
SSH: Connecting with configuration [jenkins] ...
SSH: EXEC: completed after 803 ms
SSH: Disconnecting configuration [jenkins] ...
SSH: Transferred 0 file(s)
Build step 'Send files or execute commands over SSH' changed build result to SUCCESS
Finished: SUCCESS
```

Now if we go to ansible server, we can see the file index.html

```
[ec2-user@ansible ~]$ cd /opt
[ec2-user@ansible opt]$ ll
total 4
drwxr-xr-x. 4 root root 33 Nov 10 19:54 aws
-rw-r--r--. 1 992 992 15 Dec 5 16:53 index.html
[ec2-user@ansible opt]$
[ec2-user@ansible opt]$ cat index.html
Hello World v1
[ec2-user@ansible opt]$
```

But if we go to web-server we can see any file

```
[ec2-user@web-server ~]$ cd /var/www/html/  
[ec2-user@web-server html]$ ll  
total 0  
[ec2-user@web-server html]$
```

Step 13 ) now we have to setup post build action, like after this job which job will be trigger

The screenshot shows the Jenkins configuration interface for a project named 'project-1'. In the top left, there's a button labeled 'Add post-build action' with a dropdown arrow. Below it are 'Save' and 'Apply' buttons. The main area is titled 'Configure' and contains several sections: 'General', 'Source Code Management', 'Build Triggers', 'Build Environment', 'Build Steps', and 'Post-build Actions'. The 'Post-build Actions' section is highlighted with a blue background. A large dropdown menu is open over this section, listing various actions. One item, 'Send build artifacts over SSH', is highlighted with a green border.

- Aggregate downstream test results
- Archive the artifacts
- Build other projects
- Publish JUnit test result report
- Record fingerprints of files to track usage
- Git Publisher
- E-mail Notification
- Editable Email Notification
- Send build artifacts over SSH**
- Set GitHub commit status (universal)
- Set build status on GitHub commit [deprecated]
- Delete workspace when build is done

The screenshot shows the 'SSH Server' configuration page. It lists a single server named 'jenkins'. A red box highlights the 'jenkins' entry with the text: 'now we wanted to run the command from Ansible server ,so we have to add ansible server details here'. Below this, under 'Transfers', there's a 'Transfer Set' section. A red arrow points from the 'Remote directory' field to the 'Exec command' field, with the text 'and will mention the commands here' written above the arrow.

SSH Server

- Name ? jenkins

Advanced ▾

Transfers

Transfer Set

Source files ?  
Either Source files, Exec command or both must be supplied

Remove prefix ?

Remote directory ?

Exec command ?

**Now we have done the same thing i.e. password-based authentication on ansible server also just like we have done in Jenkins server**

SSH Server

Name ?  
ansible  
! Required. Cannot contain < & ' "\

Hostname ?  
172.31.46.18  
! Required

Username ?  
root  
! Required

Remote Directory ?

Avoid sending files that have not changed ?

Proxy password

Success

Add

Advanced ▾

Add

Advanced ▾

Remote directory ?

Exec command ?

```
ansible-playbook /root/source-code/web-playbook.yml
```

All of the transfer fields (except for Exec timeout) support substitution of Jenkins environment variables

Advanced ▾

Add Transfer Set

**Save** **Apply**

Now we have again triggered the job

Status project-1

- </> Changes
- Workspace
- ▷ Build Now
- ⚙ Configure
- Delete Project
- GitHub Hook Log
- Rename

Build History trend ▾

Filter builds... /

✓ #2	Dec 5, 2023, 5:16 PM	⤒ ⤑ ⤓
✓ #1	Dec 5, 2023, 4:53 PM	⤒ ⤑ ⤓

Atom feed for all Atom feed for failures

```

> git --version # 'git version 2.40.1'
> git fetch --tags --force --progress -- https://github.com/Rizwan00792/jenkins.git +refs/heads/*:refs/remotes/origin/* # timeout=10
> git rev-parse origin/master^{commit} # timeout=10
Checking out Revision 5197fcdbe6b35318283617a0d203e4b29fa0876b (origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f 5197fcdbe6b35318283617a0d203e4b29fa0876b # timeout=10
Commit message: "Delete sample.java"
> git rev-list --no-walk 5197fcdbe6b35318283617a0d203e4b29fa0876b # timeout=10
SSH: Connecting from host [jenkins]
SSH: Connecting with configuration [jenkins] ...
SSH: EXEC: completed after 601 ms
SSH: Disconnecting configuration [jenkins] ...
SSH: Transferred 0 file(s)
Build step 'Send files or execute commands over SSH' changed build result to SUCCESS
SSH: Connecting from host [jenkins]
SSH: Connecting with configuration [ansible] ...
SSH: EXEC: completed after 401 ms
SSH: Disconnecting configuration [ansible] ...
ERROR: Exception when publishing, exception message [Exec exit status not zero. Status [2]]
Build step 'Send build artifacts over SSH' changed build result to UNSTABLE
Finished: UNSTABLE

```

This might get success due to the increase in swap  
or  
we have reconfigure the job

Status code 127,2 indicates  
Command not found  
that we are using  
wring in post build Action.

- [Status](#)
- [Changes](#)
- [Console Output](#)
- [View as plain text](#)
- [Edit Build Information](#)
- [Delete build '#34'](#)
- [Git Build Data](#)
- [Previous Build](#)

## Console Output

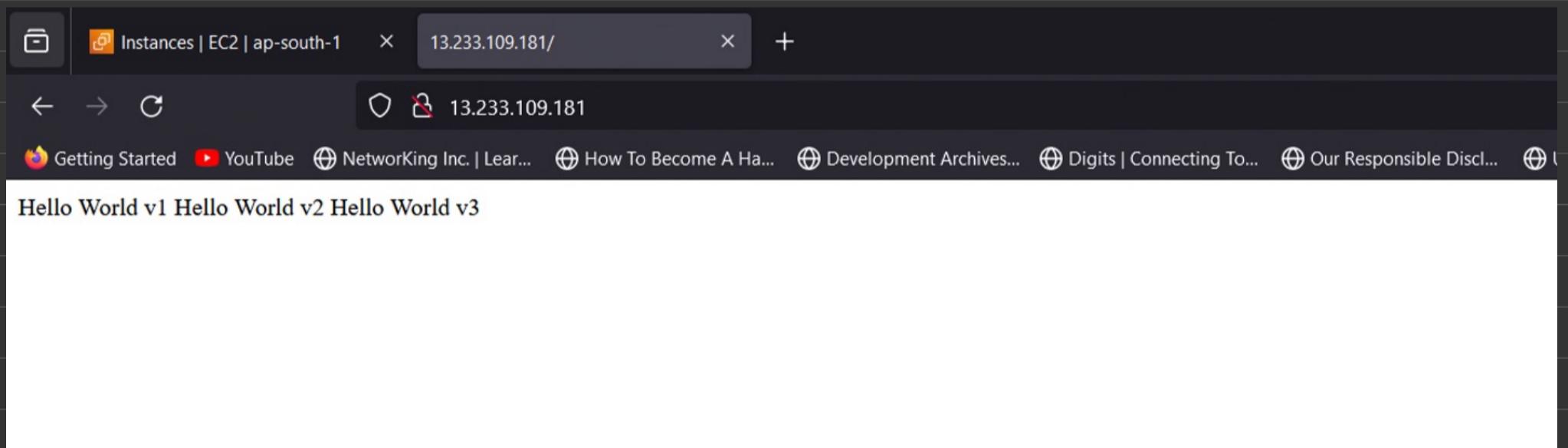
```

Started by user rizwan
Running as SYSTEM
Building in workspace /var/lib/jenkins/workspace/project-1
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/project-1/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Rizwan00792/jenkins.git # timeout=10
Fetching upstream changes from https://github.com/Rizwan00792/jenkins.git
> git --version # timeout=10
> git --version # 'git version 2.40.1'
> git fetch --tags --force --progress -- https://github.com/Rizwan00792/jenkins.git +refs/heads/*:refs/remotes/origin/*
> git rev-parse origin/master^{commit} # timeout=10
Checking out Revision d23d5045e0f4f4bd1dee54dcf2a34224993673e6 (origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f d23d5045e0f4f4bd1dee54dcf2a34224993673e6 # timeout=10
Commit message: "Update index.html"
> git rev-list --no-walk d23d5045e0f4f4bd1dee54dcf2a34224993673e6 # timeout=10
SSH: Connecting from host [jenkins]
SSH: Connecting with configuration [jenkins] ...
SSH: EXEC: completed after 401 ms
SSH: Disconnecting configuration [jenkins] ...
SSH: Transferred 0 file(s)
Build step 'Send files or execute commands over SSH' changed build result to SUCCESS
SSH: Connecting from host [jenkins]
SSH: Connecting with configuration [ansible] ...
SSH: EXEC: completed after 3,403 ms
SSH: Disconnecting configuration [ansible] ...
SSH: Transferred 0 file(s)
Finished: SUCCESS

```

**Now we have to again create Jenkins server without swap and need to check weather it was due to swap or reconfiguring the job**

**We have done the setup again it is working without any issue like normal t2.micro machine only and the only thing we have done is we have increase disk**



**The reason of failure might be that installation was done before so that**

- 1) disk space was less**
  - 2) agent was going offline because of that**
  - 3) after adding swap the space was more and that time also job run successfully.**
- Latest output of job**

[View as plain text](#)[Edit Build Information](#)[Delete build '#3'](#)[Git Build Data](#)[← Previous Build](#)

```
The recommended git tool is: NONE
No credentials specified
> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/project1/.git # timeout=10
Fetching changes from the remote Git repository
> git config remote.origin.url https://github.com/Rizwan00792/jenkins.git # timeout=10
Fetching upstream changes from https://github.com/Rizwan00792/jenkins.git
> git --version # timeout=10
> git --version # 'git version 2.40.1'
> git fetch --tags --force --progress -- https://github.com/Rizwan00792/jenkins.git +refs/heads/*:refs/remotes/origin/*
> git rev-parse origin/master^{commit} # timeout=10
Checking out Revision d23d5045e0f4f4bd1dee54dcf2a34224993673e6 (origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f d23d5045e0f4f4bd1dee54dcf2a34224993673e6 # timeout=10
Commit message: "Update index.html"
> git rev-list --no-walk d23d5045e0f4f4bd1dee54dcf2a34224993673e6 # timeout=10
SSH: Connecting from host [jenkins]
SSH: Connecting with configuration [jenkins] ...
SSH: EXEC: completed after 601 ms
SSH: Disconnecting configuration [jenkins] ...
SSH: Transferred 0 file(s)
Build step 'Send files or execute commands over SSH' changed build result to SUCCESS
SSH: Connecting from host [jenkins]
SSH: Connecting with configuration [ansible] ...
SSH: EXEC: completed after 4,404 ms
SSH: Disconnecting configuration [ansible] ...
SSH: Transferred 0 file(s)
Finished: SUCCESS
```

We have again update the code

[Code](#)[Blame](#)

6 lines (6 loc) · 90 Bytes



Code 55% faster with GitHub Copilot

```
1 Hello World v1
2 Hello World v2
3 Hello World v3
4 Hello World v4
5 Hello World v5
6 Hello World v6
```

#Session End#