

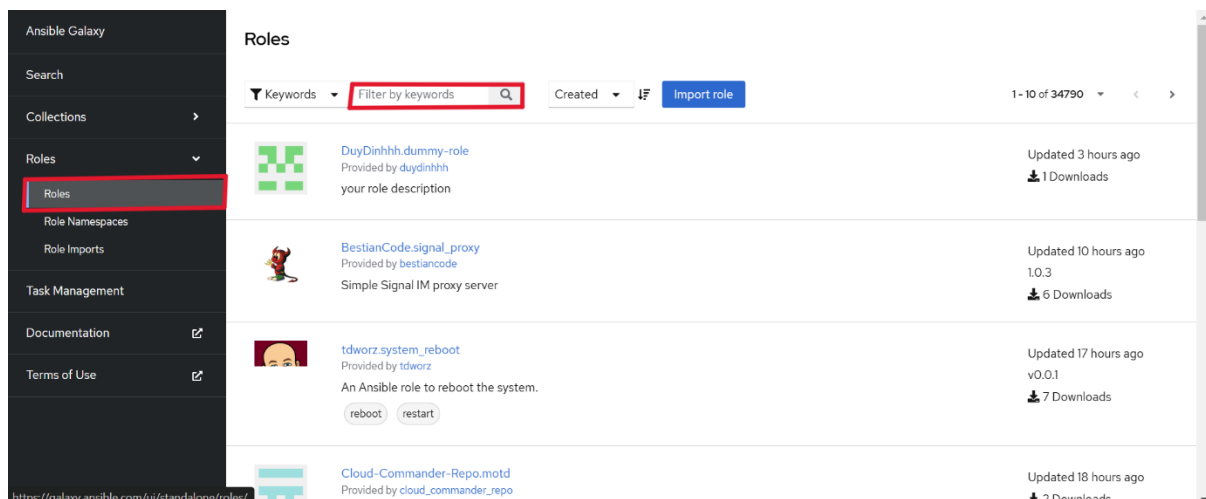
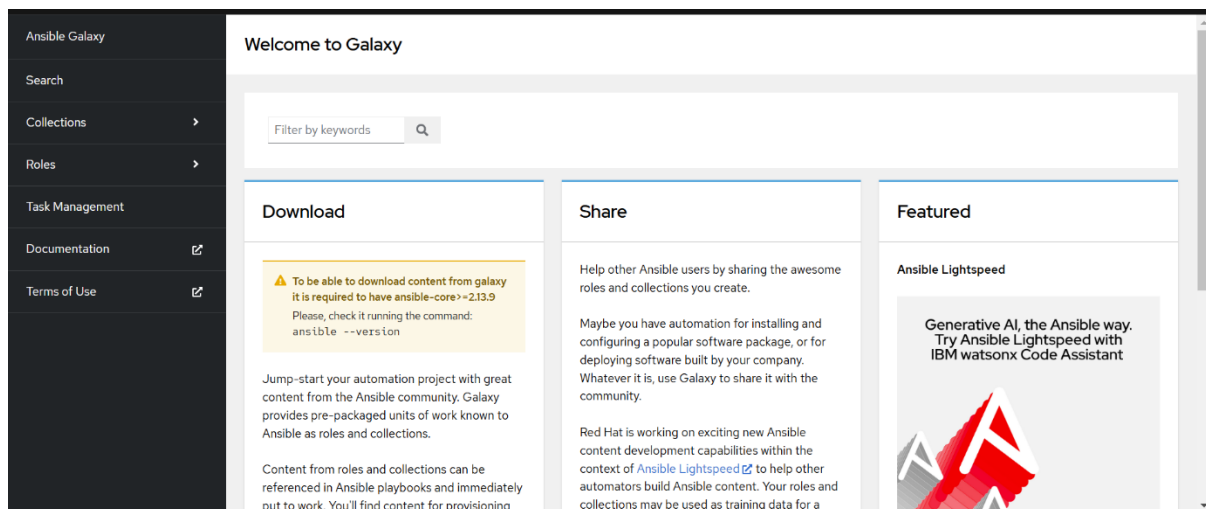
Ansible Galaxy (Day-05)

Ansible Galaxy is a public platform for sharing Ansible content, including roles, collections, and playbooks. It serves as a centralized repository where users can find, share, and collaborate on Ansible automation content. Galaxy simplifies the process of discovering and integrating pre-built automation components into your infrastructure.

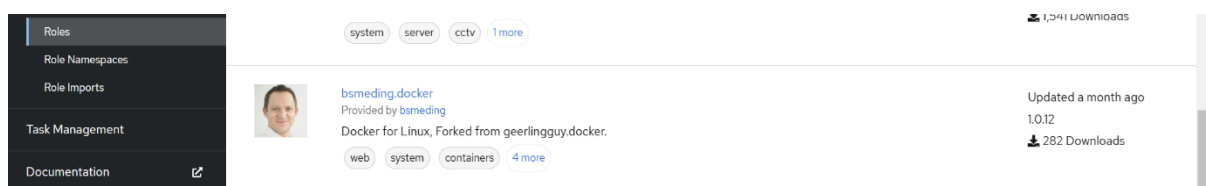
Installing Roles: A guide on how to install roles from Ansible Galaxy to the local Ansible environment. Discuss versioning and dependency management for ensuring role compatibility.

STEP 1: GO ANSIBLE-GALAXY

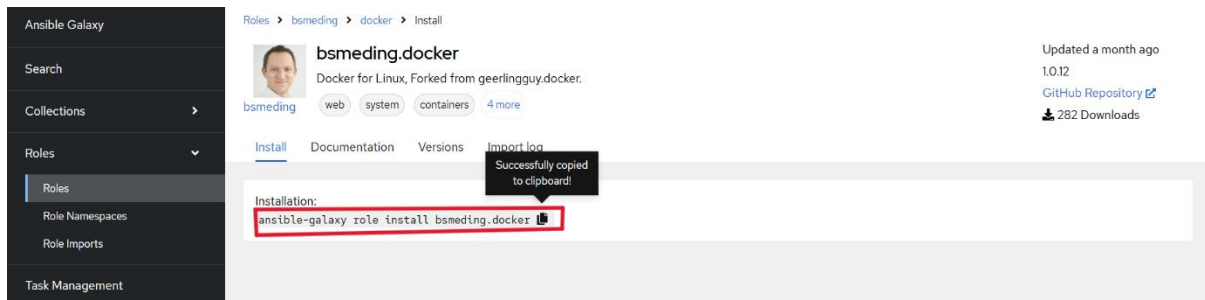
<https://galaxy.ansible.com/ui/>



- Click on Roles.
- Search for the role which You needed.



- I need a role for docker.



- Copy the Installation Command.

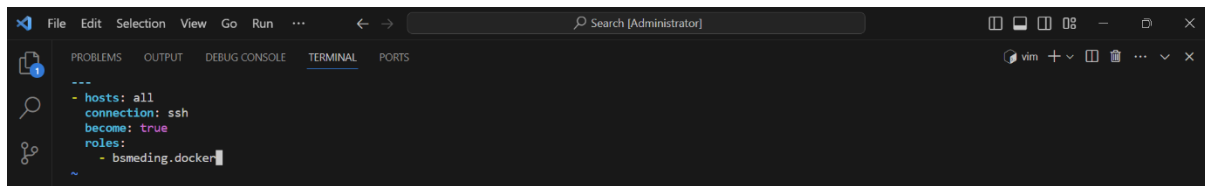


Use the ansible-galaxy command to install the role. For example:

```
ansible-galaxy install <role_name>
```

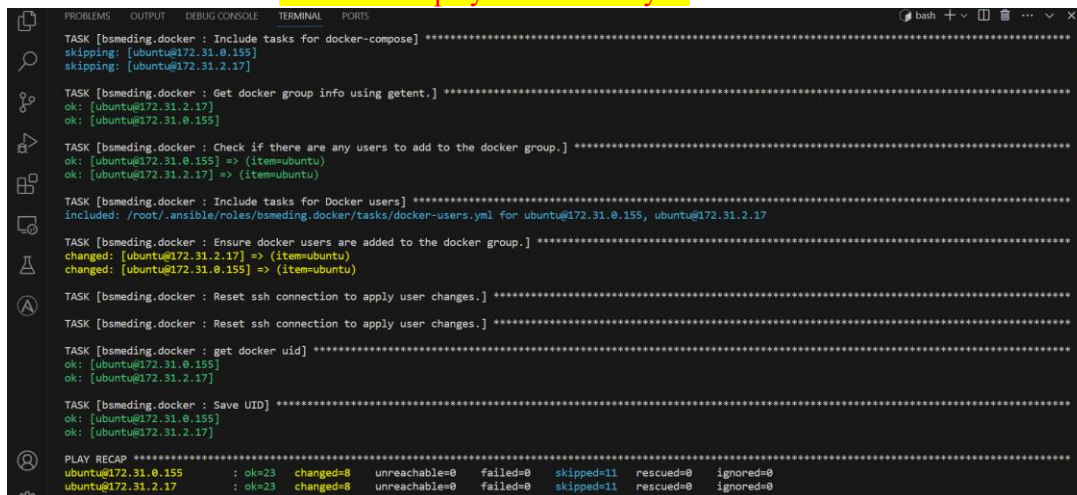
Use the Role in Your Playbook

After installation, include the role in your playbook:



- Execute playbook.

```
sudo ansible-playbook docker.yml
```



- Go to Manage node and check the docker is installed or not.

```
start      Start one or more stopped containers
stats      Display a live stream of container(s) resource usage statistics
stop       Stop one or more running containers
tag        Create a tag TARGET_IMAGE that refers to SOURCE_IMAGE
top        Display the running processes of a container
unpause    Unpause all processes within one or more containers
update     Update configuration of one or more containers
wait       Block until one or more containers stop, then print their exit codes

Global Options:
--config string      Location of client config files (default "/root/.docker")
--c, --context string Name of the context to use to connect to the daemon (overrides DOCKER_HOST env var and default context set with "docker context use")
-D, --debug          Enable debug mode
--host list          Daemon socket to connect to
-l, --log-level string Set the logging level ("debug", "info", "warn", "error", "fatal") (default "info")
--tls               Use TLS; implied by --tlsverify
--tlscacert string   Trust certs signed only by this CA (default "/root/.docker/ca.pem")
--tlscert string     Path to TLS certificate file (default "/root/.docker/cert.pem")
--tlskey string      Path to TLS key file (default "/root/.docker/key.pem")
--tlsverify          Use TLS and verify the remote
-v, --version        Print version information and quit

Run 'docker COMMAND --help' for more information on a command.

For more help on how to use Docker, head to https://docs.docker.com/go/guides/

ubuntu@ip-172-31-0-155:~$ sudo docker --version
Docker version 27.4.0, build b2d2b89
ubuntu@ip-172-31-0-155:~$
```

i-03b7264c6834f66d2 (manage-node-1 p)

PublicIPs: 15.207.109.26 PrivateIPs: 172.31.0.155

Publish own Role to ansible galaxy.

Step 1: Create a account in ansible galaxy.

- Click on login and create a account.

Step 2: Upload to GitHub

Ansible Galaxy requires your role to be hosted on a GitHub repository.

1. Initialize a Git repository:

```
ubuntu@ip-172-31-15-154:~/ansible/webserver$ ls
README.md  defaults  files     handlers  meta      tasks     templates  tests  vars
ubuntu@ip-172-31-15-154:~/ansible/webserver$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/ubuntu/ansible/webserver/.git/
ubuntu@ip-172-31-15-154:~/ansible/webserver$
```

git add *

git commit -m "files" .

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
new file:   handlers/main.yml
new file:   meta/main.yml
new file:   tasks/main.yml
new file:   tests/inventory
new file:   tests/test.yml
new file:   vars/main.yml

ubuntu@ip-172-31-15-154:~/ansible/webserver$ git commit -m "files" .
[master (root-commit) 779a20] files
Committer: ubuntu ubuntu@ip-172-31-15-154:~$
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file.

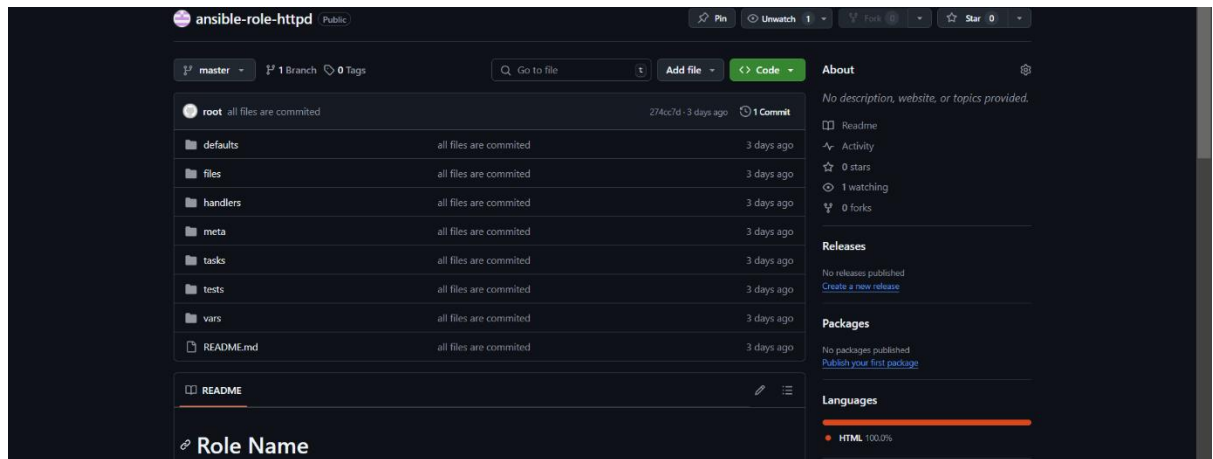
git config --global --edit

After doing this, you may fix the identity used for this commit with:

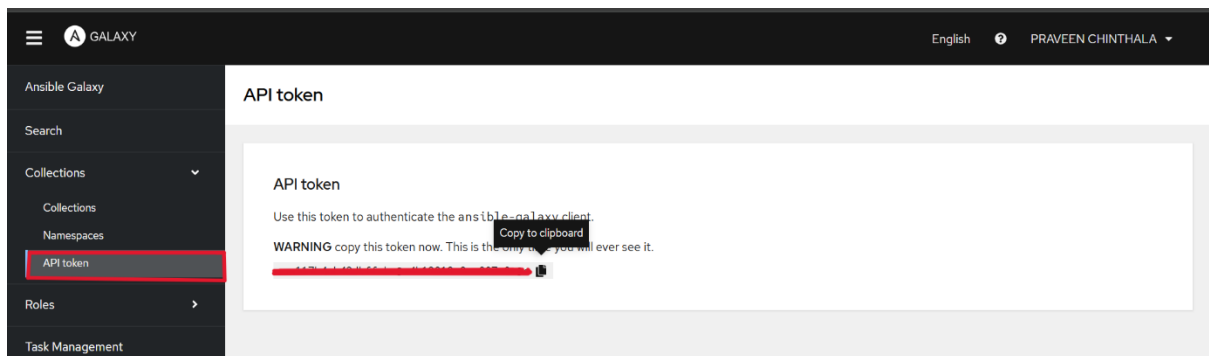
git commit --amend --reset-author

9 files changed, 129 insertions(+)
create mode 100644 README.md
create mode 100644 defaults/main.yml
create mode 100644 files/index.html
create mode 100644 handlers/main.yml
create mode 100644 meta/main.yml
create mode 100644 tasks/main.yml
create mode 100644 tests/inventory
create mode 100644 tests/test.yml
create mode 100644 vars/main.yml
ubuntu@ip-172-31-15-154:~/ansible/webserver$ git status
On branch master
nothing to commit, working tree clean
ubuntu@ip-172-31-15-154:~/ansible/webserver$
```

- Create a repo in github and push the files into github.

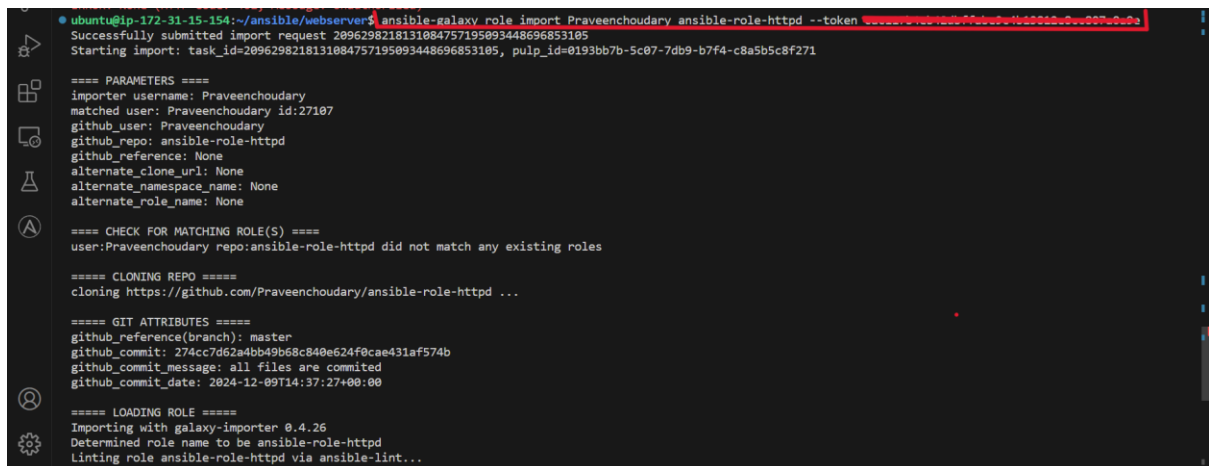


- Go to ansible-galaxy generate a api-token.
- Collection > API token> Load Token.



Now execute below command.

ansible-galaxy role import <github_user> <github_repo> --token <place generate-token>

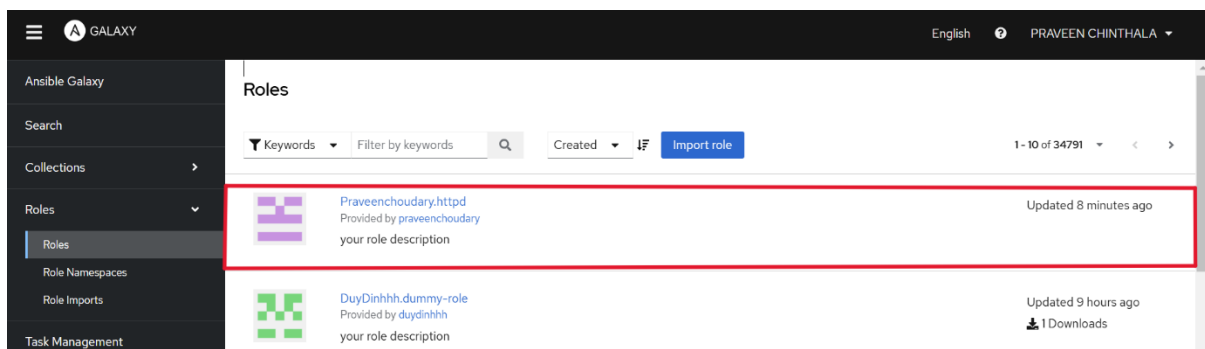


```
==== LOADING ROLE ====
Importing with galaxy-importer 0.4.26
Determined role name to be ansible-role-httpd
Linting role ansible-role-httpd via ansible-lint...
ansible-role-httpd/defaults/main.yml:2: yaml[new-line-at-end-of-file]: No new line character at the end of file
ansible-role-httpd/handlers/main.yml:2: yaml[new-line-at-end-of-file]: No new line character at the end of file
ansible-role-httpd/main.yml:1: meta-incorrect: Should change default metadata: author
ansible-role-httpd/main.yml:1: meta-incorrect: Should change default metadata: company
ansible-role-httpd/main.yml:1: meta-incorrect: Should change default metadata: license
ansible-role-httpd/main.yml:1: schema[meta]: $.galaxy_info.min_ansible_version 2.9 is not of type 'string'. See https://docs.ansible.com/ansible/latest/playbook_guide/playbooks_reuse_roles.html#using-role-dependencies
ansible-role-httpd/main.yml:53: yaml[new-line-at-end-of-file]: No new line character at the end of file
ansible-role-httpd/main.yml:53: yaml[trailing-spaces]: Trailing spaces
ansible-role-httpd/tasks/main.yml:3: fqcn[action-core]: Use FQCN for builtin module actions (ansible.builtin.yum).
ansible-role-httpd/tasks/main.yml:3: name[casing]: All names should start with an uppercase letter.
ansible-role-httpd/tasks/main.yml:3: yaml[indentation]: Wrong indentation: expected 0 but found 2
ansible-role-httpd/tasks/main.yml:8: name[casing]: All names should start with an uppercase letter.
ansible-role-httpd/tasks/main.yml:13: name[casing]: All names should start with an uppercase letter.
ansible-role-httpd/tasks/main.yml:13: risky-file-permissions: File permissions unset or incorrect.
ansible-role-httpd/tasks/main.yml:19: yaml[trailing-spaces]: Trailing spaces
ansible-role-httpd/tests/test.yml:5:7: syntax-check[specific]: the role 'myrole' was not found in /tmp/tmpt63l_4il/ansible-role-httpd/tests/roles:/app/.ansible/tmp/ansible-compat/4901d3/roles:/app/.ansible/roles:/usr/share/ansible/roles:/etc/ansible/roles:/tmp/tmpt63l_4il/ansible-role-httpd/tests
ansible-role-httpd/vars/main.yml:2: yaml[new-line-at-end-of-file]: No new line character at the end of file
...ansible-lint run complete
Legacy role loading complete

==== PROCESSING LOADER RESULTS ====
enumerated role name httpd
created new role id:39766 Praveenchoudary.httpd

==== COMPUTING ROLE VERSIONS ====

==== SAVING ROLE ====
Import completed
ubuntu@ip-172-31-15-154:~/ansible/webserver$
```



- Role is pushed to ansible-galaxy.