

Some Additional exploration on git with ansible

- Git Checkout
- Ensuring the repo checkout exists
- Getting information about the repository whether or not it has already been cloned locally
- Checkout a github repo and use refspec to fetch all pull requests
- Create git archive from repo
- Cloning a single branch

Configuring the playbook :

```
sumith306@Hello-World: ~/Team1
sumith306@Hello-World:~$ cd Team1
sumith306@Hello-World:~/Team1$ vi git.yml
sumith306@Hello-World:~/Team1$ cat git.yml
---
- hosts: localhost
  tasks:
    - name: Git checkout
      git:
        repo: 'https://github.com/sumith-018/DevOps.git'
        dest: /srv/checkout

    - name: Just ensuring the repo checkout exists
      git:
        repo: 'https://github.com/sumith-018/DevOps.git'
        dest: /srv/checkout
        update: no

    - name: Just get information about the repository whether or not it has already been cloned locally
      git:
        repo: 'https://github.com/sumith-018/DevOps.git'
        dest: /srv/checkout
        clone: no
        update: no

    - name: Checkout a github repo and use refspec to fetch all pull requests
      git:
        repo: https://github.com/sumith-018/DevOps.git
        dest: /srv/DevOps3
        refspec: '+refs/pull/*:refs/heads/*'

    - name: Create git archive from repo
      git:
        repo: https://github.com/sumith-018/DevOps.git
        dest: /srv/DevOps
        archive: /tmp/DevOps.zip

    - name: Example clone of a single branch
      git:
        repo: https://github.com/sumith-018/DevOps-Tasks.git
        dest: /srv/DevOps2
        version: main
```

Creating Different directories to check after running the playbook :

```
Select sumith306@Hello-World: ~/Team1
sumith306@Hello-World:/srv$ ls
sumith306@Hello-World:/srv$ mkdir DevOps
sumith306@Hello-World:/srv$ mkdir DevOps2
sumith306@Hello-World:/srv$ mkdir DevOps3
sumith306@Hello-World:/srv$ mkdir checkout
sumith306@Hello-World:/srv$ ls
DevOps  DevOps2  DevOps3  checkout
sumith306@Hello-World:/srv$ chmod o+rwX DevOps
sumith306@Hello-World:/srv$ chmod o+rwX DevOps2
sumith306@Hello-World:/srv$ chmod o+rwX DevOps3
sumith306@Hello-World:/srv$ chmod o+rwX checkout
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$ cd ../home/sumith306/Team1/
sumith306@Hello-World:~/Team1$
```

Executing the playbook :

```
sumith306@Hello-World: /srv
sumith306@Hello-World:~/Team1$ ansible-playbook git.yml --ask-vault-pass
Vault password:
[WARNING]: provided hosts list is empty, only localhost is available. Note that the implicit localhost does not match 'all'

PLAY [localhost] *****

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

TASK [Git checkout] *****
ok: [localhost]

TASK [Just ensuring the repo checkout exists] *****
ok: [localhost]

TASK [Just get information about the repository whether or not it has already been cloned locally] *****
ok: [localhost]

TASK [Checkout a github repo and use refspect to fetch all pull requests] *****
ok: [localhost]

TASK [Create git archive from repo] *****
ok: [localhost]

TASK [Example clone of a single branch] *****
ok: [localhost]

PLAY RECAP *****
localhost                : ok=7    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

sumith306@Hello-World:~/Team1$
sumith306@Hello-World:~/Team1$ cd ../../../srv/
sumith306@Hello-World:/srv$ ls
DevOps  DevOps2  DevOps3  checkout
sumith306@Hello-World:/srv$
```


Validating by checking the repos :

```
sumith306@Hello-World: /tmp

PLAY RECAP *****
localhost                : ok=7    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

sumith306@Hello-World:~/Team1$
sumith306@Hello-World:~/Team1$ cd ../../../srv/
sumith306@Hello-World:/srv$ ls
DevOps  DevOps2  DevOps3  checkout
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$ cd checkout
sumith306@Hello-World:/srv/checkout$ ls
'DevOps Hackathon.pdf'  PRG1.txt  PRG3.txt  README.md  index.js  prg2.txt
sumith306@Hello-World:/srv/checkout$ echo "The repo is cloned successfylly and checked in part 2 of the playbook above"
The repo is cloned successfylly and checked in part 2 of the playbook above
sumith306@Hello-World:/srv/checkout$
sumith306@Hello-World:/srv/checkout$ cd ../
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$ cd DevOps2
sumith306@Hello-World:/srv/DevOps2$ ls
'DevOps Hackathon.pdf'  README.md
sumith306@Hello-World:/srv/DevOps2$ echo "only Main branch is cloned Successfully"
only Main branch is cloned Successfully
sumith306@Hello-World:/srv/DevOps2$ cd ../
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$ cd DevOps3
sumith306@Hello-World:/srv/DevOps3$ ls
'DevOps Hackathon.pdf'  PRG1.txt  PRG3.txt  README.md  index.js  prg2.txt
sumith306@Hello-World:/srv/DevOps3$ echo "checked out the repo and used refspect to fetch all pull requests"
checked out the repo and used refspect to fetch all pull requests
sumith306@Hello-World:/srv/DevOps3$ cd ../
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$ cd DevOps4
sumith306@Hello-World:/srv/DevOps4$ ls
```

```
sumith306@Hello-World:/tmp$
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$ cd DevOps
sumith306@Hello-World:/srv/DevOps$ ls
'DevOps Hackathon.pdf'  PRG1.txt  PRG3.txt  README.md  index.js  prg2.txt
sumith306@Hello-World:/srv/DevOps$ echo "Repo to archive using git archive"
Repo to archive using git archive
sumith306@Hello-World:/srv/DevOps$ cd ../
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$
sumith306@Hello-World:/srv$ cd ../tmp
sumith306@Hello-World:/tmp$ ls
DevOps.zip  tmp4dyf0cn8  tmp8vpv7ydb
sumith306@Hello-World:/tmp$ echo "repo successfully archived to DevOps.zip"
repo successfully archived to DevOps.zip
sumith306@Hello-World:/tmp$
sumith306@Hello-World:/tmp$
```

The image shows a Windows taskbar at the bottom of the terminal window. It includes the Start button, a search bar with the text "Type here to search", and several pinned application icons: File Explorer, Microsoft Edge, Google Chrome, and a red icon. On the right side of the taskbar, it displays the system tray with the date and time "13:28 24-09-2021", the language "ENG", and weather information "27°C Light rain".