

## **establish a password less authentication from ACS server to Node**

1. login with ACS machine

**ssh devops@<ACS public ip >**

with devops user password

2. ssh-keygen (generate the keygenerator pair for public and private ip) —>  
enter for defaults are fine for us

what happens after keygen is it will create new files(**id\_rsa** and **id\_rsa.pub**) gets created, you can check in the below path

**ls ~/.ssh**

3. node should know about the public key of ACS server, if we copy the public to node, then it will able to allow us to login because it know me public key

for that run the below command

**ssh-copy-id devops@<node provide ip>**  
(enter the password of devops user of node)

4. try to connect the node from ACS  
**ssh <private ip of node> //** it will connect to the node without asking the password

you can verify **authorized\_keys** file in the node in the below path

**cd ~/.ssh -> ls**

5. execute ansible on ACS server

Add the inventory to hosts file  
**cd /etc/ansible -> ls //** hosts will exists

**sudo mv hosts hosts.orig //** rename the original hosts file to hosts.orig (for backup)

**sudo vi hosts // create new hosts file**

**enter the node private ip and save the file. // adding inventory**

**ansible -m ping all // checking that ansible able to connect to the node**

```
Projects — devops@ip-172-31-47-60: /etc/ansible — ssh devops@3.18.108.23...
* Management:      https://landscape.canonical.com
* Support:         https://ubuntu.com/advantage

System information as of Mon Apr 12 11:28:10 UTC 2021

System load:  0.0          Processes:           92
Usage of /:   17.2% of 7.69GB   Users logged in:    0
Memory usage: 20%          IP address for eth0: 172.31.41.115
Swap usage:   0%

37 packages can be updated.
22 of these updates are security updates.
To see these additional updates run: apt list --upgradable

New release '20.04.2 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

Last login: Mon Apr 12 11:26:07 2021 from 172.31.47.60
[devops@ip-172-31-41-115:~$ cd ~/.ssh
[devops@ip-172-31-41-115:~/.ssh$ ls
authorized_keys
[devops@ip-172-31-41-115:~/.ssh$ exit
logout
Connection to 172.31.41.115 closed.
[devops@ip-172-31-47-60:~$ cd /etc/ansible/
[devops@ip-172-31-47-60:/etc/ansible$ ls
ansible.cfg  hosts  roles
[devops@ip-172-31-47-60:/etc/ansible$ mv hosts hosts.orig
mv: cannot move 'hosts' to 'hosts.orig': Permission denied
[devops@ip-172-31-47-60:/etc/ansible$ sudo mv hosts hosts.orig
[devops@ip-172-31-47-60:/etc/ansible$ ls
ansible.cfg  hosts.orig  roles
[devops@ip-172-31-47-60:/etc/ansible$ sudo vi hosts
[devops@ip-172-31-47-60:/etc/ansible$ ansible -m ping all
[DEPRECATION WARNING]: Distribution Ubuntu 18.04 on host 172.31.41.115 should
use /usr/bin/python3, but is using /usr/bin/python for backward compatibility
with prior Ansible releases. A future Ansible release will default to using the
discovered platform python for this host. See https://docs.ansible.com/ansible
/2.9/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.
172.31.41.115 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "ping": "pong"
}
[devops@ip-172-31-47-60:/etc/ansible$
```

now check for localhost // adding localhost in the inventory (hosts file) and verify

```

devops@ip-172-31-47-60:/etc/ansible$ vi hosts
devops@ip-172-31-47-60:/etc/ansible$ sudo vi hosts
devops@ip-172-31-47-60:/etc/ansible$ ansible -m ping all
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:00231B4yDvSqEcn4AW91jBF41ysq9aebretSM1dk+gU.
Are you sure you want to continue connecting (yes/no)? [DEPRECATION WARNING]: Distribution Ubuntu 18.04 on host 172.31.41.115 should
use /usr/bin/python3, but is using /usr/bin/python for backward compatibility
with prior Ansible releases. A future Ansible release will default to using the
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by setting deprecation_warnings=False in ansible.cfg.
172.31.41.115 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "ping": "pong"
}

localhost | UNREACHABLE! => {
  "changed": false,
  "msg": "Failed to connect to the host via ssh: Host key verification failed.",
  "unreachable": true
}

devops@ip-172-31-47-60:/etc/ansible$ ssh-copy-id devops@localhost
/usr/bin/ssh-copy-id: INFO: Source of key(s) to be installed: "/home/devops/.ssh/id_rsa.pub"
The authenticity of host 'localhost (127.0.0.1)' can't be established.
ECDSA key fingerprint is SHA256:00231B4yDvSqEcn4AW91jBF41ysq9aebretSM1dk+gU.
Are you sure you want to continue connecting (yes/no)? 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
devops@localhost's password:

Number of key(s) added: 1

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

devops@ip-172-31-47-60:/etc/ansible$ ansible -m ping all
[DEPRECATION WARNING]: Distribution Ubuntu 18.04 on host 172.31.41.115 should
use /usr/bin/python3, but is using /usr/bin/python for backward compatibility
with prior Ansible releases. A future Ansible release will default to using the
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172.31.41.115 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
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  "ping": "pong"
}

[DEPRECATION WARNING]: Distribution Ubuntu 18.04 on host localhost should use
/usr/bin/python3, but is using /usr/bin/python for backward compatibility with
prior Ansible releases. A future Ansible release will default to using the
discovered platform python for this host. See https://docs.ansible.com/ansible/
2.9/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.
localhost | SUCCESS => {
  "ansible_facts": {

```

now ansible is able to login both the entries of hosts file (inventory)