

Ubuntu Installation

```
ubuntu@ip-172-31-18-207: ~$
Unpacking python-pkg-resources (20.7.0-1) ...
Selecting previously unselected package python-setuptools.
Preparing to unpack .../python-setuptools_20.7.0-1_all.deb ...
Unpacking python-setuptools (20.7.0-1) ...
Selecting previously unselected package sshpass.
Preparing to unpack .../sshpas_1.05-1_amd64.deb ...
Unpacking sshpass (1.05-1) ...
Selecting previously unselected package python-cffi-backend.
Preparing to unpack .../python-cffi-backend_1.5.2-1ubuntu1_amd64.deb ...
Unpacking python-cffi-backend (1.5.2-1ubuntu1) ...
Selecting previously unselected package python-enum34.
Preparing to unpack .../python-enum34_1.1.2-1_all.deb ...
Unpacking python-enum34 (1.1.2-1) ...
Selecting previously unselected package python-idna.
Preparing to unpack .../python-idna_2.0-3_all.deb ...
Unpacking python-idna (2.0-3) ...
Selecting previously unselected package python-ipaddress.
Preparing to unpack .../python-ipaddress_1.0.16-1_all.deb ...
Unpacking python-ipaddress (1.0.16-1) ...
Selecting previously unselected package python-pyasn1.
Preparing to unpack .../python-pyasn1_0.1.9-1_all.deb ...
Unpacking python-pyasn1 (0.1.9-1) ...
Selecting previously unselected package python-cryptography.
Preparing to unpack .../python-cryptography_1.2.3-1ubuntu0.3_amd64.deb ...
Unpacking python-cryptography (1.2.3-1ubuntu0.3) ...
Selecting previously unselected package ansible.
Preparing to unpack .../ansible_2.9.22-1ppa-xenial_all.deb ...
Unpacking ansible (2.9.22-1ppa-xenial) ...
Processing triggers for man-db (2.7.5-1) ...
Setting up python-markupsafe (0.23-2build2) ...
Setting up python-jinja2 (2.8-1ubuntu0.1) ...
Setting up python-yaml (3.11-3build1) ...
Setting up python-crypto (2.6.1-6ubuntu0.16.04.3) ...
Setting up python-six (1.10.0-3) ...
Setting up python-ecdsa (0.13-2ubuntu0.16.04.1) ...
Setting up python-paramiko (1.16.0-1ubuntu0.2) ...
Setting up python-httplib2 (0.9.1+dfsg-1) ...
Setting up python-pkg-resources (20.7.0-1) ...
Setting up python-setuptools (20.7.0-1) ...
Setting up sshpass (1.05-1) ...
Setting up python-cffi-backend (1.5.2-1ubuntu1) ...
Setting up python-enum34 (1.1.2-1) ...
Setting up python-idna (2.0-3) ...
Setting up python-ipaddress (1.0.16-1) ...
Setting up python-pyasn1 (0.1.9-1) ...
Setting up python-cryptography (1.2.3-1ubuntu0.3) ...
Setting up ansible (2.9.22-1ppa-xenial) ...
ubuntu@ip-172-31-18-207:~$
```

```
ubuntu@ip-172-31-18-207:~$
Setting up python-idna (2.0-3) ...
Setting up python-ipaddress (1.0.16-1) ...
Setting up python-pyasn1 (0.1.9-1) ...
Setting up python-cryptography (1.2.3-1ubuntu0.3) ...
Setting up ansible (2.9.22-1ppa-xenial) ...
ubuntu@ip-172-31-18-207:~$ sudo su -
root@ip-172-31-18-207:~# cd /etc/ansible
root@ip-172-31-18-207:/etc/ansible# ls -ltr
total 28
-rw-r--r-- 1 root root 1016 May 24 21:17 hosts
-rw-r--r-- 1 root root 19985 May 24 21:17 ansible.cfg
drwxr-xr-x 2 root root 4096 May 24 21:49 roles
root@ip-172-31-18-207:/etc/ansible# vi hosts
root@ip-172-31-18-207:/etc/ansible# exit
logout
ubuntu@ip-172-31-18-207:~$ ansible -m ping all
The authenticity of host '172.31.19.124 (172.31.19.124)' can't be established.
ECDSA key fingerprint is SHA256:26GuVhXbcq2R8Jpy4BaL6Pq17D/8m015r7ttJKdkfk.
Are you sure you want to continue connecting (yes/no)? The authenticity of host '172.31.28.78 (172.31.28.78)' can't be established.
ECDSA key fingerprint is SHA256:hFBdiKooeWpIToEgEmnFOSijUv4KMKBEHAGFqPq7/w.
Are you sure you want to continue connecting (yes/no)? yes
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.
172.31.19.124 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "ping": "pong"
}

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

ubuntu@ip-172-31-18-207:~$ ansible -m ping all
The authenticity of host '172.31.28.78 (172.31.28.78)' can't be established.
ECDSA key fingerprint is SHA256:hFBdiKooeWpIToEgEmnFOSijUv4KMKBEHAGFqPq7/w.
Are you sure you want to continue connecting (yes/no)? [DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.
172.31.19.124 | SUCCESS => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "ping": "pong"
}
```

```
ubuntu@ip-172-31-18-207: ~  
Last login: Wed Jun 16 07:18:04 2021 from 10.118.155.227  
ubuntu@ip-172-31-28-78:~$ exit  
logout  
Connection to 172.31.28.78 closed.  
ubuntu@ip-172-31-18-207:~$ ansible -m ping all  
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.  
172.31.19.124 | SUCCESS => {  
  "ansible_facts": {  
    "discovered_interpreter_python": "/usr/bin/python"  
  },  
  "changed": false,  
  "ping": "pong"  
}  
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.  
172.31.28.78 | SUCCESS => {  
  "ansible_facts": {  
    "discovered_interpreter_python": "/usr/bin/python"  
  },  
  "changed": false,  
  "ping": "pong"  
}  
ubuntu@ip-172-31-18-207:~$ ansible -m ping dev  
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.  
172.31.19.124 | SUCCESS => {  
  "ansible_facts": {  
    "discovered_interpreter_python": "/usr/bin/python"  
  },  
  "changed": false,  
  "ping": "pong"  
}  
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.  
172.31.28.78 | SUCCESS => {  
  "ansible_facts": {  
    "discovered_interpreter_python": "/usr/bin/python"  
  },  
  "changed": false,  
  "ping": "pong"  
}  
ubuntu@ip-172-31-18-207:~$ ansible -m ping  
usage: ansible [-h] [--version] [-v] [-b] [--become-method BECOME_METHOD] [--become-user BECOME_USER] [-R] [-i INVENTORY] [--list-hosts]
```

```
ubuntu@ip-172-31-18-207:~$ sudo su -  
root@ip-172-31-18-207:~# cd /etc/ansible  
root@ip-172-31-18-207:/etc/ansible# ls -ltr  
total 28  
-rw-r--r-- 1 root root 1016 May 24 21:17 hosts  
-rw-r--r-- 1 root root 19985 May 24 21:17 ansible.cfg  
drwxr-xr-x 2 root root 4096 May 24 21:49 roles  
root@ip-172-31-18-207:/etc/ansible# vi hosts  
root@ip-172-31-18-207:/etc/ansible# exit  
logout  
ubuntu@ip-172-31-18-207:~$ ansible -m ping all  
ssh ubuntu@172.31.28.78
```

Ad Hoc commands

```
ansible web -i inventory -m ping  
ansible all --list-hosts  
ansible web -i inventory -m command -a 'df -hk'  
ansible-doc -l | more | wc -l  
ansible-doc yum  
ansible web -i inventory -m user -a "name={{username}} password={{ 'password' |  
password_hash('sha512') }}"
```

```
ansible web -i inventory -m yum -a "name=httpd state=present"
ansible web -i inventory -m service -a "name=httpd enabled=yes state=started"
ansible web -i inventory -m yum -a "name=httpd state=absent"
ansible web:db -i inventory -m service -a "name=httpd enabled=yes state=started"
ansible db -i inventory -m setup -a "filter=ansible_mounts"
ansible all -i inventory -m setup --tree ./setup
ansible prod -i hosts -a "hostname"
ansible prod -i hosts -a "df -hk"
ansible localhost -m debug -a 'var=groups.keys()'
ansible prod -m stat -a "path=/etc/environment"
ansible prod -m copy -a "src=/etc/hosts dest=/tmp/hosts"
ansible prod -m fetch -a "src=/etc/hosts dest=/root"
ansible prod -m file -a "dest=/tmp/test mode=644 state=directory"
ansible prod -m file -a "dest=/tmp/test state=absent"
ansible prod -m shell -a "tail /var/log/messages | grep ansible-command | wc -l"
```

```
ubuntu@ip-172-31-18-207: ~
$ ansible-playbook httpd.yml
PLAY [web] *********************************************************************
TASK [Gathering Facts] *********************************************************
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.
ok: [172.31.19.124]

[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.
ok: [172.31.28.78]

TASK [Install apache httpd (state=present is optional)] *********************
changed: [172.31.28.78]
changed: [172.31.19.124]

PLAY RECAP *********************************************************************
172.31.19.124      : ok=2  changed=1  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0
172.31.28.78      : ok=2  changed=1  unreachable=0  failed=0  skipped=0  rescued=0  ignored=0

ubuntu@ip-172-31-18-207:~$ vi index.html
ubuntu@ip-172-31-18-207:~$ ansible-playbook httpd.yml

PLAY [dev] *********************************************************************

TASK [Gathering Facts] *********************************************************
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 should use /usr/bin/python3, but is using /usr/bin/python for backward compatibility with prior Ansible releases. A
```

```
ubuntu@ip-172-31-18-207: ~
Information: This feature will be removed in version 2.12. Deprecation warnings can be disabled by setting deprecation_warnings=False in ansible.cfg.
ok: [172.31.19.124]

TASK [Install apache httpd (state=present is optional)] *****
changed: [172.31.28.78]
changed: [172.31.19.124]

PLAY RECAP *****
172.31.19.124      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
172.31.28.78      : ok=2    changed=1    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

ubuntu@ip-172-31-18-207:~$ vi index.html
ubuntu@ip-172-31-18-207:~$ ansible-playbook httpd.yaml

PLAY [dev] *****

TASK [Gathering Facts] *****
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.
ok: [172.31.28.78]
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.
ok: [172.31.19.124]

TASK [Install apache httpd (state=present is optional)] *****
ok: [172.31.28.78]
ok: [172.31.19.124]

PLAY RECAP *****
172.31.19.124      : ok=2    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
172.31.28.78      : ok=2    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

ubuntu@ip-172-31-18-207:~$
ubuntu@ip-172-31-18-207:~$ vi httpd.yaml
ubuntu@ip-172-31-18-207:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-18-207:~$ ansible all -m copy -a "src=/home/ubuntu/index.html dest=/var/www/html/"
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.
172.31.19.124 | FAILED! => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "checksum": "5a8af6c7d25373862158dedbc068e8b0aa9ae7d0",
  "msg": "Destination /var/www/html not writable"
}

[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.
172.31.28.78 | FAILED! => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "checksum": "5a8af6c7d25373862158dedbc068e8b0aa9ae7d0",
  "msg": "Destination /var/www/html not writable"
}
```

```
ubuntu@ip-172-31-18-207: ~
ok: [172.31.28.78]
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.
ok: [172.31.19.124]

TASK [Install apache httpd (state=present is optional)] *****
ok: [172.31.28.78]
ok: [172.31.19.124]

PLAY RECAP *****
172.31.19.124      : ok=2    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
172.31.28.78      : ok=2    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

ubuntu@ip-172-31-18-207:~$
ubuntu@ip-172-31-18-207:~$ vi httpd.yaml
ubuntu@ip-172-31-18-207:~$ pwd
/home/ubuntu
ubuntu@ip-172-31-18-207:~$ ansible all -m copy -a "src=/home/ubuntu/index.html dest=/var/www/html/"
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.
172.31.19.124 | FAILED! => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "checksum": "5a8af6c7d25373862158dedbc068e8b0aa9ae7d0",
  "msg": "Destination /var/www/html not writable"
}

[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.
172.31.28.78 | FAILED! => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": false,
  "checksum": "5a8af6c7d25373862158dedbc068e8b0aa9ae7d0",
  "msg": "Destination /var/www/html not writable"
}

ubuntu@ip-172-31-18-207:~$ ansible all -m copy -a "src=/home/ubuntu/index.html dest=/var/www/html/" -b
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.
172.31.28.78 | CHANGED => {
  "ansible_facts": {
    "discovered_interpreter_python": "/usr/bin/python"
  },
  "changed": true,
```

```
ubuntu@ip-172-31-18-207: ~  
{  
  "changed": false,  
  "checksum": "5a8af6c7d25373862158dedbc068e8b0aa9ae7d8",  
  "msg": "Destination /var/www/html not writable"  
}  
  
ubuntu@ip-172-31-18-207:~$ ansible all -m copy -a "src=/home/ubuntu/index.html dest=/var/www/html/" -b  
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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.  
172.31.28.78 | CHANGED => {  
  "ansible_facts": {  
    "discovered_interpreter_python": "/usr/bin/python"  
  },  
  "changed": true,  
  "checksum": "5a8af6c7d25373862158dedbc068e8b0aa9ae7d8",  
  "dest": "/var/www/html/index.html",  
  "gid": 0,  
  "group": "root",  
  "md5sum": "a0228185c9bac9555d5a0aflc8dec60b",  
  "mode": "0644",  
  "owner": "root",  
  "size": 11,  
  "src": "/home/ubuntu/.ansible/tmp/ansible-tmp-1623851574.86-2683-94889002570308/source",  
  "state": "file",  
  "uid": 0  
}  
  
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.19.124 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.  
172.31.19.124 | CHANGED => {  
  "ansible_facts": {  
    "discovered_interpreter_python": "/usr/bin/python"  
  },  
  "changed": true,  
  "checksum": "5a8af6c7d25373862158dedbc068e8b0aa9ae7d8",  
  "dest": "/var/www/html/index.html",  
  "gid": 0,  
  "group": "root",  
  "md5sum": "a0228185c9bac9555d5a0aflc8dec60b",  
  "mode": "0644",  
  "owner": "root",  
  "size": 11,  
  "src": "/home/ubuntu/.ansible/tmp/ansible-tmp-1623851574.87-2684-21248559084254/source",  
  "state": "file",  
  "uid": 0  
}  
  
ubuntu@ip-172-31-18-207:~$  
ubuntu@ip-172-31-18-207:~$ ansible all -m copy -a "src=/home/ubuntu/index.html dest=/var/www/html/" -b  
[DEPRECATION WARNING]: Distribution Ubuntu 16.04 on host 172.31.28.78 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
```



