Ansible使用

环境：rhel8虚拟机6台，关闭防火墙、SELinux，清空iptables规则，搭建好yum源

架构：

Node01 192.168.1.1 node01

Node02 192.168.1.2 node02

Node03 192.168.1.3 node03

Node04 192.168.1.4 node04

Node05 192.168.1.5 node05

Node10 192.168.1.10 control

###################################################################control控制端到各个节点实现免密登录

#安装ansible

[root@control ~]# dnf repolist | tail -5

Failed to set locale, defaulting to C

Last metadata expiration check: 0:01:48 ago on Wed Jun 3 11:54:42 2020.

This system is not registered to Red Hat Subscription Management. You can use subscription-manager to register.

repo id repo name status

AppStream AppStream 4672

BaseOS BaseOS 1658

Extras Extras 7

[root@control ~]# dnf -y install ansible python3-paramiko

#自定义配置文件

[root@control ~]# mkdir myansi

[root@control ~]# cd myansi/

[root@control myansi]# touch ansible.cfg

[root@control myansi]# vim ansible.cfg

[root@control myansi]# touch hosts

[root@control myansi]# vim hosts

[root@control myansi]# cat ansible.cfg hosts

[defaults]

inventory = ./hosts

forks = 5

ask\_pass = False

host\_key\_checking = False

[test]

node01

[proxy]

node02

[webserver]

node0[3:4]

[database]

node05

[cluster:children]

webserver

database

[root@control myansi]#

[root@control myansi]# ansible all --list-hosts

hosts (5):

node01

node02

node03

node04

node05

[root@control myansi]# ansible webserver -m ping

node03 | SUCCESS => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"ping": "pong"

}

node04 | SUCCESS => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"ping": "pong"

}

[root@control myansi]#

#ansible默认调用command模块

[root@control myansi]# ansible node01 -m command -a "uptime"

node01 | CHANGED | rc=0 >>

15:54:04 up 4:39, 1 user, load average: 0.08, 0.03, 0.01

[root@control myansi]# ansible node01 -m command -a "uname -r"

node01 | CHANGED | rc=0 >>

4.18.0-80.el8.x86\_64

[root@control myansi]# ansible node01 -m command -a "ip a s eth0"

node01 | CHANGED | rc=0 >>

2: eth0: <BROADCAST,MULTICAST,UP,LOWER\_UP> mtu 1500 qdisc fq\_codel state UP group default qlen 1000

link/ether 52:54:00:6b:e9:30 brd ff:ff:ff:ff:ff:ff

inet 192.168.1.1/24 brd 192.168.1.255 scope global noprefixroute eth0

valid\_lft forever preferred\_lft forever

inet6 fe80::5054:ff:fe6b:e930/64 scope link

valid\_lft forever preferred\_lft forever

[root@control myansi]# ansible webserver -a "date"

node04 | CHANGED | rc=0 >>

Wed Jun 3 15:54:48 CST 2020

node03 | CHANGED | rc=0 >>

Wed Jun 3 15:54:48 CST 2020

[root@control myansi]#

###########

#ansible模块，command模式不支持bash特性，如管道、重定向、后台进程等

[root@control myansi]# ansible node01 -m command -a "ps aux | wc -l"

node01 | FAILED | rc=1 >>

error: garbage option

Usage:

ps [options]

Try 'ps --help <simple|list|output|threads|misc|all>'

or 'ps --help <s|l|o|t|m|a>'

for additional help text.

For more details see ps(1).non-zero return code

[root@control myansi]# ansible node01 -m shell -a "ps aux | wc -l"

node01 | CHANGED | rc=0 >>

77

[root@control myansi]#

[root@control myansi]# ansible node01 -m command -a "uptime >> uptime.txt"

node01 | CHANGED | rc=0 >>

16:13:26 up 4:58, 2 users, load average: 0.08, 0.04, 0.01

[root@control myansi]# ansible node01 -m command -a "cat uptime.txt"

node01 | FAILED | rc=1 >>

cat: uptime.txt: No such file or directorynon-zero return code

[root@control myansi]# ls

ansible.cfg hosts

[root@control myansi]# ansible node01 -m shell -a "uptime >> uptime.txt"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "cat uptime.txt"

node01 | CHANGED | rc=0 >>

16:14:28 up 4:59, 2 users, load average: 0.15, 0.06, 0.02

[root@control myansi]#

[root@control myansi]# ansible node01 -m shell -a "cd /tmp"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "touch my.txt"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "ls /root/"

node01 | CHANGED | rc=0 >>

my.txt

uptime.txt

[root@control myansi]# ansible node01 -m shell -a "chdir=/tmp touch my.txt"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "ls /tmp/\*.txt"

node01 | CHANGED | rc=0 >>

/tmp/my.txt

[root@control myansi]#

[root@control myansi]# ansible node01 -m shell -a "chdir=/tmp touch a.txt b.txt c.txt"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "ls /tmp/\*.txt"

node01 | CHANGED | rc=0 >>

/tmp/a.txt

/tmp/b.txt

/tmp/c.txt

/tmp/my.txt

[root@control myansi]#

#条件判断逻辑执行

[root@control myansi]# ansible node01 -m shell -a "ls /tmp/test.txt"

node01 | FAILED | rc=2 >>

ls: cannot access '/tmp/test.txt': No such file or directorynon-zero return code

[root@control myansi]# ansible node01 -m shell -a "touch /tmp/test.txt creates=/tmp/test.txt"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "ls /tmp/test.txt"

node01 | CHANGED | rc=0 >>

/tmp/test.txt

[root@control myansi]# ansible node01 -m shell -a "touch /tmp/test.txt creates=/tmp/test.txt"

node01 | SUCCESS | rc=0 >>

skipped, since /tmp/test.txt exists

[root@control myansi]# ansible node01 -m shell -a "rm -rf /tmp/test.txt removes=/tmp/test.txt"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "ls /tmp/test.txt"

node01 | FAILED | rc=2 >>

ls: cannot access '/tmp/test.txt': No such file or directorynon-zero return code

[root@control myansi]# ansible node01 -m shell -a "rm -rf /tmp/test.txt removes=/tmp/test.txt"

node01 | SUCCESS | rc=0 >>

skipped, since /tmp/test.txt does not exist

[root@control myansi]#

#creates：文件存在则命令不执行

#removes：文件不存在则命令不执行

##########################

#script模块，将本地脚本到远程主机执行

[root@control myansi]# vim test.sh

[root@control myansi]# cat test.sh

#!/bin/bash

dnf -y install httpd &> /dev/null

systemctl start httpd

[root@control myansi]# ansible node01 -m script -a "./test.sh"

node01 | CHANGED => {

"changed": true,

"rc": 0,

"stderr": "Shared connection to node01 closed.\r\n",

"stderr\_lines": [

"Shared connection to node01 closed."

],

"stdout": "",

"stdout\_lines": []

}

[root@control myansi]# ansible node01 -m shell -a "systemctl is-active httpd"

node01 | CHANGED | rc=0 >>

active

[root@control myansi]#

#file模块管理文件目录

[root@control myansi]# ansible node01 -m file -a "path=/tmp/file.txt state=touch"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"dest": "/tmp/file.txt",

"gid": 0,

"group": "root",

"mode": "0644",

"owner": "root",

"size": 0,

"state": "file",

"uid": 0

}

[root@control myansi]# ansible node01 -m shell -a "ls -l /tmp/file.txt"

node01 | CHANGED | rc=0 >>

-rw-r--r-- 1 root root 0 Jun 3 17:25 /tmp/file.txt

[root@control myansi]# ansible node01 -m file -a "path=/tmp/mydir state=directory"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"gid": 0,

"group": "root",

"mode": "0755",

"owner": "root",

"path": "/tmp/mydir",

"size": 6,

"state": "directory",

"uid": 0

}

[root@control myansi]# ansible node01 -m shell -a "ls -ld /tmp/mydir"

node01 | CHANGED | rc=0 >>

drwxr-xr-x 2 root root 6 Jun 3 17:27 /tmp/mydir

[root@control myansi]#

[root@control myansi]# ansible node01 -m file -a "path=/tmp/file.txt owner=sshd group=adm mode=777"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"gid": 4,

"group": "adm",

"mode": "0777",

"owner": "sshd",

"path": "/tmp/file.txt",

"size": 0,

"state": "file",

"uid": 74

}

[root@control myansi]# ansible node01 -m shell -a "ls -l /tmp/file.txt"

node01 | CHANGED | rc=0 >>

-rwxrwxrwx 1 sshd adm 0 Jun 3 17:25 /tmp/file.txt

[root@control myansi]#

[root@control myansi]# ansible node01 -m file -a "path=/tmp/file.txt state=absent"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"path": "/tmp/file.txt",

"state": "absent"

}

[root@control myansi]# ansible node01 -m file -a "path=/tmp/mydir state=absent"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"path": "/tmp/mydir",

"state": "absent"

}

[root@control myansi]# ansible node01 -m shell -a "ls /tmp"

node01 | CHANGED | rc=0 >>

\_MEI1OBafX

a.txt

ansible\_command\_payload\_ei3prw0v

b.txt

c.txt

ks-script-duvyqfkw

my.txt

systemd-private-bdd76f13ef144483808707da2dae7c8d-chronyd.service-qz9gOb

systemd-private-bdd76f13ef144483808707da2dae7c8d-httpd.service-yWSwlV

[root@control myansi]#

[root@control myansi]# ansible node01 -m file -a "src=/etc/hosts path=/tmp/hosts.txt state=link"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"dest": "/tmp/hosts.txt",

"gid": 0,

"group": "root",

"mode": "0777",

"owner": "root",

"size": 10,

"src": "/etc/hosts",

"state": "link",

"uid": 0

}

[root@control myansi]# ansible node01 -m shell -a "ls -l /tmp/hosts.txt"

node01 | CHANGED | rc=0 >>

lrwxrwxrwx 1 root root 10 Jun 3 17:35 /tmp/hosts.txt -> /etc/hosts

[root@control myansi]#

#copy模块将控制端文件分发到被管理节点

[root@control myansi]# echo testcopy >> testcp.txt

[root@control myansi]# ansible node01 -m copy -a "src=./testcp.txt dest=/root"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"checksum": "d44b893ca7b34450022a104ea4dc5304dfb01e2a",

"dest": "/root/testcp.txt",

"gid": 0,

"group": "root",

"md5sum": "dd726e6ecb2f6c3e31cbe78dfbe2b5cc",

"mode": "0644",

"owner": "root",

"size": 9,

"src": "/root/.ansible/tmp/ansible-tmp-1591177219.730645-158784267858853/source",

"state": "file",

"uid": 0

}

[root@control myansi]# ansible node01 -m shell -a "ls /root"

node01 | CHANGED | rc=0 >>

my.txt

testcp.txt

uptime.txt

[root@control myansi]# ansible node01 -m copy -a "src=./testcp.txt dest=/root/ttcp.txt"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"checksum": "d44b893ca7b34450022a104ea4dc5304dfb01e2a",

"dest": "/root/ttcp.txt",

"gid": 0,

"group": "root",

"md5sum": "dd726e6ecb2f6c3e31cbe78dfbe2b5cc",

"mode": "0644",

"owner": "root",

"size": 9,

"src": "/root/.ansible/tmp/ansible-tmp-1591177248.147469-257813962135898/source",

"state": "file",

"uid": 0

}

[root@control myansi]# ansible node01 -m shell -a "ls /root"

node01 | CHANGED | rc=0 >>

my.txt

testcp.txt

ttcp.txt

uptime.txt

[root@control myansi]#

[root@control myansi]# ansible node01 -m copy -a "content='hello world\nhello ni hao' dest=/root/hi.txt"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"checksum": "f04dbe0d3ba26b1561d819a012324877bde027bb",

"dest": "/root/hi.txt",

"gid": 0,

"group": "root",

"md5sum": "725ac782d80f780f918f5507f1f3b495",

"mode": "0644",

"owner": "root",

"size": 24,

"src": "/root/.ansible/tmp/ansible-tmp-1591177440.404153-37761095731474/source",

"state": "file",

"uid": 0

}

[root@control myansi]# ansible node01 -m shell -a 'cat /root/hi.txt'

node01 | CHANGED | rc=0 >>

hello world

hello ni hao

[root@control myansi]#

###################################################################fetch模块，将被控制节点的文件拷贝到管理节点

[root@control myansi]# mkdir download

[root@control myansi]# ansible webserver -m fetch -a "src=/etc/hostname dest=./download"

node03 | CHANGED => {

"changed": true,

"checksum": "cbea41bf2d33052d5925290078514d7632fa7958",

"dest": "/root/myansi/download/node03/etc/hostname",

"md5sum": "5c1e892423993830c6244f911134d2de",

"remote\_checksum": "cbea41bf2d33052d5925290078514d7632fa7958",

"remote\_md5sum": null

}

node04 | CHANGED => {

"changed": true,

"checksum": "921caf99803138c54fd86388066cfffce77dd00f",

"dest": "/root/myansi/download/node04/etc/hostname",

"md5sum": "4148c763826b31f42b18c2aa50877070",

"remote\_checksum": "921caf99803138c54fd86388066cfffce77dd00f",

"remote\_md5sum": null

}

[root@control myansi]# tree download/

download/

|-- node03

| `-- etc

| `-- hostname

`-- node04

`-- etc

`-- hostname

4 directories, 2 files

[root@control myansi]#

###################################################################lineinfile模块，修改文件内容

[root@control myansi]# ansible node01 -m lineinfile -a "path=/etc/issue line='hello world'"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line added"

}

[root@control myansi]# ansible node01 -m shell -a "cat /etc/issue"

node01 | CHANGED | rc=0 >>

\S

Kernel \r on an \m

hello world

[root@control myansi]# ansible node01 -m lineinfile -a "path=/etc/issue line='Insert' insertafter='Kernel'"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line added"

}

[root@control myansi]# ansible node01 -m shell -a "cat /etc/issue"

node01 | CHANGED | rc=0 >>

\S

Kernel \r on an \m

Insert

hello world

[root@control myansi]#

[root@control myansi]# ansible node01 -m lineinfile -a "path=/etc/issue regexp='hello' line='ni hao'"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line replaced"

}

[root@control myansi]# ansible node01 -m shell -a "cat /etc/issue"

node01 | CHANGED | rc=0 >>

\S

Kernel \r on an \m

Insert

ni hao

#正则匹配，替换整行；如有多行，替换最后一行；如无匹配，末尾追加

[root@control myansi]# ansible node01 -m shell -a 'cat /etc/issue.net'

node01 | CHANGED | rc=0 >>

\S

Kernel \r on an \m

[root@control myansi]# ansible node01 -m replace -a "path=/etc/issue.net regexp='Kernel' replace='Ocean'"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "1 replacements made"

}

[root@control myansi]# ansible node01 -m shell -a 'cat /etc/issue.net'

node01 | CHANGED | rc=0 >>

\S

Ocean \r on an \m

[root@control myansi]#

#replace模块，仅替换匹配部分，全文所有替换

###################################################################user模块管理系统用户

[root@control myansi]# ansible node01 -m user -a "name=tuser1"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"comment": "",

"create\_home": true,

"group": 1000,

"home": "/home/tuser1",

"name": "tuser1",

"shell": "/bin/bash",

"state": "present",

"system": false,

"uid": 1000

}

[root@control myansi]# ansible node01 -m shell -a 'id tuser1'

node01 | CHANGED | rc=0 >>

uid=1000(tuser1) gid=1000(tuser1) groups=1000(tuser1)

[root@control myansi]# ansible node01 -m user -a "name=tuser2 uid=1010 group='adm' groups='root','daemon' home='/home/tuser2'"

node01 | FAILED! => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"msg": "Group root' does not exist"

}

[root@control myansi]# ansible node01 -m user -a "name=tuser2 uid=1010 group='adm' groups=root,daemon home='/home/tuser2'"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"comment": "",

"create\_home": true,

"group": 4,

"groups": "root,daemon",

"home": "/home/tuser2",

"name": "tuser2",

"shell": "/bin/bash",

"state": "present",

"system": false,

"uid": 1010

}

[root@control myansi]# ansible node01 -m shell -a 'id tuser2'

node01 | CHANGED | rc=0 >>

uid=1010(tuser2) gid=4(adm) groups=4(adm),0(root),2(daemon)

[root@control myansi]# ansible node01 -m shell -a "cat /etc/shadow | grep tuser"

node01 | CHANGED | rc=0 >>

tuser1:!!:18417:0:99999:7:::

tuser2:!!:18417:0:99999:7:::

[root@control myansi]# ansible node01 -m user -a "name=tuser1 password='123'"

[WARNING]: The input password appears not to have been hashed. The 'password' argument must be encrypted for this module to work

properly.

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"append": false,

"changed": true,

"comment": "",

"group": 1000,

"home": "/home/tuser1",

"move\_home": false,

"name": "tuser1",

"password": "NOT\_LOGGING\_PASSWORD",

"shell": "/bin/bash",

"state": "present",

"uid": 1000

}

[root@control myansi]# ansible node01 -m user -a "name=tuser2 password={{'123'|password\_hash('sha512')}}"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"append": false,

"changed": true,

"comment": "",

"group": 4,

"home": "/home/tuser2",

"move\_home": false,

"name": "tuser2",

"password": "NOT\_LOGGING\_PASSWORD",

"shell": "/bin/bash",

"state": "present",

"uid": 1010

}

[root@control myansi]# ansible node01 -m shell -a "cat /etc/shadow | grep tuser"

node01 | CHANGED | rc=0 >>

tuser1:123:18417:0:99999:7:::

tuser2:$6$TO7.pRdaHtfLxgx/$nkgr0KvwR40OEjW0up2U8JuQ1F8Mh32XcQP6X85AXy0ICAy5CfxkOjHaTOwsBJk10Z20lOpz6/cv3k5j/z6TK/:18417:0:99999:7:::

[root@control myansi]#

[root@control myansi]# ansible node01 -m shell -a 'id tuser1'

node01 | CHANGED | rc=0 >>

uid=1000(tuser1) gid=1000(tuser1) groups=1000(tuser1)

[root@control myansi]# ansible node01 -m user -a "name=tuser1 groups='root,adm'"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"append": false,

"changed": true,

"comment": "",

"group": 1000,

"groups": "root,adm",

"home": "/home/tuser1",

"move\_home": false,

"name": "tuser1",

"shell": "/bin/bash",

"state": "present",

"uid": 1000

}

[root@control myansi]# ansible node01 -m shell -a 'id tuser1'

node01 | CHANGED | rc=0 >>

uid=1000(tuser1) gid=1000(tuser1) groups=1000(tuser1),0(root),4(adm)

[root@control myansi]#

[root@control myansi]# ansible node01 -m user -a "name=tuser1 state=absent"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"force": false,

"name": "tuser1",

"remove": false,

"state": "absent"

}

[root@control myansi]# ansible node01 -m user -a "name=tuser2 state=absent remove=true"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"force": false,

"name": "tuser2",

"remove": true,

"state": "absent"

}

[root@control myansi]# ansible node01 -m shell -a 'ls /home'

node01 | CHANGED | rc=0 >>

tuser1

[root@control myansi]#

###################################################################yum\_repository模块管理节点上的repo仓库文件

[root@control myansi]# ansible node01 -m yum\_repository -a "name=myyum description=hello baseurl=file:///mnt gpgcheck=0 enabled=1"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"repo": "myyum",

"state": "present"

}

[root@control myansi]# ansible node01 -m shell -a "cat /etc/yum.repos.d/myyum.repo"

node01 | CHANGED | rc=0 >>

[myyum]

baseurl = file:///mnt

enabled = 1

gpgcheck = 0

name = hello

[root@control myansi]# ansible node01 -m yum\_repository -a "name=myyum description=test baseurl=file:///mnt gpgcheck=1 enabled=1"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"repo": "myyum",

"state": "present"

}

[root@control myansi]# ansible node01 -m shell -a "cat /etc/yum.repos.d/myyum.repo"

node01 | CHANGED | rc=0 >>

[myyum]

baseurl = file:///mnt

enabled = 1

gpgcheck = 1

name = test

[root@control myansi]# ansible node01 -m yum\_repository -a "name=myyum state=absent"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"repo": "myyum",

"state": "absent"

}

[root@control myansi]# ansible node01 -m shell -a 'ls /etc/yum.repos.d/'

node01 | CHANGED | rc=0 >>

RPM-GPG-KEY-redhat-release

dvd.repo

redhat.repo

[root@control myansi]#

###################################################################使用yum模块管理软件

[root@control myansi]# ansible node01 -m yum -a 'name=nfs-utils state=present'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "",

"rc": 0,

"results": [

"Installed: nfs-utils",

"Installed: rpcbind-1.2.5-3.el8.x86\_64",

"Installed: gssproxy-0.8.0-5.el8.x86\_64",

"Installed: keyutils-1.5.10-6.el8.x86\_64",

"Installed: quota-1:4.04-10.el8.x86\_64",

"Installed: quota-nls-1:4.04-10.el8.noarch",

"Installed: libverto-libevent-0.3.0-5.el8.x86\_64",

"Installed: nfs-utils-1:2.3.3-14.el8.x86\_64"

]

}

[root@control myansi]# ansible node01 -m yum -a 'name=nfs-utils state=latest'

node01 | SUCCESS => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"msg": "Nothing to do",

"rc": 0,

"results": [

"Installed: nfs-utils"

]

}

[root@control myansi]# ansible node01 -m yum -a 'name=nfs-utils state=absent'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "",

"rc": 0,

"results": [

"Removed: nfs-utils-1:2.3.3-14.el8.x86\_64"

]

}

[root@control myansi]#

###################################################################service模块管理服务

[root@control myansi]# ansible node01 -m shell -a 'systemctl is-active httpd'

node01 | FAILED | rc=3 >>

inactivenon-zero return code

[root@control myansi]# ansible node01 -m shell -a 'systemctl is-enable httpd'

node01 | FAILED | rc=1 >>

Unknown operation is-enable.non-zero return code

[root@control myansi]# ansible node01 -m service -a 'name=httpd state=started'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"name": "httpd",

"state": "started",

"status": {

"ActiveEnterTimestampMonotonic": "0",

"ActiveExitTimestampMonotonic": "0",

"ActiveState": "inactive",

"After": "remote-fs.target sysinit.target system.slice httpd-init.service basic.target systemd-tmpfiles-setup.service tmp.mount nss-lookup.target network.target systemd-journald.socket -.mount",

"AllowIsolate": "no",

"AmbientCapabilities": "",

"AssertResult": "no",

"AssertTimestampMonotonic": "0",

"Before": "shutdown.target",

"BlockIOAccounting": "no",

"BlockIOWeight": "[not set]",

"CPUAccounting": "no",

"CPUQuotaPerSecUSec": "infinity",

"CPUSchedulingPolicy": "0",

"CPUSchedulingPriority": "0",

"CPUSchedulingResetOnFork": "no",

"CPUShares": "[not set]",

"CPUUsageNSec": "[not set]",

"CPUWeight": "[not set]",

"CacheDirectoryMode": "0755",

"CanIsolate": "no",

"CanReload": "yes",

"CanStart": "yes",

"CanStop": "yes",

"CapabilityBoundingSet": "cap\_chown cap\_dac\_override cap\_dac\_read\_search cap\_fowner cap\_fsetid cap\_kill cap\_setgid cap\_setuid cap\_setpcap cap\_linux\_immutable cap\_net\_bind\_service cap\_net\_broadcast cap\_net\_admin cap\_net\_raw cap\_ipc\_lock cap\_ipc\_owner cap\_sys\_module cap\_sys\_rawio cap\_sys\_chroot cap\_sys\_ptrace cap\_sys\_pacct cap\_sys\_admin cap\_sys\_boot cap\_sys\_nice cap\_sys\_resource cap\_sys\_time cap\_sys\_tty\_config cap\_mknod cap\_lease cap\_audit\_write cap\_audit\_control cap\_setfcap cap\_mac\_override cap\_mac\_admin cap\_syslog cap\_wake\_alarm cap\_block\_suspend",

"CollectMode": "inactive",

"ConditionResult": "no",

"ConditionTimestampMonotonic": "0",

"ConfigurationDirectoryMode": "0755",

"Conflicts": "shutdown.target",

"ControlPID": "0",

"DefaultDependencies": "yes",

"Delegate": "no",

"Description": "The Apache HTTP Server",

"DevicePolicy": "auto",

"Documentation": "man:httpd.service(8)",

"DynamicUser": "no",

"Environment": "LANG=C",

"ExecMainCode": "0",

"ExecMainExitTimestampMonotonic": "0",

"ExecMainPID": "0",

"ExecMainStartTimestampMonotonic": "0",

"ExecMainStatus": "0",

"ExecReload": "{ path=/usr/sbin/httpd ; argv[]=/usr/sbin/httpd $OPTIONS -k graceful ; ignore\_errors=no ; start\_time=[n/a] ; stop\_time=[n/a] ; pid=0 ; code=(null) ; status=0/0 }",

"ExecStart": "{ path=/usr/sbin/httpd ; argv[]=/usr/sbin/httpd $OPTIONS -DFOREGROUND ; ignore\_errors=no ; start\_time=[n/a] ; stop\_time=[n/a] ; pid=0 ; code=(null) ; status=0/0 }",

"FailureAction": "none",

"FileDescriptorStoreMax": "0",

"FragmentPath": "/usr/lib/systemd/system/httpd.service",

"GID": "[not set]",

"GuessMainPID": "yes",

"IOAccounting": "no",

"IOSchedulingClass": "0",

"IOSchedulingPriority": "0",

"IOWeight": "[not set]",

"IPAccounting": "no",

"IPEgressBytes": "18446744073709551615",

"IPEgressPackets": "18446744073709551615",

"IPIngressBytes": "18446744073709551615",

"IPIngressPackets": "18446744073709551615",

"Id": "httpd.service",

"IgnoreOnIsolate": "no",

"IgnoreSIGPIPE": "yes",

"InactiveEnterTimestampMonotonic": "0",

"InactiveExitTimestampMonotonic": "0",

"JobRunningTimeoutUSec": "infinity",

"JobTimeoutAction": "none",

"JobTimeoutUSec": "infinity",

"KeyringMode": "private",

"KillMode": "mixed",

"KillSignal": "28",

"LimitAS": "infinity",

"LimitASSoft": "infinity",

"LimitCORE": "infinity",

"LimitCORESoft": "infinity",

"LimitCPU": "infinity",

"LimitCPUSoft": "infinity",

"LimitDATA": "infinity",

"LimitDATASoft": "infinity",

"LimitFSIZE": "infinity",

"LimitFSIZESoft": "infinity",

"LimitLOCKS": "infinity",

"LimitLOCKSSoft": "infinity",

"LimitMEMLOCK": "16777216",

"LimitMEMLOCKSoft": "16777216",

"LimitMSGQUEUE": "819200",

"LimitMSGQUEUESoft": "819200",

"LimitNICE": "0",

"LimitNICESoft": "0",

"LimitNOFILE": "4096",

"LimitNOFILESoft": "1024",

"LimitNPROC": "5688",

"LimitNPROCSoft": "5688",

"LimitRSS": "infinity",

"LimitRSSSoft": "infinity",

"LimitRTPRIO": "0",

"LimitRTPRIOSoft": "0",

"LimitRTTIME": "infinity",

"LimitRTTIMESoft": "infinity",

"LimitSIGPENDING": "5688",

"LimitSIGPENDINGSoft": "5688",

"LimitSTACK": "infinity",

"LimitSTACKSoft": "8388608",

"LoadState": "loaded",

"LockPersonality": "no",

"LogLevelMax": "-1",

"LogsDirectoryMode": "0755",

"MainPID": "0",

"MemoryAccounting": "yes",

"MemoryCurrent": "[not set]",

"MemoryDenyWriteExecute": "no",

"MemoryHigh": "infinity",

"MemoryLimit": "infinity",

"MemoryLow": "0",

"MemoryMax": "infinity",

"MemorySwapMax": "infinity",

"MountAPIVFS": "no",

"MountFlags": "",

"NFileDescriptorStore": "0",

"NRestarts": "0",

"Names": "httpd.service",

"NeedDaemonReload": "no",

"Nice": "0",

"NoNewPrivileges": "no",

"NonBlocking": "no",

"NotifyAccess": "main",

"OOMScoreAdjust": "0",

"OnFailureJobMode": "replace",

"PermissionsStartOnly": "no",

"Perpetual": "no",

"PrivateDevices": "no",

"PrivateMounts": "no",

"PrivateNetwork": "no",

"PrivateTmp": "yes",

"PrivateUsers": "no",

"ProtectControlGroups": "no",

"ProtectHome": "no",

"ProtectKernelModules": "no",

"ProtectKernelTunables": "no",

"ProtectSystem": "no",

"RefuseManualStart": "no",

"RefuseManualStop": "no",

"RemainAfterExit": "no",

"RemoveIPC": "no",

"Requires": "-.mount sysinit.target system.slice",

"RequiresMountsFor": "/var/tmp",

"Restart": "no",

"RestartUSec": "100ms",

"RestrictNamespaces": "no",

"RestrictRealtime": "no",

"Result": "success",

"RootDirectoryStartOnly": "no",

"RuntimeDirectoryMode": "0755",

"RuntimeDirectoryPreserve": "no",

"RuntimeMaxUSec": "infinity",

"SameProcessGroup": "no",

"SecureBits": "0",

"SendSIGHUP": "no",

"SendSIGKILL": "yes",

"Slice": "system.slice",

"StandardError": "inherit",

"StandardInput": "null",

"StandardInputData": "",

"StandardOutput": "journal",

"StartLimitAction": "none",

"StartLimitBurst": "5",

"StartLimitIntervalUSec": "10s",

"StartupBlockIOWeight": "[not set]",

"StartupCPUShares": "[not set]",

"StartupCPUWeight": "[not set]",

"StartupIOWeight": "[not set]",

"StateChangeTimestampMonotonic": "0",

"StateDirectoryMode": "0755",

"StatusErrno": "0",

"StopWhenUnneeded": "no",

"SubState": "dead",

"SuccessAction": "none",

"SyslogFacility": "3",

"SyslogLevel": "6",

"SyslogLevelPrefix": "yes",

"SyslogPriority": "30",

"SystemCallErrorNumber": "0",

"TTYReset": "no",

"TTYVHangup": "no",

"TTYVTDisallocate": "no",

"TasksAccounting": "yes",

"TasksCurrent": "[not set]",

"TasksMax": "9100",

"TimeoutStartUSec": "1min 30s",

"TimeoutStopUSec": "1min 30s",

"TimerSlackNSec": "50000",

"Transient": "no",

"Type": "notify",

"UID": "[not set]",

"UMask": "0022",

"UnitFilePreset": "disabled",

"UnitFileState": "disabled",

"UtmpMode": "init",

"Wants": "httpd-init.service",

"WatchdogTimestampMonotonic": "0",

"WatchdogUSec": "0"

}

}

[root@control myansi]# ansible node01 -m shell -a 'systemctl is-active httpd'

node01 | FAILED | rc=3 >>

inactivenon-zero return code

[root@control myansi]# ansible node01 -m service -a 'name=httpd state=started enable=yes'

node01 | FAILED! => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"msg": "Unsupported parameters for (systemd) module: enable Supported parameters include: daemon\_reexec, daemon\_reload, enabled, force, masked, name, no\_block, scope, state, user"

}

[root@control myansi]# ansible node01 -m service -a 'name=httpd state=started enabled=yes'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"enabled": true,

"name": "httpd",

"state": "started",

"status": {

"ActiveEnterTimestampMonotonic": "0",

"ActiveExitTimestampMonotonic": "0",

"ActiveState": "inactive",

"After": "httpd-init.service sysinit.target network.target system.slice -.mount basic.target systemd-tmpfiles-setup.service nss-lookup.target tmp.mount remote-fs.target systemd-journald.socket",

"AllowIsolate": "no",

"AmbientCapabilities": "",

"AssertResult": "no",

"AssertTimestampMonotonic": "0",

"Before": "shutdown.target",

"BlockIOAccounting": "no",

"BlockIOWeight": "[not set]",

"CPUAccounting": "no",

"CPUQuotaPerSecUSec": "infinity",

"CPUSchedulingPolicy": "0",

"CPUSchedulingPriority": "0",

"CPUSchedulingResetOnFork": "no",

"CPUShares": "[not set]",

"CPUUsageNSec": "[not set]",

"CPUWeight": "[not set]",

"CacheDirectoryMode": "0755",

"CanIsolate": "no",

"CanReload": "yes",

"CanStart": "yes",

"CanStop": "yes",

"CapabilityBoundingSet": "cap\_chown cap\_dac\_override cap\_dac\_read\_search cap\_fowner cap\_fsetid cap\_kill cap\_setgid cap\_setuid cap\_setpcap cap\_linux\_immutable cap\_net\_bind\_service cap\_net\_broadcast cap\_net\_admin cap\_net\_raw cap\_ipc\_lock cap\_ipc\_owner cap\_sys\_module cap\_sys\_rawio cap\_sys\_chroot cap\_sys\_ptrace cap\_sys\_pacct cap\_sys\_admin cap\_sys\_boot cap\_sys\_nice cap\_sys\_resource cap\_sys\_time cap\_sys\_tty\_config cap\_mknod cap\_lease cap\_audit\_write cap\_audit\_control cap\_setfcap cap\_mac\_override cap\_mac\_admin cap\_syslog cap\_wake\_alarm cap\_block\_suspend",

"CollectMode": "inactive",

"ConditionResult": "no",

"ConditionTimestampMonotonic": "0",

"ConfigurationDirectoryMode": "0755",

"Conflicts": "shutdown.target",

"ControlPID": "0",

"DefaultDependencies": "yes",

"Delegate": "no",

"Description": "The Apache HTTP Server",

"DevicePolicy": "auto",

"Documentation": "man:httpd.service(8)",

"DynamicUser": "no",

"Environment": "LANG=C",

"ExecMainCode": "0",

"ExecMainExitTimestampMonotonic": "0",

"ExecMainPID": "0",

"ExecMainStartTimestampMonotonic": "0",

"ExecMainStatus": "0",

"ExecReload": "{ path=/usr/sbin/httpd ; argv[]=/usr/sbin/httpd $OPTIONS -k graceful ; ignore\_errors=no ; start\_time=[n/a] ; stop\_time=[n/a] ; pid=0 ; code=(null) ; status=0/0 }",

"ExecStart": "{ path=/usr/sbin/httpd ; argv[]=/usr/sbin/httpd $OPTIONS -DFOREGROUND ; ignore\_errors=no ; start\_time=[n/a] ; stop\_time=[n/a] ; pid=0 ; code=(null) ; status=0/0 }",

"FailureAction": "none",

"FileDescriptorStoreMax": "0",

"FragmentPath": "/usr/lib/systemd/system/httpd.service",

"GID": "[not set]",

"GuessMainPID": "yes",

"IOAccounting": "no",

"IOSchedulingClass": "0",

"IOSchedulingPriority": "0",

"IOWeight": "[not set]",

"IPAccounting": "no",

"IPEgressBytes": "18446744073709551615",

"IPEgressPackets": "18446744073709551615",

"IPIngressBytes": "18446744073709551615",

"IPIngressPackets": "18446744073709551615",

"Id": "httpd.service",

"IgnoreOnIsolate": "no",

"IgnoreSIGPIPE": "yes",

"InactiveEnterTimestampMonotonic": "0",

"InactiveExitTimestampMonotonic": "0",

"JobRunningTimeoutUSec": "infinity",

"JobTimeoutAction": "none",

"JobTimeoutUSec": "infinity",

"KeyringMode": "private",

"KillMode": "mixed",

"KillSignal": "28",

"LimitAS": "infinity",

"LimitASSoft": "infinity",

"LimitCORE": "infinity",

"LimitCORESoft": "infinity",

"LimitCPU": "infinity",

"LimitCPUSoft": "infinity",

"LimitDATA": "infinity",

"LimitDATASoft": "infinity",

"LimitFSIZE": "infinity",

"LimitFSIZESoft": "infinity",

"LimitLOCKS": "infinity",

"LimitLOCKSSoft": "infinity",

"LimitMEMLOCK": "16777216",

"LimitMEMLOCKSoft": "16777216",

"LimitMSGQUEUE": "819200",

"LimitMSGQUEUESoft": "819200",

"LimitNICE": "0",

"LimitNICESoft": "0",

"LimitNOFILE": "4096",

"LimitNOFILESoft": "1024",

"LimitNPROC": "5688",

"LimitNPROCSoft": "5688",

"LimitRSS": "infinity",

"LimitRSSSoft": "infinity",

"LimitRTPRIO": "0",

"LimitRTPRIOSoft": "0",

"LimitRTTIME": "infinity",

"LimitRTTIMESoft": "infinity",

"LimitSIGPENDING": "5688",

"LimitSIGPENDINGSoft": "5688",

"LimitSTACK": "infinity",

"LimitSTACKSoft": "8388608",

"LoadState": "loaded",

"LockPersonality": "no",

"LogLevelMax": "-1",

"LogsDirectoryMode": "0755",

"MainPID": "0",

"MemoryAccounting": "yes",

"MemoryCurrent": "[not set]",

"MemoryDenyWriteExecute": "no",

"MemoryHigh": "infinity",

"MemoryLimit": "infinity",

"MemoryLow": "0",

"MemoryMax": "infinity",

"MemorySwapMax": "infinity",

"MountAPIVFS": "no",

"MountFlags": "",

"NFileDescriptorStore": "0",

"NRestarts": "0",

"Names": "httpd.service",

"NeedDaemonReload": "no",

"Nice": "0",

"NoNewPrivileges": "no",

"NonBlocking": "no",

"NotifyAccess": "main",

"OOMScoreAdjust": "0",

"OnFailureJobMode": "replace",

"PermissionsStartOnly": "no",

"Perpetual": "no",

"PrivateDevices": "no",

"PrivateMounts": "no",

"PrivateNetwork": "no",

"PrivateTmp": "yes",

"PrivateUsers": "no",

"ProtectControlGroups": "no",

"ProtectHome": "no",

"ProtectKernelModules": "no",

"ProtectKernelTunables": "no",

"ProtectSystem": "no",

"RefuseManualStart": "no",

"RefuseManualStop": "no",

"RemainAfterExit": "no",

"RemoveIPC": "no",

"Requires": "sysinit.target -.mount system.slice",

"RequiresMountsFor": "/var/tmp",

"Restart": "no",

"RestartUSec": "100ms",

"RestrictNamespaces": "no",

"RestrictRealtime": "no",

"Result": "success",

"RootDirectoryStartOnly": "no",

"RuntimeDirectoryMode": "0755",

"RuntimeDirectoryPreserve": "no",

"RuntimeMaxUSec": "infinity",

"SameProcessGroup": "no",

"SecureBits": "0",

"SendSIGHUP": "no",

"SendSIGKILL": "yes",

"Slice": "system.slice",

"StandardError": "inherit",

"StandardInput": "null",

"StandardInputData": "",

"StandardOutput": "journal",

"StartLimitAction": "none",

"StartLimitBurst": "5",

"StartLimitIntervalUSec": "10s",

"StartupBlockIOWeight": "[not set]",

"StartupCPUShares": "[not set]",

"StartupCPUWeight": "[not set]",

"StartupIOWeight": "[not set]",

"StateChangeTimestampMonotonic": "0",

"StateDirectoryMode": "0755",

"StatusErrno": "0",

"StopWhenUnneeded": "no",

"SubState": "dead",

"SuccessAction": "none",

"SyslogFacility": "3",

"SyslogLevel": "6",

"SyslogLevelPrefix": "yes",

"SyslogPriority": "30",

"SystemCallErrorNumber": "0",

"TTYReset": "no",

"TTYVHangup": "no",

"TTYVTDisallocate": "no",

"TasksAccounting": "yes",

"TasksCurrent": "[not set]",

"TasksMax": "9100",

"TimeoutStartUSec": "1min 30s",

"TimeoutStopUSec": "1min 30s",

"TimerSlackNSec": "50000",

"Transient": "no",

"Type": "notify",

"UID": "[not set]",

"UMask": "0022",

"UnitFilePreset": "disabled",

"UnitFileState": "disabled",

"UtmpMode": "init",

"Wants": "httpd-init.service",

"WatchdogTimestampMonotonic": "0",

"WatchdogUSec": "0"

}

}

[root@control myansi]# ansible node01 -m shell -a 'systemctl is-active httpd'

node01 | CHANGED | rc=0 >>

active

[root@control myansi]# ansible node01 -m shell -a 'systemctl is-enabled httpd'

node01 | CHANGED | rc=0 >>

enabled

[root@control myansi]#

###################################################################使用parted模块给节点磁盘分区

[root@node01 ~]# lsblk

NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT

vda 253:0 0 10G 0 disk

`-vda1 253:1 0 10G 0 part /

vdb 253:16 0 10G 0 disk

[root@control myansi]# ansible node01 -m parted -a 'device=/dev/vdb state=info'

node01 | SUCCESS => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"disk": {

"dev": "/dev/vdb",

"logical\_block": 512,

"model": "Virtio Block Device",

"physical\_block": 512,

"size": 10485760.0,

"table": "unknown",

"unit": "kib"

},

"partitions": [],

"script": "unit 'KiB' print"

}

[root@control myansi]# ansible node01 -m parted -a 'device=/dev/vdb label=gpt number=1 part\_type=primary part\_start=0% part\_end=50% state=present'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"disk": {

"dev": "/dev/vdb",

"logical\_block": 512,

"model": "Virtio Block Device",

"physical\_block": 512,

"size": 10485760.0,

"table": "gpt",

"unit": "kib"

},

"partitions": [

{

"begin": 1024.0,

"end": 5242880.0,

"flags": [],

"fstype": "",

"name": "primary",

"num": 1,

"size": 5241856.0,

"unit": "kib"

}

],

"script": "unit KiB mklabel gpt mkpart primary 0% 50%"

}

[root@control myansi]# ansible node01 -m parted -a 'device=/dev/vdb label=gpt number=2 part\_type=primary part\_start=50% part\_end=100% state=present'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"disk": {

"dev": "/dev/vdb",

"logical\_block": 512,

"model": "Virtio Block Device",

"physical\_block": 512,

"size": 10485760.0,

"table": "gpt",

"unit": "kib"

},

"partitions": [

{

"begin": 1024.0,

"end": 5242880.0,

"flags": [],

"fstype": "",

"name": "primary",

"num": 1,

"size": 5241856.0,

"unit": "kib"

},

{

"begin": 5242880.0,

"end": 10484736.0,

"flags": [],

"fstype": "",

"name": "primary",

"num": 2,

"size": 5241856.0,

"unit": "kib"

}

],

"script": "unit KiB mkpart primary 50% 100%"

}

[root@control myansi]# ansible node01 -m parted -a 'device=/dev/vdb state=info'

node01 | SUCCESS => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"disk": {

"dev": "/dev/vdb",

"logical\_block": 512,

"model": "Virtio Block Device",

"physical\_block": 512,

"size": 10485760.0,

"table": "gpt",

"unit": "kib"

},

"partitions": [

{

"begin": 1024.0,

"end": 5242880.0,

"flags": [],

"fstype": "",

"name": "primary",

"num": 1,

"size": 5241856.0,

"unit": "kib"

},

{

"begin": 5242880.0,

"end": 10484736.0,

"flags": [],

"fstype": "",

"name": "primary",

"num": 2,

"size": 5241856.0,

"unit": "kib"

}

],

"script": "unit 'KiB' print"

}

[root@control myansi]# ansible node01 -m shell -a 'lsblk'

node01 | CHANGED | rc=0 >>

NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT

vda 253:0 0 10G 0 disk

`-vda1 253:1 0 10G 0 part /

vdb 253:16 0 10G 0 disk

|-vdb1 253:17 0 5G 0 part

`-vdb2 253:18 0 5G 0 part

[root@control myansi]#

###################################################################lvg模块管理节点卷组

[root@control myansi]# ansible node01 -m yum -a 'name=lvm2 state=latest'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "",

"rc": 0,

"results": [

"Installed: lvm2",

"Installed: lvm2-libs-8:2.03.02-6.el8.x86\_64",

"Installed: device-mapper-event-8:1.02.155-6.el8.x86\_64",

"Installed: device-mapper-event-libs-8:1.02.155-6.el8.x86\_64",

"Installed: libaio-0.3.110-12.el8.x86\_64",

"Installed: device-mapper-persistent-data-0.7.6-1.el8.x86\_64",

"Installed: lvm2-8:2.03.02-6.el8.x86\_64"

]

}

[root@control myansi]# ansible node01 -m lvg -a 'vg=myvg pvs=/dev/vdb1'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true

}

[root@control myansi]# ansible node01 -m shell -a 'vgs'

node01 | CHANGED | rc=0 >>

VG #PV #LV #SN Attr VSize VFree

myvg 1 0 0 wz--n- <5.00g <5.00g

[root@control myansi]# ansible node01 -m lvg -a 'vg=myvg pvs=/dev/vdb1,/dev/vdb2'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true

}

[root@control myansi]# ansible node01 -m shell -a 'vgs'

node01 | CHANGED | rc=0 >>

VG #PV #LV #SN Attr VSize VFree

myvg 2 0 0 wz--n- 9.99g 9.99g

###################################################################lvol模块管理逻辑卷

[root@control myansi]# ansible node01 -m lvol -a 'lv=mylv vg=myvg size=2G state=present'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": ""

}

[root@control myansi]# ansible node01 -m shell -a 'lvs'

node01 | CHANGED | rc=0 >>

LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert

mylv myvg -wi-a----- 2.00g

[root@control myansi]# ansible node01 -m lvol -a 'lv=mylv vg=myvg size=4G state=present'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"lv": "mylv",

"size": 2.0,

"vg": "myvg"

}

[root@control myansi]# ansible node01 -m shell -a 'lvs'

node01 | CHANGED | rc=0 >>

LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert

mylv myvg -wi-a----- 4.00g

[root@control myansi]# ansible node01 -m lvol -a 'lv=mylv vg=myvg state=absent force=1'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true

}

[root@control myansi]# ansible node01 -m shell -a 'lvs'

node01 | CHANGED | rc=0 >>

[root@control myansi]#

[root@control myansi]# ansible node01 -m lvg -a 'vg=myvg state=absent'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true

}

[root@control myansi]# ansible node01 -m shell -a 'vgs'

node01 | CHANGED | rc=0 >>

[root@control myansi]#

###################################################################filesystem模块格式化磁盘

[root@control myansi]# ansible node01 -m lvg -a 'vg=myvg pvs=/dev/vdb1,/dev/vdb2'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true

}

[root@control myansi]# ansible node01 -m shell -a 'vgs'

node01 | CHANGED | rc=0 >>

VG #PV #LV #SN Attr VSize VFree

myvg 2 0 0 wz--n- 9.99g 9.99g

[root@control myansi]# ansible node01 -m lvol -a 'lv=mylv vg=myvg size=4G state=present'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": ""

}

[root@control myansi]# ansible node01 -m shell -a 'lvs'

node01 | CHANGED | rc=0 >>

LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert

mylv myvg -wi-a----- 4.00g

[root@control myansi]#

[root@control myansi]# ansible node01 -m filesystem -a 'dev=/dev/myvg/mylv fstype=xfs'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true

}

[root@control myansi]# ansible node01 -m shell -a 'file -sL /dev/myvg/mylv'

node01 | CHANGED | rc=0 >>

/dev/myvg/mylv: SGI XFS filesystem data (blksz 4096, inosz 512, v2 dirs)

[root@control myansi]# ansible node01 -m shell -a 'lsblk -fp'

node01 | CHANGED | rc=0 >>

NAME FSTYPE LABEL UUID MOUNTPOINT

/dev/vda

`-/dev/vda1 xfs 59b5409b-98ee-440c-95be-9452058475b2 /

/dev/vdb

|-/dev/vdb1 LVM2\_member zKH78W-PdIl-KJBS-sM2Q-vkrp-n6UI-alTrb6

| `-/dev/mapper/myvg-mylv xfs a443e295-4607-4f49-8093-dc296d8a4f54

`-/dev/vdb2 LVM2\_member 5daUIt-cuqz-YZdx-bD2I-gxws-Rlqx-dVKjkG

[root@control myansi]# ansible node01 -m lvol -a 'lv=mylv vg=myvg size=8G'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"lv": "mylv",

"size": 4.0,

"vg": "myvg"

}

[root@control myansi]# ansible node01 -m shell -a 'lvs'

node01 | CHANGED | rc=0 >>

LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert

mylv myvg -wi-a----- 8.00g

[root@control myansi]# ansible node01 -m filesystem -a 'dev=/dev/myvg/mylv fstype=xfs resizefs=yes'

node01 | FAILED! => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"cmd": "/usr/sbin/xfs\_growfs -n /dev/myvg/mylv",

"msg": "xfs\_growfs: /dev/myvg/mylv is not a mounted XFS filesystem",

"rc": 1,

"stderr": "xfs\_growfs: /dev/myvg/mylv is not a mounted XFS filesystem\n",

"stderr\_lines": [

"xfs\_growfs: /dev/myvg/mylv is not a mounted XFS filesystem"

],

"stdout": "",

"stdout\_lines": []

}

[root@control myansi]#

#这里遗留一个问题，filesystem模块，扩容逻辑卷的时候，可以用resizefs扩容ext4文件系统，xfs文件系统扩容失败

#测试结果：7版本的系统执行扩容动作没有问题，已经测试的8.0和8.1版本均无法执行，在服务器上执行xfs\_growfs /dev/myvg/mylv命令就报错

###################################################################mount模块挂载分区

[root@control myansi]# ansible node01 -m mount -a 'src=/dev/myvg/myext4 path=/mnt/ext4 fstype=ext4 opts=defaults,rw state=present'

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"dump": "0",

"fstab": "/etc/fstab",

"fstype": "ext4",

"name": "/mnt/ext4",

"opts": "defaults,rw",

"passno": "0",

"src": "/dev/myvg/myext4"

}

[root@control myansi]# ansible node01 -m shell -a 'df -hT | grep ext4'

node01 | FAILED | rc=1 >>

non-zero return code

[root@control myansi]# ansible node01 -m shell -a 'cat /etc/fstab | grep ext4'

node01 | CHANGED | rc=0 >>

/dev/myvg/myext4 /mnt/ext4 ext4 defaults,rw 0 0

[root@control myansi]#

#mount模块的state解析：如果挂载点不存在，可以创建挂载点，且卸载时删除挂载点

1. present：只修改fstab文件，不执行挂载动作
2. mounted：修改fstab文件，执行挂载动作
3. unmounted：不修改fstab文件，执行卸载动作
4. absent：修改fstab文件，执行卸载动作

###################################################################sudo提权

[root@control myansi]# ansible all --list-hosts

hosts (5):

node01

node02

node03

node04

node05

[root@control myansi]# ansible all -m user -a "name=alice password={{'123456' | password\_hash('sha512')}}"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"comment": "",

"create\_home": true,

"group": 1000,

"home": "/home/alice",

"name": "alice",

"password": "NOT\_LOGGING\_PASSWORD",

"shell": "/bin/bash",

"state": "present",

"system": false,

"uid": 1000

}

node04 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"comment": "",

"create\_home": true,

"group": 1000,

"home": "/home/alice",

"name": "alice",

"password": "NOT\_LOGGING\_PASSWORD",

"shell": "/bin/bash",

"state": "present",

"system": false,

"uid": 1000

}

node05 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"comment": "",

"create\_home": true,

"group": 1000,

"home": "/home/alice",

"name": "alice",

"password": "NOT\_LOGGING\_PASSWORD",

"shell": "/bin/bash",

"state": "present",

"system": false,

"uid": 1000

}

node03 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"comment": "",

"create\_home": true,

"group": 1000,

"home": "/home/alice",

"name": "alice",

"password": "NOT\_LOGGING\_PASSWORD",

"shell": "/bin/bash",

"state": "present",

"system": false,

"uid": 1000

}

node02 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"comment": "",

"create\_home": true,

"group": 1000,

"home": "/home/alice",

"name": "alice",

"password": "NOT\_LOGGING\_PASSWORD",

"shell": "/bin/bash",

"state": "present",

"system": false,

"uid": 1000

}

[root@control myansi]# ansible all -m shell -a "id alice"

node04 | CHANGED | rc=0 >>

uid=1000(alice) gid=1000(alice) groups=1000(alice)

node01 | CHANGED | rc=0 >>

uid=1000(alice) gid=1000(alice) groups=1000(alice)

node02 | CHANGED | rc=0 >>

uid=1000(alice) gid=1000(alice) groups=1000(alice)

node03 | CHANGED | rc=0 >>

uid=1000(alice) gid=1000(alice) groups=1000(alice)

node05 | CHANGED | rc=0 >>

uid=1000(alice) gid=1000(alice) groups=1000(alice)

[root@control myansi]# ssh alice@node01

alice@node01's password:

[alice@node01 ~]$ exit

logout

Connection to node01 closed.

[root@control myansi]# ansible all -m lineinfile -a "path=/etc/sudoers line='alice ALL=(ALL) NOPASSWD:/usr/bin/systemctl'"

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line added"

}

node04 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line added"

}

node05 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line added"

}

node02 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line added"

}

node03 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"backup": "",

"changed": true,

"msg": "line added"

}

[root@control myansi]# ansible all -m shell -a 'tail -1 /etc/sudoers'

node04 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:/usr/bin/systemctl

node02 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:/usr/bin/systemctl

node03 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:/usr/bin/systemctl

node05 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:/usr/bin/systemctl

node01 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:/usr/bin/systemctl

[root@control myansi]# ssh alice@node01

alice@node01's password:

Last login: Fri Jun 5 13:38:41 2020 from 192.168.1.10

[alice@node01 ~]$

[alice@node01 ~]$ systemctl is-active httpd

inactive

[alice@node01 ~]$ systemctl start httpd

==== AUTHENTICATING FOR org.freedesktop.systemd1.manage-units ====

Authentication is required to start 'httpd.service'.

Authenticating as: root

Password:

[alice@node01 ~]$ sudo systemctl start httpd

[alice@node01 ~]$ systemctl is-active httpd

active

[alice@node01 ~]$ exit

logout

Connection to node01 closed.

[root@control myansi]#

[root@control myansi]# cd ..

[root@control ~]# mkdir testsudo

[root@control ~]# cd testsudo/

[root@control testsudo]# touch ansible.cfg hosts

[root@control testsudo]# vim ansible.cfg

[root@control testsudo]# vim hosts

[root@control testsudo]# cat ansible.cfg hosts

[defaults]

inventory = hosts

remote\_user = alice

[privilege\_escalation]

become = True

become\_method = sudo

become\_user = root

become\_ask\_pass = no

[test]

node01

[proxy]

node02

[webserver]

node0[3:4]

[database]

node05

[cluster:children]

database

webserver

[root@control testsudo]# ansible all --list-hosts

hosts (5):

node01

node02

node05

node03

node04

[root@control testsudo]# for i in node0{1..5}

> do

> ssh-copy-id alice@$i

> done

[root@control testsudo]# cd ../myansi/

[root@control myansi]# ansible all -m replace -a "path=/etc/sudoers regexp='/usr/bin/systemctl$' replace='ALL'"

node05 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "1 replacements made"

}

node01 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "1 replacements made"

}

node04 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "1 replacements made"

}

node03 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "1 replacements made"

}

node02 | CHANGED => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": true,

"msg": "1 replacements made"

}

[root@control myansi]# ansible all -m shell -a 'tail -1 /etc/sudoers'

node05 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:ALL

node02 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:ALL

node04 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:ALL

node01 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:ALL

node03 | CHANGED | rc=0 >>

alice ALL=(ALL) NOPASSWD:ALL

[root@control myansi]# cd ../testsudo/

[root@control testsudo]# ansible all -m shell -a 'who'

node02 | CHANGED | rc=0 >>

alice pts/0 Jun 5 14:25 (192.168.1.10)

node05 | CHANGED | rc=0 >>

alice pts/0 Jun 5 14:25 (192.168.1.10)

node01 | CHANGED | rc=0 >>

root pts/0 Jun 5 14:14 (192.168.1.254)

alice pts/1 Jun 5 14:25 (192.168.1.10)

node03 | CHANGED | rc=0 >>

alice pts/0 Jun 5 14:25 (192.168.1.10)

node04 | CHANGED | rc=0 >>

alice pts/0 Jun 5 14:25 (192.168.1.10)

[root@control testsudo]# ansible all -m shell -a 'ls /root'

node05 | CHANGED | rc=0 >>

node01 | CHANGED | rc=0 >>

hi.txt

hi.txt.10822.2020-06-03@17:50:05~

my.txt

testcp.txt

ttcp.txt

uptime.txt

ys

ystcqq

node02 | CHANGED | rc=0 >>

node03 | CHANGED | rc=0 >>

node04 | CHANGED | rc=0 >>

[root@control testsudo]#

###################################################################测试ssh非标准选项，node08端口为2222，node09不允许秘钥认证登录

[root@control testsudo]# cd ..

[root@control ~]# mkdir testsshopt

[root@control ~]# cd testsshopt/

[root@control testsshopt]#

[root@control testsshopt]# touch ansible.cfg hosts

[root@control testsshopt]# vim ansible.cfg

[root@control testsshopt]# vim hosts

[root@control testsshopt]# vim hosts

[root@control testsshopt]# cat hosts

[test1]

node08 ansible\_ssh\_port=2222

[test2]

node09 ansible\_ssh\_user=root ansible\_ssh\_pass=1

[root@control testsshopt]# ansible all -m ping

node08 | SUCCESS => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/bin/python"

},

"changed": false,

"ping": "pong"

}

node09 | SUCCESS => {

"ansible\_facts": {

"discovered\_interpreter\_python": "/usr/libexec/platform-python"

},

"changed": false,

"ping": "pong"

}

[root@control testsshopt]#

###################################################################playbook应用

[root@control myansi]# mkdir yamls

[root@control myansi]# touch yamls/test1.yaml

[root@control myansi]# vim yamls/test1.yaml

[root@control myansi]# cat yamls/test1.yaml

---

- hosts: all

tasks:

- name: This is my first playbook

ping:

...

[root@control myansi]# ansible-playbook yamls/test1.yaml

PLAY [all] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node05]

ok: [node02]

ok: [node04]

ok: [node03]

ok: [node01]

TASK [This is my first playbook] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node05]

ok: [node01]

ok: [node04]

ok: [node02]

ok: [node03]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node01 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node02 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node03 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node05 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# vim yamls/test2.yaml

[root@control myansi]# cat yamls/test2.yaml

---

- hosts:

- test

- webserver

tasks:

- name: This is my first playbook

ping:

- name: Run a shell command

shell:

touch ~/shell.txt

...

[root@control myansi]# ansible-playbook yamls/test2.yaml -f 3

PLAY [test,webserver] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node03]

ok: [node04]

ok: [node01]

TASK [This is my first playbook] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node03]

ok: [node04]

ok: [node01]

TASK [Run a shell command] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node03]

changed: [node01]

changed: [node04]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node01 : ok=3 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node03 : ok=3 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=3 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible test,webserver -m shell -a 'ls /root/shell.txt'

node03 | CHANGED | rc=0 >>

/root/shell.txt

node04 | CHANGED | rc=0 >>

/root/shell.txt

node01 | CHANGED | rc=0 >>

/root/shell.txt

[root@control myansi]#

[root@control myansi]# vim yamls/test3.yaml

[root@control myansi]# cat yamls/test3.yaml

---

- hosts: test

tasks:

- name: This is first play

ping:

- hosts: webserver

tasks:

- name: This is second play

ping:

[root@control myansi]# ansible-playbook yamls/test3.yaml

PLAY [test] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

TASK [This is first play] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

PLAY [webserver] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node03]

ok: [node04]

TASK [This is second play] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node03]

ok: [node04]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node01 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node03 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=2 changed=0 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]#

###################################################################playbook进阶应用，user模块

[root@control myansi]# vim yamls/add\_user1.yaml

[root@control myansi]# cat yamls/add\_user1.yaml

---

- hosts: webserver

tasks:

- name: Add a system user named johnd

user:

name: johnd

uid: 1040

groups: daemon

password: "{{ '123' | password\_hash('sha512') }}"

[root@control myansi]# ansible-playbook yamls/add\_user1.yaml

PLAY [webserver] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node03]

ok: [node04]

TASK [Add a system user named johnd] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node03]

changed: [node04]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node03 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible webserver -m shell -a 'id johnd'

node04 | CHANGED | rc=0 >>

uid=1040(johnd) gid=1040(johnd) groups=1040(johnd),2(daemon)

node03 | CHANGED | rc=0 >>

uid=1040(johnd) gid=1040(johnd) groups=1040(johnd),2(daemon)

[root@control myansi]#

[root@control myansi]# vim yamls/add\_user2.yaml

[root@control myansi]# cat yamls/add\_user2.yaml

---

- hosts: webserver

tasks:

- name: Add a system user named james

user:

name: james

uid: 1080

group: daemon

groups: adm,root

shell: /bin/sh

password: "{{ '123' | password\_hash('sha512') }}"

state: present

[root@control myansi]# ansible-playbook yamls/add\_user2.yaml

PLAY [webserver] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node04]

ok: [node03]

TASK [Add a system user named james] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node03]

changed: [node04]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node03 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible webserver -m shell -a 'id james'

node03 | CHANGED | rc=0 >>

uid=1080(james) gid=2(daemon) groups=2(daemon),0(root),4(adm)

node04 | CHANGED | rc=0 >>

uid=1080(james) gid=2(daemon) groups=2(daemon),0(root),4(adm)

[root@control myansi]# ansible webserver -m shell -a 'cat /etc/passwd | grep james'

node04 | CHANGED | rc=0 >>

james:x:1080:2::/home/james:/bin/sh

node03 | CHANGED | rc=0 >>

james:x:1080:2::/home/james:/bin/sh

[root@control myansi]#

[root@control myansi]# vim yamls/del\_user1.yaml

[root@control myansi]# cat yamls/del\_user1.yaml

---

- hosts: webserver

tasks:

- name: Delete a system user named johnd

user:

name: johnd

state: absent

[root@control myansi]# ansible-playbook yamls/del\_user1.yaml

PLAY [webserver] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node04]

ok: [node03]

TASK [Delete a system user named johnd] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node04]

changed: [node03]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node03 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible webserver -m shell -a 'id johnd'

node03 | FAILED | rc=1 >>

id: 'johnd': no such usernon-zero return code

node04 | FAILED | rc=1 >>

id: 'johnd': no such usernon-zero return code

[root@control myansi]# ansible webserver -m shell -a 'ls /home'

node04 | CHANGED | rc=0 >>

alice

james

johnd

node03 | CHANGED | rc=0 >>

alice

james

johnd

[root@control myansi]# vim yamls/del\_user2.yaml

[root@control myansi]# cat yamls/del\_user2.yaml

---

- hosts: webserver

tasks:

- name: Delete a system user named james

user:

name: james

remove: yes #删除用户的家目录以及邮件

state: absent

[root@control myansi]# ansible-playbook yamls/del\_user2.yaml

PLAY [webserver] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node04]

ok: [node03]

TASK [Delete a system user named james] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node03]

changed: [node04]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node03 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible webserver -m shell -a 'id james'

node04 | FAILED | rc=1 >>

id: 'james': no such usernon-zero return code

node03 | FAILED | rc=1 >>

id: 'james': no such usernon-zero return code

[root@control myansi]# ansible webserver -m shell -a 'ls /home'

node03 | CHANGED | rc=0 >>

alice

johnd

node04 | CHANGED | rc=0 >>

alice

johnd

[root@control myansi]#

###################################################################lvm相关模块编写playbook，parted、lvg、lvol、filesystem

#清空node01上的vdb硬盘分区表，恢复到新硬盘的情况

[root@control myansi]# ansible node01 -m shell -a 'lsblk /dev/vdb'

node01 | CHANGED | rc=0 >>

NAME MAJ:MIN RM SIZE RO TYPE MOUNTPOINT

vdb 253:16 0 10G 0 disk

#创建文件系统是xfs的myxfs逻辑卷

[root@control myansi]# vim yamls/lvm\_xfs.yaml

[root@control myansi]# cat yamls/lvm\_xfs.yaml

---

- hosts: node01

tasks:

#给/dev/vdb分区

- name: Create a new partation number 1

parted:

device: /dev/vdb

label: gpt

name: /dev/vdb1

number: 1

part\_type: primary

#part\_start: 0MiB

part\_end: 1GiB

state: present

- name: create another partation number 2

parted:

device: /dev/vdb

label: gpt

name: /dev/vdb2

number: 2

part\_type: primary

part\_start: 1GiB

part\_end: 3GiB

state: present

#创建卷组

- name: create a vg named myvg

lvg:

vg: myvg

pvs: /dev/vdb1

pesize: '32'

state: present

#创建逻辑卷

- name: create a lv named myxfs

lvol:

lv: myxfs

vg: myvg

size: 512m

state: present

#格式化myxfs卷文件系统为xfs

- name: format myxfs's filesystem

filesystem:

dev: /dev/myvg/myxfs

fstype: xfs

[root@control myansi]# ansible-playbook yamls/lvm\_xfs.yaml

PLAY [node01] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

TASK [Create a new partation number 1] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

TASK [create another partation number 2] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

TASK [create a vg named myvg] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

TASK [create a lv named myxfs] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

TASK [format myxfs's filesystem] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node01 : ok=6 changed=3 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible node01 -m shell -a 'lsblk -fp'

node01 | CHANGED | rc=0 >>

NAME FSTYPE LABEL UUID MOUNTPOINT

/dev/vda

`-/dev/vda1 xfs 59b5409b-98ee-440c-95be-9452058475b2 /

/dev/vdb

|-/dev/vdb1 LVM2\_member iEbYEw-jTco-YKHM-Cmcu-gqb3-lYVV-5UkSaL

| `-/dev/mapper/myvg-myxfs xfs fdf81ed0-2f45-4ab0-b6f9-d6ac24636a24

`-/dev/vdb2

[root@control myansi]#

#由于xfs的文件系统问题，另外创建一个ext4文件系统的逻辑卷

[root@control myansi]# vim yamls/lvm\_ext4.yaml

[root@control myansi]# cat yamls/lvm\_ext4.yaml

---

- hosts: node01

tasks:

#扩展myvg卷组

- name: extend vg named myvg's device /dev/vdb2

lvg:

vg: myvg

pvs: /dev/vdb1,/dev/vdb2

state: present

#创建逻辑卷

- name: create a lv named myext4

lvol:

vg: myvg

lv: myext4

size: 512M

state: present

#格式化myext4逻辑卷的文件系统为ext4

- name: format myext4's filesystem

filesystem:

dev: /dev/myvg/myext4

fstype: ext4

[root@control myansi]# ansible-playbook yamls/lvm\_ext4.yaml

PLAY [node01] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

TASK [extend vg named myvg's device /dev/vdb2] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

TASK [create a lv named myext4] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

TASK [format myext4's filesystem] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node01 : ok=4 changed=3 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible node01 -m shell -a 'lsblk -fp'

node01 | CHANGED | rc=0 >>

NAME FSTYPE LABEL UUID MOUNTPOINT

/dev/vda

`-/dev/vda1 xfs 59b5409b-98ee-440c-95be-9452058475b2 /

/dev/vdb

|-/dev/vdb1 LVM2\_member k7abRj-Om4b-3NFy-bR1N-QIGa-tPpz-1EJS3t

| `-/dev/mapper/myvg-myxfs xfs 8f3e6aca-4553-4a1f-b61e-0a20477d183b

`-/dev/vdb2 LVM2\_member dFULnq-LiPI-e4xb-lH6I-71xm-LkPG-aevblk

`-/dev/mapper/myvg-myext4 ext4 9d6e857d-d0f3-4a84-a9c4-55a648d998bd

[root@control myansi]#

#扩展ext4逻辑卷及文件系统

[root@control myansi]# vim yamls/resize\_ext4.yaml

[root@control myansi]# cat yamls/resize\_ext4.yaml

---

- hosts: node01

tasks:

#扩展逻辑卷并刷新文件系统

- name: resize the lvm named myext4

lvol:

vg: myvg

lv: myext4

size: 1G

state: present

#刷新文件系统

- name: resize the lvm myext4's filesystem

filesystem:

dev: /dev/myvg/myext4

fstype: ext4

resizefs: yes

[root@control myansi]# ansible-playbook yamls/resize\_ext4.yaml

PLAY [node01] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

TASK [resize the lvm named myext4] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

TASK [resize the lvm myext4's filesystem] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node01 : ok=3 changed=2 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]#

#经过测试，xfs文件系统无法用filesystem模块刷新文件系统，但是可以用lvol模块中的resizefs选项直接刷新

[root@control myansi]# vim yamls/resize\_xfs.yaml

[root@control myansi]# ansible node01 -m shell -a "mount /dev/myvg/myxfs /mnt"

node01 | CHANGED | rc=0 >>

[root@control myansi]# ansible node01 -m shell -a "df -hT | grep myxfs"

node01 | CHANGED | rc=0 >>

/dev/mapper/myvg-myxfs xfs 507M 30M 478M 6% /mnt

[root@control myansi]# cat yamls/resize\_xfs.yaml

---

- hosts: node01

tasks:

#扩展xfs文件系统逻辑卷并刷新文件系统

- name: resize myxfs'size and resizefs

lvol:

vg: myvg

lv: myxfs

size: 1G

resizefs: yes

state: present

[root@control myansi]# ansible-playbook yamls/resize\_xfs.yaml

PLAY [node01] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node01]

TASK [resize myxfs'size and resizefs] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node01]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node01 : ok=2 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible node01 -m shell -a "df -hT | grep myxfs"

node01 | CHANGED | rc=0 >>

/dev/mapper/myvg-myxfs xfs 1019M 34M 986M 4% /mnt

[root@control myansi]#

###################################################################管理软件、服务

[root@control myansi]# vim yamls/pkssvr.yaml

[root@control myansi]# cat yamls/pkssvr.yaml

---

- hosts: webserver

tasks:

- name: Install packages #安装软件包

yum:

name:

- httpd

- mariadb

- mariadb-server

state: present

- name: Install packages group #安装软件包组

yum:

name: "@Development tools"

state: present

- name: update installed packages

yum:

name: '\*'

state: latest

- name: start httpd

service:

name: httpd

enabled: yes

state: started

- name: start maraidb

service:

name: mariadb

enabled: yes

state: started

[root@control myansi]# ansible-playbook yamls/pkssvr.yaml

PLAY [webserver] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

TASK [Gathering Facts] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node03]

ok: [node04]

TASK [Install packages] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node04]

ok: [node03]

TASK [Install packages group] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node04]

ok: [node03]

TASK [update installed packages] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node04]

ok: [node03]

TASK [start httpd] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ok: [node04]

ok: [node03]

TASK [start maraidb] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

changed: [node04]

changed: [node03]

PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

node03 : ok=6 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

node04 : ok=6 changed=1 unreachable=0 failed=0 skipped=0 rescued=0 ignored=0

[root@control myansi]# ansible webserver -m shell -a 'ss -untpl'

node04 | CHANGED | rc=0 >>

Netid State Recv-Q Send-Q Local Address:Port Peer Address:Port

udp UNCONN 0 0 127.0.0.1:323 0.0.0.0:\* users:(("chronyd",pid=490,fd=5))

udp UNCONN 0 0 [::1]:323 [::]:\* users:(("chronyd",pid=490,fd=6))

tcp LISTEN 0 128 0.0.0.0:22 0.0.0.0:\* users:(("sshd",pid=549,fd=4))

tcp LISTEN 0 80 \*:3306 \*:\* users:(("mysqld",pid=15122,fd=21))

tcp LISTEN 0 128 \*:80 \*:\* users:(("httpd",pid=14010,fd=4),("httpd",pid=14009,fd=4),("httpd",pid=14008,fd=4),("httpd",pid=14006,fd=4))

node03 | CHANGED | rc=0 >>

Netid State Recv-Q Send-Q Local Address:Port Peer Address:Port

udp UNCONN 0 0 127.0.0.1:323 0.0.0.0:\* users:(("chronyd",pid=481,fd=5))

udp UNCONN 0 0 [::1]:323 [::]:\* users:(("chronyd",pid=481,fd=6))

tcp LISTEN 0 128 0.0.0.0:22 0.0.0.0:\* users:(("sshd",pid=541,fd=4))

tcp LISTEN 0 80 \*:3306 \*:\* users:(("mysqld",pid=15101,fd=21))

tcp LISTEN 0 128 \*:80 \*:\* users:(("httpd",pid=14007,fd=4),("httpd",pid=14006,fd=4),("httpd",pid=14005,fd=4),("httpd",pid=14003,fd=4))

[root@control myansi]# ansible webserver -m shell -a 'systemctl is-active httpd mariadb'

node04 | CHANGED | rc=0 >>

active

active

node03 | CHANGED | rc=0 >>

active

active

[root@control myansi]# ansible webserver -m shell -a 'systemctl is-enabled httpd mariadb'

node03 | CHANGED | rc=0 >>

enabled

enabled

node04 | CHANGED | rc=0 >>

enabled

enabled

[root@control myansi]#

###################################################################特殊模块