

一、安装和配置 ansible

```
[greg@control ansible]$ cat inventory
[dev]
node1

[test]
node2

[prod]
node3
node4

[balancers]
node5

[webserver:children]
prod
[greg@control ansible]$ cat ansible.cfg
[defaults]
inventory = /home/greg/ansible/inventory
roles_path = /home/greg/ansible/roles:/usr/share/ansible/roles
remote_user = greg
ask_pass = False

[privilege_escalation]
become=True
become_method=sudo
become_user=root
become_ask_pass=False
```

```
[greg@control ansible]$ ansible all -a 'id'
node3 | CHANGED | rc=0 >>
uid=0(root) gid=0(root) groups=0(root) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023

node2 | CHANGED | rc=0 >>
uid=0(root) gid=0(root) groups=0(root) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023

node4 | CHANGED | rc=0 >>
uid=0(root) gid=0(root) groups=0(root) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023

node5 | CHANGED | rc=0 >>
uid=0(root) gid=0(root) groups=0(root) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023

node1 | CHANGED | rc=0 >>
uid=0(root) gid=0(root) groups=0(root) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
```

二、创建和运行 ansible 临时命令

```
#!/bin/bash
ansible all -m yum_repository -a 'name="EX294_BASE" description="EX294 base software" baseurl="http://repo.domainx.example.com/Base05" gpgcheck=yes gpgkey="http://repo.domainx.example.com/RPM-GPG-KEY-redhat-release" enabled=yes'
ansible all -m yum_repository -a 'name="EX294_STREAM" description="EX294 stream software" baseurl="http://repo.domainx.example.com/AppStream" gpgcheck=yes gpgkey="http://repo.domainx.example.com/RPM-GPG-KEY-redhat-release" enabled=yes'
```

```
[greg@control ansible]$ ansible all -a 'yum repolist'
[WARNING]: Consider using the yum module rather than running 'yum'. If you need to use command because yum is insufficient you can add 'warn: false' to this command task or set 'command_warnings=False' in ansible.cfg to get rid of this message.

node5 | CHANGED | rc=0 >>
repo id      repo name      status
EX294_BASE   EX294 base software  1,658
EX294_STREAM EX294 stream software 4,672Last metadata expiration che
ck: 0:02:25 ago on Tue 10 May 2022 04:03:02 PM CST.

node3 | CHANGED | rc=0 >>
repo id      repo name      status
EX294_BASE   EX294 base software  1,658
EX294_STREAM EX294 stream software 4,672Last metadata expiration che
ck: 0:03:10 ago on Tue 10 May 2022 04:02:18 PM CST.

node4 | CHANGED | rc=0 >>
repo id      repo name      status
EX294_BASE   EX294 base software  1,658
EX294_STREAM EX294 stream software 4,672Last metadata expiration che
ck: 0:03:10 ago on Tue 10 May 2022 04:02:18 PM CST.

node2 | CHANGED | rc=0 >>
repo id      repo name      status
EX294_BASE   EX294 base software  1,658
EX294_STREAM EX294 stream software 4,672EX294 base software
34 kB/s | 2.7 kB    00:00
EX294 stream software 52 kB/s | 3.2 kB    00:00

node1 | CHANGED | rc=0 >>
repo id      repo name      status
EX294_BASE   EX294 base software  1,658
EX294_STREAM EX294 stream software 4,672Last metadata expiration che
ck: 0:00:23 ago on Tue 10 May 2022 04:05:07 PM CST.
```

三、安装软件包

```
---  
- name: packages  
  hosts: dev, test, prod  
  tasks:  
    - yum:  
      name:  
        - php  
        - mariadb  
      state: latest  
    - yum:  
      name: "@RPM Development Tools"  
      state: latest  
      when: "'dev' in group_names"  
    - yum:  
      name: "*"   
      state: latest  
      when: "'dev' in group_names"
```

```
[greg@control ansible]$ ansible all -m shell -a 'rpm -qa|grep php'
[WARNING]: Consider using the yum, dnf or zypper module rather than
command because yum, dnf or zypper is insufficient you can add 'warn:
'command_warnings=False' in ansible.cfg to get rid of this message.
```

```
node4 | CHANGED | rc=0 >>
php-cli-7.2.11-1.module+el8+2561+laca3413.x86_64
php-fpm-7.2.11-1.module+el8+2561+laca3413.x86_64
php-common-7.2.11-1.module+el8+2561+laca3413.x86_64
php-7.2.11-1.module+el8+2561+laca3413.x86_64
```

```
node3 | CHANGED | rc=0 >>
php-cli-7.2.11-1.module+el8+2561+laca3413.x86_64
php-fpm-7.2.11-1.module+el8+2561+laca3413.x86_64
php-common-7.2.11-1.module+el8+2561+laca3413.x86_64
php-7.2.11-1.module+el8+2561+laca3413.x86_64
```

```
node5 | FAILED | rc=1 >>
non-zero return code
```

```
node2 | CHANGED | rc=0 >>
php-cli-7.2.11-1.module+el8+2561+laca3413.x86_64
php-fpm-7.2.11-1.module+el8+2561+laca3413.x86_64
php-common-7.2.11-1.module+el8+2561+laca3413.x86_64
php-7.2.11-1.module+el8+2561+laca3413.x86_64
```

```
node1 | CHANGED | rc=0 >>
php-common-7.2.11-1.module+el8+2561+laca3413.x86_64
php-7.2.11-1.module+el8+2561+laca3413.x86_64
php-fpm-7.2.11-1.module+el8+2561+laca3413.x86_64
php-cli-7.2.11-1.module+el8+2561+laca3413.x86_64
```

```
[greg@control ansible]$ ansible all -m shell -a 'rpm -qa|grep mariadb'
[WARNING]: Consider using the yum, dnf or zypper module rather than running
command because yum, dnf or zypper is insufficient you can add 'warn: fa
'command_warnings=False' in ansible.cfg to get rid of this message.

node3 | CHANGED | rc=0 >>
mariadb-connector-c-config-3.0.7-1.el8.noarch
mariadb-common-10.3.11-1.module+el8+2765+cfa4f87b.x86_64
mariadb-connector-c-3.0.7-1.el8.x86_64
mariadb-10.3.11-1.module+el8+2765+cfa4f87b.x86_64

node2 | CHANGED | rc=0 >>
mariadb-connector-c-config-3.0.7-1.el8.noarch
mariadb-common-10.3.11-1.module+el8+2765+cfa4f87b.x86_64
mariadb-connector-c-3.0.7-1.el8.x86_64
mariadb-10.3.11-1.module+el8+2765+cfa4f87b.x86_64

node5 | FAILED | rc=1 >>
non-zero return code

node4 | CHANGED | rc=0 >>
mariadb-connector-c-config-3.0.7-1.el8.noarch
mariadb-common-10.3.11-1.module+el8+2765+cfa4f87b.x86_64
mariadb-connector-c-3.0.7-1.el8.x86_64
mariadb-10.3.11-1.module+el8+2765+cfa4f87b.x86_64

node1 | CHANGED | rc=0 >>
mariadb-connector-c-3.0.7-1.el8.x86_64
mariadb-connector-c-config-3.0.7-1.el8.noarch
mariadb-common-10.3.11-1.module+el8+2765+cfa4f87b.x86_64
mariadb-10.3.11-1.module+el8+2765+cfa4f87b.x86_64
```

```
[greg@control ansible]$ ansible dev -a 'yum group list'
[WARNING]: Consider using the yum module rather than running 'yum'. If you need
yum is insufficient you can add 'warn: false' to this command task or set 'comm
ansible.cfg to get rid of this message.

node1 | CHANGED | rc=0 >>
Last metadata expiration check: 0:07:16 ago on Wed 06 May 2020 03:12:40 AM CST.
Available Environment Groups:
  Server with GUI
  Server
  Minimal Install
  Virtualization Host
  Custom Operating System
Installed Environment Groups:
  Workstation
Installed Groups:
  RPM Development Tools
Available Groups:
  Container Management
  .NET Core Development
  Smart Card Support
  Development Tools
  Graphical Administration Tools
  Headless Management
  Legacy UNIX Compatibility
  Network Servers
  Scientific Support
  Security Tools
  System Tools
```


四、使用 RHEL 系统角色

```
---
- name: timesync
  hosts: all
  vars:
    timesync_ntp_servers:
      - hostname: 172.25.254.254
        iburst: yes
  roles:
    - rhel-system-roles.timesync
```

```
[greg@control ansible]$ ansible all -a 'chronyc sources'
node5 | CHANGED | rc=0 >>
210 Number of sources = 1
MS Name/IP address         Stratum Poll Reach LastRx Last sample
=====
^* classroom.example.com    8      6   377   30   -106us[ -260us] +/-  692us

node3 | CHANGED | rc=0 >>
210 Number of sources = 1
MS Name/IP address         Stratum Poll Reach LastRx Last sample
=====
^* classroom.example.com    8      6   377   27    +32us[ +60us] +/- 1084us

node2 | CHANGED | rc=0 >>
210 Number of sources = 1
MS Name/IP address         Stratum Poll Reach LastRx Last sample
=====
^* classroom.example.com    8      6   377   31 +1831ns[ +15us] +/-  546us

node4 | CHANGED | rc=0 >>
210 Number of sources = 1
MS Name/IP address         Stratum Poll Reach LastRx Last sample
=====
^* classroom.example.com    8      6   377   30    -53us[ -222us] +/-  586us

node1 | CHANGED | rc=0 >>
210 Number of sources = 1
MS Name/IP address         Stratum Poll Reach LastRx Last sample
=====
^* classroom.example.com    8      6   377   30    -32us[ -55us] +/-  954us
```

```

- - -
- name: selinux
  hosts: all
  vars:
    selinux_policy: targeted
    selinux_state: enforcing
  roles:
    - rhel-system-roles.selinux

```

```

[greg@control ansible]$ ansible all -a 'cat /etc/selinux/config'
node5 | CHANGED | rc=0 >>

# This file controls the state of SELinux on the system.
# SELINUX= can take one of these three values:
#   enforcing - SELinux security policy is enforced.
#   permissive - SELinux prints warnings instead of enforcing.
#   disabled - No SELinux policy is loaded.
SELINUX=enforcing
# SELINUXTYPE= can take one of these three values:
#   targeted - Targeted processes are protected,
#   minimum - Modification of targeted policy. Only selected processes are protected.
#   mls - Multi Level Security protection.
SELINUXTYPE=targeted

```

五、使用 ansible galaxy 安装角色

```

- src: http://rhgls.domainx.example.com/materials/haproxy.tar
  name: balancer
- src: http://rhgls.domainx.example.com/materials/phpinfo.tar
  name: phpinfo

```

```

[greg@control ansible]$ ansible-galaxy list
# /home/greg/ansible/roles
- apache, (unknown version)
- balancer, (unknown version)
- phpinfo, (unknown version)
# /usr/share/ansible/roles
- linux-system-roles.kdump, (unknown version)
- linux-system-roles.network, (unknown version)
- linux-system-roles.postfix, (unknown version)
- linux-system-roles.selinux, (unknown version)
- linux-system-roles.timesync, (unknown version)
- rhel-system-roles.kdump, (unknown version)
- rhel-system-roles.network, (unknown version)
- rhel-system-roles.postfix, (unknown version)
- rhel-system-roles.selinux, (unknown version)
- rhel-system-roles.timesync, (unknown version)

```

六、创建一个 web role

```
---
- yum:
    name: httpd
    state: latest
- service:
    name: httpd
    state: started
    enabled: yes
- service:
    name: firewalld
    state: started
    enabled: yes
- firewallld:
    service: http
    permanent: yes
    immediate: yes
    state: enabled
- template:
    src: index.html.j2
    dest: /var/www/html/index.html
```

```
[greg@control ansible]$ cat roles/apache/templates/index.html.j2
Welcome to {{ ansible_fqdn }} on {{ ansible_default_ipv4.address }}
```

```
---
- name: apache
  hosts: webservers
  roles:
    - apache
```

```
[greg@control ansible]$ curl node3
Welcome to node3.domainx.example.com on 172.25.250.11
[greg@control ansible]$ curl node4
Welcome to node4.domainx.example.com on 172.25.250.12
```


七、从 ansible galaxy 使用角色

```
---
- name: roles
  hosts: webserver
  roles:
    - phpinfo
- name: roles2
  hosts: balancers
  roles:
    - balancer

tasks:
  - firewall:
    service: http
    permanent: yes
    immediate: yes
    state: enabled
```

```
[greg@control ansible]$ curl node5
Welcome to node3.domainx.example.com on 172.25.250.11
[greg@control ansible]$ curl node5
Welcome to node4.domainx.example.com on 172.25.250.12
[greg@control ansible]$ curl node5
Welcome to node3.domainx.example.com on 172.25.250.11
[greg@control ansible]$ curl node5
Welcome to node4.domainx.example.com on 172.25.250.12
```

Hello PHP World from node3.domainx.example.com	
PHP Version 7.2.11	
System	Linux node3.domainx.example.com 4.18.0-80.el8.x86_64 #1 SMP Wed M x86_64
Build Date	Oct 9 2018 15:09:36
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d
Additional .ini files parsed	/etc/php.d/20-bz2.ini, /etc/php.d/20-calendar.ini, /etc/php.d/20-ctype.ini, /etc/php.d/20-exif.ini, /etc/php.d/20-fileinfo.ini, /etc/php.d/20-ftp.ini, /etc/ /etc/php.d/20-iconv.ini, /etc/php.d/20-phar.ini, /etc/php.d/20-sockets.ini, /
PHP API	20170718
PHP Extension	20170718

Hello PHP World from node4.domainx.example.com	
PHP Version 7.2.11	
System	Linux node4.domainx.example.com 4.18.0-80.el8.x86_64 #1 SMP Wed M x86_64
Build Date	Oct 9 2018 15:09:36
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d

八、创建和使用逻辑卷

```

---
- name: lv
  hosts: all
  tasks:
    - block:
        - lvvol:
            vg: research
            lv: data
            size: 1500
        - filesystem:
            dev: /dev/research/data
            fstype: ext4
    rescue:
        - debug:
            msg: "Could not create logical volume of that size"
            when: ansible_lvm.vgs.research is defined
        - lvvol:
            vg: research
            lv: data
            size: 800
            when: ansible_lvm.vgs.research is defined
        - filesystem:
            dev: /dev/research/data
            fstype: ext4
            when: ansible_lvm.vgs.research is defined
        - debug:
            msg: "Volume group does not exist"
            when: ansible_lvm.vgs.research is undefined

```

```
TASK [debug] *****
skipping: [node2]
ok: [node3] => {
    "msg": "Could not create logical volume of that size"
}
ok: [node4] => {
    "msg": "Could not create logical volume of that size"
}
```

```
TASK [debug] *****
ok: [node2] => {
    "msg": "Volume group does not exist"
}
skipping: [node3]
skipping: [node4]
```

```
[greg@control ansible]$ ansible all -a 'lvs'
node3 | CHANGED | rc=0 >>
  LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert
  data research -wi-a----- 800.00m

node5 | CHANGED | rc=0 >>
  LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert
  data research -wi-a----- 1.46g

node4 | CHANGED | rc=0 >>
  LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert
  data research -wi-a----- 800.00m

node2 | CHANGED | rc=0 >>

node1 | CHANGED | rc=0 >>
  LV VG Attr LSize Pool Origin Data% Meta% Move Log Cpy%Sync Convert
  data research -wi-a----- 1.46g
```

九、生成主机文件

```
[greg@control ansible]$ cat hosts.j2
127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost localhost.localdomain localhost6 localhost6.localdomain6
{% for host in groups.all %}
{{ hostvars[host].ansible_default_ipv4.address }} {{ hostvars[host].ansible_fqdn }} {{
hostvars[host].ansible_hostname }}
{% endfor %}
```

```

- - -
- name: hosts
  hosts: all
  tasks:
    - template:
        src: hosts.j2
        dest: /etc/myhosts
        when: "'dev' in group_names"

```

```

[greg@control ansible]$ ansible all -a 'cat /etc/myhosts'
node4 | FAILED | rc=1 >>
cat: /etc/myhosts: No such file or directorynon-zero return code

node2 | FAILED | rc=1 >>
cat: /etc/myhosts: No such file or directorynon-zero return code

node5 | FAILED | rc=1 >>
cat: /etc/myhosts: No such file or directorynon-zero return code

node3 | FAILED | rc=1 >>
cat: /etc/myhosts: No such file or directorynon-zero return code

node1 | CHANGED | rc=0 >>
127.0.0.1 localhost localhost.localdomain localhost4 localhost4.localdomain4
::1 localhost localhost.localdomain localhost6 localhost6.localdomain6
172.25.250.9 node1.domainx.example.com node1
172.25.250.10 node2.domainx.example.com node2
172.25.250.13 node5.domainx.example.com node5
172.25.250.11 node3.domainx.example.com node3
172.25.250.12 node4.domainx.example.com node4

```

十、修改文件内容

```
---
- name: issue
  hosts: all
  tasks:
    - copy:
        content: "Development"
        dest: /etc/issue
        when: "'dev' in group_names"
    - copy:
        content: "Test"
        dest: /etc/issue
        when: "'test' in group_names"
    - copy:
        content: "Production"
        dest: /etc/issue
        when: "'prod' in group_names"
```

```
[greg@control ansible]$ ansible all -a 'cat /etc/issue'
node4 | CHANGED | rc=0 >>
Production

node2 | CHANGED | rc=0 >>
Test

node3 | CHANGED | rc=0 >>
Production

node5 | CHANGED | rc=0 >>
\S
Kernel \r on an \m

node1 | CHANGED | rc=0 >>
Development
```


十一、创建 web 内容目录

```
---
- name: webcontent
  hosts: dev
  tasks:
    - yum:
        name: httpd
        state: latest
    - service:
        name: httpd
        state: started
        enabled: yes
    - service:
        name: firewalld
        state: started
        enabled: yes
    - firewalld:
        service: http
        permanent: yes
        immediate: yes
        state: enabled
    - group:
        name: webdev
        state: present
    - file:
        path: /webdev
        group: webdev
        state: directory
        mode: "2775"
    - file:
        src: /webdev
        dest: /var/www/html/webdev
        state: link
    - copy:
        content: "Development"
        dest: /webdev/index.html
        setype: 'httpd_sys_content_t'
```

```
[greg@control ansible]$ curl node1/webdev/Development[greg@control ansible]$  
[greg@control ansible]$
```

十二、生成硬件报告

```
---  
- name: hwreport  
  hosts: all  
  vars:  
    hardware:  
      - ww: HOST  
        yy: "{{ ansible_hostname }}"  
      - ww: MEMORY  
        yy: "{{ ansible_memtotal_mb }}"  
      - ww: BIOS  
        yy: "{{ ansible_bios_version }}"  
      - ww: DISK_SIZE_VDA  
        yy: "{{ ansible_devices.vda.size | default('NONE') }}"  
      - ww: DISK_SIZE_VDB  
        yy: "{{ ansible_devices.vdb.size | default('NONE') }}"  
  tasks:  
    - get_url:  
      url: http://rhgls.domainx.example.com/materials/hwreport.empty  
      dest: /root/hwreport.txt  
    - lineinfile:  
      path: /root/hwreport.txt  
      line: "{{ item.ww }}={{ item.yy }}"  
      regexp: '^{{ item.ww }}='  
      loop: "{{ hardware }}"
```

```
[greg@control ansible]$ ansible all -a 'cat /root/hwreport.txt'
node3 | CHANGED | rc=0 >>
HOST=node3
MEMORY=821
BIOS=1.11.1-3.module+el8+2529+a9686a4d
DISK_SIZE_VDA=10.00 GB
DISK_SIZE_VDB=5.00 GB

node2 | CHANGED | rc=0 >>
HOST=node2
MEMORY=821
BIOS=1.11.1-3.module+el8+2529+a9686a4d
DISK_SIZE_VDA=10.00 GB
DISK_SIZE_VDB=NONE

node5 | CHANGED | rc=0 >>
HOST=node5
MEMORY=821
BIOS=1.11.1-3.module+el8+2529+a9686a4d
DISK_SIZE_VDA=10.00 GB
DISK_SIZE_VDB=5.00 GB

node4 | CHANGED | rc=0 >>
HOST=node4
MEMORY=821
BIOS=1.11.1-3.module+el8+2529+a9686a4d
DISK_SIZE_VDA=10.00 GB
DISK_SIZE_VDB=5.00 GB

node1 | CHANGED | rc=0 >>
HOST=node1
MEMORY=1829
BIOS=1.11.1-3.module+el8+2529+a9686a4d
DISK_SIZE_VDA=10.00 GB
DISK_SIZE_VDB=5.00 GB
```

十三、使用 ansible vault

```
[greg@control ansible]$ ansible-vault view --vault-id=secret.txt locker.yml
pw_developer: Imadev
pw_manager: Imamgr
```

```
[greg@control ansible]$ cat secret.txt
whenyouwishuponastar
```

十四、创建批量添加用户 role

```
---
- name: users
  hosts: dev,test
  vars_files:
    - locker.yml
    - user_list.yml
  tasks:
    - group:
        name: devops
        state: present
    - user:
        name: "{{ item.name }}"
        groups: devops
        password: "{{ pw_developer | password_hash('sha512','mysecretsalt') }}"
        expires: "{{ item.password_expire_MAX }}"
        loop: "{{ users }}"
        when: item.job == 'developer'
- name: users
  hosts: prod
  vars_files:
    - locker.yml
    - user_list.yml
  tasks:
    - group:
        name: opsmgr
        state: present
    - user:
        name: "{{ item.name }}"
        groups: opsmgr
        uid: 6666
        password: "{{ pw_manager | password_hash('sha512','mysecretsalt') }}"
        expires: "{{ item.password_expire_MAX }}"
        loop: "{{ users }}"
        when: item.job == 'manager'
```

```

[greg@control ansible]$ ansible all -a 'id gzy001'
node4 | FAILED | rc=1 >>
id: 'gzy001': no such usernon-zero return code

node2 | CHANGED | rc=0 >>
uid=1003(gzy001) gid=1003(gzy001) groups=1003(gzy001),1001(devops)

node3 | FAILED | rc=1 >>
id: 'gzy001': no such usernon-zero return code

node5 | FAILED | rc=1 >>
id: 'gzy001': no such usernon-zero return code

node1 | CHANGED | rc=0 >>
uid=1003(gzy001) gid=1004(gzy001) groups=1004(gzy001),1001(devops)

[greg@control ansible]$ ansible all -a 'id gzy101'
node5 | FAILED | rc=1 >>
id: 'gzy101': no such usernon-zero return code

node2 | FAILED | rc=1 >>
id: 'gzy101': no such usernon-zero return code

node3 | CHANGED | rc=0 >>
uid=6666(gzy101) gid=6666(gzy101) groups=6666(gzy101),1003(opsmgr)

node4 | CHANGED | rc=0 >>
uid=6666(gzy101) gid=6666(gzy101) groups=6666(gzy101),1003(opsmgr)

node1 | FAILED | rc=1 >>
id: 'gzy101': no such usernon-zero return code

```

十五、重新设置 ansible vault 密码

```

[greg@control ansible]$ ansible-vault rekey salaries.yml
Vault password:
New Vault password:
Confirm New Vault password:
Rekey successful
[greg@control ansible]$ ansible-vault view salaries.yml
Vault password:
Your salaries is 1 million per month

```


十六、创建定时任务

```
---
- name: cron
  hosts: all
  tasks:
    - user:
      name: natasha
      state: present
    - cron:
      user: natasha
      job: 'Logger "EX294 in progress"'
      minute: "*/2"
```

```
[greg@control ansible]$ ansible all -a 'crontab -l -u natasha'
node5 | CHANGED | rc=0 >>
#Ansible: None
*/2 * * * * Logger "EX294 in Progress"

node2 | CHANGED | rc=0 >>
#Ansible: None
*/2 * * * * Logger "EX294 in Progress"

node3 | CHANGED | rc=0 >>
#Ansible: None
*/2 * * * * Logger "EX294 in Progress"

node4 | CHANGED | rc=0 >>
#Ansible: None
*/2 * * * * Logger "EX294 in Progress"

node1 | CHANGED | rc=0 >>
#Ansible: None
*/2 * * * * Logger "EX294 in Progress"
```

END

```
[greg@control ansible]$ ls
adhoc.sh      hosts.yml      lv.yml         salaries.yml   users.yml
ansible.cfg   hwreport.yml  packages.yml   secret.txt     webcontent.yml
apache.yml    inventory     requirements.yml selinux.yml
cron.yml      issue.yml     roles          timesync.yml
hosts.j2      locker.yml    roles.yml      user_list.yml
[greg@control ansible]$ ls roles/
apache  balancer  phpinfo  requirements.yml
```