Ansible-Day-5

13 December 2023   14:25

► **How to declare variable in ansible playbooks**

```
---
- hosts: all
 become: yes
 var:
   pkg_name: git
 tasks:
   - name: Install git
    yum:
      name: {{ pkg_name }}
      state: present
```

Execute the playbook the and show installation done successfully.

► **Override the git variable explicitly during ansible playbook execution**

```
ansible-playbook -i hosts -v -e "pkg_name=tree" samp.yml
```

► **Define variables in /etc/hosts as host variables & group variables**

```
[webserver]
10.1.2.100        pkg_name=wget

[dbserver]
10.2.1.200
10.2.2.201

[dbserver:vars]
pkg_name=apache2
```

► **Write a playbook to install the package using host vars**
```
---
- hosts: webserver
become: yes
tasks:
  - name: print the variable
   debug:
      msg: The variable pkg_name is: "{{ pkg_name }}"

o/p:-
The variable pkg_name is: wget
```

► **Write a playbook to install the package using group vars**
```
---
- hosts: dbserver
become: yes
tasks:
  - name: print the variable
```

```
debug:
    msg: The variable pkg_name is: "{{ pkg_name }}"
```

o/p:-
The variable pkg_name is: apache2

► **Priority levels of variable**

   0 --> group_vars
   1 --> host_vars
   2 --> variable in playbook
   3 --> variable passed through the command line

     ○ **Example: Maintain variables in**
        ▪ **group_vars(apache2)**
        ▪ **host_vars(wget)**
        ▪ **playbook(git)**
        ▪ **command line(tree) & test the priority levels**

     ○ **Write a playbook & execute**
```
---
- hosts: all
become: yes
vars:
  pkg_name: git
tasks:
 - name: print the variable
   debug:
       msg: The variable pkg_name is: "{{ pkg_name }}"
```

exec1-
ansible-playbook -i hosts -e "pkg_name=tree" -v smp.yml
o/p:
The variable pkg_name is: tree

exec2:-
ansible-playbook -i hosts -v smp.yml
o/p:
The variable pkg_name is: git

exec3:- Disable variable & define host vars for dbserver group also
ansible-playbook -i hosts -v smp.yml
o/p:
The variable pkg_name is: wget

exec4:-
ansible-playbook -i hosts -v smp.yml
o/p:
The variable pkg_name is: apache2

► **New way of declaring the group_vars & host_vars**

```
cd /home/ansible
ls
hosts
group_vars/webserver.yml
host_vars/10.1.2.100.yml
```

- **Create host file with this contents**
  The host file contains details like
  [webserver]
  10.1.1.100
  10.1.1.101

  [dbserver]
  10.1.2.100

- **Define variables at group level**
  webserver.yml
  ---
  pkg_name: git

- **Define variables at host level**
  10.1.2.100.yml
  ---
  pkg_name: tree

- **Provide hosts details as web-server & check which package is getting executed**
  ```
  ---
  - hosts: webserver
    become: yes
    tasks:
      - name: print the pkg_name
        debug:
          msg: value of pkg_name is "{{ pkg_name }}"
  ```

  Exec: On webserver related nodes git package will get installed

- **Provide hosts details as ip-details & check which package is getting executed**
  ```
  ---
  - hosts: 10.1.2.100
    become: yes
    tasks:
      - name: print the pkg_name
        debug:
          msg: value of pkg_name is "{{ pkg_name }}"
  ```

  Exec: On 10.1.2.100 node tree package will get installed

- **Provide all hosts & check which package is getting executed**
  ```
  ---
  - hosts: all
    become: yes
    tasks:
      - name: print the pkg_name
        debug:
          msg: value of pkg_name is "{{ pkg_name }}"
  ```

Exec: On webserver related nodes git package will get installed
On 10.1.2.100 node tree package will get installed