## Playbook

```
---
- name: Create FW rule
   hosts: all
   gat her _facts: no
   roles:
   - role: robert deb ock.mysql
       become: yes
       vars:
           mys ql_ use r_name: tony
   tasks:
   - includ e-t asks: tasks/ use ful.yml
   - firewalld:
           var: ansibl e_f acts`
           port: "{{ http_port | defaul t('88') }}/tcp "
           ser vice: http
           source: 192.0.0.0/24
           zone: public
           state: enabled
           per manent: yes #(persist reboot)
           imm ediate: yes #(enable now)
   - name: Generate password
       shell: pwgen -N 1 -s 30
       reg ister: myPass
   - name: Print the generated password
       debug:
           msg: "The password is {{ myPass }}";
```

- When the option expects a variable as parameter, you don't need double curly breaths around variables.

- When line start with a variable like on the *port* line above, you **must** use double quote " around the variable.

- Boolean value accept: *yes, true, True, TRUE* and *no, NO, false, FALSE*

## Block

```
- hosts: server1
   tasks:
   - name: Install git and restart nginx
       block:
       - name: install Git
           yum: name=git state= present
       - name: Restart nginx
           ser vice: name=nginx state= res tarted
       become: yes
       when: ansibl e_f act s[' dis tri but ion ']= ='C entOS'
       rescue: # Do this if the task fail
        - mail:
```

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## Block (cont)

```
>        to: admin@domain.com
      subject: Houston, We've Got a Problem
      body: task {{ ansible_failed_task.name }}
   always: # Always do this
   - mail:
      to: user@domain.com
      subject: "{{ ansible_play_name }} status"
      body: "{{ ansible_failed_result }}"
```

---

## Variables precedences

Link to Ansible doc: https://shorturl.at/HMZ05

## Magic Variables

| | |
|---|---|
| hostvars['srv1'].ip_address | Get vars value defined for another host |
| hostvars['srv1'].ansible_facts.mounts | Get facts value from another host |
| hostvars['srv1'][ansible_facts][mounts] | Same as above writen diffrently |
| group_names | Get all groups the current host is part of |
| inventory_hostname | Get the current host name define in inventiry not the FQDN |

## Performances tuning

| | |
|---|---|
| gather_facts: False | Disable facts gathering |
| forks=50 (in ansible.cfg) | or --forks 50 or -f 50 on CLI (default is 5) |
| [ssh_connection] (in ansible.cfg) ssh_args = -o ControlMaster=auto -o ControlPersist=60s | |
| pipelining = True (in ansible.cfg) | Reduce the number of SSH connections |
| strategy: free | Execute tasks without waiting for other hosts to finish their tasks |
| Use mitogen if you can: https://mitogen.networkgenomics.com/ansible_detailed.html | |

## Inventory

```
all:
    hosts:
        mai l.e xam ple.com:
            ans ibl e_host: 192.16 8.1.230
            ans ibl e_user: mailmin
    chi ldren:
        web ser vers:
            hosts:
                frc llw eb001:
                    ans ibl e_host: 192.16 8.1.231
```

## ansible.cfg precedence

1. **$ANSIBLE_CONFIG**

2. ansible.cfg in playbook dir

3. ~/.ansible.cfg

4. /etc/ansible/ansible.cfg

## Error Handling

| | |
|---|---|
| any_errors_fatal: true | Will stop & exit playbook if any error |
| ignore_errors: true | Execute next tasks on failed hosts |
| failed_when: <condition> | Task fail when condition is met |

Avoid using **shell** or **command** modules, they will simply execute the command without any validations, use the appropriate module.

## Ansible tips & triks

**Make your playbook executable**
Add the following sheebang at the top of your palybook:
**#!/usr /bi n/a nsible**
and add the executable bit to your playbook file
**chmod +x <my_playbook.yml>**
Now you can execute your playbook like a regular script **./my_playbook.yml**

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