



What are we going to see in this session?

- Introduction to conditionals
- When condition
- Loops



Conditionals

- Often sometimes the result of a play may depend on the value of variable, fact (something fetched from remote system) or previous task results.
- Also, in some cases, the values of variables may depend on other variable.
- All the above scenarios are covered under this topic how ansible playbook deals with Conditionals.



When condition

- Sometimes you will want to skip a particular step on particular host.
- This could be something as simple as not installing a certain package, if the operating system is in particular version or it also could be something like performing some clean up steps if a filesystem is getting full
- This process is very much easy with Ansible with the When statement.
- [GitHub Code](#) [Ansible/Code/E10_when/0_vars.yml]



When condition scenarios

Examples 1 : Shutdown all the VMs if it is Debian.

tasks:

- name: "shut down Debian flavored systems"

command: /sbin/shutdown -t now

when: ansible_os_family == "Debian"

Examples 2 : Multiple conditions that all need to be true can be specified as a list.

tasks:

- name: "shut down CentOS 6 systems"

command: /sbin/shutdown -t now

when: ansible_os_family == "Centos" and ansible_lsb.major_release == "6"

Examples 3 : Doing operation on multiple operating systems.

tasks:

- name: "shut down CentOS 6 and Debian 7 systems"

command: /sbin/shutdown -t now

when: (ansible_distribution == "Ubuntu" and ansible_distribution_version == "16.04") or
(ansible_distribution == "Centos" and ansible_distribution_version == "7")



Loops

- Sometimes you want to repeat a tasks multiple times. In computer programming, this is called a loop.
- Common use case of Ansible loops are
 - Changing ownership on several files and dictionaries with the file module.
 - Creating multiple users with user module.
 - Repeating a step until a certain result reached.
- Ansible offers two keywords for creating loops, [loop] and [with_<lookup>]
- Note : Module loop can be used from Ansible version 2.5.
- It's not a complete replacement of <with_lookup> as it is still recommended to use most use cases.



With_lookups

Available with `with_lookups` module in Ansible

- **With_items** : With_items are used to loop through all the values provided in variable one by one.

[GitHub Code](#) [Ansible/Code/E11_with_lookups/0_with_items.yml]

- **With_dict** : This module is specifically used to loop through all the values inside the dictionary.

[GitHub Code](#) [Ansible/Code/E11_with_lookups/1_with_dict.yml]

Above all can be replaced with loop module which is released in Ansible 2.5 but end of the day module can be used based on your choice and based on your use case.



Loops

- [GitHub Code](#) [Ansible/Code/E11_with_lookups/2_loops.yml]
- [GitHub Code](#) [Ansible/Code/E11_with_lookups/3_loops.yml]



End of this topic!

Any questions?



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