



# What are we going to see in this session?

- Inventory Basics
- Hosts and Groups [INI Format]
- Hosts and Groups [YAML Format]
- Hosts in multiple groups
- Handle hosts needing different user accounts or ports to log in.
- Tips to manage inventory file efficiently



# Inventory Basics

- ✓ Ansible works against multiple remote hosts in your infrastructure at the same time. How it does this?
- ✓ It actually does this by selecting portions of systems listed in Ansible's Inventory file.
- ✓ Default location of Inventory file is `[/etc/ansible/hosts]`
- ✓ You can also specify different inventory file using `[-i <path>]`
- ✓ Generally inventory files can be in different formats `[YAML, ini, etc]` but ansible uses `[ini]` as an default inventory file format.



# Hosts and Groups [INI-Format]

- Lets see some examples in INI format [This is the default format of Ansible]
- The headings in [brackets] are group names, which are basically used to classify the hosts and deciding what systems you are controlling at what times and for what purpose.

# Single host without any group

mail.example.com

# Hosts listed under Group # Below we have classified all the web servers.

[WEB servers]

one.example.com

two.example.com

# Below we have classified all the DB servers.

[DB servers]

three.example.com

four.example.com

five.example.com





# Hosts and Groups [YAML-Format]

- Lets see some examples in YAML format.
- [Note : This is not and default format used by Ansible, Its just one of the options available for our comfort]
- Here no [brackets] for group names and groups are classified under children's category

```
all:
  hosts:
    mail.example.com:
  children:
    webservers:
      hosts:
        foo.example.com:
        bar.example.com:
    dbbservers:
      hosts:
        one.example.com:
        two.example.com:
        three.example.com:
```



# Hosts in Multiple groups

- ✓ You can also put systems in more than one group, for instance a server could be part of both webserver and specific datacenter.
- ✓ For Example you can create groups that track.
  - What – Whether that host is Webserver, Database or Performance testing etc.
  - Where – You can specify the datacenter region.
  - When – You can specify whether it is PROD, TEST or STAGING.



## Handle hosts needing different user accounts or ports to log in

- ✓ This is called inventory variables (or) host variables.
- ✓ Setting inventory variables in the inventory file is the easiest way.
- ✓ For instance, suppose these hosts have different usernames and ports

[webservers]

server1.example.com ansible\_port=5000 ansible\_user=oracle

server2.example.com ansible\_port=5001 ansible\_user=mysql





# Tips to manage inventory file efficiently

- If you need to add lot of hosts with following similar patterns, you can do this rather than listing each hostname.

[webservers]

www[01:50].example.com



# End of this topic!

Any questions?



ANSIBLE