Ansible allows administrators to execute on-demand tasks on Ansible managed servers. The ad-hoc commands are the most basic operations that can be performed with Ansible engine. Each ad-hoc command is capable of performing a single operation on host or group of hosts. To perform multiple operations, the administrator should run the series of ad-hoc commands from Ansible Server. Some of the commands might require “root” privilege. We will see that how to become a root user in ad-hoc mode.

1. Login to Ansible server and run “uptime” command in ad-hoc mode.

[sysadmin@ansible-server ~]$ ansible all -a 'uptime'

ana-2 | SUCCESS | rc=0 >>

07:01:19 up 2 days, 8:29, 2 users, load average: 0.24, 0.06, 0.06

ana-1 | SUCCESS | rc=0 >>

00:43:56 up 3 days, 20:58, 1 user, load average: 0.19, 0.31, 0.22

uaans | SUCCESS | rc=0 >>

04:18:41 up 3 days, 12:00, 2 users, load average: 0.00, 0.01, 0.05

uaans69 | SUCCESS | rc=0 >>

04:18:40 up 4 days, 1:50, 2 users, load average: 0.00, 0.00, 0.00

To align the output in one line, use “-o” option.

[sysadmin@ansible-server ~]$ ansible all -a 'uptime' -o

ana-1 | SUCCESS | rc=0 | (stdout) 00:44:03 up 3 days, 20:58, 1 user, load average: 0.17, 0.31, 0.22

uaans69 | SUCCESS | rc=0 | (stdout) 04:18:46 up 4 days, 1:50, 2 users, load average: 0.00, 0.00, 0.00

uaans | SUCCESS | rc=0 | (stdout) 04:18:47 up 3 days, 12:00, 2 users, load average: 0.00, 0.01, 0.05

ana-2 | SUCCESS | rc=0 | (stdout) 07:01:26 up 2 days, 8:29, 2 users, load average: 0.22, 0.06, 0.06

[sysadmin@ansible-server ~]$

2. How to gain the escalated privileges on Ad-hoc mode?

The following command just finds the user which is configured with ansible for passwordless authentication.

[sysadmin@ansible-server ~]$ ansible all -a "whoami"

ana-1 | SUCCESS | rc=0 >>

sysadmin

ana-2 | SUCCESS | rc=0 >>

sysadmin

uaans | SUCCESS | rc=0 >>

sysadmin

uaans69 | SUCCESS | rc=0 >>

sysadmin

[sysadmin@ansible-server ~]$

Try the same command using the “-b” option to gain the***elevated access/root access.***

[sysadmin@ansible-server ~]$ ansible all -b -a "whoami"

uaans69 | SUCCESS | rc=0 >>

root

uaans | SUCCESS | rc=0 >>

root

ana-2 | SUCCESS | rc=0 >>

root

ana-1 | SUCCESS | rc=0 >>

root

[sysadmin@ansible-server ~]$

Here we can see that, sysadmin user has gained the root access.  In many cases, you need to escalate the privileges to manage the hosts.

3. Install Apache package using “ad-hoc” command.

* “-b” option used for escalating the privilege.
* “-m” option used for specifying the module.

[sysadmin@ansible-server ~]$ ansible all -b -m yum -a "name=httpd state=present"

ana-2 | SUCCESS => {

"changed": false,

"msg": "",

"rc": 0,

"results": [

"httpd-2.4.6-80.el7.centos.1.x86\_64 providing httpd is already installed"

]

}

ana-1 | SUCCESS => {

"changed": false,

"msg": "",

"rc": 0,

"results": [

"httpd-2.4.6-80.el7.centos.1.x86\_64 providing httpd is already installed"

]

}

uaans69 | SUCCESS => {

"changed": false,

"msg": "",

"rc": 0,

"results": [

"httpd-2.2.15-60.el6\_9.6.x86\_64 providing httpd is already installed"

]

}

uaans | SUCCESS => {

"changed": false,

"msg": "",

"rc": 0,

"results": [

"httpd-2.4.6-17.el7.x86\_64 providing httpd is already installed"

]

}

[sysadmin@ansible-server ~]$