**Lecture: Until**

1. Verify that your ansible installation is available by displaying the version of ansible while logged in as the 'user' user.

[test@tcox3 ~]$ ansible --version

ansible 1.9.2

  configured module search path = None

2. Run the ansible command that lists all of the hosts configured in your control server 'hosts' file for the system.

[test@tcox3 ~]$ ansible all --list-hosts

    tcox5.mylabserver.com

    localhost

    tcox4.mylabserver.com

3. Create a playbook, using the 'UNTIL' concepts from the video:

- Uses SSH

- Logs in to the remote system as 'test' user

- Connects to ALL servers

- The playbook runs as 'sudo'

- Skip gathering remote facts

- Installs the Apache web server using the appropriate package management module

- Runs a command to verify that the 'systemctl' status command shows the httpd service is running

- Register the result of the above command, using the debug module to display the value captured during each iteration

- This command should run FIVE times with a break of FIVE seconds between each try until the command succeeds OR the fifth loop indicates the service did not start

[test@tcox3 Playbooks]$ ansible-playbook until.yml   
  
PLAY [apacheweb] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*   
  
TASK: [Installing Apache Web Server] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*   
changed: [tcox4.mylabserver.com]  
  
TASK: [Verify Service Status] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*   
changed: [tcox4.mylabserver.com]  
  
TASK: [debug var=result] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*   
ok: [tcox4.mylabserver.com] => {  
    "var": {  
        "result": {  
            "attempts": 3,   
            "changed": true,   
            "cmd": "systemctl status httpd",   
            "delta": "0:00:00.007014",   
            "end": "2015-11-02 23:34:29.364704",   
            "invocation": {  
                "module\_args": "systemctl status httpd",   
                "module\_name": "shell"  
            },   
            "rc": 0,   
            "start": "2015-11-02 23:34:29.357690",   
            "stderr": "",   
            "stdout": "httpd.service - The Apache HTTP Server\n   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled)\n   Active: active (running) since Mon 2015-11-02 23:34:25 UTC; 4s ago\n Main PID: 1701 (httpd)\n   Status: \"Processing requests...\"\n   CGroup: /system.slice/httpd.service\n           |-1701 /usr/sbin/httpd -DFOREGROUND\n           |-1702 /usr/sbin/httpd -DFOREGROUND\n           |-1703 /usr/sbin/httpd -DFOREGROUND\n           |-1704 /usr/sbin/httpd -DFOREGROUND\n           |-1705 /usr/sbin/httpd -DFOREGROUND\n           `-1706 /usr/sbin/httpd -DFOREGROUND\n\nNov 02 23:34:25 tcox4.mylabserver.com systemd[1]: Starting The Apache HTTP Server...\nNov 02 23:34:25 tcox4.mylabserver.com systemd[1]: Started The Apache HTTP Server.",   
            "stdout\_lines": [  
                "httpd.service - The Apache HTTP Server",   
                "   Loaded: loaded (/usr/lib/systemd/system/httpd.service; disabled)",   
                "   Active: active (running) since Mon 2015-11-02 23:34:25 UTC; 4s ago",   
                " Main PID: 1701 (httpd)",   
                "   Status: \"Processing requests...\"",   
                "   CGroup: /system.slice/httpd.service",   
                "           |-1701 /usr/sbin/httpd -DFOREGROUND",   
                "           |-1702 /usr/sbin/httpd -DFOREGROUND",   
                "           |-1703 /usr/sbin/httpd -DFOREGROUND",   
                "           |-1704 /usr/sbin/httpd -DFOREGROUND",   
                "           |-1705 /usr/sbin/httpd -DFOREGROUND",   
                "           `-1706 /usr/sbin/httpd -DFOREGROUND",   
                "",   
                "Nov 02 23:34:25 tcox4.mylabserver.com systemd[1]: Starting The Apache HTTP Server...",   
                "Nov 02 23:34:25 tcox4.mylabserver.com systemd[1]: Started The Apache HTTP Server."  
            ],   
            "warnings": []  
        }  
    }  
}  
  
PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*   
tcox4.mylabserver.com      : ok=3    changed=2    unreachable=0    failed=0

HERE IS AN EXAMPLE OF WHAT YOUR PLAYBOOK COULD LOOK LIKE:

--- # UNTIL EXAMPLE

- hosts: apacheweb

  sudo: yes

  connection: ssh

  user: test

  gather\_facts: no

tasks:

- name: Installing Apache Web Server

  yum: pkg=httpd state=latest

- name: Verify Service Status

  shell: systemctl status httpd

  register: result

  until: result.stdout.find(“active (running)”) != -1

  retries: 5

  delay: 5

- debug: var=result

4. Run the playbook and display the results.

See above for full output