Performance Assessment: Midterm Exam

In this exam, you’ll perform tasks based on what you have been taught in the prior Guided Practices and Performance Assessments – you should have all of the Guided Practices and Performance assessments complete by this point. You may use the book, and any notes you have, along with the Linux man pages. You may look at your prior output. You may not give or receive help from other students. You may ask your instructor for assistance, but it is likely to cost points.

# Resources Needed

* VCASTLE Pod designed for this course’s Performance Assessments

# Level of Difficulty

Moderate

|  |
| --- |
| **Warning with solid fill Important**: Please Note the Following Guidance |
| This Assessment **should not** be performed in the VCASTLE Pod for **Guided Practices**.  It should be performed in the VCASTLE Pod for **Performance Assessments**. |

# Instructions

1. Log in to the CentOS machine that is part of the Performance Assessment pod using your username**.** Check the version of Ansible that you have installed (Ansible should already be installed from a prior activity), and **insert a screenshot of the command and result here.** **Text

   Description automatically generated**
2. Run Ansible’s ping module against the Ubuntu target in the ansible host file. Run Ansible’s win\_ping module against the Windows target in the ansible host file. **Paste a screenshot here showing the module ran successfully.** Text

   Description automatically generated
3. View your hosts file on the CentOS machine from your Performance Assessment pod, and ensure there is an entry for the Ubuntu machine. If an entry does not exist, create one. **Paste a screenshot here showing the contents of your /etc/ansible/hosts file.** **Graphical user interface, text

   Description automatically generated**
4. In your playbooks folder under your home directory, create a playbook to count the processes running on the remote Ubuntu machine. **Paste a screenshot here showing the contents of your playbook.** **Text

   Description automatically generated**
5. Check the syntax of the newly created playbook, correct any errors, and run the playbook. **Paste a screenshot here showing that the playbook ran successfully.** **Text

   Description automatically generated**
6. In a previous performance assessment, you created a CSV file and a playbook that made use of a custom BASH module to create users based on the data provided by the CSV file. Those users should still exist. In this step, you will create playbook that calls a custom BASH module to delete the users you previously created. First, create the custom BASH module. **Paste a screenshot of the contents of the file that is your custom BASH module for user deletion.** Graphical user interface, text

   Description automatically generated
7. Create the playbook that will delete the users.  **Paste a screenshot here showing the contents of your playbook.** **Text

   Description automatically generated**
8. Check the syntax of the newly created playbook, correct any errors, and run the playbook. **Paste a screenshot here showing that the playbook ran successfully.** Text

   Description automatically generated
9. Verify that the users were removed by displaying the last few lines of the /etc/passwd file. **Paste a screenshot of the command you used and its results.** Text

   Description automatically generated
10. Answer the following questions:
    1. What is the relationship of Ansible to ssh?

Ansible utilizes SSH to connect and communicate with remote workstations.

* 1. When and why is it necessary to install pywinrm?

It is necessary **when** you want to communicate with a windows OS workstation remotely, to install pywinrm. PYWINRM is the is the Python client for the Windows Remote Module (WinRm) service.  It allows you to invoke commands on target Windows machines from any machine that can run Python. WinRM allows you to perform various management tasks remotely.

# Rubric

|  |  |
| --- | --- |
| Criteria | Points |
| Screenshot 1 (Step 1) | 5 points |
| Screenshot 2 (Step 2) | 5 points |
| Screenshot 3 (Step 3) | 5 points |
| Screenshot 4 (Step 4) | 20 points |
| Screenshot 5 (Step 5) | 10 points |
| Screenshot 6 (Step 6) | 5 points |
| Screenshot 7 (Step 7) | 20 points |
| Screenshot 8 (Step 8) | 10 points |
| Screenshot 9 (Step 9) | 5 points |
| Answer Question 10-a | 7.5 points |
| Answer Question 10-b | 7.5 points |