RHCE Practice Exam 1

To perform the tasks in this RHCE practice exam, you need three virtual machines that meet the following requirements:

- RHEL 9 installed with the Minimal Installation pattern.

- A 5 GB second disk that is available but not used for anything. In this sample exam, we will assume that the name of the disk is /dev/sdb. Change accordingly if your disk is using a different name.

Once you're set on the requirements, do the following:

- Install an Ansible Managed environment applying the following steps:

  - Create an Ansible control node and two managed nodes: server1.tekup.com and server2.tekup.com. Ensure on these servers that the user "greg" exists to perform management tasks.

  - Create a project directory with the name exam, and in this project directory, create an inventory file to define the managed servers. Also, create a configuration file to automatically use that inventory file.

  - Run ad-hoc commands to set up all the required elements on the managed servers.

  - Configure the inventory file, such that server1 is part of the group webservers, and server2 is part of the group webclients.

Create a playbook named webserver.yml to set up an http server on hosts in the webservers group according to the following requirements:

- This webserver needs to run on port 90, it's root directory is /webserver

- Create an index.html file with a welcome message "Welcome to server1"

- Open a port in the firewalld firewall to allow access to the web server.

- Create a variables file that is called web_vars and is stored in the vars directory. In this file, the following variables must be set:

  - web_service   httpd

  - web_server   httpd

  - web_config_file   /etc/httpd/conf/httpd.conf

- Configure a handler that restarts the web server after successfully creating the index.html file.

- Create the webclient.yml playbook that will run on server2, and do the following:
  - Curl the web server and return its contents.
- In your project directory, create a site.yml file that includes webclient.yml and webserver.yml.

- Convert the playbook that you have created in the previous task into an Ansible role. You will create a new playbook that calls this role in the next task. Create the role in the roles directory.

- In the exam directory, create a playbook that activates the role and sets up storage according to the following requirements:
  - Set up the second disk with a partition that will use all the available space.
  - Create volume group ansible_vg with a pesize of 10MB.
  - Create logical volume ansible_lv with a size of 200MB
  - Mount ansible_lv under /ansible with an ext4 filesystem, persistently under /etc/fstab