

Curriculum Web Service Runbook

Short Description

A website that is used for looking up information about course and class offerings at CSUN. The web service provides a gateway to access the information via a REST-ful API.

Required Software

Control Machine

- ansible

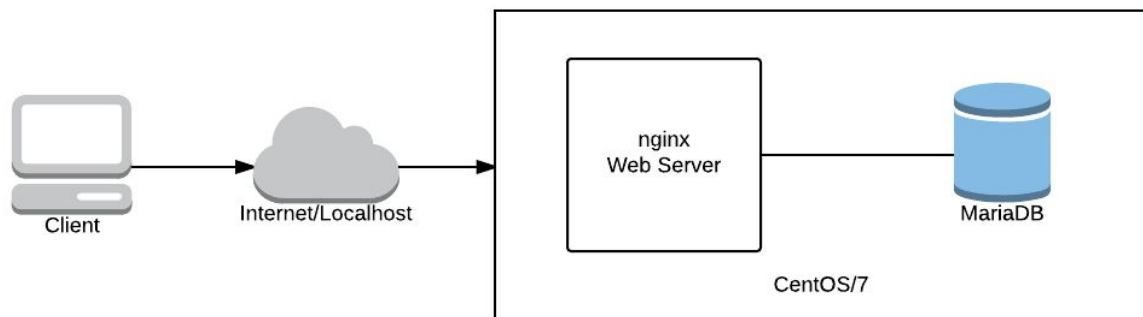
Host

- CentOS 7
- Web Server
 - nginx
 - php
 - php-fpm
 - php-ldap
 - php-mbstring
 - php-mcrypt
 - php-mysql
 - php-phpunit-PHPUnit
 - Composer

Database

- MariaDB-server
- MariaDB-client
- MariaDB.repo

Architecture Diagram



Deployment

It is assumed that the basic OS on the control and host machine are installed. The software will be deployed using ansible on the control machine to install a webserver and database onto the host machine. Ensure it is installed on the control system:

```
$ sudo yum install epel-release
$ sudo yum install ansible
```

Ensure that the target machines are in the ansible/hosts file

```
$ sudo vim /etc/ansible/hosts
```

Within the directory with all the configuration files in this case ~/cit-360

```
$ ansible-playbook web.yml db.yml --ask-vault-pass
```

This will prompt for the password to decrypt the secrets.yml file. After you enter the password ansible should indicate that it is running through the tasks needed to setup the nginx web server, mariadb, and the databases. There will be a description of what task is running that looks like:

```
PLAY [web] *****
TASK [setup] *****
ok: [Target's name or ip will be here]
TASK [Change SELinux to permissive] *****
changed: [Target's name or ip will be here]
```

When all the tasks have been run there will be a summary that looks like this:

```
PLAY RECAP *****
Targets name or ip here      :ok=27 changed=6 unreachable=0 failed=0
```

To test that it is working, on the machine with a web browser

Issues

Title: Failed to decrypt

Description: If you run the ansible command without the correct password or without using the `--ask-vault-pass` you will get an error.

Remediation Steps: Make sure you are using the correct password to decrypt the `secrets.yml` file. Contact the creator of the file for the correct password.

Title: Connection refused

Description: When trying to access the website it displays a 500 error code saying connection refused.

Remediation Steps: It could be that the nginx service isn't running properly, restart the service using:

```
$ sudo service nginx restart
```

Title: Unreachable

Description: When trying to run the playbook it gives the error message "Failed to connect to the host via ssh".

Remediation Steps: It could be that ssh isn't properly configured between the control machine and the host. On the host machine open the `sshd_config` file:

```
$ sudo vim /etc/ssh/sshd_config #use vi or nano if vim isn't installed
```

In the file:

```
PublicKeyAuthentication yes
PasswordAuthentication yes
```

Restart the sshd service:

```
$ sudo service sshd restart
```

On the control machine:

```
$ ssh-copy-id *host IP address*
```

Yes and put in the password to the host machine.