

## <service\_name> Runbook

### Short Description

This service includes a webserver and database for hosting a web page for curriculums and courses offered CSUN.

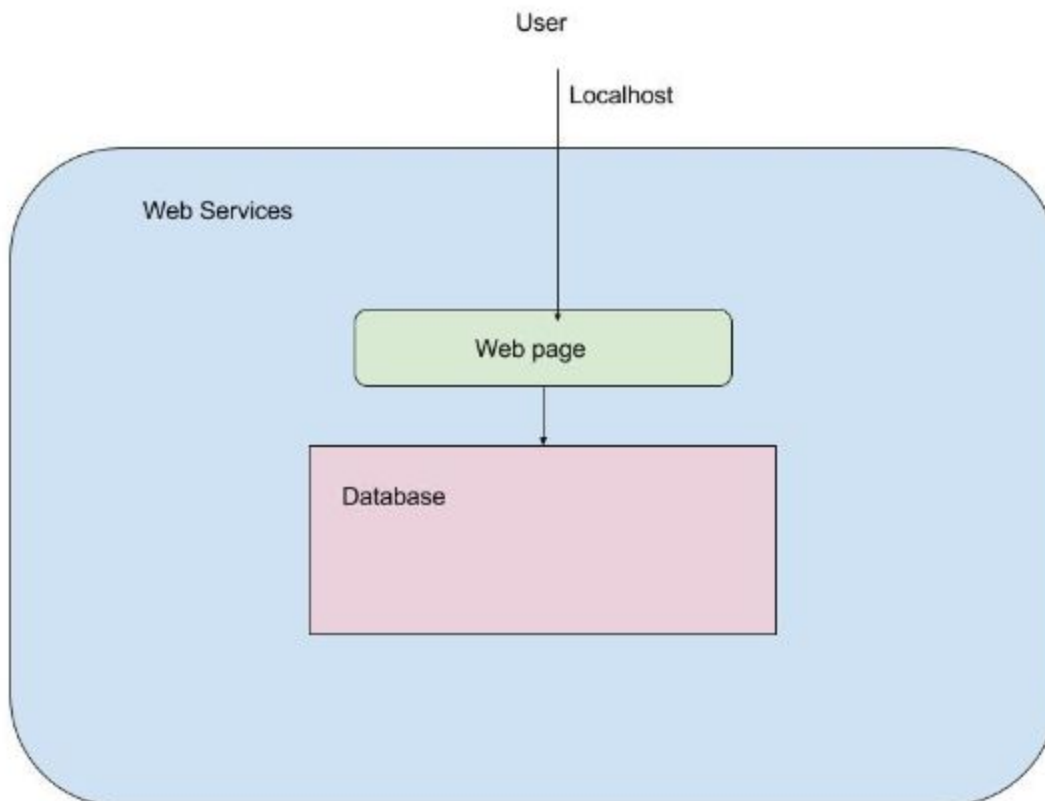
### Required Software

CentOS 7

MariaDB

NGINX HTTP-server

### Architecture Diagram



## Deployment

The deployment requires a controller machine with Ansible and Vagrant coupled with supported virtualization software, for example VirtualBox.

The installation scripts uses modules that requires Ansible version 2.2.0, check the version by running the command: *ansible --version*. You may have to install Ansible from source, visit Ansible installation page for details.

In the CLI, move to the directory containing the installation scripts, db.yml and web.yml. The “ansible-playbook” commands requires input of a password before they can be executed. Make sure that the hosts.ini file is located in the same directory as the scripts.

### Commands:

```
vagrant up
```

```
ansible-playbook -i hosts.ini db.yml --ask-vault-pass
```

```
ansible-playbook -i hosts.ini web.yml --ask-vault-pass
```

## Issues

### Title: Missing or wrongly configured vault file

**Description:** Error when running scripts and error occurs under [including secrets].

**Remediation Steps:** Ensure that the vault file is located where the scripts are located and that the correct password has been entered. Note that whereas multiple vault files can be included in a script they must all require the same password.

Make sure the vault file is formatted correctly with three dashes at top before the secrets are entered.

### Title: Service stops

**Description:** Service unexpectedly stops or freezes causing either the database or webserver to become dysfunctional.

**Remediation steps:** Use Ansible to directly restart the affected service using the *systemd* module. If restart fails, try to update the service and start it again. If all attempts at restart fails then, if it's possible, direct all traffic to a backup server and ensure that the data is saved in another location and reinstall the entire VM again. This should not be time consuming if Ansible is configured correctly. If the problem persists, check for configuration errors or if it's a known issue.

### Title: Overloading traffic

**Description:** The entire server becomes very slow or unresponsive.

**Remediation steps:** Check for malicious traffic. If the traffic is legitimate consider redirecting traffic to a backup server, creating another server and redirect traffic there or freeing system resources by shutting down unused services and other applications.