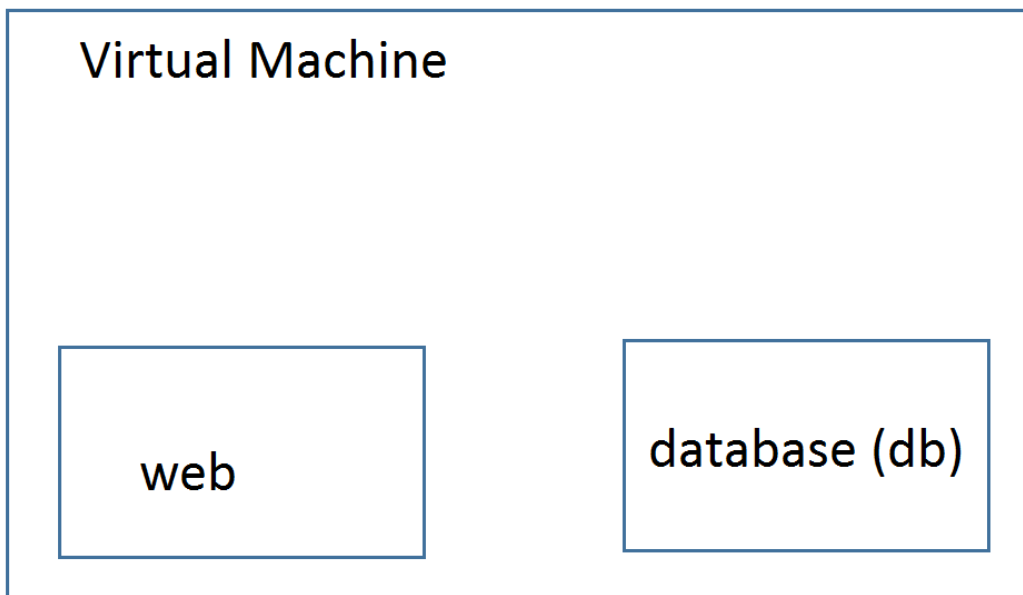# DB Runbook

Short Description

The db playbook configures, installs, and updates all of the necessary files need to set up the database.

Required Software

The software required to run web.yml includes MariaDB

Architecture Diagram

Deployment

To deploy db.yml the following tools and commands will need to be used:

Copy Install files of MariaDB into etc/yum repo using permission 0644
Accepted Output: ok: [localhost]

Install MariaDB server and clieint Repository, update cache
Accepted Output: ok: [localhost]

Start MariaDB on remote host
Accepted Output: ok: [localhost]

Templates MariaDB answers file into local temp folder on machine
Accepted Output: ok: [localhost]

Mysql Installation
Accepted Output: ok: [localhost]

Runs Script
Accepted Output: ok: [localhost]

Last operation
Accepted Output: changed: [localhost]

Issues

What could cause a "webserver" and a "web service" to go wrong

Title: System Overload
Description: A server overloads can be caused by a large bottleneck influx of traffic which clogs the network. Typically, this happens during peak traffic hours.
Remediation Steps: Do a deep capacity analysis of the network traffic, to ensure there is a balanced ratio of virtual servers, examining the loads on the CPU and memory to the amount of "work" needed on each server. Sometimes this means improving the physical hardware to support a higher capacity.

Title: DDos attack
Description: Distributed Denial of Service attack basically bombards a server with an overflow of packets that the server is not able to handle create a bottleneck state, which makes the service (server) become unavailable.

Remediation Steps: Several technical things can be done, 1) rate limit your router to prevent the server from being overwhelmed, add filters to tell the router to drop packets from "suspicious sources" 3) timeout half-open connects more aggressively, 4) drop spoofed and malformed packets. If the problem persists, call a DDoS specialist to analyze your network setup.

Title: Natural Disaster
Description: Natural Disaster wipes out all your electricity thereby taking your severs down.
Remediation Steps: Possibly look into investing in cloud technology some kind of SaaS type of technology. For example, with Amazon there are server farms, which in case "your server" goes down there is redundancy so that it is backed up on another server which takes command.