

ANSIBLE REAL DEVOPS ENTERPRISE SCENARIOS

SCENARIO PLAYBOOK 1 – Deploy LAMP Stack

- name: Scenario 1 - Deploy LAMP Stack

hosts: webservers

become: yes

roles:

- role: apache
- role: mysql
- role: php

SCENARIO PLAYBOOK 2 – Setup PostgreSQL Cluster

- name: Scenario 2 - PostgreSQL Cluster

hosts: dbservers

become: yes

roles:

- role: postgresql

tasks:

- name: Initialize replication
 - shell: "pg_basebackup -h master -D /var/lib/pgsql/data -U replicator"
 - when: inventory_hostname != 'master'

SCENARIO PLAYBOOK 3 – Deploy Node.js App with Nginx Proxy

- name: Scenario 3 - Node.js App Deployment

hosts: appservers

become: yes

roles:

- role: nodejs
- role: nginx

tasks:

- name: Deploy app code

git:

repo: 'https://github.com/org/myapp.git'

dest: /opt/myapp

- name: Restart Node.js

systemd:

name: nodeapp

state: restarted

SCENARIO PLAYBOOK 4 – Setup Docker Swarm Cluster

- name: Scenario 4 - Docker Swarm

hosts: swarmnodes

become: yes

roles:

- role: docker

tasks:

- name: Initialize swarm

shell: "docker swarm init"

when: inventory_hostname == 'manager1'

SCENARIO PLAYBOOK 5 – Configure CI/CD Pipeline (Jenkins)

- name: Scenario 5 - Jenkins CI/CD

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy pipeline job

template:

src: jenkins_job.xml.j2

dest: /var/lib/jenkins/jobs/myjob/config.xml

notify: restart jenkins

handlers:

- name: restart jenkins

service:

name: jenkins

state: restarted

SCENARIO PLAYBOOK 6 – Setup ELK Stack

- name: Scenario 6 - ELK Stack

hosts: monitoring

become: yes

roles:

- role: elasticsearch

- role: logstash

- role: kibana

- role: filebeat

SCENARIO PLAYBOOK 7 – Configure Prometheus & Grafana Monitoring

```
- name: Scenario 7 - Monitoring

hosts: monitoring

become: yes

roles:

  - role: prometheus

  - role: grafana

tasks:

  - name: Deploy alert rules

    copy:

      src: alert_rules.yml

      dest: /etc/prometheus/alert_rules.yml

    notify: reload prometheus


handlers:

  - name: reload prometheus

    service:

      name: prometheus

      state: reloaded
```

SCENARIO PLAYBOOK 8 – Setup HAProxy Load Balancer

```
---
```

```
- name: Scenario 8 - Load Balancer

hosts: loadbalancers

become: yes

roles:

  - role: haproxy

tasks:

  - name: Deploy HAProxy config

    template:
```

src: haproxy.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 9 – Deploy Redis Cluster

- name: Scenario 9 - Redis Cluster

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy Redis config

template:

src: redis.conf.j2

dest: /etc/redis/redis.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 10 – Setup Backup & Restore Jobs

- name: Scenario 10 - Backup & Restore

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Configure daily backup

template:

src: backup_cron.j2

dest: /etc/cron.d/daily_backup

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 11 – Setup MongoDB Replica Set

- name: Scenario 11 - MongoDB Replica Set

hosts: dbservers

become: yes

roles:

- role: mongod

tasks:

- name: Deploy MongoDB config

template:

src: mongod.conf.j2

dest: /etc/mongod.conf

notify: restart mongod

handlers:

- name: restart mongod

service:

name: mongod

state: restarted

SCENARIO PLAYBOOK 12 – Configure RabbitMQ Cluster

- name: Scenario 12 - RabbitMQ Cluster

hosts: mqservers

become: yes

roles:

- role: rabbitmq

tasks:

- name: Deploy RabbitMQ config

template:

src: rabbitmq.conf.j2

dest: /etc/rabbitmq/rabbitmq.conf

notify: restart rabbitmq

handlers:

- name: restart rabbitmq

service:

name: rabbitmq-server

state: restarted

SCENARIO PLAYBOOK 13 – Deploy Kafka Cluster

- name: Scenario 13 - Kafka Cluster

hosts: kafka_nodes

become: yes

roles:

- role: kafka

tasks:

- name: Deploy Kafka broker config

template:

src: server.properties.j2

dest: /opt/kafka/config/server.properties

notify: restart kafka

handlers:

- name: restart kafka

service:

name: kafka

state: restarted

SCENARIO PLAYBOOK 14 – Setup Zookeeper Ensemble

- name: Scenario 14 - Zookeeper Ensemble

hosts: zookeeper_nodes

become: yes

roles:

- role: zookeeper

tasks:

- name: Deploy Zookeeper config

template:

src: zoo.cfg.j2

dest: /opt/zookeeper/conf/zoo.cfg

notify: restart zookeeper

handlers:

- name: restart zookeeper

service:

name: zookeeper

state: restarted

SCENARIO PLAYBOOK 15 – Configure ELK Logging for Apps

- name: Scenario 15 - ELK Logging for Apps

hosts: appservers

become: yes

roles:

- role: filebeat

tasks:

- name: Deploy Filebeat config

template:

src: filebeat.yml.j2

dest: /etc/filebeat/filebeat.yml

notify: restart filebeat

handlers:

- name: restart filebeat

service:

- name: filebeat

- state: restarted

SCENARIO PLAYBOOK 16 – Deploy Prometheus Node Exporter

- name: Scenario 16 - Prometheus Node Exporter

- hosts: all

- become: yes

- roles:

- role: node_exporter

- tasks:

- name: Deploy node exporter service

- template:

- src: node_exporter.service.j2

- dest: /etc/systemd/system/node_exporter.service

- notify: restart node_exporter

- handlers:

- name: restart node_exporter

- systemd:

- name: node_exporter

- state: restarted

SCENARIO PLAYBOOK 17 – Configure Grafana Dashboards

- name: Scenario 17 - Grafana Dashboards

- hosts: monitoring

become: yes

roles:

- role: grafana

tasks:

- name: Deploy dashboards

copy:

src: dashboards/

dest: /var/lib/grafana/dashboards/

notify: restart grafana

handlers:

- name: restart grafana

service:

name: grafana-server

state: restarted

SCENARIO PLAYBOOK 18 – Setup Jenkins Pipeline for App

- name: Scenario 18 - Jenkins Pipeline

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy pipeline job

template:

src: pipeline_job.xml.j2

dest: /var/lib/jenkins/jobs/myapp/config.xml

notify: restart jenkins

handlers:

- name: restart jenkins

service:

name: jenkins

state: restarted

SCENARIO PLAYBOOK 19 – Configure HAProxy + Web Apps

- name: Scenario 19 - HAProxy + Web Apps

hosts: loadbalancers

become: yes

roles:

- role: haproxy

tasks:

- name: Deploy HAProxy config

template:

src: haproxy.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 20 – Configure Backup Jobs for DBs

```
- name: Scenario 20 - Backup DBs

hosts: backupservers

become: yes

roles:

  - role: backup

tasks:

  - name: Deploy backup scripts

    template:

      src: backup_db.sh.j2

      dest: /opt/backup/backup_db.sh

    notify: restart cron

handlers:

  - name: restart cron

    service:

      name: crond

      state: restarted
```

SCENARIO PLAYBOOK 21 – Deploy LEMP Stack

```
---
```

```
- name: Scenario 21 - LEMP Stack Deployment

hosts: webservers

become: yes

roles:

  - role: nginx

  - role: mysql

  - role: php
```

SCENARIO PLAYBOOK 22 – Setup MariaDB Galera Cluster

- name: Scenario 22 - MariaDB Galera Cluster

hosts: dbservers

become: yes

roles:

- role: mariadb

tasks:

- name: Initialize Galera replication

shell: "galera_new_cluster"

when: inventory_hostname == 'db1'

SCENARIO PLAYBOOK 23 – Deploy Python Flask App with Gunicorn & Nginx

- name: Scenario 23 - Flask App Deployment

hosts: appservers

become: yes

roles:

- role: python

- role: nginx

tasks:

- name: Deploy app code

git:

repo: 'https://github.com/org/flaskapp.git'

dest: /opt/flaskapp

- name: Restart Gunicorn

systemd:

name: flaskapp

state: restarted

SCENARIO PLAYBOOK 24 – Setup Kubernetes Cluster

- name: Scenario 24 - Kubernetes Cluster

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

tasks:

- name: Initialize kubeadm

shell: "kubeadm init"

when: inventory_hostname == 'master1'

SCENARIO PLAYBOOK 25 – Configure Jenkins Shared Libraries

- name: Scenario 25 - Jenkins Shared Libraries

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy shared library

git:

repo: 'https://github.com/org/jenkins-shared-libs.git'

dest: /var/lib/jenkins/shared-libs

notify: restart jenkins

handlers:

- name: restart jenkins

service:
name: jenkins
state: restarted

SCENARIO PLAYBOOK 26 – Setup Elasticsearch Index Templates

- name: Scenario 26 - Elasticsearch Index Templates

hosts: monitoring

become: yes

roles:

- role: elasticsearch

tasks:

- name: Deploy index templates

template:

src: index_template.json.j2

dest: /etc/elasticsearch/index_template.json

notify: restart elasticsearch

handlers:

- name: restart elasticsearch

service:

name: elasticsearch

state: restarted

SCENARIO PLAYBOOK 27 – Configure Prometheus Alertmanager

- name: Scenario 27 - Prometheus Alertmanager

hosts: monitoring

become: yes

roles:

- role: prometheus
- role: alertmanager

tasks:

- name: Deploy alertmanager config

template:

src: alertmanager.yml.j2

dest: /etc/alertmanager/alertmanager.yml

notify: restart alertmanager

handlers:

- name: restart alertmanager

service:

name: alertmanager

state: restarted

SCENARIO PLAYBOOK 28 – Deploy HAProxy + Certbot SSL

- name: Scenario 28 - HAProxy with SSL

hosts: loadbalancers

become: yes

roles:

- role: haproxy
- role: certbot

tasks:

- name: Deploy HAProxy SSL config

template:

src: haproxy_ssl.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 29 – Deploy Redis Sentinel

- name: Scenario 29 - Redis Sentinel

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy sentinel config

template:

src: sentinel.conf.j2

dest: /etc/redis/sentinel.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 30 – Configure Database Backup with Cron

- name: Scenario 30 - Database Backup Cron

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Deploy DB backup script

template:

src: backup_script.sh.j2

dest: /opt/backup/backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 31 – Deploy Java Spring Boot App with Nginx Proxy

- name: Scenario 31 - Spring Boot App Deployment

hosts: appservers

become: yes

roles:

- role: java

- role: nginx

tasks:

- name: Deploy WAR file

copy:

src: myapp.war

dest: /opt/springapp/myapp.war

- name: Restart Spring Boot service

systemd:

name: springapp

state: restarted

SCENARIO PLAYBOOK 32 – Setup MySQL Master-Slave Replication

- name: Scenario 32 - MySQL Master-Slave

hosts: dbservers

become: yes

roles:

- role: mysql

tasks:

- name: Configure replication

template:

src: replication.cnf.j2

dest: /etc/mysql/conf.d/replication.cnf

notify: restart mysql

handlers:

- name: restart mysql

service:

name: mysqld

state: restarted

SCENARIO PLAYBOOK 33 – Deploy Dockerized App with Compose

- name: Scenario 33 - Docker Compose App

hosts: appservers

become: yes

roles:

- role: docker

tasks:

- name: Deploy docker-compose file

template:

src: docker-compose.yml.j2

dest: /opt/dockerapp/docker-compose.yml

notify: restart docker-compose-app

handlers:

- name: restart docker-compose-app

shell: "docker-compose -f /opt/dockerapp/docker-compose.yml down && docker-compose -f /opt/dockerapp/docker-compose.yml up -d"

SCENARIO PLAYBOOK 34 – Setup Nginx Load Balancer for Multiple Web Apps

- name: Scenario 34 - Nginx Load Balancer

hosts: loadbalancers

become: yes

roles:

- role: nginx

tasks:

- name: Deploy LB config

template:

src: lb.conf.j2

dest: /etc/nginx/conf.d/loadbalancer.conf

notify: reload nginx

handlers:

- name: reload nginx

service:

name: nginx

state: reloaded

SCENARIO PLAYBOOK 35 – Configure PostgreSQL Backup and Restore

- name: Scenario 35 - PostgreSQL Backup

hosts: backupservers

become: yes

roles:

- role: postgresql

- role: backup

tasks:

- name: Deploy backup script

template:

src: pg_backup.sh.j2

dest: /opt/backup/pg_backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 36 – Deploy ELK Stack with Beats Agents

- name: Scenario 36 - ELK Stack + Beats

hosts: monitoring

become: yes

roles:

- role: elasticsearch

- role: logstash

- role: kibana

- role: filebeat

- role: metricbeat

SCENARIO PLAYBOOK 37 – Setup Prometheus + Grafana Alerts

- name: Scenario 37 - Prometheus Alerts

hosts: monitoring

become: yes

roles:

- role: prometheus

- role: grafana

tasks:

- name: Deploy alert rules

copy:

src: alert_rules.yml

dest: /etc/prometheus/alert_rules.yml

notify: reload prometheus

handlers:

- name: reload prometheus

service:

name: prometheus

state: reloaded

SCENARIO PLAYBOOK 38 – Deploy Redis Cluster with Sentinel

- name: Scenario 38 - Redis Sentinel Cluster

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy sentinel config

template:

src: sentinel.conf.j2

dest: /etc/redis/sentinel.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 39 – Configure HAProxy + SSL Certificates

- name: Scenario 39 - HAProxy SSL

hosts: loadbalancers

become: yes

roles:

- role: haproxy
- role: certbot

tasks:

- name: Deploy HAProxy SSL config

template:

src: haproxy_ssl.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 40 – CI/CD Pipeline with Multiple Apps

- name: Scenario 40 - CI/CD Multiple Apps

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy app1 pipeline

template:

src: app1_pipeline.xml.j2

dest: /var/lib/jenkins/jobs/app1/config.xml

- name: Deploy app2 pipeline

template:

src: app2_pipeline.xml.j2

dest: /var/lib/jenkins/jobs/app2/config.xml

notify: restart jenkins

handlers:

- name: restart jenkins

service:

name: jenkins

state: restarted

SCENARIO PLAYBOOK 41 – Deploy Java Microservices with Docker

- name: Scenario 41 - Java Microservices Deployment

hosts: appservers

become: yes

roles:

- role: docker

- role: java

tasks:

- name: Deploy microservice Docker images

docker_image:

name: "{{ item.name }}"

source: pull

loop:

- { name: 'service1:latest' }

- { name: 'service2:latest' }

- name: Start Docker containers

```
docker_container:
  name: "{{ item.name }}"
  image: "{{ item.name }}"
  state: started

loop:
  - { name: 'service1:latest' }
  - { name: 'service2:latest' }
```

SCENARIO PLAYBOOK 42 – Setup MySQL Galera Cluster

```
---
- name: Scenario 42 - MySQL Galera Cluster
  hosts: dbservers
  become: yes
  roles:
    - role: mysql
  tasks:
    - name: Deploy Galera config
      template:
        src: galera.cnf.j2
        dest: /etc/mysql/conf.d/galera.cnf
      notify: restart mysql

  handlers:
    - name: restart mysql
      service:
        name: mysqld
        state: restarted
```

SCENARIO PLAYBOOK 43 – Deploy Python Django App with Gunicorn & Nginx

- name: Scenario 43 - Django App Deployment

hosts: appservers

become: yes

roles:

- role: python

- role: nginx

tasks:

- name: Deploy app code

git:

repo: 'https://github.com/org/djangoapp.git'

dest: /opt/djangoapp

- name: Restart Gunicorn service

systemd:

name: djangoapp

state: restarted

SCENARIO PLAYBOOK 44 – Setup Kubernetes Namespaces and RBAC

- name: Scenario 44 - Kubernetes Namespaces & RBAC

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

tasks:

- name: Create namespaces

shell: "kubectl create namespace {{ item }}"

loop:

- dev

- staging
- prod

- name: Apply RBAC roles

shell: "kubectl apply -f rbac.yaml"

SCENARIO PLAYBOOK 45 – Configure Jenkins Multibranch Pipeline

- name: Scenario 45 - Jenkins Multibranch Pipeline

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy multibranch pipeline job

template:

src: multibranch_job.xml.j2

dest: /var/lib/jenkins/jobs/multibranch/config.xml

notify: restart jenkins

handlers:

- name: restart jenkins

service:

name: jenkins

state: restarted

SCENARIO PLAYBOOK 46 – Setup ELK Stack with Log Forwarding

- name: Scenario 46 - ELK Stack Log Forwarding

hosts: monitoring

become: yes

roles:

- role: elasticsearch
- role: logstash
- role: kibana
- role: filebeat

tasks:

- name: Deploy logstash pipelines

template:

src: pipelines.conf.j2

dest: /etc/logstash/conf.d/pipelines.conf

notify: restart logstash

handlers:

- name: restart logstash

service:

name: logstash

state: restarted

SCENARIO PLAYBOOK 47 – Configure Prometheus Blackbox Exporter

- name: Scenario 47 - Prometheus Blackbox Exporter

hosts: monitoring

become: yes

roles:

- role: prometheus
- role: blackbox_exporter

tasks:

- name: Deploy blackbox config

template:

src: blackbox.yml.j2

dest: /etc/blackbox_exporter/blackbox.yml

notify: restart blackbox_exporter

handlers:

- name: restart blackbox_exporter

service:

name: blackbox_exporter

state: restarted

SCENARIO PLAYBOOK 48 – Deploy HAProxy with Multiple Backends

- name: Scenario 48 - HAProxy Multiple Backends

hosts: loadbalancers

become: yes

roles:

- role: haproxy

tasks:

- name: Deploy HAProxy backend config

template:

src: haproxy_backends.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 49 – Setup Redis Cluster with Sentinel Failover

- name: Scenario 49 - Redis Sentinel Failover

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy sentinel config

template:

src: sentinel_failover.conf.j2

dest: /etc/redis/sentinel.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 50 – Configure Automated DB Backups with Retention

- name: Scenario 50 - Automated DB Backups

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Deploy backup script

template:

src: backup_with_retention.sh.j2

dest: /opt/backup/db_backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 51 – Deploy Java Microservices with Kubernetes

- name: Scenario 51 - Java Microservices on Kubernetes

hosts: k8s_nodes

become: yes

roles:

- role: kube_master
- role: kube_worker

tasks:

- name: Apply deployment manifests

shell: "kubectl apply -f /opt/k8s/deployments/"

SCENARIO PLAYBOOK 52 – Setup MySQL High Availability with Keepalived

- name: Scenario 52 - MySQL HA with Keepalived

hosts: dbservers

become: yes

roles:

- role: mysql
- role: keepalived

tasks:

- name: Deploy MySQL HA config

template:

src: mysql_ha.cnf.j2

dest: /etc/mysql/conf.d/mysql_ha.cnf

notify: restart mysql

handlers:

- name: restart mysql

service:

name: mysqld

state: restarted

SCENARIO PLAYBOOK 53 – Deploy Python Flask App with Gunicorn and Nginx

- name: Scenario 53 - Flask App Deployment

hosts: appservers

become: yes

roles:

- role: python
- role: nginx

tasks:

- name: Deploy app code

git:

repo: 'https://github.com/org/flaskapp.git'

```
    dest: /opt/flaskapp
- name: Restart Gunicorn

systemd:
    name: flaskapp
    state: restarted
```

SCENARIO PLAYBOOK 54 – Setup Kubernetes Ingress Controller

```
---
- name: Scenario 54 - Kubernetes Ingress

hosts: k8s_nodes

become: yes

roles:
    - role: kube_master

tasks:
    - name: Deploy ingress controller
      shell: "kubectl apply -f /opt/k8s/ingress-controller.yaml"
```

SCENARIO PLAYBOOK 55 – Jenkins CI/CD Pipeline for Multi-Branch

```
---
- name: Scenario 55 - Jenkins Multi-Branch Pipeline

hosts: cicdservers

become: yes

roles:
    - role: jenkins

tasks:
    - name: Deploy multi-branch pipeline
      template:
        src: multi_branch_job.xml.j2
        dest: /var/lib/jenkins/jobs/multi_branch/config.xml
```

notify: restart jenkins

handlers:

- name: restart jenkins

service:

name: jenkins

state: restarted

SCENARIO PLAYBOOK 56 – Setup ELK Stack with Custom Pipelines

- name: Scenario 56 - ELK Custom Pipelines

hosts: monitoring

become: yes

roles:

- role: elasticsearch

- role: logstash

- role: kibana

- role: filebeat

tasks:

- name: Deploy logstash pipelines

template:

src: pipelines_custom.conf.j2

dest: /etc/logstash/conf.d/pipelines.conf

notify: restart logstash

handlers:

- name: restart logstash

service:

name: logstash

state: restarted

SCENARIO PLAYBOOK 57 – Prometheus Node & Blackbox Exporters

- name: Scenario 57 - Prometheus Node + Blackbox

hosts: monitoring

become: yes

roles:

- role: prometheus
- role: node_exporter
- role: blackbox_exporter

tasks:

- name: Deploy exporter configs

template:

src: exporters.yml.j2

dest: /etc/prometheus/exporters.yml

notify: reload prometheus

handlers:

- name: reload prometheus

service:

name: prometheus

state: reloaded

SCENARIO PLAYBOOK 58 – HAProxy Load Balancer with SSL & Multiple Apps

- name: Scenario 58 - HAProxy SSL Multi-App

hosts: loadbalancers

become: yes

roles:

- role: haproxy
- role: certbot

tasks:

- name: Deploy HAProxy config

template:

src: haproxy_multi.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 59 – Redis Cluster with Sentinel Monitoring

- name: Scenario 59 - Redis Cluster Sentinel

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy sentinel configs

template:

src: sentinel_cluster.conf.j2

dest: /etc/redis/sentinel.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 60 – Automated Backup with Retention Policy

- name: Scenario 60 - Automated Backup with Retention

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Deploy backup script

template:

src: backup_retention.sh.j2

dest: /opt/backup/backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 61 – Deploy Java Spring Boot Microservices with Docker Swarm

- name: Scenario 61 - Spring Boot Microservices Docker Swarm

hosts: swarm_nodes

become: yes

roles:

- role: docker

- role: java

tasks:

- name: Deploy microservice images

docker_image:

name: "{{ item }}"

source: pull

loop:

- service1:latest

- service2:latest

- name: Start containers

docker_swarm_service:

name: "{{ item }}"

image: "{{ item }}"

state: present

loop:

- service1:latest

- service2:latest

SCENARIO PLAYBOOK 62 – Setup MySQL Master-Master Replication

- name: Scenario 62 - MySQL Master-Master

hosts: dbservers

become: yes

roles:

- role: mysql

tasks:

- name: Deploy master-master replication config

template:

src: master_master.cnf.j2

dest: /etc/mysql/conf.d/master_master.cnf

notify: restart mysql

handlers:

- name: restart mysql

service:

name: mysqld

state: restarted

SCENARIO PLAYBOOK 63 – Deploy Python Django App with Gunicorn and Nginx

- name: Scenario 63 - Django App Deployment

hosts: appservers

become: yes

roles:

- role: python
- role: nginx

tasks:

- name: Deploy app code

git:

repo: 'https://github.com/org/djangoapp.git'

dest: /opt/djangoapp

- name: Restart Gunicorn

systemd:

name: djangoapp

state: restarted

SCENARIO PLAYBOOK 64 – Kubernetes Cluster with Helm Charts

- name: Scenario 64 - Kubernetes Helm Deployment

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

tasks:

- name: Deploy Helm charts

shell: "helm upgrade --install myapp /opt/helm/myapp"

SCENARIO PLAYBOOK 65 – Jenkins CI/CD Pipeline with Multi-Project

- name: Scenario 65 - Jenkins Multi-Project Pipeline

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy project1 pipeline

template:

src: project1_pipeline.xml.j2

dest: /var/lib/jenkins/jobs/project1/config.xml

- name: Deploy project2 pipeline

template:

src: project2_pipeline.xml.j2

dest: /var/lib/jenkins/jobs/project2/config.xml

notify: restart jenkins

handlers:

- name: restart jenkins

service:

name: jenkins

state: restarted

SCENARIO PLAYBOOK 66 – ELK Stack with Custom Log Parsing

- name: Scenario 66 - ELK Custom Parsing

hosts: monitoring

become: yes

roles:

- role: elasticsearch

- role: logstash

- role: kibana

- role: filebeat

tasks:

- name: Deploy logstash parsing rules

template:

src: logstash_rules.conf.j2

dest: /etc/logstash/conf.d/logstash_rules.conf

notify: restart logstash

handlers:

- name: restart logstash

service:

name: logstash

state: restarted

SCENARIO PLAYBOOK 67 – Prometheus + Grafana + Alertmanager Setup

- name: Scenario 67 - Prometheus & Grafana Monitoring

hosts: monitoring

become: yes

roles:

- role: prometheus

- role: grafana

- role: alertmanager

tasks:

- name: Deploy alertmanager config

template:

src: alertmanager.yml.j2

dest: /etc/alertmanager/alertmanager.yml

notify: restart alertmanager

handlers:

- name: restart alertmanager

service:

name: alertmanager

state: restarted

SCENARIO PLAYBOOK 68 – HAProxy Load Balancer with SSL Certificates

- name: Scenario 68 - HAProxy SSL

hosts: loadbalancers

become: yes

roles:

- role: haproxy

- role: certbot

tasks:

- name: Deploy HAProxy config

template:

src: haproxy_ssl_multi.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 69 – Redis Cluster with Sentinel Failover

- name: Scenario 69 - Redis Sentinel Failover

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy sentinel failover config

template:

src: sentinel_failover.conf.j2
dest: /etc/redis/sentinel.conf
notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 70 – Automated Database Backups with Retention Policy

- name: Scenario 70 - Automated DB Backup

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Deploy backup script

template:

src: backup_db_retention.sh.j2

dest: /opt/backup/db_backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 71 – Deploy Java Microservices with Kubernetes and Helm

- name: Scenario 71 - Java Microservices Kubernetes Helm

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

tasks:

- name: Deploy Helm charts for microservices

shell: "helm upgrade --install service1 /opt/helm/service1"

- name: Deploy Helm charts for service2

shell: "helm upgrade --install service2 /opt/helm/service2"

SCENARIO PLAYBOOK 72 – Setup MySQL Cluster with ProxySQL

- name: Scenario 72 - MySQL Cluster with ProxySQL

hosts: dbservers

become: yes

roles:

- role: mysql

- role: proxysql

tasks:

- name: Deploy ProxySQL config

template:

src: proxysql.cnf.j2

dest: /etc/proxysql.cnf

notify: restart proxysql

handlers:

- name: restart proxysql

service:

name: proxysql

state: restarted

SCENARIO PLAYBOOK 73 – Deploy Python Flask App with Nginx and Gunicorn

- name: Scenario 73 - Flask App Deployment

hosts: appservers

become: yes

roles:

- role: python

- role: nginx

tasks:

- name: Deploy Flask code

git:

repo: 'https://github.com/org/flaskapp.git'

dest: /opt/flaskapp

- name: Restart Gunicorn service

systemd:

name: flaskapp

state: restarted

SCENARIO PLAYBOOK 74 – Kubernetes Cluster Setup with Calico Networking

- name: Scenario 74 - Kubernetes with Calico

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

tasks:

- name: Apply Calico networking

- shell: "kubectl apply -f /opt/k8s/calico.yaml"

SCENARIO PLAYBOOK 75 – Jenkins CI/CD Pipeline for Multi-Repo Projects

- name: Scenario 75 - Jenkins Multi-Repo CI/CD

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy repo1 pipeline

- template:

- src: repo1_pipeline.xml.j2

- dest: /var/lib/jenkins/jobs/repo1/config.xml

- name: Deploy repo2 pipeline

- template:

- src: repo2_pipeline.xml.j2

- dest: /var/lib/jenkins/jobs/repo2/config.xml

- notify: restart jenkins

handlers:

- name: restart jenkins

service:

name: jenkins

state: restarted

SCENARIO PLAYBOOK 76 – ELK Stack Deployment with Beats & Custom Dashboards

- name: Scenario 76 - ELK + Beats + Dashboards

hosts: monitoring

become: yes

roles:

- role: elasticsearch

- role: logstash

- role: kibana

- role: filebeat

- role: metricbeat

tasks:

- name: Deploy dashboards

copy:

src: dashboards/

dest: /var/lib/kibana/dashboards/

SCENARIO PLAYBOOK 77 – Prometheus + Grafana + Blackbox Exporter Monitoring

- name: Scenario 77 - Prometheus & Grafana Blackbox

hosts: monitoring

become: yes

roles:

- role: prometheus
- role: grafana
- role: blackbox_exporter

tasks:

- name: Deploy exporter configs

template:

src: exporters.yml.j2

dest: /etc/prometheus/exporters.yml

notify: reload prometheus

handlers:

- name: reload prometheus

service:

name: prometheus

state: reloaded

SCENARIO PLAYBOOK 78 – HAProxy Load Balancer with Multiple Domains & SSL

- name: Scenario 78 - HAProxy SSL Multi-Domain

hosts: loadbalancers

become: yes

roles:

- role: haproxy
- role: certbot

tasks:

- name: Deploy HAProxy config for multiple domains

template:

src: haproxy_multi_domains.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 79 – Redis Cluster with Sentinel & Automatic Failover

- name: Scenario 79 - Redis Sentinel Automatic Failover

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy sentinel config

template:

src: sentinel_auto_failover.conf.j2

dest: /etc/redis/sentinel.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 80 – Automated Backup with Retention and Alerts

- name: Scenario 80 - Automated Backup + Alerts

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Deploy backup script

template:

src: backup_alerts.sh.j2

dest: /opt/backup/backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 81 – Deploy Java Microservices with Kubernetes + Ingress

- name: Scenario 81 - Java Microservices Kubernetes with Ingress

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

tasks:

- name: Deploy service1 Helm chart
shell: "helm upgrade --install service1 /opt/helm/service1"
- name: Deploy service2 Helm chart
shell: "helm upgrade --install service2 /opt/helm/service2"
- name: Apply ingress resources
shell: "kubectl apply -f /opt/k8s/ingress/"

SCENARIO PLAYBOOK 82 – Setup MySQL Master-Slave with Monitoring

- name: Scenario 82 - MySQL Master-Slave with Monitoring
hosts: dbservers
become: yes
roles:
 - role: mysql
 - role: monitoringtasks:
 - name: Deploy replication config
template:
 - src: replication.cnf.j2
 - dest: /etc/mysql/conf.d/replication.cnfnotify: restart mysqlhandlers:
 - name: restart mysql
service:
 - name: mysqld
 - state: restarted

SCENARIO PLAYBOOK 83 – Deploy Python Django App with Gunicorn, Nginx & SSL

- name: Scenario 83 - Django App Deployment with SSL

hosts: appservers

become: yes

roles:

- role: python

- role: nginx

- role: certbot

tasks:

- name: Deploy Django code

git:

repo: 'https://github.com/org/djangoapp.git'

dest: /opt/djangoapp

- name: Restart Gunicorn

systemd:

name: djangoapp

state: restarted

SCENARIO PLAYBOOK 84 – Kubernetes Cluster with Metrics Server and Prometheus

- name: Scenario 84 - Kubernetes Metrics + Prometheus

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

- role: prometheus

tasks:

- name: Deploy metrics server

- shell: "kubectl apply -f /opt/k8s/metrics-server.yaml"

SCENARIO PLAYBOOK 85 – Jenkins CI/CD for Multi-Service Microservices

- name: Scenario 85 - Jenkins Multi-Service CI/CD

- hosts: cicdservers

- become: yes

- roles:

- role: jenkins

- tasks:

- name: Deploy pipeline for service1

- template:

- src: service1_pipeline.xml.j2

- dest: /var/lib/jenkins/jobs/service1/config.xml

- name: Deploy pipeline for service2

- template:

- src: service2_pipeline.xml.j2

- dest: /var/lib/jenkins/jobs/service2/config.xml

- notify: restart jenkins

- handlers:

- name: restart jenkins

- service:

- name: jenkins

- state: restarted

SCENARIO PLAYBOOK 86 – ELK Stack with Custom Dashboards & Alerts

- name: Scenario 86 - ELK + Dashboards + Alerts

hosts: monitoring

become: yes

roles:

- role: elasticsearch

- role: logstash

- role: kibana

- role: filebeat

tasks:

- name: Deploy dashboards

copy:

src: dashboards/

dest: /var/lib/kibana/dashboards/

- name: Deploy log alerts

template:

src: log_alerts.yml.j2

dest: /etc/logstash/conf.d/alerts.yml

notify: restart logstash

handlers:

- name: restart logstash

service:

name: logstash

state: restarted

SCENARIO PLAYBOOK 87 – Prometheus Node & Blackbox Exporter with Grafana Dashboards

- name: Scenario 87 - Prometheus + Blackbox + Grafana

hosts: monitoring

become: yes

roles:

- role: prometheus
- role: blackbox_exporter
- role: grafana

tasks:

- name: Deploy exporter configs

template:

src: exporters.yml.j2

dest: /etc/prometheus/exporters.yml

notify: reload prometheus

handlers:

- name: reload prometheus

service:

name: prometheus

state: reloaded

SCENARIO PLAYBOOK 88 – HAProxy Load Balancer with Multiple Backends & SSL

- name: Scenario 88 - HAProxy Multi-Backend SSL

hosts: loadbalancers

become: yes

roles:

- role: haproxy

- role: certbot

tasks:

- name: Deploy HAProxy config

template:

src: haproxy_multi_backends.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 89 – Redis Cluster with Sentinel & Auto-Failover

- name: Scenario 89 - Redis Sentinel Auto-Failover

hosts: cacheservers

become: yes

roles:

- role: redis

tasks:

- name: Deploy sentinel auto-failover config

template:

src: sentinel_auto_failover.conf.j2

dest: /etc/redis/sentinel.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 90 – Automated Backup with Retention & Email Alerts

- name: Scenario 90 - Automated Backup with Email Alerts

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Deploy backup script

template:

src: backup_email.sh.j2

dest: /opt/backup/backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

SCENARIO PLAYBOOK 91 – Deploy Java Microservices with Kubernetes + Helm + Ingress

- name: Scenario 91 - Java Microservices Kubernetes Helm with Ingress

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

tasks:

- name: Deploy service1 Helm chart

 - shell: "helm upgrade --install service1 /opt/helm/service1"

- name: Deploy service2 Helm chart

 - shell: "helm upgrade --install service2 /opt/helm/service2"

- name: Apply ingress resources

 - shell: "kubectl apply -f /opt/k8s/ingress/"

SCENARIO PLAYBOOK 92 – Setup MySQL Cluster with Monitoring & Alerts

- name: Scenario 92 - MySQL Cluster with Monitoring & Alerts

hosts: dbservers

become: yes

roles:

- role: mysql

- role: monitoring

tasks:

- name: Deploy cluster replication config

 - template:

 - src: cluster_replication.cnf.j2

 - dest: /etc/mysql/conf.d/cluster_replication.cnf

 - notify: restart mysql

handlers:

- name: restart mysql

service:

name: mysqld

state: restarted

SCENARIO PLAYBOOK 93 – Deploy Python Django App with Nginx, Gunicorn & SSL

- name: Scenario 93 - Django App with SSL Deployment

hosts: appservers

become: yes

roles:

- role: python

- role: nginx

- role: certbot

tasks:

- name: Deploy Django code

git:

repo: 'https://github.com/org/djangoapp.git'

dest: /opt/djangoapp

- name: Restart Gunicorn

systemd:

name: djangoapp

state: restarted

SCENARIO PLAYBOOK 94 – Kubernetes Cluster with Metrics + Prometheus + Grafana

- name: Scenario 94 - Kubernetes Metrics + Prometheus + Grafana

hosts: k8s_nodes

become: yes

roles:

- role: kube_master

- role: kube_worker

- role: prometheus

- role: grafana

tasks:

- name: Deploy metrics server

- shell: "kubectl apply -f /opt/k8s/metrics-server.yaml"

SCENARIO PLAYBOOK 95 – Jenkins Multi-Service CI/CD Pipeline with Notifications

- name: Scenario 95 - Jenkins Multi-Service CI/CD with Notifications

hosts: cicdservers

become: yes

roles:

- role: jenkins

tasks:

- name: Deploy pipeline for service1

- template:

- src: service1_pipeline.xml.j2

- dest: /var/lib/jenkins/jobs/service1/config.xml

- name: Deploy pipeline for service2

- template:

- src: service2_pipeline.xml.j2

- dest: /var/lib/jenkins/jobs/service2/config.xml

- notify: restart jenkins

handlers:

- name: restart jenkins

service:

- name: jenkins

- state: restarted

SCENARIO PLAYBOOK 96 – ELK Stack with Custom Dashboards, Alerts & Filebeat

- name: Scenario 96 - ELK + Dashboards + Alerts + Filebeat

- hosts: monitoring

- become: yes

- roles:

- role: elasticsearch

- role: logstash

- role: kibana

- role: filebeat

- tasks:

- name: Deploy dashboards

- copy:

- src: dashboards/

- dest: /var/lib/kibana/dashboards/

- name: Deploy log alerts

- template:

- src: log_alerts.yml.j2

- dest: /etc/logstash/conf.d/alerts.yml

- notify: restart logstash

handlers:

- name: restart logstash

service:

name: logstash

state: restarted

SCENARIO PLAYBOOK 97 – Prometheus + Grafana + Node & Blackbox Exporters

- name: Scenario 97 - Prometheus + Grafana + Exporters

hosts: monitoring

become: yes

roles:

- role: prometheus
- role: grafana
- role: node_exporter
- role: blackbox_exporter

tasks:

- name: Deploy exporter configs

template:

src: exporters.yml.j2

dest: /etc/prometheus/exporters.yml

notify: reload prometheus

handlers:

- name: reload prometheus

service:

name: prometheus

state: reloaded

SCENARIO PLAYBOOK 98 – HAProxy Load Balancer with SSL, Multiple Domains & Health Checks

- name: Scenario 98 - HAProxy SSL Multi-Domain + Health Checks

hosts: loadbalancers

become: yes

roles:

- role: haproxy

- role: certbot

tasks:

- name: Deploy HAProxy config

template:

src: haproxy_multi_domains_health.cfg.j2

dest: /etc/haproxy/haproxy.cfg

notify: reload haproxy

handlers:

- name: reload haproxy

service:

name: haproxy

state: reloaded

SCENARIO PLAYBOOK 99 – Redis Cluster with Sentinel, Auto-Failover & Monitoring

- name: Scenario 99 - Redis Sentinel Auto-Failover with Monitoring

hosts: cacheservers

become: yes

roles:

- role: redis

- role: monitoring

tasks:

- name: Deploy sentinel auto-failover config

template:

src: sentinel_auto_failover.conf.j2

dest: /etc/redis/sentinel.conf

notify: restart redis

handlers:

- name: restart redis

service:

name: redis

state: restarted

SCENARIO PLAYBOOK 100 – Automated Backup with Retention, Alerts & Verification

- name: Scenario 100 - Automated Backup with Retention & Verification

hosts: backupservers

become: yes

roles:

- role: backup

tasks:

- name: Deploy backup script

template:

src: backup_verify.sh.j2

dest: /opt/backup/backup.sh

notify: reload cron

handlers:

- name: reload cron

service:

name: crond

state: restarted

ALL DONE 