Zabbix Full Deployment Guide (Docker Based)

Version: Final Stable Release

1. Overview

This document provides a complete and professionally formatted guide for deploying Zabbix using Docker and Docker Compose on RHEL/CentOS-based systems. It includes installation steps, a corrected docker-compose.yml file, verification steps, default credentials, and troubleshooting references.

2. Install Docker Engine

Run the following commands in order:

```
sudo dnf remove docker docker-client docker-client-latest docker-common docker-latest docker-latest-logr

sudo dnf -y install dnf-plugins-core

sudo dnf config-manager --add-repo https://download.docker.com/linux/centos/docker-ce.repo

sudo dnf install docker-ce docker-ce-cli containerd.io docker-buildx-plugin docker-compose-plugin -y

sudo systemctl start docker
sudo systemctl enable docker

docker --version
docker compose version
```

3. Install Docker Compose (If not included)

```
sudo curl -L "https://github.com/docker/compose/releases/download/v2.29.2/docker-compose-$(uname -s)-$(u

sudo chmod +x /usr/local/bin/docker-compose

docker-compose version
```

4. Final Corrected docker-compose.yml File

Use the following updated and validated compose file. Save it as docker-compose.yml:

```
services:
  mysql:
    image: mysql:8.0
    container_name: zabbix-mysql
    environment:
      MYSQL_ROOT_PASSWORD: rootpass
      MYSQL_DATABASE: zabbix
      MYSQL_USER: zabbix
      MYSQL_PASSWORD: zabbixpass
      MYSQL_SSL_MODE: DISABLED
    command: --default-authentication-plugin=mysql_native_password --skip-ssl
    volumes:
```

```
      - mysql_data:/var/lib/mysql
    networks:
      - zbx-net

  zabbix-server:
    image: zabbix/zabbix-server-mysql:alpine-latest
    container_name: zabbix-server
    environment:
      DB_SERVER_HOST: mysql
      MYSQL_USER: zabbix
      MYSQL_PASSWORD: zabbixpass
      MYSQL_DATABASE: zabbix
      MYSQL_SSL_MODE: disable
    depends_on:
      - mysql
    ports:
      - "10051:10051"
    networks:
      - zbx-net

  zabbix-web:
    image: zabbix/zabbix-web-apache-mysql:alpine-latest
    container_name: zabbix-web
    environment:
      DB_SERVER_HOST: mysql
      MYSQL_USER: zabbix
      MYSQL_PASSWORD: zabbixpass
      MYSQL_DATABASE: zabbix
      MYSQL_SSL_MODE: disable
      PHP_TZ: Asia/Kolkata
    depends_on:
      - mysql
      - zabbix-server
    ports:
      - "8080:8080"
    networks:
      - zbx-net

  zabbix-agent:
    image: zabbix/zabbix-agent:alpine-latest
    container_name: zabbix-agent
    depends_on:
      - zabbix-server
    networks:
      - zbx-net

networks:
  zbx-net:

volumes:
  mysql_data:
```

5. Deployment Steps

```
docker compose down -v
docker compose up -d

docker ps
```

6. Verify MySQL Database

```
docker exec -it zabbix-mysql mysql -uzabbix -pzabbixpass -e "show databases;"
```

7. Web Interface Login

Open the Zabbix dashboard in your browser: http://:8080

Field	Value
Username	Admin
Password	zabbix

8. Troubleshooting

• If TLS/SSL errors appear → Ensure MYSQL_SSL_MODE=disable. • If browser not loading UI → Open firewall ports: firewall-cmd --add-port=8080/tcp --permanent firewall-cmd --reload • If Docker network error → Restart Docker: systemctl restart docker