HPE AutoPass License Server v9.15

Docker Container Deployment

Autopass License Server (APLS) v9.14 and later will be available as a Docker container image. The following instructions are a general use case set of configurations and requirements to run the APLS Docker image as a container on Linux based systems.

About the Image

The Autopass License Server (APLS) Docker image was built using the Apache Tomcat Official repository image with the Java openjdk-8 from Amazon Corretto. The image is a self-contained application with everything included to get you started using APLS Docker container.

Image Specifications

Tomcat Web Server/Java version: Tomcat 9 with OpenJDK Runtime Environment Corretto-8

Autopass License Server current version: v9.15.x

Supported Architecture

Our image is only supported for x86-64/amd64.

Usage

The process for using APLS deployed as a docker container involves installing the image from the private HPE's docker registry, performing the Data persistence configuration and Creating/Running the container.

Installing APLS Docker container image

APLS docker images are available at HPE's docker registry. To login to the HPE docker registry it requires your HPE Passport **email id** and password '**hpe_eval**'. APLS images will be signed by HPE with name '**hpe_autopass**'. Please follow these steps to install the APLS docker image:

1. Login to the HPE docker registry using your HPE Passport email id and password '**hpe_eval**' :

```
docker login hub.myenterpriselicense.hpe.com -u  <HPE-PASSPORT-EMAIL-ID> -p hpe_eval
```

2. Enable docker content trust:

```
export DOCKER_CONTENT_TRUST=1
```

3. Optionally, inspect repos and validate HPE signer name for all the APLS docker container images:

```
docker trust inspect --pretty hub.myenterpriselicense.hpe.com/hpe_eval/autopass/apls
```

4. Pull the image with a tag:

```
docker pull hub.myenterpriselicense.hpe.com/hpe_eval/autopass/apls: <image-tag>
```

Data Persistence Configuration

In order to retain configurations and installed licenses across containers, it is recommended to create a volume to persist the **/hpe** directory. This directory contains the following details:

Image Directory	Subdirectories	Description
/hpe	AutoPass/LicenseServer/data ..data/conf ..data/log ..data/database	License server configuration directory. Contains database, logs and configuration files required to persist setup across containers transactions such as restarts, deletion or upgrades to new image tags.

Revised September 2023

The following are suggested steps to create a docker volume and mapping for persistence. It is recommended to create the volume using docker volume create command to be able to assign a volume name (aka. apls-volume) as detailed below:

```
docker volume create apls-volume
```

Note: By default, docker usually creates the volume at the directory: /var/lib/docker/volumes

Creating and Running the APLS container

To get started with the APLS Docker container you may use either docker cli or docker-compose using the following instructions below:

Docker CLI

```
docker run -d \
--name apls \
-v apls-volume:/hpe \
-p 5814:5814 \
--restart unless-stopped \
hub.myenterpriselicense.hpe.com/hpe_eval/autopass/apls:<image-tag>
```

Docker Compose

First, copy the contents below into a file named docker-compose.yml :

```
version: '3.7'
services:
  web-app:
    container_name: apls
    image: hub.myenterpriselicense.hpe.com/hpe_eval/autopass/apls:<image-tag>
    restart: unless-stopped
    ports:
      - "5814:5814"
    volumes:
      - apls-volume:/hpe

volumes:
  apls-volume:
           external: true
```

Then execute the following command within the same directory of the docker-compose file created above.

```
docker-compose up -d
```

Access the APLS Web Portal:

Open a Web Browser and enter the following URL:

https://localhost:5814/autopass

Ports

The following is a list of exposed ports:

5814/tcp	APLS web application default listening port for Web UI access.

Application Logs

The APLS application logs can be found at the following paths:

1. Within the container when no data persistence has been configured:
    a. /hpe/AutoPass/LicenseServer/data/log
2. At the host docker volume (aka. apls-volume) when data persistence has been configured:
    a. /var/lib/docker/volumes/apls-volume/_data/AutoPass/LicenseServer/data/log

Image Version Tags

It is suggested to use one of the numbered versions tagged instead of using the **latest** tag to prevent an unplanned software upgrade during system maintenance.

Tag	Description
9.15	Current version tagged. (Recommended Tag)
9.14	First official docker container image version released to production.

Version Changes

- 9.15:
    - Vulnerability Fixes
        - Common Weakness Enumeration (CWE) fixes from Static Code Analysis and Web Application Scanning tool reports.
            - CWE-307: Improper Restriction of Excessive Authentication Attempts (Brute force protection).
            - CWE-204: Observable Response Discrepancy (user enumeration).
            - CWE-620: Unverified Password Change.
        - jQuery upgrade to v3.6.4
            - CVE's: CVE-2012-6708, CVE-2015-9251, CVE-2019-11358, CVE-2020-11022, CVE-2020-11023, CVE-2020-7656, CVE-2011-4969.
        - Bootstrap upgrade to v3.4.1
            - CVE's: CVE-2016-10735, CVE-2018-14040, CVE-2018-14041, CVE-2018-14042, CVE-2018-20676, CVE-2018-20677, CVE-2019-8331.
        - MomentJS upgrade to v2.29.4
            - CVE's: CVE-2017-18214, CVE-2022-24785.
        - Java runtime Amazon Corretto upgrade to latest 1.8 (8.382.05)
            - CVE's: CVE-2023-22045, CVE-2023-22049, CVE-2023-22043.
        - Apache struts upgrade to v2.5.31
            - CVE's: CVE-2023-34396 , CVE-2023-34149.
        - Updated commons-fileupload to v1.5
            - CVE's: CVE-2023-24998.
    - Enhancements:
        - CSS/UI styling improvements across the application.
        - Implemented Brute force protection against repeated failed login attempts which affected the server on DB configuration.
        - Forgot password process enhancements.
    - Minimum System Requirement Changes:
        - Mozilla Firefox - Latest 2 major stable releases.
        - Microsoft Edge - Latest 2 major stable releases.
        - Google Chrome - Latest 2 major stable releases.
        - Internet Explorer - No longer supported.

- 9.14 : First official docker container image version released to production.