CONFIGURATION GUIDES › DOCKER

Deploy SingleAgent in a Docker Container

Applicare 10.0 · Updated September 13, 2024 · docker, singleagent · **Pending technical review**

Step 1: Add the following packages to include the **apk** command if the Docker container is running on **Alpine OS.**

curl, vim, unzip, bash, wget

BASH

```
Example:

RUN apk add --no-cache \
openjdk8-jre \
wkhtmltopdf \
aws-cli \
busybox-extras \
curl \
vim \
wget \
bash \
unzip \
tzdata && cp /usr/share/zoneinfo/Asia/Kolkata /etc/localtime && echo 'Asia/Kolkata' >
/etc/timezone
```

Step 2: Create a file named startAgent.sh with the following content in the directory containing the **Dockerfile**.

```bash
#!/bin/sh

SERVER_NAME=`hostname`_sa
export SERVER_NAME

ARCTURUS_HOME=/usr/local/Applicare
export ARCTURUS_HOME

JAVA_HOME_PATH=$JAVA_HOME

INBUILD_JAVA_PATH=$ARCTURUS_HOME/jre
export INBUILD_JAVA_PATH

if [[ $(uname -s) == "Darwin" ]]; then
JAVA_HOME_PATH="$ARCTURUS_HOME/jre/mac/zulu-8_jre/Contents/Home"
else
JAVA_HOME_PATH="$ARCTURUS_HOME/jre/linux/jre"
fi

JAVA_HOME_PATH="/usr/lib/jvm/java-1.8-openjdk/jre"
export JAVA_HOME_PATH

JAVA_OPTS="-noverify -Xmx1024m -Dserver.name=$SERVER_NAME -
javaagent:$ARCTURUS_HOME/applicare-db-aspects.jar=verbosity=0,logfile=false,norestart-
intellitrace=false -Darcturus_home=$ARCTURUS_HOME -XX:HeapDumpPath=/dev/null -
Djava.library.path=.:$ARCTURUS_HOME/bin -Dapplicare.standalone=true"
export JAVA_OPTS

EXECUTABLE_NAME=/usr/local/Applicare/AgentStartHelper.jar
export EXECUTABLE_NAME

# Run the JAR file
/usr/lib/jvm/java-1.8-openjdk/jre/bin/java -jar $JAVA_OPTS $EXECUTABLE_NAME
```

Step 3: Add the following line in the Dockerfile immediately after the **package** installation commands.

```
TEXT
# Create working directory for Applicare
RUN mkdir -p /usr/local/Applicare

# Download and unzip Applicare
RUN curl CONTROLLER_PROTOCOL://CONTROLLER_IP:CONTROLLER_PORT/applicare/standalone?
filename=ApplicareSingleAgentLinux.zip -o /usr/local/Applicare/ApplicareSingleAgentLinux.zip
RUN unzip /usr/local/Applicare/ApplicareSingleAgentLinux.zip -d /usr/local/Applicare

# Clean up
RUN rm -fv /usr/local/Applicare/ApplicareSingleAgentLinux.zip
RUN rm -fv /usr/local/Applicare/agentscripts/startAgent.sh

# Copy the start script
COPY startAgent.sh /usr/local/Applicare/agentscripts/startAgent.sh
RUN chmod -R 777 /usr/local/Applicare
```

Replace the below values in the above command

CONTROLLER_PROTOCOL -> http (or) https

CONTROLLER_IP -> Applicare Controller IP

CONTROLLER_PORT -> Applicare Controller Port

Step 4: Comment out the existing **CMD** line in the **Dockerfile** and replace it with the following CMD line.

```
TEXT
CMD ["/bin/sh", "-c", "nohup /usr/local/Applicare/agentscripts/startAgent.sh & java -jar
/usr/local/rest-TestApplication.jar"]
```

After starting the agent using the provided CMD command, it will operate similarly to running a Java application. If you need to run a different application, you can remove the current command and replace it with the appropriate command to start your desired application.

Step 5: Add and execute the following command before starting the container.

--hostname <**Server_Name**>

```
BASH
e.g.
docker run -dit -p 8086:8080 --name restapi --hostname dev c9700fdfc2f5
```

The hostname you specify will be displayed on the overview screen in Applicare.

You can use Applicare to assist with your Monitoring needs.

Monitoring with Applicare