

# Middleware Components – Execution Procedure

## Pre-check:

### Step 1: Ensure No Conflicting Applications Are Running

- Check if any related application processes are running in the background:  
\$ top (or) \$ ps -ef | grep <app\_name>
- If any such processes are found, terminate them to avoid conflicts:  
\$ kill -9 <PID>

### Step 2: Check Host IP Address

- Find your active network interface IP:  
\$ ifconfig

### Step 3: Update IP in Configuration Files

- Modify the noted IP address in the following files:  
\$ AppMain/ip\_config.ini  
\$ HMIC/ip\_config

### Step 4: Launch Middleware Containers

- Navigate to the middleware directory and start the script:  
\$ cd mw\_docker  
\$ chmod 777 run\_middleware.sh  
\$ ./run\_middleware.sh

***Note:** If the docker containers are already Up and running, no need to run above script file*

### Step 5: Verify Docker Container Status

- Check if the containers are up:  
\$ docker ps -a
- If containers are not running, manage them using:  
\$ docker start <container\_name\_or\_id>  
\$ docker stop <container\_name\_or\_id>  
\$ docker restart <container\_name\_or\_id>

## Example:

```
$ docker start velocitas-container
```

## Startup Order Preference:

1. kuksa-databroker
2. mock-provider
3. velocitas-container
4. vpredictor

***Note:** The startup order is important because the mock-provider publishes VSS signals to the kuksa-databroker, which must be running first, and then velocitas-container consumes those signals. The vpredictor should also start after the data broker is available to ensure it receives the required inputs.*

## **Step 6: Run the Applications**

Once the middleware containers are running, start the application services as required.