# RITE ARP4754A\_Prototype Tutorial

This tutorial contains simplified instructions for downloading and exploring the prototype ARP4754A Compliance Dashboard feature of RITE on a Windows PC using synthetic data supplied as an ingestion package

Copyright (c) 2024 General Electric Aerospace Research

# Step 1: Setting up RACK

Details about RACK can be found at <a href="https://github.com/ge-high-assurance/RACK">https://github.com/ge-high-assurance/RACK</a>

In this section, we will only describe the bare minimum necessary to get RACK running.

NOTE: RACK v13 is needed for this prototype. RACK v14 may work, but has not been tested

### Step 1.1:

Download and install docker from https://www.docker.com/products/dockerdesktop/

### Step 1.2:

Open Windows Powershell and execute docker pull gehighassurance/rackbox:v13.0 command

Note: When the image is successfully pulled for the first time, a "Downloaded image ..." message will appear instead of the "Image is up to date ..." message shown above

# Step 1.3:

Start a RACK docker instance by running the command docker run -- detach -p 3030:3030 -p 8050:8050 -p 8080:80 -p 1205012091:12050-12091 gehighassurance/rack-box:v13.0

RACK should be now up and running!!!

More details about running RACK using Docker can be found at <a href="https://github.com/ge-high-assurance/RACK/wiki/02-Run-a-RACK-Box-container">https://github.com/ge-high-assurance/RACK/wiki/02-Run-a-RACK-Box-container</a>

# Step 2: Downloading the RITE Prototype

# Step 2.1:

Navigate to the Release page <a href="https://github.com/ge-highassurance/RITE/releases/tag/arp4754a">https://github.com/ge-highassurance/RITE/releases/tag/arp4754a</a> v1

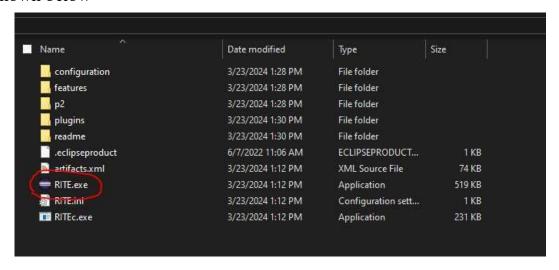


Step 2.2:

Download the RITE-win32 86 64 arp4754aWithPlan v1 file

# Step 2.3:

Unzip the <u>RITE-win32\_86\_64\_arp4754aWithPlan\_v1</u> file and click on the folders until you reach the directory with the RITE executables. Then click on the RITE application button as shown below



Select a workspace when prompted and click on the "Launch" button

RITE should now be running as an Eclipse window!!

# Step 3: Downloading the Sample Ingestion Package

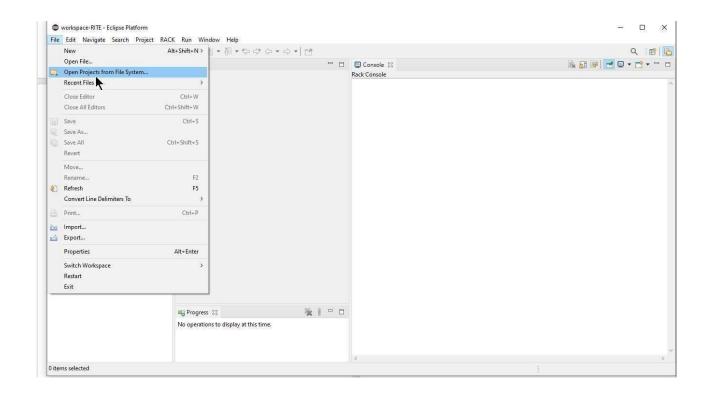
We provide sample data corresponding to the OEM ontology described in the DASC 2024 paper in the form of a readymade ingestion package. From the release page shown in Step 2.3, download the OEM-Ingestion-Package-v3.zip and unzip it somewhere convenient.

# Step 4: Ingesting the Data into RACK

With RACK running and RITE launched, follow the steps:

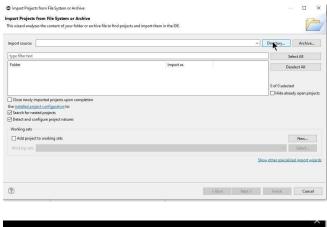
Step 4.1:

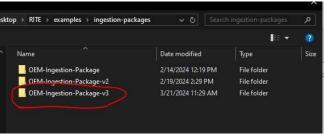
Click on "File" and then Select "Open Projects from File System"



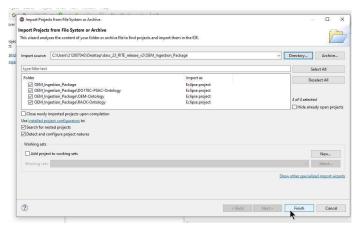
# Step 4.2:

In the pop up that appears, click on "Directory" and then select the extracted Ingestion Package directory.



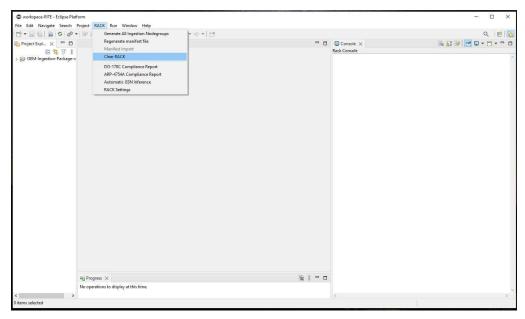


Then just click on "Finish"

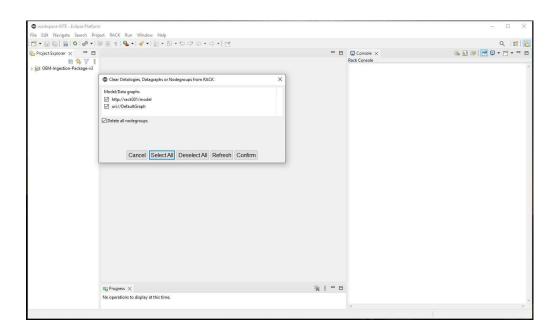


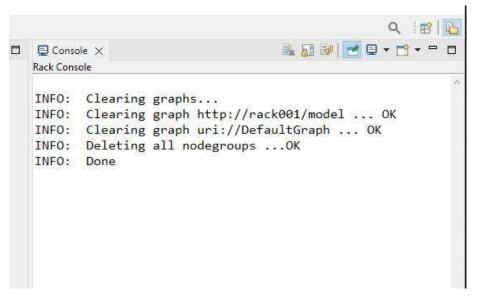
The ingestion package should now be visible on the "Package Explorer" pane Step 4.3:

Click on the "RACK" menu from the toolbar and select "Clear RACK"



In the dialogue box, select "Select All" and click "Confirm"

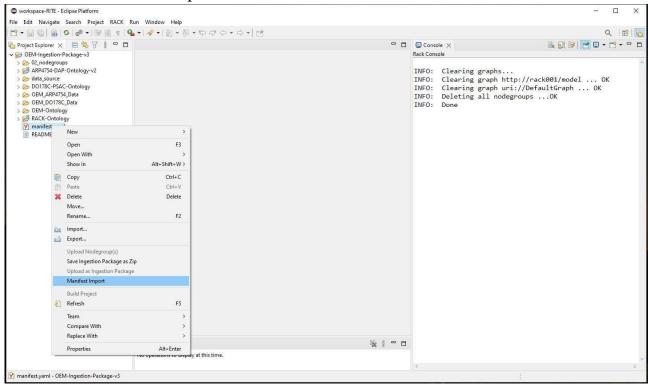




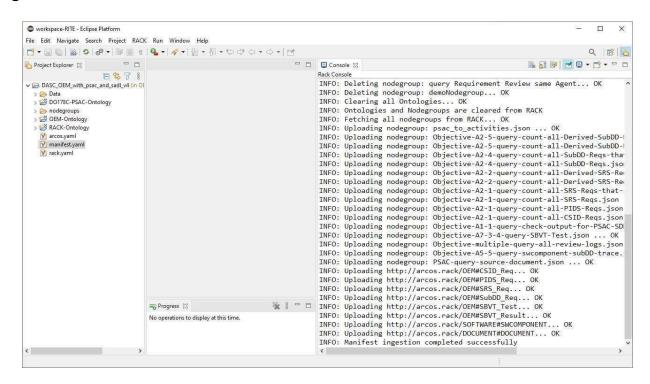
An "Info: Done" message confirms that RACK has been cleared

### Step 4.4:

Expand the ingestion package on the left, right click on the "manifest.yaml" and click on the "Manifest Import" button

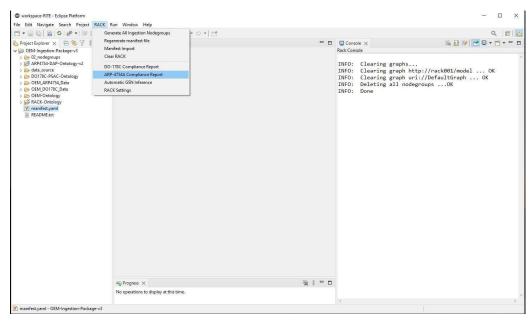


# "INFO: Manifest ingestion completed successfully" indicates successful ingestion

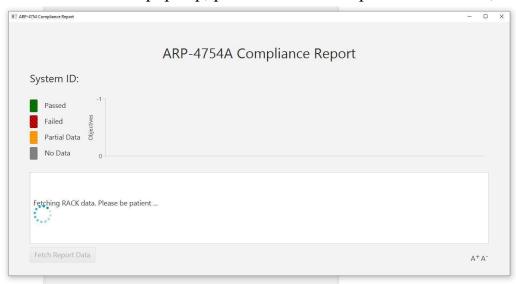


# Step 5: Running the Compliance Dashboard Step 5.1:

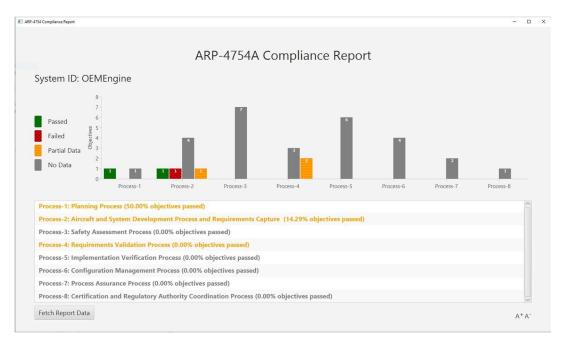
From the "RACK" menu, click on the "ARP-4754A Compliance Report" button



When the dashboard pops up, press the "Fetch Report Data" button, and wait



After the data is fetched the dashboard will be ready for you to explore!!



### NOTE:

- 1. This dashboard is only a prototype, and many aspects are still incomplete. So, several buttons and menu items may not work.
- 2. There may be bugs that we have not accounted for.