Genesys Customer Experience Insights Private Edition Guide

Before you begin deploying RAA

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Find out what to do before deploying Reporting and Analytics Aggregates (RAA).

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Limitations and assumptions

The RAA container works with the Genesys Info Mart database; deploy RAA only after you have deployed Genesys Info Mart.

The Genesys Info Mart database schema must correspond to a compatible Genesys Info Mart version. Execute the following command to discover the required Genesys Info Mart release:

```
docker run -it --entrypoint /bin/java gcxi/raa: -jar GIMAgg.jar -version
```

RAA container runs RAA on Java 11, and is supplied with the following of JDBC drivers:

- MSSQL 9.2.1 JDBC Driver
- Postgres 42.2.11 JDBC Driver
- Oracle Database 21c (21.1) JDBC Driver

Genesys recommends that you verify whether the provided driver is compatible with your database, and if it is not, you can override the JDBC driver by copying an updated driver file to the folder **lib\jdbc_driver_** within the mounted config volume, or by creating a co-named link within the folder **lib\jdbc_driver_**, which points to a driver file stored on another volume (where is the RDBMS used in your environment). This is possible because RAA is launched in a config folder, which is mounted in a container.

Download the Helm charts

To learn what Helm chart version you must download for your release, see Helm charts and containers for Genesys Customer Experience Insights.

You can download the gcxi helm charts from the following repository:

```
https://pureengage.jfrog.io/ui/packages/helm:%2F%2Fgcxi-raa
```

For more information about downloading containers, see: Downloading your Genesys Multicloud CX containers.

Third-party prerequisites

For information about setting up your Genesys Multicloud CX private edition platform, including Kubernetes, Helm, and other prerequisites, see Software requirements.

Storage requirements

This section describes the storage requirements for various volumes.

GIM secret volume

In scenarios where **raa.env.GCXI_GIM_DB__JSON** is not specified, RAA mounts this volume to provide GIM connections details.

1. Declare GIM database connection details as a Kubernetes secret in **gimsecret.yaml**:

```
apiVersion: v1
kind: Secret
metadata:
  namespace: gcxi
  name: gim-secret
type: kubernetes.io/service-account-token
data:
  json_credentials:
eyJqZGJjX3VybCI6ImpkYmM6cG9zdGdyZXNxbDovLzxob3N0Pjo1NDMyLzxnaW1fZGF0YWJhc2U+IiwgImRiX3VzZXJuYW1lIjoiPH
```

2. Reference **gimsecret.yaml** in **values.yaml**:

```
raa
  ...
  volumes:
    ...
    gimSecret:
      name: "gim-secret-volume"
      secretName: "gim-secret"
      jsonFile: "json_credentials"
   ...
```

Alternatively, you can mount the CSI secret using **secretProviderClass**, in **values.yaml**:

```
raa
  ...
  volumes:
    ...
    gimSecret:
      name: "gim-secret-volume"
```

```
      secretProviderClass: "gim-secret-class"
      jsonFile: "json_credentials"
   ...
```

Config volume

RAA mounts a config volume inside the container, as the folder **/genesys/raa_config**. The folder is treated as a work directory, RAA reads the following files from it during startup:

- **conf.xml**, which contains application-level config settings.
- custom ***.ss** files.
- JDBC driver, from the folder **lib/jdbc_driver_**.

RAA does not normally create any files in **/genesys/raa_config** at runtime, so the volume does not require a fast storage class. By default, the size limit is set to 50 MB. You can specify the storage class and size limit in **values.yaml**:

```
raa
  ...
  volumes:
    ...
    config:
      capacity: 50Mi
      storageClassName: ""

   ...
```

RAA helm chart creates a Persistent Volume Claim (PVC). You can define a Persistent Volume (PV) separately using the **gcxi-raa** chart, and bind such a volume to the PVC by specifying the volume name in the **raa.volumes.config.pvc.volumeName** value, in **values.yaml**:

```
raa
  ...
  volumes:
    ...
    config:
      pvc:
        volumeName: "my_raa_config_volume"
    ...
```

Health volume

RAA uses the Health volume to store:

- Health files.
- Prometheus file containing metrics for the most recent 2-3 scrape intervals.
- Results of the most recent **testRun init** container execution.

By default, the volume is limited to 50MB. RAA periodically interacts with the volume at runtime, so Genesys does not recommend a slow storage class for this

volume. You can specify the storage class and size limit in **values.yaml**:

```
raa
  ...
  volumes:
    ...
    health:
      capacity: 50Mi
      storageClassName: ""
   ...
```

RAA helm chart creates a PVC. You can define a PV separately using the **gcxi-raa** chart, and bind such a volume to the PVC by specifying the volume name in the **raa.volumes.health.pvc.volumeName** value, in **values.yaml**:

```
raa
  ...
  volumes:
    ...
    health:
      pvc:
        volumeName: "my_raa_helath_volume"
    ...
```

Network requirements

RAA interacts only with the Genesys Info Mart database.

RAA can expose Prometheus metrics by way of Netcat.

The aggregation pod has it's own IP address, and can run with one or two running containers. For Helm test, an additional IP address is required -- each test pod runs one container.

Genesys recommends that RAA be located in the same region as the Genesys Info Mart database.

Secrets

RAA secret information is defined in the values.yaml file (line 89).

For information about configuring arbitrary UID, see Configure security.

Genesys dependencies

RAA interacts with Genesys Info Mart database only.

GDPR support

Not applicable.