

# Trust Center 25.03.0

This document describes each container image in use in the Trust Center version 25.03.0 deployment.

## Contents

- [Component List](#)
- [Verifying Container Images](#)
- [Component Details](#)

# Component List

<b>Container Image</b>	<b>Component</b>
trust-center/trust-center-ctl	<a href="#">Trust Center Init Job</a>
library/busybox	<a href="#">Busybox</a>
ms_activity_log	<a href="#">Activity Log Service</a>
ms_authorization	<a href="#">Authorization Service</a>
trust-center/asset-mgmt	<a href="#">Asset Management Service</a>
trust-center/command	<a href="#">Command Service</a>
trust-center/endpoint-connector	<a href="#">Endpoint Connector Service</a>
trust-center/endpoint-registry	<a href="#">Endpoint Registry Service</a>
trust-center/endpoint-updater	<a href="#">Endpoint Updater Service</a>
trust-center/health	<a href="#">Health Service</a>
trust-center/ostree-sync	<a href="#">OSTree Sync Service</a>
trust-center/pki-adapter	<a href="#">PKI Adapter Service</a>
job_rotate_signing_key	<a href="#">Rotate Signing Key Job</a>
ms_secret_mgmt	<a href="#">Secret Management Service</a>
trust-center/trust-enforcement	<a href="#">Trust Enforcement Service</a>
trust-center/vault-unseal	<a href="#">Vault Unseal Job</a>
trust-center/docs-external-v1	<a href="#">External API Docs</a>
hashicorp/vault	<a href="#">Vault</a>
library/redis	<a href="#">Redis</a>
oliver006/redis_exporter	<a href="#">Redis Prometheus Exporter</a>
confluentinc/cp-kafka	<a href="#">Kafka</a>
danielqsj/kafka-exporter	<a href="#">Kafka Prometheus Exporter</a>
library/mariadb	<a href="#">MariaDB</a>
library/mongo	<a href="#">MongoDB</a>
bitnami/mongodb-exporter	<a href="#">MongoDB Prometheus Exporter</a>
ingress-nginx/controller	<a href="#">NGINX Ingress Controller</a>
fluent/fluent-bit	<a href="#">Fluent Bit</a>
fluent/fluentd	<a href="#">Fluentd</a>
jetstack/cert-manager-cainjector	<a href="#">cert-manager CA Injector</a>
jetstack/cert-manager-controller	<a href="#">cert-manager Controller</a>
jetstack/cert-manager-webhook	<a href="#">cert-manager Webhooks</a>

# Verifying Container Images

First, copy the container registry password from `global.images.password` in your Trust Center's `config.yaml`.

Then, log into the container registry:

```
$ docker login docker.cloudsmith.io
Username: teradici/trust-center
Password: <Password>
```

(note: If using a beta release, use `teradici/trust-center-beta` instead)

Next, check the details for a specific container image in the remote registry:

```
$ docker buildx imagetools inspect <Image tag>
Name:      <Image tag>
MediaType: application/vnd.docker.distribution.manifest.v2+json
Digest:    sha256:002f688e9756d464d2064b526d4446306210198e8c8b234b36c9a8d5
```

<Image tag> should be the full URI to the image, e.g.:

```
docker.cloudsmith.io/teradici/trust-center/fluents/fluentsd:v1.16-2
```

Now, pull the image to download it locally:

```
$ docker pull <Image tag>
[...]
$ docker inspect --format='{{index .RepoDigests 0}}' <Image tag>
<Image tag>@sha256:002f688e9756d464d2064b526d4446306210198e8c8b234b36c9a8d
```

The image sha256 hash should match between the remote container registry and the local copy.

Additionally, the hash calculated here should match the image hash listed for each container image in these READMEs.

# **Component Details**

# Trust Center Init Job

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/trust-center-ctl
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:b2efc1157a4ea0feb8c18537b922bf21f946e0cb53ad1971a70d6a462d69d0aa

## Description

Container which runs on initial installation and upgrade of the Trust Center. Initializes and upgrades Trust Center service configuration.

[Back to overview](#)

# Busybox

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/library/busybox
Product	Trust Center
Supplier	Open Source
Version	1.36.1
Image Hash	sha256:023917ec6a886d0e8e15f28fb543515a5fcd8d938edb091e8147db4efed388ee

## Description

Used for various init containers preventing services from starting up before dependencies are ready.

We use the official Docker image for Busybox: [https://hub.docker.com/\\_/busybox](https://hub.docker.com/_/busybox)

[Back to overview](#)

# Activity Log Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/ms_activity_log
Product	Trust Center
Supplier	HP Inc.
Version	0.0.768_84f4c1f
Image Hash	sha256:67dea90c8be993dfc79ec697d89647d13474fcf3a0abed979638782ad598f7c9

## Description

The Activity Log service handles events generated by Trust Center services, and exposes an API to query activity logs.

[Back to overview](#)

# Authorization Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/ms_authorization
Product	Trust Center
Supplier	HP Inc.
Version	0.0.5559_fde52ff
Image Hash	sha256:1f667811704697c58b9f98785b6f039a0dfbcd2bae35733abdc91a3f6611e093

## Description

The Authorization service handles authentication and authorization for Trust Center API service accounts.

[Back to overview](#)



# Asset Management Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/asset-mgmt
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:0b1d80810c435b5e3ab4bf2e602bedc9b491fdee446f37632a6db82f9d539019

## Description

The Asset Management service enables storing and retrieving assets (such as support bundles, branding assets) within the Trust Center.

[Back to overview](#)

# Command Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/command
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:45743bbbd2e471515be901112cbbc9736bdee937b6bb57ade21cccb7f09fb5b9

## Description

The Command service enables sending commands to endpoints connected to the Trust Center and processing command status updates.

[Back to overview](#)

# Endpoint Connector Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/endpoint-connector
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:d81a2da2016fff638685e2e24d737c6ef010b76c2603164c831a3bda36a0ebc3

## Description

The Endpoint Connector service provides APIs which Trusted Zero Clients and other endpoints use to communicate with the Trust Center.

[Back to overview](#)

# Endpoint Registry Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/endpoint-registry
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:d416949a06e0ff8984ba1cebedb3e9dc65758a78d1f69716af1378c486d09b4a

## Description

The Endpoint Registry service maintains endpoint digital twins and provides APIs for management of endpoint configuration.

[Back to overview](#)

# Endpoint Updater Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/endpoint-updater
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:03632a2b29b9c6aaa030f0c59dca3b10ac94d5021b7f2bb73cb6daadfb2586db

## Description

The Endpoint Updater service is responsible for triggering OTA updates for connected endpoints when requested in endpoint configuration.

[Back to overview](#)

# Health Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/health
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:42dc2ba1d4d6aa7e9c5b0a1e11f48549359186d663e1a07c42b2158d95560dfa

## Description

The Health service provides API endpoints for Trust Center deployment health-checks.

[Back to overview](#)

# OSTree Sync Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/ostree-sync
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:3d1f135e6bfdc26784ac36d10952f0f484b8565b1e271b6557b82f592295efe5

## Description

The OSTree Sync service is responsible for storing Trusted Zero Client OTA update images and serving them to endpoints when requested.

[Back to overview](#)

# PKI Adapter Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/pki-adapter
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:6590ca883905e7fd593223c5ac5d5908e9956ec4216a43b5d5b2ce9970bd59bc

## Description

The PKI Adapter Service is responsible for providing an interface for Trust Center services to request certificates and tokens generated by internal and external issuers.

[Back to overview](#)



# Rotate Signing Key Job

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/job_rotate_signing_key
Product	Trust Center
Supplier	HP Inc.
Version	0.0.306_1fd114b
Image Hash	sha256:2dd340a6ae9d7f6b9cb880aa3f3196cbbaf2c037b54480df0879dc234200e982

## Description

The Rotate Signing Key job is used as a periodic CronJob in the Trust Center to rotate internal token signing keys.

[Back to overview](#)

# Secret Management Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/ms_secret_mgmt
Product	Trust Center
Supplier	HP Inc.
Version	0.0.690_b709211
Image Hash	sha256:ed8044a52a74886470b84ea3ddfba3762eef537fed16d6ef3e8568f99ae4370f

## Description

The Secret Management service provides an interface for Trust Center services to access key/value secrets from internal (Vault) and external secret storage providers.

[Back to overview](#)

# Trust Enforcement Service

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/trust-enforcement
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:21ba3bc68aebd76e4a0ef85fd6cafde54c14ff325663ad639933f38d2223af46

## Description

The Trust Enforcement Service is responsible for facilitating policy evaluation and enforcement on endpoints connected to the Trust Center.

[Back to overview](#)

# Vault Unseal Job

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/vault-unseal
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:8797c865fa259dab02f5b79d30fc43b7e806510c3f64113d3a11e78b41be12ca

## Description

The Vault Unseal job is a CronJob used by the Trust Center to ensure the internal Vault instance (for on-prem deployments) is unsealed.

[Back to overview](#)

# External API Docs

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/trust-center/docs-external-v1
Product	Trust Center
Supplier	HP Inc.
Version	25.03.0
Image Hash	sha256:0b43981ec016021277aeaf82fbfc1d21002c70d83833464d6e86621dd6160d7c

## Description

This container serves a copy of the External API documentation corresponding to this version of the Trust Center.

[Back to overview](#)

# Vault

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/hashicorp/vault
Product	Hashicorp Vault
Supplier	Hashicorp
Version	1.18.2
Image Hash	sha256:0d40cc366fd251520002c170f3f3c9a89e935d303313ed2f36cbc58fd3a530ef

## Description

Hashicorp Vault is a third party component deployed with the Trust Center in on-premises deployments to securely store deployment secrets.

We use the official Docker image for Hashicorp Vault: <https://hub.docker.com/r/hashicorp/vault>

[Back to overview](#)

# Redis

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/library/redis
Product	Redis
Supplier	Redis Ltd.
Version	7.4.1-alpine
Image Hash	sha256:7438ca8459132b9fe507a95fe6838fec7c55f8611ed835742a014d7a92618e4

## Description

Redis is a third-party component deployed with the Trust Center to function as an in-memory cache.

We use the official Docker image for Redis: [https://hub.docker.com/\\_/redis](https://hub.docker.com/_/redis)

[Back to overview](#)

# Redis Prometheus Exporter

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/oliver006/redis_exporter
Product	Redis
Supplier	Open Source - Oliver006
Version	v1.66.0-alpine
Image Hash	sha256:617b1e5b51498d0e98d0b2e55abfe45a017dd0d08c37ca88e3c973c0d77fa47b

## Description

Small third-party component used to export Prometheus metrics from Redis.

Uses mirrored Docker Hub image: [https://hub.docker.com/r/oliver006/redis\\_exporter](https://hub.docker.com/r/oliver006/redis_exporter)

[Back to overview](#)



# Kafka

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/confluentinc/cp-kafka
Product	Kafka
Supplier	Confluent Inc.
Version	7.7.1
Image Hash	sha256:a21737d09496a8b9bb38b995ab021e94e952259a5a2756ee22cef1cc84f5d9fe

## Description

Kafka is deployed as part of the Trust Center to handle message queueing.

We use the Kafka Docker image (Community Version) maintained by Confluent Inc.: <https://hub.docker.com/r/confluentinc/cp-kafka/>

[Back to overview](#)

# Kafka Prometheus Exporter

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/danielqsj/kafka-exporter
Product	Kafka
Supplier	Open Source - Daniel Qian
Version	v1.8.0
Image Hash	sha256:16bbe1d1647128a7060da21c36ae27b6f052bf5b8dedba0a5cb3460dee2f7b51

## Description

Small third-party component used to export Prometheus metrics from Kafka.

Uses mirrored Docker Hub image: <https://hub.docker.com/r/danielqsj/kafka-exporter>

[Back to overview](#)

# MariaDB

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/library/mariadb
Product	MariaDB
Supplier	MariaDB Foundation
Version	10.4.29
Image Hash	sha256:f9f3c4b8fd9dc7717a903c79d847af9c783771b9e0ff3cc4fc983a40e9e5972d

## Description

MariaDB is included in this release to facilitate data migration on upgrade from older Trust Center versions which required it. It will be removed in a subsequent release.

We use the official Docker image for MariaDB: [https://hub.docker.com/\\_/mariadb](https://hub.docker.com/_/mariadb)

[Back to overview](#)

# MongoDB

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/library/mongo
Product	MongoDB
Supplier	MongoDB Inc.
Version	5.0.30
Image Hash	sha256:b3857ebaf1cf7d0c75090776ef76fb01cc142fe1ca0939be51da61fd5936a911

## Description

MongoDB is included in on-premises deployments of the Trust Center to handle data persistence.

We use the official Docker image for MongoDB: [https://hub.docker.com/\\_/mongo](https://hub.docker.com/_/mongo)

[Back to overview](#)

# MongoDB Prometheus Exporter

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/bitnami/mongodb-exporter
Product	MongoDB
Supplier	Bitnami
Version	0.42.1
Image Hash	sha256:3aeaedd3faf7f9e16e919fdefc954153c5a0179eb733cce509d961fb2ed9885a

## Description

Small third-party component used to export Prometheus metrics from MongoDB.

Uses mirrored Docker Hub image: <https://hub.docker.com/r/bitnami/mongodb-exporter/>

[Back to overview](#)

# NGINX Ingress Controller

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/ingress-nginx/controller
Product	NGINX
Supplier	NGINX Inc.
Version	v1.11.3
Image Hash	sha256:38b51d8833e79d97d4adf825e0bf893e322d19be54ff65a88d9320139a68adfb

## Description

The Trust Center uses the NGINX Ingress controller to handle ingress to Trust Center APIs (including TLS, WAF, etc.)

We use the official Docker image for nginx-ingress: <https://hub.docker.com/r/nginx/nginx-ingress>

[Back to overview](#)

# Fluent Bit

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/fluent/fluent-bit
Product	Fluentd
Supplier	Fluent
Version	3.2.1
Image Hash	sha256:905e3e329840de5b843c9277911ab3d82205a57851ad22b79d671b47012860c5

## Description

Fluent Bit is a third party log processor deployed with the Trust Center to facilitate log aggregation.

We use the official Docker image for Fluent Bit: <https://hub.docker.com/r/fluent/fluent-bit>

[Back to overview](#)

# Fluentd

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/ fluent/ fluentd
Product	Fluentd
Supplier	Fluent
Version	v1.17-1
Image Hash	sha256:c795c1bf9918c77a5415e2fda5825f9341f2dd0645d9adfb91f8cae3a3e6b240

## Description

Fluentd is a third party log data collector deployed with the Trust Center to facilitate log aggregation.

We use the official Docker image for Fluentd: <https://hub.docker.com/r/ fluent/ fluentd>

[Back to overview](#)



# cert-manager CA Injector

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/jetstack/cert-manager-cainjector
Product	cert-manager
Supplier	cert-manager Project
Version	v1.16.2
Image Hash	sha256:0a1f62ea3390a73239c0b4214e0ada1fb89c52d30677aebcdc3ca54508996511

## Description

We include cert-manager in the Trust Center deployment to automatically manage API ingress certificates.

We use the Docker image for the cert-manager CA injector managed by Jetstack: <https://quay.io/repository/jetstack/cert-manager-cainjector>

[Back to overview](#)

# cert-manager Controller

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/jetstack/cert-manager-controller
Product	cert-manager
Supplier	cert-manager Project
Version	v1.16.2
Image Hash	sha256:de97c3767802e33d3096ad9b276598ceee3ed92a0c67907221581b36c8ad055f

## Description

We include cert-manager in the Trust Center deployment to automatically manage API ingress certificates.

We use the Docker image for the cert-manager controller managed by Jetstack: <https://quay.io/repository/jetstack/cert-manager-controller>

[Back to overview](#)

# cert-manager Webhooks

## Metadata

Field	Value
Container Image	docker.cloudsmith.io/teradici/trust-center/jetstack/cert-manager-webhook
Product	cert-manager
Supplier	cert-manager Project
Version	v1.16.2
Image Hash	sha256:25d87dff68f00587a3e76a1e5d530d40b6f0f7872e6d634db01a593047849109

## Description

We include cert-manager in the Trust Center deployment to automatically manage API ingress certificates.

We use the Docker image for the cert-manager webhooks managed by Jetstack: <https://quay.io/repository/jetstack/cert-manager-webhook>

[Back to overview](#)