OpenShift Container Platform 4.1

Telemetry

An overview of Telemetry in OpenShift Container Platform 4.1

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Abstract

This document provides information about Telemetry in OpenShift Container Platform 4.1 and instructions for disabling it.

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CHAPTER 1. ABOUT TELEMETRY

Telemetry collects anonymized aggregated information about:

- The size of an OpenShift Container Platform cluster
- The health and status of OpenShift Container Platform components
- Use of OpenShift Container Platform components
- The features in use

This information is used by Red Hat to help make OpenShift Container Platform better and more intuitive to use. None of the information is shared with third parties.

1.1. WHAT INFORMATION IS COLLECTED

Telemetry does not collect, and will never collect, identifying information like user names, passwords, or the names or addresses of user resources.

Primary information collected includes:

- Number of updates available per cluster
- Channel and image repository used for an update
- Number of errors that occurred during an update
- Progress information of an update that is running
- Number of machines per cluster
- Number of CPU cores and size of RAM of the machines
- Number of members in the etcd cluster and number of objects currently stored in the etcd cluster
- Number of CPU cores and RAM used per machine type - infra or master
- Number of CPU cores and RAM used per cluster
- Use of OpenShift Container Platform framework components per cluster
- Version of the OpenShift Container Platform cluster
- Health, condition, and status for any OpenShift Container Platform framework component that is installed on the cluster, for example Cluster Version Operator, Cluster Monitoring, Image Registry, and Elasticsearch for Logging
- A unique random identifier that is generated during installation
- Name of the platform OpenShift Container Platform is deployed on, such as Amazon Web Services

CHAPTER 2. SHOWING DATA COLLECTED BY TELEMETRY

An administrator might need to review the metrics that Telemetry collects.

2.1. SHOWING DATA COLLECTED FROM THE CLUSTER

You can see the cluster and components time series data captured by Telemetry.

Prerequisites

- Install the OpenShift Command-line Interface (CLI), commonly known as **oc**.
- You must log in to the cluster with a user that has the **cluster-admin** role.

Procedure

1. Find the URL for the Prometheus service that runs in the OpenShift Container Platform cluster:

```
$ oc get route prometheus-k8s -n openshift-monitoring -o jsonpath="{.spec.host}"
```

2. Navigate to the URL.
3. Enter this query in the **Expression** input box and press **Execute**:

```
{__name__="up"} or {__name__="cluster_version"} or
{__name__="cluster_version_available_updates"} or {__name__="cluster_operator_up"} or
{__name__="cluster_operator_conditions"} or {__name__="cluster_version_payload"} or
{__name__="cluster_version_payload_errors"} or
{__name__="instance:etcd_object_counts:sum"} or
{__name__="ALERTS",alertstate="firing"} or
{__name__="code:apiserver_request_count:rate:sum"} or
{__name__="kube_pod_status_ready:etcd:sum"} or
{__name__="kube_pod_status_ready:image_registry:sum"} or
{__name__="cluster:capacity_cpu_cores:sum"} or
{__name__="cluster:capacity_memory_bytes:sum"} or
{__name__="cluster:cpu_usage_cores:sum"} or
{__name__="cluster:memory_usage_bytes:sum"} or
{__name__="openshift:cpu_usage_cores:sum"} or
{__name__="openshift:memory_usage_bytes:sum"} or
{__name__="cluster:node_instance_type_count:sum"}
```

This query replicates the request that Telemetry makes against a running OpenShift Container Platform cluster's Prometheus service and returns the full set of time series captured by Telemetry.

CHAPTER 3. OPTING OUT OF TELEMETRY

You might need to opt out of Telemetry for your cluster. For example, you might need to comply with privacy laws.

Prerequisites

- Install the OpenShift Command-line Interface (CLI), commonly known as **oc**.
- You must log in to the cluster with a user that has the **cluster-admin** role.
- You need to have the **cluster-monitoring-config** ConfigMap object with the **data/config.yaml** section. See Creating cluster monitoring ConfigMap for details.

3.1. CONSEQUENCES OF DISABLING TELEMETRY

In OpenShift Container Platform 4.1, customers can opt out of the Telemetry service. However, Telemetry is embedded as a core component and serves as part of the overall function of the cluster. Therefore, opting out is strongly discouraged.

Some of the consequences of opting out of Telemetry are:

- The Red Hat OpenShift Cluster Manager does not work as expected and does not show critical information about your clusters.
- You cannot perform subscription management, including legally entitling your purchase from Red Hat through **cloud.redhat.com**. Because there is no disconnected subscription management, you cannot both opt out of sending data to Red Hat and entitle your purchase.
- You will not gain quality assurance by reporting faults encountered during upgrades.
- You cannot entitle your cluster.

Deployment and management of OpenShift Container Platform for disconnected environments is a critical goal and will be delivered in a future version of OpenShift Container Platform.

3.2. DISABLING TELEMETRY

You can disable Telemetry.

Procedure

1. Start editing the **cluster-monitoring-config** ConfigMap:

```
$ oc -n openshift-monitoring edit configmap cluster-monitoring-config
```

2. Add the two lines that are required to disable Telemetry to the **data/config.yaml** section, as shown:

```
apiVersion: v1
kind: ConfigMap
metadata:
  name: cluster-monitoring-config
  namespace: openshift-monitoring
```

```
data:
  config.yaml: |+
    telemeterClient:
      enabled: false
```