OpenShift Dedicated 4

Support

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Abstract

This document details on how to get support for OpenShift Dedicated
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CHAPTER 1. GETTING SUPPORT

1.1. GETTING SUPPORT

If you experience difficulty with a procedure described in this documentation, visit the Red Hat Customer Portal. Through the Customer Portal, you can:

- Search or browse through the Red Hat Knowledgebase of technical support articles about Red Hat products.
- Submit a support case to Red Hat Support.

**NOTE**

When submitting a support case, it is recommended to provide the following information about your cluster to Red Hat Support to aid in troubleshooting:

- Data gathered using the `oc adm must-gather` command
- The unique cluster ID. Navigate to (?) Help → Open Support Case to have the cluster ID autofilled when you submit the case.

- Access other product documentation.

If you have a suggestion for improving this documentation or have found an error, please submit a Bugzilla report at http://bugzilla.redhat.com against the OpenShift Container Platform product for the Documentation component. Please provide specific details, such as the section name and OpenShift Dedicated version.
CHAPTER 2. GATHERING DATA ABOUT YOUR CLUSTER

When opening a support case, it is often helpful to provide debugging information about your cluster to Red Hat Support.

It is recommended to provide:

- Data gathered using the `oc adm must-gather` command
- The unique cluster ID

2.1. ABOUT THE MUST-GATHER TOOL

The `oc adm must-gather` CLI command collects the information from your cluster that is most likely needed for debugging issues, such as:

- Resource definitions
- Audit logs
- Service logs

You can specify one or more images when you run the command by including the `--image` argument. When you specify an image, the tool collects data related to that feature or product.

When you run `oc adm must-gather`, a new Pod is created on the cluster. The data is collected on that Pod and saved in a new directory that starts with `must-gather.local`. This directory is created in the current working directory.

2.2. GATHERING DATA ABOUT YOUR CLUSTER FOR RED HAT SUPPORT

You can gather debugging information about your cluster by using the `oc adm must-gather` CLI command.

Prerequisites

- Access to the cluster as a user with the `cluster-admin` role.
- The OpenShift Dedicated CLI (`oc`) installed.

Procedure

1. Navigate to the directory where you want to store the `must-gather` data.

2. Run the `oc adm must-gather` command:

   ```
   $ oc adm must-gather
   ```

   **NOTE**

   If this command fails, for example if you cannot schedule a Pod on your cluster, then use the `oc adm inspect` command to gather information for particular resources. Contact Red Hat Support for the recommended resources to gather.
3. Create a compressed file from the must-gather directory that was just created in your working directory. For example, on a computer that uses a Linux operating system, run the following command:

```
$ tar cvaf must-gather.tar.gz must-gather.local.5421342344627712289/
```

Make sure to replace `must-gather-local.5421342344627712289/` with the actual directory name.

4. Attach the compressed file to your support case on the Red Hat Customer Portal.

### 2.3. OBTAINING YOUR CLUSTER ID

When providing information to Red Hat Support, it is helpful to provide the unique identifier for your cluster. You can have your cluster ID autofilled by using the OpenShift Dedicated web console. You can also manually obtain your cluster ID by using the web console or the OpenShift CLI (oc).

#### Prerequisites

- Access to the cluster as a user with the `cluster-admin` role.
- Access to the web console or the OpenShift CLI (oc) installed.

#### Procedure

- To open a support case and have your cluster ID autofilled using the web console:
  a. From the toolbar, navigate to (?) Help → Open Support Case.
  b. The ‘Cluster ID’ value is autofilled.
- To manually obtain your cluster ID using the web console:
  b. The value is available in the Cluster ID field of the Details section.
- To obtain your cluster ID using the OpenShift CLI (oc), run the following command:

```
$ oc get clusterversion -o jsonpath='{.items[0].spec.clusterID}"n"'
```
CHAPTER 3. REMOTE HEALTH MONITORING WITH CONNECTED CLUSTERS

3.1. ABOUT REMOTE HEALTH MONITORING

OpenShift Dedicated collects anonymized aggregated information about the health, usage, and size of clusters and reports it to Red Hat via two integrated components: Telemetry and the Insights Operator. This information allows Red Hat to improve OpenShift Dedicated and to react to issues that impact customers more quickly. This also simplifies the subscription and entitlement process for Red Hat customers and enables the Red Hat OpenShift Cluster Manager service to provide an overview of your clusters and their health and subscription status.

A cluster that reports data to Red Hat via Telemetry and the Insights Operator is considered a connected cluster.

3.1.1. About Telemetry

Telemetry sends a carefully chosen subset of the cluster monitoring metrics to Red Hat. These metrics are sent continuously and describe:

- The size of an OpenShift Dedicated cluster
- The health and status of OpenShift Dedicated components
- The health and status of any upgrade being performed
- Limited usage information about OpenShift Dedicated components and features
- Summary info about alerts reported by the cluster monitoring component

This continuous stream of data is used by Red Hat to monitor the health of clusters in real time and to react as necessary to problems that impact our customers. It also allows Red Hat to roll out OpenShift Dedicated upgrades to customers so as to minimize service impact and continuously improve the upgrade experience.

This debugging information is available to Red Hat Support and engineering teams with the same restrictions as accessing data reported via support cases. All connected cluster information is used by Red Hat to help make OpenShift Dedicated better and more intuitive to use. None of the information is shared with third parties.

3.1.1.1. Information collected by Telemetry

Primary information collected by Telemetry includes:

- The number of updates available per cluster
- Channel and image repository used for an update
- The number of errors that occurred during an update
- Progress information of running updates
- The number of machines per cluster
- The number of CPU cores and size of RAM of the machines
- The number of members in the etcd cluster and number of objects currently stored in the etcd cluster
- The number of CPU cores and RAM used per machine type – infra or master
- The number of CPU cores and RAM used per cluster
- Use of OpenShift Dedicated framework components per cluster
- The version of the OpenShift Dedicated cluster
- Health, condition, and status for any OpenShift Dedicated 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
- The name of the platform that OpenShift Dedicated is deployed on, such as Amazon Web Services

Telemetry does not collect identifying information such as user names, passwords, or the names or addresses of user resources.

3.1.2. About the Insights Operator

The Insights Operator periodically gathers anonymized configuration and component failure status and reports that to Red Hat. This is a subset of the information captured by the must-gather tool and allows Red Hat to assess important configuration and deeper failure data than is reported via Telemetry. This data is sent several times a day and describes:

- Important configuration information about the environment that the cluster runs in
- Details about the state of the cluster and its major components
- Debugging information about infrastructure Pods or nodes that are reporting failures

This debugging information is available to Red Hat Support and engineering teams with the same restrictions as accessing data reported via support cases. All connected cluster information is used by Red Hat to help make OpenShift Dedicated better and more intuitive to use. None of the information is shared with third parties.

3.1.2.1. Information collected by the Insights Operator

Primary information collected by the Insights Operator includes:

- The version of the cluster and its components, as well as the unique cluster identifier
- Channel and image repository used for an update
- Details about errors that have occurred in the cluster components
- Progress and health information of running updates and the status of any component upgrades
- Anonymized details about the cluster configuration that is relevant to Red Hat Support
- Details about any Technology Preview or unsupported configurations that might impact Red Hat Support
• Details of the platform that OpenShift Dedicated is deployed on, such as Amazon Web Services, and the region that the cluster is located in

• Information about Pods of degraded OpenShift Dedicated cluster Operators

• Information about nodes marked as NotReady

• Events for all namespaces listed as "related objects" for Degraded operator

The Insights Operator does not collect identifying information such as user names, passwords, or the names or addresses of user resources.

3.2. SHOWING DATA COLLECTED BY REMOTE HEALTH MONITORING

As an administrator, you can review the metrics collected by Telemetry and the Insights Operator.

3.2.1. Showing data collected by Telemetry

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 Dedicated 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 Dedicated cluster’s Prometheus service and returns the full set of time series captured by Telemetry.

3.2.2. Showing data collected by the Insights Operator

You can review the data that is collected by the Insights Operator.

**Prerequisites**

- Access to the cluster as a user with the `cluster-admin` role.

**Procedure**

1. Find the name of the currently running Pod for the Insights Operator:

   ```bash
   $ INSIGHTS_OPERATOR_POD=$(oc get pods --namespace=openshift-insights -o custom-columns=:metadata.name --no-headers --field-selector=status.phase=Running)
   ```

2. Copy the recent data archives collected by the Insights Operator:

   ```bash
   $ oc cp openshift-insights/$INSIGHTS_OPERATOR_POD:/var/lib/insights-operator ./insights-data
   ```

The recent Insights Operator archives are now available in the `insights-data` directory.

3.3. OPTING OUT OF REMOTE HEALTH REPORTING

On OpenShift Dedicated, remote health reporting is always enabled. You cannot opt out.