

Cost Management Service 1-latest

Analyzing your cost data

Use cost management to track the cost of your clouds and containers.

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Abstract

To get you started, the following sections provide information about currency exchange and caluclating effective usage.

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PREFACE

To begin using cost management, you must have set up set up cost management by connecting your cost data. For more information, see How to set up cost management.

CHAPTER 1. USING COST MANAGEMENT CURRENCY EXCHANGE

Cost management uses the United States Dollar (USD) by default. However, you can use the cost management currency exchange feature to estimate your costs in your local currency. This feature updates costs both in Red Hat Hybrid Cloud Console and in your exported cost report files.

Cost management updates currency exchange information daily with the most recent data from ExchangeRate-API. The values in cost management do not reflect any foreign currency contract agreements.

Procedure

- 1. From Red Hat Hybrid Cloud Console go to cost management.
- 2. From the **currency** dropdown, select your local currency.

After you change your currency, cost management automatically updates all values with the most recent exchange rates.

CHAPTER 2. CALCULATING EFFECTIVE USAGE WITH COST MODELS

Cloud providers charge for the infrastructure costs of running a cluster, regardless of your overall usage. By calculating the effective usage in cost management, you can more accurately correlate cloud costs with a pod or namespace by considering their direct utilization.

A pod typically requests resources, such as CPU or memory, from a cluster. The cluster then reserves these requested resources as a minimum, but the pod might use more or less than it initially requested. The effective usage metric in cost management uses whichever kind of usage, CPU or memory, is greater per hour.

You can create a cost model in cost management to estimate your effective usage. Ultimately, you can use this data to understand how infrastructure cost is distributed to your OpenShift project.

Prerequisites

- You must be a user with Cost Administrator or Cost Price List Administrator permissions. To learn how to configure user roles, see <u>Limiting access to cost management resources</u> in <u>Getting</u> started with cost management
- You must add your OpenShift cluster as a cost management data integration. For more details, see *Integrating OpenShift Container Platform data into cost management* in *Getting started with cost management*.

Procedure

- 1. Log in to Red Hat Hybrid Cloud Console.
- 2. From the Services menu, click Spend Management → Cost Management.
- 3. In the Global Navigation, click **Cost Management** → **Settings**.
- 4. In the Cost Models tab, click Create cost model to open the cost model wizard.
- 5. Enter a name and description for the cost model and select **OpenShift Container Platform** as the integration type. Click **Next**.
- 6. Create a price list so that you can assign rates to usage or requests. The cost management service collects these metrics from OpenShift but there is no cost attached to them in cost management until you apply a cost model.
 - a. To create a price list to calculate effective CPU usage, click Create rate.
 - i. Add a description. In this example, enter **effective cpu usage**.
 - ii. In the Metric field, select CPU.
 - iii. In the Measurement field, select Effective-usage (core-hours).
 - iv. In the **Rate** field, enter the rate you pay for CPU usage. In this example, enter **2**. Click **Create rate**.
 - b. To create a price list to calculate effective memory usage, click Create rate.
 - i. Add a description. In this example, enter effective memory usage.

- ii. In the Metric field, select Memory.
- iii. In the Measurement field, select Effective-usage (GB-hours).
- iv. In the **Rate** field, enter the rate you pay for memory usage. In this example, enter **1**. Click **Create rate**.

7. Click Next.

- 8. (Optional) On the **Cost calculations** page, apply a markup or discount to change how raw costs are calculated for your integrations. Adding a markup to your *raw costs* can allow you to account for your overhead costs, such as the cost of administering your AWS account, Azure subscription, or other support costs. A markup is an estimation to cover your costs not shown by metrics or usage.
- On the Cost distribution page, select the CPU or Memory distribution type. The distribution type distributes costs based on CPU or memory metrics in project cost breakdowns. If your cluster has high memory usage, select Memory. If your cluster has high CPU usage, select CPU. Click Next.
- 10. Assign an integration to your cost model and then click **Next**.
- 11. Review the details and then click **Create**.
- 12. To review the results of your cost model on a integration, in the Global Navigation, click **Cost**Management → OpenShift.
- 13. Select a project and view the results.

PROVIDING FEEDBACK ON RED HAT DOCUMENTATION

If you found an error or have a suggestion on how to improve these guidelines, open an issue in the cost management Jira board and add the **Documentation** label.

We appreciate your feedback!