



Cost Management Service 2022

Getting started with cost management

Learn about and configure cost management

Cost Management Service 2022 Getting started with cost management

Learn about and configure cost management

Legal Notice

Copyright © 2022 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux[®] is the registered trademark of Linus Torvalds in the United States and other countries.

Java[®] is a registered trademark of Oracle and/or its affiliates.

XFS[®] is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL[®] is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js[®] is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack[®] Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

This guide describes the initial steps to begin using cost management.

Table of Contents

CHAPTER 1. INTRODUCTION TO COST MANAGEMENT	3
1.1. ABOUT COST MANAGEMENT	3
1.2. PLANNING FOR COST MANAGEMENT	3
CHAPTER 2. CONFIGURING COST MANAGEMENT	5
2.1. ADD SOURCES TO COST MANAGEMENT	5
2.2. LIMIT ACCESS TO COST MANAGEMENT RESOURCES	5
2.3. CONFIGURE TAGGING FOR YOUR SOURCES	5
2.4. CONFIGURE COST MODELS TO ACCURATELY REPORT COSTS	6
CHAPTER 3. USING COST MANAGEMENT	7
3.1. USE THE COST EXPLORER TO VISUALIZE YOUR COSTS	7

CHAPTER 1. INTRODUCTION TO COST MANAGEMENT

This document provides instructions to begin using cost management, including prerequisites and instructions for connecting your cloud environments, and configuring users and permissions.

After completing the setup described in this guide, you will be able to track cost and usage data for your Amazon Web Services (AWS), Microsoft Azure, Google Cloud, and OpenShift Container Platform environments.

If you have a suggestion for improving this guide or have found an error, please submit a Bugzilla report at <http://bugzilla.redhat.com> against *Red Hat Hybrid Cloud Console* (console.redhat.com) for the **cost management** component. Alternatively, you can open an issue in the [cost management Jira board](#) with the **Documentation** label.

1.1. ABOUT COST MANAGEMENT

Cost management is an OpenShift Container Platform service that enables you to better understand and track costs for clouds and containers. It is based on the upstream project Koku.

You can access the cost management application from console.redhat.com/openshift/cost-management/.

Cost management allows you to simplify management of resources and costs across various environments, including:

- Container platforms such as OpenShift Container Platform
- Public clouds such as Amazon Web Services (AWS), Google Cloud, and Microsoft Azure

The cost management application allows you to:

- Visualize, understand and analyze the use of resources and costs
- Forecast your future consumption and compare them with budgets
- Optimize resources and consumption
- Identify patterns of usage that should be investigated
- Integrate with third party tools that can benefit from cost and resourcing data

1.2. PLANNING FOR COST MANAGEMENT

When configuring cost management for your needs, consider the scope of your environments that you want to manage costs for, and the users who will have access to the data.

Some considerations in creating a new Red Hat organization and users for different customer types include:

Scope:

- Customer company wide
- Customer division or organization wide
- Partner company managing several tenants

Data:

- How does your business need the data? Do you want information about projects, or users, for example?
- Planning AWS tags to reflect previous use cases.
- Enforcement: Is there any way for you to ensure that the proper tags and metadata are included in each item of the inventory?

User access:

- What level of access do you want your users to have?
- Do you want some users to have access to all cost data, while other users can view only a portion of the environment or certain sources?

CHAPTER 2. CONFIGURING COST MANAGEMENT

Before you begin to use cost management, you must complete these tasks to properly configure the cost management application:

Task summary

- [Add sources to cost management](#)
- [Limit access to cost management resources](#)
- [Configure tagging for your sources](#)
- [Configure cost models to accurately report costs](#)

2.1. ADD SOURCES TO COST MANAGEMENT

A source is a provider account that is connected to cost management to be monitored, for example, an OpenShift Container Platform deployment, or a cloud infrastructure provider. To use cost management to monitor your cloud costs, you must first connect a data source to the cost management application.

Currently, cost management can track costs for Amazon Web Services (AWS), Microsoft Azure, Google Cloud, and Red Hat OpenShift Container Platform sources.

From <https://console.redhat.com/settings/sources>, you can view, edit, and delete sources connected to cost management.

For more information on how to add sources to cost management, follow these guides:

- [Adding an OpenShift Container Platform source to cost management](#)
- [Adding an Amazon Web Services \(AWS\) source to cost management](#)
- [Adding a Google Cloud source to cost management](#)
- [Adding a Microsoft Azure source to cost management](#)

2.2. LIMIT ACCESS TO COST MANAGEMENT RESOURCES

After adding and configuring sources in cost management, it is a good idea to limit access to cost data and resources. For example, you may not want users to have access to all cost data, but instead only data specific to their projects or organization. Using role-based access control, you can limit the visibility of resources involved in cost management reports. For example, you may want to restrict a user's view to only AWS sources, instead of the entire environment.

For more information about limiting access see, [Limiting access to cost management resources](#).

2.3. CONFIGURE TAGGING FOR YOUR SOURCES

The cost management application tracks cloud and infrastructure costs using tags (called labels in OpenShift), which you can refine to filter and attribute to resources. Tags in cost management allow you to organize your resources by cost and to allocate the costs to different parts of your cloud infrastructure.



IMPORTANT

Tags and labels can only be configured directly on a source. While you can choose what tags are activated in cost management, you cannot edit tags and labels in the cost management application.

See [Managing cost data using tagging](#) to learn more about:

- Planning your tagging strategy to organize your view of cost data.
- Understanding how cost management associates tags.
- Configuring tags and labels on your sources.

2.4. CONFIGURE COST MODELS TO ACCURATELY REPORT COSTS

Now that you have configured your sources to collect cost and usage data into cost management, you can configure cost models to associate prices to metrics and usage, and fine-tune the costs of running your cloud.

A cost model is a framework used to define the calculations for the costs stored in cost management, using raw costs and metrics. Costs generated by a cost model can be recorded, categorized and distributed to specific customers, business units or projects.

From the [Cost Models](#) area of cost management, you can:

- Classify your costs as infrastructure or supplementary costs.
- Capture monthly costs for OpenShift nodes and clusters.
- Apply a markup to account for additional support costs.
- Learn how to configure a cost model in [Using cost models](#).

CHAPTER 3. USING COST MANAGEMENT

3.1. USE THE COST EXPLORER TO VISUALIZE YOUR COSTS

The cost management [Cost Explorer](#) allows you to create custom graphs of time-scaled cost and usage information to better visualize and interpret your costs.

See [Visualizing your costs using Cost Explorer](#) to learn more about:

- Using Cost Explorer to identify abnormal events.
- Understanding how your cost data changes over time.
- Creating custom bar charts of your cost and usage data.
- Exporting custom cost data tables.