

Cost Management Service 1-latest

Visualizing your costs using cost explorer

Use Cost Explorer to visualize and understand your costs

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Abstract

Learn how to manage your costs using the interactive Cost Explorer. Cost management is part of the Red Hat Insights portfolio of services. The Red Hat Insights suite of advanced analytical tools helps you to identify and prioritize impacts on your operations, security, and business.

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CHAPTER 1. USING COST EXPLORER

The cost management Cost Explorer, allows you to see your costs through time. Using the Cost Explorer, you can now filter through your expenditure to find answers to your questions, see details, and look for trends in data.

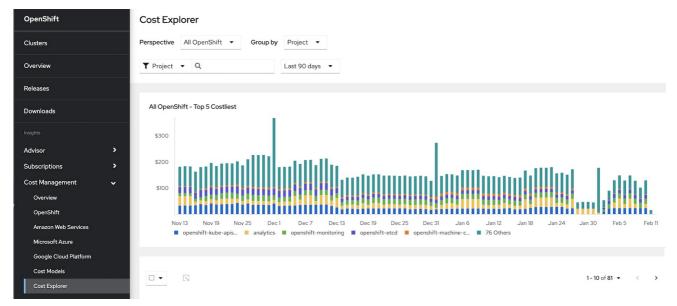
1.1. UNDERSTANDING COST EXPLORER

The cost management Cost Explorer allows you to create custom graphs containing up to 90 days of cost and usage information to better visualize and interpret your costs.

With Cost Explorer you can:

- Identify abnormal events.
- Understand how you cost data changes over time.
- Create custom bar charts of your cost and usage data.
- Export custom cost data files.

Figure 1.1. The Cost Explorer Interface



A single bar in the Cost Explorer chart represents one day of cost and usage data corresponding to the filtered options. The five most significant metrics are individually displayed and all other metrics placed into the *Others* category. See Section 1.2, "Filtering cost data with Cost Explorer" for more information about filtering your cost and usage data.

1.1.1. Cost of unallocated resources in an OpenShift cluster

Unallocated costs are visible when viewing OpenShift cost data grouped by project. Rows named **Platform unallocated** and **Worker unallocated** are available when viewing OpenShift cost data by project.

Platform unallocated accounts for the part of primary and infra nodes that are not allocated to run workloads. In this case, those workloads are the OpenShift platform or control plane.

Worker unallocated tracks the cost of OpenShift worker node resources not allocated to user's projects. This also rectifies an issue where the total cost of an OpenShift project grouped by project appeared lower than the total cost when grouped by cluster.

1.2. FILTERING COST DATA WITH COST EXPLORER

You can customize the cost data that appears by using the filter options in the Cost Explorer.

Prerequisites

- You must have your OpenShift cluster OpenShift cluster added as a cost management data integration. For instructions see *Integrating OpenShift Container Platform data into cost management*.
- You must have your cloud infrastructure account added as a cost management data integration. For instructions for your cloud provider type see *Adding integrations to cost management*.

Procedure

- 1. From the **Cost Explorer**, select an item from the **Perspective** menu. For example, to view your cumulative OpenShift Container Platform costs, select *All OpenShift Cost*.
- 2. Select a grouping. Depending on your cloud provider you can group by *Project*, *Node*, *Cluster*, or *Tag*.
- 3. If desired, specify one or more *Projects*, *Nodes*, *Clusters*, or *Tags* by name.
- 4. Select Last 90 days to view the cost data from the previous 90 days.
- 5. Repeat these steps for different perspectives and groupings to better understand your costs.

Next Steps

After filtering your data, you can export it into a CSV file. See Section 1.3, "Exporting cost data" for more information.

1.2.1. Tracking the cost of ROSA

You can track expenses associated with Red Hat OpenShift Service on AWS (ROSA) with Cost Explorer. To find costs associated with ROSA, filter the costs in Cost Explorer and view them grouped by services.

On Cost Explorer or AWS details page, view ROSA costs on the Amazon Web Service Filtered by OpenShift view by grouping by service and looking for virtual machine licenses.

Procedure

- 1. In cost management, go to the **Cost Explorer** page.
- 2. On the Cost Explorer page, in the Perspective menu, select Amazon Web Services filtered by OpenShift.
- 3. In the **Group by** field, select **Service**.
- 4. In the results, find the Red Hat OpenShift Service on AWS

Next Steps

After you filter your data, you can export it into a CSV file. See Section 1.3, "Exporting cost data" for more information.

1.2.2. Tracking the cost of ARO in OpenShift

You can track expenses associated with Microsoft Azure Red Hat OpenShift (ARO) when you calculate the cost of OpenShift for Microsoft Azure. To find costs associated with ARO, filter the costs in Cost Explorer and view them grouped by services.

The overall service cost includes all virtual machine license fees on the underlying nodes. For example, if the node is also running Red Hat Enterprise Linux, the specific cost of running ARO is included.

Procedure

- 1. In cost management, go to the Cost Explorer page.
- 2. On the Cost Explorer page, in the Perspective menu, select Microsoft Azure filtered by OpenShift.
- 3. In the **Group by** field, select **Service**.
- 4. In the results, search for the virtual machine licences. The service cost includes all of the virtual machine licences fees on each node.

Next Steps

After you filter your data, you can export it into a CSV file. See Section 1.3, "Exporting cost data" for more information.

1.3. EXPORTING COST DATA

Use the Cost Explorer to export customized CSV files of cost data to your local workstation. These files contain more details about your cost data that you can apply in your desired reporting tool.

Prerequisites

- Your OpenShift cluster added as a cost management data integration. See *Integrating OpenShift Container Platform data into cost management* for instructions.
- Your cloud infrastructure account added as a cost management data integration. See *Adding* integrations to cost management for instructions for your cloud provider type.

Procedure

- 1. Navigate to the Cost Explorer application.
- 2. Use the Cost Explorer filter options to create the desired information.
- 3. Select items to be exported in the list populated below the Cost Explorer graph.
- 4. Click the **S** Export button.
- Click Generate and Download.
 The CSV file will download to your local system.

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