



Red Hat Advanced Cluster Management for Kubernetes 2.0

Web console

Web Console

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Abstract

Web console for Red Hat Advanced Cluster Management for Kubernetes

Table of Contents

CHAPTER 1. WEB CONSOLE	3
1.1. ACCESSING YOUR CONSOLE	3
1.1.1. From the OpenShift Container Platform web console	3
1.1.2. From the Red Hat OpenShift CLI:	3
1.2. OBSERVABILITY IN THE CONSOLE	3
1.2.1. Red Hat Advanced Cluster Management for Kubernetes console components	3
1.2.2. Access your console	4
1.2.3. Welcome page	5
1.2.4. Observe environment details	5
1.2.4.1. Filtering your results	5
1.2.5. Automate infrastructure	5
1.2.6. Manage applications	5
1.2.6.1. Viewing your pod health	5
1.2.7. Topology page	5
1.2.8. Governance and risk dashboard	6
1.3. SEARCH IN THE CONSOLE	6
1.4. VISUAL WEB TERMINAL	7
1.4.1. Starting a session	8
1.4.2. Supported command list	8
1.4.3. Searching with Visual Web Terminal	10
1.5. MANAGING CLUSTER LABELS	11

CHAPTER 1. WEB CONSOLE

Learn how to access the console for your Red Hat Advanced Cluster Management console and learn how to use some of the console components.

- [Accessing the console](#)
- [Observability in the console](#)
- [Search in the console](#)
- [Searching with Visual Web Terminal](#)
- [Managing cluster labels](#)

1.1. ACCESSING YOUR CONSOLE

From the Red Hat OpenShift Container Platform web console, you can access the Red Hat Advanced Cluster Management for Kubernetes console. You can also access the console from your terminal after installation. See all the options for accessing your console.

1.1.1. From the OpenShift Container Platform web console

- You can click the **Application launcher** in the header and choose the *Red Hat Advanced Cluster Management for Kubernetes* option.
- You can also access the console from the left-hand navigation.
 - Click **Networking > Routes**
 - From the *Project* menu, select the namespace where Red Hat Advanced Cluster Management for Kubernetes is installed.
 - Find **multicloud-console** and click the URL from the **Location** column.

1.1.2. From the Red Hat OpenShift CLI:

1. While logged in to Red Hat OpenShift and after you install Red Hat Advanced Cluster Management for Kubernetes, run the following command to find the route. Here, **<namespace-from-install>** is the namespace where you installed the product:

```
oc get routes -n <namespace-from-install>
```

1. Find the **multicloud-console** name and the **Host/Port** columns to get your URL.

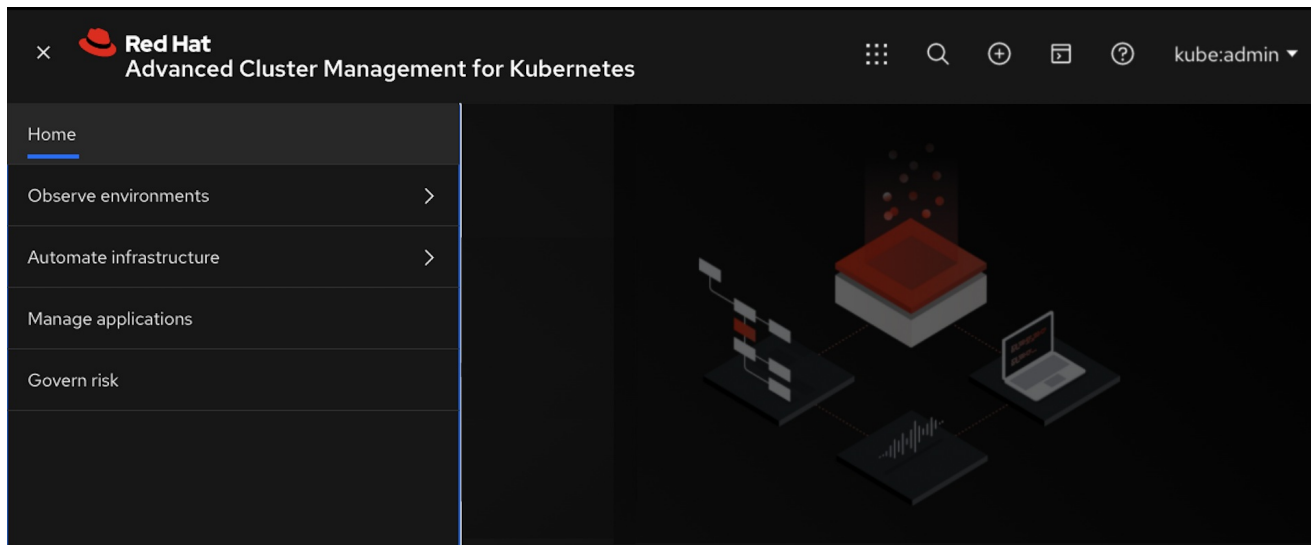
Learn more about the Red Hat Advanced Cluster Management for Kubernetes console see, [Web console](#).

1.2. OBSERVABILITY IN THE CONSOLE

Learn more about console components that you can use to view, manage, or customize your console.

1.2.1. Red Hat Advanced Cluster Management for Kubernetes console components

See the following image of the *Navigation* from the Red Hat Advanced Cluster Management for Kubernetes console, which is described in more detail later in each section. See that the navigation represents major production function.



Red Hat Advanced Cluster Management for Kubernetes console components:

- [Access your console](#)
- [Welcome page](#)
- [Observe environment details](#)
- [Automate Infrastructure](#)
- [Manage applications](#)
- [Topology page](#)
- [Governance and risk dashboard](#)

To learn about Search, see [Search in the console](#)

1.2.2. Access your console

- Access from the Red Hat OpenShift console:
 - a. From the left-hand navigation, click **Networking > Routes**
 - b. From the *Project* menu, select the namespace where Red Hat Advanced Cluster Management for Kubernetes is installed.
 - c. Find **multicloud-console** and click the URL from the **Location** column.
- Access the console from the Red Hat OpenShift CLI:
 - a. While logged in to OpenShift, run the following command to find the route, where **<namespace-from-install>** is the namespace where you installed Red Hat Advanced Cluster Management for Kubernetes:

```
oc get routes -n <namespace-from-install>
```


- a. Find the **multicloud-console** name and the **Host/Port** columns to get your URL.

1.2.3. Welcome page

From the Red Hat Advanced Cluster Management for Kubernetes Welcome page, you get more information about the product and you can access header features, such as *Search* and *Create resource*. When you select *Create resource*, you can create a YAML file or JSON file for a deployment. Also from the *Header*, you can click the **Help** (?) icon to view the *About* page and the documentation. From the *User* menu, you can access the *Configure Client* page. Additionally, you can access the [Visual Web Terminal](#) from the header.

1.2.4. Observe environment details

You can view the following information about your clusters on the Overview dashboard:

- Cluster, node, and pod counts across all clusters and for each provider
- Cluster status
- Cluster compliance
- Pod status

Many elements on the dashboard can be clicked to open a search for related resources. Click on a provider card to view information for clusters from a single provider. You can personalize your view of the Overview dashboard by clicking and dragging to reorganize the cards.

1.2.4.1. Filtering your results

You can personalize your view of the page by using the filtering feature. Click **Filter results** to specify what information is displayed on your page.

1.2.5. Automate infrastructure

Create clusters or import existing clusters. Scale up or down and delete clusters as needed. For more information, see [Managing your clusters with Red Hat Advanced Cluster Management for Kubernetes](#)

1.2.6. Manage applications

Click **New application** to edit a **.yaml** file and create your application. Click **Resources** to view the information of each application. For more information about application resources, see [Managing applications](#).

1.2.6.1. Viewing your pod health

View the pod health for all of your clusters by expanding the Heatmap.

Click **Show details** to view the map. The size of the color-coordinated boxes represents the number of nodes on your cluster. Hover your cursor over the box to view the response time of your cluster.

1.2.7. Topology page

The Topology page uses information from Weave Scope probe to display Kubernetes objects within a cluster. You can view hub cluster resources. As you configure managed clusters, you see more clusters in the Topology view.

To reduce the graphics on the page, you can filter the view by Clusters, Namespaces, and Labels. You can also filter the design by selecting the icon that represents the Kubernetes objects.

Learn more about the tabs that are available from the Topology page:

- **Clusters:** You can monitor your cluster network, object network, and security policies in a graphical format. View your hub clusters, all your managed clusters, and monitor security violations.
- **Policies:** View the policy, policy placement, and clusters that are being validated. Check for violations for the selected policy.

1.2.8. Governance and risk dashboard

Use the Governance and risk dashboard to create and manage policies and policy controllers. For more information, see [Governance and risk](#).

1.3. SEARCH IN THE CONSOLE

For Red Hat Advanced Cluster Management for Kubernetes, Search provides visibility into your resources across all your clusters.

You can type any text value in the *Search box* and results include anything with that value from any property, such as a name or namespace. If you search for **RedHat** and you manage a large number of clusters, it might take a longer time to receive search results.

For more specific search results, include the property selector in your search. You can combine related values for the property, for a more precise scope of your search. For example, search for **cluster:dev red** to receive results that match the string **"red"** in the **dev** cluster.

1. Click **Search** in the navigation menu.
2. Type a word in the *Search box*, then Search finds your resources that contain that value.
 - As you search for resources, you receive other resources that are related to your original search result, which help you visualize how the resources interact with other resources in the system.
 - Search returns and lists each cluster with the resource that you search. For resources in the *hub* cluster, the cluster name is displayed as *local-cluster*.
 - Your search results are grouped by **kind**, and each resource **kind** is grouped in a table.
 - Your search options depend on your cluster objects. You can refine your results with specific labels. Search is case-sensitive when you query labels. See the following examples: name, namespace, status, and other resource fields. Auto-complete provides suggestions to refine your search. See the following example:
 - Search for a single field, such as **kind:pod** to find all pod resources.
 - Search for multiple fields, such as **kind:pod namespace:default** to find the pods in the default namespace.

Notes:

- Users are unable to search for values that contain an empty space.
 - Any user can search for resources, but results are based on your role-based access control assignment. Additionally, if you save and share a Search query with another user, returned results depend on access level for that user. For more information on role access, see *Using RBAC Authorization* in the [Kubernetes documentation](#).
 - You can also search with conditions by using characters, such as `>`, `>=`, `<`, `<=`, `!=`.
 - When you search for more than one property selector with multiple values, the search returns either of the values that were queried. View the following examples:
 - When you search for **kind:pod name:a**, any pod named **a** is returned.
 - When you search for **kind:pod name:a,b**, any pod named **a** or **b** are returned. See the following example:
 - Search for **kind:pod status:!Running** to find all pod resources where the status is not **Running**.
 - Search for **kind:pod restarts:>1** to find all pods that restarted at least twice.
3. If you want to save your search, click the **Save disk** icon.

Learn more about the Red Hat Advanced Cluster Management for Kubernetes console, see [Web console](#).

1.4. VISUAL WEB TERMINAL

The Visual Web Terminal is a **tech preview** feature. You can use the Visual Web Terminal to run many commands across your cluster. Run commands and get outputs without leaving the entire console. You can run multiple commands, similar to what you can do in a standard terminal.

With Visual Web Terminal, commands that return cluster resource data are displayed visually in interactive tabular format, rather than plain text that is displayed in a standard terminal. You can see the data, click on a row, and then see more details about that resource.

Notes:

The information that is provided in the Visual Web Terminal is limited by the permissions of the user. When you run a command, only the items that you have permission to view are displayed.

If there are over ten sessions that are running at the same time, there might be a slower response time when running commands.

The Visual Web Terminal connects to the cloud that you are already logged into with the hub cluster console.

- [Starting a session](#)
- [Supported command list](#)
- [Searching with Visual Web Terminal](#)

1.4.1. Starting a session

You can access the Visual Web Terminal by completing the following steps:

1. Log in to your console.
2. From the console *Header*, select the **Visual Web Terminal** icon.
3. Choose to open in a new tab or open in a current tab.
4. Start running commands in the input field. For example, you can start running any **oc** or **kubectl** commands and get a visual output.
5. Optional: Select the **getting started** command to pull up the *About* page and more, or type the command in the input field.
6. Optional: You can change your default namespace. Click **@default** in the status bar at the bottom of the page to run the command that displays your namespaces. View the output, then click on a row in the table to set a different namespace.
7. Use the *Supported command list* to learn about commands that you can run using **kubectl** or **oc**.

1.4.2. Supported command list

The following table provides information and examples for the command types that are supported by the Visual Web Terminal:

Command	Description	Example
!!	Run the previous command again	!!
bash commands	Run the following basic bash commands: base64, basename, cat, cksum, cp, cut, date, dirname, echo, grep, head, ls, mkdir, mv, printf, readlink, rm, sed, tail, touch, uname, vi, and vim	mkdir new_directory
cd	Change the current working directory for local filesystem changes	cd dir_name
clear	Clear the screen of previous commands and output	clear
export	Export the output of the command to an external file	export search search_criteria

Command	Description	Example
helm	Run supported helm commands. Tip: See the helm commands topic in the Helm documentation for more information about the Helm commands.	helm list --chart-name
help (alias for getting started)	Display additional information about a command that is supported in the Visual Web Terminal in a side panel.	help
history	Displays the previous 25 commands that were run during the current session. Tip: You can limit the search criteria by adding it to the end of the command. For example, history help displays the last 25 commands that contained the string <i>help</i> .	history
kubectl or k	Run supported kubectl (or shorthand k) commands. Tip: See the Kubernetes CLI reference for more information about the kubectl commands.	kubectl get pods
oc	Runs Red Hat OpenShift oc commands. Tip: See Red Hat OpenShift CLI Operations for more information about the oc commands.	oc get svc
search	Searches your Kubernetes resources for those that match the specified search filters and parameters	search pod
savedsearches	Displays your saved searches that you created and saved in the <i>Search</i> page.	savedsearches Tip: You can specify a string after the savedsearches command to limit the data that is returned. For example, savedsearches projectA displays the saved searches that contain the string <i>projectA</i> .

Command	Description	Example
sleep	Pauses activity during a session. Note: Requires a sleepTime parameter that identifies the number of seconds that it pauses	sleep 20
themes	Displays the contrast theme options of the interface, which you can set to either light or dark	themes

1.4.3. Searching with Visual Web Terminal

The Visual Web Terminal search function provides visibility into your resources across all your clusters.

You can only search for resources based on your role-based access control level assignment. If you save and share a search query with another user, returned results for that user depend on his or her access level.

1. Start a Visual Web Terminal session.
2. In the command entry field of the Visual Web Terminal, type: **search**. When you run a **search** command, the Visual Web Terminal verifies that the search function is available. If it is not available, a message indicates that either the search function is not installed, or that it is just not available. If it is installed, but not available, it might be a network issue.
3. Add a space after the **search** command. The list of filters that are available for the search is displayed. The list of filters might be empty because it is dependent on the resources that are available in your environment and your role permissions.
4. Select one of the filters from the list. The selected filter is added to the search criteria on your command line, and the next level of filters for that selection are displayed. **Tip:** You can also enter a string after the **search** command, rather than selecting a filter from the list.
5. Optional: Add filters by entering a single space after each filter entry until your command contains all of the required filters.
6. When you are finished adding your search criteria, press **Enter** to run the search.

You can refine your results with specific fields. See the following example:

- Search for a single field, such as **kind:pod** to find all pod resources.
- Search for multiple fields, such as **kind:pod namespace:default** to find the pods in the default namespace.

You can also search with conditions using characters, such as (>, >=, <, <=, !=).

See the following examples:

- Search for **kind:pod status:!Running** to find all pod resources where the status is not **Running**.
- Search for **kind:pod restarts:>1** to find all pods that have restarted at least twice.

The search returns resources that meet the criteria of your search request, as well as links to view related resources. Viewing all of them helps you visualize how the resources interact with other resources in the system.

Your search results are grouped by **kind** and each resource **kind** is grouped in a table. You can reorder the data in the tables by selecting the row and column headings.

You can use a search that was saved in the console by entering the **savedsearches** command and selecting the search that you want to run.

1.5. MANAGING CLUSTER LABELS

Add a label to your cluster to select group resources. See [Labels and Selectors](#) for more information.

You can add new labels, remove existing labels, and edit existing labels for your clusters. Complete the following steps to manage your labels:

1. From the navigation menu, click **Automate infrastructure** > **Clusters**.
2. Find your cluster in the *Clusters* table.
3. Click the **Options** icon to see more.
4. Click **Edit labels**.
5. From the *Edit labels* dialog box, enter a label. Your entry might resemble the following content: `Key=Value``.
6. Hit enter or space to add additional labels.
7. Click **Add**. Labels are saved when the **Add** button is clicked.
8. Click **Done** to close the Edit labels dialog, when you are finished.
 - If you want to remove an existing label, click the **Remove** icon, next to the label in the list.
 - If you want to undo a **Remove** action, click on the **Deleted** icon, which appears after **Remove** is clicked.
 - If you want to update an existing label, you can reassign its key to a new value by adding a new label using the same key with a different value.

Note: You can also edit a cluster label from a cluster details page. From the navigation menu, click **Automate infrastructure** > **Clusters**. From the **Clusters** view, access a cluster's details page by clicking the cluster's name, then **Actions** > **Edit labels**.

Learn more about the Red Hat Advanced Cluster Management for Kubernetes console, see [Web console](#).