OpenNMS Helm Charts with OpenShift: Documentation (1.1.0-Beta1)

OpenNMS Helm Charts makes it easier for users to run OpenNMS Horizon on a Red Hat OpenShift or Kubernetes environment. It provides a package that includes all the resources needed to deploy Horizon.

This documentation provides basic information on how to install Horizon on Red Hat OpenShift. For information on how to use Red Hat OpenShift, refer to the [product documentation](https://access.redhat.com/documentation/en-us/openshift_container_platform/4.5).

Current Limitations and Known Issues

* **ISSUE:** Horizon can ping all IP addresses from the core or a Minion pod, but due to a limitation with how OpenShift handles routing, ICMP is not usable, as it returns an invalid result.
  + **WORKAROUND:** Use a Minion that is located outside of the OpenShift cluster.

# Supported/Tested Features

|  |  |  |
| --- | --- | --- |
|  | Status | Notes |
| Core | Testing in progress | Some random behavior:   * Horizon 32 (H32) doesn’t create the selfmonitor requisition. * ICMP does not work properly.   + Workaround: Use a Minion that is located outside of the OpenShift cluster. |
| Minion | Testing with workaround applied | * The base image fails to come up; it fails with permission error.   + Workaround: Run the container with 10001 user id. * ICMP does not work properly.   + Workaround: Use a Minion that is located outside of the OpenShift cluster. |
| Sentinel | Not Tested |  |

# Install OpenNMS Horizon on OpenShift

NOTE: OpenNMS will create a ClusterRole, ClusterRoleBinding, Route, SecurityContextConstraints, and ServiceAccount. The user used to install OpenNMS must have the required permissions to make these modifications the OpenShift Cluster, including admin access. These elements are necessary for the pods to start and function. There are options to disable the creation of these elements, but if you do so, you will need to figure out a way to get the pods to work.

1. Log in to OpenShift and switch to **Developer** view.
2. Create a project with a unique name.

A screenshot of a computer

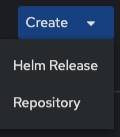
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1. Go to the **Helm** section.

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1. In the **Create** drop-down menu, select **Repository**.



* 1. In the **Create Repository** page,
     1. Add a unique name and display name.
     2. Use <https://opennms.github.io/helm-charts/> for the URL.
     3. Save the changes.

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1. In the **Create** drop-down menu, select **Helm Release**.
2. Under **Repository**, select the newly created repository entry.
3. Click on **Horizon**.

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1. Make sure that the project name matches the name you set in step 2.
   1. Skip this step if you are setting “CreateNamespace” option to true.
2. Make the required modifications (for example, set the PostgreSQL information).
3. Click **Create**.

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1. Wait for the pods to come up. This may take a few minutes.

NOTE: The process to install the Minion is similar.