



# Red Hat Application Interconnect 1.0

## Using the Skupper Operator on OpenShift

For Use with Application Interconnect 1.0 LIMITED AVAILABILITY



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## Abstract

This guide describes how to use the Skupper operator.

## Table of Contents

PREFACE .....	3
CHAPTER 1. INSTALLING THE OPERATOR USING THE CLI .....	4
CHAPTER 2. CREATING A SITE USING THE SKUPPER OPERATOR .....	5



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## PREFACE

### Making open source more inclusive

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

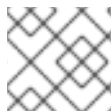


#### NOTE

This Limited Availability release is not available to all customers. Contact [Red Hat Sales](#) if you are interested in learning more about Application Interconnect.

The Skupper Operator creates and manages Application Interconnect sites in OpenShift.

You can install the Operator as described in [Chapter 1, \*Installing the Operator using the CLI\*](#).



#### NOTE

Installing an Operator requires administrator-level privileges for your OpenShift cluster.

After installing the Operator, you can create a site by deploying a ConfigMap as described in [Chapter 2, \*Creating a site using the Skupper Operator\*](#)

## CHAPTER 1. INSTALLING THE OPERATOR USING THE CLI

The steps in this section show how to use the **kubectrl** command-line interface (CLI) to install and deploy the latest version of the Skupper Operator in a given OpenShift cluster.

### Procedure

1. Download the Skupper Operator example files, for example:

```
$ curl -fL https://github.com/skupperproject/skupper-operator/archive/refs/heads/main.zip
```

2. Specify the namespace in which you want to install the Operator. You can create a new namespace or switch to an existing one.

- a. Create a new namespace if necessary:

```
$ kubectrl create namespace <namespace-name>
```

- b. Switch to the namespace in which you want to install the Operator:

```
$ kubectrl config set-context --current --namespace=<namespace-name>
```

3. Create a CatalogSource in the **openshift-marketplace** namespace:

```
$ kubectrl apply -f examples/ocp/00-cs.yaml
```

4. Make sure the skupper-operator catalog pod is running before continuing:

```
$ kubectrl -n openshift-marketplace get pods | grep skupper-operator
```

5. Create an OperatorGroup in the **my-namespace** namespace:

```
$ kubectrl apply -f examples/ocp/10-og.yaml
```

6. Create a Subscription in the **my-namespace** namespace:

```
$ kubectrl apply -f examples/ocp/20-sub.yaml
```

7. Verify that the Operator is running:

```
$ kubectrl get pods -n my-namespace
```

NAME	READY	STATUS	RESTARTS	AGE
skupper-site-controller-d7b57964-gxms6	1/1	Running	0	1m

If the output does not report the pod is running, use the following command to determine the issue that prevented it from running:

```
$ kubectrl describe pod -l name=skupper-operator
```



## CHAPTER 2. CREATING A SITE USING THE SKUPPER OPERATOR

1. Create a YAML file defining the ConfigMap of the site you want to create.  
For example, create **skupper-site.yaml**:

```
apiVersion: v1
kind: ConfigMap
metadata:
  name: skupper-site
  namespace: my-namespace
```

You can later retrieve the console credentials as described in [Using the Skupper console](#) or specify them now by adding the username and optionally the password to **skupper-site.yaml** as follows:

```
data:
  console-user: "admin"
  console-password: "changeme"
```

2. Apply the YAML to create a ConfigMap named **skupper-site** in the namespace you want to use:

```
$ kubectl apply -f skupper-site.yaml
```

3. Verify that the site is created by checking that the Skupper router and service controller pods are running:

```
$ kubectl get pods
```

NAME	READY	STATUS	RESTARTS	AGE
skupper-router-8c6cc6d76-27562	1/1	Running	0	40s
skupper-service-controller-57cdbb56c5-vc7s2	1/1	Running	0	34s



### NOTE

If you deployed the Operator to a single namespace, an additional site controller pod is also running.

*Revised on 2022-06-24 16:33:47 UTC*