



OpenShift Dedicated 4

Applications

Configuring OpenShift Dedicated for your applications

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Abstract

This document provides information about configuring OpenShift Dedicated for your application deployments. This includes setting up custom wildcard domains.

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CHAPTER 1. DEPLOYMENTS

1.1. CONFIGURING CUSTOM DOMAINS FOR APPLICATIONS

1.1.1. Configuring custom domains for applications

Custom domains are specific wildcard domains that can be used with OpenShift Dedicated applications. The top-level domains (TLDs) are owned by the customer that is operating the OpenShift Dedicated cluster. The Custom Domains Operator sets up a new **ingresscontroller** with a custom certificate as a second day operation. The public DNS record for this **ingresscontroller** can then be used by an external DNS to create a wildcard CNAME record for use with a custom domain.

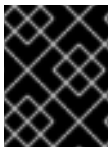


NOTE

Custom API domains are not supported because Red Hat controls the API domain. However, customers can change their application domains. For private custom domains with a private **IngressController**, set **.spec.scope** to **Internal** in the **CustomDomain** CR.

Prerequisites

- A user account with **dedicated-admin** privileges
- A unique wildcard domain, such as ***.apps.<company_name>.io**
- A wildcard custom certificate, such as **CN=*.apps.<company_name>.io**
- Access to a cluster with the latest version of the **oc** CLI installed



IMPORTANT

Do not use the reserved names **default** or **apps***, such as **apps** or **apps2**, in the **metadata/name:** section of the **CustomDomain** CR.

Procedure

1. Create a new TLS secret from a private key and a public certificate, where **fullchain.pem** and **privkey.pem** are your public or private wildcard certificates.

Example

```
$ oc create secret tls <name>-tls --cert=fullchain.pem --key=privkey.pem -n <my_project>
```

2. Create a new **CustomDomain** custom resource (CR):

Example <company_name>-custom-domain.yaml

```
apiVersion: managed.openshift.io/v1alpha1
kind: CustomDomain
metadata:
  name: <company_name>
spec:
  domain: apps.companyname.io 1
```

```
scope: External
certificate:
  name: <name>-tls 2
  namespace: <my_project>
```

- 1** The custom domain.
- 2** The secret created in the previous step.

3. Apply the CR:

Example

```
$ oc apply -f <company_name>-custom-domain.yaml
```

4. Get the status of your newly created CR:

```
$ oc get customdomains
```

Example output

| NAME | ENDPOINT | DOMAIN | STATUS |
|--------------------------|--|--------|--------|
| <company_name> | xxrywp.<company_name>.cluster-01.opln.s1.openshiftapps.com | | |
| *.apps.<company_name>.io | Ready | | |

5. Using the endpoint value, add a new wildcard CNAME recordset to your managed DNS provider, such as Route53, Azure DNS, or Google DNS.

Example

```
*.apps.<company_name>.io -> xxrywp.<company_name>.cluster-01.opln.s1.openshiftapps.com
```

6. Create a new application and expose it:

Example

```
$ oc new-app --docker-image=docker.io/openshift/hello-openshift -n my-project
```

```
$ oc create route edge --service=hello-openshift hello-openshift-tls --hostname hello-openshift-tls-my-project.apps.acme.io -n my-project
```

```
$ oc get route -n my-project
```

```
$ curl https://hello-openshift-tls-my-project.apps.<company_name>.io
Hello OpenShift!
```