

### **Red Hat Decision Manager 7.8**

Deploying a Red Hat Decision Manager trial environment on Red Hat OpenShift Container Platform

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Red Hat Decision Manager 7.8 Deploying a Red Hat Decision Manager trial environment on Red Hat OpenShift Container Platform

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#### **Abstract**

This document describes how to deploy a Red Hat Decision Manager 7.8 trial environment on Red Hat OpenShift Container Platform.

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#### **PREFACE**

As a system engineer, you can deploy a Red Hat Decision Manager trial environment on Red Hat OpenShift Container Platform to evaluate or demonstrate development and use of rules and other business assets.

#### **Prerequisites**

- Red Hat OpenShift Container Platform version 3.11 is deployed.
- At least three gigabytes of memory are available in the OpenShift cluster/namespace.
- The OpenShift project for the deployment is created.
- You are logged in to the project using the oc command. For more information about the oc command-line tool, see the OpenShift CLI Reference. If you want to use the OpenShift Web console to deploy templates, you must also be logged on using the Web console.



#### **NOTE**

Since Red Hat Decision Manager version 7.5, images and templates for Red Hat OpenShift Container Platform 3.x are deprecated. These images and templates do not get new features, but remain supported until the end of full support for Red Hat OpenShift Container Platform version 3.x. For more information about the full support lifecycle phase for Red Hat OpenShift Container Platform Version 3.x, see Red Hat OpenShift Container Platform Life Cycle Policy (non-current versions).



#### NOTE

Do not use Red Hat Decision Manager templates with Red Hat OpenShift Container Platform 4.x. To deploy Red Hat Decision Manager on Red Hat OpenShift Container Platform 4.x, see the instructions in *Deploying a Red Hat Decision Manager environment on Red Hat OpenShift Container Platform using Operators*.

# CHAPTER 1. OVERVIEW OF RED HAT DECISION MANAGER ON RED HAT OPENSHIFT CONTAINER PLATFORM

You can deploy Red Hat Decision Manager into a Red Hat OpenShift Container Platform environment.

In this solution, components of Red Hat Decision Manager are deployed as separate OpenShift pods. You can scale each of the pods up and down individually to provide as few or as many containers as required for a particular component. You can use standard OpenShift methods to manage the pods and balance the load.

The following key components of Red Hat Decision Manager are available on OpenShift:

- KIE Server, also known as *Execution Server*, is the infrastructure element that runs decision services and other deployable assets (collectively referred to as *services*). All logic of the services runs on execution servers.
  - In some templates, you can scale up a KIE Server pod to provide as many copies as required, running on the same host or different hosts. As you scale a pod up or down, all of its copies run the same services. OpenShift provides load balancing and a request can be handled by any of the pods.
  - You can deploy a separate KIE Server pod to run a different group of services. That pod can also be scaled up or down. You can have as many separate replicated KIE Server pods as required.
- Business Central is a web-based interactive environment used for authoring services. It also
  provides a management console. You can use Business Central to develop services and deploy
  them to KIE Servers.
  - Business Central is a centralized application. However, you can configure it for high availability, where multiple pods run and share the same data.

Business Central includes a Git repository that holds the source for the services that you develop on it. It also includes a built-in Maven repository. Depending on configuration, Business Central can place the compiled services (KJAR files) into the built-in Maven repository or (if configured) into an external Maven repository.

You can arrange these and other components into various environment configurations within OpenShift.

The following environment types are typical:

- Authoring or managed environment: An environment architecture that can be used for creating
  and modifying services using Business Central and also for running services on KIE Servers. It
  consists of pods that provide Business Central for the authoring work and one or more KIE
  Servers for execution of the services. Each KIE Server is a pod that you can replicate by scaling
  it up or down as necessary. You can deploy and undeploy services on each KIE Server using
  Business Central. For instructions about deploying this environment, see Deploying a Red Hat
  Decision Manager authoring or managed server environment on Red Hat OpenShift Container
  Platform.
- Deployment with immutable servers: An alternate environment for running existing services for staging and production purposes. In this environment, when you deploy a KIE Server pod, it builds an image that loads and starts a service or group of services. You cannot stop any service on the pod or add any new service to the pod. If you want to use another version of a service or modify the configuration in any other way, you deploy a new server image and displace the old one. In this system, the KIE Server runs like any other pod on the OpenShift environment; you

can use any container-based integration workflows and do not need to use any other tools to manage the pods. For instructions about deploying this environment, see *Deploying a Red Hat Decision Manager immutable server environment on Red Hat OpenShift Container Platform*.

You can also deploy a *trial* or evaluation environment. This environment includes Business Central and a KIE Server. You can set it up quickly and use it to evaluate or demonstrate developing and running assets. However, the environment does not use any persistent storage, and any work you do in the environment is not saved. For instructions about deploying this environment, see *Deploying a Red Hat Decision Manager trial environment on Red Hat OpenShift Container Platform*.

To deploy a Red Hat Decision Manager environment on OpenShift, you can use the templates that are provided with Red Hat Decision Manager.

## CHAPTER 2. ENSURING THE AVAILABILITY OF IMAGE STREAMS AND THE IMAGE REGISTRY

To deploy Red Hat Decision Manager components on Red Hat OpenShift Container Platform, you must ensure that OpenShift can download the correct images from the Red Hat registry. To download the images, OpenShift requires *image streams*, which contain the information about the location of images. OpenShift also must be configured to authenticate with the Red Hat registry using your service account user name and password.

Some versions of the OpenShift environment include the required image streams. You must check if they are available. If image streams are available in OpenShift by default, you can use them if the OpenShift infrastructure is configured for registry authentication server. The administrator must complete the registry authentication configuration when installing the OpenShift environment.

Otherwise, you can configure registry authentication in your own project and install the image streams in that project.

#### Procedure

- Determine whether Red Hat OpenShift Container Platform is configured with the user name and password for Red Hat registry access. For details about the required configuration, see Configuring a Registry Location. If you are using an OpenShift Online subscription, it is configured for Red Hat registry access.
- 2. If Red Hat OpenShift Container Platform is configured with the user name and password for Red Hat registry access, enter the following commands:

```
$ oc get imagestreamtag -n openshift | grep -F rhdm78-decisioncentral-openshift $ oc get imagestreamtag -n openshift | grep -F rhdm78-kieserver-openshift
```

If the outputs of both commands are not empty, the required image streams are available in the **openshift** namespace and no further action is required.

- 3. If the output of one or both of the commands is empty or if OpenShift is not configured with the user name and password for Red Hat registry access, complete the following steps:
  - a. Ensure you are logged in to OpenShift with the oc command and that your project is active.
  - b. Complete the steps documented in Registry Service Accounts for Shared Environments . You must log in to the Red Hat Customer Portal to access the document and to complete the steps to create a registry service account.
  - c. Select the **OpenShift Secret** tab and click the link under **Download secret** to download the YAML secret file.
  - d. View the downloaded file and note the name that is listed in the **name:** entry.
  - e. Enter the following commands:

```
oc create -f <file_name>.yaml
oc secrets link default <secret_name> --for=pull
oc secrets link builder <secret_name> --for=pull
```

Replace **<file\_name>** with the name of the downloaded file and **<secret\_name>** with the name that is listed in the **name:** entry of the file.

- f. Download the **rhdm-7.8.0-openshift-templates.zip** product deliverable file from the Software Downloads page and extract the **rhdm78-image-streams.yaml** file.
- g. Enter the following command:

\$ oc apply -f rhdm78-image-streams.yaml



#### **NOTE**

If you complete these steps, you install the image streams into the namespace of your project. In this case, when you deploy the templates, you must set the **IMAGE\_STREAM\_NAMESPACE** parameter to the name of this project.

#### **CHAPTER 3. DEPLOYING A TRIAL ENVIRONMENT**

You can deploy a trial (evaluation) Red Hat Decision Manager environment. It consists of Business Central for authoring or managing services and KIE Server for test execution of services.

This environment does not include permanent storage. Assets that you create or modify in a trial environment are not saved.

This environment is intended for test and demonstration access. It supports cross-origin resource sharing (CORS). This means that KIE Server endpoints can be accessed using a browser when other resources on the page are provided by other servers. KIE Server endpoints are normally intended for REST calls, but browser access can be needed in some demonstration configurations.

The procedure is minimal. There are no required settings and all passwords are set to a single value (the default password is **RedHat**).

To deploy a trial environment, use the **rhdm78-trial-ephemeral.yaml** template file. You can extract this file from the **rhdm-7.8.0-openshift-templates.zip** product deliverable file. You can download the file from the Software Downloads page of the Red Hat Customer Portal.

#### **Procedure**

- 1. Use one of the following methods to deploy the template:
  - In the OpenShift Web UI, select Add to Project → Import YAML / JSONand then select or
    paste the rhdm78-trial-ephemeral.yaml file. In the Add Template window, ensure Process
    the template is selected and click Continue.
  - To use the OpenShift command line console, prepare the following command line:
    - oc new-app -f <template-path>/rhdm78-trial-ephemeral.yaml

In this command line, replace **<template-path>** with the path to the downloaded template file.

- 2. Optionally, set any parameters as described in the template. A typical trial deployment requires only the following parameter:
  - ImageStream Namespace (IMAGE\_STREAM\_NAMESPACE): The namespace where the
    image streams are available. If the image streams were already available in your OpenShift
    environment (see Chapter 2, Ensuring the availability of image streams and the image
    registry), the namespace is openshift. If you installed the image streams file, the namespace
    is the name of the OpenShift project.
- 3. Complete the creation of the environment, depending on the method that you are using:
  - In the OpenShift Web UI, click Create.
    - A This will create resources that may have security or project behavior implications pop-up message might be displayed. If it is displayed, click Create Anyway.
  - Complete and run the command line.

# CHAPTER 4. OPENSHIFT TEMPLATE REFERENCE INFORMATION

Red Hat Decision Manager provides the following OpenShift templates. To access the templates, download and extract the **rhdm-7.8.0-openshift-templates.zip** product deliverable file from the Software Downloads page of the Red Hat customer portal.

• **rhdm78-trial-ephemeral.yaml** provides a Business Central and a KIE Server connected to the Business Central. This environment uses an ephemeral configuration without any persistent storage. For details about this template, see Section 4.1, "rhdm78-trial-ephemeral.yaml template".

#### 4.1. RHDM78-TRIAL-EPHEMERAL.YAML TEMPLATE

Application template for an ephemeral authoring and testing environment, for Red Hat Decision Manager 7.8 - Deprecated

#### 4.1.1. Parameters

Templates allow you to define parameters that take on a value. That value is then substituted wherever the parameter is referenced. References can be defined in any text field in the objects list field. See the Openshift documentation for more information.

Variable name	lmage Environment Variable	Description	Example value	Required
APPLICATION_ NAME	_	The name for the application.	myapp	True
DEFAULT_PAS SWORD	KIE_ADMIN_PW D	Default password used for multiple components for user convenience in this trial environment.	RedHat	True
KIE_ADMIN_US ER	KIE_ADMIN_US ER	KIE administrator user name.	adminUser	False
KIE_SERVER_B YPASS_AUTH_ USER	KIE_SERVER_B YPASS_AUTH_ USER	Allows the KIE server to bypass the authenticated user for task-related operations, for example, queries. (Sets the org.kie.server.bypa ss.auth.user system property)	false	False

Variable name	lmage Environment Variable	Description	Example value	Required
KIE_SERVER_M ODE	KIE_SERVER_M ODE	The KIE Server mode. Valid values are 'DEVELOPMENT' or 'PRODUCTION'. In production mode, you can not deploy SNAPSHOT versions of artifacts on the KIE server and can not change the version of an artifact in an existing container. (Sets the org.kie.server.mod e system property).	DEVELOPMENT	False
KIE_MBEANS	KIE_MBEANS	KIE server mbeans enabled/disabled. (Sets the kie.mbeans and kie.scanner.mbean s system properties)	enabled	False
DROOLS_SERV ER_FILTER_CL ASSES	DROOLS_SERV ER_FILTER_CL ASSES	KIE server class filtering. (Sets the org.drools.server.fil ter.classes system property)	true	False
PROMETHEUS_ SERVER_EXT_D ISABLED	PROMETHEUS_ SERVER_EXT_D ISABLED	If set to false, the prometheus server extension will be enabled. (Sets the org.kie.prometheu s.server.ext.disable d system property)	false	False

Variable name	lmage Environment Variable	Description	Example value	Required
KIE_SERVER_H OSTNAME_HTT P	HOSTNAME_HT TP	Custom hostname for http service route. Leave blank for default hostname, e.g.: insecure- <application-name>-kieserver- <project>.<default-domain-suffix></default-domain-suffix></project></application-name>		False
KIE_SERVER_A CCESS_CONTR OL_ALLOW_OR IGIN	AC_ALLOW_OR IGIN_FILTER_R ESPONSE_HEA DER_VALUE	Sets the Access- Control-Allow- Origin response header value in the KIE Server (useful for CORS support).	*	False
KIE_SERVER_A CCESS_CONTR OL_ALLOW_ME THODS	AC_ALLOW_ME THODS_FILTER _RESPONSE_H EADER_VALUE	Sets the Access- Control-Allow- Methods response header value in the KIE Server (useful for CORS support).	GET, POST, OPTIONS, PUT	False
KIE_SERVER_A CCESS_CONTR OL_ALLOW_HE ADERS	AC_ALLOW_HE ADERS_FILTER _RESPONSE_H EADER_VALUE	Sets the Access- Control-Allow- Headers response header value in the KIE Server (useful for CORS support).	Accept, Authorization, Content-Type, X- Requested-With	False
KIE_SERVER_A CCESS_CONTR OL_ALLOW_CR EDENTIALS	AC_ALLOW_CR EDENTIALS_FIL TER_RESPONS E_HEADER_VA LUE	Sets the Access- Control-Allow- Credentials response header value in the KIE Server (useful for CORS support).	true	False

Variable name	lmage Environment Variable	Description	Example value	Required
KIE_SERVER_A CCESS_CONTR OL_MAX_AGE	AC_MAX_AGE_ FILTER_RESPO NSE_HEADER_ VALUE	Sets the Access- Control-Max-Age response header value in the KIE Server (useful for CORS support).	1	False
DECISION_CEN TRAL_HOSTNA ME_HTTP	HOSTNAME_HT TP	Custom hostname for http service route. Leave blank for default hostname, e.g.: insecure- <application-name>-rhdmcentr- <project>.<default-domain-suffix></default-domain-suffix></project></application-name>		False
KIE_SERVER_C ONTROLLER_O PENSHIFT_GLO BAL_DISCOVE RY_ENABLED	KIE_SERVER_C ONTROLLER_O PENSHIFT_GLO BAL_DISCOVE RY_ENABLED	If set to true, turns on KIE server global discovery feature (Sets the org.kie.server.cont roller.openshift.glo bal.discovery.enabl ed system property)	false	False
KIE_SERVER_C ONTROLLER_O PENSHIFT_PRE FER_KIESERVE R_SERVICE	KIE_SERVER_C ONTROLLER_O PENSHIFT_PRE FER_KIESERVE R_SERVICE	If OpenShift integration of Business Central is turned on, setting this parameter to true enables connection to KIE Server via an OpenShift internal Service endpoint. (Sets the org.kie.server.cont roller.openshift.pre fer.kieserver.servic e system property)	true	False

Variable name	lmage Environment Variable	Description	Example value	Required
KIE_SERVER_C ONTROLLER_T EMPLATE_CAC HE_TTL	KIE_SERVER_C ONTROLLER_T EMPLATE_CAC HE_TTL	KIE ServerTemplate Cache TTL in milliseconds. (Sets the org.kie.server.cont roller.template.cac he.ttl system property)	60000	False
IMAGE_STREA M_NAMESPACE		Namespace in which the ImageStreams for Red Hat Decision Manager images are installed. These ImageStreams are normally installed in the openshift namespace. You need to modify this parameter only if you installed the ImageStreams in a different namespace/projec t.	openshift	True
KIE_SERVER_I MAGE_STREAM _NAME	_	The name of the image stream to use for KIE server. Default is "rhdm-kieserver-rhel8".	rhdm-kieserver- rhel8	True
IMAGE_STREA M_TAG	_	A named pointer to an image in an image stream. Default is "7.8.0".	7.8.0	True

Variable name	lmage Environment Variable	Description	Example value	Required
KIE_SERVER_C ONTAINER_DE PLOYMENT	KIE_SERVER_C ONTAINER_DE PLOYMENT	KIE Server Container deployment configuration with optional alias. Format: containerId=groupI d:artifactId:version  c2(alias2)=g2:a2:v2	_	False
MAVEN_REPO_I D	MAVEN_REPO_I D	The id to use for the maven repository, if set. Default is generated randomly.	repo-custom	False
MAVEN_REPO_ URL	MAVEN_REPO_ URL	Fully qualified URL to a Maven repository or service.	http://nexus.nexu s- project.svc.cluster. local:8081/nexus/ content/groups/p ublic/	False
MAVEN_REPO_ USERNAME	MAVEN_REPO_ USERNAME	User name for accessing the Maven repository, if required.	_	False
MAVEN_REPO_ PASSWORD	MAVEN_REPO_ PASSWORD	Password to access the Maven repository, if required.	_	False
GIT_HOOKS_DI R	GIT_HOOKS_DI R	The directory to use for git hooks, if required.	/opt/kie/data/git/ hooks	False
DECISION_CEN TRAL_MEMORY _LIMIT	-	Decision Central Container memory limit.	2Gi	False
KIE_SERVER_M EMORY_LIMIT	_	KIE server Container memory limit.	1Gi	False

Variable name	lmage Environment Variable	Description	Example value	Required
SSO_URL	SSO_URL	RH-SSO URL.	https://rh- sso.example.com/ auth	False
SSO_REALM	SSO_REALM	RH-SSO Realm name.	_	False
DECISION_CEN TRAL_SSO_CLI ENT	SSO_CLIENT	Decision Central RH-SSO Client name.	-	False
DECISION_CEN TRAL_SSO_SE CRET	SSO_SECRET	Decision Central RH-SSO Client Secret.	252793ed-7118- 4ca8-8dab- 5622fa97d892	False
KIE_SERVER_S SO_CLIENT	SSO_CLIENT	KIE Server RH- SSO Client name.	-	False
KIE_SERVER_S SO_SECRET	SSO_SECRET	KIE Server RH- SSO Client Secret.	252793ed-7118- 4ca8-8dab- 5622fa97d892	False
SSO_USERNAM E	SSO_USERNAM E	RH-SSO Realm admin user name used to create the Client if it doesn't exist.		False
SSO_PASSWOR D	SSO_PASSWOR D	RH-SSO Realm Admin Password used to create the Client.	_	False
SSO_DISABLE_ SSL_CERTIFIC ATE_VALIDATI ON	SSO_DISABLE_ SSL_CERTIFIC ATE_VALIDATI ON	RH-SSO Disable SSL Certificate Validation.	false	False
SSO_PRINCIPA L_ATTRIBUTE	SSO_PRINCIPA L_ATTRIBUTE	RH-SSO Principal Attribute to use as user name.	preferred_userna me	False
AUTH_LDAP_U RL	AUTH_LDAP_U RL	LDAP Endpoint to connect for authentication.	ldap://myldap.exa mple.com	False

Variable name	lmage Environment Variable	Description	Example value	Required
AUTH_LDAP_BI ND_DN	AUTH_LDAP_BI ND_DN	Bind DN used for authentication.	uid=admin,ou=user s,ou=example,ou= com	False
AUTH_LDAP_BI ND_CREDENTI AL	AUTH_LDAP_BI ND_CREDENTI AL	LDAP Credentials used for authentication.	Password	False
AUTH_LDAP_J AAS_SECURITY _DOMAIN	AUTH_LDAP_J AAS_SECURITY _DOMAIN	The JMX ObjectName of the JaasSecurityDoma in used to decrypt the password.		False
AUTH_LDAP_B ASE_CTX_DN	AUTH_LDAP_B ASE_CTX_DN	LDAP Base DN of the top-level context to begin the user search.	ou=users,ou=exam ple,ou=com	False
AUTH_LDAP_B ASE_FILTER	AUTH_LDAP_B ASE_FILTER	LDAP search filter used to locate the context of the user to authenticate. The input username or userDN obtained from the login module callback is substituted into the filter anywhere a {0} expression is used. A common example for the search filter is (uid={0}).	(uid={O})	False
AUTH_LDAP_S EARCH_SCOPE	AUTH_LDAP_S EARCH_SCOPE	The search scope to use.	SUBTREE_SCO PE	False
AUTH_LDAP_S EARCH_TIME_L IMIT	AUTH_LDAP_S EARCH_TIME_L IMIT	The timeout in milliseconds for user or role searches.	10000	False

Variable name	Image Environment Variable	Description	Example value	Required
AUTH_LDAP_DI STINGUISHED_ NAME_ATTRIB UTE	AUTH_LDAP_DI STINGUISHED_ NAME_ATTRIB UTE	The name of the attribute in the user entry that contains the DN of the user. This may be necessary if the DN of the user itself contains special characters, backslash for example, that prevent correct user mapping. If the attribute does not exist, the entry's DN is used.	distinguishedNam e	False
AUTH_LDAP_P ARSE_USERNA ME	AUTH_LDAP_P ARSE_USERNA ME	A flag indicating if the DN is to be parsed for the user name. If set to true, the DN is parsed for the user name. If set to false the DN is not parsed for the user name. This option is used together with usernameBeginString and usernameEndString.	true	False
AUTH_LDAP_U SERNAME_BEG IN_STRING	AUTH_LDAP_U SERNAME_BEG IN_STRING	Defines the String which is to be removed from the start of the DN to reveal the user name. This option is used together with usernameEndStrin g and only taken into account if parseUsername is set to true.	_	False

Variable name	Image Environment Variable	Description	Example value	Required
AUTH_LDAP_U SERNAME_END _STRING	AUTH_LDAP_U SERNAME_END _STRING	Defines the String which is to be removed from the end of the DN to reveal the user name. This option is used together with usernameEndStrin g and only taken into account if parseUsername is set to true.	_	False
AUTH_LDAP_R OLE_ATTRIBUT E_ID	AUTH_LDAP_R OLE_ATTRIBUT E_ID	Name of the attribute containing the user roles.	memberOf	False
AUTH_LDAP_R OLES_CTX_DN	AUTH_LDAP_R OLES_CTX_DN	The fixed DN of the context to search for user roles. This is not the DN where the actual roles are, but the DN where the objects containing the user roles are. For example, in a Microsoft Active Directory server, this is the DN where the user account is.	ou=groups,ou=exa mple,ou=com	False

Variable name	lmage Environment Variable	Description	Example value	Required
AUTH_LDAP_R OLE_FILTER	AUTH_LDAP_R OLE_FILTER	A search filter used to locate the roles associated with the authenticated user. The input username or userDN obtained from the login module callback is substituted into the filter anywhere a {0} expression is used. The authenticated userDN is substituted into the filter anywhere a {1} is used. An example search filter that matches on the input username is (member={0}). An alternative that matches on the authenticated userDN is (member={1}).	(memberOf={1})	False
AUTH_LDAP_R OLE_RECURSI ON	AUTH_LDAP_R OLE_RECURSI ON	The number of levels of recursion the role search will go below a matching context. Disable recursion by setting this to 0.	1	False
AUTH_LDAP_D EFAULT_ROLE	AUTH_LDAP_D EFAULT_ROLE	A role included for all authenticated users.	user	False

Variable name	Image Environment Variable	Description	Example value	Required
AUTH_LDAP_R OLE_NAME_AT TRIBUTE_ID	AUTH_LDAP_R OLE_NAME_AT TRIBUTE_ID	Name of the attribute within the roleCtxDN context which contains the role name. If the roleAttributeIsDN property is set to true, this property is used to find the role object's name attribute.	name	False
AUTH_LDAP_P ARSE_ROLE_N AME_FROM_DN	AUTH_LDAP_P ARSE_ROLE_N AME_FROM_DN	A flag indicating if the DN returned by a query contains the roleNameAttribute ID. If set to true, the DN is checked for the roleNameAttribute ID. If set to false, the DN is not checked for the roleNameAttribute ID. This flag can improve the performance of LDAP queries.	false	False
AUTH_LDAP_R OLE_ATTRIBUT E_IS_DN	AUTH_LDAP_R OLE_ATTRIBUT E_IS_DN	Whether or not the roleAttributeID contains the fully-qualified DN of a role object. If false, the role name is taken from the value of the roleNameAttribute Id attribute of the context name.  Certain directory schemas, such as Microsoft Active Directory, require this attribute to be set to true.	false	False

Variable name	lmage Environment Variable	Description	Example value	Required
AUTH_LDAP_R EFERRAL_USE R_ATTRIBUTE_I D_TO_CHECK	AUTH_LDAP_R EFERRAL_USE R_ATTRIBUTE_I D_TO_CHECK	If you are not using referrals, you can ignore this option. When using referrals, this option denotes the attribute name which contains users defined for a certain role, for example member, if the role object is inside the referral. Users are checked against the content of this attribute name. If this option is not set, the check will always fail, so role objects cannot be stored in a referral tree.		False
AUTH_ROLE_M APPER_ROLES _PROPERTIES	AUTH_ROLE_M APPER_ROLES _PROPERTIES	When present, the RoleMapping Login Module will be configured to use the provided file. This parameter defines the fully-qualified file path and name of a properties file or resource which maps roles to replacement roles. The format is original_role=role1,r ole2,role3		False
AUTH_ROLE_M APPER_REPLA CE_ROLE	AUTH_ROLE_M APPER_REPLA CE_ROLE	Whether to add to the current roles, or replace the current roles with the mapped ones. Replaces if set to true.	_	False

#### 4.1.2. Objects

The CLI supports various object types. A list of these object types as well as their abbreviations can be found in the Openshift documentation.

#### **4.1.2.1. Services**

A service is an abstraction which defines a logical set of pods and a policy by which to access them. See the container-engine documentation for more information.

Service	Port	Name	Description
\${APPLICATION_NA ME}-rhdmcentr	8080	http	All the Decision Central web server's ports.
\${APPLICATION_NA ME}-kieserver	8080	_	All the KIE server web server's ports.

#### 4.1.2.2. Routes

A route is a way to expose a service by giving it an externally reachable hostname such as **www.example.com**. A defined route and the endpoints identified by its service can be consumed by a router to provide named connectivity from external clients to your applications. Each route consists of a route name, service selector, and (optionally) security configuration. See the Openshift documentation for more information.

Service	Security	Hostname
insecure- \${APPLICATION_NAME}- rhdmcentr-http	none	\${DECISION_CENTRAL_HOS TNAME_HTTP}
insecure- \${APPLICATION_NAME}- kieserver-http	none	\${KIE_SERVER_HOSTNAME _HTTP}

#### 4.1.2.3. Deployment Configurations

A deployment in OpenShift is a replication controller based on a user-defined template called a deployment configuration. Deployments are created manually or in response to triggered events. See the Openshift documentation for more information.

#### 4.1.2.3.1. Triggers

A trigger drives the creation of new deployments in response to events, both inside and outside OpenShift. See the Openshift documentation for more information.

Deployment	Triggers
\${APPLICATION_NAME}-rhdmcentr	ImageChange
\${APPLICATION_NAME}-kieserver	ImageChange

#### 4.1.2.3.2. Replicas

A replication controller ensures that a specified number of pod "replicas" are running at any one time. If there are too many, the replication controller kills some pods. If there are too few, it starts more. See the container-engine documentation for more information.

Deployment	Replicas
\${APPLICATION_NAME}-rhdmcentr	1
\${APPLICATION_NAME}-kieserver	1

#### 4.1.2.3.3. Pod Template

#### 4.1.2.3.3.1. Service Accounts

Service accounts are API objects that exist within each project. They can be created or deleted like any other API object. See the Openshift documentation for more information.

Deployment	Service Account
\${APPLICATION_NAME}-rhdmcentr	\${APPLICATION_NAME}-rhdmsvc
\${APPLICATION_NAME}-kieserver	\${APPLICATION_NAME}-rhdmsvc

#### 4.1.2.3.3.2. Image

Deployment	lmage
\${APPLICATION_NAME}-rhdmcentr	rhdm-decisioncentral-rhel8
\${APPLICATION_NAME}-kieserver	\${KIE_SERVER_IMAGE_STREAM_NAME}

#### 4.1.2.3.3.3. Readiness Probe

#### \${APPLICATION\_NAME}-rhdmcentr

Http Get on http://localhost:8080/rest/ready

#### \${APPLICATION\_NAME}-kieserver

Http Get on http://localhost:8080/services/rest/server/readycheck

#### 4.1.2.3.3.4. Liveness Probe

#### \${APPLICATION\_NAME}-rhdmcentr

Http Get on http://localhost:8080/rest/healthy

#### \${APPLICATION\_NAME}-kieserver

Http Get on http://localhost:8080/services/rest/server/healthcheck

#### 4.1.2.3.3.5. Exposed Ports

Deployments	Name	Port	Protocol
\${APPLICATION_NA ME}-rhdmcentr	jolokia	8778	ТСР
	http	8080	ТСР
\${APPLICATION_NA ME}-kieserver	jolokia	8778	ТСР
	http	8080	ТСР

#### 4.1.2.3.3.6. Image Environment Variables

Deployment	Variable name	Description	Example value
\${APPLICATION_NA ME}-rhdmcentr	KIE_ADMIN_USER	KIE administrator user name.	\${KIE_ADMIN_USER}
	KIE_ADMIN_PWD	Default password used for multiple components for user convenience in this trial environment.	\${DEFAULT_PASSW ORD}
	KIE_MBEANS	KIE server mbeans enabled/disabled. (Sets the kie.mbeans and kie.scanner.mbeans system properties)	\${KIE_MBEANS}
	KIE_SERVER_CONT ROLLER_OPENSHIF T_ENABLED	_	true

Deployment	Variable name	Description	Example value
	KIE_SERVER_CONT ROLLER_OPENSHIF T_GLOBAL_DISCOV ERY_ENABLED	If set to true, turns on KIE server global discovery feature (Sets the org.kie.server.controller. openshift.global.discove ry.enabled system property)	\${KIE_SERVER_CON TROLLER_OPENSHI FT_GLOBAL_DISCO VERY_ENABLED}
	KIE_SERVER_CONT ROLLER_OPENSHIF T_PREFER_KIESERV ER_SERVICE	If OpenShift integration of Business Central is turned on, setting this parameter to true enables connection to KIE Server via an OpenShift internal Service endpoint. (Sets the org.kie.server.controller. openshift.prefer.kieserv er.service system property)	\${KIE_SERVER_CON TROLLER_OPENSHI FT_PREFER_KIESER VER_SERVICE}
	KIE_SERVER_CONT ROLLER_TEMPLAT E_CACHE_TTL	KIE ServerTemplate Cache TTL in milliseconds. (Sets the org.kie.server.controller. template.cache.ttl system property)	\${KIE_SERVER_CON TROLLER_TEMPLAT E_CACHE_TTL}
	WORKBENCH_ROU TE_NAME	_	insecure- \${APPLICATION_NAME }-rhdmcentr
	MAVEN_REPO_ID	The id to use for the maven repository, if set. Default is generated randomly.	\${MAVEN_REPO_ID}
	MAVEN_REPO_URL	Fully qualified URL to a Maven repository or service.	\${MAVEN_REPO_UR L}
	MAVEN_REPO_USE RNAME	User name for accessing the Maven repository, if required.	\${MAVEN_REPO_US ERNAME}

Deployment	Variable name	Description	Example value
	MAVEN_REPO_PAS SWORD	Password to access the Maven repository, if required.	\${MAVEN_REPO_PA SSWORD}
	GIT_HOOKS_DIR	The directory to use for git hooks, if required.	\${GIT_HOOKS_DIR}
	SSO_URL	RH-SSO URL.	\${SSO_URL}
	SSO_OPENIDCONN ECT_DEPLOYMENT S	_	ROOT.war
	SSO_REALM	RH-SSO Realm name.	\${SSO_REALM}
	SSO_SECRET	Decision Central RH- SSO Client Secret.	\${DECISION_CENTR AL_SSO_SECRET}
	SSO_CLIENT	Decision Central RH- SSO Client name.	\${DECISION_CENTR AL_SSO_CLIENT}
	SSO_USERNAME	RH-SSO Realm admin user name used to create the Client if it doesn't exist.	\${SSO_USERNAME}
	SSO_PASSWORD	RH-SSO Realm Admin Password used to create the Client.	\${SSO_PASSWORD}
	SSO_DISABLE_SSL_ CERTIFICATE_VALI DATION	RH-SSO Disable SSL Certificate Validation.	\${SSO_DISABLE_SS L_CERTIFICATE_VA LIDATION}
	SSO_PRINCIPAL_AT TRIBUTE	RH-SSO Principal Attribute to use as user name.	\${SSO_PRINCIPAL_ ATTRIBUTE}
	HOSTNAME_HTTP	Custom hostname for http service route. Leave blank for default hostname, e.g.: insecure- <application-name>-rhdmcentr-<project>.<default-domain-suffix></default-domain-suffix></project></application-name>	\${DECISION_CENTR AL_HOSTNAME_HT TP}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_URL	LDAP Endpoint to connect for authentication.	\${AUTH_LDAP_URL}
	AUTH_LDAP_BIND_ DN	Bind DN used for authentication.	\${AUTH_LDAP_BIND _DN}
	AUTH_LDAP_BIND_ CREDENTIAL	LDAP Credentials used for authentication.	\${AUTH_LDAP_BIND _CREDENTIAL}
	AUTH_LDAP_JAAS_ SECURITY_DOMAIN	The JMX ObjectName of the JaasSecurityDomain used to decrypt the password.	\${AUTH_LDAP_JAA S_SECURITY_DOMA IN}
	AUTH_LDAP_BASE_ CTX_DN	LDAP Base DN of the top-level context to begin the user search.	\${AUTH_LDAP_BAS E_CTX_DN}
	AUTH_LDAP_BASE_ FILTER	LDAP search filter used to locate the context of the user to authenticate. The input username or userDN obtained from the login module callback is substituted into the filter anywhere a {O} expression is used. A common example for the search filter is (uid= {O}).	\${AUTH_LDAP_BAS E_FILTER}
	AUTH_LDAP_SEAR CH_SCOPE	The search scope to use.	\${AUTH_LDAP_SEA RCH_SCOPE}
	AUTH_LDAP_SEAR CH_TIME_LIMIT	The timeout in milliseconds for user or role searches.	\${AUTH_LDAP_SEA RCH_TIME_LIMIT}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_DISTIN GUISHED_NAME_AT TRIBUTE	The name of the attribute in the user entry that contains the DN of the user. This may be necessary if the DN of the user itself contains special characters, backslash for example, that prevent correct user mapping. If the attribute does not exist, the entry's DN is used.	\${AUTH_LDAP_DIST INGUISHED_NAME_ ATTRIBUTE}
	AUTH_LDAP_PARSE _USERNAME	A flag indicating if the DN is to be parsed for the user name. If set to true, the DN is parsed for the user name. If set to false the DN is not parsed for the user name. This option is used together with usernameBeginString and usernameEndString.	\${AUTH_LDAP_PAR SE_USERNAME}
	AUTH_LDAP_USER NAME_BEGIN_STRI NG	Defines the String which is to be removed from the start of the DN to reveal the user name. This option is used together with usernameEndString and only taken into account if parseUsername is set to true.	\${AUTH_LDAP_USE RNAME_BEGIN_STR ING}
	AUTH_LDAP_USER NAME_END_STRING	Defines the String which is to be removed from the end of the DN to reveal the user name. This option is used together with usernameEndString and only taken into account if parseUsername is set to true.	\${AUTH_LDAP_USE RNAME_END_STRIN G}
	AUTH_LDAP_ROLE_ ATTRIBUTE_ID	Name of the attribute containing the user roles.	\${AUTH_LDAP_ROL E_ATTRIBUTE_ID}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_ROLE S_CTX_DN	The fixed DN of the context to search for user roles. This is not the DN where the actual roles are, but the DN where the objects containing the user roles are. For example, in a Microsoft Active Directory server, this is the DN where the user account is.	\${AUTH_LDAP_ROL ES_CTX_DN}
	AUTH_LDAP_ROLE_ FILTER	A search filter used to locate the roles associated with the authenticated user. The input username or userDN obtained from the login module callback is substituted into the filter anywhere a {0} expression is used. The authenticated userDN is substituted into the filter anywhere a {1} is used. An example search filter that matches on the input username is (member= {0}). An alternative that matches on the authenticated userDN is (member={1}).	\${AUTH_LDAP_ROL E_FILTER}
	AUTH_LDAP_ROLE_ RECURSION	The number of levels of recursion the role search will go below a matching context. Disable recursion by setting this to 0.	\${AUTH_LDAP_ROL E_RECURSION}
	AUTH_LDAP_DEFA ULT_ROLE	A role included for all authenticated users.	\${AUTH_LDAP_DEF AULT_ROLE}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_ROLE_ NAME_ATTRIBUTE_I D	Name of the attribute within the roleCtxDN context which contains the role name. If the roleAttributeIsDN property is set to true, this property is used to find the role object's name attribute.	\${AUTH_LDAP_ROL E_NAME_ATTRIBUT E_ID}
	AUTH_LDAP_PARSE _ROLE_NAME_FRO M_DN	A flag indicating if the DN returned by a query contains the roleNameAttributeID. If set to true, the DN is checked for the roleNameAttributeID. If set to false, the DN is not checked for the roleNameAttributeID. This flag can improve the performance of LDAP queries.	\${AUTH_LDAP_PAR SE_ROLE_NAME_FR OM_DN}
	AUTH_LDAP_ROLE_ ATTRIBUTE_IS_DN	Whether or not the roleAttributeID contains the fully-qualified DN of a role object. If false, the role name is taken from the value of the roleNameAttributeId attribute of the context name. Certain directory schemas, such as Microsoft Active Directory, require this attribute to be set to true.	\${AUTH_LDAP_ROL E_ATTRIBUTE_IS_D N}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_REFER RAL_USER_ATTRIB UTE_ID_TO_CHECK	If you are not using referrals, you can ignore this option. When using referrals, this option denotes the attribute name which contains users defined for a certain role, for example member, if the role object is inside the referral. Users are checked against the content of this attribute name. If this option is not set, the check will always fail, so role objects cannot be stored in a referral tree.	\${AUTH_LDAP_REF ERRAL_USER_ATTR IBUTE_ID_TO_CHEC K}
	AUTH_ROLE_MAPP ER_ROLES_PROPE RTIES	When present, the RoleMapping Login Module will be configured to use the provided file. This parameter defines the fully-qualified file path and name of a properties file or resource which maps roles to replacement roles. The format is original_role=role1,role2,r ole3	\${AUTH_ROLE_MAP PER_ROLES_PROPE RTIES}
	AUTH_ROLE_MAPP ER_REPLACE_ROLE	Whether to add to the current roles, or replace the current roles with the mapped ones. Replaces if set to true.	\${AUTH_ROLE_MAP PER_REPLACE_ROL E}
\${APPLICATION_NA ME}-kieserver	WORKBENCH_SERV ICE_NAME	_	\${APPLICATION_NA ME}-rhdmcentr
	KIE_ADMIN_USER	KIE administrator user name.	\${KIE_ADMIN_USER}
	KIE_ADMIN_PWD	Default password used for multiple components for user convenience in this trial environment.	\${DEFAULT_PASSW ORD}

Deployment	Variable name	Description	Example value
	KIE_SERVER_MODE	The KIE Server mode. Valid values are 'DEVELOPMENT' or 'PRODUCTION'. In production mode, you can not deploy SNAPSHOT versions of artifacts on the KIE server and can not change the version of an artifact in an existing container. (Sets the org.kie.server.mode system property).	\${KIE_SERVER_MOD E}
	KIE_MBEANS	KIE server mbeans enabled/disabled. (Sets the kie.mbeans and kie.scanner.mbeans system properties)	\${KIE_MBEANS}
	DROOLS_SERVER_ FILTER_CLASSES	KIE server class filtering. (Sets the org.drools.server.filter.cl asses system property)	\${DROOLS_SERVER _FILTER_CLASSES}
	PROMETHEUS_SER VER_EXT_DISABLE D	If set to false, the prometheus server extension will be enabled. (Sets the org.kie.prometheus.serv er.ext.disabled system property)	\${PROMETHEUS_SE RVER_EXT_DISABL ED}
	KIE_SERVER_BYPA SS_AUTH_USER	Allows the KIE server to bypass the authenticated user for task-related operations, for example, queries. (Sets the org.kie.server.bypass.aut h.user system property)	\${KIE_SERVER_BYP ASS_AUTH_USER}
	KIE_SERVER_ID	_	_
	KIE_SERVER_ROUT E_NAME	_	insecure- \${APPLICATION_NAME }-kieserver
			-

Deployment	Variable name	Description	Example value
	KIE_SERVER_STAR TUP_STRATEGY	_	OpenShiftStartupStrate gy
	KIE_SERVER_CONT AINER_DEPLOYMEN T	KIE Server Container deployment configuration with optional alias. Format: containerId=groupId:arti factId:version c2(alias2) =g2:a2:v2	\${KIE_SERVER_CON TAINER_DEPLOYME NT}
	MAVEN_REPOS	_	RHDMCENTR,EXTERNA L
	RHDMCENTR_MAVE N_REPO_ID	_	repo-rhdmcentr
	RHDMCENTR_MAVE N_REPO_SERVICE	_	\${APPLICATION_NA ME}-rhdmcentr
	RHDMCENTR_MAVE N_REPO_PATH	-	/maven2/
	RHDMCENTR_MAVE N_REPO_USERNAM E	KIE administrator user name.	\${KIE_ADMIN_USER}
	RHDMCENTR_MAVE N_REPO_PASSWOR D	Default password used for multiple components for user convenience in this trial environment.	\${DEFAULT_PASSW ORD}
	EXTERNAL_MAVEN_ REPO_ID	The id to use for the maven repository, if set. Default is generated randomly.	\${MAVEN_REPO_ID}
	EXTERNAL_MAVEN_ REPO_URL	Fully qualified URL to a Maven repository or service.	\${MAVEN_REPO_UR L}
	EXTERNAL_MAVEN_ REPO_USERNAME	User name for accessing the Maven repository, if required.	\${MAVEN_REPO_US ERNAME}
	EXTERNAL_MAVEN_ REPO_PASSWORD	Password to access the Maven repository, if required.	\${MAVEN_REPO_PA SSWORD}

Deployment	Variable name	Description	Example value
	SSO_URL	RH-SSO URL.	\${SSO_URL}
	SSO_OPENIDCONN ECT_DEPLOYMENT S	_	ROOT.war
	SSO_REALM	RH-SSO Realm name.	\${SSO_REALM}
	SSO_SECRET	KIE Server RH-SSO Client Secret.	\${KIE_SERVER_SSO _SECRET}
	SSO_CLIENT	KIE Server RH-SSO Client name.	\${KIE_SERVER_SSO _CLIENT}
	SSO_USERNAME	RH-SSO Realm admin user name used to create the Client if it doesn't exist.	\${SSO_USERNAME}
	SSO_PASSWORD	RH-SSO Realm Admin Password used to create the Client.	\${SSO_PASSWORD}
	SSO_DISABLE_SSL_ CERTIFICATE_VALI DATION	RH-SSO Disable SSL Certificate Validation.	\${SSO_DISABLE_SS L_CERTIFICATE_VA LIDATION}
	SSO_PRINCIPAL_AT TRIBUTE	RH-SSO Principal Attribute to use as user name.	\${SSO_PRINCIPAL_ ATTRIBUTE}
	HOSTNAME_HTTP	Custom hostname for http service route. Leave blank for default hostname, e.g.: insecure- <application-name>-kieserver-<pre><pre><pre>project&gt;.<default-domain-suffix></default-domain-suffix></pre></pre></pre></application-name>	\${KIE_SERVER_HOS TNAME_HTTP}
	AUTH_LDAP_URL	LDAP Endpoint to connect for authentication.	\${AUTH_LDAP_URL}
	AUTH_LDAP_BIND_ DN	Bind DN used for authentication.	\${AUTH_LDAP_BIND _DN}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_BIND_ CREDENTIAL	LDAP Credentials used for authentication.	\${AUTH_LDAP_BIND _CREDENTIAL}
	AUTH_LDAP_JAAS_ SECURITY_DOMAIN	The JMX ObjectName of the JaasSecurityDomain used to decrypt the password.	\${AUTH_LDAP_JAA S_SECURITY_DOMA IN}
	AUTH_LDAP_BASE_ CTX_DN	LDAP Base DN of the top-level context to begin the user search.	\${AUTH_LDAP_BAS E_CTX_DN}
	AUTH_LDAP_BASE_ FILTER	LDAP search filter used to locate the context of the user to authenticate. The input username or userDN obtained from the login module callback is substituted into the filter anywhere a {0} expression is used. A common example for the search filter is (uid= {0}).	\${AUTH_LDAP_BAS E_FILTER}
	AUTH_LDAP_SEAR CH_SCOPE	The search scope to use.	\${AUTH_LDAP_SEA RCH_SCOPE}
	AUTH_LDAP_SEAR CH_TIME_LIMIT	The timeout in milliseconds for user or role searches.	\${AUTH_LDAP_SEA RCH_TIME_LIMIT}
	AUTH_LDAP_DISTIN GUISHED_NAME_AT TRIBUTE	The name of the attribute in the user entry that contains the DN of the user. This may be necessary if the DN of the user itself contains special characters, backslash for example, that prevent correct user mapping. If the attribute does not exist, the entry's DN is used.	\${AUTH_LDAP_DIST INGUISHED_NAME_ ATTRIBUTE}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_PARSE _USERNAME	A flag indicating if the DN is to be parsed for the user name. If set to true, the DN is parsed for the user name. If set to false the DN is not parsed for the user name. This option is used together with usernameBeginString and usernameEndString.	\${AUTH_LDAP_PAR SE_USERNAME}
	AUTH_LDAP_USER NAME_BEGIN_STRI NG	Defines the String which is to be removed from the start of the DN to reveal the user name. This option is used together with usernameEndString and only taken into account if parseUsername is set to true.	\${AUTH_LDAP_USE RNAME_BEGIN_STR ING}
	AUTH_LDAP_USER NAME_END_STRING	Defines the String which is to be removed from the end of the DN to reveal the user name. This option is used together with usernameEndString and only taken into account if parseUsername is set to true.	\${AUTH_LDAP_USE RNAME_END_STRIN G}
	AUTH_LDAP_ROLE_ ATTRIBUTE_ID	Name of the attribute containing the user roles.	\${AUTH_LDAP_ROL E_ATTRIBUTE_ID}
	AUTH_LDAP_ROLE S_CTX_DN	The fixed DN of the context to search for user roles. This is not the DN where the actual roles are, but the DN where the objects containing the user roles are. For example, in a Microsoft Active Directory server, this is the DN where the user account is.	\${AUTH_LDAP_ROL ES_CTX_DN}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_ROLE_ FILTER	A search filter used to locate the roles associated with the authenticated user. The input username or userDN obtained from the login module callback is substituted into the filter anywhere a {0} expression is used. The authenticated userDN is substituted into the filter anywhere a {1} is used. An example search filter that matches on the input username is (member= {0}). An alternative that matches on the authenticated userDN is (member= {1}).	\${AUTH_LDAP_ROL E_FILTER}
	AUTH_LDAP_ROLE_ RECURSION	The number of levels of recursion the role search will go below a matching context. Disable recursion by setting this to 0.	\${AUTH_LDAP_ROL E_RECURSION}
	AUTH_LDAP_DEFA ULT_ROLE	A role included for all authenticated users.	\${AUTH_LDAP_DEF AULT_ROLE}
	AUTH_LDAP_ROLE_ NAME_ATTRIBUTE_I D	Name of the attribute within the roleCtxDN context which contains the role name. If the roleAttributeIsDN property is set to true, this property is used to find the role object's name attribute.	\${AUTH_LDAP_ROL E_NAME_ATTRIBUT E_ID}

Deployment	Variable name	Description	Example value
	AUTH_LDAP_PARSE _ROLE_NAME_FRO M_DN	A flag indicating if the DN returned by a query contains the roleNameAttributeID. If set to true, the DN is checked for the roleNameAttributeID. If set to false, the DN is not checked for the roleNameAttributeID. This flag can improve the performance of LDAP queries.	\${AUTH_LDAP_PAR SE_ROLE_NAME_FR OM_DN}
	AUTH_LDAP_ROLE_ ATTRIBUTE_IS_DN	Whether or not the roleAttributeID contains the fully-qualified DN of a role object. If false, the role name is taken from the value of the roleNameAttributeId attribute of the context name. Certain directory schemas, such as Microsoft Active Directory, require this attribute to be set to true.	\${AUTH_LDAP_ROL E_ATTRIBUTE_IS_D N}
	AUTH_LDAP_REFER RAL_USER_ATTRIB UTE_ID_TO_CHECK	If you are not using referrals, you can ignore this option. When using referrals, this option denotes the attribute name which contains users defined for a certain role, for example member, if the role object is inside the referral. Users are checked against the content of this attribute name. If this option is not set, the check will always fail, so role objects cannot be stored in a referral tree.	\${AUTH_LDAP_REF ERRAL_USER_ATTR IBUTE_ID_TO_CHEC K}

Deployment	Variable name	Description	Example value
	AUTH_ROLE_MAPP ER_ROLES_PROPE RTIES	When present, the RoleMapping Login Module will be configured to use the provided file. This parameter defines the fully-qualified file path and name of a properties file or resource which maps roles to replacement roles. The format is original_role=role1,role2,role3	\${AUTH_ROLE_MAP PER_ROLES_PROPE RTIES}
	AUTH_ROLE_MAPP ER_REPLACE_ROLE	Whether to add to the current roles, or replace the current roles with the mapped ones. Replaces if set to true.	\${AUTH_ROLE_MAP PER_REPLACE_ROL E}
	FILTERS	_	AC_ALLOW_ORIGIN,AC _ALLOW_METHODS,A C_ALLOW_HEADERS,A C_ALLOW_CREDENTIA LS,AC_MAX_AGE
	AC_ALLOW_ORIGIN _FILTER_RESPONS E_HEADER_NAME	_	Access-Control-Allow- Origin
	AC_ALLOW_ORIGIN _FILTER_RESPONS E_HEADER_VALUE	Sets the Access- Control-Allow-Origin response header value in the KIE Server (useful for CORS support).	\${KIE_SERVER_ACC ESS_CONTROL_ALL OW_ORIGIN}
	AC_ALLOW_METHO DS_FILTER_RESPO NSE_HEADER_NAM E	_	Access-Control-Allow- Methods
	AC_ALLOW_METHO DS_FILTER_RESPO NSE_HEADER_VALU E	Sets the Access- Control-Allow-Methods response header value in the KIE Server (useful for CORS support).	\${KIE_SERVER_ACC ESS_CONTROL_ALL OW_METHODS}

Deployment	Variable name	Description	Example value
	AC_ALLOW_HEADE RS_FILTER_RESPO NSE_HEADER_NAM E	_	Access-Control-Allow- Headers
	AC_ALLOW_HEADE RS_FILTER_RESPO NSE_HEADER_VALU E	Sets the Access- Control-Allow-Headers response header value in the KIE Server (useful for CORS support).	\${KIE_SERVER_ACC ESS_CONTROL_ALL OW_HEADERS}
	AC_ALLOW_CREDE NTIALS_FILTER_RE SPONSE_HEADER_ NAME	_	Access-Control-Allow- Credentials
	AC_ALLOW_CREDE NTIALS_FILTER_RE SPONSE_HEADER_V ALUE	Sets the Access- Control-Allow- Credentials response header value in the KIE Server (useful for CORS support).	\${KIE_SERVER_ACC ESS_CONTROL_ALL OW_CREDENTIALS}
	AC_MAX_AGE_FILT ER_RESPONSE_HEA DER_NAME	_	Access-Control-Max- Age
	AC_MAX_AGE_FILT ER_RESPONSE_HEA DER_VALUE	Sets the Access- Control-Max-Age response header value in the KIE Server (useful for CORS support).	\${KIE_SERVER_ACC ESS_CONTROL_MA X_AGE}

#### 4.1.2.4. External Dependencies

#### 4.1.2.4.1. Secrets

This template requires the following secrets to be installed for the application to run.

#### 4.2. OPENSHIFT USAGE QUICK REFERENCE

To deploy, monitor, manage, and undeploy Red Hat Decision Manager templates on Red Hat OpenShift Container Platform, you can use the OpenShift Web console or the **oc** command.

For instructions about using the Web console, see Create and build an image using the Web console.

For detailed instructions about using the **oc** command, see CLI Reference. The following commands are likely to be required:

• To create a project, use the following command:

\$ oc new-project oc new-project

For more information, see Creating a project using the CLI.

- To deploy a template (create an application from a template), use the following command:
  - \$ oc new-app -f <template-name> -p <parameter>=<value> -p <parameter>=<value> ...

For more information, see Creating an application using the CLI.

- To view a list of the active pods in the project, use the following command:
  - \$ oc get pods
- To view the current status of a pod, including information whether or not the pod deployment has completed and it is now in a running state, use the following command:
  - \$ oc describe pod <pod-name>

You can also use the **oc describe** command to view the current status of other objects. For more information, see Application modification operations.

- To view the logs for a pod, use the following command:
  - \$ oc logs <pod-name>
- To view deployment logs, look up a **DeploymentConfig** name in the template reference and enter the following command:
  - \$ oc logs -f dc/<deployment-config-name>

For more information, see Viewing deployment logs.

- To view build logs, look up a **BuildConfig** name in the template reference and enter the command:
  - \$ oc logs -f bc/<build-config-name>

For more information, see Accessing build logs.

- To scale a pod in the application, look up a **DeploymentConfig** name in the template reference and enter the command:
  - \$ oc scale dc/<deployment-config-name> --replicas=<number>

For more information, see Manual scaling.

- To undeploy the application, you can delete the project by using the command:
  - \$ oc delete project <project-name>

Alternatively, you can use the **oc delete** command to remove any part of the application, such as a pod or replication controller. For details, see Application modification operations.

### APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Friday, June 25, 2021.