

Cloudera Flow Management Operator for Kubernetes 2.11.0

NiFi Registry Config Reference

Date published: 2024-06-11

Date modified: 2025-09-30

The Cloudera logo is displayed in a bold, orange, sans-serif font. The word "CLOUDERA" is written in all caps, with a stylized 'E' that has a horizontal bar extending to the right.

<https://docs.cloudera.com/>

Legal Notice

© Cloudera Inc. 2026. All rights reserved.

The documentation is and contains Cloudera proprietary information protected by copyright and other intellectual property rights. No license under copyright or any other intellectual property right is granted herein.

Unless otherwise noted, scripts and sample code are licensed under the Apache License, Version 2.0.

Copyright information for Cloudera software may be found within the documentation accompanying each component in a particular release.

Cloudera software includes software from various open source or other third party projects, and may be released under the Apache Software License 2.0 (“ASLv2”), the Affero General Public License version 3 (AGPLv3), or other license terms. Other software included may be released under the terms of alternative open source licenses. Please review the license and notice files accompanying the software for additional licensing information.

Please visit the Cloudera software product page for more information on Cloudera software. For more information on Cloudera support services, please visit either the Support or Sales page. Feel free to contact us directly to discuss your specific needs.

Cloudera reserves the right to change any products at any time, and without notice. Cloudera assumes no responsibility nor liability arising from the use of products, except as expressly agreed to in writing by Cloudera.

Cloudera, Cloudera Altus, HUE, Impala, Cloudera Impala, and other Cloudera marks are registered or unregistered trademarks in the United States and other countries. All other trademarks are the property of their respective owners.

Disclaimer: EXCEPT AS EXPRESSLY PROVIDED IN A WRITTEN AGREEMENT WITH CLOUDERA, CLOUDERA DOES NOT MAKE NOR GIVE ANY REPRESENTATION, WARRANTY, NOR COVENANT OF ANY KIND, WHETHER EXPRESS OR IMPLIED, IN CONNECTION WITH CLOUDERA TECHNOLOGY OR RELATED SUPPORT PROVIDED IN CONNECTION THEREWITH. CLOUDERA DOES NOT WARRANT THAT CLOUDERA PRODUCTS NOR SOFTWARE WILL OPERATE UNINTERRUPTED NOR THAT IT WILL BE FREE FROM DEFECTS NOR ERRORS, THAT IT WILL PROTECT YOUR DATA FROM LOSS, CORRUPTION NOR UNAVAILABILITY, NOR THAT IT WILL MEET ALL OF CUSTOMER’S BUSINESS REQUIREMENTS. WITHOUT LIMITING THE FOREGOING, AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, CLOUDERA EXPRESSLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, QUALITY, NON-INFRINGEMENT, TITLE, AND FITNESS FOR A PARTICULAR PURPOSE AND ANY REPRESENTATION, WARRANTY, OR COVENANT BASED ON COURSE OF DEALING OR USAGE IN TRADE.

Contents

NiFi Registry config reference.....	4
NifiRegistry.....	4
NifiRegistrySpec.....	4
NifiRegistryConfigurationSpec.....	5
NifiRegistryPersistenceSpec.....	6
PersistenceSpec.....	6
NifiRegistryResourceSpec.....	6
NifiRegistrySecuritySpec.....	6
MultiplePersistenceSpec.....	7
PersistenceSpec.....	7
SecuritySpec.....	7
SamlSingleSignOnAuthSpec.....	8

NiFi Registry config reference

The API types documented are Kubernetes CustomResourceDefinitions. They follow the standard [API-Conventions](#). The main objects monitored are the NiFi and NiFiRegistry, which have the standard Spec and Status.

NifiRegistry

NifiRegistry is the Schema for the nifiregistries API.

NifiRegistrySpec

NifiRegistrySpec defines the desired state of NiFi Registry.

nifiVersion string

Version of NiFi Registry to create a cluster for. Must have full pattern of Major.Minor.Patch. For example: 1.2.3, or 2.1.1

image ImageSpec

Image for the NiFi Registry container.

tiniImage ImageSpec

Tini image for sidecars / init containers.

persistence NifiRegistryPersistenceSpec (Optional)

Configures persistence for NiFi Registry.

statefulset StatefulsetSpec (Optional)

Statefulset parameters for the underlying NiFi statefulset.

configOverride NifiRegistryConfigurationSpec (Optional)

Configuration overrides

resources NifiRegistryResourceSpec (Optional)

Specifies container limits by containers.

security NifiRegistrySecuritySpec (Optional)

security specifies the security related configurations (HTTPS, LDAP, Kerberos...)

debug JVMDebugSpec (Optional)

debug specifies the details for JVM remote debugging.

proxyAccessNamespaces []ProxyAccessSpec (Optional)

proxyAccessNamespaces specifies a list where NiFi Registry will look for NiFi custom resources to provide 'Can proxy user requests' access.

proxyConfig ProxyConfigSpec (Optional)

proxyConfig contains details about a reverse proxy in front of the ingress controller. When set, it is used in the ingress object to set 'X-Proxy(Scheme|Host|Port)' headers, which are used by NiFi Registry to construct URIs which work properly with the proxy. For more information, see [Proxy Configuration](#) in *NiFi System Administrator's Guide*.

hostName string (Optional)

hostName specifies the host name with which NiFi Registry is reachable. The host name appears in the “spec.rules[].host” field of ingress configuration. When omitted, any arbitrary host header is feasible, for example IP address. The host name has to match the ingress certificate in case manual ingress certificate is set. hostName is required for “host named based virtual access” mode, but can be omitted in “fanout” mode (see IngressAccessType property).

uiConnection Connection (Optional)

uiConnection configures the Ingress, Route, or Service used for accessing NiFi Registry’s WebUI.

NifiRegistryConfigurationSpec

NifiRegistryConfigurationSpec contains user provided values which override the default configuration values that are shipped with NiFi Registry.

nifiRegistryProperties ConfigOperation (Optional)

nifiRegistryProperties holds configuration file overrides for the nifi-registry.properties configuration file.

bootstrapConf ConfigOperation (Optional)

bootstrapConf holds configuration file overrides for the bootstrap.conf configuration file.

authorizers string(Optional)

authorizers holds configuration file overrides for the authorizers.xml configuration file. If set, this content overrides the entire, default authorizers.xml file.

loggers []LoggerSpec

Loggers is a list of LoggerSpec, which can define logger name, verbosity levels and additivity. Each rendered LoggerSpec will have appender-ref: APP_FILE.



Note: Only one of the fields of LogbackOverrideSpec can be specified.

authorizersRef Kubernetes core/v1.ObjectReference (Optional)

authorizersObjectReferences holds details about a custom configmap or a secret for the authorizers.xml file.

bootstrapConfRef Kubernetes core/v1.ObjectReference (Optional)

bootstrapConfRef holds details about a custom configmap or a secret for the bootstrap.conf file.

nifiPropertiesRef Kubernetes core/v1.ObjectReference (Optional)

NifiPropertiesRef holds details about a custom configmap or a secret for the nifi.properties file.

logbackRef Kubernetes core/v1.ObjectReference (Optional)

logbackRef holds details about a custom configmap or a secret for the logback.xml file.

identityProvidersRef Kubernetes core/v1.ObjectReference (Optional)

loginIdentityProvidersRef holds details about a custom configmap or a secret for the login-identity-providers.xml file.

logback LogbackOverrideSpec (Optional)

logback override for the logback.xml file. It can either specify the content of the logback.xml as a string, or as a list of LogbackSpec.

identityProviders string (Optional)

identityProviders holds configuration file overrides for the identity-providers.xml file. If set, this content overrides the default identity-providers.xml file.

providers string (Optional)

providers holds configuration file overrides for the providers.xml file. If set, this content overrides the default providers.xml file.

NifiRegistryPersistenceSpec

NifiRegistryPersistenceSpec defines the storage specification for NiFi Registry.

PersistenceSpec PersistenceSpec PersistenceSpec PersistenceSpec

PersistenceSpec defines the persistence specification.

flowStorage PersistenceSpec (Optional)

flowStorage describes the storage specification for the 'flow_storage' directory. If provided, it overrides the default storage specification.

data PersistenceSpec (Optional)

data describes the storage specification for the data directory, where state resides, for example, the database directory. If provided, it overrides the default storage specification.

extensionBundles PersistenceSpec (Optional)

xtensionBundles describes the storage specification for the extension_bundles directory. If provided, it overrides the default storage specification.

PersistenceSpec

PersistenceSpec defines the persistence specification.

storageClass string (Optional)

storageClass is the name of the storage class used in the persistent volume. If set to "-", then it sets the storage class name "", which disables dynamic provisioning, if undefined (the default) or set to null, no storage class name is set, choosing the default provisioner (gp2 on AWS, standard on GKE, AWS, and OpenStack).

size string(Optional)

Size of the persistent volume. The default is 5Gi.

NifiRegistryResourceSpec

NifiRegistryResourceSpec collects resource requests and limits for nifiregistry and log.

nifiRegistry ResourcesSpec (Optional)

nifiRegistry specifies how much CPU and memory (RAM) each NiFi Registry container needs / can have.

log ResourcesSpec (Optional)

log specifies how much CPU and memory (RAM) each sidecar log container needs / can have.

NifiRegistrySecuritySpec

NifiRegistrySecuritySpec contains the security configuration for the custom resource.

SecuritySpec SecuritySpec

Members of SecuritySpec are embedded into this type.

kerberos KerberosSpec (Optional)

Kerberos specifies configs related to user authentication through Kerberos.

MultiplePersistenceSpec

MultiplePersistenceSpec is a special persistence specification that supports multiple instances of the same .

storageClass string (Optional)

storageClass is the name of the storage class used in the persistent volume. If set to “-”, then sets the storage class name “”, which disables dynamic provisioning, if undefined (the default) or set to null then no storage class name is set, selecting the default provisioner (gp2 on AWS, standard on GKE, AWS, and OpenStack).

size string (Optional)

Size of the persistent volume. The default is 5Gi.

count int

Count of the PersistentVolumeClaims (PVCs). The default is 1.

PersistenceSpec

PersistenceSpec defines the persistence specification

storageClass string (Optional)

storageClass is the name of the storage class used in the persistent volume. If set to “-”, then sets the storage class name “”, which disables dynamic provisioning, if undefined (the default) or set to null then no storage class name is set, selecting the default provisioner (gp2 on AWS, standard on GKE, AWS, and OpenStack).

size string (Optional)

The size of the persistent volume. The default is 5Gi.

SecuritySpec

SecuritySpec contains the security configuration for the custom resource.

initialAdminIdentity string (Optional)

initialAdminIdentity specifies the initial admin user which has full access.

ingressCertGen IngressCertSpec (Optional)

ingressCertGen specifies ingress certificate generation related information.

s2sCertGen S2SCertSpec (Optional)

s2sCertGen specifies ingress certificate generation related information.

nodeCertGen NodeCertSpec (Optional)

nodeCertGen specifies node and proxy certificate generation related information.

additionalCABundles AdditionalCACertSpec (Optional)

dditionalCABundles contains additional CA certificates to be used.

samlSingleSignOnAuth SamlSingleSignOnAuthSpec (Optional)

samlAuth specifies SAML-based single sign-on authentication related configurations. SAML authentication is enabled if SamlAuth is specified.

ldap LdapSpec (Optional)

ldap specifies the various ldap authentication related configurations.

SamlSingleSignOnAuthSpec

SamlAuth specifies SAML-based single sign-on authentication related configurations.

entityID string

entityID is the entity id of the service provider (that is, NiFi). This value is used as the Issuer for SAML authentication requests and has to be a valid URI. In some cases the service provider entity id must be registered ahead of time with the identity provider.

idpMetadataSecretName string

idpMetadataSecretName is the name of a secret which contains the identity provider's metadata in SAML format. The SAML metadata should be under the sso-idp-metadata.xml key.

identityAttributeName string (Optional)

identityAttributeName is the name of a SAML assertion attribute containing the user's identity. This property is optional and if either not specified or if the attribute is not found, then the NameID of the Subject is used.

groupAttributeName string (Optional)

groupAttributeName is the name of a SAML assertion attribute containing group names the user belongs to. This property is optional, but if populated the groups are passed along to the authorization process.

singleLogoutEnabled bool (Optional)

singleLogoutEnabled enables SAML SingleLogout which causes a logout from NiFi to logout of the identity provider. By default, a logout of NiFi only removes the NiFi JSON Web Token (JWT).