

# DDF Reference Guide

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# **Application Reference**

Installation and configuration details by application.

## **Admin Application Reference**

The Admin Application contains components that are integral for the configuration of DDF applications. It contains various services and interfaces that allow administrators control over their systems and enhances administrative capabilities.

## **Admin Application Prerequisites**

None.

### **Installing the Admin Application**

Install the Admin application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the admin-app feature.

## **Configuring the Admin Application**

To configure the Admin Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Admin** application.
- 3. Select the **Configuration** tab.

Table 1. Admin Available Configurations

Name	Property	Description
Admin Configuration Policy	org.codice.ddf.admin.config.polic y.AdminConfigPolicy	Admin Configuration Policy configurations.
Admin UI	org.codice.admin.ui.configuratio	Admin UI configurations.

Table 2. Admin Configuration Policy

Name	Id	Туре	Description	Default Value	Required
Feature and App Permission s	featurePoli cies	String	When enabled, the desired features or apps will only be modifiable and viewable to users with the set attributes. The entry should be the format of: feature name/app name = "user attribute name=user attribute value"		false
Configurati on Permission s	servicePoli cies	String	When enabled, the desired service will only be modifiable and viewable to users with the set attributes. The entry should be the format of: configuration ID = "user attribute name=user attribute value"	null	false

Table 3. Admin UI

Name	Id	Туре	Description	Default Value	Required
Enable System Usage message	systemUsage Enabled	Boolean	Turns on a system usage message, which is shown when the Admin Application is opened.	false	true
System Usage Message Title	systemUsage Title	String	A title for the system usage message when the application is opened.		true
System Usage Message	systemUsage Message	String	A system usage message to be displayed to the user each time the user opens the application.		true
Show System Usage Message once per session	systemUsage OncePerSess ion	Boolean	With this selected, the system usage message will be shown once for each browser session. Uncheck this to have the usage message appear every time the admin page is opened or refreshed.	true	true
Ignored Installer Application s	disabledIns tallerApps	String	Comma delimited list (appName, appName2,appNameN) of applications that will be disabled in the installer.	admin- app,platfor m-app	null

# **Message Broker Application Reference**

The Message Broker application gives an administrator the ability to configure and control the behavior of the Message Broker. These configurations will include aspects like the graceful shutdown

period of components, names of queues and topics, and routing of messages.

## **Prerequisites for Message Broker Application**

None.

### **Installing Message Broker Application**

Install the Message Broker application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the broker-app feature.

## **Configuring the Message Broker Application**

The standard installation of the Message Broker application has no configurable properties.

#### Configuring the Message Broker for a Highly Available Cluster

Prior to making these configuration changes, follow the instructions in Installing DDF to install DDF on two physically-separate hosts.

- 1. Configure each of the DDF installations to point to each other in a live/backup server configuration. One server will have an additional step to be designated as the backup.
- 2. Modify custom.system.properties:

The <DDF\_HOME>/etc/custom.system.properties in each of the installations needs to be updated so that the servers know about each other. The following properties need to have the values on the right side of the = updated.

```
artemis.live.host=<Hostname.or.ip.here>
artemis.backup.host=<Hostname.or.ip.here>
artemis.network.iplist=<Comma,separated,IPs>
artemis.cluster.password=<Common password across all nodes>
```

#### Using a Non-Local IP or Host

#### **IMPORTANT**

artemis.network.iplist should contain a list of non-local IPs or host names that are not hosted on the same physical machine as either the live or backup machines. These IP addresses are pinged in the event of a network outage. If the backup cannot reach the live server but can successfully ping one of these hosts it will then take over as the live server. If the host list is incorrectly configured with a local IP it could break the cluster by causing both servers to go live. It is also recommended that the live server have the backups server's IP in its list and the backup server have the live server's IP in its list.

#### 3. Configure a Backup Broker:

The installation that is going to be used as the backup needs to have an additional configuration change made so that it knows it's the backup. The <DDF\_HOME>/etc/org.apache.activemq.artemis.cfg should be modified to point to the provided artemis-backup.xml instead of artemis.xml. Once updated, the config value should look like this:

```
config=file:etc/artemis-backup.xml
```

#### 4. Restart Servers:

The DDF instances should be restarted in the following order:

- 1. Live server
- 2. Backup server

In order to maintain connectivity to the broker during a restart, only stop and start a single server at a time. See Starting DDF for detailed steps.

#### 5. Verify Cluster Replication:

Once both servers are started, the following command can be run using curl or a browser to verify that the servers have successfully synced.

Server Cluster Verification Command

```
sh
curl
https://{FQDN}:{PORT}/admin/jolokia/read/org.apache.activemq.artemis:broker=%22artemis
%22/ReplicaSync --user admin:admin --header "Origin: https://{FQDN}:{PORT}" --header
"X-Requested-With: XMLHttpRequest" --insecure
```

```
"request": {
    "mbean": "org.apache.activemq.artemis:broker=\"artemis\",
    "attribute": "ReplicaSync",
    "type": "read"
},
    "value": true,
    "timestamp": 1485967446,
    "status": 200
}
```

#### **IMPORTANT**

If LDAP has been configured then the admin user and password for the above command will need to be changed.

#### **IMPORTANT**

Note the "value":true field: if it is false, then the replication is still in progress or the logs should be consulted to see if there was an issue establishing a connection between the live and backup servers.

Additionally, for more details about the health of the cluster, the following command can be run using curl or a

 $https: \label{lem:port} $$ https://{FQDN}: PORT/admin/jolokia/read/org.apache.active mq.artemis: broker=\%22 artemis\%22, component=cluster-connections, name=\%22 my-cluster\%22/Topology browser.$ 

#### Server Health Status Command

```
sh
curl
https://{FQDN}:{PORT}/admin/jolokia/read/org.apache.activemq.artemis:broker=%22artemis%22
,component=cluster-connections,name=%22broker-cluster%22/Topology --user admin:admin
--header "Origin: https://{FQDN}:{PORT}" --header "X-Requested-With: XMLHttpRequest"
--insecure
```

This endpoint returns diagnostic info about the cluster that can be used for troubleshooting. Values of interest in the response are the node=2 value which is a count of the nodes in the cluster and the port/host values for each node.

```
{
    "request": {
        "mbean": "org.apache.activemq.artemis:broker=\"artemis\",component=cluster-
connections,name=\"my-cluster\",
        "attribute": "Topology",
        "type": "read"
    },
    "value": "topology on Topology@750c2a56[owner=ClusterConnectionImpl@228651110[nodeUU
ID=17b48db9-e7ee-11e6-9d56-38c986025a6f, connector=TransportConfiguration(name=netty-con
nector, factory=org-apache-activemq-artemis-core-remoting-impl-netty-NettyConnectorFacto
ry) ?port=5672&host=10-101-3-185, address=ims, server=ActiveMQServerImpl::serverUUID=17
b48db9-e7ee-11e6-9d56-38c986025a6f]]:\n\t17b48db9-e7ee-11e6-9d56-38c986025a6f => Topolog
yMember[id = 17b48db9-e7ee-11e6-9d56-38c986025a6f, connector=Pair[a=TransportConfigurati
on(name=netty-connector, factory=org-apache-activemg-artemis-core-remoting-impl-netty-Ne
ttyConnectorFactory) ?port=5672&host=10-101-3-185, b=TransportConfiguration(name=netty-c
onnector, factory=org-apache-activemq-artemis-core-remoting-impl-netty-NettyConnectorFac
tory) ?port=5672&host=10-101-2-97], backupGroupName=null, scaleDownGroupName=null]\n\tno
des=2\tmembers=1",
    "timestamp": 1485971158,
    "status": 200
}
```

#### **Securing the Message Broker Application**

DDF can be configured to use Artemis to perform authentication and authorization against an LDAP server.

Artemis provides the ability to apply role-based security to queues based on addresses (see the Artemis documentation of for details). It can be configured to use an LDAP server to perform authentication and authorization for users who connect to it.

## IMPORTANT

If you are setting up multiple DDF instances in a cluster for high availability, then you will need to perform these steps on each instance.

The Security STS LDAP Login and Security STS LDAP Claims Handler bundles are responsible for authenticating and authorizing users with your LDAP server. To configure them for your LDAP server, follow the instructions in STS LDAP Login and STS LDAP Claims Handler.

Once the STS LDAP Login and Claims Handlers are configured, update <DDF\_HOME>/etc/org.apache.activemq.artemis.cfg to use the ldap realm (just change domain=karaf to domain=ldap):

```
domain=ldap
```

DDF uses two roles in the security settings for Artemis: manager and broker-client.

<DDF\_HOME>/etc/artemis.xml

```
<security-setting match="#">
    <permission type="createNonDurableQueue" roles="manager,broker-client"/>
    <permission type="deleteNonDurableQueue" roles="manager,broker-client"/>
    <permission type="createDurableQueue" roles="manager"/>
    <permission type="deleteDurableQueue" roles="manager"/>
    <permission type="consume" roles="manager,broker-client"/>
    <permission type="browse" roles="manager,broker-client"/>
    <permission type="send" roles="manager,broker-client"/>
    <permission type="send" roles="manager"/>
    </security-setting>
```

Users with the role manager have full permissions, but users with the role broker-client cannot create or delete durable queues or invoke management operations.

Your LDAP should have groups that correspond to these roles so that members of those groups will have the correct permissions when connecting to Artemis to send or consume messages. Alternatively, you can choose roles other than manager and broker-client, which may be useful if your LDAP already has groups that you would like to use as Artemis roles. If you wish to use different roles, just replace manager and/or broker-client in the <security-setting> in artemis.xml with the roles you would like to use.

#### **Artemis Broker Connection Configuration**

The Artemis Broker Connection Configuration manages the parameters for DDF's connection to Artemis. The username and password in the Artemis Broker Connection Configuration need to be updated so that they correspond to a user in your LDAP. If possible, this user should have the manager role (or the role that is being used in place of manager if the default Artemis role has been changed).

To update the username and password:

- 1. Navigate to the Admin Console
- 2. Select the **Broker App** application.
- 3. Select the **Configuration** tab.
- 4. Select the **Artemis Broker Connection Configuration**.
- 5. Enter the username and password and select **Save changes**.

## **Using the Message Broker Application**

The Message Broker app can be used through the Admin Console. See the Route Manager and the Undelivered Messages UI for more information.

#### **Undelivered Messages UI**

The Undeliverable Messages tab gives an administrator the ability to view undeliverable messages and then decide whether to resend or delete those messages.

The Undelivered Messages UI is installed as a part of the Message Broker.

To view undelivered messages, an administrator can use the "retrieve" button, which makes an immediate call to the backend and displays all the messages. Alternatively, the "start polling" button makes calls to the backend every 5 seconds and updates the display accordingly.

An administrator can select messages by clicking anywhere in the row of the message. Multiple messages can be selected simply by clicking multiple messages or by clicking the "Select all" option at the head of the table. Deselecting is done by clicking a message again or clicking the "Deselect all" option, next to the "Select all" option.

To attempt to resend messages, select the messages, and then click the "resend" button. Currently, there is no way to identify if a message was successfully redelivered.

To delete messages, select the messages, and then click the "delete" button.

NOTE

Only 200 messages can be viewed at a time, even though there may be more than 200 undelivered messages

Known issues with the Undelivered Messages UI:

• If attempting to resend a message, but the listener is no longer available, the message will be "successfully" resent and removed from the UI and the Artemis DLQ but will not be successfully redelivered.

#### **Route Manager**

The Route Manager gives an administrator the ability to configure and deploy Camel routes, queues, and topics dynamically. The sjms component is available by default. If a need arises for a new route, an administrator can easily develop a new route and deploy it to satisfy the requirement, rather than spending the time to develop, compile, and test new code.

The Route Manager is installed as a part of the Message Broker application.

The route shutdown timeout can be configured.

To deploy a new route, simply place a route .XML file in the <DDF\_HOME>/etc/routes directory of DDF. To

remove a route (or set of routes), delete the .XML file.

There are example routes in the CDDF\_HOME>/etc/routes directory by default.

## **Catalog Application Reference**

The Catalog provides a framework for storing, searching, processing, and transforming information.

Clients typically perform create, read, update, and delete (CRUD) operations against the Catalog.

At the core of the Catalog functionality is the Catalog Framework, which routes all requests and responses through the system, invoking additional processing per the system configuration.

## **Catalog Application Prerequisites**

To use the Catalog Application, the following applications/features must be installed:

Platform

## **Installing the Catalog Application**

Install the Catalog application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the catalog-app feature.

## **Configuring the Catalog Application**

To configure the Catalog Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Catalog** application.
- 3. Select the **Configuration** tab.

Table 4. Catalog Available Configurations

Name	Property	Description
Catalog Federation Strategy	ddf.catalog.federation.impl.Cachi ngFederationStrategy	Catalog Federation Strategy.
Catalog Backup Plugin	ddf.catalog.backup.CatalogBacku pPlugin	Catalog Backup Plugin configurations.

Name	Property	Description
Catalog Standard Framework	ddf.catalog.CatalogFrameworkI mpl	Catalog Standard Framework configurations.
Confluence Federated Source	Confluence_Federated_Source	Confluence Federated Source.
Content Directory Monitor	org.codice.ddf.catalog.content.m onitor.ContentDirectoryMonitor	Content Directory Monitor configurations.
Content File System Storage Provider	org.codice.ddf.catalog.content.im pl.FileSystemStorageProvider	Content File System Storage Provider.
CSW Connected Source	Csw_Connected_Source	CSW Connected Source.
Expiration Date Pre-Ingest Plugin	org.codice.ddf.catalog.plugin.exp iration.ExpirationDatePlugin	Catalog pre-ingest plugin to set an expiration date on metacards.
FTP Endpoint	ddf.catalog.ftp.FtpServerManage	FTP Endpoint configurations.
Historian	ddf.catalog.history.Historian	Enables versioning of both metacards and content.
Metacard Attribute Security Policy Plugin	org.codice.ddf.catalog.security.po licy.metacard.MetacardAttribute SecurityPolicyPlugin	Metacard Attribute Security Policy Plugin.
Catalog Metacard Ingest Network Plugin	org.codice.ddf.catalog.plugin.met acard.MetacardIngestNetworkPl ugin	Catalog Metacard Ingest Network Plugin.
Metacard Validation Filter Plugin	ddf.catalog.metacard.validation. MetacardValidityFilterPlugin	Metacard Validation Filter Plugin.
Metacard Validation Marker Plugin	ddf.catalog.metacard.validation. MetacardValidityMarkerPlugin	Metacard Validation Marker Plugin.
Metacard Backup File Storage Provider	Metacard_File_Storage_Route	Enable data backup of metacards using a configurable transformer.
Resource Download Settings	Metacard_S3_Storage_Route	Resource Download Configuration.
Catalog OpenSearch Federated Source	OpenSearchSource	Catalog OpenSearch Federated Source.
Resource Download Settings	ddf.catalog.resource.download.R eliableResourceDownloadManag er	Resource Download configurations.
Schematron Validation Services	ddf.services.schematron.Schema tronValidationService	Schematron Validation Services configurations.
Security Audit Plugin	org.codice.ddf.catalog.plugin.sec urity.audit.SecurityAuditPlugin	Security Audit Plugin.
Tika Input Transformer	ddf.catalog.transformer.input.tik a.TikaInputTransformer	Tika Input Transformer.

Name	Property	Description
URL Resource Reader	ddf.catalog.resource.impl.URLRe sourceReader	URL Resource Reader
Video Thumbnail Plugin	org.codice.ddf.catalog.content.pl ugin.video.VideoThumbnailPlugi n	Video Thumbnail Plugin.
XML Attribute Security Policy Plugin	org.codice.ddf.catalog.security.po licy.xml.XmlAttributeSecurityPol icyPlugin	
Xml Query Transformer	ddf.catalog.transformer.xml.Xml ResponseQueueTransformer	Xml Response Query Transformer.
PDF Input Transformer	ddf.catalog.transformer.input.pd f.PdfInputTransformer	PDF Input Transformer configurations.
Catalog Policy Plugin	org.codice.ddf.catalog.security.Ca talogPolicy	Catalog Policy Plugin.
Resource URI Policy Plugin	org.codice.ddf.catalog.security.Re sourceUriPolicy	Resource URI Policy Plugin.
Status Source Poller Runner	org.codice.ddf.catalog.sourcepoll er.StatusSourcePollerRunner	Status Source Poller Runner.

Table 5. Catalog Federation Strategy

Name	Id	Туре	Description	Default Value	Required
Maximum start index	maxStartInd ex	Integer	Sets a limit on the number of results this sorted federation strategy can handle from each federated source. A large start index in conjunction with several federated sources could yield a large result set, which the sorted federation strategy has a limited ability to do. The admin can make a rough calculation to decide what maximum start index to use based on the amount of memory in the system, the amount of federated sources, the number of threads, and the expected amount of query results requested ( (average # of threads) * (maximum # of federated sources) * (maxStartIndex + maximumQueryResults) ) must fit into the allocated memory of the running distribution. This field will be removed when sorted federation strategy has the ability to sort a larger amount of results.	50000	true
Expiration Interval	expirationI ntervalInMi nutes	Long	Interval that Solr Cache checks for expired documents to remove.	10	true
Expiration Age	expirationA geInMinutes	Long	The number of minutes a document will remain in the cache before it will expire. Default is 7 days.	10080	true
Query Result Cache Strategy	cacheStrate gy	String	Strategy for caching query results. Valid entries are ALL, FEDERATED, and NONE.	ALL	true
Cache Remote Ingests	cacheRemote Ingests	Boolean	Cache remote ingest results	false	true

Table 6. Catalog Backup Plugin

Name	Id	Туре	Description	Default Value	Required
Root backup directory path	rootBackupD ir	String	Root backup directory for Metacards. A relative path is relative to <ddf_home>.</ddf_home>	data/backu p	true

Name	Id	Туре	Description	Default Value	Required
Subdirector y levels	subDirLevel s	Integer	Number of subdirectory levels to create. Two characters from the ID will be used to name each subdirectory level.	2	true

Table 7. Catalog Standard Framework

Name	Id	Туре	Description	Default Value	Required
Enable Fanout Proxy	fanoutEnabl ed	Boolean	When enabled the Framework acts as a proxy, federating requests to all available sources. All requests are executed as federated queries and resource retrievals, allowing the framework to be the sole component exposing the functionality of all of its Federated Sources.	false	true
Enable Notification s	notificatio nEnabled	Boolean	Check to enable notifications.	true	false
Fanout tag blacklist	fanoutTagBl acklist	String	Ingest operations with tags in this list will be rejected.		true

Table 8. Confluence Federated Source

Name	Property	Туре	Description	Default Value	Required
Source Name	shortname	String			Yes
Confluence Rest URL	endpointUrl	String	The Confluence Rest API endpoint URL. Example: https://{FQDN}:{PORT}/rest/api/conte nt		Yes
Username	username	String	Username to use with HTTP Basic Authentication. This auth info will overwrite any federated auth info. Only set this if the Confluence endpoint requires basic authentication.		No

Name	Property	Туре	Description	Default Value	Required
Password	password	Password	Password to use with HTTP Basic Authentication. This auth info will overwrite any federated auth info. Only set this if the Confluence endpoint requires basic authentication.		No
Include Page Contents In Results	includePage Content	Boolean	Flag indicating if Confluence page contents should be included in the returned results.	false	No
Include Archived Spaces	includeArch ivedSpaces	Boolean	Flag indicating if archived confluence spaces should be included in search results.	false	No
Exclude Confluence Spaces	excludeSpac es	Boolean	Flag indicating if the list of Confluence Spaces should be excluded from searches instead of included.	false	No
Confluence Spaces	confluenceS paces	String cardinality =1000	The confluence spaces to include/exclude from searches. If no spaces are specified, all visible spaces will be searched.		No
Attribute Overrides	additionalA ttributes	String cardinality =100	Attribute Overrides - Optional: Metacard attribute overrides (Key-Value pairs) that can be set on the results comming from this source. If an attribute is specified here, it will overwrite the metacard's attribute that was created from the Confluence source. The format should be 'key=value'. The maximum allowed size of an attribute override is 65,535 bytes. All attributes in the catalog taxonomy tables are injected into all metacards by default and can be overridden.		No
Availability Poll Interval	availabilit yPollInterv al	Long	Availability polling interval in milliseconds.	60000	No

Table 9. Catalog Content Directory Monitor

Name	Id	Туре	Description	Default Value	Required
Directory Path	monitoredDi rectoryPath	String	"Specifies the directory to be monitored, can be a filesystem path or webdav address (only supported for Monitor in place)"	false	true
Maximum Concurrent Files	numThreads	Integer	Specifies the maximum number of concurrent files to be processed within a directory (maximum of 8). If this number exceeds 8, 8 will be used in order to preserve system resources. Make sure that your system has enough memory to support the number of concurrent processing threads across all directory monitors.	1	true
ReadLock Time Interval	readLockInt ervalMillis econds	Integer	Specifies the time to wait (in milliseconds) before acquiring a lock on a file in the monitored directory. This interval is used for sleeping between attempts to acquire the read lock on a file to be ingested. The default value of 100 milliseconds is recommended.	100	true
Processing Mechanism	processingM echanism	String	Choose what happens to the content item after it is ingested. Delete will remove the original file after storing it in the content store. Move will store the item in the content store, and a copy under ./ingested, then remove the original file. (NOTE: this will double the amount of disk space used.) Monitor in place will index the file and serve it from its original location. If in place is used, then the URLResourceReader root resource directories configuration must be updated to allow downloading from the monitored directory (See URL Resource Reader).	in_place	false

Name	Id	Туре	Description	Default Value	Required
Attribute Overrides	attributeOv errides	String	Optional: Metacard attribute overrides (Key-Value pairs) that can be set on the content monitor. If an attribute is specified here, it will overwrite the metacard's attribute that was created from the content directory. The format should be 'key=value'. The maximum allowed size of an attribute override is 65,535 bytes. All attributes in the catalog taxonomy tables are injected into all metacards by default and can be overridden.	null	false

Table 10. Content File System Storage Provider

Name	Id	Туре	Description	Default Value	Required
Content Repository File Path	baseContent Directory	String	Specifies the directory to use for the content repository. A shutdown of the server is necessary for this property to take effect. If a filepath is provided with directories that don't exist, File System Provider will attempt to create them.	<ddf_hom E&gt;/data/con tent/store</ddf_hom 	true

Table 11. CSW Connected Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source.	CSW	true
CSW URL	cswUrl	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec.	null	true
Event Service Address	eventServic eAddress	String	DDF Event Service endpoint. Do NOT include .wsdl or ?wsdl.	null	false
Register for Events	registerFor Events	Boolean	Check to register for events from this connected source.	false	false
Username	username	String	Username for CSW Service (optional).	null	false
Password	password	String	Password for CSW Service (optional).	null	false
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true

Name	Id	Туре	Description	Default Value	Required
Force Longitude/ Latitude coordinate order	isLonLatOrd er	Boolean	Force Longitude/Latitude coordinate order.	false	true
Use posList in LinearRing	usePosList	Boolean	Use a <poslist> element rather than a series of <pos> elements when issuing geospatial queries containing a LinearRing.</pos></poslist>	false	false
Metacard Mappings	metacardMap pings	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be 'title=dc:title'.	effective=cr eated, created=dat eSubmitted, , modified= modified, thumbnail= references, content- type=type, id=identifie r, resource- uri=source	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Output Schema	outputSchem a	String	Output Schema	http://www. opengis.net /cat/csw/ 2.0.2	true
Query Type Name	queryTypeNa me	String	Qualified Name for the Query Type used in the CSW GetRecords request.	csw:Record	true
Query Type Namespace	queryTypeNa mespace	String	Namespace prefix for the Query Type used in the CSW GetRecords request.	http://www. opengis.net /cat/csw/ 2.0.2	true

Name	Id	Туре	Description	Default Value	Required
Force CQL Text as the Query Language	isCqlForced	Boolean	Force CQL Text.	false	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false

## Table 12. Expiration Date Pre-Ingest Plugin

Name	Id	Туре	Description	Default Value	Required
Overwrite If Empty	overwriteIf Blank	Boolean	If this is checked, overwrite all blank expiration dates in metacards. If this is not checked, leave metacards with blank expiration dates as-is.	false	true
Overwrite If Exists	overwriteIf Exists	Boolean	If this is checked, overwrite all existing non-empty expiration dates in metacards with a new date. If this is not checked, leave metacards with an existing expiration date.	false	true
Offset from Created Date (in days)	offsetFromC reatedDate	Integer	A metacard's new expiration date is calculated by adding this value (in days) to its created date.	30	true

## Table 13. FTP Endpoint

Name	Id	Туре	Description	Default Value	Required
FTP Port Number	port	Integer	The port number for the FTP server to listen on.	8021	true
Client Authenticat ion	clientAuth	String	Whether or not client authentication is required or wanted. A value of "Need" requires client auth, a value of "Want" leaves it up to the client.	want	true

### Table 14. Historian

Name	Id	Туре	Description	Default Value	Required
Enable Versioning	historyEnab led	Boolean	Enables versioning of both metacards and content.	true	true

Table 15. Metacard Attribute Security Policy Plugin

Name	Id	Туре	Description	Default Value	Required
Metacard Intersect Attributes:	intersectMe tacardAttri butes	List of rules	Each line item in the configuration is a rule. The format of a rule is the name of a single source attribute, followed by an equals sign, followed by the destination attribute. For example: source_attribute1=destination_attrib ute. The plugin gathers the source attributes that have a common destination. It takes the combined values of the source attributes and makes them the values of a (new) metacard attribute, the destination attribute. The strategy for combining the values is intersection, which means only the values common to all source attribute are added to the destination attribute. Note: Do not use the same destination attributes in both the Intersect and Union rule sets. The plugin will behave unpredictably.	none	false
Metacard Union Attributes:	unionMetaca rdAttribute s	List of rules	Each line item in the configuration is a rule. The format of a rule is the name of a single source attribute, followed by an equals sign, followed by the destination attribute. For example: source_attribute1=destination_attrib ute. The plugin gathers the source attributes that have a common destination. It takes the combined values of the source attributes and makes them the values of a (new) metacard attribute, the destination attribute. The strategy for combining the values is union, which means only all the values of the source attribute are added to the destination attribute (excluding duplicates) Note: Do not use the same destination attributes in both the Intersect and Union rule sets. The plugin will behave unpredictably.	none	false

Table 16. Catalog Metacard Ingest Network Plugin

Name	Id	Туре	Description	Default Value	Require d	Criteria
criteriaK ey	String	Specifies the criteria for the test of equality; which value will be tested? IP Address? Hostnam e?	remoteAddr	true	Expected Value	expected Value
String	The value that the criteria must equate to for the attribute override s to occur.		true	New Attribute s	newAttri butes	String"

Table 17. Metacard Validation Filter Plugin

Name	Id	Туре	Description	Default Value	Required
Attribute map	attributeMa p	String	Mapping of Metacard SECURITY attribute to user attribute. Users with this role will always receive metacards with errors and/or warnings.	invalid- state=local host-data- manager	false
Filter errors	filterError s	Boolean	Sets whether metacards with validation errors are filtered for users without the configured user attribute.	true	false
Filter warnings	filterWarni ngs	Boolean	Sets whether metacards with validation warnings are filtered for users without the configured user attribute.	false	false

Table 18. Metacard Validation Marker Plugin

Name	Id	Туре	Description	Default Value	Required
Enforced Validators	enforcedMet acardValida tors	String	ID of Metacard Validator to enforce. Metacards that fail these validators will NOT be ingested.	false	Enforce errors
enforceErr ors	Boolean	Sets whether validation errors are enforced. This prevents ingest if errors are present.	true	true	Enforce warnings

Table 19. Metacard Backup File Storage Provider

Name	Id	Туре	Description	Default Value	Required
Keep Deleted Metacard	keepDeleted Metacards	Boolean	Should backups for deleted metacards be kept or removed.	false	true
Metacard Transforme r Id	metacardTra nsformerId	String	ID of the metacard transformer to use to serialize metacard for backup.	metacard	true
Backup Invalid Metacards	keepDeleted Metacards	Boolean	Keep backups for metacards that fail validation with warnings or errors.	true	true
Metacard Backup Output Provider(s)	metacardOut putProvider Ids	Comma delimited list of metacard output provider IDs.	Metacard Backup Provider IDs to use for this backup plugin.	fileStorage Provider	true

Table 20. Metacard Backup S3 Storage Provider

Name	Id	Туре	Description	Default Value	Required
Keep Deleted Metacard	keepDeleted Metacards	Boolean	Should backups for deleted metacards be kept or removed.	false	true

Name	Id	Туре	Description	Default Value	Required
Metacard Transforme r Id	metacardTra nsformerId	String	ID of the metacard transformer to use to serialize metacard for backup.	metacard	true
Backup Invalid Metacards	keepDeleted Metacards	Boolean	Keep backups for metacards that fail validation with warnings or errors.	true	true
Metacard Tags	backupMetac ardTags	String	Backup only metacards with one of the tags specified.	resource	true
S3 Access Key	s3AccessKey	String	The access key to use for S3. Leave blank if on an EC2 host with roles assigned.	пп	true
S3 Secret Key	s3SecretKey	Password	The secret key to use for S3. Leave blank if on an EC2 host with roles assigned.		true
S3 Bucket	s3Bucket	String	The S3 Bucket in which to store the backed up metacard data.		true
S3 Endpoint	s3Endpoint	String	The endpoint for the region in which the bucket is located.		true
Object Template	objectTempl ate	String	Template specifying the S3 object key for the metacard data. The template uses handlebars syntax.  Use [] to reference dotted attributes e.g. {{[attribute.name]}}.  If you wish to include date, you	data/backu p/metacard /{{substring id 0 3}}/{{substr ing id 3 6}}/{Metaca rd_S3_Stora	true
			would use {{dateFormat created yyyy-MM-dd}}	ge_Route}.x	

Table 21. Catalog OpenSearch Federated Source

Name	Id	Туре	Description	Default Value	Required
Source Name	shortname	String	null	DDF-OS	true

Name	Id	Туре	Description	Default Value	Required
OpenSearc h service URL	endpointUrl	String	The OpenSearch endpoint URL or DDF's OpenSearch endpoint (https://{FQDN}:{PORT}/services/catal og/query)	\${org.codic e.ddf.syste m.protocol} \${org.codic e.ddf.syste m.hostnam e}:\${org.co dice.ddf.sys tem.port}\${ org.codice. ddf.system. rootContext }/catalog/qu ery	true
Username	username	String	Username to use with HTTP Basic Authentication. This auth info will overwrite any federated auth info. Only set this if the OpenSearch endpoint requires basic authentication.		false
Password	password	Password	Password to use with HTTP Basic Authentication. This auth info will overwrite any federated auth info. Only set this if the OpenSearch endpoint requires basic authentication.		false
OpenSearc h query parameters	parameters	String	Query parameters to use with the OpenSearch connection.	q,src,mr,sta rt,count,mt, dn,lat,lon,r adius,bbox, geometry,p olygon,dtst art,dtend,d ateName,fil ter,sort	true
Always perform local query	localQueryO nly	Boolean	When federating with other DDFs, keep this checked. If checked, this source performs a local query on the remote site (by setting src=local in endpoint URL), as opposed to an enterprise search.	true	true

Name	Id	Туре	Description	Default Value	Required
Convert to BBox	shouldCon vertToBBox	Boolean	Converts Polygon and Point-Radius searches to a Bounding Box for compatibility with older interfaces. Generated bounding box is a very rough representation of the input geometry.	true	true
Multi Point- Radius polygon approximat ion vertices	numMultiP ointRadius Vertices	Integer	When performing a multi point- radius search, increase this value for more accurate polygon approximation. Minimum value is 4, maximum value is 32.	32	true
Point radius polygon simplificati on distance tolerance	distanceTol erance	Integer	The maximum distance (in meters) from the original vertices a reduced vertex may lie on a simplified circular polygon.	1	true
Disable CN Check	disableCnC heck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Connection Timeout	connection Timeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTim eout	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Entry XML Element	markUpSet	String	XML Element from the Response Entry to transform into a Metacard.		false

Table 22. Resource Download Settings

Name	Property	Туре	Description	Default Value	Required
Product Cache Directory	productCach eDirectory	String	Directory where retrieved products will be cached for faster, future retrieval. If a directory path is specified with directories that do not exist, Product Download feature will attempt to create those directories. Without configuration, the product cache directory is <ddf_home>/data/product-cache. If a relative path is provided it will be relative to the <ddf_home>. It is recommended to enter an absolute directory path such as /opt/product-cache in Linux or C:\product-cache in Windows.</ddf_home></ddf_home>		false
Enable Product Caching	cacheEnable d	Boolean	Check to enable caching of retrieved products.	true	false
Delay (in seconds) between product retrieval retry attempts	delayBetwee nRetryAttem pts	Integer	The time to wait (in seconds) between attempting to retry retrieving a product.	10	false
Max product retrieval retry attempts	maxRetryAtt empts	Integer	The maximum number of attempts to retry retrieving a product.	3	false
Product Retrieval Monitor Period	retrievalMo nitorPeriod	Integer	How many seconds to wait and not receive product data before retrying to retrieve a product.	5	false
Always Cache Product	cacheWhenCa nceled	Boolean	Check to enable caching of retrieved products even if client cancels the download. Note: this has no effect if product caching is disabled.	false	false

Table 23. Schematron Validation Services

Name	Id	Туре	Description	Default Value	Required
Ruleset Name	id	String	Give this ruleset a name	null	true
Root Namespace	namespace	String	The root namespace of the XML	null	true
Schematro n File Names	schematronF ileNames	String	Names of schematron files (*.sch) against which to validate metadata ingested into the Catalog. Absolute paths or relative paths may be specified. Relative paths are assumed to be relative to <ddf_home>/schematron.</ddf_home>	null	true

## Table 24. Security Audit Plugin

Name	Id	Туре	Description	Default Value	Required
Security attributes to audit	auditAttrib utes	String	List of security attributes to audit when modified	security.acc ess- groups,secu rity.access- individuals	

## Table 25. Tika Input Transformer

Name	Id	Туре	Description	Default Value	Required
Use Resource Title	useResource TitleAsTitl e		Use the resource's metadata to determine the metacard title. If this is not enabled, the metacard title will be the file name.	false	true

#### Table 26. URL Resource Reader

Name	Property	Туре	Description	Default Value
Follow Server Redirects	followRedirec ts	Boolean	Check the box if you want the Resource Reader to automatically follow server issued redirects (HTTP Response Code 300 series).	true
Root Resource Directories	rootResourceD irectories	String	List of root resource directories. A relative path is relative to <ddf_home>. Specifies the only directories the URLResourceReader has access to when attempting to download resources linked using file-based URLs.</ddf_home>	data/product s

Table 27. Video Thumbnail Plugin

Name	Property	Туре	Description	Default Value	Required
Maximum video file size to process (Megabytes )	maxFileSize MB	Long	Maximum video file size in Megabytes for which to create a thumbnail. Default is 120 Megabytes. Processing large videos may affect system performance.	120	false

Table 28. XML Attribute Security Policy Plugin

Name	Id	Туре	Description	Default Value	Required
XML Elements:	xmlElements	String	XML elements within the metadata that will be searched for security attributes. If these elements contain matching attributes, the values of the attributes will be combined.		true
Security Attributes (union):	securityAtt ributeUnion s	String	Security Attributes. These attributes, if they exist on any of the XML elements listed above, will have their values extracted and the union of all of the values will be saved to the metacard. For example: if element1 and element2 both contain the attribute 'attr' and that attribute has values X,Y and X,Z, respectively, then the final result will be the union of those values: X,Y,Z. The X,Y,Z value will be the value that is placed within the security attribute on the metacard.		false
Security Attributes (intersectio n):	securityAtt ributeInter sections	String	Security Attributes. These attributes, if they exist on any of the XML elements listed above, will have their values extracted and the intersection of all of the values will be saved to the metacard. For example: if element1 and element2 both contain the attribute 'attr' and that attribute has values X,Y and X,Z, respectively, then the final result will be the intersection of those values: X. The X value will be the value that is placed within the security attribute on the metacard.	null	false

Table 29. Xml Query Transformer

Name	Id	Туре	Description	Default Value	Required
Parallel Marhsallin g Threshold	threshold	Integer	Response size threshold above which marshalling is run in parallel	50	true

Table 30. PDF Input Transformer

Name	Id	Туре	Description	Default Value	Required
Use PDF Title	usePdfTitle AsTitle	Boolean	Use the PDF's metadata to determine the metacard title. If this is not enabled, the metacard title will be the file name.	false	true
Maximum text extraction length (bytes)	previewMaxL ength	Integer	The maximum length of text to be extracted.	30000	true
Maximum xml metadata length (bytes)	metadataMax Length	Integer	The maximum length of xml metadata to be extracted.	5000000	true

Table 31. Catalog Policy Plugin

Name	Id	Туре	Description	Default Value	Required
Create Required Attributes	createPermi ssions	String	Roles/attributes required for the create operations. Example: role=role1,role2	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true
Update Required Attributes	updatePermi ssions	String	Roles/attributes required for the update operation. Example: role=role1,role2	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true

Name	Id	Туре	Description	Default Value	Required
Delete Required Attributes	deletePermi ssions	String	Roles/attributes required for the delete operation. Example: role=role1,role2	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true
Read Required Attributes	readPermiss ions	String	Roles/attributes required for the read operations (query and resource). Example: role=role1,role2	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true

Table 32. Resource URI Policy Plugin

Name	Id	Туре	Description	Default Value	Required
Permit Resource URI on Creation	createPermi ssions	String	Allow users to provide a resource URI when creating a metacard	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true
Permit Resource URI on Update	updatePermi ssions	String	Allow users to provide a resource URI when updating a metacard	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true

Table 33. Status Source Poller Runner

Name	Id	Туре	Description	Default Value	Required
Poll Interval (minutes)	pollInterva lMinutes	Integer	The interval (in minutes) at which to recheck the availability of all sources. Must be at least 1 minute.  WARNING: There is a maximum delay of 2*pollIntervalMinutes for	1	true
			the Source Poller to be updated after the availability of a source changes or a source is created/modified/deleted. Currently the Standard Catalog Framework and the Catalog REST Endpoint use the Source Poller to get source availabilities. The pollIntervalMinutes should not be set to value a which results in an unacceptable maximum delay.		

## **GeoWebCache Application Reference**

GeoWebCache enables a server providing a map tile cache and tile service aggregation.

WARNING

The GeoWebCache application is currently in an EXPERIMENTAL status and should not be installed on a security-hardened installation.

GeoWebCache enables a server providing a tile cache and tile service aggregation. See (GeoWebCache ) for more information. This application also provides an administrative plugin for the management of GeoWebCached layers. GeoWebCache also provides a user interface for previewing, truncating, or seeding layers at https://{FQDN}:{PORT}/geowebcache/.

## **GeoWebCache Application Prerequisites**

None.

## **Installing GeoWebCache**

Install the GeoWebCache application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the geowebcache-app feature.

## Configuring GeoWebCache

GeoWebCache can be configured to cache layers locally, using the following procedures.

#### Adding GeoWebCache Layers

Add layers to the local cache:

- 1. Navigate to the Admin Console.
- 2. Select the GeoWebCache Application.
- 3. Select the **GeoWebCache Layers** tab.
- 4. Click the **Add** button.
- 5. Enter the data in the fields provided.
- 6. If necessary, click the **Add** button to add additional MIME types.
- 7. If necessary, click the **Add** button to add additional WMS Layer Names.

Table 34. Add Layer

Name	Property	Туре	Description	<b>Default Value</b>
Name		String	Unique name assigned.	
Mime Formats		String	List of mime formats used.	
URL		URI	URL location of layer to add.	
WMS Layer Name		String	The name(s) of WMS layers that exist at the URL specified above. If no WMS Layer names are specified, GeoWebCache will look for the Layer Name specified in the name field. Otherwise, it will attempt to find all layer names added here and combine them into one layer.	

#### **Editing GeoWebCache Layers**

- 1. Navigate to the Admin Console.
- 2. Select the GeoWebCache application.
- 3. Navigate to the **GeoWebCache Layers** tab.
- 4. Click the **Name** field of the layer to edit.

#### Removing GeoWebCache Layers

1. Click the **Delete** icon at the end of the row of the layer to be deleted.

#### **Configuring GWC Disk Quota**

Storage usage for a GeoWebCache server is managed by a diskquota.xml file with configuration details to prevent image-intensive data from filling the available storage.

To view the disk quota XML representative: https://{FQDN}:{PORT}/geowebcache/rest/diskquota.xml

To update the disk quota, a client can post a new XML configuration: curl -v -k -XPUT -H "Content-type: text/xml" -d @diskquota.xml "https://{FQDN}:{PORT}/geowebcache/rest/diskquota.xml"

Example diskquota.xml

See Disk Quotas for more information on configuration options for disk quota.

## Configuring the Standard Search UI for GeoWebCache

Add a new Imagery Provider in the Admin Console:

- 1. Navigate to the **Admin Console**.
- 2. Select **Configuration** tab.
- 3. Select Standard Search UI configuration.
- 4. Click the Add button next to Imagery Providers
- 5. Enter configuration for Imagery Provider in new textbox:

```
6. {"type" "WMS" "url" "https://{FQDN}:{PORT}/geowebcache/service/wms" "layers" ["states"] "parameters" {"FORMAT" "image/png"} "alpha" 0.5}
```

7. Set the Map Projection to EPSG:900913 or EPSG:4326. (GeoWebCache supports either of these projections.)

NOTE

Currently, GeoWebCache only supports WMS 1.1.1 and below. If the version number is not specified in the imagery provider, DDF will default to version 1.3.0, and OpenLayers will not project the image tiles properly. Thus, the version 1.1.1 must be specified when using EPSG:4326 projections.

```
{"type" "WMS" "url" "https://{FQDN}:{PORT}/geowebcache/service/wms" "layers" ["states"] "parameters" {"FORMAT" "image/png" "VERSION" "1.1.1"} "alpha" 0.5}
```

# **Platform Application Reference**

The Platform application is considered to be a core application of the distribution. The Platform application provides the fundamental building blocks that the distribution needs to run. These building blocks include subsets of:

- Karaf 🗹
- CXF ☑
- Camel 🗹

A Command Scheduler is also included as part of the Platform application to allow users to schedule Command Line Shell Commands.

### **Platform Application Prerequisites**

None.

## **Installing Platform**

Install the Platform application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the platform-app feature.

## **Configuring the Platform Application**

To configure the Platform Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Platform** application.
- 3. Select the **Configuration** tab.

Table 35. Platform Available Configurations

Name	Property	Description
MIME Custom Types	DDF_Custom_Mime_Type_Resolv er	DDF Custom Mime Types.
Logging Service	org.codice.ddf.platform.logging.L oggingService	Logging Service configurations.
Metrics Reporting	MetricsReporting	Metrics Reporting.
HTTP Response Security	org.codice.ddf.security.response. filter.ResponseHeaderConfig	HTTP Response Security response configurations.
Email Service	org.codice.ddf.platform.email.im pl.SmtpClientImpl	Email Service configurations.
Landing Page	org.codice.ddf.distribution.landi ngpage.properties	Starting page for users to interact with DDF.
Platform UI	ddf.platform.ui.config	Platform UI configurations.
Platform Command Scheduler	ddf.platform.scheduler.Comman d	Platform Command Scheduler.

### Table 36. MIME Custom Types

Name	Id	Туре	Description	Default Value	Required
Resolver Name	name	String	null	DDF Custom Resolver	false
Priority	priority	Integer	null	10	true
File Extensions to Mime Types	customMimeT ypes	String	List of key/value pairs where key is the file extension and value is the mime type, e.g., nitf=image/nitf	null	true

## Table 37. Logging Service

Name	Id	Туре	Description	Default Value	Required
Max Log Events	maxLogEvent s	Integer	The maximum number of log events stored for display in the Admin Console. This must be greater than 0 and must not exceed 5000.	500	true

Table 38. Metrics Reporting

Name	Property	Туре	Description	Default Value	Required
Metrics Max Threshold	metricsMaxT hreshold	Double	Max value a data sample can be for any metric (used to suppress spike data on metrics graphs)	4000000000	true

## Table 39. HTTP Response Security

Name	Id	Туре	Description	Default Value	Required
Content Security Policy	xContentSec urityPolicy	String	Instructions for the client browser detailing which location and/or which type of resources may be loaded.		true
X-Frame- Options	xFrameOptio ns	String	The X-Frame-Options HTTP response header can be used to indicate whether or not a browser may render a page in a frame, iframe or object.		true
X-XSS- Protection	xXssProtect ion	String	The HTTP X-XSS-Protection response header is a feature that stops pages from loading when they detect reflected cross-site scripting (XSS) attacks.		true

### Table 40. Email Service

Name	Property	Туре	Description	Default Value	Required
Host	hostName	String	Mail server hostname (must be resolvable by DNS) or IP address.		Yes
Port	portNumber	Integer	Mail server port number.	25	Yes
User Name	userName	String	Mail server user name used only for authenticated connections over TLS.		No
Password	password	Password	Mail server password used only for authenticated connections over TLS.		No

Table 41. Landing Page

Name	Id	Туре	Description	Default Value	Required
Description	description	String	Specifies the description to display on the landing page.	As a common data layer, DDF provides secure enterprisewide data access for both users and systems.	true
Phone Number	phone	String	Specifies the phone number to display on the landing page.		true
Email Address	email	String	Specifies the email address to display on the landing page.		true
External Web Site	externalUrl	String	Specifies the external web site URL to display on the landing page.		true
Announce ments	announcemen ts	String	Announcements that will be displayed on the landing page.	null	true
Branding Backgroun d	background	String	Specifies the landing page background color. Use html css colors or #rrggbb.		true
Branding Foreground	foreground	String	Specifies the landing page foreground color. Use html css colors or #rrggbb.		true
Branding Logo	logo	String	Specifies the landing page logo. Use a base64 encoded image.		true
Additional Links	links	String	Additional links to be displayed on the landing page. Use the format <text>,<link/> (e.g. example, http://www.example.com). Empty entries are ignored.</text>		yes

Table 42. Platform UI Configuration

Name	Id	Туре	Description	Default Value	Required
Enable System Usage Message	systemUsage Enabled	Boolean	Turns on a system usage message, which is shown when the Search Application is opened.	false	true

Name	Id	Туре	Description	Default Value	Required
System Usage Message Title	systemUsage Title	String	A title for the system usage Message when the application is opened.		false
System Usage Message	systemUsage Message	String	A system usage message to be displayed to the user each time the user opens the application.		false
Show System Usage Message once per session	systemUsage OncePerSess ion	Boolean	With this selected, the system usage message will be shown once for each browser session. Uncheck this to have the usage message appear every time the search window is opened or refreshed.	true	true
Header	header	String	Specifies the header text to be rendered on all pages.		false
Footer	footer	String	Specifies the footer text to be rendered on all pages.		false
Text Color	color	String	Specifies the Text Color of the Header and Footer. Use html css colors or #rrggbb.		false
Backgroun d Color	background	String	Specifies the Background Color of the Header and Footer. Use html css colors or #rrggbb.		false
Session Timeout	timeout	Integer	Specifies the length of inactivity (in minutes) that will cause a user to be logged out automatically. This value must be 2 minutes or greater, as users are warned when only 1 minute remains. If a value of less than 2 minutes is used, the timeout is set to the default time of 15 minutes.	15	true

Table 43. Platform Command Scheduler

Name	Property	Туре	Description	Default Value	Required
Command	command	String	Shell command to be used within the container. For example, log:set DEBUG">		true

Name	Property	Туре	Description	Default Value	Required
Interval	intervalStr ing	String	The Interval String for each execution. Based on the Interval Type, this will either be a Cron String or a Second Interval. (e.x. '0 0 0 1/1 * ? *' or '12')		true
Interval Type	intervalTyp e	String	Interval Type	cronString	true

# **Registry Application Reference**

Registry contains the base registry components, plugins, sources, and interfaces needed for DDF to function as a registry connecting multiple nodes.

### **Registry Prerequisites**

To use the Registry, the following apps/features must be installed:

- Catalog
- Admin
- Spatial
- Platform
- Security

## **Installing Registry**

Install the Registry application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the registry-app feature.

### **Customizing Registry Fields**

All the fields that appear in a registry node are customizable. This is done through a JSON configuration file located at <DDF\_HOME>/etc/registry/registry-custom-slots.json that defines the registry fields. In this file there are JSON objects that relate to each part of the edit registry modal. These objects are

• General

- Service
  - ServiceBinding
- Organization
- Person (Contact)
- Content (Content Collection)

Each of the objects listed above is a JSON array of field objects that can be modified. There are some other objects in the JSON file like **PersonName**, **Address**, **TelephoneNumber**, and **EmailAddress** that should not be modified.

Table 44. Field Properties

Property Key	Required	Property Value
key	yes	The string value that will be used to identify this field. Must be unique within field grouping array. This value is what will show up in the generated EBRIM xml.
displayName	yes	The string name that will be displayed in the edit node dialog for this field
description	yes	A brief description of what the field represents or is used for. Shown when user hovers or click the question mark icon for the field.
value	no	The initial or default value of the field. For most cases this should be left as an empty array or string.
type	yes	Identifies what type of field this is. Value must be one of <b>string</b> , <b>date</b> , <b>number</b> , <b>boolean</b> , <b>point</b> , or <b>bounds</b>
required	no	Indicates if this field must be filled out. <b>Default is false</b> . If true an asterisk will be displayed next to the field name.

Property Key	Required	Property Value
possibleValues	no	An array of values that could be used for this field. If <b>multiValued=true</b> this list will be used for suggestions for autocomplete. If <b>multiValued=false</b> this list will be used to populate a dropdown.
multiValued	no	Flag indicating if this field accepts multiple values or not. <b>Default is false</b> .
isSlot	no	Indicates that this field represents a slot value in the EBRIM document. If this is false the key must match a valid EBRIM attribute for the parent object. <b>Default is true</b> .
advanced	no	A flag indicating if this field should be placed under the <b>Advanced</b> section of the edit modal ui. <b>Default is false</b> .
regex	no	A regular expression for validating users input.
regexMessage	no	A message to show the user if the regular expression test fails.
isGroup, constructTitle	N/A	These fields are used for nesting objects and should not be modified

## **Configuring the Registry Application**

To configure the Registry Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Registry** application.
- 3. Select the **Configuration** tab.

Table 45. Registry Available Configurations

Name	Property	Description
CSW Registry Store	Csw_Registry_Store	Registry CSW Store.
Registry Policy Plugin	org.codice.ddf.registry.policy.Reg istryPolicyPlugin	Registry Policy Plugin.

Name	Property	Description
Registry Source Configuration Handler	Registry_Configuration_Event_H andler	Registry Source Configuration Handler configurations.

## Table 46. CSW Registry Store

Name	Id	Туре	Description	Default Value	Required
Registry ID	id	String	The unique name of the store	null	true
Registry Service URL	cswUrl	String	URL to the endpoint implementing CSW spec capable of returning ebrim formatted records	null	true
Username	username	String	Username for CSW Service (optional)	null	false
Password	password	Password	Password for CSW Service (optional)	null	false
Allow Push	pushAllowed	Boolean	Enable push (write) to this registry	true	true
Allow Pull	pullAllowed	Boolean	Enable pull (read) from this registry	true	true
Push Identity Node	autoPush	Boolean	Enable an automatic publish from the local identity node to this registry. Setting this to Off will have the effect of unpublishing the identity from this registry.	true	true

Table 47. Registry Policy Plugin

Name	Id	Туре	Description	Default Value	Required
Registry Create Attributes	createAcces sPolicyStri ngs	String	Roles/attributes required for Create operations on registry entries. Example: {role=role1;type=type1}	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true
Registry Update Attributes	updateAcces sPolicyStri ngs	String	Roles/attributes required for Update operations on registry entries. Example: {role=role1;type=type1}	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true

Name	Id	Туре	Description	Default Value	Required
Registry Delete Attributes	deleteAcces sPolicyStri ngs	String	Roles/attributes required for Delete operations on registry entries. Example: {role=role1;type=type1}	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true
Registry Read Attributes	readAccessP olicyString s	String	Roles/attributes required for reading registry entries. Example: {role=role1;type=type1}	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=guest	true
Registry Admin Attributes	registryByp assPolicySt rings	String	Roles/attributes required for an admin to bypass all filtering/access controls. Example: {role=role1;type=type1}	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ role=syste m-admin	true
Disable Registry Write Access	registryDis abled	Boolean	Disables all write access to registry entries in the catalog. Only users with Registry Admin Attributes will be able to write registry entries	null	false
Entries are White List	whiteList	Boolean	A flag indicating whether or not the Registry Entry Ids represent a 'white list' (allowed - checked) or a 'black list' (blocked - unchecked) ids	null	false
Registry Entries Ids	registryEnt ryIds	String	List of registry entry ids to be used in the white/black list.	null	false

Table 48. Registry Source Configuration Handler

Name	Id	Туре	Description	Default Value	Required
Url Binding Name	urlBindingN ame	String	The url name for communicating with the specific instance.	urlBinding Name	true

Name	Id	Туре	Description	Default Value	Required
BindingTyp e to Factory PID	bindingType FactoryPid	String	Key/Value mappings of binding type to factory PID	CSW_2.0.2= Csw_Feder ated_Sourc e,WFS_1.0.0 =Wfs_v1_0_ 0_Federate d_Source,O penSearch_ 1.0.0=Open SearchSour ce	true
Remove Configurati ons on Metacard Delete	cleanUpOnDe lete	Boolean	Flag used to determine if configurations should be deleted when the metacard is deleted.	false	true
Activate Configurati ons	activateCon figurations	Boolean	Flag used to determine if a configuration should be activated on creation	false	true
Preserve Active Configurati on	preserveAct iveConfigur ations	Boolean	Flag used to determine if configurations should be preserved. If true will only allow auto activation on creation. If false auto activation will happen on updates as well. Only applicable if activateConfigurations is true.	true	true
Source Activation Priority Order	sourceActiv ationPriori tyOrder	String	This is the priority list used to determine which source should be activated on creation	100CSW_2. 0.2,WFS_1.0 .0,OpenSea rch_1.0.0	true

# **Resource Management Application Reference**

The Resource Management Application provides administrative functionality to monitor and manage data usage on the system. This application allows an administrator to:

- View data usage.
- Set limits on users.
- View and terminate searches that are in progress.

Components of the Resource Management application include:

#### **Resource Management Data Usage Tab**

View data usage and configure users' data limits and reset times for those limits.

#### **Resource Management Queries Tab**

View and cancel actively running queries.

#### **Resource Management Prerequisites**

To use the Resource Management Application, the following apps/features must be installed:

- Platform
- Security
- Admin
- Catalog

#### **Installing Resource Management**

Install the Resource Management application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the resourcemanagement-app feature.

## **Configuring the Resource Management Application**

To configure the Resource Management Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Resource Management** application.
- 3. Select the **Configuration** tab.

Table 49. Resource Management Available Configurations

Name	Property	Description
Data Usage	org.codice.ddf.resourcemanagem ent.usage	Data Usage configurations.

Table 50. Data Usage

Name	Id	Туре	Description	Default Value	Required
Monitor Local Sources	monitorLoca 1Sources	Boolean	When checked, the Data Usage Plugin will also consider data usage from local sources.	false	true

# **Security Application Reference**

The Security application provides authentication, authorization, and auditing services for the DDF. These services comprise both a framework that developers and integrators can extend as well as a reference implementation that meets security requirements.

This section documents the installation, maintenance, and support of this application.

Applications Included in Security

- Security Core
- Security Encryption
- Security IdP
- Security PEP
- Security PDP
- Security STS

## **Security Prerequisites**

To use the Security application, the following applications/features must be installed:

Platform

### **Installing Security**

Install the Security application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the security-app feature.

## **Configuring the Security Application**

To configure the Security Application:

1. Navigate to the Admin Console.

- 2. Select the **Security** application.
- 3. Select the **Configuration** tab.

Table 51. Security Available Configurations

Name	Property	Description
Security STS LDAP and Roles Claims Handler	Claims_Handler_Manager	STS Ldap and Roles Claims Handler Configuration.
Security SOAP Guest Interceptor	org.codice.ddf.security.intercept or.GuestInterceptor	Security SOAP Guest Interceptor.
IdP Client	org.codice.ddf.security.idp.client. IdpMetadata	IdP Client configurations.
Logout Page	org.codice.ddf.security.idp.client. LogoutRequestService	Logout Page configurations.
OIDC Handler	org.codice.ddf.security.handler.o idc.OidcHandler	OIDC Handler configurations.
Web Context Policy Manager	org.codice.ddf.security.policy.con text.impl.PolicyManager	Web Context Security Policies.
File Based Claims Handler	org.codice.ddf.security.sts.claims. property.PropertyFileClaimsHan dler	File Based Claims Handler.
Session	org.codice.ddf.security.filter.logi n.Session	Session configurations.
IdP Handler	org.codice.ddf.security.idp.client. IdpHandler	IdP Handler configurations.
Security AuthZ Realm	ddf.security.pdp.realm.AuthzRea lm	AuthZ Security configurations.
SAML NameID Policy	ddf.security.service.SecurityMan ager	SAML NameID Policy.
Security STS Server	ddf.security.sts	STS configurations.
Security STS Client	ddf.security.sts.client.configurati	STS Client configurations.
Guest Claims Configuration	ddf.security.guest.realm	Guest Claims configurations.
Security STS PKI Token Validator	org.codice.ddf.security.validator. pki	STS PKI Token Validator configurations.

Table 52. Security STS LDAP and Roles Claims Handler

Name	Property	Туре	Description	Default Value	Required
LDAP URL	url	String	true	<pre>ldaps://\${org .codice.ddf.s ystem.hostnam e}:1636</pre>	LDAP or LDAPS server and port
StartTLS	startTls	Boolean	Determines whether or not to use StartTLS when connecting via the ldap protocol. This setting is ignored if the URL uses ldaps.	false	true
LDAP Bind User DN	ldapBindUserD n	String	DN of the user to bind with LDAP. This user should have the ability to verify passwords and read attributes for any user.	cn=admin	true
LDAP Bind User Password	password	Password	Password used to bind user with LDAP.	secret	true
LDAP Group User Membership Attribute	membershipUse rAttribute	String	Attribute used as the membership attribute for the user in the group. Usually this is uid, cn, or something similar.	uid	true
LDAP User Login Attribute	loginUserAttr ibute	String	Attribute used as the login username. Usually this is uid, cn, or something similar.	uid	true
LDAP Base User DN	userBaseDn	String	Full LDAP path to where users can be found.	<pre>ou=usersdc= exampledc=c om</pre>	true
Override User Certificate DN	overrideCertD n	Boolean	When checked, this setting will ignore the DN of a user and instead use the LDAP Base User DN value.	false	true
LDAP Group ObjectClass	objectClass	String	ObjectClass that defines structure for group membership in LDAP. Usually this is groupOfNames or groupOfUniqueNames.	groupOfNames	true

Name	Property	Туре	Description	Default Value	Required
LDAP Membership Attribute	memberNameAtt ribute	String	Attribute used to designate the user's name as a member of the group in LDAP. Usually this is member or uniqueMember.	member	true
LDAP Base Group DN	groupBaseDn	String	Full LDAP path to where groups can be found.	<pre>ou=groupsdc =exampledc= com</pre>	true
Attribute Map File	propertyFileL ocation	String	Location of the file which contains user attribute maps to use.	<pre><install_home>/etc/ws- security/attr ibuteMap.prop erties</install_home></pre>	

## Table 53. Security SOAP Guest Interceptor

Name	Id	Туре	Description	Default Value	Required
Deny Guest Access	guestAccess Denied	Boolean	If set to true, no guest access will be allowed via this guest interceptor. If set to false, this interceptor will generate guest tokens for incoming requests that lack a WS-Security header.	false	false

### Table 54. IdP Client

Name	Id	Туре	Description	Default Value
IdP Metadata	metadata	String	Refer to metadata by HTTPS URL (https://), file URL (file:), or an XML block( <md:entitydescriptor> </md:entitydescriptor> ).	https://\${org. codice.ddf.sy stem.hostna me}:\${org.co dice.ddf.syste m.httpsPort}/ services/idp/ login/ metadata
Perform User-Agent Check	userAgentChec k	Boolean	If selected, this will allow clients that do not support ECP and are not browsers to fall back to PKI, BASIC, and potentially GUEST authentication, if enabled.	true

Table 55. Logout Page

Name	Id	Туре	Description	Default Value
Logout Page Time Out	logOutPageTim eOut	Long	This is the time limit that the IDP client will wait for a user to click log out on the logout page. Any requests that take longer than this time for the user to submit will be rejected."/>	3600000

#### Table 56. OIDC Handler

Name	Id	Туре	Description	Default Value
IdP Type	idpType	String	IdP type to use.	Keycloak
Client ID	clientId	String	Unique ID for the client, this may be provided by the Identity Provider.	ddf-client
Realm/Tenan t	realm	String	Realm to use for a multi-tenant environment. This is required for Keycloak or Azure.	master
Secret	secret	String	This value must match the value set on the Identity Provider.	secret
Discovery URI	discoveryUri	String	Discovery URI for fetching OP metadata (http://openid.net/specs/openid-connect-discovery-1_0.html).	http://localho st:8080/auth/ realms/ master/.well- known/ openid- configuration
Base URI	baseUri	String	Base URI for IdP. Do not fill out both this and the Discovery URI. Only one is needed depending on the IdP in use.	http://localho st:8080/auth
Logout URI	logoutUri	String	URI directing to single logout service of the IdP in use.	http://localho st:8080/auth/ realms/ master/ protocol/ openid- connect/ logout
Scope	scope	String	OIDC scopes.	openid profile email resource.rea d
Use Nonce	useNonce	Boolean	Whether or not to use nonce in JWT.	true

Name	Id	Туре	Description	Default Value
Response Type	responseType	String	Response type to use.	code
Mode	responseMode	String	Mode. Leave blank if you are unsure of the value to use.	form_post

Table 57. Web Context Policy Manager

Name	Id	Туре	Description	Default Value	Required
Context Traversal Depth	traversalDe pth	Integer	Depth to which paths will be traversed. Any value greater than 500 will be set to 500.	20	true
Allow Guest Access	guestAccess	Boolean	Allow guest access to all web contexts. Required attributes can be used to restrict access to contexts from guest users.	true	true
Allow Session Storage	sessionAcce ss	Boolean	Allow for session cookies to be used. Note that the SAML and OIDC authentication types require session storage to be enabled.	true	true
Authenticat ion Types	authenticat ionTypes	String	List of authentication types required for each context. List of default valid authentication types are: BASIC, PKI, SAML, and OIDC. Example: /context=AUTH1	AUTH2	AUTH3
/=SAML,/ad min=SAML	BASIC	true	Required Attributes	requiredAtt ributes	String

Name	Id	Туре	Description	Default Value	Required
List of attributes required for each Web Context. Example: /context={r ole=role1;ty pe=type1}	/=,/admin={ http://sche mas.xmlsoap.org/ws/200 5/05/identi ty/claims/r ole=system- admin},/sys tem={http:/ /schemas.xm lsoap.org/w s/2005/05/identity/cla ims/role=sy stem- admin},/sec urity- config={htt p://schemas. xmlsoap.or g/ws/2005/0 5/identity/ claims/role =system- admin}		White Listed Contexts	whiteListCo	String

Table 58. File Based Claims Handler

Name	Id	Туре	Description	Default Value	Required
Role Claim Type	roleClaimTy pe	String	Role claim URI.	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/role	true
ID Claim Type	idClaimType	String	ID claim URI.	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ nameidenti fier	true
User Role File	propertyFil eLocation	String	Location of the file which maps roles to users.	etc/users.pr operties	true
User Attribute File	usersAttrib utesFileLoc ation	String	Location of the file which maps attributes to users.	etc/users.at tributes	true

Table 59. Session

Name	Id	Туре	Description	Default Value	Required
Session Timeout (in minutes)	expirationT ime	Integer	Specifies the length of inactivity (in minutes) between client requests before the servlet container will invalidate the session (this applies to all client sessions). This value must be 2 minutes or greater, as users are warned when only 1 minute remains. If a value of less than 2 minutes is used, the timeout is set to the default time of 31 minutes.  See also: Platform UI Config.	31	true

#### Table 60. IdP Handler

Name	Id	Туре	Description	Default Value
Authenticatio		String	Authentication Context Classes that are	urn:oasis:na
n Context	asses	_	considered acceptable means of	mes:tc:SAMI
Class			authentication by the IdP Client.	2.0:ac:classe
				Password,ur
				n:oasis:nam
				s:tc:SAML:2.
				:ac:classes:P
				sswordProte
				tedTranspor
				urn:oasis:na
				mes:tc:SAM
				2.0:ac:classe
				X509,urn:oa
				s:names:tc:S
				AML:2.0:ac:
				asses:Smart
				ardPKI,urn:
				asis:names:
				:SAML:2.0:a
				classes:Softv
				arePKI,urn:
				asis:names:
				:SAML:2.0:a
				classes:SPKI
				urn:oasis:na
				mes:tc:SAM
				2.0:ac:classe
				TLSClient

Table 61. Security AuthZ Realm

Name	Id	Туре	Description	Default Value	Required
Match-All Mappings	matchAllMap pings	String	List of 'Match-All' subject attribute to Metacard attribute mapping. All values of this metacard key must be present in the corresponding subject key values. Format is subjectAttrName=metacardAttrName.		false
Match-One Mappings	matchOneMap pings	String	List of 'Match-One' subject attribute to Metacard attribute mapping. One value of this metacard key must be present in the corresponding subject key values. Format is subjectAttrName=metacardAttrName.		false
Environme nt Attributes	environment Attributes	String	List of environment attributes to pass to the XACML engine. Format is attributeId=attributeValue1,attribute Value2.		false

### Table 62. SAML NameID Policy

Name	Id	Туре	Description	Default Value	Required
SAML NameID Policy	usernameAtt ributeList	String	List of attributes that are considered for replacing the username of the logged in user. If any of these attributes match any of the attributes within the SecurityAssertion, the value of the first matching attribute will be used as the username. (Does not apply when NameIDFormat is of the following: X509, persistent, kerberos or unspecified, and the username is not empty).	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ nameidenti fier, uid	true

## Table 63. Security STS Server

Name	Id	Туре	Description	Default Value	Required
SAML Assertion Lifetime	lifetime	Long	Set the number of seconds that an issued SAML assertion will be good for.	1800	true

Name	Id	Туре	Description	Default Value	Required
Token Issuer	issuer	String	The name of the server issuing tokens. Generally this is unique identifier of this IdP.	https://\${or g.codice.dd f.system.ho stname}:\${ org.codice. ddf.system. httpsPort}\$ {org.codice. ddf.system. rootContext }/idp/login	true
Signature Username	signatureUs ername	String	Alias of the private key in the STS Server's keystore used to sign messages.	\${org.codic e.ddf.syste m.hostnam e}	true
Encryption Username	encryptionU sername	String	Alias of the private key in the STS Server's keystore used to encrypt messages.	\${org.codic e.ddf.syste m.hostnam e}	true

Table 64. Security STS Client

Name	Id	Туре	Description	Default Value	Required
SAML Assertion Type	assertionTy pe	String	The version of SAML to use. Most services require SAML v2.0. Changing this value from the default could cause services to stop responding.	http://docs. oasis- open.org/ wss/oasis- wss-saml- token- profile-1.1# SAMLV2.0	true
SAML Key Type	кеуТуре	String	The key type to use with SAML. Most services require Bearer. Changing this value from the default could cause services to stop responding.	http://docs. oasis- open.org/ ws-sx/ws- trust/ 200512/ Bearer	true
SAML Key Size	keySize	String	The key size to use with SAML. The default key size is 256 and this is fine for most applications. Changing this value from the default could cause services to stop responding.	256	true

Name	Id	Туре	Description	Default Value	Required
Use Key	useKey	Boolean	Signals whether or not the STS Client should supply a public key to embed as the proof key. Changing this value from the default could cause services to stop responding.	true	true
STS WSDL Address	address	String	STS WSDL Address	\${org.codic e.ddf.syste m.protocol} \${org.codic e.ddf.syste m.hostnam e}:\${org.co dice.ddf.sys tem.port}\${ org.codice. ddf.system. rootContext }/SecurityT okenServic e?wsdl	true
STS Endpoint Name	endpointNam e	String	STS Endpoint Name.	{http://docs. oasis- open.org/w s-sx/ws- trust/20051 2/}STS_Port	false
STS Service Name	serviceName	String	STS Service Name.	{http://docs. oasis- open.org/w s-sx/ws- trust/20051 2/}Security TokenServi ce	false
Signature Properties	signaturePr operties	String	Path to Signature crypto properties. This path can be part of the classpath, relative to <ddf_home>, or an absolute path on the system.</ddf_home>	etc/ws- security/ser ver/signatu re.properti es	true
Encryption Properties	encryptionP roperties	String	Path to Encryption crypto properties file. This path can be part of the classpath, relative to <ddf_home>, or an absolute path on the system.</ddf_home>	etc/ws- security/ser ver/encrypt ion.propert ies	true

Name	Id	Туре	Description	Default Value	Required
STS Properties	tokenProper ties	String	Path to STS crypto properties file. This path can be part of the classpath, relative to <ddf_home>, or an absolute path on the system.</ddf_home>	etc/ws- security/ser ver/signatu re.properti es	true
Claims	claims	String	List of claims that should be requested by the STS Client.	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ nameidenti fier,http:// schemas.x mlsoap.org/ ws/2005/05/ identity/ claims/ emailaddre ss,http:// schemas.x mlsoap.org/ ws/2005/05/ identity/ claims/ surname,ht tp:// schemas.x mlsoap.org/ ws/2005/05/ identity/ claims/ givenname, http:// schemas.x mlsoap.org/ ws/2005/05/ identity/ claims/ givenname, http:// schemas.x mlsoap.org/ ws/2005/05/ identity/ claims/ givenname, http:// schemas.x	true

Table 65. Guest Claims Configuration

Name	Id	Туре	Description	Default Value	Required
Attributes	attributes	String	The attributes to be returned for any Guest user.	http://sche mas.xmlsoa p.org/ws/ 2005/05/ identity/ claims/ nameidenti fier=guest,h ttp:// schemas.x mlsoap.org/ ws/2005/05/ identity/ claims/ role=guest	true

Table 66. Security STS PKI Token Validator

Name	Id	Туре	Description	Default Value	Required
Realms	realms	String	The realms to be validated by this validator.	karaf	true
Do Full Path Validation	pathValidat ion	Boolean	Validate the full certificate path. Uncheck to only validate the subject cert. (RFC5280 6.1)	true	true

# **Solr Catalog Application Reference**

DDF uses Solr for data storage, by default.

## **Solr Catalog Prerequisites**

To use the Solr Catalog Application, the following apps/features must be installed:

- Platform
- Catalog

## **Installing Solr Catalog**

Install the Solr Catalog application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.

- 3. Select the **Features** tab.
- 4. Install the solr-app feature.

### **Configuring the Solr Catalog Application**

To configure the Solr Catalog Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Solr Catalog** application.
- 3. Select the **Configuration** tab.

Table 67. Solr Catalog Available Configurations

Name	Property	Description
Solr Catalog Provider	ddf.catalog.solr.provider.SolrCat alogProvider	Solr Catalog Provider.

#### Table 68. Solr Catalog Provider

Name	Property	Туре	Description	Default Value	Required
Force Auto Commit	forceAutoCo mmit	Boolean	WARNING: Performance Impact. Only in special cases should auto- commit be forced. Forcing auto- commit makes the search results visible immediately.	false	true
Disable Text Path indexing	disableText Path	Boolean	Disables the ability to make Text Path queries by disabling the Text Path index. Disabling Text Path indexing typically increases ingest performance.	false	true

# **Spatial Application Reference**

The Spatial Application provides KML transformer and a KML network link endpoint that allows a user to generate a View-based KML Query Results Network Link.

#### Offline Gazetteer Service

In the Spatial Application, the offline-gazetteer is installed by default. This feature enables you to use an offline source of GeoNames data (as an alternative to the GeoNames Web service enabled by the webservice-gazetteer feature) to perform searches via the gazetteer search box in the Search UI.

By default a small set of GeoNames data is included with the offline gazetteer. The GeoNames data is stored as metacards in the core catalog and are tagged with geonames and gazetteer. This collection of

GeoNames metacards can be expanded or updated by using the gazetteer:update command.

#### **Spatial Gazetteer Console Commands**

The gazetteer commands provide the ability to interact with the local GeoNames metacard collection in the core catalog. These GeoNames metacards are used by the offline-gazetteer feature, which is an optional feature available in this application and is explained above. Note that these commands are only available if the offline-gazetteer feature is installed.

Table 69. Gazetteer Command Descriptions

Command	Description
gazetteer:update	Adds new gazetteer metacards to the core catalog from a resource.
	The resource argument can be one of three types:
	• a local file path to a .txt, .zip, or .geo.json GeoNames data file. If a path to a file ends in .geo.json, it will processed as a geoJSON feature collection and imported as supplementary shape data for GeoNames entries.
	• a URL to a .txt or .zip GeoNames data file. GeoJSON URLs are not supported.
	• a keyword to automatically process a GeoNames file from from http://download.geonames.org/export/dump. Valid keywords include
	<ul> <li>a country code, which will add the country as GeoNames metacards in the core catalog. The full list of country codes available can be found in http://download.geonames.org/export/dump/countryInfo.txt.</li> </ul>
	<ul> <li>cities1000, cities5000, and cities15000, which will add cities to the index that have at least 1000, 5000, or 15000 people, respectively.</li> </ul>
	<ul> <li>all, which will download all of the current country codes. This process may take some time.</li> </ul>
	The -c orcreate flag can be used to clear out the existing gazetteer metacards before adding new entries.
build-suggester- index	Builds the Solr suggester index used for placename autocompletion in Intrigue when using the offline gazetteer. This index is built automatically whenever gazetteer metacards are created, updated, or deleted, but if those builds fail then this command can be used to attempt to build the index again.

## **Spatial Prerequisites**

To use the Spatial Application, the following apps/features must be installed:

• Platform

Catalog

## **Installing Spatial**

Install the Spatial application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the spatial-app feature.

## **Configuring the Spatial Application**

To configure the Spatial Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Spatial** application.
- 3. Select the **Configuration** tab.

Table 70. Spatial Available Configurations

Name	Property	Description
CSW Specification Profile Federated Source	Csw_Federated_Source	CSW Specification Profile Federated Source should be used when federating to an external CSW service.
CSW Federation Profile Source	Csw_Federation_Profile_Source	DDF's full-fidelity CSW Federation Profile. Use this when federating to a DDF-based system.
CSW Transactional Profile Federated Source	Csw_Transactional_Federated_So urce	CSW Federated Source that supports transactions (create, update, delete).
GeoCoder Plugin	org.codice.ddf.spatial.geocoding. plugin.GeoCoderPlugin	GeoCoder Plugin.
GMD CSW ISO Federated Source	Gmd_Csw_Federated_Source	CSW Federated Source using the Geographic MetaData (GMD) format (ISO 19115:2003).
Spatial KML Endpoint	org.codice.ddf.spatial.kml.endpoi nt.KmlEndpoint	Spatial KML Endpoint.
Metacard to WFS Feature Map	org.codice.ddf.spatial.ogc.wfs.cat alog.mapper.MetacardMapper	Metacard to WFS Feature Map.
WFS 1.0.0 Connected Source	Wfs_v1_0_0_Connected_Source	WFS 1.0.0 Connected Source.

Name	Property	Description
WFS v1.0.0 Federated Source	Wfs_v1_0_0_Federated_Source	WFS v1.0.0 Federated Source.
WFS 1.1.0 Federated Source	Wfs_v1_1_0_Federated_Source	WFS 1.1.0 Federated Source.
WFS 2.0.0 Connected Source	Wfs_v2_0_0_Connected_Source	WFS 2.0.0 Connected Source.
WFS 2.0.0 Federated Source	Wfs_v2_0_0_Federated_Source	WFS 2.0.0 Federated Source.
Spatial KML Style Map Entry	org.codice.ddf.spatial.kml.style	Spatial KML Style Map Entry.

Table 71. CSW Specification Profile Federated Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source	null	true
CSW URL	cswUrl	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec	\${org.codic e.ddf.exter nal.protoco l}\${org.codi ce.ddf.exter nal.hostna me}:\${org.c odice.ddf.e xternal.por t}\${org.codi ce.ddf.exter nal.context }\${org.codi ce.ddf.syste m.rootCont ext}/csw	true
Event Service Address	eventServic eAddress	String	DDF Event Service endpoint.	\${org.codic e.ddf.exter nal.protoco l}\${org.codi ce.ddf.exter nal.hostna me}:\${org.c odice.ddf.e xternal.por t}\${org.codi ce.ddf.exter nal.context }\${org.codi ce.ddf.syste m.rootCont ext}/csw/su bscription	

Name	Id	Туре	Description	Default Value	Required
Register for Events	registerFor Events	Boolean	Check to register for events from this source.	false	false
Username	username	String	Username for CSW Service (optional)	null	false
Password	password	Password	Password for CSW Service (optional)	null	false
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	coordinate0 rder	String	Coordinate order that remote source expects and returns spatial data in	LON_LAT	true
Use posList in LinearRing	usePosList	Boolean	Use a <poslist> element rather than a series of <pos> elements when issuing geospatial queries containing a LinearRing</pos></poslist>	false	false
Metacard Mappings	metacardMap pings	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be 'title=dc:title'.	effective=cr eated,creat ed=dateSub mitted,mod ified=modif ied,thumbn ail=referen ces,content- type=type,i d=identifier ,resource- uri=source	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out,in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out,in milliseconds.	60000	true
Output Schema	outputSchem a	String	Output Schema	http://www. opengis.net /cat/csw/ 2.0.2	true
Query Type Name	queryTypeNa me	String	Qualified Name for the Query Type used in the CSW GetRecords request	csw:Record	true

Name	Id	Туре	Description	Default Value	Required
Query Type Namespace	queryTypeNa mespace	String	Namespace for the Query Type used in the CSW GetRecords request	http://www. opengis.net /cat/csw/ 2.0.2	true
Force CQL Text as the Query Language	isCqlForced	Boolean	Force CQL Text	false	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Security Attributes	securityAtt ributeStrin gs	String	Security attributes for this source	null	true

Table 72. CSW Federation Profile Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source	CSW	true
CSW URL	cswUrl	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec	\${org.codic e.ddf.exter nal.protoco l}\${org.codi ce.ddf.exter nal.hostna me}:\${org.c odice.ddf.e xternal.por t}\${org.codi ce.ddf.exter nal.context }\${org.codi ce.ddf.syste m.rootCont ext}/csw	

Name	Id	Туре	Description	Default Value	Required
CSW Event Service Address	eventServic eAddress	String	CSW Event Service endpoint.	\${org.codic e.ddf.exter nal.protoco l}\${org.codi ce.ddf.exter nal.hostna me}:\${org.c odice.ddf.e xternal.por t}\${org.codi ce.ddf.exter nal.context }\${org.codi ce.ddf.syste m.rootCont ext}/csw/su bscription	false
Register for Events	registerFor Events	Boolean	Check to register for events from this connected source.	false	false
Username	username	String	Username for CSW Service (optional)	null	false
Password	password	String	Password for CSW Service (optional)	null	false
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out,in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out,in milliseconds.	60000	true

 $\it Table~73.~CSW~Transactional~Profile~Federated~Source$ 

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source		true

Name	Id	Туре	Description	Default Value	Required
CSW URL	cswUrl	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec	\${variable- name}org.c odice.ddf.sy stem.protoc ol}\${variab le- name}org.c odice.ddf.sy stem.hostn ame}:\${var iable- name}org.c odice.ddf.sy stem.port}\$ {variable- name}org.c odice.ddf.sy stem.rootC ontext}/csw	true
Event Service Address	eventServic eAddress	String	Event Service endpoint.	\${variable- name}org.c odice.ddf.sy stem.protoc ol}\${variab le- name}org.c odice.ddf.sy stem.hostn ame}:\${var iable- name}org.c odice.ddf.sy stem.port}\$ {variable- name}org.c odice.ddf.sy stem.rootC ontext}/csw /subscriptio n	false
Register for Events	Events	Boolean	Check to register for events from this source.	false	false
username	Username	String	Username for CSW Service (optional)		false
Password	password	Password	Password for CSW Service (optional)		false

Name	Id	Туре	Description	Default Value	Required
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	coordinate0 rder	String	Coordinate order expected and returned by remote source	LON_LAT	true
Use posList in LinearRing	usePosList	Boolean	Use a <poslist> element rather than a series of <pos> elements when issuing geospatial queries containing a LinearRing</pos></poslist>	false	false
Metacard Mappings	metacardMap pings	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be 'title=dc:title'.	effective=cr eated,creat ed=dateSub mitted,mod ified=modif ied,thumbn ail=referen ces,content- type=type,i d=identifier ,resource- uri=source	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Output Schema	outputSchem a	String	Output Schema	urn:catalog :metacard	true
Query Type Name	queryTypeNa me	String	Qualified Name for the Query Type used in the CSW GetRecords request	csw:Record	true
Query Type Namespace	queryTypeNa mespace	String	Namespace for the Query Type used in the CSW GetRecords request	http://www. opengis.net /cat/csw/ 2.0.2	true
Force CQL Text	isCqlForced	Boolean	Force CQL Text as the Query Language	false	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false

Name	Id	Туре	Description	Default Value	Required
Security Attributes	securityAtt ributeStrin gs	String	Security attributes for this source		true

### Table 74. GeoCoder Plugin

Title	Property	Туре	Description	Default Value
Radius	radiusInKm	Integer	The search radius from a Point in kilometers.	10

### Table 75. GMD CSW ISO Federated Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source		true
CSW URL	cswUrl	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec		true
Username	username	String	Username for CSW Service (optional)		false
Password	password	Password	Password for CSW Service (optional)		false
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	coordinate0 rder	String	Coordinate order expected and returned by remote source	LON_LAT	true
Use posList in LinearRing	usePosList	Boolean	Use a <poslist> element rather than a series of <pos> elements when issuing geospatial queries containing a LinearRing</pos></poslist>	false	false

Name	Id	Туре	Description	Default Value	Required
Metacard Mappings	metacardMap pings		Mapping of the Metacard Attribute names to their CSW property names. The format should be 'title=dc:title'.	id=apiso:Id entifier,effe ctive=apiso: Publication Date,create d=apiso:Cre ationDate, modified=a piso:Revisi onDate,title =apiso:Alte rnateTitle,A nyText=api so:AnyText, ows:Boundi ngBox=apis o:Bounding Box,langua ge=apiso:La nguage,lan guage=apis o:Resource Language,d atatype=api so:Type,des cription=ap iso:Abstract ,contact-name=apis o:Organisat ionName,to pic.keywor d=apiso:Su bject,media .format=api so:Format, modified=a piso:Modifi ed	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true

Name	Id	Туре	Description	Default Value	Required
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Output Schema	outputSchem a	String	Output Schema	http://www. isotc211.or g/2005/gmd	true
Query Type Name	queryTypeNa me	String	Qualified Name for the Query Type used in the CSW GetRecords request	gmd:MD_M etadata	true
Query Type Namespace	queryTypeNa mespace	String	Namespace for the Query Type used in the CSW GetRecords request	http://www. isotc211.or g/2005/gmd	true
Force CQL Text	isCqlForced	Boolean	Force CQL Text as the Query Language	false	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Security Attributes	securityAtt ributeStrin gs	String	Security attributes for this source		true

Table 76. Spatial KML Endpoint

Name	Id	Туре	Description	Default Value	Required
Style Document	styleUrl	String	KML Document containing custom styling. This will be served up by the KmlEndpoint. (e.g. file:///path/to/kml/style/doc.kml)		false
Icons Location	iconLoc	String	Location of icons for the KML endpoint		false
Description	description	String	Description of this NetworkLink. Enter a short description of what this NetworkLink provides.		false
Web Site	webSite	String	URL of the web site to be displayed in the description.		false
Logo	logo	String	URL to the logo to be displayed in the description.		false
Visible By Default	visibleByDe fault	Boolean	Check if the source NetworkLinks should be visible by default.	false	false

Name	Id	Туре	Description	Default Value	Required
Max Number of Results	maxResults	Integer	The maximum number of results that should be returned from each layer.	100	false

Table 77. Metacard to WFS Feature Map

Name	Id	Туре	Description	Default Value	Required
Feature Type	featureType	String	Feature Type. Format is {URI}local-name		true
Metacard Title to WFS Feature Property Mapping	titleMappin g	String	Metacard Title to WFS Feature Property Mapping		false
Metacard Created Date to WFS Feature Property Mapping	createdDate Mapping	String	Metacard Created Date to WFS Feature Property Mapping		false
Metacard Modified Date to WFS Feature Property Mapping	modifiedDat eMapping	String	Metacard Modified Date to WFS Feature Property Mapping		false
Metacard Effective Date to WFS Feature Property Mapping	effectiveDa teMapping	String	Metacard Effective Date to WFS Feature Property Mapping		false
Metacard Expiration Date to WFS Feature Property Mapping	expirationD ateMapping	String	Metacard Expiration Date to WFS Feature Property Mapping		false

Name	Id	Type	Description	Default Value	Required
Metacard Resource URI to WFS Feature Property Mapping	resourceUri Mapping	String	Metacard Resource URI to WFS Feature Property Mapping		false
Metacard Resource Size to WFS Feature Property Mapping	resourceSiz eMapping	String	Metacard Resource Size to WFS Feature Property Mapping		false
The Units of the Feature Property that correspond s to the Metacard Resource Size	dataUnit	String	The Units of the Feature Property that corresponds to the Metacard Resource Size	В	true
Metacard Thumbnail to WFS Feature Property Mapping	thumbnailMa pping	String	Metacard Thumbnail to WFS Feature Property Mapping		false
Metacard Geography to WFS Feature Property Mapping	geographyMa pping	String	Metacard Geography to WFS Feature Property Mapping		false
Temporal Sort By Feature Property	sortByTempo ralFeatureP roperty	String	When Sorting Temporally, Sort By This Feature Property.		false
Relevance Sort By Feature Property	sortByRelev anceFeature Property	String	When Sorting By Relevance, Sort By This Feature Property.		false

Name	Id	Туре	Description	Default Value	Required
Distance Sort By Feature Property	sortByDista nceFeatureP roperty	String	When Sorting By Distance, Sort By This Feature Property.		false

### Table 78. WFS v1.0.0 Connected Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source	WFS	true
WFS URL	wfsUrl	String	URL to the endpoint implementing the Web Feature Service (WFS) spec	null	true
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Username	username	String	Username for WFS Service (optional)	null	false
Password	password	Password	Password for WFS Service (optional)	null	false
Non Queryable Properties	nonQueryabl eProperties	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

### Table 79. WFS v1.0.0 Federated Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source	WFS_v1_0_ 0	true
WFS URL	wfsUrl	String	URL to the endpoint implementing the Web Feature Service (WFS) spec	null	true

Name	Id	Туре	Description	Default Value	Required
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Username	username	String	Username for WFS Service (optional)	null	false
Password	password	Password	Password for WFS Service (optional)	null	false
Forced Feature Type	forcedFeatu reType	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Non Queryable Properties	nonQueryabl eProperties	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

### Table 80. WFS v1.1.0 Federated Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source	WFS	true
WFS URL	wfsUrl	String	URL to the endpoint implementing the Web Feature Service (WFS) spec	null	true
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	coordinate0 rder	String	Coordinate order that remote source expects and returns spatial data in	LAT_LON	true
Forced Feature Type	forcedFeatu reType	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Username	username	String	Username for WFS Service (optional)	null	false

Name	Id	Туре	Description	Default Value	Required
Password	password	Password	Password for WFS Service (optional)	null	false
Non Queryable Properties	nonQueryabl eProperties	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
SRS Name	srsName	String	SRS Name to use in outbound GetFeature requests. The SRS Name parameter is used to assert the specific CRS transformation to be applied to the geometries of the features returned in a response document.	EPSG:4326	false

Table 81. WFS 2.0.0 Connected Source

Name	Id	Туре	Description	Default Value	Required
Source ID	id	String	The unique name of the Source	WFS	true
WFS URL	wfsUrl	String	URL to the endpoint implementing the Web Feature Service (WFS) 2.0.0 spec	null	true
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Force Longitude/ Latitude coordinate order	isLonLatOrd er	Boolean	Force Longitude/Latitude coordinate order	false	true

Name	Id	Туре	Description	Default Value	Required
Disable Sorting	disableSort ing	Boolean	When selected, the system will not specify sort criteria with the query. This should only be used if the remote source is unable to handle sorting even when the capabilities states 'ImplementsSorting' is supported.	false	true
Username	username	String	Username for the WFS Service (optional)	null	false
Password	password	Password	Password for the WFS Service (optional)	null	false
Non Queryable Properties	nonQueryabl eProperties	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

### Table 82. WFS 2.0.0 Federated Source

Name	Id	Туре	Description	Default Value	Required	
Source ID	id	String	The unique name of the Source	WFS_v2_0_ 0	true	
WFS URL	wfsUrl	String	URL to the endpoint implementing the Web Feature Service (WFS) 2.0.0 spec	null	true	
Disable CN Check	disableCnCh eck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true	
Coordinate Order	coordinate0 rder	String	Coordinate order that remote source expects and returns spatial data in	LAT_LON	true	

Name	Id	Туре	Description	Default Value	Required
Forced Feature Type	forcedFeatu reType	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Disable Sorting	disableSort ing	Boolean	When selected, the system will not specify sort criteria with the query. This should only be used if the remote source is unable to handle sorting even when the capabilities states 'ImplementsSorting' is supported.	false	true
Username	username	String	Username for tge WFS Service (optional)	null	false
Password	password	Password	Password for the WFS Service (optional)	null	false
Non Queryable Properties	nonQueryabl eProperties	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	pollInterva l	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	forceSpatia lFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	connectionT imeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTime out	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

Table 83. Spatial KML Style Map Entry

Name	Id	Туре	Description	Default Value	Required
Attribute Name	attributeNa me	String	The name of the Metacard Attribute to match against. e.g. title, metadata-content-type, etc	null	true
Attribute Value	attributeVa lue	String	The value of the Metacard Attribute.	null	true
Style URL	styleUrl	String	The full qualified URL to the KML Style. e.g. http://example.com/styles#myStyle	null	true

# **Search UI Application Reference**

The Search UI is a user interface that enables users to search a catalog and associated sites for content and metadata.

### **Search UI Prerequisites**

To use the Search UI application, the following applications/features must be installed:

- Platform
- Catalog

### **Installing Search UI**

Install the Search UI application through the Admin Console.

- 1. Navigate to the **Admin Console**.
- 2. Select the **System** tab.
- 3. Select the **Features** tab.
- 4. Install the search-ui-app feature.

### **Configuring the Search UI Application**

To configure the Search UI Application:

- 1. Navigate to the Admin Console.
- 2. Select the **Search UI** application.
- 3. Select the **Configuration** tab.

Table 84. Search UI Available Configurations

Name	Property	Description
Catalog UI Search Attribute Suggestion Whitelist	org.codice.ddf.catalog.ui.security. facetwhitelist	Catalog UI Search Attribute Suggestion Whitelist
Email Notifier	org.codice.ddf.catalog.ui.query.m onitor.email.EmailNotifier	Email Notifier.
Search UI Redirect	org.codice.ddf.ui.searchui.filter.R edirectServlet	Search UI redirect.
Catalog UI Search Transformer Blacklists	org.codice.ddf.catalog.ui.transfor mer.TransformerDescriptors	Catalog UI Search Transformer Blacklists.
Catalog UI Search Workspace Query Monitor	org.codice.ddf.catalog.ui.query.m onitor.impl.WorkspaceQuerySer vice	Catalog UI Search Workspace Query Monitor.

Name	Property	Description
Catalog UI Search Workspace Service	org.codice.ddf.catalog.ui.query.m onitor.impl.WorkspaceServiceIm pl	
Catalog UI Search	org.codice.ddf.catalog.ui	Catalog UI Search.
Catalog UI Search Attribute Aliases	org.codice.ddf.catalog.ui.attribut e.aliases	Catalog UI Search Attribute Aliases.
Catalog UI Search Attribute Descriptions	org.codice.ddf.catalog.ui.attribut e.descriptions	Catalog UI Search Attribute Descriptions.
Catalog UI Search Hidden Attributes	org.codice.ddf.catalog.ui.attribut e.hidden	Catalog UI Search Hidden Attributes.
Catalog UI Search Theme	org.codice.ddf.catalog.ui.theme	Catalog UI Search Theme.
Catalog UI Search Metacard Type Whitelist	org.codice.ddf.catalog.ui.whitelis	Catalog UI Search Metacard Type Whitelist.
Catalog UI Search Workspace Security	org.codice.ddf.catalog.ui.security	Catalog UI Search Workspace Security.

Table 85. Catalog UI Search Attribute Suggestion Whitelist

Name	Id	Туре	Description	Default Value	Required
Attribute Suggestion Whitelist	facetAttrib uteWhitelis t	String	List of attributes that should provide autocomplete suggestions. Suggestions are typically popular values for the attribute in data storage. Caution: Suggestion values are not protected by any security. Only choose attributes whose values will be safe for all users to view.		false

# Table 86. Catalog UI Search Email Notifier

Name	Id	Туре	Description	Default Value	Required
Subject	subjectTemp late	String	Set the subject line template.	Workspace '%[attribut e=title]' notificatio n	true

Name	Id	Туре	Description	Default Value	Required
Body	bodyTemplat e	String	Set the body template.	The workspace '%[attribut e=title]' contains up to %[hitCount] results. Log in to see results https://{FQ DN}:{PORT}/ search/cata log/#worksp aces/%attri bute=id.	true
From Address	fromEmail	String	Set the 'from' email address.	donotreply@ example.com	true

### Table 87. Search UI Redirect

Name	Id	Туре	Description	Default Value	Required
Redirect URI	defaultUri	String	Specifies the redirect URI to use when accessing the /search URI.	<pre>\${org.codic e.ddf.exter nal.context }/search/ca talog/</pre>	

 $\it Table~88.~Catalog~UI~Search~Transformer~Black lists$ 

Name	Id	Туре	Description	Default Value	Required
Metacard Transforme r Blacklist	blackListed MetacardTra nsformerIds	String	The IDs of all Metacard Transformers services that will not show up as export actions in the UI. Every ID in this set will remove that transformer as an export option in the UI.	[]	false
Query Response Transforme r Blacklist	blackListed QueryRespon seTransform erIds	String	The IDs of all Query Response Transformers services that will not show up as export actions in the UI. Every ID in this set will remove that transformer as an export option in the UI.	<pre>[zipCompres sion]</pre>	false

Table 89. Catalog UI Search Workspace Query Monitor

Name	Id	Туре	Description	Default Value	Required
Query Timeout	queryTimeou tMinutes	Long	Set the number of minutes to wait for query to complete.	5	true
Notification Time Interval	queryTimeIn terval	Integer	Set the Relative Time Search (past X minutes up to 24 hours). Note: This will query for results from the interval to the time the query is sent out.	1440	true

### Table 90. Catalog UI Search Workspace Service

Name	Id	Туре	Description	Default Value	Required
Maximum Subscriptio ns	maxSubscrip tions	Integer	Specifies the maximum number of workspace subscriptions that may be queried for email notifications.	100	true

## Table 91. Catalog UI Search

Name	Id	Туре	Description	Default Value	Required
Result Count	resultCount	Integer	Specifies the number of results to request from each source.	250	true
Export Result Limit	exportResul tLimit	Integer	Specifies the max number of results that can be exported.	1000	true

Name	Id	Туре	Description	Default Value	Required
Imagery Providers	imageryProv iders	String	List of imagery providers to use.		false
Providers			The valid types are:		
			• OSM (OpenStreetMap)		
			• AGM (ArcGisMap)		
			• <b>BM</b> (BingMap)		
			• WMS (WebMapService)		
			• WMT (WebMapTile)		
			• TMS (TileMapService)		
			• <b>GE</b> (GoogleEarth)		
			OSM example: {"name": "Example OSM", "show": true, "type": "OSM", "url": "http://a.tile.openstreetmap.org", "fileExtension": "png", "order": 0, "alpha": 1, "proxyEnabled": false}		
			AGM example: {"name": "Example AGM", "show": true, "type": "AGM", "url": "https://server.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer", "order": 0, "proxyEnabled": false, "alpha": 1}		
			<pre>WMS example: {"name": "Example WMS", "show": true, "type": "WMS", "url": "http://suite.opengeo.org/geoserver /gwc/service/wms", "layers" : ["opengeo:countries"], "parameters": {"FORMAT": "image/png", "VERSION": "1.1.1"}, "order": 0, "alpha":1, "proxyEnabled": false}</pre>		
			WMT example: { "parameters": {   "transparent": false, "format":   "image/jpeg" }, "name": "Example   WMT", "tileMatrixLabels": [   "EPSG:4326:0", "EPSG:4326:1",   "EPSG:4326:2", "EPSG:4326:5",   "EPSG:4326:6", "EPSG:4326:5",   "EPSG:4326:6", "EPSG:4326:7",   "EPSG:4326:10", "EPSG:4326:11",   "EPSG:4326:12", "EPSG:4326:13",   "EPSG:4326:14", "EPSG:4326:15",		

Name	Id	Туре	Description	Default Value	Required
Terrain Provider	terrainProv ider	String	Terrain provider to use for height data. Valid types are: CT (CesiumTerrain), AGS (ArcGisImageServer), and VRW (VRTheWorld).  Example: {"type": "CT", "url": "http://example.com"}	<pre>{ "type": "CT" "url": "http://ass ets.agi.com /stk- terrain/til esets/world /tiles" }</pre>	false
Default Layout	defaultLayout	String	The default UI layout and visualization configuration used in the Catalog UI. See http://golden-layout.com/docs/Config.html & for more information. Example: [{"type": "stack", "content": [{"type": "component", "component": "cesium", "componentName": "cesium", "title": "3D Map"}, {"type": "component", "component": "inspector", "componentName": "inspector", "title": "Inspector"}]}].	[{"type": "stack", "content": [{"type": "component" : "cesium", "componentN ame": "cesium", "title": "3D Map"}, {"type": "component" , "component" , "component" , "tippe": "component" , "tippe": "inspector" , "title": "inspector" , "title": "Inspector" }]}]	true
List Templates	listTemplat es	String	Templates for users to quickly create lists that already specify an icon and a filter. Example: {"id":"Pizza Deliveries", "list.icon": "tasks", "list.cql": "(\"anyText\"ILIKE 'pizza')"}		false
Map Projection	projection	String	Projection of imagery providers (e.g. EPSG: 3857, EPSG: 4326).	EPSG:4326	false
Bing Maps Key	bingKey	String	Bing Maps API key. This should only be set if you are using Bing Maps Imagery or Terrain Providers.		false
Connection Timeout	timeout	Integer	Specifies the client-side connection timeout in milliseconds.	300000	false
Source Poll Interval	sourcePollI nterval	Integer	Specifies the interval to poll for sources in milliseconds.	60000	true

Name	Id	Туре	Description	Default Value	Required
Show Sign In	signInEnabl ed	Boolean	Allow Sign In to Search UI and welcome notice. Enable this if the Search UI is protected.	true	false
Show Tasks	taskEnabled	Boolean	Show task menu area for long running actions.	false	false
Show Gazetteer	gazetteerEn abled	Boolean	Show gazetteer for searching place names.	true	false
Use Online Gazetteer	onlineGazet teerEnabled	Boolean	Should the online gazetteer be used? If unchecked a local gazetteer service will be used. This only applies to the search gazetteer in Intrigue.	true	false
Show Uploader	ingestEnabl ed	Boolean	Show upload menu for adding new record.	true	false
Use External Authenticat ion	externalAut hentication Enabled	Boolean	Use an external authentication point, such as IdP.	false	false
Enable Cache	cacheEnable d	Boolean	Locally cached results will be returned in search results.	true	true
Allow Editing	editingEnab led	Boolean	Allow editing capability to be visible in the UI.	true	true
Enable Web Sockets	webSocketsE nabled	Boolean	Enables use of Web Sockets	true	false
Enable Local Catalog	localCatalo gEnabled	Boolean	Enables queries to the local catalog.	true	true
Enable Historical Search	historicalS earchEnable d	Boolean	Enable searching for historical metacards.	true	true
Enable Archive Search	archiveSear chEnabled	Boolean	Enable searching for archived metacards.	true	true
Enable Query Feedback	queryFeedba ckEnabled	Boolean	Enable the query comments option.	true	true
Enable Experiment al Features	experimenta lEnabled	Boolean	WARNING: Enables experimental features in the UI. This allows users to preview upcoming features.	false	true

Name	Id	Туре	Description	Default Value	Required
Show Relevance Scores	relevanceSc oresEnabled	Boolean	Toggle the display of relevance scores of search results.	false	false
Relevance Score Precision	relevancePr ecision	Integer	Set the number of digits to display in for each relevance score. The default is 5 (i.e. 12.345).	5	false
Show Logo in Title Bar	logoEnabled	Boolean	Toggles the visibility of the logo in the menu bar.	false	false
Enable Unknown Error Box	unknownErro rBoxEnabled	Boolean	Enable Unknown Error Box visibility.	true	false
Enable Metacard Preview	metacardPre viewEnabled	Boolean	Enable Metacard Preview in the Inspector.	true	true
Enable Spellcheck	spellcheckE nabled	Boolean	Enable spellcheck for searches.	false	false
Enable Similar Word Matching	phoneticsEn abled	Boolean	Enable phonetic and synonym matching for searches.	false	false
Basic Search Temporal Selections	basicSearch TemporalSel ectionDefau lt	String	Enable Basic Search Temporal Selections.	<ul> <li>created</li> <li>effective</li> <li>modified</li> <li>metacard.created</li> <li>metacard.modified</li> </ul>	true
Basic Search Match Type Metacard Attribute	basicSearch MatchType	String	Metacard attribute used for Basic Search Type Match.	datatype	true
Type Name Mapping	typeNameMap ping	String	Mapping of display names to content types in the form name=type.		false

Name	Id	Type	Description	Default Value	Required
Read Only Metacard Attributes	readOnly	String	List of metacard attributes that are read-only. NOTE: the provided values will be evaluated as JavaScript regular expressions when matched against metacard attributes.	<ul> <li>^checks um\$</li> <li>^checks um-algorit hm\$</li> <li>^id\$</li> <li>^resour ce-downloa d-url\$</li> <li>^resour ce.deri ved-uri\$</li> <li>^resour ce.deri ved-downloa d-url\$</li> <li>^modified\$</li> <li>^metaca rd-tags\$</li> <li>^metaca rd-tags\$</li> <li>^metaca rd-tags\$</li> <li>^metaca rd-tags\$</li> <li>^metaca rd-type\$</li> <li>^source -id\$</li> <li>^point-of-contact \$</li> <li>^metaca rd.</li> <li>^versio n.</li> <li>^valida tion.</li> </ul>	false

Name	Id	Туре	Description	Default Value	Required
Summary Metacard Attributes	summaryShow	String	List of metacard attributes to display in the summary view.	<ul><li>created</li><li>modifie</li><li>d</li><li>thumbna</li><li>il</li></ul>	false
Result Preview Metacard Attributes	resultShow	String	List of metacard attributes to display in the result preview.		false
Query Schedule Frequencie s	scheduleFre quencyList	Long	Custom list of schedule frequencies in seconds. This will override the frequency list in the query schedule tab. Leave this empty to use the frequency list on the Catalog UI.	<ul><li>1800</li><li>3600</li><li>7200</li><li>14400</li><li>28800</li><li>57600</li><li>86400</li></ul>	true
Auto Merge Time	autoMergeTi me	Integer	Specifies the interval during which new results can be merged automatically. This is the time allowed since last merge (in milliseconds).	1000	true
Query Feedback Email Subject Template	queryFeedba ckEmailSubj ectTemplate	String	See Configuring Query Feedback for Intrigue for more details about Query Feedback templates.	Query Feedback from {{username} }	true

Name	Id	Туре	Description	Default Value	Required
Query Feedback Email Body Template	queryFeedba ckEmailBody Template	String	See Configuring Query Feedback for Intrigue for more details about Query Feedback templates.	<h2>Query Feedback cb&gt;Authenti cated User: {{auth_use rname}} <bb>: {{username }} <bb>Email : {{email}} &gt;<b>Email</b> : {{email}} &gt;<b>Workspac e</b>: {{workspac e_id}} ) <b>Query</b> : {{query}} &gt;cb&gt;Query <bquery b="" time<="">: {{query_in itiated_tim e}}   <b>Query time</b>: {{query_st atus}} <b>Comments   <b>Query results }}   <b>(query_re sults</b>: <ff(query_re b="" sults<="">: <ff(query_re b="" sults<="">: <ff(query_re b="" sults<="">:   <b>Query cb&gt;(dery_re sults</b>: <ff(query_re b="" sults<="">:   <bp></bp></ff(query_re></ff(query_re></ff(query_re></ff(query_re></b></b></bquery></bb></bb></h2>	true
Query Feedback Email Destination	queryFeedba ckEmailDest ination	String	Email destination to send Query Feedback results.		true

Name	Id	Туре	Description	Default Value	Required
Maximum Endpoint Upload Size	maximumUplo adSize	Integer	The maximum size (in bytes) to allow per client when receiving a POST/PATCH/PUT. Note: This does not affect product upload size, just the maximum size allowed for calls from Intrigue.	1048576	true
Map Home	mapHome	String	Specifies the default home view for the map by bounding box. The format is "West, South, East, North", where North, East, South, and West are coordinates in degrees. An example is: -124, 60, -100, 40.		false
UI Branding Name	uiName	String	Specifies a custom UI branding name in the UI.	Intrigue	true
Upload Editor: Attribute Configurati on	attributeEn umMap	String	List of attributes to show in the upload editor. See Catalog Taxonomy for a list of supported attributes.  Supported entry syntax:  1. attribute  2. attribute=value1, value2,  Using the first syntax, the editor will attempt to determine the appropriate control to display based on the attribute datatype. The second syntax will force the editor to use a dropdown selector populated with the provided values. This is intended for use with String datatypes, which by default may be assigned any value.		false
Upload Editor: Required Attributes	requiredAtt ributes	String	List of attributes which must be set before an upload is permitted. If an attribute is listed as required but not shown in the editor, it will be ignored.		false

Table 92. Catalog UI Search Attribute Aliases

Name	Id	Туре	Description	Default Value	Required
Attribute Aliases	attributeAl iases	String	List of attribute aliases. Separate the attribute name and alias with an equals (=) sign. Example: title=Title.		false

### Table 93. Catalog UI Search Attribute Descriptions

Name	Id	Туре	Description	Default Value	Required
Attribute Description s	attributeDe scriptions	String	List of friendly attribute descriptions. Separate the attribute name and description with an equals (=) sign. Example: checksum-algorithm=Method for generating a small-sized datum from a block of digital data for the purpose of detecting errors.		false

## Table 94. Catalog UI Search Hidden Attributes

Name	Id	Туре	Description	Default Value	Required
Hidden Attributes	hiddenAttri butes	String	List of attributes to be hidden. NOTE: the provided values will be evaluated as JavaScript regular expressions when matched against metacard attributes.	<ul><li> ^sorts\$</li><li> ^cql\$</li><li> ^polling\$</li><li> ^cached\$</li></ul>	false

## Table 95. Catalog UI Search Theme

Name	Id	Туре	Description	Default Value	Required
Theme	theme	String	Specifies the default theme:  Dark Light Sea Custom, which consists of the colors below	Dark	true
Primary Color	customPrima ryColor	String		#3c6dd5	true
Positive Color	customPosit iveColor	String		#428442	true

Name	Id	Туре	Description	Default Value	Required
Negative Color	customNegat iveColor	String		#8a423c	true
Warning Color	customWarni ngColor	String		#c89600	true
Favorite Color	customFavor iteColor	String		#d1d179	true
Backgroun d Navigation Color	customBackg roundNaviga tion	String		#252529	true
Backgroun d Accent Content Color	customBackg roundAccent Content	String		#2A2A2E	true
Backgroun d Dropdown Color	customBackg roundDropdo wn	String		#35353a	true
Backgroun d Content Color	customBackg roundConten t	String		#35353a	true
Backgroun d Modal Color	customBackg roundModal	String		#252529	true
Backgroun d Slideout Color	customBackg roundSlideo ut	String		#252529	true
Theme Spacing Mode	spacingMode	String	Specifies the default theme spacing mode:  • Comfortable • Cozy • Compact	Comfortable	true
Theme Zoom	zoomPercent age	Integer	Specifies the default theme zoom percentage.	100	true

Table 96. Catalog UI Search Metacard Type Whitelist

Name	Id	Туре	Description	Default Value	Required
Metacard Type Whitelist	whiteListed MetacardTyp es	String	List of metacard types that are whitelisted and not filtered. NOTE: This will directly filter out metacard types rendered from metacard application. An empty list will whitelist everything.		false

Table 97. Catalog UI Search Workspace Security

Name	Id	Туре	Description	Default Value	Required
System User Attribute	systemUserA ttribute	String	The name of the attribute to determine the system user.	http://sche mas.xmlsoap .org/ws/ 2005/05/ identity/ claims/role	true
System User Attribute Value	systemUserA ttributeVal ue	String	The value of the attribute to determine the system user.	system-user	true

# **Application Whitelists**

Within each DDF application, certain packages are exported for use by third parties.

# **Packages Removed From Whitelist**

In the transition of the whitelist from the ambiguous package listing to the new class listing several errors were found. The packages originally listed that were removed either did not exist, contained experimental interfaces, or contained only internal implementations and should have never been included in the whitelist. The following is a list of packages that were listed in error and have been removed from the whitelist.

NOTE

None of the packages in this list have been removed from the distribution. They may however be changed or removed in the future.

#### Admin

- org.codice.ddf.ui.admin.api.plugin
- org.codice.ddf.admin.configuration.plugin

#### Catalog

- org.codice.ddf.admin.configuration.plugin
- ddf.catalog.data.metacardtype
- ddf.catalog.federation.impl
- ddf.catalog.plugin.groomer
- ddf.catalog.pubsub
- ddf.catalog.pubsub.tracker
- ddf.catalog.resource.data
- ddf.catalog.resource.impl
- ddf.catalog.resourceretriever
- ddf.catalog.transformer.metacard.geojson
- ddf.common
- org.codice.ddf.endpoints
- org.codice.ddf.endpoints.rest
- org.codice.ddf.endpoints.rest.action
- org.codice.ddf.opensearch.query
- org.codice.ddf.opensearch.query.filter

#### Platform

- org.codice.ddf.configuration.admin
- org.codice.ddf.configuration.migration
- org.codice.ddf.configuration.persistence
- org.codice.ddf.configuration.persistence.felix
- org.codice.ddf.configuration.status
- org.codice.ddf.parser
- org.codice.ddf.parser.xml
- org.codice.ddf.platform.error.handler
- org.codice.ddf.platform.util

#### Security

- ddf.security.assertion.impl
- ddf.security.common.audit
- ddf.security.http.impl
- ddf.security.impl
- ddf.security.pdp.realm
- ddf.security.permission
- ddf.security.principal
- ddf.security.realm.sts
- ddf.security.samlp.impl
- ddf.security.service.impl

```
    ddf.security.settings
```

- ddf.security.soap.impl
- ddf.security.sts
- ddf.security.ws.policy.impl
- org.codice.ddf.security.certificate.generator
- org.codice.ddf.security.certificate.keystore.editor
- org.codice.ddf.security.common
- org.codice.ddf.security.filter.authorization
- org.codice.ddf.security.filter.login
- org.codice.ddf.security.filter.websso
- org.codice.ddf.security.handler.basic
- org.codice.ddf.security.handler.guest.configuration
- org.codice.ddf.security.handler.guest
- org.codice.ddf.security.handler.pki
- org.codice.ddf.security.handler.saml
- org.codice.ddf.security.interceptor
- org.codice.ddf.security.interceptor
- org.codice.ddf.security.policy.context.impl
- org.codice.ddf.security.servlet.logout
- org.codice.ddf.security.validator.username

#### **Spatial**

- org.codice.ddf.spatial.geocoder
- org.codice.ddf.spatial.geocoder.geonames
- org.codice.ddf.spatial.geocoding
- org.codice.ddf.spatial.geocoding.context
- org.codice.ddf.spatial.kml.endpoint
- org.codice.ddf.spatial.ogc.catalog.resource.impl

# **Catalog Whitelist**

The following classes have been exported by the Catalog application and are approved for use by third parties:

In package ddf.catalog

- CatalogFramework
- Constants

In package ddf.catalog.cache

ResourceCacheInterface Deprecated

### In package ddf.catalog.data

- Attribute
- AttributeDescriptor
- AttributeType
- BinaryContent
- ContentType
- Metacard
- MetacardCreationException
- MetacardType
- MetacardTypeUnregistrationException
- Result

### In package ddf.catalog.event

- DeliveryException
- DeliveryMethod
- EventException
- EventProcessor
- InvalidSubscriptionException
- Subscriber
- Subscription
- SubscriptionExistsException
- SubscriptionNotFoundException

### In package ddf.catalog.federation

- Federatable
- FederationException
- FederationStrategy

#### In package ddf.catalog.filter

- AttributeBuilder
- BufferedSpatialExpressionBuilder
- ContextualExpressionBuilder
- EqualityExpressionBuilder
- ExpressionBuilder
- FilterAdapter
- FilterBuilder
- FilterDelegate
- NumericalExpressionBuilder
- NumericalRangeExpressionBuilder

- SpatialExpressionBuilder
- TemporalInstantExpressionBuilder
- TemporalRangeExpressionBuilder
- XPathBasicBuilder
- XPathBuilder

### In package ddf.catalog.filter.delegate

- CopyFilterDelegate
- FilterToTextDelegate

### In package ddf.catalog.operation

- CreateRequest
- CreateResponse
- DeleteRequest
- DeleteResponse
- Operation
- OperationTransaction
- Pingable
- ProcessingDetails
- Query
- QueryRequest
- QueryResponse
- Request
- ResourceRequest
- ResourceResponse
- Response
- SourceInfoRequest
- SourceInfoResponse
- SourceProcessingDetails
- SourceResponse
- Update
- UpdateRequest
- UpdateResponse

### In package ddf.catalog.plugin

- AccessPlugin
- PluginExecutionException
- PolicyPlugin
- PolicyResponse

- PostFederatedQueryPlugin
- PostIngestPlugin
- PostQueryPlugin
- PostResourcePlugin
- PreDeliveryPlugin
- PreFederatedQueryPlugin
- PreIngestPlugin
- PreQueryPlugin
- PreResourcePlugin
- PreSubscriptionPlugin
- StopProcessingException

### In package ddf.catalog.resource

- DataUsageLimitExceededException
- Resource
- ResourceNotFoundException
- ResourceNotSupportedException
- ResourceReader
- ResourceWriter

### In package ddf.catalog.service

ConfiguredService

### In package ddf.catalog.source

- CatalogProvider
- ConnectedSource
- FederatedSource
- IngestException
- InternalIngestException
- RemoteSource
- Source
- SourceDescriptor
- SourceMonitor
- SourceUnavailableException
- UnsupportedQueryException

### In package ddf.catalog.transform

- CatalogTransformerException
- InputCollectionTransformer InputTransformer

- MetacardTransformer
- QueryResponseTransformer

In package ddf.catalog.transformer.api

- MetacardMarshaller
- PrintWriter
- PrintWriterProvider

In package ddf.catalog.util

- Describable Deprecated
- Maskable

In package ddf.catalog.validation

- MetacardValidator
- ValidationException

In package ddf.geo.formatter

- CompositeGeometry
- GeometryCollection
- LineString
- MultiLineString
- MultiPoint
- MultiPolygon
- Point
- Polygon

In package ddf.util

- InetAddressUtil
- NamespaceMapImpl
- NamespaceResolver
- WktStandard
- XPathCache
- XPathHelper
- XSLTUtil

## **Platform Whitelist**

The following classes have been exported by the Platform application and are approved for use by third parties:

In package ddf.action

- Action
- ActionProvider
- ActionRegistry

In package org.codice.ddf.branding

- BrandingPlugin
- BrandingRegistry

In package org.codice.ddf.configuration

• ConfigurationWatcher Deprecated

# **Registry Whitelist**

The following classes have been exported by the Registry Application and are approved for use by third parties:

None.

# **Security Whitelist**

The following classes have been exported by the Security application and are approved for use by third parties:

In package ddf.security

- SecurityConstants
- Subject

In package ddf.security.assertion

• SecurityAssertion

In package ddf.security.common.util

- Security Deprecated
- SecurityProperties
- ServiceComparator
- SortedServiceList Deprecated

In package ddf.security.encryption

• EncryptionService

In package ddf.security.expansion

Expansion

In package ddf.security.http

SessionFactory

In package ddf.security.service

- SecurityManager
- SecurityServiceException
- TokenRequestHandler

In package ddf.security.sts.client.configuration

• STSClientConfiguration

In package ddf.security.ws.policy

- AbstractOverrideInterceptor
- PolicyLoader

In package ddf.security.ws.proxy

ProxyServiceFactory

In package org.codice.ddf.security.handler.api

• AuthenticationHandler

In package org.codice.ddf.security.policy.context.attributes

• ContextAttributeMapping

In package org.codice.ddf.security.policy.context

- ContextPolicy
- ContextPolicyManager

# **Solr Catalog Whitelist**

The following classes have been exported by the Solr Catalog application and are approved for use by third parties:

None.

## Search UI Whitelist

The following classes have been exported by the Search UI application and are approved for use by

third parties:

None.

# **DDF Dependency List**

This list of DDF dependencies is automatically generated:

DDF 2.17.1 Dependency List.

- c3p0:c3p0:jar:0.9.1.1
- ca.juliusdavies:not-yet-commons-ssl:jar:0.3.11
- cglib:cglib-nodep:jar:3.2.6
- ch.qos.logback:logback-access:jar:1.2.3
- ch.qos.logback:logback-classic:jar:1.2.3
- ch.qos.logback:logback-core:jar:1.2.3
- com.codahale.metrics:metrics-core:jar:3.0.1
- com.connexta.arbitro:arbitro-core:jar:1.0.0
- com.fasterxml.jackson.core:jackson-annotations:jar:2.9.8
- com.fasterxml.jackson.core:jackson-core:jar:2.9.8
- com.fasterxml.jackson.core:jackson-databind:jar:2.9.8
- com.fasterxml.jackson.datatype:jackson-datatype-jdk8:jar:2.9.8
- com.fasterxml.woodstox:woodstox-core:jar:5.0.3
- com.github.drapostolos:type-parser:jar:0.5.0
- com.github.jai-imageio:jai-imageio-core:jar:1.3.1
- com.github.jai-imageio:jai-imageio-jpeg2000:jar:1.3.1\_CODICE\_3
- com.github.jknack:handlebars-jackson2:jar:1.0.0
- com.github.jknack:handlebars:jar:1.1.2
- com.github.jknack:handlebars:jar:2.0.0
- com.github.lookfirst:sardine:jar:5.7
- com.github.rvesse:airline:jar:2.1.0
- com.google.code.gson:gson:jar:2.8.5
- com.google.crypto.tink:tink:jar:1.2.2
- com.google.guava:guava:jar:20.0
- com.google.http-client:google-http-client:jar:1.22.0
- com.googlecode.json-simple:json-simple:jar:1.1.1

- com.googlecode.owasp-java-html-sanitizer:owasp-java-html-sanitizer:jar:20171016.1
- com.hazelcast:hazelcast:jar:3.2.1
- com.jayway.restassured:rest-assured:jar:2.9.0
- com.jhlabs:filters:jar:2.0.235-1
- com.rometools:rome-utils:jar:1.9.0
- com.rometools:rome:jar:1.9.0
- com.sparkjava:spark-core:jar:2.5.5
- com.sun.mail:javax.mail:jar:1.5.6
- com.sun.xml.bind:jaxb-core:jar:2.2.11
- com.sun.xml.bind:jaxb-impl:jar:2.2.11
- com.thoughtworks.xstream:xstream:jar:1.4.9
- com.unboundid:unboundid-ldapsdk:jar:3.2.1
- com.vividsolutions:jts-core:jar:1.14.0
- com.vividsolutions:jts-io:jar:1.14.0
- com.xebialabs.restito:restito:jar:0.8.2
- commons-beanutils:commons-beanutils:jar:1.9.3
- commons-codec:jar:1.10
- commons-codec:jar:1.11
- commons-collections:commons-collections:jar:3.2.2
- commons-configuration:commons-configuration:jar:1.10
- commons-digester:commons-digester:jar:1.8.1
- commons-fileupload:commons-fileupload:jar:1.3.2
- commons-io:commons-io:jar:2.1
- commons-io:commons-io:jar:2.4
- commons-io:commons-io:jar:2.6
- commons-lang:commons-lang:jar:2.6
- commons-logging:commons-logging:jar:1.2
- commons-net:jar:3.5
- commons-validator:commons-validator:jar:1.6
- de.micromata.jak:JavaAPIforKml:jar:2.2.0
- de.micromata.jak:JavaAPIforKml:jar:2.2.1\_CODICE\_1
- io.dropwizard.metrics:metrics-core:jar:3.1.2

- io.dropwizard.metrics:metrics-core:jar:3.2.6
- io.dropwizard.metrics:metrics-ganglia:jar:3.2.6
- io.dropwizard.metrics:metrics-graphite:jar:3.2.6
- io.dropwizard.metrics:metrics-jetty9:jar:3.2.6
- io.dropwizard.metrics:metrics-jvm:jar:3.2.6
- io.netty:netty-buffer:jar:4.1.16.Final
- io.netty:netty-codec:jar:4.1.16.Final
- io.netty:netty-common:jar:4.1.16.Final
- io.netty:netty-handler:jar:4.1.16.Final
- io.netty:netty-resolver:jar:4.1.16.Final
- io.netty:netty-transport-native-epoll:jar:4.1.16.Final
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- io.sgr:s2-geometry-library-java:jar:1.0.0
- javax.annotation:javax.annotation-api:jar:1.2
- javax.inject:javax.inject:jar:1
- javax.mail:mail:jar:1.4.5
- javax.servlet:javax.servlet-api:jar:3.1.0
- javax.servlet:servlet-api:jar:2.5
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- javax.ws.rs:javax.ws.rs-api:jar:2.1
- javax.xml.bind:jaxb-api:jar:2.2.11
- joda-time:joda-time:jar:2.9.9
- junit:junit:jar:4.12
- log4j:log4j:jar:1.2.17
- net.iharder:base64:jar:2.3.9
- net.jodah:failsafe:jar:0.9.3
- net.jodah:failsafe:jar:0.9.5
- net.jodah:failsafe:jar:1.0.0
- net.markenwerk:commons-nulls:jar:1.0.3
- net.markenwerk:utils-data-fetcher:jar:4.0.1
- net.minidev:asm:jar:1.0.2
- net.minidev:json-smart:jar:2.3

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- net.sf.saxon:Saxon-HE:jar:9.6.0-4
- org.antlr:antlr4-runtime:jar:4.1
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- org.apache.abdera:abdera-extensions-geo:jar:1.1.3
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- org.apache.activemq:activemq-all:jar:5.14.5
- org.apache.activemq:artemis-amqp-protocol:jar:2.4.0
- org.apache.activemq:artemis-jms-client:jar:2.4.0
- org.apache.activemq:artemis-server:jar:2.4.0
- org.apache.ant:ant-launcher:jar:1.9.7
- org.apache.ant:ant:jar:1.9.7
- org.apache.aries.jmx:org.apache.aries.jmx.api:jar:1.1.5
- org.apache.aries.jmx:org.apache.aries.jmx.core:jar:1.1.7
- org.apache.aries:org.apache.aries.util:jar:1.1.3
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- org.apache.camel:camel-aws:jar:2.19.5
- org.apache.camel:camel-blueprint:jar:2.19.5
- org.apache.camel:camel-context:jar:2.19.5
- org.apache.camel:camel-core-osgi:jar:2.19.5
- org.apache.camel:camel-core:jar:2.19.5
- org.apache.camel:camel-cxf:jar:2.19.5
- org.apache.camel:camel-http-common:jar:2.19.5
- org.apache.camel:camel-http4:jar:2.19.5
- org.apache.camel:camel-http:jar:2.19.5
- org.apache.camel:camel-quartz2:jar:2.19.5
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- org.apache.camel:camel-saxon:jar:2.19.5
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- org.apache.commons:commons-compress:jar:1.17
- org.apache.commons:commons-csv:jar:1.4
- org.apache.commons:commons-exec:jar:1.3
- org.apache.commons:commons-lang3:jar:3.0
- org.apache.commons:commons-lang3:jar:3.1
- org.apache.commons:commons-lang3:jar:3.3.2
- org.apache.commons:commons-lang3:jar:3.4
- org.apache.commons:commons-lang3:jar:3.7
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- org.apache.commons:commons-pool2:jar:2.5.0
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- org.apache.cxf:cxf-rt-bindings-soap:jar:3.0.4
- org.apache.cxf:cxf-rt-databinding-jaxb:jar:3.0.4
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- org.apache.cxf:cxf-rt-rs-client:jar:3.2.5
- org.apache.cxf:cxf-rt-rs-security-sso-saml:jar:3.2.5
- org.apache.cxf:cxf-rt-rs-security-xml:jar:3.0.4
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- org.apache.cxf:cxf-rt-transports-http:jar:3.2.5
- org.apache.cxf:cxf-rt-ws-policy:jar:3.2.5
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- org.apache.felix:org.apache.felix.configadmin:jar:1.8.14
- org.apache.felix:org.apache.felix.fileinstall:jar:3.6.0
- org.apache.felix:org.apache.felix.framework:jar:5.6.6
- org.apache.felix:org.apache.felix.utils:jar:1.10.0
- org.apache.ftpserver:ftplet-api:jar:1.0.6
- org.apache.ftpserver:ftpserver-core:jar:1.0.6
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- org.apache.httpcomponents:httpcore:jar:4.4.6
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- org.apache.karaf.features:standard:xml:features:4.2.2
- org.apache.karaf.jaas:org.apache.karaf.jaas.boot:jar:4.2.2
- org.apache.karaf.jaas:org.apache.karaf.jaas.config:jar:4.2.2
- org.apache.karaf.jaas:org.apache.karaf.jaas.modules:jar:4.2.2
- org.apache.karaf.shell:org.apache.karaf.shell.console:jar:4.2.2
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- org.apache.karaf.system:org.apache.karaf.system.core:jar:4.2.2
- org.apache.karaf:apache-karaf:tar.gz:4.2.2
- org.apache.karaf:apache-karaf:zip:4.2.2
- org.apache.karaf:org.apache.karaf.util:jar:4.2.2
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- org.apache.logging.log4j:log4j-api:jar:2.11.0
- org.apache.logging.log4j:log4j-api:jar:2.4.1
- org.apache.logging.log4j:log4j-core:jar:2.11.0
- org.apache.logging.log4j:log4j-slf4j-impl:jar:2.11.0
- org.apache.lucene:lucene-analyzers-common:jar:7.4.0
- org.apache.lucene:lucene-core:jar:3.0.2
- org.apache.lucene:lucene-core:jar:7.4.0
- org.apache.lucene:lucene-queries:jar:7.4.0
- org.apache.lucene:lucene-queryparser:jar:7.4.0
- org.apache.lucene:lucene-sandbox:jar:7.4.0
- org.apache.lucene:lucene-spatial-extras:jar:7.4.0
- org.apache.lucene:lucene-spatial3d:jar:7.4.0
- org.apache.lucene:lucene-spatial:jar:7.4.0
- org.apache.maven.shared:maven-invoker:jar:2.2

- org.apache.mina:mina-core:jar:2.0.6
- org.apache.pdfbox:fontbox:jar:2.0.11
- org.apache.pdfbox:pdfbox-tools:jar:2.0.11
- org.apache.pdfbox:pdfbox:jar:2.0.11
- org.apache.poi:poi-ooxml:jar:3.17
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- org.apache.servicemix.specs.org.apache.servicemix.specs.jsr339-api-2.0:jar:2.6.0
- org.apache.shiro:shiro-core:jar:1.3.2
- org.apache.solr:solr-core:jar:7.4.0
- org.apache.solr:solr-solrj:jar:7.4.0
- org.apache.tika:tika-core:jar:1.18
- org.apache.tika:tika-parsers:jar:1.18
- org.apache.ws.commons.axiom:axiom-api:jar:1.2.14
- org.apache.ws.xmlschema:xmlschema-core:jar:2.2.2
- org.apache.wss4j:wss4j-bindings:jar:2.2.2
- org.apache.wss4j:wss4j-policy:jar:2.2.2
- org.apache.wss4j:wss4j-ws-security-common:jar:2.2.2
- org.apache.wss4j:wss4j-ws-security-dom:jar:2.2.2
- org.apache.wss4j:wss4j-ws-security-policy-stax:jar:2.2.2
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- org.asciidoctor;asciidoctorj-diagram;jar:1.5.4.1
- org.asciidoctor;asciidoctorj;jar:1.5.6
- org.assertj:assertj-core:jar:2.1.0
- org.awaitility:awaitility:jar:3.0.0
- org.awaitility:awaitility:jar:3.1.0
- org.bouncycastle:bcmail-jdk15on:jar:1.60
- org.bouncycastle:bcpkix-jdk15on:jar:1.60
- org.bouncycastle:bcprov-jdk15on:jar:1.60
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- org.codehaus.jackson:jackson-mapper-asl:jar:1.9.13

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- org.codice.geowebcache:geowebcache-server-standalone:war:0.7.0
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- org.codice.httpproxy:proxy-camel-route:jar:2.14.0
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- org.codice.pro-grade:pro-grade:jar:1.1.3
- org.codice.thirdparty:commons-httpclient:jar:3.1.0\_1
- org.codice.thirdparty:ffmpeg:zip:bin:4.0\_2
- org.codice.thirdparty:geotools-suite:jar:19.1\_1
- org.codice.thirdparty:gt-opengis:jar:19.1\_1
- org.codice.thirdparty:jts:jar:1.14.0\_1
- org.codice.thirdparty:lucene-core:jar:3.0.2\_1
- org.codice.thirdparty:ogc-filter-v\_1\_1\_0-schema:jar:1.1.0\_5
- org.codice.thirdparty:picocontainer:jar:1.3\_1
- org.codice.thirdparty:tika-bundle:jar:1.18.0\_1
- org.codice.usng4j:usng4j-api:jar:0.1
- org.codice.usng4j:usng4j-impl:jar:0.1
- org.codice:lux:jar:1.2
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- org.eclipse.jetty:jetty-server:jar:9.4.11.v20180605
- org.eclipse.jetty:jetty-servlet:jar:9.4.11.v20180605
- org.eclipse.jetty:jetty-servlets:jar:9.4.11.v20180605
- org.eclipse.jetty:jetty-util:jar:9.4.11.v20180605
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- org.forgerock.commons:i18n-core:jar:1.4.2
- org.forgerock.commons:i18n-slf4j:jar:1.4.2
- org.forgerock.opendj:opendj-core:jar:3.0.0
- org.forgerock.opendj:opendj-grizzly:jar:3.0.0
- org.fusesource.jansi:jansi:jar:1.16
- org.geotools.xsd:gt-xsd-gml3:jar:19.1
- org.geotools:gt-cql:jar:13.0

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- org.geotools:gt-epsg-hsql:jar:19.1
- org.geotools:gt-jts-wrapper:jar:19.1
- org.geotools:gt-main:jar:19.1
- org.geotools:gt-opengis:jar:19.1
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- org.glassfish.grizzly:grizzly-http-server:jar:2.3.25
- org.hamcrest:hamcrest-all:jar:1.3
- org.hisrc.w3c:xlink-v\_1\_0:jar:1.4.0
- org.hisrc.w3c:xmlschema-v\_1\_0:jar:1.4.0
- org.imgscalr:imgscalr-lib:jar:4.2
- org.jasypt:jasypt:jar:1.9.0
- org.jasypt:jasypt:jar:1.9.2
- org.javassist:javassist:jar:3.22.0-GA
- org.jcodec:jcodec:jar:0.2.0\_1
- org.jdom:jdom2:jar:2.0.6
- org.joda:joda-convert:jar:1.2
- org.jolokia:jolokia-osgi:jar:1.2.3
- org.jruby:jruby-complete:jar:9.0.4.0
- org.jscience:jscience:jar:4.3.1
- org.jsoup:jsoup:jar:1.9.2
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- org.jvnet.ogc:filter-v\_2\_0\_0-schema:jar:1.1.0
- org.jvnet.ogc:gml-v\_3\_1\_1-schema:jar:1.1.0
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- org.jvnet.ogc:gml-v\_3\_2\_1:pom:1.1.0
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- org.jvnet.ogc:wcs-v\_1\_0\_0-schema:jar:1.1.0
- org.jvnet.ogc:wfs-v\_1\_1\_0:jar:2.6.1
- org.jvnet.ogc:wps-v\_2\_0:jar:2.6.1
- org.la4j:la4j:jar:0.6.0
- org.locationtech.jts:jts-core:jar:1.15.0
- org.locationtech.spatial4j:spatial4j:jar:0.6
- org.locationtech.spatial4j:spatial4j:jar:0.7
- org.mockito:mockito-core:jar:1.10.19
- org.noggit:noggit:jar:0.6
- org.objenesis:objenesis:jar:2.5.1
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- org.opensaml:opensaml-soap-impl:jar:3.3.0
- org.opensaml:opensaml-xmlsec-api:jar:3.3.0
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- org.osgi:org.osgi.core:jar:5.0.0
- org.osgi:org.osgi.enterprise:jar:5.0.0
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- org.parboiled:parboiled-java:jar:1.1.8
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- org.quartz-scheduler:quartz:jar:2.1.7
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- org.rrd4j:rrd4j:jar:2.2
- org.rrd4j:rrd4j:jar:3.2
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- org.slf4j:jul-to-slf4j:jar:1.7.24
- org.slf4j:slf4j-api:jar:1.7.12
- org.slf4j:slf4j-api:jar:1.7.1
- org.slf4j:slf4j-api:jar:1.7.24
- org.slf4j:slf4j-ext:jar:1.7.1
- org.slf4j:slf4j-log4j12:jar:1.7.12
- org.slf4j:slf4j-log4j12:jar:1.7.24
- org.slf4j:slf4j-log4j12:jar:1.7.7
- org.slf4j:slf4j-simple:jar:1.7.1
- org.slf4j:slf4j-simple:jar:1.7.5
- org.spockframework:spock-core:jar:1.1-groovy-2.4
- org.springframework.ldap:spring-ldap-core:jar:2.3.2.RELEASE
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- org.springframework:spring-core:jar:5.0.4.RELEASE
- org.taktik:mpegts-streamer:jar:0.1.0\_2

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- org.xmlunit:xmlunit-matchers:jar:2.5.1
- us.bpsm:edn-java:jar:0.4.4
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- xalan:xalan:jar:2.7.2
- xerces:xercesImpl:jar:2.11.0
- xerces:xercesImpl:jar:2.9.1
- xml-apis:xml-apis:jar:1.4.01
- xpp3:xpp3:jar:1.1.4c

# **Hardening Checklist**

The following list enumerates the required mitigations needed for hardening. It is not intended to be a step-by-step procedure. To harden a new system, perform configuration as documented.

	Configure Auditing
	Set Directory Permissions
	Configure Keystore and Certificates
	Disallow Login Without Certificates
	Configure Certificate Revocation
	☐ Deny Guest User Access (if denying Guest users)
	☐ Allow Guest User Access (if allowing Guest users)
	Configure Guest Claim Attributes (if allowing Guest users)
	Configure Guest User Authentication
	Create unique user role
	Limit Access to the STS
	Restricting Access to Admin Console
	Restrict Feature, App, Service, and Configuration Access
	Remove Default Users
	Harden Solr
	Environment Hardening
$\qquad \qquad \square$	Isolate Solr Cloud and Zookeener (If using)