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.policy.AdminConfigPolicy	Admin Configuration Policy configurations.
Admin UI	org.codice.admin.ui.configuration	Admin UI configurations.

Table 2. Admin Configuration Policy

Name	Id	Type	Description	Default Value	Required
Feature and App Permissions	`featurePolicies`	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
Configuration Permissions	`servicePolicies`	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	Type	Description	Default Value	Required
Enable System Usage message	`systemUsageEnabled`	Boolean	Turns on a system usage message, which is shown when the Admin Application is opened.	false	true
System Usage Message Title	`systemUsageTitle`	String	A title for the system usage message when the application is opened.		true
System Usage Message	`systemUsageMessage`	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	`systemUsageOncePerSession`	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 Applications	`disabledInstallerApps`	String	Comma delimited list (appName, appName2, ...appNameN) of applications that will be disabled in the installer.	admin-app,platform-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
   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
   ```

Example ReplicaSync JSON Response

```
{
    "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://{FQDN}:{PORT}/admin/jolokia/read/org.apache.activemq.artemis:broker=%22artemis%22,component=cluster-connections,name=%22my-cluster%22/Topologybrowser.

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.

Example Topology JSON Response for a Cluster of 2

```
{
    "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=jms, 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-activemq-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 ⧉ 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`):

<DDF_HOME>/etc/org.apachc.activemq.artemis.cfg

```
domain=ldap
```

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

<DDF_HOME>/etc/artemis.xml

```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="manage" 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 `<DDF_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.CachingFederationStrategy	Catalog Federation Strategy.
Catalog Backup Plugin	ddf.catalog.backup.CatalogBackupPlugin	Catalog Backup Plugin configurations.

Name	Property	Description
Catalog Standard Framework	ddf.catalog.CatalogFrameworkImpl	Catalog Standard Framework configurations.
Confluence Federated Source	Confluence_Federated_Source	Confluence Federated Source.
Content Directory Monitor	org.codice.ddf.catalog.content.monitor.ContentDirectoryMonitor	Content Directory Monitor configurations.
Content File System Storage Provider	org.codice.ddf.catalog.content.impl.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.expiration.ExpirationDatePlugin	Catalog pre-ingest plugin to set an expiration date on metacards.
FTP Endpoint	ddf.catalog.ftp.FtpServerManager	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.policy.metacard.MetacardAttributeSecurityPolicyPlugin	Metacard Attribute Security Policy Plugin.
Catalog Metacard Ingest Network Plugin	org.codice.ddf.catalog.plugin.metacard.MetacardIngestNetworkPlugin	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.ReliableResourceDownloadManager	Resource Download configurations.
Schematron Validation Services	ddf.services.schematron.SchematronValidationService	Schematron Validation Services configurations.
Security Audit Plugin	org.codice.ddf.catalog.plugin.security.audit.SecurityAuditPlugin	Security Audit Plugin.
Tika Input Transformer	ddf.catalog.transformer.input.tika.TikaInputTransformer	Tika Input Transformer.

Name	Property	Description
URL Resource Reader	ddf.catalog.resource.impl.URLResourceReader	URL Resource Reader
Video Thumbnail Plugin	org.codice.ddf.catalog.content.plugin.video.VideoThumbnailPlugin	Video Thumbnail Plugin.
XML Attribute Security Policy Plugin	org.codice.ddf.catalog.security.policy.xml.XmlAttributeSecurityPolicyPlugin	XML Attribute Security Policy Plugin.
Xml Query Transformer	ddf.catalog.transformer.xml.XmlResponseQueueTransformer	Xml Response Query Transformer.
PDF Input Transformer	ddf.catalog.transformer.input.pdf.PdfInputTransformer	PDF Input Transformer configurations.
Catalog Policy Plugin	org.codice.ddf.catalog.security.CatalogPolicy	Catalog Policy Plugin.
Resource URI Policy Plugin	org.codice.ddf.catalog.security.ResourceUriPolicy	Resource URI Policy Plugin.
Status Source Poller Runner	org.codice.ddf.catalog.sourcepoller.StatusSourcePollerRunner	Status Source Poller Runner.

Table 5. Catalog Federation Strategy

Name	Id	Type	Description	Default Value	Required
Maximum start index	`maxStartIndex`	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	`expirationIntervalInMinutes`	Long	Interval that Solr Cache checks for expired documents to remove.	10	true
Expiration Age	`expirationAgeInMinutes`	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	`cacheStrategy`	String	Strategy for caching query results. Valid entries are ALL, FEDERATED, and NONE.	ALL	true
Cache Remote Ingests	`cacheRemoteIngests`	Boolean	Cache remote ingest results	false	true

Table 6. Catalog Backup Plugin

Name	Id	Type	Description	Default Value	Required
Root backup directory path	`rootBackupDir`	String	Root backup directory for Metacards. A relative path is relative to <DDF_HOME>.	data/backup	true

Name	Id	Type	Description	Default Value	Required
Subdirectory levels	`subDirLevels`	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	Type	Description	Default Value	Required
Enable Fanout Proxy	`fanoutEnabled`	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 Notifications	`notificationEnabled`	Boolean	Check to enable notifications.	true	false
Fanout tag blacklist	`fanoutTagBlacklist`	String	Ingest operations with tags in this list will be rejected.		true

Table 8. Confluence Federated Source

Name	Property	Type	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/content		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	Type	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	includePageContent	Boolean	Flag indicating if Confluence page contents should be included in the returned results.	false	No
Include Archived Spaces	includeArchivedSpaces	Boolean	Flag indicating if archived confluence spaces should be included in search results.	false	No
Exclude Confluence Spaces	excludeSpaces	Boolean	Flag indicating if the list of Confluence Spaces should be excluded from searches instead of included.	false	No
Confluence Spaces	confluenceSpaces	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	additionalAttributes	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	availabilityPollInterval	Long	Availability polling interval in milliseconds.	60000	No

Table 9. Catalog Content Directory Monitor

Name	Id	Type	Description	Default Value	Required
Directory Path	`monitoredDirectoryPath`	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	`readLockIntervalMilliseconds`	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	`processingMechanism`	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	Type	Description	Default Value	Required
Attribute Overrides	`attributeOverrides`	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	Type	Description	Default Value	Required
Content Repository File Path	`baseContentDirectory`	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_HOME>/data/content/store	true

Table 11. CSW Connected Source

Name	Id	Type	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	`eventServiceAddress`	String	DDF Event Service endpoint. Do NOT include .wsdl or ?wsdl.	null	false
Register for Events	`registerForEvents`	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	`disableCnCheck`	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true

Name	Id	Type	Description	Default Value	Required
Force Longitude/ Latitude coordinate order	`isLonLatOrder`	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.	false	false
Metacard Mappings	`metacardMappings`	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be `'title=dc:title'`.	effective=created, created=dateSubmitted, modified=modified, thumbnail=references, content-type=type, id=identifier, resource-uri=source	false
Poll Interval	`pollInterval`	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	`connectionTimeout`	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	`receiveTimeout`	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Output Schema	`outputSchema`	String	Output Schema	http://www.opengis.net/cat/csw/2.0.2	true
Query Type Name	`queryTypeName`	String	Qualified Name for the Query Type used in the CSW GetRecords request.	csw:Record	true
Query Type Namespace	`queryTypeNamespace`	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	Type	Description	Default Value	Required
Force CQL Text as the Query Language	`isCqlForced`	Boolean	Force CQL Text.	false	true
Forced Spatial Filter Type	`forceSpatialFilter`	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	Type	Description	Default Value	Required
Overwrite If Empty	`overwriteIfBlank`	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	`overwriteIfExists`	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)	`offsetFromCreatedDate`	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	Type	Description	Default Value	Required
FTP Port Number	`port`	Integer	The port number for the FTP server to listen on.	8021	true
Client Authentication	`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	Type	Description	Default Value	Required
Enable Versioning	`historyEnabled`	Boolean	Enables versioning of both metacards and content.	true	true

Table 15. Metacard Attribute Security Policy Plugin

Name	Id	Type	Description	Default Value	Required
Metacard Intersect Attributes:	`intersectMetacardAttributes`	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_attribute. 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:	`unionMetacardAttributes`	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_attribute. 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	Type	Description	Default Value	Required	Criteria
criteriaKey	String	Specifies the criteria for the test of equality; which value will be tested? IP Address? Hostname?	remoteAddr	true	Expected Value	expected Value
String	The value that the criteria must equate to for the attribute overrides to occur.		true	New Attributes	newAttributes	String"

Table 17. Metacard Validation Filter Plugin

Name	Id	Type	Description	Default Value	Required
Attribute map	`attributeMap`	String	Mapping of Metacard SECURITY attribute to user attribute. Users with this role will always receive metacards with errors and/or warnings.	invalid-state=localhost-data-manager	false
Filter errors	`filterErrors`	Boolean	Sets whether metacards with validation errors are filtered for users without the configured user attribute.	true	false
Filter warnings	`filterWarnings`	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	Type	Description	Default Value	Required
Enforced Validators	`enforcedMetacardValidators`	String	ID of Metacard Validator to enforce. Metacards that fail these validators will NOT be ingested.	false	Enforce errors
enforceErrors	`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	Type	Description	Default Value	Required
Keep Deleted Metacard	`keepDeletedMetacards`	Boolean	Should backups for deleted metacards be kept or removed.	false	true
Metacard Transformer Id	`metacardTransformerId`	String	ID of the metacard transformer to use to serialize metacard for backup.	metacard	true
Backup Invalid Metacards	`keepDeletedMetacards`	Boolean	Keep backups for metacards that fail validation with warnings or errors.	true	true
Metacard Backup Output Provider(s)	`metacardOutputProviderIds`	Comma delimited list of metacard output provider IDs.	Metacard Backup Provider IDs to use for this backup plugin.	fileStorageProvider	true

Table 20. Metacard Backup S3 Storage Provider

Name	Id	Type	Description	Default Value	Required
Keep Deleted Metacard	`keepDeletedMetacards`	Boolean	Should backups for deleted metacards be kept or removed.	false	true

Name	Id	Type	Description	Default Value	Required
Metacard Transformer Id	`metacardTransformerId`	String	ID of the metacard transformer to use to serialize metacard for backup.	metacard	true
Backup Invalid Metacards	`keepDeletedMetacards`	Boolean	Keep backups for metacards that fail validation with warnings or errors.	true	true
Metacard Tags	`backupMetacardTags`	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.	""	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	`objectTemplate`	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 would use {{dateFormat created yyyy-MM-dd}}	data/backup/metacard/{{substring id 0 3}}/{{substring id 3 6}}/{Metacard_S3_Storage_Route}.xml	true

Table 21. Catalog OpenSearch Federated Source

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

Name	Id	Type	Description	Default Value	Required
OpenSearch service URL	endpointUrl	String	The OpenSearch endpoint URL or DDF's OpenSearch endpoint (https://{FQDN}:{PORT}/services/catalog/query)	${org.codice.ddf.system.protocol}${org.codice.ddf.system.hostname}:${org.codice.ddf.system.port}${org.codice.ddf.system.rootContext}/catalog/query	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
OpenSearch query parameters	parameters	String	Query parameters to use with the OpenSearch connection.	q,src,mr,start,count,mt,dn,lat,lon,radius,bbox,geometry,polygon,dtstart,dtend,dateName,filter,sort	true
Always perform local query	localQueryOnly	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	Type	Description	Default Value	Required
Convert to BBox	shouldConvertToBBox	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 approximation vertices	numMultiPointRadiusVertices	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 simplification distance tolerance	distanceTolerance	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	disableCnCheck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Connection Timeout	connectionTimeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTimeout	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	Type	Description	Default Value	Required
Product Cache Directory	`productCacheDirectory`	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.		false
Enable Product Caching	`cacheEnabled`	Boolean	Check to enable caching of retrieved products.	true	false
Delay (in seconds) between product retrieval retry attempts	`delayBetweenRetryAttempts`	Integer	The time to wait (in seconds) between attempting to retry retrieving a product.	10	false
Max product retrieval retry attempts	`maxRetryAttempts`	Integer	The maximum number of attempts to retry retrieving a product.	3	false
Product Retrieval Monitor Period	`retrievalMonitorPeriod`	Integer	How many seconds to wait and not receive product data before retrying to retrieve a product.	5	false
Always Cache Product	`cacheWhenCanceled`	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	Type	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
Schematron File Names	`schematronFileNames`	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`.	null	true

Table 24. Security Audit Plugin

Name	Id	Type	Description	Default Value	Required
Security attributes to audit	`auditAttributes`	String	List of security attributes to audit when modified	security.access-groups,security.access-individuals	true

Table 25. Tika Input Transformer

Name	Id	Type	Description	Default Value	Required
Use Resource Title	`useResourceTitleAsTitle`	Boolean	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	Type	Description	Default Value
Follow Server Redirects	`followRedirects`	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	`rootResourceDirectories`	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.	data/products

Table 27. Video Thumbnail Plugin

Name	Property	Type	Description	Default Value	Required
Maximum video file size to process (Megabytes)	`maxFileSizeMB`	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	Type	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):	`securityAttributeUnions`	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 (intersection):	`securityAttributeIntersections`	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	Type	Description	Default Value	Required
Parallel Marhsalling Threshold	`threshold`	Integer	Response size threshold above which marshalling is run in parallel	50	true

Table 30. PDF Input Transformer

Name	Id	Type	Description	Default Value	Required
Use PDF Title	`usePdfTitleAsTitle`	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)	`previewMaxLength`	Integer	The maximum length of text to be extracted.	30000	true
Maximum xml metadata length (bytes)	`metadataMaxLength`	Integer	The maximum length of xml metadata to be extracted.	5000000	true

Table 31. Catalog Policy Plugin

Name	Id	Type	Description	Default Value	Required
Create Required Attributes	`createPermissions`	String	Roles/attributes required for the create operations. Example: role=role1,role2	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true
Update Required Attributes	`updatePermissions`	String	Roles/attributes required for the update operation. Example: role=role1,role2	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true

Name	Id	Type	Description	Default Value	Required
Delete Required Attributes	`deletePermissions`	String	Roles/attributes required for the delete operation. Example: role=role1,role2	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true
Read Required Attributes	`readPermissions`	String	Roles/attributes required for the read operations (query and resource). Example: role=role1,role2	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true

Table 32. Resource URI Policy Plugin

Name	Id	Type	Description	Default Value	Required
Permit Resource URI on Creation	`createPermissions`	String	Allow users to provide a resource URI when creating a metacard	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true
Permit Resource URI on Update	`updatePermissions`	String	Allow users to provide a resource URI when updating a metacard	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true

Table 33. Status Source Poller Runner

Name	Id	Type	Description	Default Value	Required
Poll Interval (minutes)	`pollIntervalMinutes`	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 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.	1	true

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	Type	Description	Default Value
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`

```
<gwcQuotaConfiguration>
  <enabled>true</enabled>
  <diskBlockSize>2048</diskBlockSize>
  <cacheCleanUpFrequency>5</cacheCleanUpFrequency>
  <cacheCleanUpUnits>SECONDS</cacheCleanUpUnits>
  <maxConcurrentCleanUps>5</maxConcurrentCleanUps>
  <globalExpirationPolicyName>LFU</globalExpirationPolicyName>
  <globalQuota>
    <value>100</value>
    <units>GiB</units>
  </globalQuota>
  <layerQuotas/>
</gwcQuotaConfiguration>
```

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_Resolver	DDF Custom Mime Types.
Logging Service	org.codice.ddf.platform.logging.LoggingService	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.impl.SmtpClientImpl	Email Service configurations.
Landing Page	org.codice.ddf.distribution.landingpage.properties	Starting page for users to interact with DDF.
Platform UI	ddf.platform.ui.config	Platform UI configurations.
Platform Command Scheduler	ddf.platform.scheduler.Command	Platform Command Scheduler.

Table 36. MIME Custom Types

Name	Id	Type	Description	Default Value	Required
Resolver Name	`name`	String	null	DDF Custom Resolver	false
Priority	`priority`	Integer	null	10	true
File Extensions to Mime Types	`customMimeTypes`	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	Type	Description	Default Value	Required
Max Log Events	`maxLogEvents`	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	Type	Description	Default Value	Required
Metrics Max Threshold	`metricsMaxThreshold`	Double	Max value a data sample can be for any metric (used to suppress spike data on metrics graphs)	4000000000.0	true

Table 39. HTTP Response Security

Name	Id	Type	Description	Default Value	Required
Content Security Policy	`xContentSecurityPolicy`	String	Instructions for the client browser detailing which location and/or which type of resources may be loaded.		true
X-Frame-Options	`xFrameOptions`	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	`xXssProtection`	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	Type	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	Type	Description	Default Value	Required
Description	description	String	Specifies the description to display on the landing page.	As a common data layer, DDF provides secure enterprise-wide 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
Announcements	announcements	String	Announcements that will be displayed on the landing page.	null	true
Branding Background	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.		yes

Table 42. Platform UI Configuration

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

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

Name	Property	Type	Description	Default Value	Required
Interval	`intervalString`	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	`intervalType`	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 **string**, **date**, **number**, **boolean**, **point**, or **bounds**
required	no	Indicates if this field must be filled out. **Default is false**. 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 **multiValued=true** this list will be used for suggestions for autocomplete. If **multiValued=false** this list will be used to populate a dropdown.
multiValued	no	Flag indicating if this field accepts multiple values or not. **Default is false**.
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. **Default is true**.
advanced	no	A flag indicating if this field should be placed under the **Advanced** section of the edit modal ui. **Default is false**.
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.RegistryPolicyPlugin	Registry Policy Plugin.

Name	Property	Description
Registry Source Configuration Handler	Registry_Configuration_Event_Handler	Registry Source Configuration Handler configurations.

Table 46. CSW Registry Store

Name	Id	Type	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	Type	Description	Default Value	Required
Registry Create Attributes	createAccessPolicyStrings	String	Roles/attributes required for Create operations on registry entries. Example: {role=role1;type=type1}	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true
Registry Update Attributes	updateAccessPolicyStrings	String	Roles/attributes required for Update operations on registry entries. Example: {role=role1;type=type1}	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true

Name	Id	Type	Description	Default Value	Required
Registry Delete Attributes	`deleteAccessPolicyStrings`	String	Roles/attributes required for Delete operations on registry entries. Example: {role=role1;type=type1}	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true
Registry Read Attributes	`readAccessPolicyStrings`	String	Roles/attributes required for reading registry entries. Example: {role=role1;type=type1}	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true
Registry Admin Attributes	`registryBypassPolicyStrings`	String	Roles/attributes required for an admin to bypass all filtering/access controls. Example: {role=role1;type=type1}	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=system-admin	true
Disable Registry Write Access	`registryDisabled`	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	`registryEntryIds`	String	List of registry entry ids to be used in the white/black list.	null	false

Table 48. Registry Source Configuration Handler

Name	Id	Type	Description	Default Value	Required
Url Binding Name	`urlBindingName`	String	The url name for communicating with the specific instance.	urlBinding Name	true

Name	Id	Type	Description	Default Value	Required
BindingType 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.resourcemanagement.usage	Data Usage configurations.

Table 50. Data Usage

Name	Id	Type	Description	Default Value	Required
Monitor Local Sources	`monitorLocalSources`	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.interceptor.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.oidc.OidcHandler	OIDC Handler configurations.
Web Context Policy Manager	org.codice.ddf.security.policy.context.impl.PolicyManager	Web Context Security Policies.
File Based Claims Handler	org.codice.ddf.security.sts.claims.property.PropertyFileClaimsHandler	File Based Claims Handler.
Session	org.codice.ddf.security.filter.login.Session	Session configurations.
IdP Handler	org.codice.ddf.security.idp.client.IdpHandler	IdP Handler configurations.
Security AuthZ Realm	ddf.security.pdp.realm.AuthzRealm	AuthZ Security configurations.
SAML NameID Policy	ddf.security.service.SecurityManager	SAML NameID Policy.
Security STS Server	ddf.security.sts	STS configurations.
Security STS Client	ddf.security.sts.client.configuration	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	Type	Description	Default Value	Required
LDAP URL	`url`	String	true	`ldaps://${org.codice.ddf.system.hostname}:1636`	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	`ldapBindUserDn`	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	`membershipUserAttribute`	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	`loginUserAttribute`	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.	`ou=users\,dc=example\,dc=com`	true
Override User Certificate DN	`overrideCertDn`	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	Type	Description	Default Value	Required
LDAP Membership Attribute	`memberNameAttribute`	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.	`ou=groups\,dc=example\,dc=com`	true
Attribute Map File	`propertyFileLocation`	String	Location of the file which contains user attribute maps to use.	`<INSTALL_HOME>/etc/ws-security/attributeMap.properties`	true

Table 53. Security SOAP Guest Interceptor

Name	Id	Type	Description	Default Value	Required
Deny Guest Access	`guestAccessDenied`	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	Type	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://${org.codice.ddf.system.hostname}:${org.codice.ddf.system.httpsPort}/services/idp/login/metadata
Perform User-Agent Check	`userAgentCheck`	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	Type	Description	Default Value
Logout Page Time Out	`logOutPageTimeOut`	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	Type	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/Tenant	`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://localhost: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://localhost:8080/auth
Logout URI	`logoutUri`	String	URI directing to single logout service of the IdP in use.	http://localhost:8080/auth/realms/master/protocol/openid-connect/logout
Scope	`scope`	String	OIDC scopes.	openid profile email resource.read
Use Nonce	`useNonce`	Boolean	Whether or not to use nonce in JWT.	true

Name	Id	Type	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	Type	Description	Default Value	Required
Context Traversal Depth	`traversalDepth`	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	`sessionAccess`	Boolean	Allow for session cookies to be used. Note that the SAML and OIDC authentication types require session storage to be enabled.	true	true
Authentication Types	`authenticationTypes`	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,/admin=SAML	`BASIC`	true	Required Attributes	requiredAttributes	String

Name	Id	Type	Description	Default Value	Required
List of attributes required for each Web Context. Example: /context={role=role1;type=type1}	/=,/admin={http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=system-admin},/system={http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=system-admin},/security-config={http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=system-admin}	true	White Listed Contexts	whiteListContexts	String

Table 58. File Based Claims Handler

Name	Id	Type	Description	Default Value	Required
Role Claim Type	roleClaimType	String	Role claim URI.	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role	true
ID Claim Type	idClaimType	String	ID claim URI.	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier	true
User Role File	propertyFileLocation	String	Location of the file which maps roles to users.	etc/users.properties	true
User Attribute File	usersAttributesFileLocation	String	Location of the file which maps attributes to users.	etc/users.attributes	true

Table 59. Session

Name	Id	Type	Description	Default Value	Required
Session Timeout (in minutes)	`expirationTime`	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	Type	Description	Default Value
Authentication Context Class	`authContextClasses`	String	Authentication Context Classes that are considered acceptable means of authentication by the IdP Client.	urn:oasis:names:tc:SAML:2.0:ac:classes:Password,urn:oasis:names:tc:SAML:2.0:ac:classes:PasswordProtectedTransport,urn:oasis:names:tc:SAML:2.0:ac:classes:X509,urn:oasis:names:tc:SAML:2.0:ac:classes:SmartcardPKI,urn:oasis:names:tc:SAML:2.0:ac:classes:SoftwarePKI,urn:oasis:names:tc:SAML:2.0:ac:classes:SPKI,urn:oasis:names:tc:SAML:2.0:ac:classes:TLSClient

Table 61. Security AuthZ Realm

Name	Id	Type	Description	Default Value	Required
Match-All Mappings	`matchAllMappings`	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	`matchOneMappings`	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
Environment Attributes	`environmentAttributes`	String	List of environment attributes to pass to the XACML engine. Format is attributeId=attributeValue1,attributeValue2.		false

Table 62. SAML NameID Policy

Name	Id	Type	Description	Default Value	Required
SAML NameID Policy	`usernameAttributeList`	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://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier, uid	true

Table 63. Security STS Server

Name	Id	Type	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	Type	Description	Default Value	Required
Token Issuer	`issuer`	String	The name of the server issuing tokens. Generally this is unique identifier of this IdP.	https://${org.codice.ddf.system.hostname}:${org.codice.ddf.system.httpsPort}${org.codice.ddf.system.rootContext}/idp/login	true
Signature Username	`signatureUsername`	String	Alias of the private key in the STS Server's keystore used to sign messages.	${org.codice.ddf.system.hostname}	true
Encryption Username	`encryptionUsername`	String	Alias of the private key in the STS Server's keystore used to encrypt messages.	${org.codice.ddf.system.hostname}	true

Table 64. Security STS Client

Name	Id	Type	Description	Default Value	Required
SAML Assertion Type	`assertionType`	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	`keyType`	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	Type	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	${org.codice.ddf.system.protocol}${org.codice.ddf.system.hostname}:${org.codice.ddf.system.port}${org.codice.ddf.system.rootContext}/SecurityTokenService?wsdl	true
STS Endpoint Name	endpointName	String	STS Endpoint Name.	{http://docs.oasis-open.org/ws-sx/ws-trust/200512/}STS_Port	false
STS Service Name	serviceName	String	STS Service Name.	{http://docs.oasis-open.org/ws-sx/ws-trust/200512/}SecurityTokenService	false
Signature Properties	signatureProperties	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.	etc/ws-security/server/signature.properties	true
Encryption Properties	encryptionProperties	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.	etc/ws-security/server/encryption.properties	true

Name	Id	Type	Description	Default Value	Required
STS Properties	`tokenProperties`	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.	etc/ws-security/server/signature.properties	true
Claims	`claims`	String	List of claims that should be requested by the STS Client.	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier,http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress,http://schemas.xmlsoap.org/ws/2005/05/identity/claims/surname,http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname,http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role	true

Table 65. Guest Claims Configuration

Name	Id	Type	Description	Default Value	Required
Attributes	`attributes`	String	The attributes to be returned for any Guest user.	http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier=guest,http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest	true

Table 66. Security STS PKI Token Validator

Name	Id	Type	Description	Default Value	Required
Realms	`realms`	String	The realms to be validated by this validator.	karaf	true
Do Full Path Validation	`pathValidation`	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.SolrCatalogProvider	Solr Catalog Provider.

Table 68. Solr Catalog Provider

Name	Property	Type	Description	Default Value	Required
Force Auto Commit	`forceAutoCommit`	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	`disableTextPath`	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
	◦ 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.
	◦ `cities1000`, `cities5000`, and `cities15000`, which will add cities to the index that have at least 1000, 5000, or 15000 people, respectively.
	◦ `all`, which will download all of the current country codes. This process may take some time.
	The `-c` or `--create` 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_Source	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.endpoint.KmlEndpoint	Spatial KML Endpoint.
Metacard to WFS Feature Map	org.codice.ddf.spatial.ogc.wfs.catalog.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	Type	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	${org.codice.ddf.external.protocol}${org.codice.ddf.external.hostname}:${org.codice.ddf.external.port}${org.codice.ddf.external.context}${org.codice.ddf.system.rootContext}/csw	true
Event Service Address	`eventServiceAddress`	String	DDF Event Service endpoint.	${org.codice.ddf.external.protocol}${org.codice.ddf.external.hostname}:${org.codice.ddf.external.port}${org.codice.ddf.external.context}${org.codice.ddf.system.rootContext}/csw/subscription	false

Name	Id	Type	Description	Default Value	Required
Register for Events	registerForEvents	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	disableCnCheck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	coordinateOrder	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	false	false
Metacard Mappings	metacardMappings	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be 'title=dc:title'.	effective=created,created=dateSubmitted,modified=modified,thumbnail=references,content-type=type,id=identifier,resource-uri=source	false
Poll Interval	pollInterval	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	connectionTimeout	Integer	Amount of time to attempt to establish a connection before timing out,in milliseconds.	30000	true
Receive Timeout	receiveTimeout	Integer	Amount of time to wait for a response before timing out,in milliseconds.	60000	true
Output Schema	outputSchema	String	Output Schema	http://www.opengis.net/cat/csw/2.0.2	true
Query Type Name	queryTypeName	String	Qualified Name for the Query Type used in the CSW GetRecords request	csw:Record	true

Name	Id	Type	Description	Default Value	Required
Query Type Namespace	`queryTypeNamespace`	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	`forceSpatialFilter`	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Security Attributes	`securityAttributeStrings`	String	Security attributes for this source	null	true

Table 72. CSW Federation Profile Source

Name	Id	Type	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	${org.codice.ddf.external.protocol}${org.codice.ddf.external.hostname}:${org.codice.ddf.external.port}${org.codice.ddf.external.context}${org.codice.ddf.system.rootContext}/csw	true

Name	Id	Type	Description	Default Value	Required
CSW Event Service Address	`eventServiceAddress`	String	CSW Event Service endpoint.	${org.codice.ddf.external.protocol}${org.codice.ddf.external.hostname}:${org.codice.ddf.external.port}${org.codice.ddf.external.context}${org.codice.ddf.system.rootContext}/csw/subscription	false
Register for Events	`registerForEvents`	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	`connectionTimeout`	Integer	Amount of time to attempt to establish a connection before timing out,in milliseconds.	30000	true
Receive Timeout	`receiveTimeout`	Integer	Amount of time to wait for a response before timing out,in milliseconds.	60000	true

Table 73. CSW Transactional Profile Federated Source

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

Name	Id	Type	Description	Default Value	Required
CSW URL	`cswUrl`	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec	${variable-name}org.codice.ddf.system.protocol}${variable-name}org.codice.ddf.system.hostname}:${variable-name}org.codice.ddf.system.port}${variable-name}org.codice.ddf.system.rootContext}/csw	true
Event Service Address	`eventServiceAddress`	String	Event Service endpoint.	${variable-name}org.codice.ddf.system.protocol}${variable-name}org.codice.ddf.system.hostname}:${variable-name}org.codice.ddf.system.port}${variable-name}org.codice.ddf.system.rootContext}/csw/subscription	false
Register for Events	`registerForEvents`	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	Type	Description	Default Value	Required
Disable CN Check	disableCnCheck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	coordinateOrder	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	false	false
Metacard Mappings	metacardMappings	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be 'title=dc:title'.	effective=created,created=dateSubmitted,modified=modified,thumbnail=references,content-type=type,id=identifier,resource-uri=source	false
Poll Interval	pollInterval	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	connectionTimeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTimeout	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Output Schema	outputSchema	String	Output Schema	urn:catalog:metacard	true
Query Type Name	queryTypeName	String	Qualified Name for the Query Type used in the CSW GetRecords request	csw:Record	true
Query Type Namespace	queryTypeNamespace	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	forceSpatialFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false

Name	Id	Type	Description	Default Value	Required
Security Attributes	`securityAttributeStrings`	String	Security attributes for this source		true

Table 74. GeoCoder Plugin

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

Table 75. GMD CSW ISO Federated Source

Name	Id	Type	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	`disableCnCheck`	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	`coordinateOrder`	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	false	false

Name	Id	Type	Description	Default Value	Required
Metacard Mappings	`metacardMappings`	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be 'title=dc:title'.	id=apiso:Identifier,effective=apiso:PublicationDate,created=apiso:CreationDate,modified=apiso:RevisionDate,title=apiso:AlternateTitle,AnyText=apiso:AnyText,ows:BoundingBox=apiso:BoundingBox,language=apiso:Language,language=apiso:ResourceLanguage,datatype=apiso:Type,description=apiso:Abstract,contact.point-of-contact-name=apiso:OrganisationName,topic.keyword=apiso:Subject,media.format=apiso:Format,modified=apiso:Modified	false
Poll Interval	`pollInterval`	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true

Name	Id	Type	Description	Default Value	Required
Connection Timeout	`connectionTimeout`	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	`receiveTimeout`	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Output Schema	`outputSchema`	String	Output Schema	http://www.isotc211.org/2005/gmd	true
Query Type Name	`queryTypeName`	String	Qualified Name for the Query Type used in the CSW GetRecords request	gmd:MD_Metadata	true
Query Type Namespace	`queryTypeNamespace`	String	Namespace for the Query Type used in the CSW GetRecords request	http://www.isotc211.org/2005/gmd	true
Force CQL Text	`isCqlForced`	Boolean	Force CQL Text as the Query Language	false	true
Forced Spatial Filter Type	`forceSpatialFilter`	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Security Attributes	`securityAttributeStrings`	String	Security attributes for this source		true

Table 76. Spatial KML Endpoint

Name	Id	Type	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	`visibleByDefault`	Boolean	Check if the source NetworkLinks should be visible by default.	false	false

Name	Id	Type	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	Type	Description	Default Value	Required
Feature Type	`featureType`	String	Feature Type. Format is {URI}local-name		true
Metacard Title to WFS Feature Property Mapping	`titleMapping`	String	Metacard Title to WFS Feature Property Mapping		false
Metacard Created Date to WFS Feature Property Mapping	`createdDateMapping`	String	Metacard Created Date to WFS Feature Property Mapping		false
Metacard Modified Date to WFS Feature Property Mapping	`modifiedDateMapping`	String	Metacard Modified Date to WFS Feature Property Mapping		false
Metacard Effective Date to WFS Feature Property Mapping	`effectiveDateMapping`	String	Metacard Effective Date to WFS Feature Property Mapping		false
Metacard Expiration Date to WFS Feature Property Mapping	`expirationDateMapping`	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	`resourceUriMapping`	String	Metacard Resource URI to WFS Feature Property Mapping		false
Metacard Resource Size to WFS Feature Property Mapping	`resourceSizeMapping`	String	Metacard Resource Size to WFS Feature Property Mapping		false
The Units of the Feature Property that corresponds to the Metacard Resource Size	`dataUnit`	String	The Units of the Feature Property that corresponds to the Metacard Resource Size	B	true
Metacard Thumbnail to WFS Feature Property Mapping	`thumbnailMapping`	String	Metacard Thumbnail to WFS Feature Property Mapping		false
Metacard Geography to WFS Feature Property Mapping	`geographyMapping`	String	Metacard Geography to WFS Feature Property Mapping		false
Temporal Sort By Feature Property	`sortByTemporalFeatureProperty`	String	When Sorting Temporally, Sort By This Feature Property.		false
Relevance Sort By Feature Property	`sortByRelevanceFeatureProperty`	String	When Sorting By Relevance, Sort By This Feature Property.		false

Name	Id	Type	Description	Default Value	Required
Distance Sort By Feature Property	`sortByDistanceFeatureProperty`	String	When Sorting By Distance, Sort By This Feature Property.		false

Table 78. WFS v1.0.0 Connected Source

Name	Id	Type	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	`disableCnCheck`	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	`nonQueryableProperties`	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	`pollInterval`	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	`forceSpatialFilter`	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	`connectionTimeout`	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	`receiveTimeout`	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	Type	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	Type	Description	Default Value	Required
Disable CN Check	`disableCnCheck`	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	`forcedFeatureType`	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Non Queryable Properties	`nonQueryableProperties`	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	`pollInterval`	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	`forceSpatialFilter`	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	`connectionTimeout`	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	`receiveTimeout`	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	Type	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	`disableCnCheck`	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	`coordinateOrder`	String	Coordinate order that remote source expects and returns spatial data in	LAT_LON	true
Forced Feature Type	`forcedFeatureType`	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	Type	Description	Default Value	Required
Password	password	Password	Password for WFS Service (optional)	null	false
Non Queryable Properties	nonQueryableProperties	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	pollInterval	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	forceSpatialFilter	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	connectionTimeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTimeout	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	Type	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	disableCnCheck	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Force Longitude/ Latitude coordinate order	isLonLatOrder	Boolean	Force Longitude/Latitude coordinate order	false	true

Name	Id	Type	Description	Default Value	Required
Disable Sorting	`disableSorting`	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	`nonQueryableProperties`	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	`pollInterval`	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	`forceSpatialFilter`	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	`connectionTimeout`	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	`receiveTimeout`	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	Type	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	`disableCnCheck`	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	`coordinateOrder`	String	Coordinate order that remote source expects and returns spatial data in	LAT_LON	true

Name	Id	Type	Description	Default Value	Required
Forced Feature Type	`forcedFeatureType`	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Disable Sorting	`disableSorting`	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	`nonQueryableProperties`	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	`pollInterval`	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	`forceSpatialFilter`	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	`connectionTimeout`	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	`receiveTimeout`	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	Type	Description	Default Value	Required
Attribute Name	`attributeName`	String	The name of the Metacard Attribute to match against. e.g. title, metadata-content-type, etc	null	true
Attribute Value	`attributeValue`	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.monitor.email.EmailNotifier	Email Notifier.
Search UI Redirect	org.codice.ddf.ui.searchui.filter.RedirectServlet	Search UI redirect.
Catalog UI Search Transformer Blacklists	org.codice.ddf.catalog.ui.transformer.TransformerDescriptors	Catalog UI Search Transformer Blacklists.
Catalog UI Search Workspace Query Monitor	org.codice.ddf.catalog.ui.query.monitor.impl.WorkspaceQueryService	Catalog UI Search Workspace Query Monitor.

Name	Property	Description
Catalog UI Search Workspace Service	org.codice.ddf.catalog.ui.query.monitor.impl.WorkspaceServiceImpl	Catalog UI Search Workspace Service.
Catalog UI Search	org.codice.ddf.catalog.ui	Catalog UI Search.
Catalog UI Search Attribute Aliases	org.codice.ddf.catalog.ui.attribute.aliases	Catalog UI Search Attribute Aliases.
Catalog UI Search Attribute Descriptions	org.codice.ddf.catalog.ui.attribute.descriptions	Catalog UI Search Attribute Descriptions.
Catalog UI Search Hidden Attributes	org.codice.ddf.catalog.ui.attribute.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.whitelist	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	Type	Description	Default Value	Required
Attribute Suggestion Whitelist	`facetAttributeWhitelist`	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	Type	Description	Default Value	Required
Subject	`subjectTemplate`	String	Set the subject line template.	`Workspace '%[attribute=title]' notification`	true

Name	Id	Type	Description	Default Value	Required
Body	`bodyTemplate`	String	Set the body template.	`The workspace '%[attribute=title]' contains up to %[hitCount] results. Log in to see results https://{FQDN}:{PORT}/search/catalog/#workspaces/%attribute=id.`	true
From Address	`fromEmail`	String	Set the 'from' email address.	donotreply@example.com	true

Table 87. Search UI Redirect

Name	Id	Type	Description	Default Value	Required
Redirect URI	`defaultUri`	String	Specifies the redirect URI to use when accessing the /search URI.	`${org.codice.ddf.external.context}/search/catalog/`	true

Table 88. Catalog UI Search Transformer Blacklists

Name	Id	Type	Description	Default Value	Required
Metacard Transformer Blacklist	`blackListedMetacardTransformerIds`	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 Transformer Blacklist	`blackListedQueryResponseTransformerIds`	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.	`[zipCompression]`	false

Table 89. Catalog UI Search Workspace Query Monitor

Name	Id	Type	Description	Default Value	Required
Query Timeout	queryTimeoutMinutes	Long	Set the number of minutes to wait for query to complete.	5	true
Notification Time Interval	queryTimeInterval	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	Type	Description	Default Value	Required
Maximum Subscriptions	maxSubscriptions	Integer	Specifies the maximum number of workspace subscriptions that may be queried for email notifications.	100	true

Table 91. Catalog UI Search

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

Name	Id	Type	Description	Default Value	Required
Imagery Providers	`imageryProviders`	String	List of imagery providers to use. The valid types are: • **OSM** (OpenStreetMap) • **AGM** (ArcGisMap) • **BM** (BingMap) • **WMS** (WebMapService) • **WMT** (WebMapTile) • **TMS** (TileMapService) • **GE** (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}` **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}` **WMT example**: `{ "parameters": { "transparent": false, "format": "image/jpeg" }, "name": "Example WMT", "tileMatrixLabels": ["EPSG:4326:0", "EPSG:4326:1", "EPSG:4326:2", "EPSG:4326:3", "EPSG:4326:4", "EPSG:4326:5", "EPSG:4326:6", "EPSG:4326:7", "EPSG:4326:8", "EPSG:4326:9", "EPSG:4326:10", "EPSG:4326:11", "EPSG:4326:12", "EPSG:4326:13", "EPSG:4326:14", "EPSG:4326:15",`		false
82	`imageryProviders`				

Name	Id	Type	Description	Default Value	Required
Terrain Provider	`terrainProvider`	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"}	`{ "type": "CT"\, "url": "http://assets.agi.com/stk-terrain/tilesets/world/tiles" }`	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", "component": "cesium", "componentName": "cesium", "title": "3D Map"}, {"type": "component", "component": "inspector", "componentName": "inspector", "title": "Inspector"}]}]`	true

`cgis/rest/services/World_Street_Map/MapServer", "order": 1, "proxyEnabled": false, "alpha": 1}`

Name	Id	Type	Description	Default Value	Required
Visualizations	`visualizations`	String	Visualizations that should be recognized by golden layout. Example `[{"name":"openlayers","title":"2D Map","icon":"map"},{"name":"cesium","title":"3D Map","icon":"globe"},{"name":"inspector","title":"Inspector","icon":"info"},{"name":"histogram","title":"Histogram","icon":"bar-chart"},{"name":"table","title":"Table","icon":"table"}]`	`[{"name":"openlayers","title":"2D Map","icon":"map"},{"name":"cesium","title":"3D Map","icon":"globe"},{"name":"inspector","title":"Inspector","icon":"info"},{"name":"histogram","title":"Histogram","icon":"bar-chart"},{"name":"table","title":"Table","icon":"table"}]`	false
List Templates	`listTemplates`	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	`sourcePollInterval`	Integer	Specifies the interval to poll for sources in milliseconds.	`60000`	true
Show Sign In	`signInEnabled`	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	`gazetteerEnabled`	Boolean	Show gazetteer for searching place names.	`true`	false

Name	Id	Type	Description	Default Value	Required
Use Online Gazetteer	`onlineGazetteerEnabled`	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	`ingestEnabled`	Boolean	Show upload menu for adding new record.	`true`	false
Use External Authentication	`externalAuthenticationEnabled`	Boolean	Use an external authentication point, such as IdP.	`false`	false
Enable Cache	`cacheEnabled`	Boolean	Locally cached results will be returned in search results.	`true`	true
Allow Editing	`editingEnabled`	Boolean	Allow editing capability to be visible in the UI.	`true`	true
Enable Web Sockets	`webSocketsEnabled`	Boolean	Enables use of Web Sockets	`true`	false
Enable Local Catalog	`localCatalogEnabled`	Boolean	Enables queries to the local catalog.	`true`	true
Enable Historical Search	`historicalSearchEnabled`	Boolean	Enable searching for historical metacards.	`true`	true
Enable Archive Search	`archiveSearchEnabled`	Boolean	Enable searching for archived metacards.	`true`	true
Enable Query Feedback	`queryFeedbackEnabled`	Boolean	Enable the query comments option.	`true`	true
Enable Experimental Features	`experimentalEnabled`	Boolean	WARNING: Enables experimental features in the UI. This allows users to preview upcoming features.	`false`	true
Show Relevance Scores	`relevanceScoresEnabled`	Boolean	Toggle the display of relevance scores of search results.	`false`	false
Relevance Score Precision	`relevancePrecision`	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

Name	Id	Type	Description	Default Value	Required
Enable Unknown Error Box	`unknownErrorBoxEnabled`	Boolean	Enable Unknown Error Box visibility.	`true`	false
Enable Metacard Preview	`metacardPreviewEnabled`	Boolean	Enable Metacard Preview in the Inspector.	`true`	true
Enable Spellcheck	`spellcheckEnabled`	Boolean	Enable spellcheck for searches.	`false`	false
Enable Similar Word Matching	`phoneticsEnabled`	Boolean	Enable phonetic and synonym matching for searches.	`false`	false
Basic Search Temporal Selections	`basicSearchTemporalSelectionDefault`	String	Enable Basic Search Temporal Selections.	`created` `effective` `modified` `metacard.created` `metacard.modified`	true
Basic Search Match Type Metacard Attribute	`basicSearchMatchType`	String	Metacard attribute used for Basic Search Type Match.	`datatype`	true
Type Name Mapping	`typeNameMapping`	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.	`^checksum$` `^checksum-algorithm$` `^id$` `^resource-download-url$` `^resource-uri$` `^resource.derived-uri$` `^resource.derived-download-url$` `^modified$` `^metacard-tags$` `^metadata$` `^metacard-type$` `^source-id$` `^point-of-contact$` `^metacard.` `^version.` `^validation.`	false

Name	Id	Type	Description	Default Value	Required
Summary Metacard Attributes	`summaryShow`	String	List of metacard attributes to display in the summary view.	`created` `modified` `thumbnail`	false
Result Preview Metacard Attributes	`resultShow`	String	List of metacard attributes to display in the result preview.		false
Query Schedule Frequencies	`scheduleFrequencyList`	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.	`1800` `3600` `7200` `14400` `28800` `57600` `86400`	true
Auto Merge Time	`autoMergeTime`	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	`queryFeedbackEmailSubjectTemplate`	String	See Configuring Query Feedback for Intrigue for more details about Query Feedback templates.	`Query Feedback from {{username}}`	true

Name	Id	Type	Description	Default Value	Required
Query Feedback Email Body Template	`queryFeedbackEmailBodyTemplate`	String	See Configuring Query Feedback for Intrigue for more details about Query Feedback templates.	`<h2>Query Feedback</h2>` `<p> ` `<b>Authenticated User</b>:` `{{{auth_username}}}  ` `<b>User</b>:` `{{{username}}}  ` `<b>Email</b>:` `{{{email}}}  ` `<b>Workspace</b>:` `{{{workspace_name}}}` `({{{workspace_id}}})  ` `<b>Query</b>:` `{{{query}}}  ` `<b>Query time</b>:` `{{{query_initiated_time}}}  ` `<b>Query status</b>:` `{{{query_status}}}  ` `<b>Comments</b>:` `{{{comments}}}  ` `<b>Query_results</b>:` `<pre>{{{query_results}}}</pre>` `</p>`	true
Query Feedback Email Destination	`queryFeedbackEmailDestination`	String	Email destination to send Query Feedback results.		true

Name	Id	Type	Description	Default Value	Required
Maximum Endpoint Upload Size	`maximumUploadSize`	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 Configuration	`attributeEnumMap`	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	`requiredAttributes`	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	Type	Description	Default Value	Required
Attribute Aliases	`attributeAliases`	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	Type	Description	Default Value	Required
Attribute Descriptions	`attributeDescriptions`	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	Type	Description	Default Value	Required
Hidden Attributes	`hiddenAttributes`	String	List of attributes to be hidden. NOTE: the provided values will be evaluated as JavaScript regular expressions when matched against metacard attributes.	• `^sorts$` • `^cql$` • `^polling$` • `^cached$`	false

Table 95. Catalog UI Search Theme

Name	Id	Type	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	`customPrimaryColor`	String		`#3c6dd5`	true
Positive Color	`customPositiveColor`	String		`#428442`	true

Name	Id	Type	Description	Default Value	Required
Negative Color	`customNegativeColor`	String		`#8a423c`	true
Warning Color	`customWarningColor`	String		`#c89600`	true
Favorite Color	`customFavoriteColor`	String		`#d1d179`	true
Background Navigation Color	`customBackgroundNavigation`	String		`#252529`	true
Background Accent Content Color	`customBackgroundAccentContent`	String		`#2A2A2E`	true
Background Dropdown Color	`customBackgroundDropdown`	String		`#35353a`	true
Background Content Color	`customBackgroundContent`	String		`#35353a`	true
Background Modal Color	`customBackgroundModal`	String		`#252529`	true
Background Slideout Color	`customBackgroundSlideout`	String		`#252529`	true
Theme Spacing Mode	`spacingMode`	String	Specifies the default theme spacing mode: • `Comfortable` • `Cozy` • `Compact`	`Comfortable`	true
Theme Zoom	`zoomPercentage`	Integer	Specifies the default theme zoom percentage.	`100`	true

Table 96. Catalog UI Search Metacard Type Whitelist

Name	Id	Type	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	Type	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 2.19.0 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:commons-codec:jar:1.10

- commons-codec: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: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

- io.netty:netty-transport:jar:4.1.16.Final

- 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

- javax.validation:validation-api:jar:1.1.0.Final

- 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

- net.sf.saxon:Saxon-HE:jar:9.5.1-3

- net.sf.saxon:Saxon-HE:jar:9.6.0-4

- org.antlr:antlr4-runtime:jar:4.1

- org.antlr:antlr4-runtime:jar:4.3

- org.apache.abdera:abdera-extensions-geo:jar:1.1.3

- org.apache.abdera:abdera-extensions-opensearch:jar:1.1.3

- 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

- org.apache.camel:camel-amqp:jar:2.19.5

- 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

- org.apache.camel:camel-quartz:jar:2.19.5

- org.apache.camel:camel-saxon:jar:2.19.5

- org.apache.camel:camel-servlet:jar:2.19.5

- org.apache.camel:camel-sjms:jar:2.19.5

- org.apache.camel:camel-stream:jar:2.19.5

- org.apache.commons:commons-collections4:jar:4.1

- 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
- org.apache.commons:commons-math:jar:2.2
- org.apache.commons:commons-pool2:jar:2.4.2
- org.apache.commons:commons-pool2:jar:2.5.0
- org.apache.cxf.services.sts:cxf-services-sts-core:jar:3.2.5
- org.apache.cxf:cxf-core:jar:3.2.5
- org.apache.cxf:cxf-rt-bindings-soap:jar:3.0.4
- org.apache.cxf:cxf-rt-databinding-jaxb:jar:3.0.4
- org.apache.cxf:cxf-rt-frontend-jaxrs:jar:3.2.5
- org.apache.cxf:cxf-rt-frontend-jaxws:jar:3.0.4
- org.apache.cxf:cxf-rt-frontend-jaxws:jar:3.2.5
- 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
- org.apache.cxf:cxf-rt-rs-security-xml:jar:3.2.5
- org.apache.cxf:cxf-rt-transports-http:jar:3.2.5
- org.apache.cxf:cxf-rt-ws-policy:jar:3.2.5
- org.apache.cxf:cxf-rt-ws-security:jar:3.2.5
- 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:5.6.12
- 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
- org.apache.geronimo.specs:geronimo-servlet_3.0_spec:jar:1.0

- org.apache.httpcomponents:httpclient:jar:4.5.3

- org.apache.httpcomponents:httpclient:jar:4.5.5

- org.apache.httpcomponents:httpcore:jar:4.4.6

- org.apache.httpcomponents:httpmime:jar:4.5.3

- org.apache.httpcomponents:httpmime:jar:4.5.5

- org.apache.karaf.bundle:org.apache.karaf.bundle.core:jar:4.2.6

- org.apache.karaf.features:org.apache.karaf.features.core:jar:4.2.6

- org.apache.karaf.features:standard:xml:features:4.2.6

- org.apache.karaf.jaas:org.apache.karaf.jaas.boot:jar:4.2.6

- org.apache.karaf.jaas:org.apache.karaf.jaas.config:jar:4.2.6

- org.apache.karaf.jaas:org.apache.karaf.jaas.modules:jar:4.2.6

- org.apache.karaf.shell:org.apache.karaf.shell.console:jar:4.2.6

- org.apache.karaf.shell:org.apache.karaf.shell.core:jar:4.2.6

- org.apache.karaf.system:org.apache.karaf.system.core:jar:4.2.6

- org.apache.karaf:apache-karaf:tar.gz:4.2.6

- org.apache.karaf:apache-karaf:zip:4.2.6

- org.apache.karaf:org.apache.karaf.util:jar:4.2.6

- org.apache.logging.log4j:log4j-1.2-api:jar:2.11.0

- 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
- org.apache.poi:poi-scratchpad:jar:3.17
- org.apache.poi:poi:jar:3.17
- org.apache.servicemix.bundles:org.apache.servicemix.bundles.poi:jar:3.17_1
- 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
- org.apache.wss4j:wss4j-ws-security-stax:jar:2.2.2
- 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.awaitility:awaitility:jar:3.1.5
- org.bouncycastle:bcmail-jdk15on:jar:1.60
- org.bouncycastle:bcpkix-jdk15on:jar:1.60
- org.bouncycastle:bcprov-jdk15on:jar:1.60
- org.codehaus.groovy:groovy-all:jar:2.4.7

- org.codehaus.jackson:jackson-mapper-asl:jar:1.9.13

- org.codice.countrycode:converter:jar:0.1.6

- org.codice.geowebcache:geowebcache-server-standalone:war:0.7.0

- org.codice.geowebcache:geowebcache-server-standalone:xml:geowebcache:0.7.0

- org.codice.httpproxy:proxy-camel-route:jar:2.14.0

- org.codice.httpproxy:proxy-camel-servlet:jar:2.14.0

- org.codice.opendj.embedded:opendj-embedded-app:xml:features:1.3.3

- 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

- org.eclipse.jetty:jetty-http:jar:9.4.11.v20180605

- 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

- org.forgerock.commons:forgerock-util:jar:3.0.2

- 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
- org.geotools:gt-cql:jar:19.1
- 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
- org.geotools:gt-referencing:jar:19.1
- org.geotools:gt-shapefile:jar:19.1
- org.geotools:gt-xml:jar:19.1
- org.glassfish.grizzly:grizzly-framework:jar:2.3.30
- 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
- org.jvnet.jaxb2_commons:jaxb2-basics-runtime:jar:0.11.0
- org.jvnet.jaxb2_commons:jaxb2-basics-runtime:jar:0.6.0
- org.jvnet.jaxb2_commons:jaxb2-basics-runtime:jar:0.9.4
- org.jvnet.ogc:filter-v_1_1_0:jar:2.6.1
- org.jvnet.ogc:filter-v_2_0:jar:2.6.1
- 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

- org.jvnet.ogc:gml-v_3_1_1:jar:2.6.1

- org.jvnet.ogc:gml-v_3_2_1-schema:jar:1.1.0

- org.jvnet.ogc:gml-v_3_2_1:pom:1.1.0

- org.jvnet.ogc:ogc-tools-gml-jts:jar:1.0.3

- org.jvnet.ogc:ows-v_1_0_0-schema:jar:1.1.0

- org.jvnet.ogc:ows-v_1_0_0:jar:2.6.1

- org.jvnet.ogc:ows-v_1_1_0-schema:jar:1.1.0

- org.jvnet.ogc:ows-v_2_0:jar:2.6.1

- 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

- org.objenesis:objenesis:jar:2.6

- org.openexi:nagasena-rta:jar:0000.0002.0049.0

- org.openexi:nagasena:jar:0000.0002.0049.0

- org.opensaml:opensaml-core:jar:3.3.0

- org.opensaml:opensaml-soap-impl:jar:3.3.0

- org.opensaml:opensaml-xmlsec-api:jar:3.3.0

- org.opensaml:opensaml-xmlsec-impl:jar:3.3.0

- org.ops4j.pax.exam:pax-exam-container-karaf:jar:4.11.0

- org.ops4j.pax.exam:pax-exam-junit4:jar:4.11.0

- org.ops4j.pax.exam:pax-exam-link-mvn:jar:4.11.0

- org.ops4j.pax.exam:pax-exam:jar:4.11.0

- org.ops4j.pax.swissbox:pax-swissbox-extender:jar:1.8.2

- org.ops4j.pax.tinybundles:tinybundles:jar:2.1.1

- org.ops4j.pax.url:pax-url-aether:jar:2.4.5

- org.ops4j.pax.url:pax-url-wrap:jar:2.4.5

- org.ops4j.pax.web:pax-web-api:jar:6.0.9

- org.osgi:org.osgi.compendium:jar:4.3.1

- org.osgi:org.osgi.compendium:jar:5.0.0

- org.osgi:org.osgi.core:jar:4.3.1

- org.osgi:org.osgi.core:jar:5.0.0

- org.osgi:org.osgi.enterprise:jar:5.0.0

- org.ow2.asm:asm:jar:5.0.2

- org.ow2.asm:asm:jar:5.0.4

- org.parboiled:parboiled-core:jar:1.1.8

- org.parboiled:parboiled-java:jar:1.1.8

- org.quartz-scheduler:quartz-jobs:jar:2.2.3

- org.quartz-scheduler:quartz:jar:2.1.7

- org.quartz-scheduler:quartz:jar:2.2.3

- org.rrd4j:rrd4j:jar:2.2

- org.rrd4j:rrd4j:jar:3.2

- org.simplejavamail:simple-java-mail:jar:4.1.3

- org.slf4j:jcl-over-slf4j:jar:1.7.24

- 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

- org.springframework.osgi:spring-osgi-core:jar:1.2.1

- org.springframework:spring-core:jar:5.1.7.RELEASE

- org.taktik:mpegts-streamer:jar:0.1.0_2

- org.twitter4j:twitter4j-core:jar:4.0.4

- org.xmlunit:xmlunit-matchers:jar:2.5.1

- us.bpsm:edn-java:jar:0.4.4

- xalan:serializer:jar:2.7.2

- 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

☐ Isolate Solr Cloud and Zookeeper. (If using)