DDF Reference Guide

Table of Contents

License . . . 2
1. Application Reference . . . 3
1.1. Admin Application Reference . . . 3
1.1.1. Admin Application Prerequisites . . . 3
1.1.2. Installing the Admin Application . . . 3
1.1.3. Configuring the Admin Application . . . 3
1.2. Catalog Application Reference . . . 5
1.2.1. Catalog Application Prerequisites . . . 5
1.2.2. Installing the Catalog Application . . . 5
1.2.3. Configuring the Catalog Application . . . 5
1.3. Platform Application Reference . . . 29
1.3.1. Platform Application Prerequisites . . . 30
1.3.2. Installing Platform . . . 30
1.3.3. Configuring the Platform Application . . . 30
1.4. Security Application Reference . . . 34
1.4.1. Security Prerequisites . . . 35
1.4.2. Installing Security . . . 35
1.4.3. Configuring the Security Application . . . 35
1.5. Solr Catalog Application Reference . . . 50
1.5.1. Solr Catalog Prerequisites . . . 50
1.5.2. Installing Solr Catalog . . . 50
1.5.3. Configuring the Solr Catalog Application . . . 51
1.6. Spatial Application Reference . . . 51
1.6.1. Offline Gazetteer Service . . . 51
1.6.1.1. Spatial Gazetteer Console Commands . . . 51
1.6.2. Standalone Solr Offline Gazetteer Feature . . . 52
1.6.2.1. Installing Standalone Solr Offline Gazetteer . . . 52
1.6.2.2. Special Note Regarding Installation . . . 53
1.6.2.3. Building the suggester index on Standalone Solr Offline Gazetteer . . . 53
1.6.3. Spatial Prerequisites . . . 53
1.6.4. Installing Spatial . . . 53
1.6.5. Configuring the Spatial Application . . . 54
1.7. Search UI Application Reference . . . 74

1.7.1. Search UI Prerequisites . . . 74
1.7.2. Installing Search UI . . . 74
1.7.3. Configuring the Search UI Application . . . 74
2. Application Whitelists . . . 77
2.1. Packages Removed From Whitelist . . . 77
2.2. Catalog Whitelist . . . 80
2.3. Platform Whitelist . . . 85
2.4. Security Whitelist . . . 85
2.5. Solr Catalog Whitelist . . . 87
2.6. Search UI Whitelist . . . 87
3. DDF Dependency List . . . 87
3.1. DDF 2.31.4 Dependency List . . . 87
4. Hardening Checklist . . . 97
Index . . . 98

License

Copyright (c) Codice Foundation.
This work is licensed under a Creative Commons Attribution 4.0 International License.

This document last updated: 2026-10-09.

1. Application Reference

Installation and configuration details by application.

1.1. 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.

1.1.1. Admin Application Prerequisites

None.

1.1.2. 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.

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

Table 2. 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 is 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 are disabled in the installer.	admin-app,platform-app	null

Table 3. Admin Configuration Policy

Name	Id	Type	Description	Default Value	Required
Feature and App Permissions	`featurePolicies`	String	When enabled, the desired features or apps are only 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 is only 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

1.2. 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.

1.2.1. Catalog Application Prerequisites

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

- Platform

1.2.2. 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.

1.2.3. 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 Policy Plugin	org.codice.ddf.catalog.security.CatalogPolicy	Catalog Policy Plugin.
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.

Name	Property	Description
Security Audit Plugin	org.codice.ddf.catalog.plugin.security.audit.SecurityAuditPlugin	Security Audit Plugin.
Xml Query Transformer	ddf.catalog.transformer.xml.XmlResponseQueueTransformer	Xml Response Query Transformer.
Resource URI Policy Plugin	org.codice.ddf.catalog.security.ResourceUriPolicy	Resource URI Policy Plugin.
Resource Download Settings	Metacard_S3_Storage_Route	Resource Download Configuration.
Metacard Validation Marker Plugin	ddf.catalog.metacard.validation.MetacardValidityMarkerPlugin	Metacard Validation Marker Plugin.
Metacard Attribute Security Policy Plugin	org.codice.ddf.catalog.security.policy.metacard.MetacardAttributeSecurityPolicyPlugin	Metacard Attribute Security Policy Plugin.
Catalog Federation Strategy	ddf.catalog.federation.impl.CachingFederationStrategy	Catalog Federation Strategy.
PDF Input Transformer	ddf.catalog.transformer.input.pdf.PdfInputTransformer	PDF Input Transformer configurations.
Historian	ddf.catalog.history.Historian	Enables versioning of both metacards and content.
Catalog Metacard Ingest Network Plugin	org.codice.ddf.catalog.plugin.metacard.MetacardIngestNetworkPlugin	Catalog Metacard Ingest Network Plugin.
CSW Connected Source	Csw_Connected_Source	CSW Connected Source.
Confluence Federated Source	Confluence_Federated_Source	Confluence Federated Source.
Schematron Validation Services	ddf.services.schematron.SchematronValidationService	Schematron Validation Services configurations.
Metacard Backup File Storage Provider	Metacard_File_Storage_Route	Enable data backup of metacards using a configurable transformer.
Catalog Backup Plugin	ddf.catalog.backup.CatalogBackupPlugin	Catalog Backup Plugin configurations.
XML Attribute Security Policy Plugin	org.codice.ddf.catalog.security.policy.xml.XmlAttributeSecurityPolicyPlugin	XML Attribute Security Policy Plugin.
Catalog Preview	org.codice.ddf.transformer.preview	Allow Preview to be Extracted From Metadata.

Name	Property	Description
Metacard Validation Filter Plugin	ddf.catalog.metacard.validation.MetacardValidityFilterPlugin	Metacard Validation Filter Plugin.
Catalog Standard Framework	ddf.catalog.CatalogFrameworkImpl	Catalog Standard Framework configurations.
Expiration Date Pre-Ingest Plugin	org.codice.ddf.catalog.plugin.expiration.ExpirationDatePlugin	Catalog pre-ingest plugin to set an expiration date on metacards.
Tika Input Transformer	ddf.catalog.transformer.input.tika.TikaInputTransformer	Tika Input Transformer.
Catalog OpenSearch Federated Source	OpenSearchSource	Catalog OpenSearch Federated Source.
Status Source Poller Runner	org.codice.ddf.catalog.sourcepoller.StatusSourcePollerRunner	Status Source Poller Runner.
Content File System Storage Provider	org.codice.ddf.catalog.content.impl.FileSystemStorageProvider	Content File System Storage Provider.
Resource Download Settings	ddf.catalog.resource.download.ReliableResourceDownloadManager	Resource Download configurations.
Content Directory Monitor	org.codice.ddf.catalog.content.monitor.ContentDirectoryMonitor	Content Directory Monitor configurations.

Table 5. 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 6. 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 7. 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 8. 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 9. 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 10. 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 11. 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, as in {{[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 12. 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 are NOT ingested.	false	Enforce errors

Name	Id	Type	Description	Default Value	Required
enforceErrors	`Boolean`	Sets whether validation errors are enforced. This prevents ingest if errors are present.	true	true	Enforce warnings

Table 13. 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 behaves unpredictably.	none	false

Name	Id	Type	Description	Default Value	Required
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 behaves unpredictably.	none	false

Table 14. 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 may be deprecated and 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 remains in the cache before it expires . 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 15. 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 is 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 16. Historian

Name	Id	Type	Description	Default Value	Required
Enable Versioning	`historyEnabled`	Boolean	Enables versioning of both metacards and content.	true	true

Table 17. 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 is tested? IP Address? Hostname?	remoteAddr	true	Expected Value	expectedValue

Name	Id	Type	Description	Default Value	Required	Criteria
String	The value that the criteria must equate to for the attribute overrides to occur.		true	New Attributes	newAttributes	String"

Table 18. 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
Authentication Type	`authenticationType`	String	Authentication type to use when federating.	saml	true
Username	`username`	String	Username for CSW Service. Required if basic authentication type is selected.	null	false
Password	`password`	String	Password for CSW Service. Required if basic authentication type is selected.	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

Name	Id	Type	Description	Default Value	Required
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
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 19. 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
Authentication Type	`authenticationType`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	saml	true
Username	`username`	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	`password`	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false
Include Page Contents In Results	`includePageContent`	Boolean	Flag indicating if Confluence page contents should be included in the returned results.	false	No

Name	Property	Type	Description	Default Value	Required
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 are 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 overwrites 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 20. 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

Name	Id	Type	Description	Default Value	Required
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 21. 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 Providers	`metacardOutputProviderIds`	Comma delimited list of metacard output provider IDs.	Metacard Backup Provider IDs to use for this backup plugin.	fileStorageProvider	true

Table 22. 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
Subdirectory levels	`subDirLevels`	Integer	Number of subdirectory levels to create. Two characters from the ID are used to name each subdirectory level.	2	true

Table 23. XML Attribute Security Policy Plugin

Name	Id	Type	Description	Default Value	Required
XML Elements:	`xmlElements`	String	XML elements within the metadata that are searched for security attributes. If these elements contain matching attributes, the values of the attributes are combined.		true
Security Attributes (union):	`securityAttributeUnions`	String	Security Attributes. These attributes, if they exist on any of the XML elements listed above, have their values extracted and the union of all of the values is 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 is the union of those values: X,Y,Z. The X,Y,Z value is 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, have their values extracted and the intersection of all of the values is 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 is the intersection of those values: X. The X value is the value that is placed within the security attribute on the metacard.	null	false

Table 24. Catalog Preview

Name	Id	Type	Description	Default Value	Required
Preview From Metadata	`previewFromMetadata`	Boolean	Allow Preview to be Extracted From Metadata.	false	true

Name	Id	Type	Description	Default Value	Required
Element Names to Preview	`previewElements`	String	Specify element names to preview from XML. Takes the text content of the first available element for preview. Note: This list is not used unless Preview From Metadata is enabled.	text,TEXT	true

Table 25. 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 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 26. 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 are rejected.		true

Table 27. 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 28. 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 is the file name.	false	true

Table 29. 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
Authentication Type	`authenticationType`	String	Authentication type to use when federating.	saml	true
Username	`username`	String	Username to use with HTTP Basic Authentication. Required if basic authentication type is selected.		false
Password	`password`	Password	Password to use with HTTP Basic Authentication. Required if basic authentication type is selected.		false
OAuth Discovery Url	`oauthDiscoveryUrl`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	https://localhost:8443/auth/realms/master/.well-known/openid-configuration	false
OAuth Client ID	`oauthClientId`	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	`oauthClientSecret`	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false

Name	Id	Type	Description	Default Value	Required
OAuth Flow	`oauthFlow`	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	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
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

Name	Id	Type	Description	Default Value	Required
Connection Timeout	connection Timeout	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 30. 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

Table 31. 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 attempts to create them.	<DDF_HOME>/data/content/store	true

Table 32. Resource Download Settings

Name	Property	Type	Description	Default Value	Required
Product Cache Directory	`productCacheDirectory`	String	Directory where retrieved products are cached for faster, future retrieval. If a directory path is specified with directories that do not exist, Product Download feature attempts to create those directories. Without configuration, the product cache directory is <DDF_HOME>/data/product-cache. If a relative path is provided it must 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

Name	Property	Type	Description	Default Value	Required
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 33. 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 is 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

Name	Id	Type	Description	Default Value	Required
Processing Mechanism	`processingMechanism`	String	Choose what happens to the content item after it is ingested. Delete removes the original file after storing it in the content store. Move stores the item in the content store, and a copy under ./ingested, then removes the original file. (NOTE: this doubles the amount of disk space used.) Monitor in place indexes the file and serves 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
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 overwrites 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

1.3. 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.

1.3.1. Platform Application Prerequisites

None.

1.3.2. 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.

1.3.3. 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 34. Platform Available Configurations

Name	Property	Description
Platform Command Scheduler	ddf.platform.scheduler.Command	Platform Command Scheduler.
Logging Service	org.codice.ddf.platform.logging.LoggingService	Logging Service configurations.
HTTP Response Security	org.codice.ddf.security.response.filter.ResponseHeaderConfig	HTTP Response Security response configurations.
MIME Custom Types	DDF_Custom_Mime_Type_Resolver	DDF Custom Mime Types.
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.

Table 35. 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
Interval	`intervalString`	String	The Interval String for each execution. Based on the Interval Type, this can be either 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

Table 36. 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 37. 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 38. 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, for example, `nitf=image/nitf`	null	true

Table 39. 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 40. 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

Name	Id	Type	Description	Default Value	Required
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 to display 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> (such as `example,http://www.example.com`). Empty entries are ignored.		yes

Table 41. 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
System Usage Message Title	`systemUsageTitle`	String	A title for the system usage Message when the application is opened.		false
System Usage Message	`systemUsageMessage`	String	A system usage message to be displayed to the user each time the user opens the application.		false

Name	Id	Type	Description	Default Value	Required
Show System Usage Message once per session	`systemUsageOncePerSession`	Boolean	With this selected, the system usage message is 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 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 causes 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

1.4. 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.

Features Included in Security

- Security Core
- Security Encryption
- Security PEP

- Security PDP

1.4.1. Security Prerequisites

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

- Platform

1.4.2. 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.

1.4.3. 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 42. Security Available Configurations

Name	Property	Description
Security STS LDAP and Roles Claims Handler	Claims_Handler_Manager	STS Ldap and Roles Claims Handler Configuration.
SAML NameID Policy	ddf.security.service.SecurityManager	SAML NameID Policy.
Session	org.codice.ddf.security.filter.login.Session	Session configurations.
Security STS Server	ddf.security.sts	STS configurations.
File Based Claims Handler	org.codice.ddf.security.sts.claims.property.PropertyFileClaimsHandler	File Based Claims Handler.
Guest Claims Configuration	ddf.security.guest.realm	Guest Claims configurations.
IdP Client	org.codice.ddf.security.idp.client.IdpMetadata	IdP Client configurations.

Name	Property	Description
Logout Page	org.codice.ddf.security.idp.client.LogoutRequestService	Logout Page configurations.
Security AuthZ Realm	ddf.security.pdp.realm.AuthzRealm	AuthZ Security configurations.
Web Context Policy Manager	org.codice.ddf.security.policy.context.impl.PolicyManager	Web Context Security Policies.
SAML Handler	org.codice.ddf.security.idp.client.IdpHandler	IdP Handler configurations.
Security STS Client	ddf.security.sts.client.configuration	STS Client configurations.
Security STS PKI Token Validator	org.codice.ddf.security.validator.pki	STS PKI Token Validator configurations.
Security SOAP Guest Interceptor	org.codice.ddf.security.interceptor.GuestInterceptor	Security SOAP Guest Interceptor.
OIDC Handler	org.codice.ddf.security.handler.oidc.OidcHandler	OIDC Handler configurations.

Table 43. 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

Name	Property	Type	Description	Default Value	Required
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 ignores the DN of a user and instead uses 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
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 44. 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 is 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 45. 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 invalidates 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 46. 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 is valid.	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 47. 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

Name	Id	Type	Description	Default Value	Required
User Attribute File	`usersAttributesFileLocation`	String	Location of the file which maps attributes to users.	etc/users.attributes	true

Table 48. 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 49. 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 allows clients that do not support ECP and are not browsers to fall back to PKI, BASIC, and potentially GUEST authentication, if enabled.	true

Table 50. Logout Page

Name	Id	Type	Description	Default Value
Logout Page Time Out	`logOutPageTimeOut`	Long	This is the time limit that the SAML client waits for a user to click log out on the logout page. Any requests that take longer than this time for the user to submit are rejected."/>	3600000

Table 51. 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 52. Web Context Policy Manager

Name	Id	Type	Description	Default Value	Required
Context Traversal Depth	`traversalDepth`	Integer	Depth to which paths are traversed. Any value greater than 500 is 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

Name	Id	Type	Description	Default Value	Required
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 for Web Pages	`webAuthenticationTypes`	String	List of authentication types required for all web pages (these are all context paths except /services). List of valid authentication types are: BASIC, PKI, SAML, and OIDC. Example: AUTH1	AUTH2	AUTH3
PKI	`BASIC`	true	Authentication Types for Endpoints	endpointAuthenticationTypes	String
List of authentication types required for all endpoints (these are context paths that start with /services). List of valid authentication types are: BASIC, PKI, SAML, and OIDC. Example: AUTH1	`AUTH2`	AUTH3	PKI	BASIC	true

Name	Id	Type	Description	Default Value	Required
Required Attributes	`requiredAttributes`	String	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

Name	Id	Type	Description	Default Value	Required
White Listed Contexts	`whiteListContexts`	String	List of contexts that do not use security. Note that sub-contexts to ones listed here also skip security, unless authentication types are provided for it. For example: if /foo is listed here, then /foo/bar also does not require any sort of authentication. However, if /foo is listed and /foo/bar has authentication types provided in the 'Authentication Types' field, then that more specific policy is used.	${org.codice.ddf.system.rootContext}/SecurityTokenService,${org.codice.ddf.system.rootContext}/internal/metrics,/proxy,${org.codice.ddf.system.rootContext}/saml,${org.codice.ddf.system.rootContext}/idp,/idp,${org.codice.ddf.system.rootContext}/platform/config/ui,/logout	true

Table 53. SAML Handler

Name	Id	Type	Description	Default Value
Authentication Context Class	`authContextClasses`	String	Authentication Context Classes that are considered acceptable means of authentication by the SAML handler.	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 54. 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

Name	Id	Type	Description	Default Value	Required
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
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

Name	Id	Type	Description	Default Value	Required
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
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

Name	Id	Type	Description	Default Value	Required
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 55. 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

Name	Id	Type	Description	Default Value	Required
Do Full Path Validation	`pathValidation`	Boolean	Validate the full certificate path. Uncheck to only validate the subject cert. (RFC5280 6.1)	true	true

Table 56. Security SOAP Guest Interceptor

Name	Id	Type	Description	Default Value	Required
Deny Guest Access	`guestAccessDenied`	Boolean	If set to true, no guest access is allowed via this guest interceptor. If set to false, this interceptor generates guest tokens for incoming requests that lack a WS-Security header.	false	false

Table 57. 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

Name	Id	Type	Description	Default Value
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
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

1.5. Solr Catalog Application Reference

DDF uses Solr for data storage, by default.

1.5.1. Solr Catalog Prerequisites

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

- Platform
- Catalog

1.5.2. 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 `catalog-solr-app` feature.

1.5.3. 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 58. Solr Catalog Available Configurations

Name	Property	Description
Solr Catalog Provider	ddf.catalog.solr.provider.SolrCatalogProvider	Solr Catalog Provider.

Table 59. 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

1.6. 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.

1.6.1. 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.

Installing the `offline-gazetteer-index` feature provides a small set of GeoNames data to use 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.

1.6.1.1. 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 60. 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 is 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 adds 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 adds cities to the index that have at least 1000, 5000, or 15000 people, respectively.
	  ◦ `all`, which downloads 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 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.

1.6.2. Standalone Solr Offline Gazetteer Feature

The Standalone Solr Offline Gazetteer is a reflection of the gazetteer data stored in the catalog but separated from other data. This allows the suggester to be separately rebuilt much quicker than for the entire catalog collection.

1.6.2.1. Installing Standalone Solr Offline Gazetteer

The Standalone Solr Offline Gazetteer is not installed by default but can be installed by running `feature:install catalog-solr-offline-gazetteer`. This installs:

- The plugin that intercepts gazetteer metacard creates/updates/deletes to the catalog collection (and

stores them in the standalone solr gazetteer collection)

- The gazetteer query service which registers the Query component that responds to requests from the UI gazetteer search box
- The `offline-solr-gazetteer:removeall` command which deletes all records in the gazetteer collection.
- The `offline-solr-gazetteer:synccatalog` command which syncs with the catalog and updates all records in the gazetteer collection to reflect it (or add them if they are not yet created)

1.6.2.2. Special Note Regarding Installation

If the Spatial Geocoding Offline Catalog bundle and the bundle using the Gazetteer query service (for example, Intrigue) are both already running, you must restart the bundles consuming the service (for example, Intrigue) in order to pick up the correct one.

1.6.2.3. Building the suggester index on Standalone Solr Offline Gazetteer

The suggester index is built when any of the other methods of building the catalog gazetteer are run, along with on initial install. So you can run `gazetteer:build-suggester-index` or `offline-solr-gazetteer:build-suggester-index` to build the suggester.

Another option is to send a build request via a solr client. An example of this is done through the Solr Dashboard after selecting the `gazetteer` collection and clicking `query`. Ensure that the Request-Handler (qt) is set to `/suggest` and then in the 'Extra Parameters' field add `suggest.build=true&suggest.dictionary=suggestPlace&suggest.q=bla`.

1.6.3. Spatial Prerequisites

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

- Platform
- Catalog

1.6.4. 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.

1.6.5. 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 61. Spatial Available Configurations

Name	Property	Description
Metacard to WFS Feature Map	org.codice.ddf.spatial.ogc.wfs.catalog.mapper.MetacardMapper	Metacard to WFS Feature Map.
Spatial KML Style Map Entry	org.codice.ddf.spatial.kml.style	Spatial KML Style Map Entry.
CSW Specification Profile Federated Source	Csw_Federated_Source	CSW Specification Profile Federated Source should be used when federating to an external CSW service.
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.
CSW Federation Profile Source	Csw_Federation_Profile_Source	DDF's full-fidelity CSW Federation Profile. Use this when federating to a DDF-based system.
WFS 1.1.0 Federated Source	Wfs_v1_1_0_Federated_Source	WFS 1.1.0 Federated Source.
Spatial KML Endpoint	org.codice.ddf.spatial.kml.endpoint.KmlEndpoint	Spatial KML Endpoint.
GMD CSW ISO Federated Source	Gmd_Csw_Federated_Source	CSW Federated Source using the Geographic MetaData (GMD) format (ISO 19115:2003).
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.

Table 62. 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

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

Table 63. 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. For example, 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, for example, http://example.com/styles#myStyle	null	true

Table 64. CSW Specification Profile Federated Source

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

Name	Id	Type	Description	Default Value	Required
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
Register for Events	`registerForEvents`	Boolean	Check to register for events from this source.	false	false
Authentication Type	`authenticationType`	String	Authentication type to use when federating.	saml	true
Username	`username`	String	Username for CSW Service. Required if basic authentication type is selected.	null	false

Name	Id	Type	Description	Default Value	Required
Password	`password`	Password	Password for CSW Service. Required if basic authentication type is selected.	null	false
OAuth Discovery Url	`oauthDiscoveryUrl`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	https://localhost:8443/auth/realms/master/.well-known/openid-configuration	false
OAuth Client ID	`oauthClientId`	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	`oauthClientSecret`	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	`oauthFlow`	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	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

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'.	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 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

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

Table 65. 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
Disable Sorting	`disableSorting`	Boolean	When selected, the system does 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
Authentication Type	`authenticationType`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	saml	true
Username	`username`	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	`password`	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false

Name	Id	Type	Description	Default Value	Required
Non Queryable Properties	`nonQueryableProperties`	String	Properties listed here are NOT queryable and any attempt to filter on these properties results 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 66. 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
Forced Feature Type	`forcedFeatureType`	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false

Name	Id	Type	Description	Default Value	Required
Disable Sorting	`disableSorting`	Boolean	When selected, the system does 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
Authentication Type	`authenticationType`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	saml	true
Username	`username`	String	Username for the WFS Service. Required if basic authentication type is selected.	null	false
Password	`password`	Password	Password for the WFS Service. Required if basic authentication type is selected.	null	false
Non Queryable Properties	`nonQueryableProperties`	String	Properties listed here are NOT queryable and any attempt to filter on these properties results 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 67. CSW Federation Profile Source

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

Name	Id	Type	Description	Default Value	Required
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
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
Authentication Type	`authenticationType`	String	Authentication type to use when federating.	saml	true
Username	`username`	String	Username for CSW Service. Required if basic authentication type is selected.	null	false

Name	Id	Type	Description	Default Value	Required
Password	`password`	String	Password for CSW Service. Required if basic authentication type is selected.	null	false
OAuth Discovery Url	`oauthDiscoveryUrl`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	https://localhost:8443/auth/realms/master/.well-known/openid-configuration	false
OAuth Client ID	`oauthClientId`	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	`oauthClientSecret`	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	`oauthFlow`	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	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 68. 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

Name	Id	Type	Description	Default Value	Required
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
Authentication Type	`authenticationType`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	saml	true
Username	`username`	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	`password`	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false
Non Queryable Properties	`nonQueryableProperties`	String	Properties listed here are NOT queryable and any attempt to filter on these properties results 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 69. Spatial KML Endpoint

Name	Id	Type	Description	Default Value	Required
Style Document	`styleUrl`	String	KML Document containing custom styling. This is served up by the KmlEndpoint. (for example, 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
Max Number of Results	`maxResults`	Integer	The maximum number of results that should be returned from each layer.	100	false

Table 70. 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
Authentication Type	`authenticationType`	String	Authentication type to use when federating.	saml	true
Username	`username`	String	Username for CSW Service. Required if basic authentication type is selected.		false
Password	`password`	Password	Password for CSW Service. Required if basic authentication type is selected.		false

Name	Id	Type	Description	Default Value	Required
OAuth Discovery Url	`oauthDiscoveryUrl`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	https://localhost:8443/auth/realms/master/.well-known/openid-configuration	false
OAuth Client ID	`oauthClientId`	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	`oauthClientSecret`	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	`oauthFlow`	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	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

Name	Id	Type	Description	Default Value	Required
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.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 71. 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

Name	Id	Type	Description	Default Value	Required
Register for Events	`registerForEvents`	Boolean	Check to register for events from this source.	false	false
Authentication Type	`authenticationType`	String	Authentication type to use when federating.	saml	true
Username	`username`	String	Username for CSW Service. Required if basic authentication type is selected.		false
Password	`password`	Password	Password for CSW Service. Required if basic authentication type is selected.		false
OAuth Discovery Url	`oauthDiscoveryUrl`	String	The Discovery URL where the metadata of the OAuth Provider protecting the source is hosted. Required if OAuth 2.0 authentication type is selected.	https://localhost:8443/auth/realms/master/.well-known/openid-configuration	false
OAuth Client ID	`oauthClientId`	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	`oauthClientSecret`	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	`oauthFlow`	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	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'.	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
Security Attributes	`securityAttributeStrings`	String	Security attributes for this source		true

Table 72. GeoCoder Plugin

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

1.7. 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.

1.7.1. Search UI Prerequisites

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

- Platform
- Catalog

1.7.2. 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.

1.7.3. 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 73. Search UI Available Configurations

Name	Property	Description
Catalog UI Search Workspace Query Monitor	org.codice.ddf.catalog.ui.query.monitor.impl.WorkspaceQueryService	Catalog UI Search Workspace Query Monitor.

Name	Property	Description
Search UI Redirect	org.codice.ddf.ui.searchui.filter.RedirectServlet	Search UI redirect.
Catalog UI Search Workspace Service	org.codice.ddf.catalog.ui.query.monitor.impl.WorkspaceServiceImpl	Catalog UI Search Workspace Service.
Facet Attribute Whitelist	org.codice.ddf.catalog.plugin.facetattributeaccess.facetwhitelist	Facet Attribute Whitelist
Catalog UI Search Transformer Blacklists	org.codice.ddf.catalog.ui.transformer.TransformerDescriptors	Catalog UI Search Transformer Blacklists.
Email Notifier	org.codice.ddf.catalog.ui.query.monitor.email.EmailNotifier	Email Notifier.
Catalog UI Search Workspace Security	org.codice.ddf.catalog.ui.security	Catalog UI Search Workspace Security.

Table 74. 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 queries for results from the interval to the time the query is sent out.	`1440`	true

Table 75. 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/simple/`	true

Table 76. 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 77. Facet Attribute Whitelist

Name	Id	Type	Description	Default Value	Required
Facet Attribute Whitelist	`facetAttributeWhitelist`	String	Attributes that can be faceted against through the catalog framework. Caution: Suggestion values are not protected by any security. Only choose attributes whose values are safe for all users to view.		false

Table 78. 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 do not show up as export actions in the UI. Every ID in this set removes 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 do not show up as export actions in the UI. Every ID in this set removes that transformer as an export option in the UI.	`[zipCompression]`	false

Table 79. 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 80. Catalog UI Search Workspace Security

Name	Id	Type	Description	Default Value	Required
System User Attribute	`systemUserAttribute`	String	The name of the attribute to determine the system user.	`http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role`	true
System User Attribute Value	`systemUserAttributeValue`	String	The value of the attribute to determine the system user.	`system-user`	true

2. Application Whitelists

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

2.1. 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`

2.2. 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`

2.3. 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

2.4. 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 `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`

2.5. Solr Catalog Whitelist

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

None.

2.6. Search UI Whitelist

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

None.

3. DDF Dependency List

This list of DDF dependencies is automatically generated:

3.1. DDF 2.31.4 Dependency List

- `ca.juliusdavies:not-yet-commons-ssl:jar:0.3.11`
- `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.connexta.arbitro:arbitro-core:jar:1.0.0`
- `com.fasterxml.jackson.core:jackson-annotations:jar:2.12.5`
- `com.fasterxml.jackson.core:jackson-core:jar:2.12.5`
- `com.fasterxml.jackson.core:jackson-databind:jar:2.12.5`
- `com.fasterxml.woodstox:woodstox-core:jar:6.2.6`
- `com.github.drapostolos:type-parser:jar:0.5.0`
- `com.github.jai-imageio:jai-imageio-core:jar:1.4.0`
- `com.github.jai-imageio:jai-imageio-jpeg2000:jar:1.3.1_CODICE_3`

- com.github.jknack:handlebars:jar:2.0.0
- com.github.lookfirst:sardine:jar:5.7
- com.github.luben:zstd-jni:jar:1.4.9-1
- com.github.openjson:openjson:jar:1.0.12
- com.google.code.findbugs:jsr305:jar:3.0.2
- com.google.code.gson:gson:jar:2.8.5
- com.google.crypto.tink:tink:jar:1.4.0
- com.google.guava:guava:jar:29.0-jre
- com.google.http-client:google-http-client:jar:1.22.0
- com.google.protobuf:protobuf-java:jar:3.12.4
- com.googlecode.json-simple:json-simple:jar:1.1.1
- com.googlecode.owasp-java-html-sanitizer:owasp-java-html-sanitizer:jar:20191001.1
- com.hazelcast:hazelcast:jar:3.12.10
- com.jhlabs:filters:jar:2.0.235-1
- com.mchange:c3p0:jar:0.9.5.5
- com.nimbusds:lang-tag:jar:1.4.4
- com.nimbusds:nimbus-jose-jwt:jar:8.14.1
- com.nimbusds:oauth2-oidc-sdk:jar:8.3
- com.rometools:rome-utils:jar:1.9.0
- com.rometools:rome:jar:1.9.0
- com.sparkjava:spark-core:jar:2.9.2
- com.thoughtworks.xstream:xstream:jar:1.4.18
- com.unboundid:unboundid-ldapsdk:jar:4.0.14
- com.xebialabs.restito:restito:jar:0.9.4
- com.zensols.jrtf:tutego.jrtf:jar:0.1.0
- commons-beanutils:commons-beanutils:jar:1.9.4
- commons-codec:commons-codec:jar:1.11
- commons-codec:commons-codec:jar:1.15
- 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:1.3.3

- commons-io:commons-io:jar:2.11.0
- 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.github.soc:ogc-tools-gml-jts:jar:1.1.90
- io.micrometer:micrometer-registry-prometheus:jar:1.5.1
- io.rest-assured:rest-assured:jar:3.3.0
- jakarta.activation:jakarta.activation-api:jar:1.2.2
- jakarta.mail:jakarta.mail-api:jar:1.6.5
- jakarta.xml.bind:jakarta.xml.bind-api:jar:2.3.3
- jakarta.xml.soap:jakarta.xml.soap-api:jar:1.4.2
- javax.activation:activation:jar:1.1.1
- javax.annotation:javax.annotation-api:jar:1.2
- javax.cache:cache-api:jar:1.1.1
- javax.inject:javax.inject:jar:1
- javax.measure:unit-api:jar:1.0
- 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
- javax.xml.stream:stax-api:jar:1.0-2
- joda-time:joda-time:jar:2.10.6
- junit:junit:jar:4.13.2
- net.bytebuddy:byte-buddy-agent:jar:1.10.18
- net.bytebuddy:byte-buddy:jar:1.10.18
- net.jodah:failsafe:jar:0.9.3
- net.jodah:failsafe:jar:0.9.5
- net.jodah:failsafe:jar:1.0.0

- net.minidev:accessors-smart:jar:2.4.7
- net.minidev:asm:jar:1.0.2
- net.minidev:json-smart:jar:2.3
- net.minidev:json-smart:jar:2.4.7
- net.sf.jwordnet:jwnl:jar:1.3.3
- net.sf.saxon:Saxon-HE:jar:9.6.0-4
- 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.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:1.1.8
- org.apache.aries.proxy:org.apache.aries.proxy:jar:1.1.10
- org.apache.aries:org.apache.aries.util:jar:1.1.3
- org.apache.calcite:calcite-core:jar:1.26.0
- org.apache.camel:camel-aws-s3:jar:3.8.0
- org.apache.camel:camel-base:jar:3.8.0
- org.apache.camel:camel-core:jar:3.8.0
- org.apache.camel:camel-http-common:jar:3.8.0
- org.apache.camel:camel-servlet:jar:3.8.0
- org.apache.camel:camel-support:jar:3.8.0
- org.apache.commons:commons-collections4:jar:4.1
- org.apache.commons:commons-compress:jar:1.21
- org.apache.commons:commons-csv:jar:1.4
- org.apache.commons:commons-exec:jar:1.3
- org.apache.commons:commons-lang3:jar:3.11
- org.apache.commons:commons-math3:jar:3.6.1
- org.apache.commons:commons-pool2:jar:2.5.0
- org.apache.commons:commons-text:jar:1.6
- org.apache.cxf:cxf-core:jar:3.4.4
- org.apache.cxf:cxf-rt-bindings-soap:jar:3.4.4

- org.apache.cxf:cxf-rt-features-logging:jar:3.4.4
- org.apache.cxf:cxf-rt-frontend-jaxrs:jar:3.4.4
- org.apache.cxf:cxf-rt-frontend-jaxws:jar:3.4.4
- org.apache.cxf:cxf-rt-rs-client:jar:3.4.4
- org.apache.cxf:cxf-rt-rs-security-jose-jaxrs:jar:3.4.4
- org.apache.cxf:cxf-rt-rs-security-jose:jar:3.4.4
- org.apache.cxf:cxf-rt-rs-security-oauth2:jar:3.4.4
- org.apache.cxf:cxf-rt-rs-security-sso-saml:jar:3.4.4
- org.apache.cxf:cxf-rt-rs-security-xml:jar:3.4.4
- org.apache.cxf:cxf-rt-transports-http:jar:3.4.1
- org.apache.cxf:cxf-rt-transports-http:jar:3.4.4
- org.apache.cxf:cxf-rt-ws-security:jar:3.4.4
- org.apache.felix:org.apache.felix.configadmin:jar:1.9.22
- org.apache.felix:org.apache.felix.fileinstall:jar:3.7.0
- org.apache.felix:org.apache.felix.framework:jar:6.0.5
- org.apache.felix:org.apache.felix.scr:jar:2.1.28
- org.apache.felix:org.apache.felix.utils:jar:1.11.8
- org.apache.httpcomponents:httpclient:jar:4.5.12
- org.apache.httpcomponents:httpcore:jar:4.4.13
- org.apache.httpcomponents:httpmime:jar:4.5.12
- org.apache.karaf.bundle:org.apache.karaf.bundle.core:jar:4.3.3
- org.apache.karaf.features:enterprise:xml:features:4.3.3
- org.apache.karaf.features:org.apache.karaf.features.core:jar:4.3.3
- org.apache.karaf.features:standard:xml:features:4.3.3
- org.apache.karaf.itests:common:jar:4.3.3
- org.apache.karaf.jaas:org.apache.karaf.jaas.boot:jar:4.3.3
- org.apache.karaf.jaas:org.apache.karaf.jaas.config:jar:4.3.3
- org.apache.karaf.jaas:org.apache.karaf.jaas.modules:jar:4.3.3
- org.apache.karaf.log:org.apache.karaf.log.core:jar:4.3.3
- org.apache.karaf.shell:org.apache.karaf.shell.console:jar:4.3.3
- org.apache.karaf.shell:org.apache.karaf.shell.core:jar:4.3.3
- org.apache.karaf.system:org.apache.karaf.system.core:jar:4.3.3

- org.apache.karaf:apache-karaf:tar.gz:4.3.3
- org.apache.karaf:apache-karaf:zip:4.3.3
- org.apache.karaf:karaf:pom:4.3.3
- org.apache.karaf:org.apache.karaf.client:jar:4.3.3
- org.apache.karaf:org.apache.karaf.util:jar:4.3.3
- org.apache.logging.log4j:log4j-1.2-api:jar:2.11.2
- org.apache.logging.log4j:log4j-api:jar:2.11.2
- org.apache.logging.log4j:log4j-api:jar:2.8.2
- org.apache.logging.log4j:log4j-core:jar:2.11.2
- org.apache.logging.log4j:log4j-slf4j-impl:jar:2.11.2
- org.apache.lucene:lucene-analyzers-common:jar:8.9.0
- org.apache.lucene:lucene-core:jar:3.0.2
- org.apache.lucene:lucene-core:jar:8.9.0
- org.apache.lucene:lucene-queryparser:jar:8.9.0
- org.apache.pdfbox:fontbox:jar:2.0.23
- org.apache.pdfbox:pdfbox-tools:jar:2.0.23
- org.apache.pdfbox:pdfbox:jar:2.0.23
- org.apache.poi:poi-ooxml-schemas:jar:4.1.2
- org.apache.poi:poi-ooxml:jar:4.1.2
- org.apache.poi:poi-scratchpad:jar:4.1.2
- org.apache.poi:poi:jar:4.1.2
- org.apache.servicemix.bundles:org.apache.servicemix.bundles.jaxb-runtime:jar:2.3.2_2
- org.apache.servicemix.bundles:org.apache.servicemix.bundles.jdom:jar:2.0.6_1
- org.apache.servicemix.bundles:org.apache.servicemix.bundles.poi:jar:4.1.2_1
- org.apache.servicemix.specs:org.apache.servicemix.specs.jaxb-api-2.3:jar:2.3_3
- org.apache.servicemix.specs:org.apache.servicemix.specs.jsr339-api-2.0:jar:2.6.0
- org.apache.shiro:shiro-core:jar:1.7.1
- org.apache.solr:solr-core:jar:8.9.0
- org.apache.solr:solr-solrj:jar:8.9.0
- org.apache.tika:tika-core:jar:1.26
- org.apache.tika:tika-parsers:jar:1.26
- org.apache.ws.commons.axiom:axiom-api:jar:1.2.14

- org.apache.ws.xmlschema:xmlschema-core:jar:2.2.3
- org.apache.wss4j:wss4j-ws-security-common:jar:2.3.0
- org.apache.wss4j:wss4j-ws-security-dom:jar:2.3.0
- org.apache.xmlbeans:xmlbeans:jar:3.1.0
- org.apache.zookeeper:zookeeper-jute:jar:3.6.2
- org.apache.zookeeper:zookeeper:jar:3.6.2
- org.assertj:assertj-core:jar:3.18.1
- org.awaitility:awaitility:jar:3.1.6
- org.bouncycastle:bcmail-jdk15on:jar:1.69
- org.bouncycastle:bcpkix-jdk15on:jar:1.69
- org.bouncycastle:bcprov-jdk15on:jar:1.69
- org.codehaus.woodstox:stax2-api:jar:4.2.1
- org.codice.countrycode:converter:jar:0.1.8
- 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:4.3.1_1
- org.codice.thirdparty:geotools-suite:jar:20.1_2
- org.codice.thirdparty:gt-api:jar:20.1_3
- org.codice.thirdparty:jts:jar:1.16.0_2
- 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:1.26.0_1
- org.codice.usng4j:usng4j-api:jar:0.4
- org.codice.usng4j:usng4j-impl:jar:0.4
- org.cryptomator:siv-mode:jar:1.2.2
- org.eclipse.jetty.websocket:websocket-servlet:jar:9.4.42.v20210604
- org.eclipse.jetty:jetty-http:jar:9.4.42.v20210604
- org.eclipse.jetty:jetty-security:jar:9.4.42.v20210604
- org.eclipse.jetty:jetty-server:jar:9.4.42.v20210604
- org.eclipse.jetty:jetty-servlet:jar:9.4.42.v20210604

- org.eclipse.jetty:jetty-util:jar:9.4.42.v20210604
- org.eclipse.platform:org.eclipse.osgi:jar:3.16.300
- 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:1.18
- org.geotools.xsd:gt-xsd-gml3:jar:28.2
- org.geotools:gt-cql:jar:20.2
- org.geotools:gt-epsg-hsql:jar:28.2
- org.geotools:gt-main:jar:28.2
- org.geotools:gt-api:jar:28.2
- org.geotools:gt-referencing:jar:28.2
- org.geotools:gt-shapefile:jar:28.2
- org.geotools:gt-xml:jar:28.2
- org.glassfish.grizzly:grizzly-framework:jar:2.3.30
- org.glassfish.grizzly:grizzly-http-server:jar:2.3.25
- org.glassfish.jaxb:jaxb-runtime:jar:2.3.3
- org.hamcrest:hamcrest-all:jar:1.3
- org.hibernate:hibernate-core:jar:5.4.24.Final
- org.hisrc.w3c:xlink-v_1_0:jar:1.4.0
- org.imgscalr:imgscalr-lib:jar:4.2
- org.jasypt:jasypt:jar:1.9.3
- org.jcodec:jcodec:jar:0.2.0_1
- org.joda:joda-convert:jar:1.2
- org.jolokia:jolokia-osgi:jar:1.6.2
- org.json:json:jar:20170516
- org.jsoup:jsoup:jar:1.11.3
- org.jvnet.jaxb2_commons:jaxb2-basics-runtime:jar:0.10.0
- org.jvnet.jaxb2_commons:jaxb2-basics-runtime:jar:0.11.0
- org.jvnet.jaxb2_commons:jaxb2-basics-runtime:jar:0.6.0

- org.jvnet.ogc:filter-v_1_1_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: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:wcs-v_1_0_0-schema:jar:1.1.0
- org.jvnet.ogc:wfs-v_1_1_0:jar:2.6.1
- org.la4j:la4j:jar:0.6.0
- org.locationtech.jts:jts-core:jar:1.19.0
- org.locationtech.spatial4j:spatial4j:jar:0.8
- org.mindrot:jbcrypt:jar:0.4
- org.mockito:mockito-core:jar:3.6.28
- org.objenesis:objenesis:jar:3.1
- org.opengis:geoapi:jar:3.0.1
- org.opensaml:opensaml-core:jar:3.4.6
- org.opensaml:opensaml-soap-impl:jar:3.4.6
- org.opensaml:opensaml-xmlsec-api:jar:3.4.6
- org.opensaml:opensaml-xmlsec-impl:jar:3.4.6
- org.ops4j.pax.exam:pax-exam-container-karaf:jar:4.13.4
- org.ops4j.pax.exam:pax-exam-features:xml:4.13.4
- org.ops4j.pax.exam:pax-exam-junit4:jar:4.13.4
- org.ops4j.pax.exam:pax-exam-link-mvn:jar:4.13.4
- org.ops4j.pax.exam:pax-exam:jar:4.13.4
- org.ops4j.pax.swissbox:pax-swissbox-extender:jar:1.8.4
- org.ops4j.pax.tinybundles:tinybundles:jar:3.0.0
- org.ops4j.pax.url:pax-url-aether:jar:2.6.7
- org.ops4j.pax.url:pax-url-wrap:jar:2.6.7
- org.ops4j.pax.web:pax-web-api:jar:7.3.19

- org.ops4j.pax.web:pax-web-jsp:jar:7.3.19
- org.osgi:org.osgi.enterprise:jar:5.0.0
- org.osgi:osgi.cmpn:jar:7.0.0
- org.osgi:osgi.core:jar:7.0.0
- org.ow2.asm:asm-analysis:jar:7.1
- org.ow2.asm:asm-tree:jar:7.1
- org.ow2.asm:asm:jar:7.1
- org.ow2.asm:asm:jar:9.2
- org.pac4j:pac4j-core:jar:4.0.1
- org.pac4j:pac4j-jwt:jar:4.0.1
- org.pac4j:pac4j-oauth:jar:4.0.1
- org.pac4j:pac4j-oidc:jar:4.0.1
- org.parboiled:parboiled-core:jar:1.3.1
- org.parboiled:parboiled-java:jar:1.3.1
- org.quartz-scheduler:quartz:jar:2.3.2
- org.slf4j:jcl-over-slf4j:jar:1.7.32
- org.slf4j:jul-to-slf4j:jar:1.7.24
- org.slf4j:slf4j-api:jar:1.7.32
- org.slf4j:slf4j-ext:jar:1.7.29
- org.slf4j:slf4j-log4j12:jar:1.7.32
- org.slf4j:slf4j-simple:jar:1.7.32
- org.springframework.ldap:spring-ldap-core:jar:2.3.3.RELEASE
- org.springframework.osgi:spring-osgi-core:jar:1.2.1
- org.springframework:spring-core:jar:5.2.13.RELEASE
- org.taktik:mpegts-streamer:jar:0.1.0_2
- org.xmlunit:xmlunit-matchers:jar:2.8.2
- xalan:serializer:jar:2.7.2
- xalan:xalan:jar:2.7.2
- xerces:xercesImpl:jar:2.12.0
- xml-apis:xml-apis:jar:1.4.01
- xpp3:xpp3:jar:1.1.4c

4. 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
- ☐ Restricting Access to Admin Console
- ☐ Restricting Access to Features, Apps, Services, and Configurations
- ☐ Remove Default Users
- ☐ Harden Solr
- ☐ Environment Hardening

Index

A

Admin, 3
Application Whitelists, 77

C

Catalog, 5
Catalog Whitelist, 80

H

Hardening Checklist, 97

J

Java Dependency List, 87

P

Packages Removed From Whitelist, 77
Platform, 29
Platform Whitelist, 85

S

Search UI, 74
Search UI Whitelist, 87
Security, 34
Security Whitelist, 85
Solr Catalog, 50
Solr Catalog Whitelist, 87
Spatial, 51