



# DDF Reference Guide

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# Application Reference

Installation and configuration details by application.

## Admin Application Reference

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

### Admin Application Prerequisites

None.

### Installing the Admin Application

Install the Admin application through the Admin Console.

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

### Configuring the Admin Application

To configure the Admin Application:

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

Table 1. Admin Available Configurations

Name	Property	Description
<a href="#">Admin Configuration Policy</a>	org.codice.ddf.admin.config.policy.AdminConfigPolicy	Admin Configuration Policy configurations.
<a href="#">Admin UI</a>	org.codice.admin.ui.configuration	Admin UI configurations.

Table 2. Admin Configuration Policy

Name	Id	Type	Description	Default Value	Required
Feature and App Permissions	<code>featurePolicies</code>	String	When enabled, the desired features or apps will only be modifiable and viewable to users with the set attributes. The entry should be the format of: <code>feature name/app name = "user attribute name=user attribute value"</code>		false
Configuration Permissions	<code>servicePolicies</code>	String	When enabled, the desired service will only be modifiable and viewable to users with the set attributes. The entry should be the format of: <code>configuration ID = "user attribute name=user attribute value"</code>	null	false

Table 3. Admin UI

Name	Id	Type	Description	Default Value	Required
Enable System Usage message	<code>systemUsageEnabled</code>	Boolean	Turns on a system usage message, which is shown when the Admin Application is opened.	false	true
System Usage Message Title	<code>systemUsageTitle</code>	String	A title for the system usage message when the application is opened.		true
System Usage Message	<code>systemUsageMessage</code>	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	<code>systemUsageOncePerSession</code>	Boolean	With this selected, the system usage message will be shown once for each browser session. Uncheck this to have the usage message appear every time the admin page is opened or refreshed.	true	true
Ignored Installer Applications	<code>disabledInstallerApps</code>	String	Comma delimited list (appName, appName2, ...appNameN) of applications that will be disabled in the installer.	admin-app, platform-app	null

## Catalog Application Reference

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

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

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

## Catalog Application Prerequisites

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

- Platform

## Installing the Catalog Application

Install the Catalog application through the Admin Console.

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

## Configuring the Catalog Application

To configure the Catalog Application:

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

Table 4. Catalog Available Configurations

Name	Property	Description
Catalog Federation Strategy	ddf.catalog.federation.impl.CachingFederationStrategy	Catalog Federation Strategy.
Catalog Backup Plugin	ddf.catalog.backup.CatalogBackupPlugin	Catalog Backup Plugin configurations.
Catalog Standard Framework	ddf.catalog.CatalogFrameworkImpl	Catalog Standard Framework configurations.
Confluence Federated Source	Confluence_Federated_Source	Confluence Federated Source.
Content Directory Monitor	org.codice.ddf.catalog.content.monitor.ContentDirectoryMonitor	Content Directory Monitor configurations.
Content File System Storage Provider	org.codice.ddf.catalog.content.impl.FileSystemStorageProvider	Content File System Storage Provider.
CSW Connected Source	Csw_Connected_Source	CSW Connected Source.

Name	Property	Description
<a href="#">Expiration Date Pre-Ingest Plugin</a>	org.codice.ddf.catalog.plugin.expiration.ExpirationDatePlugin	Catalog pre-ingest plugin to set an expiration date on metacards.
<a href="#">FTP Endpoint</a>	ddf.catalog.ftp.FtpServerManager	FTP Endpoint configurations.
<a href="#">Historian</a>	ddf.catalog.history.Historian	Enables versioning of both metacards and content.
<a href="#">Metacard Attribute Security Policy Plugin</a>	org.codice.ddf.catalog.security.policy.metacard.MetacardAttributeSecurityPolicyPlugin	Metacard Attribute Security Policy Plugin.
<a href="#">Catalog Metacard Ingest Network Plugin</a>	org.codice.ddf.catalog.plugin.metacard.MetacardIngestNetworkPlugin	Catalog Metacard Ingest Network Plugin.
<a href="#">Metacard Validation Filter Plugin</a>	ddf.catalog.metacard.validation.MetacardValidityFilterPlugin	Metacard Validation Filter Plugin.
<a href="#">Metacard Validation Marker Plugin</a>	ddf.catalog.metacard.validation.MetacardValidityMarkerPlugin	Metacard Validation Marker Plugin.
<a href="#">Metacard Backup File Storage Provider</a>	Metacard_File_Storage_Route	Enable data backup of metacards using a configurable transformer.
<a href="#">Resource Download Settings</a>	Metacard_S3_Storage_Route	Resource Download Configuration.
<a href="#">Catalog OpenSearch Federated Source</a>	OpenSearchSource	Catalog OpenSearch Federated Source.
<a href="#">Resource Download Settings</a>	ddf.catalog.resource.download.ReliableResourceDownloadManager	Resource Download configurations.
<a href="#">Schematron Validation Services</a>	ddf.services.schematron.SchemaTronValidationService	Schematron Validation Services configurations.
<a href="#">Security Audit Plugin</a>	org.codice.ddf.catalog.plugin.security.audit.SecurityAuditPlugin	Security Audit Plugin.
<a href="#">Tika Input Transformer</a>	ddf.catalog.transformer.input.tika.TikaInputTransformer	Tika Input Transformer.
<a href="#">URL Resource Reader</a>	ddf.catalog.resource.impl.URLResourceReader	URL Resource Reader
<a href="#">Video Thumbnail Plugin</a>	org.codice.ddf.catalog.content.plugin.video.VideoThumbnailPlugin	Video Thumbnail Plugin.
<a href="#">XML Attribute Security Policy Plugin</a>	org.codice.ddf.catalog.security.policy.xml.XmlAttributeSecurityPolicyPlugin	XML Attribute Security Policy Plugin.



Name	Property	Description
<a href="#">Xml Query Transformer</a>	ddf.catalog.transformer.xml.XmlResponseQueueTransformer	Xml Response Query Transformer.
<a href="#">PDF Input Transformer</a>	ddf.catalog.transformer.input.pdf.PdfInputTransformer	PDF Input Transformer configurations.
<a href="#">Catalog Preview</a>	org.codice.ddf.transformer.preview	Allow Preview to be Extracted From Metadata.
<a href="#">Catalog Policy Plugin</a>	org.codice.ddf.catalog.security.CatalogPolicy	Catalog Policy Plugin.
<a href="#">Resource URI Policy Plugin</a>	org.codice.ddf.catalog.security.ResourceUriPolicy	Resource URI Policy Plugin.
<a href="#">Status Source Poller Runner</a>	org.codice.ddf.catalog.sourcepoller.StatusSourcePollerRunner	Status Source Poller Runner.

Table 5. Catalog Federation Strategy

Name	Id	Type	Description	Default Value	Required
Maximum start index	<code>maxStartIndex</code>	Integer	Sets a limit on the number of results this sorted federation strategy can handle from each federated source. A large start index in conjunction with several federated sources could yield a large result set, which the sorted federation strategy has a limited ability to do. The admin can make a rough calculation to decide what maximum start index to use based on the amount of memory in the system, the amount of federated sources, the number of threads, and the expected amount of query results requested ( (average # of threads) * (maximum # of federated sources) * (maxStartIndex + maximumQueryResults) ) must fit into the allocated memory of the running distribution. This field will be removed when sorted federation strategy has the ability to sort a larger amount of results.	50000	true
Expiration Interval	<code>expirationIntervalInMinutes</code>	Long	Interval that Solr Cache checks for expired documents to remove.	10	true

Name	Id	Type	Description	Default Value	Required
Expiration Age	expirationAgeInMinutes	Long	The number of minutes a document will remain in the cache before it will expire. Default is 7 days.	10080	true
Query Result Cache Strategy	cacheStrategy	String	Strategy for caching query results. Valid entries are ALL, FEDERATED, and NONE.	ALL	true
Cache Remote Ingests	cacheRemoteIngests	Boolean	Cache remote ingest results	false	true

Table 6. Catalog Backup Plugin

Name	Id	Type	Description	Default Value	Required
Root backup directory path	rootBackupDir	String	Root backup directory for Metacards. A relative path is relative to <DDF_HOME>.	data/backup	true
Subdirectory levels	subDirLevels	Integer	Number of subdirectory levels to create. Two characters from the ID will be used to name each subdirectory level.	2	true

Table 7. Catalog Standard Framework

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

Table 8. Confluence Federated Source

Name	Property	Type	Description	Default Value	Required
Source Name	<code>shortname</code>	String			Yes
Confluence Rest URL	<code>endpointUrl</code>	String	The Confluence Rest API endpoint URL. Example: https://{FQDN}:{PORT}/rest/api/content		Yes
Authentication Type	<code>authenticationType</code>	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	<code>username</code>	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	<code>password</code>	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false
Include Page Contents In Results	<code>includePageContent</code>	Boolean	Flag indicating if Confluence page contents should be included in the returned results.	false	No
Include Archived Spaces	<code>includeArchivedSpaces</code>	Boolean	Flag indicating if archived confluence spaces should be included in search results.	false	No
Exclude Confluence Spaces	<code>excludeSpaces</code>	Boolean	Flag indicating if the list of Confluence Spaces should be excluded from searches instead of included.	false	No
Confluence Spaces	<code>confluenceSpaces</code>	String cardinality =1000	The confluence spaces to include/exclude from searches. If no spaces are specified, all visible spaces will be searched.		No

Name	Property	Type	Description	Default Value	Required
Attribute Overrides	additionalAttributes	String cardinality=100	Attribute Overrides - Optional: Metacard attribute overrides (Key-Value pairs) that can be set on the results coming from this source. If an attribute is specified here, it will overwrite the metacard's attribute that was created from the Confluence source. The format should be 'key=value'. The maximum allowed size of an attribute override is 65,535 bytes. All attributes in the <a href="#">catalog taxonomy tables</a> are injected into all metacards by default and can be overridden.		No
Availability Poll Interval	availabilityPollInterval	Long	Availability polling interval in milliseconds.	60000	No

Table 9. Catalog Content Directory Monitor

Name	Id	Type	Description	Default Value	Required
Directory Path	monitoredDirectoryPath	String	"Specifies the directory to be monitored, can be a filesystem path or webdav address (only supported for Monitor in place)"	false	true
Maximum Concurrent Files	numThreads	Integer	Specifies the maximum number of concurrent files to be processed within a directory (maximum of 8). If this number exceeds 8, 8 will be used in order to preserve system resources. Make sure that your system has enough memory to support the number of concurrent processing threads across all directory monitors.	1	true
ReadLock Time Interval	readLockIntervalMilliseconds	Integer	Specifies the time to wait (in milliseconds) before acquiring a lock on a file in the monitored directory. This interval is used for sleeping between attempts to acquire the read lock on a file to be ingested. The default value of 100 milliseconds is recommended.	100	true

Name	Id	Type	Description	Default Value	Required
Processing Mechanism	processingMechanism	String	Choose what happens to the content item after it is ingested. Delete will remove the original file after storing it in the content store. Move will store the item in the content store, and a copy under ./ingested, then remove the original file. (NOTE: this will double the amount of disk space used.) Monitor in place will index the file and serve it from its original location. If in place is used, then the URLResourceReader root resource directories configuration must be updated to allow downloading from the monitored directory (See <a href="#">URL Resource Reader</a> ).	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 will overwrite the metacard's attribute that was created from the content directory. The format should be 'key=value'. The maximum allowed size of an attribute override is 65,535 bytes. All attributes in the <a href="#">catalog taxonomy tables</a> are injected into all metacards by default and can be overridden.	null	false

Table 10. Content File System Storage Provider

Name	Id	Type	Description	Default Value	Required
Content Repository File Path	baseContentDirectory	String	Specifies the directory to use for the content repository. A shutdown of the server is necessary for this property to take effect. If a filepath is provided with directories that don't exist, File System Provider will attempt to create them.	<DDF_HOME>/data/content/store	true

Table 11. CSW Connected Source

Name	Id	Type	Description	Default Value	Required
Source ID	<b>id</b>	String	The unique name of the Source.	CSW	true
CSW URL	<b>cswUrl</b>	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec.	null	true
Event Service Address	<b>eventServiceAddress</b>	String	DDF Event Service endpoint. Do NOT include .wsdl or ?wsdl.	null	false
Register for Events	<b>registerForEvents</b>	Boolean	Check to register for events from this connected source.	false	false
Authentication Type	<b>authenticationType</b>	String	Authentication type to use when federating.	saml	true
Username	<b>username</b>	String	Username for CSW Service. Required if basic authentication type is selected.	null	false
Password	<b>password</b>	String	Password for CSW Service. Required if basic authentication type is selected.	null	false
Disable CN Check	<b>disableCnCheck</b>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Force Longitude/Latitude coordinate order	<b>isLonLatOrder</b>	Boolean	Force Longitude/Latitude coordinate order.	false	true
Use posList in LinearRing	<b>usePosList</b>	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	<code>metacardMappings</code>	String	Mapping of the Metacard Attribute names to their CSW property names. The format should be <code>'title=dc:title'</code> .	effective=created, created=dateSubmitted, modified=modified, thumbnail=references, content-type=type, id=identifier, resource-uri=source	false
Poll Interval	<code>pollInterval</code>	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Output Schema	<code>outputSchema</code>	String	Output Schema	<a href="http://www.opengis.net/cat/csw/2.0.2">http://www.opengis.net/cat/csw/2.0.2</a>	true
Query Type Name	<code>queryTypeName</code>	String	Qualified Name for the Query Type used in the CSW GetRecords request.	csw:Record	true
Query Type Namespace	<code>queryTypeNamespace</code>	String	Namespace prefix for the Query Type used in the CSW GetRecords request.	<a href="http://www.opengis.net/cat/csw/2.0.2">http://www.opengis.net/cat/csw/2.0.2</a>	true
Force CQL Text as the Query Language	<code>isCqlForced</code>	Boolean	Force CQL Text.	false	true
Forced Spatial Filter Type	<code>forceSpatialFilter</code>	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false

Table 12. Expiration Date Pre-Ingest Plugin

Name	Id	Type	Description	Default Value	Required
Overwrite If Empty	<code>overwriteIfBlank</code>	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	<code>overwriteIfExists</code>	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)	<code>offsetFromCreatedDate</code>	Integer	A metacard's new expiration date is calculated by adding this value (in days) to its created date.	30	true

Table 13. FTP Endpoint

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

Table 14. Historian

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

Table 15. Metacard Attribute Security Policy Plugin



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

Table 16. Catalog Metacard Ingest Network Plugin

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

Table 17. Metacard Validation Filter Plugin

Name	Id	Type	Description	Default Value	Required
Attribute map	<code>attributeMap</code>	String	Mapping of Metacard SECURITY attribute to user attribute. Users with this role will always receive metacards with errors and/or warnings.	invalid-state=local host-data-manager	false
Filter errors	<code>filterErrors</code>	Boolean	Sets whether metacards with validation errors are filtered for users without the configured user attribute.	true	false
Filter warnings	<code>filterWarnings</code>	Boolean	Sets whether metacards with validation warnings are filtered for users without the configured user attribute.	false	false

Table 18. Metacard Validation Marker Plugin

Name	Id	Type	Description	Default Value	Required
Enforced Validators	<code>enforcedMetacardValidators</code>	String	ID of Metacard Validator to enforce. Metacards that fail these validators will NOT be ingested.	false	Enforce errors
enforceErrors	<code>Boolean</code>	Sets whether validation errors are enforced. This prevents ingest if errors are present.	true	true	Enforce warnings

Table 19. Metacard Backup File Storage Provider

Name	Id	Type	Description	Default Value	Required
Keep Deleted Metacard	<code>keepDeletedMetacards</code>	Boolean	Should backups for deleted metacards be kept or removed.	false	true
Metacard Transformer Id	<code>metacardTransformerId</code>	String	ID of the metacard transformer to use to serialize metacard for backup.	metacard	true
Backup Invalid Metacards	<code>keepDeletedMetacards</code>	Boolean	Keep backups for metacards that fail validation with warnings or errors.	true	true
Metacard Backup Output Provider(s)	<code>metacardOutputProviderIds</code>	Comma delimited list of metacard output provider IDs.	Metacard Backup Provider IDs to use for this backup plugin.	fileStorage Provider	true

Table 20. Metacard Backup S3 Storage Provider

Name	Id	Type	Description	Default Value	Required
Keep Deleted Metacard	<code>keepDeletedMetacards</code>	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	<p>Template specifying the S3 object key for the metacard data. The template uses handlebars syntax.</p> <p>Use [] to reference dotted attributes e.g. {{[attribute.name]}}.</p> <p>If you wish to include date, you would use {{dateFormat created yyyy-MM-dd}}</p>	data/backup/metacard/{{substring id 0 3}}/{{substring id 3 6}}/{Metacard_S3_Storage_Route}.xml	true

Table 21. Catalog OpenSearch Federated Source

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

Name	Id	Type	Description	Default Value	Required
OpenSearch service URL	<code>endpointUrl</code>	String	The OpenSearch endpoint URL or DDF's OpenSearch endpoint (https://{FQDN}:{PORT}/services/catalog/query)	<code>\${org.codice.ddf.system.protocol}\${org.codice.ddf.system.hostname}:\${org.codice.ddf.system.port}\${org.codice.ddf.system.rootContext}/catalog/query</code>	true
Authentication Type	<code>authenticationType</code>	String	Authentication type to use when federating.	saml	true
Username	<code>username</code>	String	Username to use with HTTP Basic Authentication. Required if basic authentication type is selected.		false
Password	<code>password</code>	Password	Password to use with HTTP Basic Authentication. Required if basic authentication type is selected.		false
OAuth Discovery Url	<code>oauthDiscoveryUrl</code>	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.	<a href="https://localhost:8443/auth/realms/master/.well-known/openid-configuration">https://localhost:8443/auth/realms/master/.well-known/openid-configuration</a>	false
OAuth Client ID	<code>oauthClientId</code>	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	<code>oauthClientSecret</code>	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	<code>oauthFlow</code>	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	false

Name	Id	Type	Description	Default Value	Required
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
Connection Timeout	connectionTimeout	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	receiveTimeout	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true
Entry XML Element	markUpSet	String	XML Element from the Response Entry to transform into a Metacard.		false

Table 22. Resource Download Settings

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

Table 23. Schematron Validation Services

Name	Id	Type	Description	Default Value	Required
Ruleset Name	<b>id</b>	String	Give this ruleset a name	null	true
Root Namespace	<b>namespace</b>	String	The root namespace of the XML	null	true
Schematron File Names	<b>schematronFileNames</b>	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 <b>&lt;DDF_HOME&gt;/schematron</b> .	null	true

Table 24. Security Audit Plugin

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

Table 25. Tika Input Transformer

Name	Id	Type	Description	Default Value	Required
Use Resource Title	<b>useResourceTitleAsTitle</b>	Boolean	Use the resource's metadata to determine the metacard title. If this is not enabled, the metacard title will be the file name.	false	true

Table 26. URL Resource Reader

Name	Property	Type	Description	Default Value
Follow Server Redirects	<b>followRedirects</b>	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	<b>rootResourceDirectories</b>	String	List of root resource directories. A relative path is relative to <b>&lt;DDF_HOME&gt;</b> . Specifies the only directories the URLResourceReader has access to when attempting to download resources linked using file-based URLs.	data/products



Table 27. Video Thumbnail Plugin

Name	Property	Type	Description	Default Value	Required
Maximum video file size to process (Megabytes)	<code>maxFileSizeMB</code>	Long	Maximum video file size in Megabytes for which to create a thumbnail. Default is 120 Megabytes. Processing large videos may affect system performance.	120	false

Table 28. XML Attribute Security Policy Plugin

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

Table 29. Xml Query Transformer

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

Table 30. PDF Input Transformer

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

Table 31. Catalog Preview

Name	Id	Type	Description	Default Value	Required
Preview From Metadata	previewFromMetadata	Boolean	Allow Preview to be Extracted From Metadata.	false	true
Element Names to Preview	previewElements	String	Specify element names to preview from XML. Will take the text content of the first available element for preview. Note: This list will not be used unless Preview From Metadata is enabled.	text,TEXT	true

Table 32. Catalog Policy Plugin

Name	Id	Type	Description	Default Value	Required
Create Required Attributes	<code>createPermissions</code>	String	Roles/attributes required for the create operations. Example: role=role1,role2	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest</a>	true
Update Required Attributes	<code>updatePermissions</code>	String	Roles/attributes required for the update operation. Example: role=role1,role2	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest</a>	true
Delete Required Attributes	<code>deletePermissions</code>	String	Roles/attributes required for the delete operation. Example: role=role1,role2	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest</a>	true
Read Required Attributes	<code>readPermissions</code>	String	Roles/attributes required for the read operations (query and resource). Example: role=role1,role2	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest</a>	true

Table 33. Resource URI Policy Plugin

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

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

Table 34. Status Source Poller Runner


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

## GeoWebCache Application Reference

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

### WARNING

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

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

## GeoWebCache Application Prerequisites

None.

## Installing GeoWebCache

Install the GeoWebCache application through the Admin Console.

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

## Configuring GeoWebCache

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

### Adding GeoWebCache Layers

Add layers to the local cache:

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

Table 35. Add Layer

Name	Property	Type	Description	Default Value
Name		String	Unique name assigned.	
Mime Formats		String	List of mime formats used.	
URL		URI	URL location of layer to add.	

Name	Property	Type	Description	Default Value
WMS Layer Name		String	The name(s) of WMS layers that exist at the URL specified above. If no WMS Layer names are specified, GeoWebCache will look for the Layer Name specified in the name field. Otherwise, it will attempt to find all layer names added here and combine them into one layer.	

### Editing GeoWebCache Layers

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

### Removing GeoWebCache Layers

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

### Configuring GWC Disk Quota

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

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

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

Example `diskquota.xml`

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

See [Disk Quotas](#) for more information on configuration options for disk quota.

## Configuring the Standard Search UI for GeoWebCache

Add a new Imagery Provider in the Admin Console:

1. Navigate to the **Admin Console**.
2. Select **Configuration** tab.
3. Select **Standard Search UI** configuration.
4. Click the **Add** button next to **Imagery Providers**
5. Enter configuration for Imagery Provider in new textbox:
6. `{"type" "WMS" "url" "https://{FQDN}:{PORT}/geowebcache/service/wms" "layers" ["states"] "parameters" {"FORMAT" "image/png"} "alpha" 0.5}`
7. Set the Map Projection to `EPSG:900913` or `EPSG:4326`. (GeoWebCache supports either of these projections.)

### NOTE

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

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

## Platform Application Reference

The Platform application is considered to be a core application of the distribution. The Platform

application provides the fundamental building blocks that the distribution needs to run. These building blocks include subsets of:

- [Karaf](#) 
- [CXF](#) 
- [Camel](#) 

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

## Platform Application Prerequisites

None.

## Installing Platform

Install the Platform application through the Admin Console.

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

## Configuring the Platform Application

To configure the Platform Application:

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

Table 36. Platform Available Configurations

Name	Property	Description
<a href="#">MIME Custom Types</a>	DDF_Custom_Mime_Type_Resolver	DDF Custom Mime Types.
<a href="#">Logging Service</a>	org.codice.ddf.platform.logging.LoggingService	Logging Service configurations.
<a href="#">Metrics Reporting</a>	MetricsReporting	Metrics Reporting.
<a href="#">HTTP Response Security</a>	org.codice.ddf.security.response.filter.ResponseHeaderConfig	HTTP Response Security response configurations.
<a href="#">Email Service</a>	org.codice.ddf.platform.email.impl.SmtplibClientImpl	Email Service configurations.



Name	Property	Description
<a href="#">Landing Page</a>	org.codice.ddf.distribution.landingpage.properties	Starting page for users to interact with DDF.
<a href="#">Platform UI</a>	ddf.platform.ui.config	Platform UI configurations.
<a href="#">Platform Command Scheduler</a>	ddf.platform.scheduler.Command	Platform Command Scheduler.

Table 37. MIME Custom Types

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

Table 38. Logging Service

Name	Id	Type	Description	Default Value	Required
Max Log Events	<code>maxLogEvents</code>	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 39. Metrics Reporting

Name	Property	Type	Description	Default Value	Required
Metrics Max Threshold	<code>metricsMaxThreshold</code>	Double	Max value a data sample can be for any metric (used to suppress spike data on metrics graphs)	4000000000.0	true

Table 40. HTTP Response Security

Name	Id	Type	Description	Default Value	Required
Content Security Policy	<code>xContentSecurityPolicy</code>	String	Instructions for the client browser detailing which location and/or which type of resources may be loaded.		true

Name	Id	Type	Description	Default Value	Required
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 41. 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 42. Landing Page

Name	Id	Type	Description	Default Value	Required
Description	description	String	Specifies the description to display on the landing page.	As a common data layer, DDF provides secure enterprise-wide data access for both users and systems.	true
Phone Number	phone	String	Specifies the phone number to display on the landing page.		true
Email Address	email	String	Specifies the email address to display on the landing page.		true

Name	Id	Type	Description	Default Value	Required
External Web Site	<code>externalUrl</code>	String	Specifies the external web site URL to display on the landing page.		true
Announcements	<code>announcements</code>	String	Announcements that will be displayed on the landing page.	null	true
Branding Background	<code>background</code>	String	Specifies the landing page background color. Use html css colors or #rrggbb.		true
Branding Foreground	<code>foreground</code>	String	Specifies the landing page foreground color. Use html css colors or #rrggbb.		true
Branding Logo	<code>logo</code>	String	Specifies the landing page logo. Use a base64 encoded image.		true
Additional Links	<code>links</code>	String	Additional links to be displayed on the landing page. Use the format <text>,<link> (e.g. <code>example</code> , <code>http://www.example.com</code> ). Empty entries are ignored.		yes

Table 43. Platform UI Configuration

Name	Id	Type	Description	Default Value	Required
Enable System Usage Message	<code>systemUsageEnabled</code>	Boolean	Turns on a system usage message, which is shown when the Search Application is opened.	false	true
System Usage Message Title	<code>systemUsageTitle</code>	String	A title for the system usage Message when the application is opened.		false
System Usage Message	<code>systemUsageMessage</code>	String	A system usage message to be displayed to the user each time the user opens the application.		false
Show System Usage Message once per session	<code>systemUsageOncePerSession</code>	Boolean	With this selected, the system usage message will be shown once for each browser session. Uncheck this to have the usage message appear every time the search window is opened or refreshed.	true	true
Header	<code>header</code>	String	Specifies the header text to be rendered on all pages.		false

Name	Id	Type	Description	Default Value	Required
Footer	<code>footer</code>	String	Specifies the footer text to be rendered on all pages.		false
Text Color	<code>color</code>	String	Specifies the Text Color of the Header and Footer. Use html css colors or <code>#rrggbb</code> .		false
Background Color	<code>background</code>	String	Specifies the Background Color of the Header and Footer. Use html css colors or <code>#rrggbb</code> .		false
Session Timeout	<code>timeout</code>	Integer	Specifies the length of inactivity (in minutes) that will cause a user to be logged out automatically. This value must be 2 minutes or greater, as users are warned when only 1 minute remains. If a value of less than 2 minutes is used, the timeout is set to the default time of 15 minutes.	15	true

Table 44. Platform Command Scheduler

Name	Property	Type	Description	Default Value	Required
Command	<code>command</code>	String	Shell command to be used within the container. For example, <code>log:set DEBUG"&gt;</code>		true
Interval	<code>intervalString</code>	String	The Interval String for each execution. Based on the Interval Type, this will either be a Cron String or a Second Interval. (e.x. '0 0 0 1/1 * ? *' or '12')		true
Interval Type	<code>intervalType</code>	String	Interval Type	<code>cronString</code>	true

## Registry Application Reference

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

### Registry Prerequisites

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

- Catalog
- Admin

- Spatial
- Platform
- Security

## Installing Registry

Install the Registry application through the Admin Console.

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

## Customizing Registry Fields

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

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

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

Table 45. Field Properties

Property Key	Required	Property Value
key	yes	The string value that will be used to identify this field. Must be unique within field grouping array. This value is what will show up in the generated EBRIM xml.

Property Key	Required	Property Value
displayName	yes	The string name that will be displayed in the edit node dialog for this field
description	yes	A brief description of what the field represents or is used for. Shown when user hovers or click the question mark icon for the field.
value	no	The initial or default value of the field. For most cases this should be left as an empty array or string.
type	yes	Identifies what type of field this is. Value must be one of <b>string</b> , <b>date</b> , <b>number</b> , <b>boolean</b> , <b>point</b> , or <b>bounds</b>
required	no	Indicates if this field must be filled out. <b>Default is false</b> . If true an asterisk will be displayed next to the field name.
possibleValues	no	An array of values that could be used for this field. If <b>multiValued=true</b> this list will be used for suggestions for autocomplete. If <b>multiValued=false</b> this list will be used to populate a dropdown.
multiValued	no	Flag indicating if this field accepts multiple values or not. <b>Default is false</b> .
isSlot	no	Indicates that this field represents a slot value in the EBRIM document. If this is false the key must match a valid EBRIM attribute for the parent object. <b>Default is true</b> .
advanced	no	A flag indicating if this field should be placed under the <b>Advanced</b> section of the edit modal ui. <b>Default is false</b> .
regex	no	A regular expression for validating users input.

Property Key	Required	Property Value
regexMessage	no	A message to show the user if the regular expression test fails.
isGroup, constructTitle	N/A	These fields are used for nesting objects and should not be modified

## Configuring the Registry Application

To configure the Registry Application:

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

Table 46. Registry Available Configurations

Name	Property	Description
<a href="#">CSW Registry Store</a>	Csw_Registry_Store	Registry CSW Store.
<a href="#">Registry Policy Plugin</a>	org.codice.ddf.registry.policy.RegistryPolicyPlugin	Registry Policy Plugin.
<a href="#">Registry Source Configuration Handler</a>	Registry_Configuration_Event_Handler	Registry Source Configuration Handler configurations.

Table 47. CSW Registry Store

Name	Id	Type	Description	Default Value	Required
Registry ID	<b>id</b>	String	The unique name of the store	null	true
Registry Service URL	<b>cswUrl</b>	String	URL to the endpoint implementing CSW spec capable of returning ebrim formatted records	null	true
Authentication Type	<b>authenticationType</b>	String	Authentication type to use when federating.	saml	true
Username	<b>username</b>	String	Username for CSW Service. Required if basic authentication type is selected.	null	false
Password	<b>password</b>	Password	Password for CSW Service. Required if basic authentication type is selected.	null	false

Name	Id	Type	Description	Default Value	Required
OAuth Discovery Url	<code>oauthDiscoveryUrl</code>	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.	<a href="https://localhost:8443/auth/realms/master/.well-known/openid-configuration">https://localhost:8443/auth/realms/master/.well-known/openid-configuration</a>	false
OAuth Client ID	<code>oauthClientId</code>	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	<code>oauthClientSecret</code>	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	<code>oauthFlow</code>	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	false
Allow Push	<code>pushAllowed</code>	Boolean	Enable push (write) to this registry	true	true
Allow Pull	<code>pullAllowed</code>	Boolean	Enable pull (read) from this registry	true	true
Push Identity Node	<code>autoPush</code>	Boolean	Enable an automatic publish from the local identity node to this registry. Setting this to Off will have the effect of unpublishing the identity from this registry.	true	true

Table 48. Registry Policy Plugin

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



Name	Id	Type	Description	Default Value	Required
Registry Update Attributes	<code>updateAccessPolicyStrings</code>	String	Roles/attributes required for Update operations on registry entries. Example: {role=role1;type=type1}	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest</a>	true
Registry Delete Attributes	<code>deleteAccessPolicyStrings</code>	String	Roles/attributes required for Delete operations on registry entries. Example: {role=role1;type=type1}	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest</a>	true
Registry Read Attributes	<code>readAccessPolicyStrings</code>	String	Roles/attributes required for reading registry entries. Example: {role=role1;type=type1}	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=guest</a>	true
Registry Admin Attributes	<code>registryBypassPolicyStrings</code>	String	Roles/attributes required for an admin to bypass all filtering/access controls. Example: {role=role1;type=type1}	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=system-admin">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role=system-admin</a>	true
Disable Registry Write Access	<code>registryDisabled</code>	Boolean	Disables all write access to registry entries in the catalog. Only users with Registry Admin Attributes will be able to write registry entries	null	false
Entries are White List	<code>whitelist</code>	Boolean	A flag indicating whether or not the Registry Entry Ids represent a 'white list' (allowed - checked) or a 'black list' (blocked - unchecked) ids	null	false
Registry Entries Ids	<code>registryEntryIds</code>	String	List of registry entry ids to be used in the white/black list.	null	false

Table 49. Registry Source Configuration Handler

Name	Id	Type	Description	Default Value	Required
Url Binding Name	<code>urlBindingName</code>	String	The url name for communicating with the specific instance.	urlBindingName	true
BindingType to Factory PID	<code>bindingTypeFactoryPid</code>	String	Key/Value mappings of binding type to factory PID	CSW_2.0.2=Csw_Federated_Source,WFS_1.0.0=Wfs_v1_0_0_Federated_Source,OpenSearch_1.0.0=OpenSearchSource	true
Remove Configurations on Metacard Delete	<code>cleanupOnDelete</code>	Boolean	Flag used to determine if configurations should be deleted when the metacard is deleted.	false	true
Activate Configurations	<code>activateConfigurations</code>	Boolean	Flag used to determine if a configuration should be activated on creation	false	true
Preserve Active Configuration	<code>preserveActiveConfigurations</code>	Boolean	Flag used to determine if configurations should be preserved. If true will only allow auto activation on creation. If false auto activation will happen on updates as well. Only applicable if activateConfigurations is true.	true	true
Source Activation Priority Order	<code>sourceActivationPriorityOrder</code>	String	This is the priority list used to determine which source should be activated on creation	100CSW_2.0.2,WFS_1.0.0,OpenSearch_1.0.0	true

## Resource Management Application Reference

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

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

Components of the Resource Management application include:

**Resource Management Data Usage Tab**

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

**Resource Management Queries Tab**

View and cancel actively running queries.

**Resource Management Prerequisites**

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

- Platform
- Security
- Admin
- Catalog

**Installing Resource Management**

Install the Resource Management application through the Admin Console.

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

**Configuring the Resource Management Application**

To configure the Resource Management Application:

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

Table 50. Resource Management Available Configurations

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

Table 51. Data Usage

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

## Security Application Reference

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

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

### *Applications Included in Security*

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

## Security Prerequisites

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

- Platform

## Installing Security

Install the Security application through the Admin Console.

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

## Configuring the Security Application

To configure the Security Application:

1. Navigate to the Admin Console.

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

Table 52. Security Available Configurations

Name	Property	Description
<a href="#">Security STS LDAP and Roles Claims Handler</a>	Claims_Handler_Manager	STS Ldap and Roles Claims Handler Configuration.
<a href="#">Security SOAP Guest Interceptor</a>	org.codice.ddf.security.interceptor.GuestInterceptor	Security SOAP Guest Interceptor.
<a href="#">IdP Client</a>	org.codice.ddf.security.idp.client.IdpMetadata	IdP Client configurations.
<a href="#">Logout Page</a>	org.codice.ddf.security.idp.client.LogoutRequestService	Logout Page configurations.
<a href="#">OIDC Handler</a>	org.codice.ddf.security.handler.oidc.OidcHandler	OIDC Handler configurations.
<a href="#">Web Context Policy Manager</a>	org.codice.ddf.security.policy.context.impl.PolicyManager	Web Context Security Policies.
<a href="#">File Based Claims Handler</a>	org.codice.ddf.security.sts.claims.property.PropertyFileClaimsHandler	File Based Claims Handler.
<a href="#">Session</a>	org.codice.ddf.security.filter.login.Session	Session configurations.
<a href="#">IdP Handler</a>	org.codice.ddf.security.idp.client.IdpHandler	IdP Handler configurations.
<a href="#">Security AuthZ Realm</a>	ddf.security.pdp.realm.AuthzRealm	AuthZ Security configurations.
<a href="#">SAML NameID Policy</a>	ddf.security.service.SecurityManager	SAML NameID Policy.
<a href="#">Security STS Server</a>	ddf.security.sts	STS configurations.
<a href="#">Security STS Client</a>	ddf.security.sts.client.configuration	STS Client configurations.
<a href="#">Guest Claims Configuration</a>	ddf.security.guest.realm	Guest Claims configurations.
<a href="#">Security STS PKI Token Validator</a>	org.codice.ddf.security.validator.pki	STS PKI Token Validator configurations.

Table 53. Security STS LDAP and Roles Claims Handler

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

Name	Property	Type	Description	Default Value	Required
LDAP Membership Attribute	<code>memberNameAttribute</code>	String	Attribute used to designate the user's name as a member of the group in LDAP. Usually this is member or uniqueMember.	<code>member</code>	true
LDAP Base Group DN	<code>groupBaseDn</code>	String	Full LDAP path to where groups can be found.	<code>ou=groups\,dc=example\,dc=com</code>	true
Attribute Map File	<code>propertyFileLocation</code>	String	Location of the file which contains user attribute maps to use.	<code>&lt;INSTALL_HOME&gt;/etc/ws-security/attributeMap.properties</code>	true

Table 54. Security SOAP Guest Interceptor

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

Table 55. IdP Client

Name	Id	Type	Description	Default Value
IdP Metadata	<code>metadata</code>	String	Refer to metadata by HTTPS URL ( <a href="https://">https://</a> ), file URL (file:), or an XML block(<md:EntityDescriptor>...</md:EntityDescriptor>).	<a href="https://org.codice.ddf.system.hostname}:\${org.codice.ddf.system.httpsPort}/services/idp/login/metadata">https://org.codice.ddf.system.hostname}:\${org.codice.ddf.system.httpsPort}/services/idp/login/metadata</a>
Perform User-Agent Check	<code>userAgentCheck</code>	Boolean	If selected, this will allow clients that do not support ECP and are not browsers to fall back to PKI, BASIC, and potentially GUEST authentication, if enabled.	true

Table 56. Logout Page

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

Table 57. OIDC Handler

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



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

Table 58. Web Context Policy Manager

Name	Id	Type	Description	Default Value	Required
Context Traversal Depth	traversalDepth	Integer	Depth to which paths will be traversed. Any value greater than 500 will be set to 500.	20	true
Allow Guest Access	guestAccess	Boolean	Allow guest access to all web contexts. Required attributes can be used to restrict access to contexts from guest users.	true	true
Allow Session Storage	sessionAccess	Boolean	Allow for session cookies to be used. Note that the SAML and OIDC authentication types require session storage to be enabled.	true	true
Authentication Types	authenticationTypes	String	List of authentication types required for each context. List of default valid authentication types are: BASIC, PKI, SAML, and OIDC. Example: /context=AUTH1	AUTH2	AUTH3
/=SAML,/admin=SAML	BASIC	true	Required Attributes	requiredAttributes	String

Name	Id	Type	Description	Default Value	Required
List of attributes required for each Web Context. Example: /context={role=role1;type=type1}	<code>/=/admin={http://schemas.xmlsoap.org/ws/2005/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}</code>	true	White Listed Contexts	whiteListContexts	String

Table 59. File Based Claims Handler

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

Table 60. Session

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

Table 61. IdP Handler

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

Table 62. Security AuthZ Realm

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

Table 63. SAML NameID Policy

Name	Id	Type	Description	Default Value	Required
SAML NameID Policy	<code>usernameAttributeList</code>	String	List of attributes that are considered for replacing the username of the logged in user. If any of these attributes match any of the attributes within the SecurityAssertion, the value of the first matching attribute will be used as the username. (Does not apply when NameIDFormat is of the following: X509, persistent, kerberos or unspecified, and the username is not empty).	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier</a> , uid	true

Table 64. Security STS Server

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

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

Table 65. Security STS Client

Name	Id	Type	Description	Default Value	Required
SAML Assertion Type	<code>assertionType</code>	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.	<a href="http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0">http://docs.oasis-open.org/wss/oasis-wss-saml-token-profile-1.1#SAMLV2.0</a>	true
SAML Key Type	<code>keyType</code>	String	The key type to use with SAML. Most services require Bearer. Changing this value from the default could cause services to stop responding.	<a href="http://docs.oasis-open.org/ws-sx/ws-trust/200512/Bearer">http://docs.oasis-open.org/ws-sx/ws-trust/200512/Bearer</a>	true
SAML Key Size	<code>keySize</code>	String	The key size to use with SAML. The default key size is 256 and this is fine for most applications. Changing this value from the default could cause services to stop responding.	256	true

Name	Id	Type	Description	Default Value	Required
Use Key	<code>useKey</code>	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	<code>address</code>	String	STS WSDL Address	<code>\${org.codice.ddf.system.protocol}\${org.codice.ddf.system.hostname}:\${org.codice.ddf.system.port}\${org.codice.ddf.system.rootContext}/SecurityTokenService?wsdl</code>	true
STS Endpoint Name	<code>endpointName</code>	String	STS Endpoint Name.	<code>{http://docs.oasis-open.org/ws-sx/ws-trust/200512/}STS_Port</code>	false
STS Service Name	<code>serviceName</code>	String	STS Service Name.	<code>{http://docs.oasis-open.org/ws-sx/ws-trust/200512/}SecurityTokenService</code>	false
Signature Properties	<code>signatureProperties</code>	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.	<code>etc/ws-security/server/signature.properties</code>	true
Encryption Properties	<code>encryptionProperties</code>	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.	<code>etc/ws-security/server/encryption.properties</code>	true

Name	Id	Type	Description	Default Value	Required
STS Properties	tokenProperties	String	Path to STS crypto properties file. This path can be part of the classpath, relative to <DDF_HOME>, or an absolute path on the system.	etc/ws-security/server/signature.properties	true
Claims	claims	String	List of claims that should be requested by the STS Client.	<a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/nameidentifier</a> , <a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/emailaddress</a> , <a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/surname">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/surname</a> , <a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/givenname</a> , <a href="http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role">http://schemas.xmlsoap.org/ws/2005/05/identity/claims/role</a>	true

Table 66. Guest Claims Configuration

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

Table 67. Security STS PKI Token Validator

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

## Solr Catalog Application Reference

DDF uses [Solr](#) for data storage, by default.

### Solr Catalog Prerequisites

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

- Platform
- Catalog

### Installing Solr Catalog

Install the Solr Catalog application through the Admin Console.

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



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

## Configuring the Solr Catalog Application

To configure the Solr Catalog Application:

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

Table 68. Solr Catalog Available Configurations

Name	Property	Description
<a href="#">Solr Catalog Provider</a>	ddf.catalog.solr.provider.SolrCatalogProvider	Solr Catalog Provider.

Table 69. Solr Catalog Provider

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

## Spatial Application Reference

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

### Offline Gazetteer Service

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

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

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

## Spatial Gazetteer Console Commands

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

Table 70. Gazetteer Command Descriptions

Command	Description
<code>gazetteer:update</code>	<p>Adds new gazetteer metacards to the core catalog from a resource.</p> <p>The resource argument can be one of three types:</p> <ul style="list-style-type: none"><li>• a local file path to a <code>.txt</code>, <code>.zip</code>, or <code>.geo.json</code> GeoNames data file. If a path to a file ends in <code>.geo.json</code>, it will be processed as a geoJSON feature collection and imported as supplementary shape data for GeoNames entries.</li><li>• a URL to a <code>.txt</code> or <code>.zip</code> GeoNames data file. GeoJSON URLs are not supported.</li><li>• a keyword to automatically process a GeoNames file from <a href="http://download.geonames.org/export/dump">http://download.geonames.org/export/dump</a>. Valid keywords include<ul style="list-style-type: none"><li>◦ a country code, which will add the country as GeoNames metacards in the core catalog. The full list of country codes available can be found in <a href="http://download.geonames.org/export/dump/countryInfo.txt">http://download.geonames.org/export/dump/countryInfo.txt</a>.</li><li>◦ <code>cities1000</code>, <code>cities5000</code>, and <code>cities15000</code>, which will add cities to the index that have at least 1000, 5000, or 15000 people, respectively.</li><li>◦ <code>all</code>, which will download all of the current country codes. This process may take some time.</li></ul></li></ul> <p>The <code>-c</code> or <code>--create</code> flag can be used to clear out the existing gazetteer metacards before adding new entries.</p>
<code>build-suggester-index</code>	<p>Builds the Solr suggester index used for placename autocompletion in Intrigue when using the offline gazetteer. This index is built automatically whenever gazetteer metacards are created, updated, or deleted, but if those builds fail then this command can be used to attempt to build the index again.</p>

## Spatial Prerequisites

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

- Platform

- Catalog

## Installing Spatial

Install the Spatial application through the Admin Console.

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

## Configuring the Spatial Application

To configure the Spatial Application:

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

Table 71. Spatial Available Configurations

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

Name	Property	Description
<a href="#">WFS v1.0.0 Federated Source</a>	Wfs_v1_0_0_Federated_Source	WFS v1.0.0 Federated Source.
<a href="#">WFS 1.1.0 Federated Source</a>	Wfs_v1_1_0_Federated_Source	WFS 1.1.0 Federated Source.
<a href="#">WFS 2.0.0 Connected Source</a>	Wfs_v2_0_0_Connected_Source	WFS 2.0.0 Connected Source.
<a href="#">WFS 2.0.0 Federated Source</a>	Wfs_v2_0_0_Federated_Source	WFS 2.0.0 Federated Source.
<a href="#">Spatial KML Style Map Entry</a>	org.codice.ddf.spatial.kml.style	Spatial KML Style Map Entry.

Table 72. CSW Specification Profile Federated Source

Name	Id	Type	Description	Default Value	Required
Source ID	<b>id</b>	String	The unique name of the Source	null	true
CSW URL	<b>cswUrl</b>	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec	<code>\${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</code>	true
Event Service Address	<b>eventServiceAddress</b>	String	DDF Event Service endpoint.	<code>\${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</code>	false

Name	Id	Type	Description	Default Value	Required
Register for Events	<code>registerForEvents</code>	Boolean	Check to register for events from this source.	false	false
Authentication Type	<code>authenticationType</code>	String	Authentication type to use when federating.	saml	true
Username	<code>username</code>	String	Username for CSW Service. Required if basic authentication type is selected.	null	false
Password	<code>password</code>	Password	Password for CSW Service. Required if basic authentication type is selected.	null	false
OAuth Discovery Url	<code>oauthDiscoveryUrl</code>	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.	<a href="https://localhost:8443/auth/realms/master/.well-known/openid-configuration">https://localhost:8443/auth/realms/master/.well-known/openid-configuration</a>	false
OAuth Client ID	<code>oauthClientId</code>	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	<code>oauthClientSecret</code>	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	<code>oauthFlow</code>	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	false
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	<code>coordinateOrder</code>	String	Coordinate order that remote source expects and returns spatial data in	LON_LAT	true
Use posList in LinearRing	<code>usePosList</code>	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	<code>metacardMappings</code>	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	<code>pollInterval</code>	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out,in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out,in milliseconds.	60000	true
Output Schema	<code>outputSchema</code>	String	Output Schema	<a href="http://www.opengis.net/cat/csw/2.0.2">http://www.opengis.net/cat/csw/2.0.2</a>	true
Query Type Name	<code>queryTypeName</code>	String	Qualified Name for the Query Type used in the CSW GetRecords request	csw:Record	true
Query Type Namespace	<code>queryTypeNamespace</code>	String	Namespace for the Query Type used in the CSW GetRecords request	<a href="http://www.opengis.net/cat/csw/2.0.2">http://www.opengis.net/cat/csw/2.0.2</a>	true
Force CQL Text as the Query Language	<code>isCqlForced</code>	Boolean	Force CQL Text	false	true
Forced Spatial Filter Type	<code>forceSpatialFilter</code>	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Security Attributes	<code>securityAttributes</code>	String	Security attributes for this source	null	true

Table 73. CSW Federation Profile Source

Name	Id	Type	Description	Default Value	Required
Source ID	<b>id</b>	String	The unique name of the Source	CSW	true
CSW URL	<b>cswUrl</b>	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec	<code>\${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</code>	true
CSW Event Service Address	<b>eventServiceAddress</b>	String	CSW Event Service endpoint.	<code>\${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</code>	false
Register for Events	<b>registerForEvents</b>	Boolean	Check to register for events from this connected source.	false	false
Authentication Type	<b>authenticationType</b>	String	Authentication type to use when federating.	saml	true
Username	<b>username</b>	String	Username for CSW Service. Required if basic authentication type is selected.	null	false
Password	<b>password</b>	String	Password for CSW Service. Required if basic authentication type is selected.	null	false

Name	Id	Type	Description	Default Value	Required
OAuth Discovery Url	<code>oauthDiscoveryUrl</code>	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.	<a href="https://localhost:8443/auth/realms/master/.well-known/openid-configuration">https://localhost:8443/auth/realms/master/.well-known/openid-configuration</a>	false
OAuth Client ID	<code>oauthClientId</code>	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	<code>oauthClientSecret</code>	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	<code>oauthFlow</code>	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	false
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out,in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out,in milliseconds.	60000	true

Table 74. CSW Transactional Profile Federated Source

Name	Id	Type	Description	Default Value	Required
Source ID	<code>id</code>	String	The unique name of the Source		true



Name	Id	Type	Description	Default Value	Required
CSW URL	<code>cswUrl</code>	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec	<code>\${variable-name}org.unicode.ddf.system.protocol}\${variable-name}org.unicode.ddf.system.hostname}:\${variable-name}org.unicode.ddf.system.port}\${variable-name}org.unicode.ddf.system.rootContext}/csw</code>	true
Event Service Address	<code>eventServiceAddress</code>	String	Event Service endpoint.	<code>\${variable-name}org.unicode.ddf.system.protocol}\${variable-name}org.unicode.ddf.system.hostname}:\${variable-name}org.unicode.ddf.system.port}\${variable-name}org.unicode.ddf.system.rootContext}/csw/subscription</code>	false
Register for Events	<code>registerForEvents</code>	Boolean	Check to register for events from this source.	false	false
Authentication Type	<code>authenticationType</code>	String	Authentication type to use when federating.	saml	true

Name	Id	Type	Description	Default Value	Required
Username	<code>username</code>	String	Username for CSW Service. Required if basic authentication type is selected.		false
Password	<code>password</code>	Password	Password for CSW Service. Required if basic authentication type is selected.		false
OAuth Discovery Url	<code>oauthDiscoveryUrl</code>	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.	<a href="https://localhost:8443/auth/realms/master/.well-known/openid-configuration">https://localhost:8443/auth/realms/master/.well-known/openid-configuration</a>	false
OAuth Client ID	<code>oauthClientId</code>	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	<code>oauthClientSecret</code>	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	<code>oauthFlow</code>	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	false
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	<code>coordinateOrder</code>	String	Coordinate order expected and returned by remote source	LON_LAT	true
Use posList in LinearRing	<code>usePosList</code>	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	<a href="http://www.opengis.net/cat/csw/2.0.2">http://www.opengis.net/cat/csw/2.0.2</a>	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	securityAttributes	String	Security attributes for this source		true

Table 75. GeoCoder Plugin

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

Table 76. GMD CSW ISO Federated Source

Name	Id	Type	Description	Default Value	Required
Source ID	<code>id</code>	String	The unique name of the Source		true
CSW URL	<code>cswUrl</code>	String	URL to the endpoint implementing the Catalogue Service for Web (CSW) spec		true
Authentication Type	<code>authenticationType</code>	String	Authentication type to use when federating.	saml	true
Username	<code>username</code>	String	Username for CSW Service. Required if basic authentication type is selected.		false
Password	<code>password</code>	Password	Password for CSW Service. Required if basic authentication type is selected.		false
OAuth Discovery Url	<code>oauthDiscoveryUrl</code>	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.	<a href="https://localhost:8443/auth/realms/master/.well-known/openid-configuration">https://localhost:8443/auth/realms/master/.well-known/openid-configuration</a>	false
OAuth Client ID	<code>oauthClientId</code>	String	Client ID registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	ddf-client	false
OAuth Client Secret	<code>oauthClientSecret</code>	String	Client Secret registered with the OAuth provider. Required if OAuth 2.0 authentication type is selected.	secret	false
OAuth Flow	<code>oauthFlow</code>	String	The OAuth flow to use when federating. Required if OAuth 2.0 authentication type is selected.	code	false
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	<code>coordinateOrder</code>	String	Coordinate order expected and returned by remote source	LON_LAT	true
Use posList in LinearRing	<code>usePosList</code>	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:Id entifier,effective=apiso:Publication Date,created=apiso:CreationDate, modified=apiso:RevisionDate,title=apiso:AlternateTitle,AnyText=apiso:AnyText, ows:BoundingBox=apiso:BoundingBox,language=apiso:Language,language=apiso:ResourceLanguage,datatype=apiso:Type,description=apiso:Abstract,contact.point-of-contact-name=apiso:OrganisationName,topic.keyword=apiso:Subject,media.format=apiso:Format,modified=apiso:Modified	false
Poll Interval	pollInterval	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true

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

Table 77. Spatial KML Endpoint

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

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

Table 78. Metacard to WFS Feature Map

Name	Id	Type	Description	Default Value	Required
Feature Type	<code>featureType</code>	String	Feature Type. Format is {URI}local-name		true
Metacard Title to WFS Feature Property Mapping	<code>titleMapping</code>	String	Metacard Title to WFS Feature Property Mapping		false
Metacard Created Date to WFS Feature Property Mapping	<code>createdDateMapping</code>	String	Metacard Created Date to WFS Feature Property Mapping		false
Metacard Modified Date to WFS Feature Property Mapping	<code>modifiedDateMapping</code>	String	Metacard Modified Date to WFS Feature Property Mapping		false
Metacard Effective Date to WFS Feature Property Mapping	<code>effectiveDateMapping</code>	String	Metacard Effective Date to WFS Feature Property Mapping		false
Metacard Expiration Date to WFS Feature Property Mapping	<code>expirationDateMapping</code>	String	Metacard Expiration Date to WFS Feature Property Mapping		false

Name	Id	Type	Description	Default Value	Required
Metacard Resource URI to WFS Feature Property Mapping	resourceUriMapping	String	Metacard Resource URI to WFS Feature Property Mapping		false
Metacard Resource Size to WFS Feature Property Mapping	resourceSizeMapping	String	Metacard Resource Size to WFS Feature Property Mapping		false
The Units of the Feature Property that corresponds to the Metacard Resource Size	dataUnit	String	The Units of the Feature Property that corresponds to the Metacard Resource Size	B	true
Metacard Thumbnail to WFS Feature Property Mapping	thumbnailMapping	String	Metacard Thumbnail to WFS Feature Property Mapping		false
Metacard Geography to WFS Feature Property Mapping	geographyMapping	String	Metacard Geography to WFS Feature Property Mapping		false
Temporal Sort By Feature Property	sortByTemporalFeatureProperty	String	When Sorting Temporally, Sort By This Feature Property.		false
Relevance Sort By Feature Property	sortByRelevanceFeatureProperty	String	When Sorting By Relevance, Sort By This Feature Property.		false



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

Table 79. WFS v1.0.0 Connected Source

Name	Id	Type	Description	Default Value	Required
Source ID	<code>id</code>	String	The unique name of the Source	WFS	true
WFS URL	<code>wfsUrl</code>	String	URL to the endpoint implementing the Web Feature Service (WFS) spec	null	true
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Authentication Type	<code>authenticationType</code>	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	<code>username</code>	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	<code>password</code>	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false
Non Queryable Properties	<code>nonQueryableProperties</code>	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	<code>pollInterval</code>	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	<code>forceSpatialFilter</code>	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

Table 80. WFS v1.0.0 Federated Source

Name	Id	Type	Description	Default Value	Required
Source ID	<code>id</code>	String	The unique name of the Source	WFS_v1_0_0	true
WFS URL	<code>wfsUrl</code>	String	URL to the endpoint implementing the Web Feature Service (WFS) spec	null	true
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Authentication Type	<code>authenticationType</code>	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	<code>username</code>	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	<code>password</code>	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false
Forced Feature Type	<code>forcedFeatureType</code>	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Non Queryable Properties	<code>nonQueryableProperties</code>	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	<code>pollInterval</code>	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	<code>forceSpatialFilter</code>	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

Table 81. WFS v1.1.0 Federated Source

Name	Id	Type	Description	Default Value	Required
Source ID	<code>id</code>	String	The unique name of the Source	WFS	true
WFS URL	<code>wfsUrl</code>	String	URL to the endpoint implementing the Web Feature Service (WFS) spec	null	true
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	<code>coordinateOrder</code>	String	Coordinate order that remote source expects and returns spatial data in	LAT_LON	true
Forced Feature Type	<code>forcedFeatureType</code>	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Authentication Type	<code>authenticationType</code>	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	<code>username</code>	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	<code>password</code>	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false
Non Queryable Properties	<code>nonQueryableProperties</code>	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	<code>pollInterval</code>	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	<code>forceSpatialFilter</code>	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

Name	Id	Type	Description	Default Value	Required
SRS Name	<code>srsName</code>	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 82. WFS 2.0.0 Connected Source

Name	Id	Type	Description	Default Value	Required
Source ID	<code>id</code>	String	The unique name of the Source	WFS	true
WFS URL	<code>wfsUrl</code>	String	URL to the endpoint implementing the Web Feature Service (WFS) 2.0.0 spec	null	true
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Force Longitude/Latitude coordinate order	<code>isLonLatOrder</code>	Boolean	Force Longitude/Latitude coordinate order	false	true
Disable Sorting	<code>disableSorting</code>	Boolean	When selected, the system will not specify sort criteria with the query. This should only be used if the remote source is unable to handle sorting even when the capabilities states 'ImplementsSorting' is supported.	false	true
Authentication Type	<code>authenticationType</code>	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	<code>username</code>	String	Username for WFS Service. Required if basic authentication type is selected.	null	false
Password	<code>password</code>	Password	Password for WFS Service. Required if basic authentication type is selected.	null	false

Name	Id	Type	Description	Default Value	Required
Non Queryable Properties	<code>nonQueryableProperties</code>	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	<code>pollInterval</code>	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	<code>forceSpatialFilter</code>	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

Table 83. WFS 2.0.0 Federated Source

Name	Id	Type	Description	Default Value	Required
Source ID	<code>id</code>	String	The unique name of the Source	WFS_v2_0_0	true
WFS URL	<code>wfsUrl</code>	String	URL to the endpoint implementing the Web Feature Service (WFS) 2.0.0 spec	null	true
Disable CN Check	<code>disableCnCheck</code>	Boolean	Disable CN check for the server certificate. This should only be used when testing.	false	true
Coordinate Order	<code>coordinateOrder</code>	String	Coordinate order that remote source expects and returns spatial data in	LAT_LON	true
Forced Feature Type	<code>forcedFeatureType</code>	String	Force only a specific FeatureType to be queried instead of all featureTypes	null	false
Disable Sorting	<code>disableSorting</code>	Boolean	When selected, the system will not specify sort criteria with the query. This should only be used if the remote source is unable to handle sorting even when the capabilities states 'ImplementsSorting' is supported.	false	true

Name	Id	Type	Description	Default Value	Required
Authentication Type	<code>authenticationType</code>	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	<code>username</code>	String	Username for the WFS Service. Required if basic authentication type is selected.	null	false
Password	<code>password</code>	Password	Password for the WFS Service. Required if basic authentication type is selected.	null	false
Non Queryable Properties	<code>nonQueryableProperties</code>	String	Properties listed here will NOT be queryable and any attempt to filter on these properties will result in an exception.	null	false
Poll Interval	<code>pollInterval</code>	Integer	Poll Interval to Check if the Source is available (in minutes - minimum 1).	5	true
Forced Spatial Filter Type	<code>forceSpatialFilter</code>	String	Force only the selected Spatial Filter Type as the only available Spatial Filter.	NO_FILTER	false
Connection Timeout	<code>connectionTimeout</code>	Integer	Amount of time to attempt to establish a connection before timing out, in milliseconds.	30000	true
Receive Timeout	<code>receiveTimeout</code>	Integer	Amount of time to wait for a response before timing out, in milliseconds.	60000	true

Table 84. Spatial KML Style Map Entry

Name	Id	Type	Description	Default Value	Required
Attribute Name	<code>attributeName</code>	String	The name of the Metacard Attribute to match against. e.g. title, metadata-content-type, etc	null	true
Attribute Value	<code>attributeValue</code>	String	The value of the Metacard Attribute.	null	true
Style URL	<code>styleUrl</code>	String	The full qualified URL to the KML Style. e.g. <a href="http://example.com/styles/myStyle">http://example.com/styles/myStyle</a>	null	true

# Search UI Application Reference

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

## Search UI Prerequisites

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

- Platform
- Catalog

## Installing Search UI

Install the Search UI application through the Admin Console.

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

## Configuring the Search UI Application

To configure the Search UI Application:

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

Table 85. Search UI Available Configurations

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

Name	Property	Description
<a href="#">Catalog UI Search Workspace Service</a>	org.codice.ddf.catalog.ui.query.monitor.impl.WorkspaceServiceImpl	Catalog UI Search Workspace Service.
<a href="#">Catalog UI Search</a>	org.codice.ddf.catalog.ui	Catalog UI Search.
<a href="#">Catalog UI Search Attribute Aliases</a>	org.codice.ddf.catalog.ui.attribute.aliases	Catalog UI Search Attribute Aliases.
<a href="#">Catalog UI Search Attribute Descriptions</a>	org.codice.ddf.catalog.ui.attribute.descriptions	Catalog UI Search Attribute Descriptions.
<a href="#">Catalog UI Search Hidden Attributes</a>	org.codice.ddf.catalog.ui.attribute.hidden	Catalog UI Search Hidden Attributes.
<a href="#">Catalog UI Search Theme</a>	org.codice.ddf.catalog.ui.theme	Catalog UI Search Theme.
<a href="#">Catalog UI Search Metacard Type Whitelist</a>	org.codice.ddf.catalog.ui.whitelist	Catalog UI Search Metacard Type Whitelist.
<a href="#">Catalog UI Search Workspace Security</a>	org.codice.ddf.catalog.ui.security	Catalog UI Search Workspace Security.

Table 86. Catalog UI Search Email Notifier

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

Table 87. 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 will be safe for all users to view.		false

Table 88. 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.	<code>\${org.codic.e.ddf.external.context}/search/catalog/</code>	true

Table 89. Catalog UI Search Transformer Blacklists

Name	Id	Type	Description	Default Value	Required
Metacard Transformer Blacklist	blackListedMetacardTransformerIds	String	The IDs of all Metacard Transformers services that will not show up as export actions in the UI. Every ID in this set will remove that transformer as an export option in the UI.	<code>[]</code>	false
Query Response Transformer Blacklist	blackListedQueryResponseTransformerIds	String	The IDs of all Query Response Transformers services that will not show up as export actions in the UI. Every ID in this set will remove that transformer as an export option in the UI.	<code>[zipCompression]</code>	false

Table 90. Catalog UI Search Workspace Query Monitor

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

Table 91. 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 92. Catalog UI Search

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

Name	Id	Type	Description	Default Value	Required
Imagery Providers	<code>imageryProviders</code>	String	<p>List of imagery providers to use.</p> <p>The valid types are:</p> <ul style="list-style-type: none"> <li>• <b>OSM</b> (OpenStreetMap)</li> <li>• <b>AGM</b> (ArcGisMap)</li> <li>• <b>BM</b> (BingMap)</li> <li>• <b>WMS</b> (WebMapService)</li> <li>• <b>WMT</b> (WebMapTile)</li> <li>• <b>TMS</b> (TileMapService)</li> <li>• <b>GE</b> (GoogleEarth)</li> </ul> <p><b>OSM example:</b> <code>{"name": "Example OSM", "show": true, "type": "OSM", "url": "http://a.tile.openstreetmap.org", "fileExtension": "png", "order": 0, "alpha": 1, "proxyEnabled": false}</code></p> <p><b>AGM example:</b> <code>{"name": "Example AGM", "show": true, "type": "AGM", "url": "https://server.arcgisonline.com/arcgis/rest/services/World_Imagery/MapServer", "order": 0, "proxyEnabled": false, "alpha": 1}</code></p> <p><b>WMS example:</b> <code>{"name": "Example WMS", "show": true, "type": "WMS", "url": "http://suite.opengeo.org/geoserver/gwc/service/wms", "layers": ["opengeo:countries"], "parameters": {"FORMAT": "image/png", "VERSION": "1.1.1"}, "order": 0, "alpha": 1, "proxyEnabled": false}</code></p> <p><b>WMT example:</b> <code>{ "parameters": { "transparent": false, "format": "image/jpeg" }, "name": "Example WMT", "tileMatrixLabels": [ "EPSG:4326:0", "EPSG:4326:1", "EPSG:4326:2", "EPSG:4326:3", "EPSG:4326:4", "EPSG:4326:5", "EPSG:4326:6", "EPSG:4326:7", "EPSG:4326:8", "EPSG:4326:9", "EPSG:4326:10", "EPSG:4326:11", "EPSG:4326:12", "EPSG:4326:13", "EPSG:4326:14", "EPSG:4326:15",</code></p>		false

Name	Id	Type	Description	Default Value	Required
Terrain Provider	terrainProvider	String	<p>Terrain provider to use for height data. Valid types are: <b>CT</b> (CesiumTerrain), <b>AGS</b> (ArcGisImageServer), and <b>VRW</b> (VRTheWorld).</p> <p>Example: {"type": "CT", "url": "http://example.com"}</p>	{ "type": "CT", "url": "http://assets.agi.com/stk-terrain/tiles" }	false
Default Layout	defaultLayout	String	<p>The default UI layout and visualization configuration used in the Catalog UI. See <a href="http://golden-layout.com/docs/Config.html">http://golden-layout.com/docs/Config.html</a> for more information. Example:</p> <pre>[{"type": "stack", "content": [{"type": "component", "component": "cesium", "componentName": "cesium", "title": "3D Map"}, {"type": "component", "component": "inspector", "componentName": "inspector", "title": "Inspector"}]}</pre>	<pre>[{"type": "stack", "content": [{"type": "component", "component": "cesium", "componentName": "cesium", "title": "3D Map"}, {"type": "component", "component": "inspector", "componentName": "inspector", "title": "Inspector"}]}</pre>	true

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

Name	Id	Type	Description	Default Value	Required
Visualizations	<code>visualizations</code>	String	Visualizations that should be recognized by golden layout. Example [{"name": "openlayers", "title": "2D Map", "icon": "map"}, {"name": "cesium", "title": "3D Map", "icon": "globe"}, {"name": "inspector", "title": "Inspector", "icon": "info"}, {"name": "histogram", "title": "Histogram", "icon": "bar-chart"}, {"name": "table", "title": "Table", "icon": "table"}]	[{"name": "openlayers", "title": "2D Map", "icon": "map"}, {"name": "cesium", "title": "3D Map", "icon": "globe"}, {"name": "inspector", "title": "Inspector", "icon": "info"}, {"name": "histogram", "title": "Histogram", "icon": "bar-chart"}, {"name": "table", "title": "Table", "icon": "table"}]	false
List Templates	<code>listTemplates</code>	String	Templates for users to quickly create lists that already specify an icon and a filter. Example: {"id": "Pizza Deliveries", "list.icon": "tasks", "list.cql": "("anyText"ILIKE 'pizza')"}]		false
Map Projection	<code>projection</code>	String	Projection of imagery providers (e.g. EPSG:3857, EPSG:4326).	EPSG:4326	false
Bing Maps Key	<code>bingKey</code>	String	Bing Maps API key. This should only be set if you are using Bing Maps Imagery or Terrain Providers.		false
Connection Timeout	<code>timeout</code>	Integer	Specifies the client-side connection timeout in milliseconds.	300000	false
Source Poll Interval	<code>sourcePollInterval</code>	Integer	Specifies the interval to poll for sources in milliseconds.	60000	true
Show Sign In	<code>signInEnabled</code>	Boolean	Allow Sign In to Search UI and welcome notice. Enable this if the Search UI is protected.	true	false
Show Tasks	<code>taskEnabled</code>	Boolean	Show task menu area for long running actions.	false	false
Show Gazetteer	<code>gazetteerEnabled</code>	Boolean	Show gazetteer for searching place names.	true	false

Name	Id	Type	Description	Default Value	Required
Use Online Gazetteer	onlineGazetteerEnabled	Boolean	Should the online gazetteer be used? If unchecked a local gazetteer service will be used. This only applies to the search gazetteer in Intrigue.	true	false
Show Uploader	ingestEnabled	Boolean	Show upload menu for adding new record.	true	false
Use External Authentication	externalAuthenticationEnabled	Boolean	Use an external authentication point, such as IdP.	false	false
Enable Cache	cacheEnabled	Boolean	Locally cached results will be returned in search results.	true	true
Allow Editing	editingEnabled	Boolean	Allow editing capability to be visible in the UI.	true	true
Enable Web Sockets	webSocketsEnabled	Boolean	Enables use of Web Sockets	true	false
Enable Local Catalog	localCatalogEnabled	Boolean	Enables queries to the local catalog.	true	true
Enable Historical Search	historicalSearchEnabled	Boolean	Enable searching for historical metacards.	true	true
Enable Archive Search	archiveSearchEnabled	Boolean	Enable searching for archived metacards.	true	true
Enable Query Feedback	queryFeedbackEnabled	Boolean	Enable the query comments option.	true	true
Enable Experimental Features	experimentalEnabled	Boolean	WARNING: Enables experimental features in the UI. This allows users to preview upcoming features.	false	true
Show Relevance Scores	relevanceScoresEnabled	Boolean	Toggle the display of relevance scores of search results.	false	false
Relevance Score Precision	relevancePrecision	Integer	Set the number of digits to display in for each relevance score. The default is 5 (i.e. 12.345).	5	false
Show Logo in Title Bar	logoEnabled	Boolean	Toggles the visibility of the logo in the menu bar.	false	false

Name	Id	Type	Description	Default Value	Required
Enable Unknown Error Box	unknownErrorBoxEnabled	Boolean	Enable Unknown Error Box visibility.	true	false
Enable Metacard Preview	metacardPreviewEnabled	Boolean	Enable Metacard Preview in the Inspector.	true	true
Enable Spellcheck	spellcheckEnabled	Boolean	Enable spellcheck for searches.	false	false
Enable Similar Word Matching	phoneticsEnabled	Boolean	Enable phonetic and synonym matching for searches.	false	false
Basic Search Temporal Selections	basicSearchTemporalSelectionDefault	String	Enable Basic Search Temporal Selections.	<ul style="list-style-type: none"> <li>• created</li> <li>• effective</li> <li>• modified</li> <li>• metacard.created</li> <li>• metacard.modified</li> </ul>	true
Basic Search Match Type Metacard Attribute	basicSearchMatchType	String	Metacard attribute used for Basic Search Type Match.	datatype	true
Type Name Mapping	typeNameMapping	String	Mapping of display names to content types in the form name=type.		false

Name	Id	Type	Description	Default Value	Required
Read Only Metacard Attributes	readOnly	String	List of metacard attributes that are read-only. NOTE: the provided values will be evaluated as JavaScript regular expressions when matched against metacard attributes.	<ul style="list-style-type: none"> <li>• ^checksum\$</li> <li>• ^checksum-algorithm\$</li> <li>• ^id\$</li> <li>• ^resource-downloaded-url\$</li> <li>• ^resource-uri\$</li> <li>• ^resource.derived-uri\$</li> <li>• ^resource.derived-downloaded-url\$</li> <li>• ^modified\$</li> <li>• ^metacard-tags\$</li> <li>• ^metacard\$</li> <li>• ^metacard-type\$</li> <li>• ^source-id\$</li> <li>• ^point-of-contact\$</li> <li>• ^metacard.</li> <li>• ^version.</li> <li>• ^validation.</li> </ul>	false



Name	Id	Type	Description	Default Value	Required
Summary Metacard Attributes	<code>summaryShow</code>	String	List of metacard attributes to display in the summary view.	<ul style="list-style-type: none"> <li><code>created</code></li> <li><code>modified</code></li> <li><code>thumbnail</code></li> </ul>	false
Result Preview Metacard Attributes	<code>resultShow</code>	String	List of metacard attributes to display in the result preview.		false
Query Schedule Frequencies	<code>scheduleFrequencyList</code>	Long	Custom list of schedule frequencies in seconds. This will override the frequency list in the query schedule tab. Leave this empty to use the frequency list on the Catalog UI.	<ul style="list-style-type: none"> <li><code>1800</code></li> <li><code>3600</code></li> <li><code>7200</code></li> <li><code>14400</code></li> <li><code>28800</code></li> <li><code>57600</code></li> <li><code>86400</code></li> </ul>	true
Auto Merge Time	<code>autoMergeTime</code>	Integer	Specifies the interval during which new results can be merged automatically. This is the time allowed since last merge (in milliseconds).	<code>1000</code>	true
Query Feedback Email Subject Template	<code>queryFeedbackEmailSubjectTemplate</code>	String	See <a href="#">Configuring Query Feedback for Intrigue</a> for more details about Query Feedback templates.	Query Feedback from <code>{{username}}</code>	true

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

Name	Id	Type	Description	Default Value	Required
Maximum Endpoint Upload Size	<code>maximumUploadSize</code>	Integer	The maximum size (in bytes) to allow per client when receiving a POST/PATCH/PUT. Note: This does not affect product upload size, just the maximum size allowed for calls from Intrigue.	<code>1048576</code>	true
Map Home	<code>mapHome</code>	String	Specifies the default home view for the map by bounding box. The format is "West, South, East, North", where North, East, South, and West are coordinates in degrees. An example is: <code>-124, 60, -100, 40</code> .		false
UI Branding Name	<code>uiName</code>	String	Specifies a custom UI branding name in the UI.	<code>Intrigue</code>	true
Upload Editor: Attribute Configuration	<code>attributeEnumMap</code>	String	<p>List of attributes to show in the upload editor. See <a href="#">Catalog Taxonomy</a> for a list of supported attributes.</p> <p>Supported entry syntax:</p> <ol style="list-style-type: none"> <li><code>attribute</code></li> <li><code>attribute=value1,value2,...</code></li> </ol> <p>Using the first syntax, the editor will attempt to determine the appropriate control to display based on the attribute datatype. The second syntax will force the editor to use a dropdown selector populated with the provided values. This is intended for use with String datatypes, which by default may be assigned any value.</p>		false
Upload Editor: Required Attributes	<code>requiredAttributes</code>	String	List of attributes which must be set before an upload is permitted. If an attribute is listed as required but not shown in the editor, it will be ignored.		false

Table 93. Catalog UI Search Attribute Aliases

Name	Id	Type	Description	Default Value	Required
Attribute Aliases	<code>attributeAliases</code>	String	List of attribute aliases. Separate the attribute name and alias with an equals (=) sign. Example: <code>title=Title</code> .		false

Table 94. Catalog UI Search Attribute Descriptions

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

Table 95. Catalog UI Search Hidden Attributes

Name	Id	Type	Description	Default Value	Required
Hidden Attributes	<code>hiddenAttributes</code>	String	List of attributes to be hidden. NOTE: the provided values will be evaluated as JavaScript regular expressions when matched against metacard attributes.	<ul style="list-style-type: none"> <li><code>^sorts\$</code></li> <li><code>^cql\$</code></li> <li><code>^polling\$</code></li> <li><code>^cached\$</code></li> </ul>	false

Table 96. Catalog UI Search Theme

Name	Id	Type	Description	Default Value	Required
Theme	<code>theme</code>	String	Specifies the default theme: <ul style="list-style-type: none"> <li><code>Dark</code></li> <li><code>Light</code></li> <li><code>Sea</code></li> <li><code>Custom</code>, which consists of the colors below</li> </ul>	<code>Dark</code>	true
Primary Color	<code>customPrimaryColor</code>	String		<code>#3c6dd5</code>	true
Positive Color	<code>customPositiveColor</code>	String		<code>#428442</code>	true

Name	Id	Type	Description	Default Value	Required
Negative Color	<code>customNegativeColor</code>	String		<code>#8a423c</code>	true
Warning Color	<code>customWarningColor</code>	String		<code>#c89600</code>	true
Favorite Color	<code>customFavoriteColor</code>	String		<code>#d1d179</code>	true
Background Navigation Color	<code>customBackgroundNavigation</code>	String		<code>#252529</code>	true
Background Accent Content Color	<code>customBackgroundAccentContent</code>	String		<code>#2A2A2E</code>	true
Background Dropdown Color	<code>customBackgroundDropdown</code>	String		<code>#35353a</code>	true
Background Content Color	<code>customBackgroundContent</code>	String		<code>#35353a</code>	true
Background Modal Color	<code>customBackgroundModal</code>	String		<code>#252529</code>	true
Background Slideout Color	<code>customBackgroundSlideout</code>	String		<code>#252529</code>	true
Theme Spacing Mode	<code>spacingMode</code>	String	Specifies the default theme spacing mode: <ul style="list-style-type: none"> <li><code>Comfortable</code></li> <li><code>Cozy</code></li> <li><code>Compact</code></li> </ul>	<code>Comfortable</code>	true
Theme Zoom	<code>zoomPercentage</code>	Integer	Specifies the default theme zoom percentage.	<code>100</code>	true

Table 97. Catalog UI Search Metacard Type Whitelist

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

Table 98. Catalog UI Search Workspace Security

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

## Application Whitelists

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

## Packages Removed From Whitelist

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

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

### Admin

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

### Catalog

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

## Platform

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

## Security

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

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

## Spatial

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

## Catalog Whitelist

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

In package `ddf.catalog`

- `CatalogFramework`
- `Constants`

In package `ddf.catalog.cache`

- `ResourceCacheInterface` **Deprecated**



In package `ddf.catalog.data`

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

In package `ddf.catalog.event`

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

In package `ddf.catalog.federation`

- `Federatable`
- `FederationException`
- `FederationStrategy`

In package `ddf.catalog.filter`

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

- `SpatialExpressionBuilder`
- `TemporalInstantExpressionBuilder`
- `TemporalRangeExpressionBuilder`
- `XPathBasicBuilder`
- `XPathBuilder`

In package `ddf.catalog.filter.delegate`

- `CopyFilterDelegate`
- `FilterToTextDelegate`

In package `ddf.catalog.operation`

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

In package `ddf.catalog.plugin`

- `AccessPlugin`
- `PluginExecutionException`
- `PolicyPlugin`
- `PolicyResponse`

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

In package `ddf.catalog.resource`

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

In package `ddf.catalog.service`

- `ConfiguredService`

In package `ddf.catalog.source`

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

In package `ddf.catalog.transform`

- `CatalogTransformerException`
- `InputCollectionTransformer`
- `InputTransformer`

- MetacardTransformer
- QueryResponseTransformer

In package `ddf.catalog.transformer.api`

- MetacardMarshaller
- PrintWriter
- PrintWriterProvider

In package `ddf.catalog.util`

- Describable Deprecated
- Maskable

In package `ddf.catalog.validation`

- MetacardValidator
- ValidationException

In package `ddf.geo.formatter`

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

In package `ddf.util`

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

## Platform Whitelist

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

In package `ddf.action`

- `Action`
- `ActionProvider`
- `ActionRegistry`

In package `org.codice.ddf.branding`

- `BrandingPlugin`
- `BrandingRegistry`

In package `org.codice.ddf.configuration`

- `ConfigurationWatcher` Deprecated

## Registry Whitelist

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

None.

## Security Whitelist

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

In package `ddf.security`

- `SecurityConstants`
- `Subject`

In package `ddf.security.assertion`

- `SecurityAssertion`

In package `ddf.security.common.util`

- `Security` Deprecated
- `SecurityProperties`
- `ServiceComparator`
- `SortedServiceList` Deprecated

In package `ddf.security.encryption`

- `EncryptionService`

In package `ddf.security.expansion`

- `Expansion`

In package `ddf.security.http`

- `SessionFactory`

In package `ddf.security.service`

- `SecurityManager`
- `SecurityServiceException`
- `TokenRequestHandler`

In package `ddf.security.sts.client.configuration`

- `STSCientConfiguration`

In package `ddf.security.ws.policy`

- `AbstractOverrideInterceptor`
- `PolicyLoader`

In package `ddf.security.ws.proxy`

- `ProxyServiceFactory`

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

- `AuthenticationHandler`

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

- `ContextAttributeMapping`

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

- `ContextPolicy`
- `ContextPolicyManager`

## Solr Catalog Whitelist

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

None.

## Search UI Whitelist

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

third parties:

None.

# DDF Dependency List

This list of DDF dependencies is automatically generated:

## DDF 2.21.0 Dependency List.

- c3p0:c3p0:jar:0.9.1.1
- 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.auth0:java-jwt:jar:3.8.1
- com.codahale.metrics:metrics-core:jar:3.0.1
- com.connexta.arbitro:arbitro-core:jar:1.0.0
- com.fasterxml.jackson.core:jackson-annotations:jar:2.9.8
- com.fasterxml.jackson.core:jackson-core:jar:2.9.8
- com.fasterxml.jackson.core:jackson-databind:jar:2.9.8
- com.fasterxml.woodstox:woodstox-core:jar:5.3.0
- com.github.drapostolos:type-parser:jar:0.5.0
- com.github.jai-imageio:jai-imageio-core:jar:1.3.1
- com.github.jai-imageio:jai-imageio-jpeg2000:jar:1.3.1\_CODICE\_3
- com.github.jknack:handlebars:jar:2.0.0
- com.github.lookfirst:sardine:jar:5.7
- com.google.code.gson:gson:jar:2.8.5
- com.google.crypto.tink:tink:jar:1.2.2
- com.google.guava:guava:jar:25.1-jre
- com.google.http-client:google-http-client:jar:1.22.0
- com.google.protobuf:protobuf-java:jar:3.6.1
- com.googlecode.json-simple:json-simple:jar:1.1.1
- com.googlecode.owasp-java-html-sanitizer:owasp-java-html-sanitizer:jar:20171016.1
- com.hazelcast:hazelcast:jar:3.2.1

- com.jayway.restassured:rest-assured:jar:2.9.0
- com.jhlabs:filters:jar:2.0.235-1
- com.nimbusds:lang-tag:jar:1.4.4
- com.nimbusds:nimbus-jose-jwt:jar:6.5
- com.nimbusds:oauth2-oidc-sdk:jar:6.5
- com.rometools:rome-utils:jar:1.9.0
- com.rometools:rome:jar:1.9.0
- com.sparkjava:spark-core:jar:2.5.5
- com.sun.xml.bind:jaxb-core:jar:2.2.11
- com.sun.xml.bind:jaxb-impl:jar:2.2.11
- com.thoughtworks.xstream:xstream:jar:1.4.9
- com.unboundid:unboundid-ldapsdk:jar:3.2.1
- com.vividsolutions:jts-core:jar:1.14.0
- com.vividsolutions:jts-io:jar:1.14.0
- com.xebialabs.restito:restito:jar:0.8.2
- com.zensols.jrtf:tutego.jrtf:jar:0.1.0
- commons-beanutils:commons-beanutils:jar:1.9.4
- commons-codec:commons-codec:jar:1.12
- 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:2.1
- commons-io:commons-io:jar:2.4
- commons-io:commons-io:jar:2.6
- commons-lang:commons-lang:jar:2.6
- commons-logging:commons-logging:jar:1.2
- commons-net:commons-net:jar:3.5
- commons-validator:commons-validator:jar:1.6
- de.micromata.jak:JavaAPIforKml:jar:2.2.0
- de.micromata.jak:JavaAPIforKml:jar:2.2.1\_CODICE\_1
- io.dropwizard.metrics:metrics-core:jar:3.2.6



- io.sgr:s2-geometry-library-java:jar:1.0.0
- javax.annotation:javax.annotation-api:jar:1.2
- javax.inject:javax.inject:jar:1
- javax.mail:javax.mail-api:jar:1.6.2
- javax.servlet:javax.servlet-api:jar:3.1.0
- javax.servlet:servlet-api:jar:2.5
- javax.validation:validation-api:jar:1.1.0.Final
- javax.ws.rs:javax.ws.rs-api:jar:2.1
- javax.xml.bind:jaxb-api:jar:2.2.11
- joda-time:joda-time:jar:2.10.3
- junit:junit:jar:4.12
- log4j:log4j:jar:1.2.17
- 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:1.2
- net.minidev:asm:jar:1.0.2
- net.minidev:json-smart:jar:2.3
- net.sf.saxon:Saxon-HE:jar:9.5.1-3
- net.sf.saxon:Saxon-HE:jar:9.6.0-4
- organtlr: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:1.1.4
- org.apache.aries:org.apache.aries.util:jar:1.1.3
- org.apache.camel:camel-aws:jar:2.24.2
- org.apache.camel:camel-blueprint:jar:2.24.2
- org.apache.camel:camel-context:jar:2.24.2

- org.apache.camel:camel-core-osgi:jar:2.24.2
- org.apache.camel:camel-core:jar:2.24.2
- org.apache.camel:camel-http-common:jar:2.24.2
- org.apache.camel:camel-http4:jar:2.24.2
- org.apache.camel:camel-http:jar:2.24.2
- org.apache.camel:camel-quartz:jar:2.24.2
- org.apache.camel:camel-saxon:jar:2.24.2
- org.apache.camel:camel-servlet:jar:2.24.2
- org.apache.commons:commons-collections4:jar:4.1
- org.apache.commons:commons-compress:jar:1.18
- org.apache.commons:commons-csv:jar:1.4
- org.apache.commons:commons-exec:jar:1.3
- org.apache.commons:commons-lang3:jar:3.0
- org.apache.commons:commons-lang3:jar:3.3.2
- org.apache.commons:commons-lang3:jar:3.4
- org.apache.commons:commons-lang3:jar:3.9
- org.apache.commons:commons-math3:jar:3.6.1
- org.apache.commons:commons-math:jar:2.2
- org.apache.commons:commons-pool2:jar:2.5.0
- org.apache.commons:commons-text:jar:1.6
- org.apache.cxf.services.sts:cxf-services-sts-core:jar:3.2.9
- org.apache.cxf:cxf-core:jar:3.2.9
- org.apache.cxf:cxf-rt-frontend-jaxrs:jar:3.2.9
- org.apache.cxf:cxf-rt-frontend-jaxws:jar:3.2.9
- org.apache.cxf:cxf-rt-rs-client:jar:3.2.9
- org.apache.cxf:cxf-rt-rs-security-jose-jaxrs:jar:3.2.9
- org.apache.cxf:cxf-rt-rs-security-jose:jar:3.2.9
- org.apache.cxf:cxf-rt-rs-security-sso-saml:jar:3.2.9
- org.apache.cxf:cxf-rt-rs-security-xml:jar:3.2.9
- org.apache.cxf:cxf-rt-transport-http:jar:3.2.9
- org.apache.cxf:cxf-rt-ws-policy:jar:3.2.9
- org.apache.cxf:cxf-rt-ws-security:jar:3.2.9

- org.apache.felix:org.apache.felix.configadmin:jar:1.9.14
- org.apache.felix:org.apache.felix.fileinstall:jar:3.6.4
- org.apache.felix:org.apache.felix.framework:jar:5.6.12
- org.apache.felix:org.apache.felix.scr:jar:2.0.14
- org.apache.felix:org.apache.felix.utils:jar:1.11.2
- org.apache.ftpservlet:ftplet-api:jar:1.0.6
- org.apache.ftpservlet:ftpservlet-core:jar:1.0.6
- org.apache.httpcomponents:httpClient:jar:4.5.3
- org.apache.httpcomponents:httpClient:jar:4.5.6
- org.apache.httpcomponents:httpcore:jar:4.4.10
- org.apache.httpcomponents:httpmime:jar:4.5.3
- org.apache.httpcomponents:httpmime:jar:4.5.6
- org.apache.karaf.bundle:org.apache.karaf.bundle.core:jar:4.2.6
- org.apache.karaf.features:org.apache.karaf.features.core:jar:4.2.6
- org.apache.karaf.features:standard:xml:features:4.2.6
- org.apache.karaf.itests:common:jar:4.2.6
- org.apache.karaf.jaas:org.apache.karaf.jaas.boot:jar:4.2.6
- org.apache.karaf.jaas:org.apache.karaf.jaas.config:jar:4.2.6
- org.apache.karaf.jaas:org.apache.karaf.jaas.modules:jar:4.2.6
- org.apache.karaf.log:org.apache.karaf.log.core:jar:4.2.6
- org.apache.karaf.shell:org.apache.karaf.shell.console:jar:4.2.6
- org.apache.karaf.shell:org.apache.karaf.shell.core:jar:4.2.6
- org.apache.karaf.system:org.apache.karaf.system.core:jar:4.2.6
- org.apache.karaf:apache-karaf:tar.gz:4.2.6
- org.apache.karaf:apache-karaf:zip:4.2.6
- org.apache.karaf:org.apache.karaf.util:jar:4.2.6
- org.apache.logging.log4j:log4j-1.2-api:jar:2.11.0
- org.apache.logging.log4j:log4j-api:jar:2.11.0
- org.apache.logging.log4j:log4j-api:jar:2.8.2
- org.apache.logging.log4j:log4j-core:jar:2.11.0
- org.apache.logging.log4j:log4j-slf4j-impl:jar:2.11.0
- org.apache.lucene:lucene-analyzers-common:jar:7.7.2

- org.apache.lucene:lucene-core:jar:3.0.2
- org.apache.lucene:lucene-core:jar:7.7.2
- org.apache.lucene:lucene-queries:jar:7.7.2
- org.apache.lucene:lucene-queryparser:jar:7.7.2
- org.apache.lucene:lucene-sandbox:jar:7.7.2
- org.apache.lucene:lucene-spatial-extras:jar:7.7.2
- org.apache.lucene:lucene-spatial3d:jar:7.7.2
- org.apache.lucene:lucene-spatial:jar:7.7.2
- org.apache.mina:mina-core:jar:2.0.6
- org.apache.pdfbox:fontbox:jar:2.0.11
- org.apache.pdfbox:pdfbox-tools:jar:2.0.11
- org.apache.pdfbox:pdfbox:jar:2.0.11
- org.apache.poi:poi-ooxml:jar:3.17
- org.apache.poi:poi-scratchpad:jar:3.17
- org.apache.poi:poi:jar:3.17
- org.apache.servicemix.bundles:org.apache.servicemix.bundles.poi:jar:3.17\_1
- org.apache.servicemix.specs:org.apache.servicemix.specs.jsr339-api-2.0:jar:2.6.0
- org.apache.shiro:shiro-core:jar:1.4.0
- org.apache.solr:solr-core:jar:7.7.2
- org.apache.solr:solr-solrj:jar:7.7.2
- org.apache.tika:tika-core:jar:1.18
- org.apache.tika:tika-parsers:jar:1.18
- org.apache.ws.commons.axiom:axiom-api:jar:1.2.14
- org.apache.ws.xmlschema:xmlschema-core:jar:2.2.2
- org.apache.ws.xmlschema:xmlschema-core:jar:2.2.3
- org.apache.wss4j:wss4j-bindings:jar:2.2.3
- org.apache.wss4j:wss4j-policy:jar:2.2.3
- org.apache.wss4j:wss4j-ws-security-common:jar:2.2.3
- org.apache.wss4j:wss4j-ws-security-dom:jar:2.2.3
- org.apache.wss4j:wss4j-ws-security-policy-stax:jar:2.2.3
- org.apache.wss4j:wss4j-ws-security-stax:jar:2.2.3
- org.apache.zookeeper:zookeeper:jar:3.4.14

- org.asciidoctor:asciidoctorj-diagram:jar:1.5.4.1
- org.asciidoctor:asciidoctorj:jar:1.5.6
- org.assertj:assertj-core:jar:2.1.0
- org.awaitility:awaitility:jar:3.1.5
- org.bouncycastle:bcmil-jdk15on:jar:1.61
- org.bouncycastle:bcpkix-jdk15on:jar:1.61
- org.bouncycastle:bcprov-jdk15on:jar:1.61
- org.codehaus.woodstox:stax2-api:jar:4.2
- org.codice.acdebugger:acdebugger-api:jar:1.7
- org.codice.acdebugger:acdebugger-backdoor:jar:1.7
- org.codice.countrycode:converter:jar:0.1.8
- org.codice.geowebcache:geowebcache-server-standalone:war:0.7.0
- org.codice.geowebcache:geowebcache-server-standalone:xml:geowebcache:0.7.0
- org.codice.httpproxy:proxy-camel-route:jar:2.21.0-SNAPSHOT
- org.codice.httpproxy:proxy-camel-servlet:jar:2.21.0-SNAPSHOT
- org.codice.opendj.embedded:opendj-embedded-app:xml:features:1.3.3
- org.codice.pro-grade:pro-grade:jar:1.1.3
- org.codice.thirdparty:commons-httpclient:jar:3.1.0\_1
- org.codice.thirdparty:ffmpeg:zip:bin:4.0\_2
- org.codice.thirdparty:geotools-suite:jar:19.1\_2
- org.codice.thirdparty:gt-opengis:jar:19.1\_1
- org.codice.thirdparty:jts:jar:1.14.0\_1
- org.codice.thirdparty:lucene-core:jar:3.0.2\_1
- org.codice.thirdparty:ogc-filter-v\_1\_1\_0-schema:jar:1.1.0\_5
- org.codice.thirdparty:picocontainer:jar:1.3\_1
- org.codice.thirdparty:tika-bundle:jar:1.18.0\_5
- org.codice.usng4j:usng4j-api:jar:0.4
- org.codice.usng4j:usng4j-impl:jar:0.4
- org.codice:lux:jar:1.2
- org.cryptomator:siv-mode:jar:1.2.2
- org.eclipse.jetty:jetty-http:jar:9.4.18.v20190429
- org.eclipse.jetty:jetty-security:jar:9.4.18.v20190429

- org.eclipse.jetty:jetty-server:jar:9.4.18.v20190429
- org.eclipse.jetty:jetty-servlet:jar:9.4.18.v20190429
- org.eclipse.jetty:jetty-servlets:jar:9.2.19.v20160908
- org.eclipse.jetty:jetty-util:jar:9.4.18.v20190429
- org.eclipse.platform:org.eclipse.osgi:jar:3.13.0
- 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:19.1
- org.geotools:gt-cql:jar:19.1
- org.geotools:gt-epsg-hsql:jar:19.1
- org.geotools:gt-jts-wrapper:jar:19.1
- org.geotools:gt-main:jar:19.1
- org.geotools:gt-opengis:jar:19.1
- org.geotools:gt-referencing:jar:19.1
- org.geotools:gt-shapefile:jar:19.1
- org.geotools:gt-xml:jar:19.1
- org.glassfish.grizzly:grizzly-framework:jar:2.3.30
- org.glassfish.grizzly:grizzly-http-server:jar:2.3.25
- org.hamcrest:hamcrest-all:jar:1.3
- org.hisrc.w3c:xlink-v\_1\_0:jar:1.4.0
- org.hisrc.w3c:xmlschema-v\_1\_0:jar:1.4.0
- org.imgscalr:imgscalr-lib:jar:4.2
- org.jasypt:jasypt:jar:1.9.0
- org.jasypt:jasypt:jar:1.9.2
- org.jcodec:jcodec:jar:0.2.0\_1
- org.jdom:jdom2:jar:2.0.6
- org.joda:joda-convert:jar:1.2
- org.jolokia:jolokia-osgi:jar:1.2.3

- org.jruby:jruby-complete:jar:9.0.4.0
- org.jscience:jscience:jar:4.3.1
- org.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:jar:2.6.1
- org.jvnet.ogc:filter-v\_2\_0\_0-schema:jar:1.1.0
- org.jvnet.ogc:gml-v\_3\_1\_1-schema:jar:1.1.0
- org.jvnet.ogc:gml-v\_3\_1\_1:jar:2.6.1
- org.jvnet.ogc:gml-v\_3\_2\_1-schema:jar:1.1.0
- org.jvnet.ogc:gml-v\_3\_2\_1:pom:1.1.0
- org.jvnet.ogc:ogc-tools-gml-jts:jar:1.0.3
- org.jvnet.ogc:ows-v\_1\_0\_0-schema:jar:1.1.0
- org.jvnet.ogc:ows-v\_1\_0\_0:jar:2.6.1
- org.jvnet.ogc:ows-v\_1\_1\_0-schema:jar:1.1.0
- org.jvnet.ogc:ows-v\_2\_0:jar:2.6.1
- org.jvnet.ogc:wcs-v\_1\_0\_0-schema:jar:1.1.0
- org.jvnet.ogc:wfs-v\_1\_1\_0:jar:2.6.1
- org.jvnet.ogc:wps-v\_2\_0:jar:2.6.1
- org.la4j:la4j:jar:0.6.0
- org.locationtech.jts:jts-core:jar:1.15.0
- org.locationtech.spatial4j:spatial4j:jar:0.6
- org.locationtech.spatial4j:spatial4j:jar:0.7
- org.mindrot:jbcrypt:jar:0.4
- org.mockito:mockito-core:jar:1.10.19
- org.noggit:noggit:jar:0.6
- org.noggit:noggit:jar:0.8
- org.objenesis:objenesis:jar:2.5.1
- org.openexi:nagasena-rta:jar:0000.0002.0049.0

- org.openexi:nagasena:jar:0000.0002.0049.0
- org.opensaml:opensaml-core:jar:3.3.0
- org.opensaml:opensaml-messaging-api:jar:3.3.0
- org.opensaml:opensaml-profile-api:jar:3.3.0
- org.opensaml:opensaml-saml-api:jar:3.3.0
- org.opensaml:opensaml-saml-impl:jar:3.3.0
- org.opensaml:opensaml-security-api:jar:3.3.0
- org.opensaml:opensaml-security-impl:jar:3.3.0
- org.opensaml:opensaml-soap-api:jar:3.3.0
- org.opensaml:opensaml-soap-impl:jar:3.3.0
- org.opensaml:opensaml-storage-api:jar:3.3.0
- org.opensaml:opensaml-xacml-api:jar:3.3.0
- org.opensaml:opensaml-xacml-impl:jar:3.3.0
- org.opensaml:opensaml-xacml-saml-api:jar:3.3.0
- org.opensaml:opensaml-xacml-saml-impl:jar:3.3.0
- org.opensaml:opensaml-xmlsec-api:jar:3.3.0
- org.opensaml:opensaml-xmlsec-impl:jar:3.3.0
- org.ops4j.pax.exam:pax-exam-container-karaf:jar:4.13.2.CODICE
- org.ops4j.pax.exam:pax-exam-features:xml:4.13.2.CODICE
- org.ops4j.pax.exam:pax-exam-junit4:jar:4.13.2.CODICE
- org.ops4j.pax.exam:pax-exam-link-mvn:jar:4.13.2.CODICE
- org.ops4j.pax.exam:pax-exam:jar:4.13.2.CODICE
- org.ops4j.pax.swissbox:pax-swissbox-extender:jar:1.8.2
- org.ops4j.pax.tinybundles:tinybundles:jar:2.1.1
- org.ops4j.pax.url:pax-url-aether:jar:2.4.5
- org.ops4j.pax.url:pax-url-wrap:jar:2.4.5
- org.ops4j.pax.web:pax-web-api:jar:7.2.11
- org.ops4j.pax.web:pax-web-jsp:jar:7.2.11
- org.osgi:org.osgi.compendium:jar:4.3.1
- org.osgi:org.osgi.compendium:jar:5.0.0
- org.osgi:org.osgi.core:jar:5.0.0
- org.osgi:org.osgi.enterprise:jar:5.0.0



- org.ow2.asm:asm-analysis:jar:6.2.1
- org.ow2.asm:asm-tree:jar:6.2.1
- org.ow2.asm:asm:jar:5.2
- org.ow2.asm:asm:jar:6.2.1
- org.pac4j:pac4j-core:jar:3.8.2
- org.pac4j:pac4j-jwt:jar:3.8.2
- org.pac4j:pac4j-oauth:jar:3.8.2
- org.pac4j:pac4j-oidc:jar:3.8.2
- org.parboiled:parboiled-core:jar:1.2.0
- org.parboiled:parboiled-java:jar:1.2.0
- org.quartz-scheduler:quartz-jobs:jar:2.2.3
- org.quartz-scheduler:quartz:jar:2.1.7
- org.quartz-scheduler:quartz:jar:2.2.3
- org.rrd4j:rrd4j:jar:3.3.1
- org.slf4j:jcl-over-slf4j:jar:1.7.24
- org.slf4j:jul-to-slf4j:jar:1.7.24
- org.slf4j:slf4j-api:jar:1.7.1
- org.slf4j:slf4j-api:jar:1.7.24
- org.slf4j:slf4j-ext:jar:1.7.1
- org.slf4j:slf4j-log4j12:jar:1.7.24
- org.slf4j:slf4j-simple:jar:1.7.1
- org.springframework.ldap:spring-ldap-core:jar:2.3.2.RELEASE
- org.springframework.osgi:spring-osgi-core:jar:1.2.1
- org.springframework:spring-core:jar:5.1.7.RELEASE
- org.taktik:mpegts-streamer:jar:0.1.0\_2
- org.xmlunit:xmlunit-matchers:jar:2.5.1
- xalan:serializer:jar:2.7.2
- xalan:xalan:jar:2.7.2
- xerces:xercesImpl:jar:2.11.0
- xerces:xercesImpl:jar:2.9.1
- xml-apis:xml-apis:jar:1.4.01
- xpp3:xpp3:jar:1.1.4c

## DDF 2.21.0 Javascript Dependency List.

- amdefine: 1.0.1
- are-we-there-yet: 1.1.5
- asn1: 0.2.4
- atob: 2.1.2
- base: 0.11.2
- bcrypt-pbkdf: 1.0.2
- builtins: 1.0.3
- byline: 5.0.0
- caller-path: 2.0.0
- co: 4.6.0
- code-point-at: 1.1.0
- copy-descriptor: 0.1.1
- cyclist: 1.0.1
- dashdash: 1.14.1
- debuglog: 1.0.1
- decode-uri-component: 0.2.0
- deep-is: 0.1.3
- defaults: 1.0.3
- define-properties: 1.1.3
- dependency-tree: 7.0.2
- detect-indent: 5.0.0
- detective-amd: 3.0.0
- detective-cjs: 3.1.1
- detective-es6: 2.1.0
- detective-less: 1.0.2
- detective-postcss: 3.0.1
- detective-sass: 3.0.1
- detective-scss: 2.0.1
- detective-stylus: 1.0.0
- detective-typescript: 5.6.1
- dezalgo: 1.0.3

- doctrine: 1.5.0
- duplexer: 0.1.1
- ecc-jsbn: 0.1.2
- err-code: 1.1.2
- es-abstract: 1.16.0
- es6-set: 0.1.5
- es6-weak-map: 2.0.3
- espree: 3.5.4
- esrecurse: 4.2.1
- exit-hook: 1.1.1
- fast-levenshtein: 2.0.6
- figures: 2.0.0
- find-up: 2.1.0
- flat-cache: 1.3.0
- flatten: 1.0.2
- front-matter: 2.1.2
- fs-minipass: 1.2.6
- gauge: 2.7.4
- generate-function: 2.3.1
- generate-object-property: 1.2.0
- genfun: 5.0.0
- get-own-enumerable-property-symbols: 3.0.1
- getpass: 0.1.7
- gonzales-pe-sl: 4.2.3
- ignore: 4.0.6
- ignore-walk: 3.0.3
- indent-string: 2.1.0
- indexes-of: 1.0.1
- ip: 1.1.5
- is-finite: 1.0.2
- is-fullwidth-code-point: 2.0.0
- is-my-ip-valid: 1.0.0

- is-promise: 2.1.0
- is-regexp: 1.0.0
- is-resolvable: 1.1.0
- isexe: 2.0.0
- js-base64: 2.4.3
- jsonify: 0.0.0
- jsonpointer: 4.0.1
- known-css-properties: 0.3.0
- lcid: 1.0.0
- levn: 0.3.0
- lodash.capitalize: 4.2.1
- lodash.kebabcase: 4.1.1
- macos-release: 2.3.0
- make-dir: 1.3.0
- map-age-cleaner: 0.1.3
- merge: 1.2.0
- mimic-fn: 1.2.0
- minizlib: 1.2.1
- node-gyp: 3.8.0
- bootstrap-sass: 3.3.6
- bootswatch: 3.3.7
- compass-mixins: 0.12.10
- cpr: 3.0.1
- lerna: 3.16.4
- node-sass: 4.12.0
- npm: 6.11.3
- react: 16.8.6
- react-dom: 16.8.6
- graceful-fs: 4.1.11
- minimist: 1.2.0
- mkdirp: 0.5.1
- rimraf: 2.6.2

- : octokit/request-error
- import-local: 2.0.0
- npmlog: 0
- dedent: 0.7.0
- npm-package-arg: 6.1.0
- p-map: 2.1.0
- semver: 2
- glob: 7.1.2
- safe-buffer: 5.1.2
- bluebird: 3.7.1
- cacache: 12.0.3
- chownr: 1.1.3
- figgy-pudding: 3.5.1
- get-stream: 4.1.0
- infer-owner: 1.0.4
- lru-cache: 4.1.5
- make-fetch-happen: 5.0.1
- minimatch: 3.0.4
- minipass: 2.9.0
- mississippi: 3.0.0
- normalize-package-data: 2.5.0
- npm-packlist: 1.4.4
- npm-pick-manifest: 3.0.0
- osenv: 0
- promise-inflight: 1.0.1
- promise-retry: 1.1.1
- protoduck: 5.0.1
- ssri: 6.0.1
- tar: 4.4.10
- unique-filename: 1.1.1
- which: 1.3.1
- fs.realpath: 1.0.0

- inflight: 1.0.6
- inherits: 2.0.3
- once: 1.3.0
- path-is-absolute: 1.0.0
- move-concurrently: 1.0.1
- y18n: 4.0.0
- aproba: 2.0.0
- copy-concurrently: 1.0.5
- fs-write-stream-atomic: 1.0.10
- run-queue: 1.0.0
- iferr: 0.1.5
- imurmurhash: 0.1.4
- readable-stream: 3.4.0
- pump: 3.0.0
- yallist: 3.0.0
- agentkeepalive: 3.5.2
- http-cache-semantics: 3.8.1
- http-proxy-agent: 2.1.0
- https-proxy-agent: 2.2.3
- node-fetch-npm: 2.0.2
- socks-proxy-agent: 4.0.0
- humanize-ms: 1.2.1
- ms: 2.0.0
- agent-base: 4.3.0
- debug: 2.6.9
- es6-promisify: 5.0.0
- es6-promise: 4.2.8
- encoding: 0.1.12
- json-parse-better-errors: 1.0.2
- iconv-lite: 0.4.24
- concat-stream: 2.0.0
- duplexify: 3.7.1

- end-of-stream: 1.4.4
- flush-write-stream: 1.1.1
- from2: 2.3.0
- parallel-transform: 1.1.0
- pumpify: 1.3.3
- stream-each: 1.1.0
- through2: 2.0.0
- buffer-from: 1.1.1
- typedarray: 0.0.6
- stream-shift: 1.0.0
- core-util-is: 1.0.2
- isarray: 1.0.0
- process-nextick-args: 2.0.0
- string\_decoder: 1.1.1
- util-deprecate: 1.0.1
- is-ci: 1.1.0
- execa: 1.0.0
- lodash: 4.17.15
- ci-info: 2.0.0
- globby: 9.2.0
- cosmiconfig: 5.2.1
- dot-prop: 3.0.0
- glob-parent: 3.1.0
- load-json-file: 1.1.0
- resolve-from: 4.0.0
- write-json-file: 3.2.0
- dir-glob: 2.2.2
- array-union: 1.0.2
- fast-glob: 2.2.7
- pify: 2.3.0
- slash: 1.0.0
- path-type: 1.1.0

- js-yaml: 3.13.1
- import-fresh: 2.0.0
- is-directory: 0.3.1
- parse-json: 2.2.0
- argparse: 1.0.10
- esprima: 4.0.1
- sprintf-js: 1.0.3
- caller-callsite: 2.0.0
- callsites: 2.0.0
- is-obj: 1.0.1
- is-glob: 3.1.0
- strip-bom: 2.0.0
- type-fest: 0.3.0
- write-file-atomic: 2.3.0
- cross-spawn: 3.0.1
- is-stream: 1.1.0
- npm-run-path: 2.0.0
- p-finally: 1.0.0
- signal-exit: 3.0.0
- strip-eof: 1.0.0
- nice-try: 1.0.5
- path-key: 2.0.1
- shebang-command: 1.2.0
- multimatch: 3.0.0
- array-differ: 2.1.0
- arrify: 1.0.1
- config-chain: 1.1.12
- ini: 1.3.5
- proto-list: 1.2.1
- get-port: 4.2.0
- p-map-series: 1.0.0
- p-waterfall: 1.0.0



- read-package-tree: 5.1.6
- array-uniq: 1.0.3
- fs-extra: 8.1.0
- write-pkg: 3.1.0
- path-exists: 2.1.0
- npm-lifecycle: 3.1.2
- is-windows: 1.0.2
- mkdirp-promise: 5.0.1
- mz: 2.7.0
- any-promise: 1.3.0
- object-assign: 4.0.1
- thenify-all: 1.0.0
- read-cmd-shim: 1.0.1
- chalk: 1.1.3
- columnify: 1.5.4
- strip-ansi: 3.0.0
- wcwidth: 1.0.0
- inquirer: 6.5.2
- ansi-escapes: 3.2.0
- cli-cursor: 2.1.0
- cli-width: 2.2.0
- external-editor: 3.1.0
- rxjs: 6.5.3
- string-width: 2.1.1
- mute-stream: 0.0.7
- run-async: 2.2.0
- through: >=2.2.7
- restore-cursor: 2.0.0
- chardet: 0.7.0
- tmp: 0.0.33
- safer-buffer: >=
- escape-string-regexp: 1.0.5

- tslib: 1.9.0
- ansi-regex: 2.1.1
- yargs: 11.0.0
- yargs-parser: 11.1.1
- cliui: 4.1.0
- decamelize: 1.2.0
- get-caller-file: 1.0.2
- os-locale: 2.1.0
- require-directory: 2.1.1
- require-main-filename: 1.0.1
- set-blocking: 2.0.0
- which-module: 2.0.0
- locate-path: 3.0.0
- p-locate: 3.0.0
- p-limit: 2.2.1
- p-try: 2.2.0
- camelcase: 2.1.1
- wrap-ansi: 2.0.0
- whatwg-url: 7.1.0
- init-package-json: 1.10.3
- p-reduce: 1.0.0
- validate-npm-package-license: 3.0.3
- validate-npm-package-name: 3.0.0
- strong-log-transformer: 2.0.0
- merge2: 1.3.0
- micromatch: 3.1.10
- call-me-maybe: 1.0.1
- glob-to-regexp: 0.3.0
- path-dirname: 1.0.0
- is-extglob: 2.1.1
- arr-diff: 4.0.0
- array-unique: 0.3.2

- braces: 2.3.2
- define-property: 2.0.2
- extend-shallow: 3.0.2
- extglob: 2.0.4
- fragment-cache: 0.2.1
- kind-of: 6.0.2
- nanomatch: 1.2.13
- object.pick: 1.3.0
- regex-not: 1.0.0
- snapdragon: 0.8.1
- to-regex: 3.0.1
- arr-flatten: 1.1.0
- fill-range: 4.0.0
- isobject: 4.0.0
- repeat-element: 1.1.2
- snapdragon-node: 2.0.1
- split-string: 3.0.2
- is-extendable: 0.1.1
- is-number: 3.0.0
- repeat-string: 1.6.1
- to-regex-range: 2.1.0
- is-buffer: 1.1.6
- is-descriptor: 1.0.2
- is-accessor-descriptor: 1.0.0
- is-data-descriptor: 1.0.0
- assign-symbols: 1.0.0
- is-plain-object: 3.0.0
- expand-brackets: 2.1.4
- posix-character-classes: 0.1.0
- map-cache: 0.2.2
- lodash.sortby: 4.7.0
- tr46: 1.0.1

- webidl-conversions: 4.0.2
- jsonfile: 4.0.0
- universalify: 0.1.0
- promzard: 0.3.0
- read: 1.0.1
- read-package-json: 2.0.13
- p-queue: 4.0.0
- p-pipe: 1.2.0
- JSONStream: 1.3.5
- jsonparse: 1.3.1
- byte-size: 5.0.1
- has-unicode: 2.0.1
- lodash.clonedeep: 4.5.0
- temp-write: 3.4.0
- conventional-changelog-angular: 5.0.5
- conventional-changelog-core: 3.2.3
- conventional-recommended-bump: 5.0.1
- lodash.template: 4.5.0
- compare-func: 1.3.2
- q: 1.5.1
- array-ify: 1.0.0
- conventional-changelog-writer: 4.0.9
- conventional-commits-parser: 3.0.5
- dateformat: 3.0.3
- get-pkg-repo: 1.4.0
- git-raw-commits: 2.0.0
- git-remote-origin-url: 2.0.0
- git-semver-tags: 2.0.3
- read-pkg: 1.1.0
- read-pkg-up: 1.0.1
- split: 1.0.1
- conventional-commits-filter: 2.0.2

- handlebars: 4.4.5
- json-stringify-safe: 5.0.1
- meow: 3.7.0
- neo-async: 2.6.1
- optimist: 0.6.1
- source-map: 0.6.1
- uglify-js: 3.1.4
- is-text-path: 2.0.0
- split2: 2.0.0
- trim-off-newlines: 1.0.0
- text-extensions: 2.0.0
- hosted-git-info: 2.6.0
- parse-github-repo-url: 1.3.0
- camelcase-keys: 2.1.0
- map-obj: 1.0.1
- redent: 1.0.0
- trim-newlines: 1.0.0
- loud-rejection: 1.6.0
- pinkie-promise: 2.0.0
- error-ex: 1.3.2
- is-utf8: 0.2.1
- strip-indent: 1.0.1
- repeating: 2.0.0
- get-stdin: 4.0.1
- dargs: 4.1.0
- number-is-nan: 1.0.0
- gitconfiglocal: 1.0.0
- conventional-changelog-presets-loader: 2.2.0
- lodash.ismatch: 4.4.0
- modify-values: 1.0.1
- decamelize-keys: 1.1.0
- minimist-options: 3.0.2

- quick-lru: 1.0.0
- is-plain-obj: 1.1.0
- lodash.\_reinterpolate: 3.0.0
- lodash.templatesettings: 4.2.0
- git-url-parse: 11.1.2
- atob-lite: 2.0.0
- before-after-hook: 2.1.0
- btoa-lite: 1.0.0
- deprecation: 2.3.1
- lodash.get: 4.4.2
- lodash.set: 4.3.2
- lodash.uniq: 4.5.0
- octokit-pagination-methods: 1.1.0
- universal-user-agent: 4.0.0
- node-fetch: 2.6.0
- git-up: 4.0.1
- is-ssh: 1.3.1
- parse-url: 5.0.0
- protocols: 1.1.0
- ansi-styles: 2.2.1
- supports-color: 2.0.0
- color-convert: 1.9.3
- color-name: 1.1.3
- brace-expansion: 1.1.11
- balanced-match: 1.0.0
- concat-map: 0.0.1
- pkg-dir: 3.0.0
- resolve-cwd: 2.0.0
- async-foreach: 0.1.3
- gaze: 1.1.2
- in-publish: 2.0.0
- nan: 2.14.0

- request: 2.88.0
- sass-graph: 2.2.4
- stdout-stream: 1.4.0
- true-case-path: 1.0.2
- globule: 1.2.0
- has-ansi: 2.0.0
- pseudomap: 1.0.2
- wrappy: 1
- currently-unhandled: 0.4.1
- array-find-index: 1.0.2
- is-arrayish: 0.2.1
- resolve: 1.10.0
- fstream: 1.0.12
- nopt: 3.0.6
- block-stream: 0.0.9
- abbrev: 1.1.1
- aws-sign2: 0.7.0
- aws4: 1.8.0
- caseless: 0.12.0
- combined-stream: 1.0.8
- extend: 3.0.2
- forever-agent: 0.6.1
- form-data: 2.3.3
- http-signature: 1.2.0
- is-typedarray: 1.0.0
- isstream: 0.1.2
- mime-types: 2.1.18
- har-validator: 5.1.3
- qs: 6.5.2
- uuid: 3.3.2
- oauth-sign: 0.9.0
- performance-now: 2.1.0

- tough-cookie: 2.4.3
- tunnel-agent: 0.6.0
- delayed-stream: 1.0.0
- asynckit: 0.4.0
- assert-plus: 1.0.0
- jsprim: 1.4.1
- sshpk: 1.7.0
- extsprintf: 1.3.0
- json-schema: 0.2.3
- verror: 1.10.0
- mime-db: 1.33.0
- ajv: 6.10.2
- har-schema: 2.0.0
- fast-deep-equal: 2.0.1
- fast-json-stable-stringify: 2.0.0
- json-schema-traverse: 0.4.1
- uri-js: 4.2.2
- retry: 0.12.0
- sha: 3.0.0
- slide: 1.1.3
- sorted-object: 2.0.1
- sorted-union-stream: 2.1.3
- stringify-package: 1.0.0
- text-table: 0.2.0
- tiny-relative-date: 1.3.0
- uid-number: 0.0.6
- umask: 1.1.0
- unpipe: 1.0.0
- update-notifier: 2.3.0
- worker-farm: 1.6.0
- boxen: 1.3.0
- configstore: 3.1.2



- crypto-random-string: 1.0.0
- errno: 0.1.7
- has-flag: 3.0.0
- import-lazy: 2.1.0
- is-installed-globally: 0.1.0
- is-npm: 1.0.0
- latest-version: 3.1.0
- object.getownpropertydescriptors: 2.0.3
- prepend-http: 1.0.4
- psl: 1.1.29
- punycode: 1.4.1
- spdx-correct: 3.0.0
- spdx-expression-parse: 3.0.0
- wide-align: 1.1.0
- split-on-first: 1.0.0
- strict-uri-encode: 2.0.0
- util-extend: 1.0.1
- util-promisify: 2.1.0

## Hardening Checklist

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

- ☐ [Configure Auditing](#)
- ☐ [Set Directory Permissions](#)
- ☐ [Configure Keystore and Certificates](#)
- ☐ [Disallow Login Without Certificates](#)
- ☐ [Configure Certificate Revocation](#)
  - ☐ [Deny Guest User Access](#) (if denying Guest users)
  - ☐ [Allow Guest User Access](#) (if allowing Guest users)
- ☐ [Configure Guest Claim Attributes](#) (if allowing Guest users)
- ☐ [Configure Guest User Authentication](#)
- ☐ [Create unique user role](#)

- ☐ [Limit Access to the STS](#)
- ☐ [Restricting Access to Admin Console](#)
- ☐ [Restrict Feature, App, Service, and Configuration Access](#)
- ☐ [Remove Default Users](#)
- ☐ [Harden Solr](#)
- ☐ [Environment Hardening](#)
- ☐ [Isolate Solr Cloud and Zookeeper](#). (If using)