DDF User's Guide

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1. Using Distributed Data Framework

These user interfaces are available in DDF.

Using the Landing Page
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Using Intrigue
> Using Intrigue.

Using Standard Search UI
> Using Standard Search UI.

Using the Simple Search
> Using the Simple Search user interface.

2. Using the Landing Page

The DDF Landing Page is the starting point for using DDF. It is accessible at https://{FQDN}:{PORT}.

2.1. Search DDF Button

The search button navigates to the Search UI, enabling catalog queries.

2.2. Data Source Availability

The data source availabilty pane provides a quick glance at the status of configured data sources.

2.3. Announcements

The announcements pane contains messages from system adminstrators.

3. Using Intrigue

Introduction: Intrigue represents the most advanced search interface available with DDF. It provides metadata search and discovery, resource retrieval, and workspace management with a 3D or optional 2D map visualization.

NOTE	For more detail on any feature or button within Intrigue, click the ? icon in the upper right of the screen; then, hover over any item on the screen and a contextual tooltip will be displayed to define its purpose. To exit this mode, click the ? again or press escape.

3.1. Accessing Intrigue

The default URL for Intrigue is https://{FQDN}:{PORT}/search/catalog

NOTE	*Catalog UI Guest Users* If Guest access has been enabled, users not signed in to DDF (i.e. guest users) will have access to search functions, but all workspace configuration and settings will only exist locally and will not be available for sharing.

The default view for Intrigue is the **Workspaces** view. For other views or to return to the **Workspaces** view, click the **Navigation** menu in the upper-left corner of Intrigue and select the desired view.
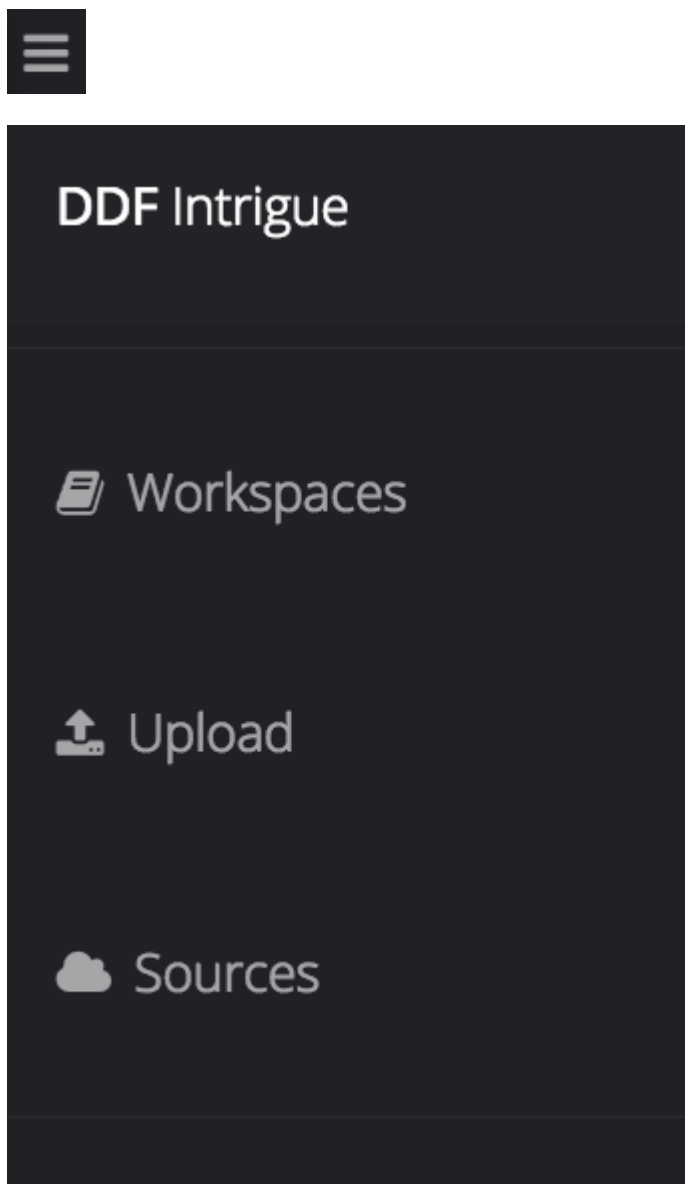
Figure 1. Select the desired view from the **Navigation** *menu.*

3.2. Workspaces in Intrigue

Within Intrigue, workspaces are collections of settings, searches, and bookmarks that can be shared between users and stored for repeated access.

3.2.1. Creating a Workspace in Intrigue

Before searching in DDF, at least one workspace must be created.

Start new workspace

1. From the **Workspaces** view, enter search terms into the **Start new workspace** search field and click the magnifying glass ( ) icon. This will create a new workspace and perform a search based on the entered search terms.
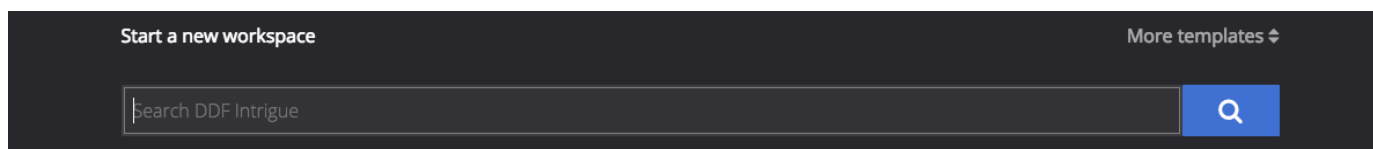
Figure 2. Start new workspace

> **NOTE** New workspaces inherit the search filter of the current workspace.
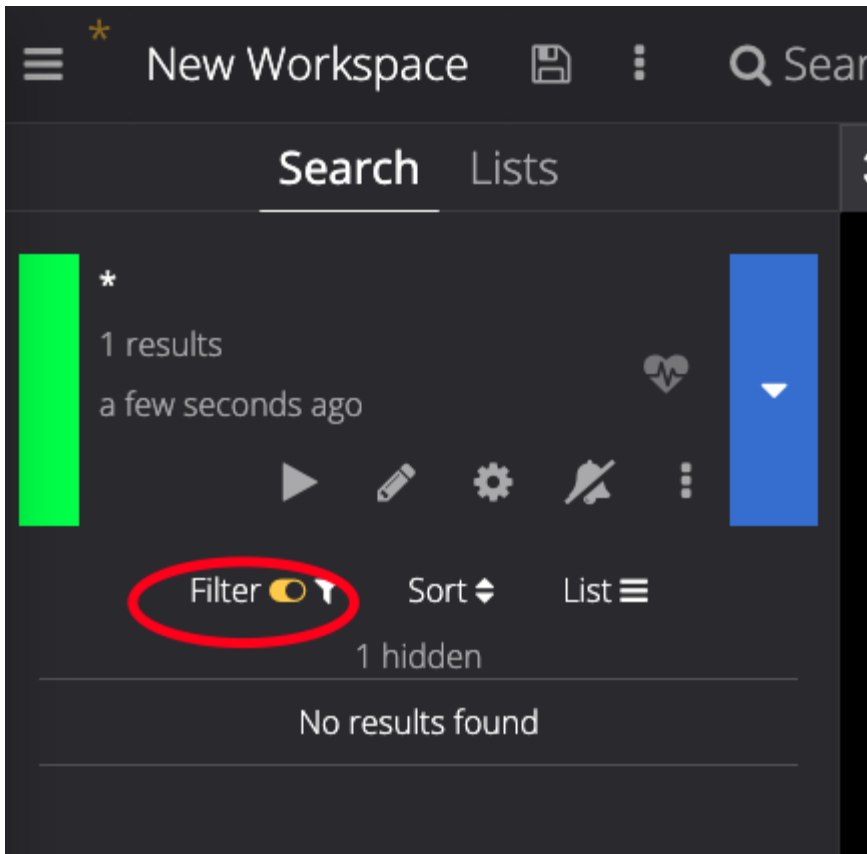
Figure 3. Current filter is inherited

Using a template

1. From the **Workspaces** view, click on an existing template.

2. Change the workspace title by clicking on the temporary workspace title in the upper left corner and entering a new title.

3. Click the save ( ) icon next to the workspace title in the upper left corner.
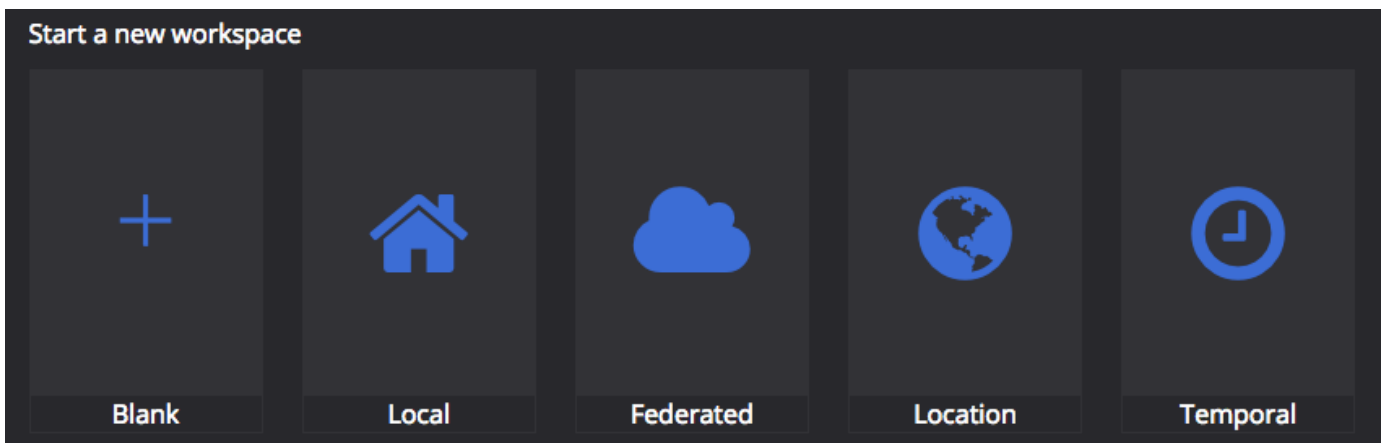
Figure 4. Default Workspace Templates

Blank

A blank workspace with no default search.

Local

    An example of a local search.

Federated

    An example of a search across all federated sources and the local Catalog.

Location

    An example of a geographically constrained search.

Temporal

    An example of a time-range search.

3.2.2. Configuring a Workspace in Intrigue

Configure each workspace with searches and share options.

Adding searches

1. From the default **Workspaces** view, select the workspace to add a search to.

2. Click **Search DDF Intrigue** in the upper left corner, enter search terms, and click **Search** to add a search. This step can be repeated to add additional searches. Each workspace can have up to ten searches.

   a. Select **Basic** Search to select simple search criteria, such as **text**, **time**, and **location**.

   b. Select **Advanced** Search to access a query builder for more complex queries.

3. Click the save ( ) icon next to the workspace title in the upper left corner.

Navigation Menu Options

- **Workspaces**: View all available workspaces.
- **Upload**: Add new metadata and resources to the catalog.
- **Sources**: Lists all sources and their statuses.
- **Open Workspaces**: Lists open workspaces.

Workspace Menu Options

- To view a workspace's options from the **Workspaces** view, press the **Options** button ( ) for the workspace.

  ◦ **Save**: Save changes to the workspace.

  ◦ **Run All Searches**: Start all saved searches within this workspace.

  ◦ **Cancel All Searches**: Cancel all running searches.

  ◦ **Open in New Tab**: Opens this workspace in a separate tab.

- **View Sharing**: View and edit settings for sharing this workspace. Users must be signed in to share workspaces or view shared workspaces.

- **View Details**: View the current details for a cloud-based workspace Users must be signed in to view workspace details.

- **Duplicate**: Create a copy of this workspace.

- **Subscribe/Unsubscribe**: Selecting **Subscribe** will enable email notifications for search results on this workspace. Selecting **Unsubscribe** will disable email notifications for search results on this workspace.

- **Move to Trash**: Delete (archive) this workspace.

3.2.3. Sharing Workspaces

Workspaces can be shared between users at different levels of access as needed.

Share a Workspace

1. From the **Workspaces** view, select the **Options** menu ( ) for the workspace in which sharing will be modified.

2. Select **View Sharing**.

   a. To share by user role, set the drop-down menu to **Can Access** for each desired role. All users with that role will be able to view the workspace.

   b. To share with an individual user, add his/her email to the email list.

3. Click **Apply**.

Remove Sharing on a Workspace

1. From the **Workspaces** view, select the **Options** menu ( ) for the workspace in which sharing will be modified.

2. Select **View Sharing**.

   a. To remove the workspace from users with specific roles, set the drop-down menu to **No Access** for those roles.

   b. To remove individual users, remove the users' email addresses from the email list.

3. Click **Apply**.

3.3. Ingesting from Intrigue

Data can be ingested via Intrigue.

WARNING	The Intrigue uploader is intended for the upload of products (such as images or documents), not metadata files (such as Metacard XML). A user will not be able to specify which input transformer is used to ingest the document.

1. Select the Menu icon ( ) in the upper left corner.

2. Select **Upload**.

3. Drag and drop file(s) or click to open a navigation window.

4. After selecting the file(s) to be uploaded, select **Start** to begin uploading.

Files are processed individually with a visual status indication of each upload. If there are any failures, the user is notified with a message on that specific product. More information about the uploads can be found in the ingest log. The default location of the log is `<DDF_HOME>/data/log/ingest_error.log`.

NOTE	Uploaded products may be marked with Validation Warnings or Errors. Additional configuration may be needed to view these products in searches.

3.3.1. Using the Upload Editor

Intrigue provides an upload editor form which allows users to customize the metadata of their uploads. If enabled, it will appear alongside the upload dropzone and will displays a list of attributes a that may be set.

To set an attribute, simply provide a value in the corresponding form control. All custom values in the form will be applied on upload. If a field is left blank, the attribute will be ignored. To remove all custom values entered, simply click the "Reset Attributes" button at the bottom of the form.

Certain attributes within the form may be marked as required (indicated by an asterisk). These fields must be set before uploads will be permitted.

3.4. Searching with Intrigue

The Search pane has two tabs: **Search** and **Lists**.
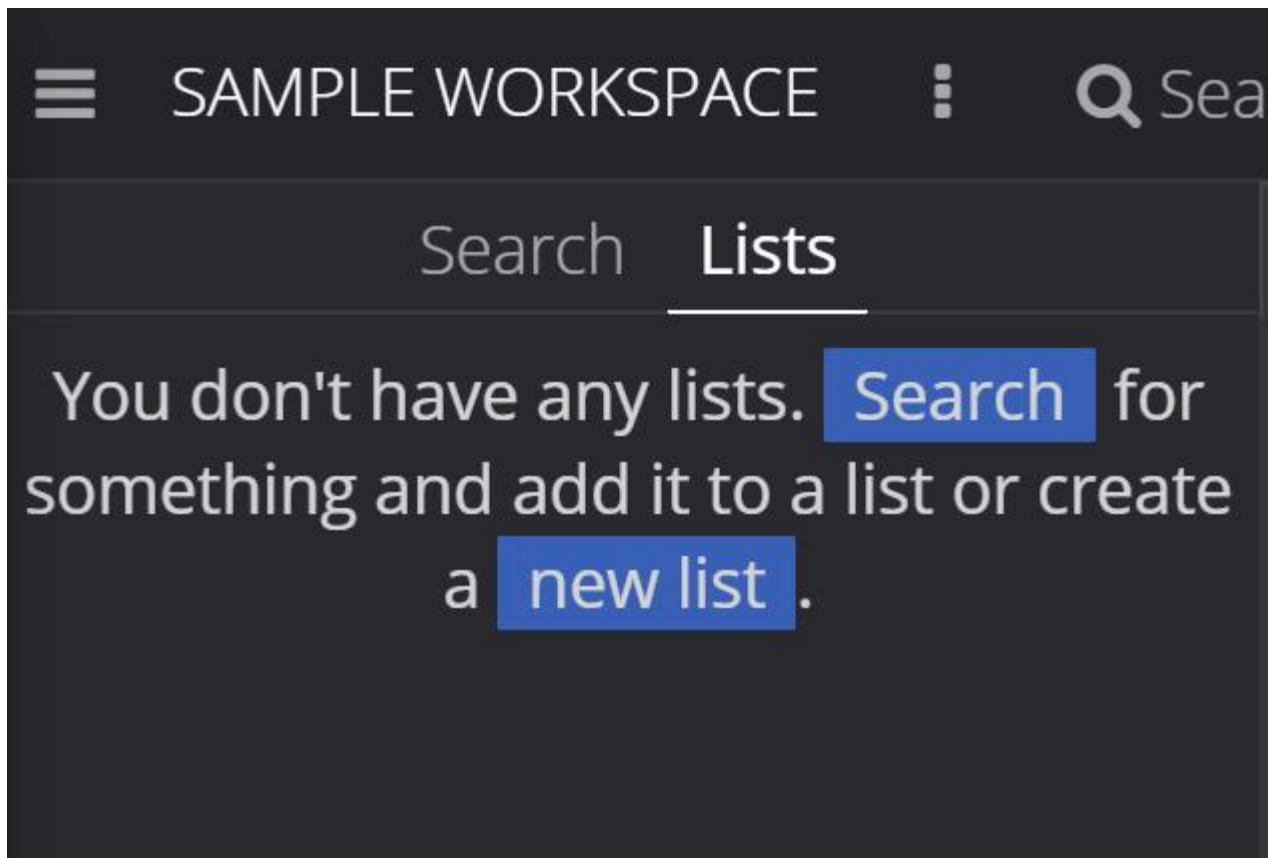
Figure 5. Search Pane Tabs

3.4.1. Search Tab

View and edit searches from the **Search** tab.

The available searches for a workspace can be viewed by clicking on the drop-down on the **Search** tab.
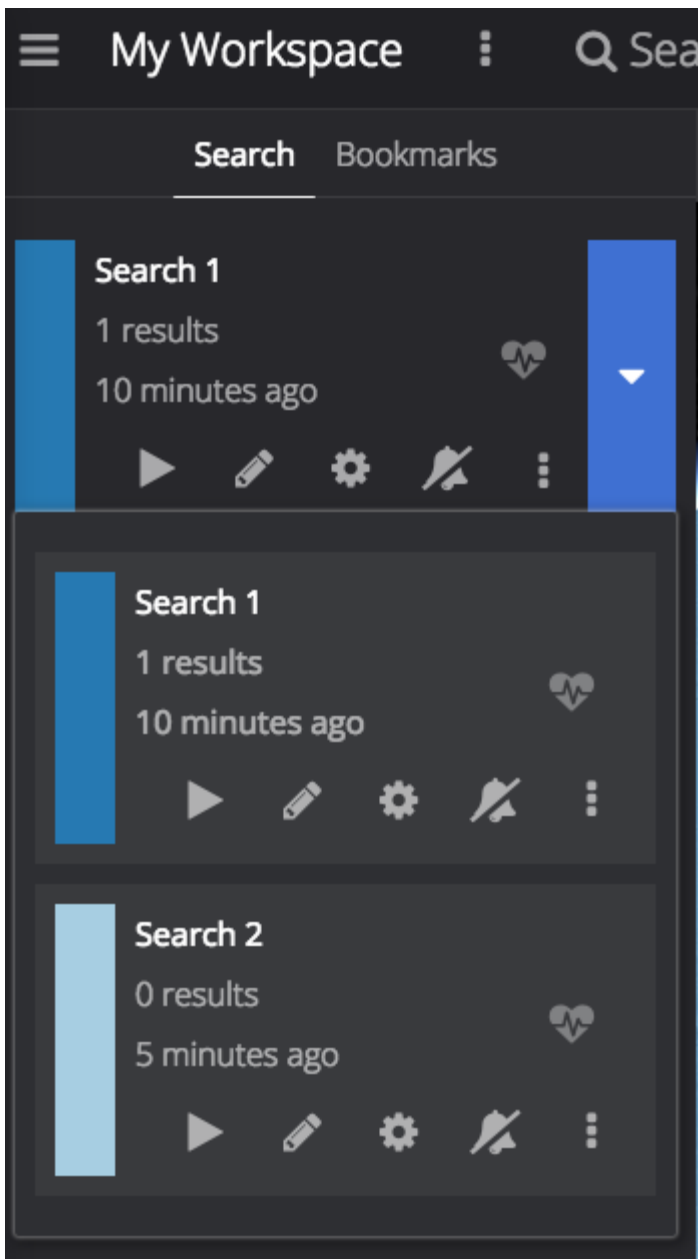
Figure 6. Viewing available searches.

Search Menu Options

At the bottom of each search is a list of options for the search.

- **Run**: Trigger this search to begin immediately.
- **Edit**: Edits the search criteria.
- **Settings**: Edits the search settings, such as sorting.
- **Notifications**: Allows setting up search notifications.
- **Stop**: Stop this search.
- **Delete**: Remove this search.
- **Duplicate**: Create a copy of this search as a starting point.

- **Search Archived**: Execute this search, but specifically for archived results.

- **Search Historical**: Execute this search, but specifically for historical results.

3.4.1.1. Editing a Search

An existing search can be updated by selecting the search in the **Search** tab of a workspace and by clicking the Edit ( ) icon.

Text: Perform a minimal textual search that is treated identically to a Basic search with only Text specified.

Basic: Define a Text, Temporal, Spatial, or Type Search.

Text Search Details

Searches across all textual data of the targeted data source. Text search capabilities include:

Search for an exact word, such as `Text = apple`: Returns items containing the word "apple" but not "apples". Matching occurs on word boundaries.

Search for the existence of items containing multiple words, such as `Text = apple orange`: Returns items containing both "apple" and "orange" words. Words can occur anywhere in an item's metadata.

Search using wildcards, such as `Text = foo*`: Returns items containing words like "food", "fool", etc.

Text searches are by default case insensitive, but case sensitive searches are an option.

Wildcards should only be used for single word searches, not for phrases.

WARNING	When searching with wildcards, do not include the punctuation at the beginning or the end of a word. For example, search for `Text = ca*` instead of `Text = -ca*` when searching for words like "cat", "-cat", etc. and search for `Text = *og` instead of `Text = *og.` when searching for words like "dog", "dog.", etc..

Text searches are by default case insensitive, but case sensitive searches are possible by toggling the `Matchcase` option.

Temporal Search Details

Search based on absolute time of the created, modified, or effective date.

Any: Search without any time restrictions (default).

After: Search records after a specified time.

Before: Search records before a specified time.

Between: Set a beginning and end time to search between.

Relative: Search records relative to the current time.

Spatial Search Details

Search by latitude/longitude, USNG/MGRS, or UTM using a line, polygon, point-radius, or bounding box. Spatial criteria can also be defined by entering a **Keyword** for a region, country, or city in the **Location** section of the query builder.

Type Search Details

Search for specific content types.

Advanced: Advanced query builder can be used to create more specific searches than can be done through the other methods.

Advanced Query Builder Details

Operator: If 'AND' is used, all the filters in the branch have to be true for this branch to be true. If 'OR' is used, only one of the filters in this branch has to be true for this branch to be true.

Property: Property to compare against.

Comparison: How to compare the value for this property against the provided value. Depending on the type of property selected, various comparison values will be available. See Types of Comparators.

Search Terms: The value for the property to use during comparison.

Sorting: Sort results by relevance, distance, created time, modified time or effective time.

Sources: Perform an enterprise search (the local Catalog and all federated sources) or search specific sources.

Advanced Query Builder Comparators

Textual

CONTAINS: Equivalent to Basic Text Search with Matchcase set to No.

MATCHCASE: Equivalent to Basic Text Search with Matchcase set to Yes.

=: Matches if an attribute is precisely equal to that search term.

NEAR: Performs a fuzzy proximity-based textual search. A NEAR query of `"car street" within 3` will match a sample text of `the blue car drove down the street with the red building` because performing three word deletions in that phrase (`drove`, `down`, `the`) causes `car` and `street` to become adjacent.

More generally, a NEAR query of `"A B" within N` matches a text document if you can perform at most N insertions/deletions to your document and end up with `A` followed by `B`.

It is worth noting that `"street car" within 3` will not match the above sample text because it is not possible to match the phrase `"street car"` after only three insertions/deletions. `"street car" within 5` will match, though, as you can perform three word deletions to get `"car street"`, one deletion of one of the two words, and one insertion on the other side.

If multiple terms are used in the phrase, then the `within` amount specifies the total number of edits that can be made to attempt to make the full phrase match. `"car down street" within 2` will

match the above text because it takes two word deletions (`drove`, `the`) to turn the phrase `car drove down the street` into `car down street`.

Temporal

BEFORE: Search records before a specified time.

AFTER: Search records after a specified time.

RELATIVE Search records relative to the current time.

Spatial

INTERSECTS: Gives a component with the same functionality as Basic Spatial Search.

Numeric

>: Search records with field entries greater than the specified value.

>=: Search records with field entries greater than or equal to the specified value.

=: Search records with field entries equal to the specified value.

<=: Search records with field entries less than or equal to the specified value.

<: Search records with field entries less than the specified value.

3.4.1.1.1. Editing Search Settings

An existing search's settings can be modified by selecting the search in the **Search** tab of a workspace and by clicking the **Settings** ( ) icon. Sorting and sources can be customized here.

3.4.1.1.2. Editing Search Notifications

An existing search's notifications can be modified by selecting the search in the **Search** tab of a workspace and by clicking the **Notifications** ( ) icon. Notification frequency can be customized here.

3.4.1.1.3. Viewing Search Status

An existing search's status can be viewed by selecting the search in the **Search** tab of a workspace and by clicking the **Status** ( ) icon. The **Status** view for a search displays information about the sources searched.

NOTE

Intersecting Polygon Searchs

If a self intersecting polygon is used to perform a geographic search, the polygon will be converted into a non-intersection one via a convex hull conversion. In the example below the blue line shows the original self intersecting search polygon and the red line shows the converted polygon that will be used for the search. The blue dot shows a search result that was not within the original polygon but was returned because it was within the converted polygon.

Figure 7. Self Intersecting Polygon Conversion Example

3.4.1.2. Refining Search Results

Returned search results can be refined further, bookmarked, and/or downloaded from the **Search** tab. Result sets are color-coded by source as a visual aid. There is no semantic meaning to the colors assigned.
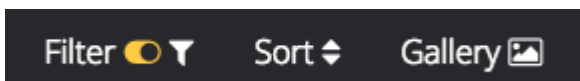
Figure 8. Search Results Options

1. On the **Search** tab, select a search from the drop-down list.

2. Perform any of these actions on the results list of the selected search:

    a. Filter the result set locally. This does not re-execute the search.

    b. Customize results sorting. The default sort is by title in ascending order.

    c. Toggle results view between **List** and **Gallery**.

3.4.1.3. Search Result Options

Options for each individual search result

- **Download**: Downloads the result's associated product directly to the local machine. This option is only available for results that have products.

- **Bookmark**: Adds/removes the results to/from the saved bookmarks.

- **Hide from Future Searches**: Adds to a list of results that will be hidden from future searches.

- **Expand Metacard View**: Navigates to a view that only focuses on this particular result.

- **Create Search from Location**: Searches for all records that intersect the current result's location geometry.

3.4.2. Lists Tab

Lists organize results and enable performing actions on those sets of results.

1. Perform any of these actions on lists:

    a. Filter the result set locally (does not re-execute the search),

    b. Customize results sorting (Default: Title in Ascending Order).

    c. Toggle results view between **List** and **Gallery**.

NOTE	Lists are not available to guest users.

3.4.2.1. Creating a List

A new list can be created by selecting the **Lists** tab and selecting the **new list** text.
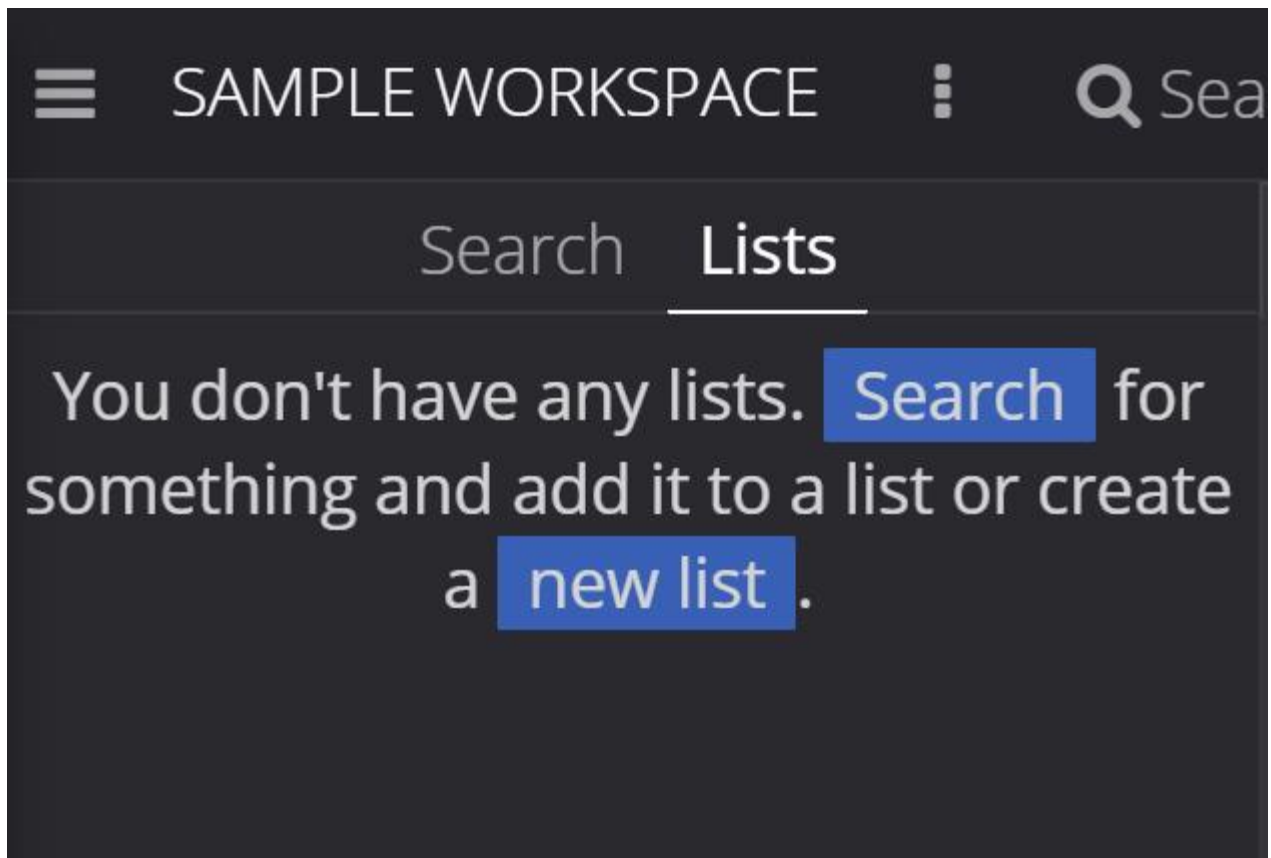
3.4.2.2. Adding/Removing Results to a List

Results can be added to a list by selecting the + icon on a result.
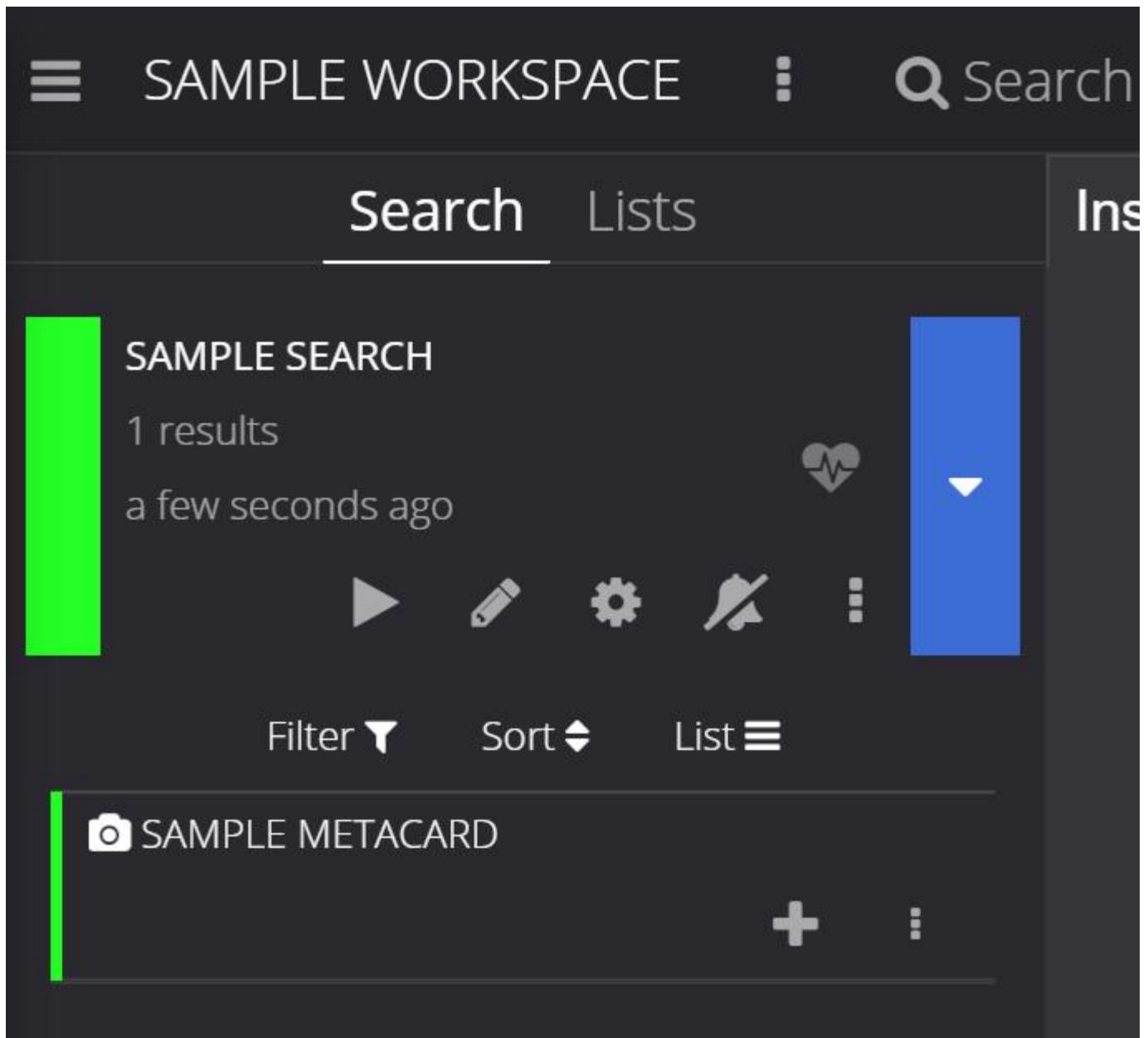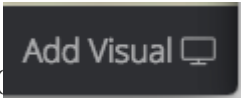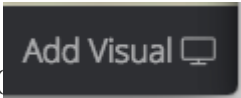
Results can be added or removed to/from a list through the result's dropdown menu.
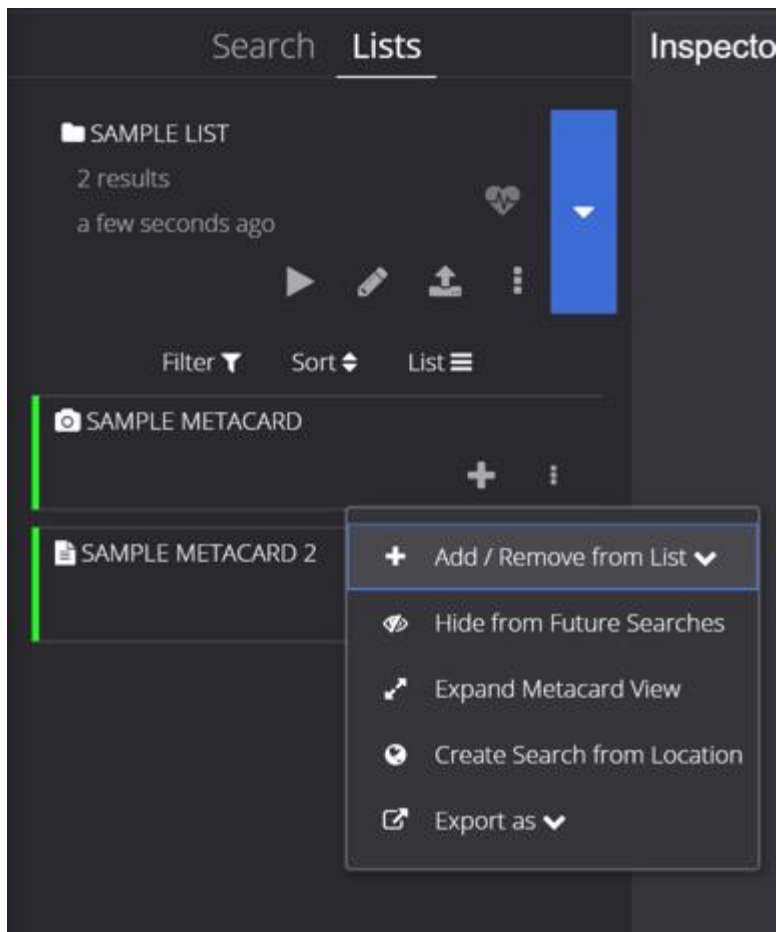
3.5. Viewing Search Results

3.5.1. Adding Visuals

Visuals are different ways to view search results.

1.
   Click the **Add Visual** ( ) icon in the bottom right corner of Intrigue.

2. Select a visual to add.

   a. **2D Map**: A 2 dimensional map view.

   b. **3D Map**: A 3 dimensional map view.

   c. **Inspector**: In depth details and actions for the results of a search.

   d. **Histogram**: A configurable histogram view for the results of a search.

   e. **Table**: A configurable table view for the results of a search.

The **Search** tab displays a list of all of the search results for the selected search. The **Inspector** visual provides in depth information and actions for each search result.

Summary

A summarized view of the result.

Details

A detailed view of the result.

History

View revision history of this record.

Associations

View or edit the relationship(s) between this record and others in the catalog.

Quality

View the completeness and accuracy of the metadata for this record.

Actions

Export the metadata/resource to a specific format.

Archive

Remove the selected result from standard search results.

Overwrite

Overwrite a resource.

3.5.2. Editing Records

Results can be edited from the **Summary** or **Details** tabs in the **Inspector** visual.

3.5.3. Viewing Text Previews

If a preview for a result is available, an extra tab will appear in the **Inspector** visual that allows you to see a preview of the resource.

3.5.4. Editing Associations on a Record

Update relationships between records through **Associations**.

1. Select the desired result from the **Search** tab.

2. Select the **Inspector** visual.

3. Select the **Associations** tab.

4. Select **Edit**.

5. For a new association, select **Add Association**. Only items in the current result set can be added as associations.

a. Select the related result from either the **Parent** or **Child** drop-down.

b. Select the type of relationship from the **Relationship** drop-down.

c. Select **Save**.

6. To edit an existing association, update the selections from the appropriate drop-downs and select **Save**.

View a graphical representation of the associations by selecting **Graph** icon from the **Associations** menu.
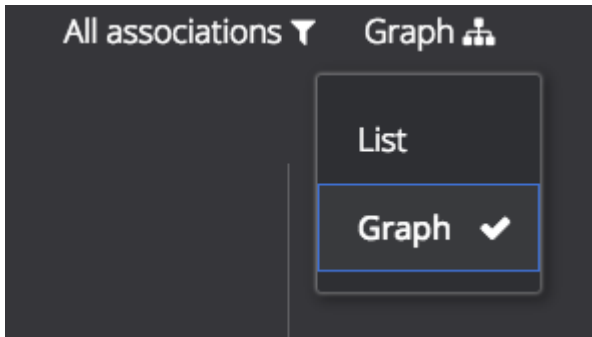
Figure 9. Associations menu.

3.5.5. Viewing Revision History

View the complete revision history of a record.

1. Select the desired result from the **Search** tab.

2. Select the **Inspector** visual.

3. Select the **History** tab.

a. Select a previous version from the list.

b. Select **Revert to Selected Version** to undo changes made after that revision.

3.5.6. Viewing Metadata Quality

View and fix issues with metadata quality in a record.

NOTE | Correcting metadata issues may require administrative permissions.

1. Select the desired result from the **Search** tab.

2. Select the **Inspector** visual.

3. Select the **Quality** tab.

4. A report is displayed showing any issues:

a. Metacard Validation Issues.

b. Attribute Validation Issues.

3.5.7. Exporting a Result

Export a result's metadata and/or resource.

1. Select the desired result from the **Search** tab.
2. Select the **Inspector** visual.
3. Select **Actions** tab.
4. Select the desired export format.
5. Export opens in a new browser tab. Save, if desired.

3.5.8. Archiving a Result

To remove a result from the active search results, archive it.

1. Select the desired result from the **Search** tab.
2. Select the **Inspector** visual.
3. Select the **Archive** tab.
4. Select **Archive item(s)**.
5. Select **Archive**.

3.5.9. Restoring Archived Results

Restore an archived result to return it to the active search results.

1. Select the **Search Archived** option from the **Search Results Options** menu.
2. Select the desired result from the **Search** tab.
3. Select the **Inspector** visual.
4. Select the **Archive** tab.
5. Select **Restore item(s)**.
6. Select **Restore**.

Restore hidden results to the active search results.

1. Select the **Settings** (⚙) icon on navigation bar.
2. Select **Hidden**.
3. Click on the eye (👁) icon next to each result to be unhidden.
   a. Or select **Unhide All** to clear the list.
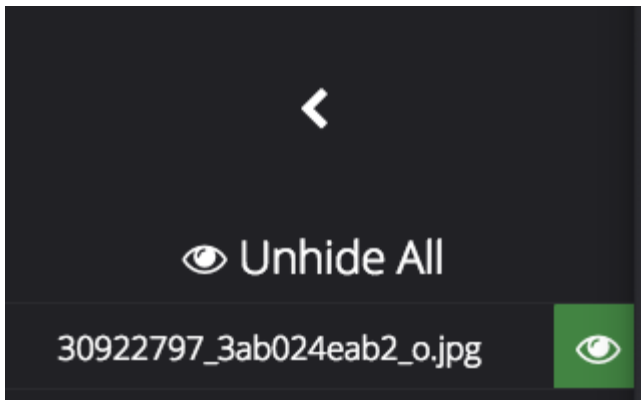
3.5.10. Overwriting a Resource

Replace a resource.

1. Select the desired result from the **Search** tab.

2. Select the **Inspector** visual.

3. Select the **Overwrite** tab.

4. Select **Overwrite content**.

5. Select **Overwrite**

6. Navigate to the new content via the navigation window.

3.5.11. Intrigue Settings

Customize the look and feel of Intrigue using the **Settings** (⚙) menu on the navigation bar.
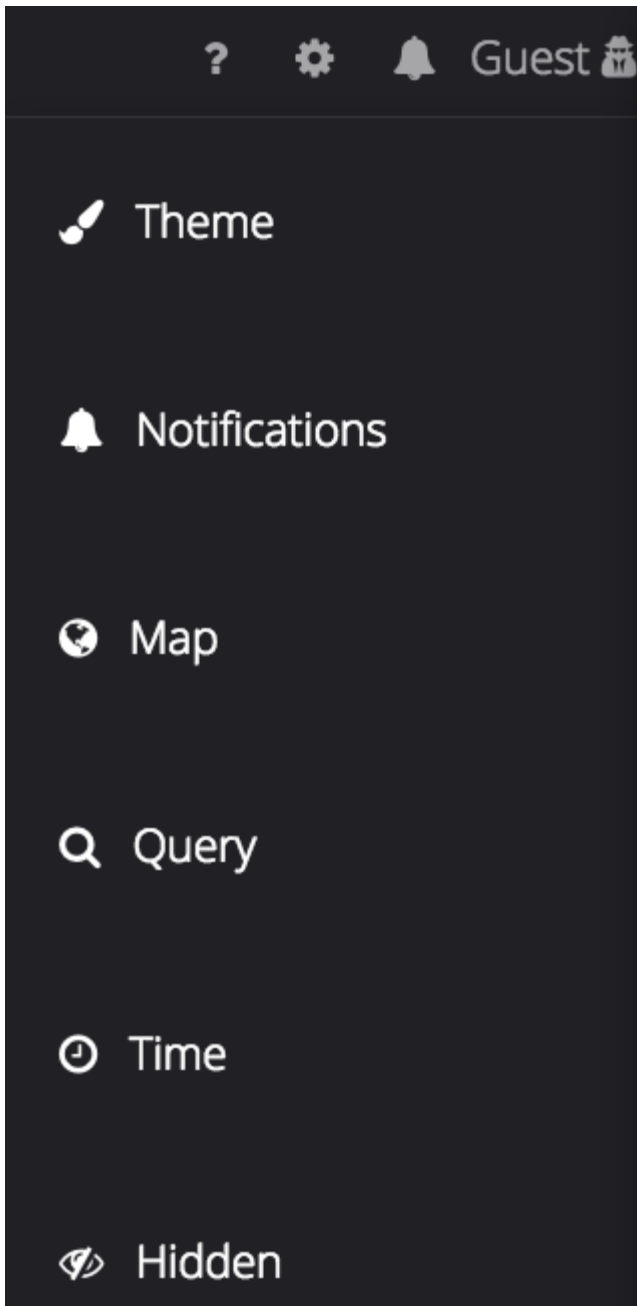
Figure 10. Settings Menu Options

- **Theme**: Visual options for page layout.

- **Notifications**: Select if notifications persist across sessions.

- **Map**: Select options for map layers.

- **Query**: Customize the number of search results returned.

- **Time**: Set the time format (ISO-8601, 24 Hour or 12 Hour), as well as the timezone (UTC-12:00 through UTC+12:00).

- **Hidden**: View or edit a list of results that have been hidden from the current search results.

3.5.12. Intrigue Notifications

Notifications can be checked/dismissed by clicking the **Notifications** icon ( ) on the navigation bar.

3.5.13. Intrigue Low Bandwidth Mode

Low bandwidth mode can be enabled by passing in a `?lowBandwidth` parameter along with any URL targeting the Intrigue endpoint. Ex: `https://{FQDN}:{PORT}/search/catalog/?lowBandwidth#workspaces`. Currently, enabling this parameter causes the system to prompt the user for confirmation before loading potentially bandwidth-intensive components like the 2D or 3D Maps.

4. Using Standard Search UI

IMPORTANT	This feature has been **DEPRECATED** and will be removed in a future version.

NOTE	**To use the Standard Search UI, uninstall the DDF** Security :: Filter :: CSRF bundle.

The DDF Standard Search UI application allows a user to search for records in the local Catalog (provider) and federated sources. Results of the search are returned in HTML format and are displayed on a globe, providing a visual representation of where the records were found. The Search UI is not installed by default; however, it can be installed through the Admin UI.

Located at the bottom of the left pane of the Search UI are two tabs: Search and Workspaces. The Search tab contains basic fields to query the Catalog and other sources. The workspaces feature uses the same search criteria that are provided in the Search tab, and it also allows the user to create custom searches that can be saved for later execution. The right-side pane displays a map that, when records are found, shows the location of where the record was retrieved.

4.1. Search

The Standard Search UI allows users to search for records in the local Catalog and federated sources based on the criteria entered in the Search tab. After a search is executed, the UI provides results based on the defined criteria and detailed information about each result. Additionally, a user can save individual records that were returned by the query to a workspace, so they can be referenced in the future. The user can also save the search criteria to a workspace so the query can be run again.

4.1.1. Installing Search UI

The Search UI is not installed by default, but can be installed through the Admin UI.

1. Go to **Admin UI**

2. Go to **System** tab

3. Go to **Feature** tab

4. Install feature: **search-ui-deprecated**

4.1.2. Search Criteria

The Search UI queries a Catalog using the following criteria.

Criteria	Description
Text	Search by free text using the grammar of the underlying endpoint/Catalog.
Time	Search based on relative or absolute time of the created, modified, or effective date.
Location	Search by latitude/longitude or the USNG using a point-radius or bounding box.
Type	Search for specific content types.
Sorting	Sort results by relevance, distance, created time, modified time or effective time.
Additional Sources	Select **All Sources** or **Specific Sources**.
All Sources	Create an enterprise search. All federations are queried.
Specific Sources	Search a specific source(s). If a source is unavailable, it is displayed in red text.

4.1.3. Results

After a query is executed, the records matching the search criteria are automatically displayed in the Results pane.

Item	Description
Search criteria	Enhanced search toggle. Enables the enhanced search menu (see below). Allows users to filter and refine search and build more sophisticated queries.
Results	The number of records that were returned as a result of the query. Only the top 250 results are displayed, with the most relevant records displayed at the top of the list. If more than 250 results are returned, try narrowing the search criteria.
Search button	Navigates back to the Search pane.
Save button	Allows the user to select individual records to save.

Item	Description
Records list	Shows the results of the search. The following information is displayed for each record: Title – The title of the record is displayed in blue text. Select the title of the record to view more details. Source – The gray text displayed below the record title is the data source (e.g., ddf.distribution) and the amount of time that has passed since the record was modified (e.g., an hour ago).

4.1.4. Enhanced Search

The enhanced search menu allows more granular filtering of results and the ability to construct sophisticated queries.

Item	Description
Source	List of all sources searched with check boxes to allow users to refine searches to the most relevant sources.
Metadata Content Type	List of metadata content types found in the search, with the ability to select and deselect content type.
Query	The Query builder enables users to construct a very granular search query. The first drop-down menu contains the metadata elements in the search results, and the second contains operators based on the field selected (greater than, equals, contains, matchcase, before, after, etc.) Click the + to add further constraints to the query, or x to remove. Click Search to use the new query.
Search button	Executes an enhanced search on any new parameters that were specified or the query built above.

4.1.5. Record Summary

When an individual record is selected in the results list, the Record pane opens. When the Summary button is selected in the Record pane, the following information is displayed.

Item	Description
Results button	Navigates back to the original query results list.
Up and down arrows	Navigate through the records that were returned in the search. When the end or the beginning of the search results list is reached, the respective up or down arrow is disabled.
Details button	Opens the Details tab, which displays more information about the record.
Title	The title of the record is displayed in white font.

Item	Description
Source	The location that the metadata came from, which could be the local provider or a federated source.
Created time	When the record was created.
Modified time	Time since the record was last modified.
Locate button	Centers the map on the record's originating location.
Thumbnail	Depicts a reduced-size image of the original artifact for the current record, if available.
Download	A link to download the record. The size, if known, is indicated.

4.1.6. Record Details

When an individual record is selected in the results list, the Record pane opens. When the Details button is selected in the Record pane, the following information is displayed.

Item	Description
Results button	Navigates back to the original query results list.
Up and down arrows	Navigate through the records that were returned in the search. When the end or the beginning of the search results list is reached, the respective up or down arrow is disabled.
Summary button	Opens the Summary tab, which provides a high-level overview of the result set.
Id	The record's unique identifier.
Source Id	Where the metadata was retrieved from, which could be the local provider or a federated source.
Title	The title of the record is displayed in white font.
Thumbnail	Depicts a reduced size image of the original artifact for the current record, if available.
Resource URI	Identifies the stored resource within the server.
Created time	When the record was created.
Metacard Content Type version	The version of the metadata associated with the record.
Metacard Type	The type of metacard associated with the record.
Metacard Content Type	The type of the metadata associated with the record.
Resource size	The size of the resource, if available.
Modified	Time since the record was last modified.

Item	Description
Download	When applicable, a download link for the product associated with the record is displayed. The size of the product is also displayed, if available. If the size is not available, N/A is displayed.
Metadata	Shows a representation of the metadata XML, if available.

4.2. Actions

Depending on the contents of the metacard, various actions will be available to perform on the metadata.

Troubleshooting: if no actions are available, ensure IP address is configured correctly under global configuration in Admin Console.

4.2.1. Save a Search

Saved searches are search criteria that are created and saved by a user. Each saved search has a name that was defined by the user, and the search can be executed at a later time or be scheduled for execution. Bookmarked records that the user elected to save for future use are returned as part of a search. These queries can be saved to a workspace, which is a collection of searches and records created by a user. Complete the following procedure to create a saved search.

1. Select the Search tab at the bottom of the left pane.

2. Use the fields provided to define the Search Criteria for the query to be saved.

3. Select the **Save** button. The Select Workspace pane opens.

4. Type a name for the query in the **ENTER NAME FOR SEARCH** field.

5. Select a workspace in which to save the query, or create a workspace by typing a title for the new workspace in the **New Workspace** field.

6. Select the **Save** button.

NOTE	The size of the product is based on the value in the associated metacard's resource-size attribute. This is defined when the metacard was originally created and may or may not be accurate. Often it will be set to N/A, indicating that the size is unknown or not applicable.
	However, if the administrator has enabled caching on DDF, and has installed the `catalog-core-resourcesizeplugin` PostQuery Plugin, and if the product has been retrieved, it has been cached and the size of the product can be determined based on the cached file's size. Therefore, subsequent query results that include that product will display an accurate size under the download link.

4.3. Workspaces

Each user can create multiple workspaces and assign each of them a descriptive name. Each workspace can contain multiple saved searches and contain multiple saved records. Workspaces are saved for each user and are loaded when the user logs in. Workspaces and their contents are persisted, so they survive if DDF is restarted. Within the Standard Search UI, workspaces are private and cannot be viewed by other users.

4.3.1. Create a Workspace

1. Select the Workspaces tab at the bottom of the Search UI's left pane. The Workspaces pane opens, which displays the existing workspaces that were created by the user. At the top of the pane, an option to **Add** and an option to **Edit** are displayed.

2. Select the **Add** button at the top of the left pane. A new workspace is created.

3. In the **Workspace Name** field, enter a descriptive name for the workspace.

4. Select the **Add** button. The Workspaces pane opens, which now displays the new workspace and any existing workspaces.

5. Select the name of the new workspace. The data (i.e., saved searches and records) for the selected workspace is displayed in the Workspace pane.

6. Select the + icon near the top of the Workspace pane to begin adding queries to the workspace. The Add/Edit Search pane opens.

7. Enter a name for the new query to be saved in the QUERY NAME field.

8. Complete the rest of the Search Criteria.

9. Select the **Save & Search** button. The Search UI begins searching for records matching the criteria, and the new query is saved to the workspace. When the search is complete, the Workspace pane opens.

10. Select the name of the search to view the query results.

11. If necessary, in the Workspace pane, select the **Edit** button then select the pencil icon next to the name of a query to change the search criteria.

12. If necessary, in the Workspace pane, select the delete icon next to the name of a query to delete the query from the workspace.

4.4. Notifications

The Standard Search UI receives all notifications from DDF. These notifications appear as pop-up windows inside the Search UI to alert the user of an event of interest. To view all notifications, select the notification icon.

Currently, the notifications provide information about product retrieval only. After a user initiates a resource download, they receive periodic notifications that provide the progress of the download (e.g.,

the download completed, failed, or is being retried).

NOTE	A notification pop-up remains visible until it is dismissed or the browser is refreshed. Once a notification is dismissed, it cannot be retrieved again.

4.5. Activities

Similar to notifications, activities appear as pop-up windows inside the Search UI. Activity events include the status and progress of actions that are being performed by the user, such as searches and downloads. To view all activities, select the activity icon in the top-right corner of the window. A list of all activities opens in a drop-down menu, from which activities can be read and deleted. If a download activity is being performed, the Activity drop-down menu provides the link to retrieve the product.

If caching is enabled, a progress bar is displayed in the Activity (Product Retrieval) drop-down menu until the action being performed is complete.

4.6. Downloads

Downloads from the UI are currently managed by the user-specific browser's download manager. The UI itself does not have a built-in download manager utility.

4.7. Maps

The right side of the Search UI contains a map to locate search results on. There are three views for this map, 3D, 2D, and Columbus View. To choose a different view, select the map icon in the upper right corner. (The icon will change depending on current view selected.)

5. Using the Simple Search

The DDF Simple Search UI application provides a low-bandwidth option for searching records in the local Catalog (provider) and federated sources. Results are returned in HTML format.

5.1. Search

The **Input** form allows the user to specify keyword, geospatial, temporal, and type query parameters. It also allows the user to select the sources to search and the number of results to return.

5.1.1. Search Criteria

Enter one or more of the available search criteria to execute a query:

Keyword Search

A text box allowing the user to enter a textual query. This supports the use of (*) wildcards. If blank,

the query will contain a contextual component.

Temporal Query

Select from **any**, **relative**, or **absolute**. Selecting **Any** results in no temporal restrictions on the query, selecting **relative** allows the user to query a period from some length of time in the past until now, and selecting **absolute** allows the user to specify a **start** and **stop** date range.

Spatial Search

Select from **any**, **point-radius**, and **bounding box**. Selecting **Any** results in no spatial restrictions on the query, selecting **point-radius** allows the user to specify a **lat/lon** and **radius** to search, and selecting a **bounding box** allows the user to specify an **eastern**, **western**, **southern** and **northern** boundary to search within.

Type Search

Select from **any**, or a specific type. Selecting **Any** results in no type restrictions on the query, and Selecting **Specific Types** shows a list of known content types on the federation, and allows the user to select a specific type to search for.

Sources

Select from **none**, **all sources**, or **specific sources**. Selelcting **None** results in querying only the local provider, Selecting **All Sources** results in an enterprise search where all federations are queried, and selecting **Specific Sources** allows the user to select which sources are queried.

Results per Page

Select the number of results to be returned by a single query.

5.1.2. Results

The table of results shows the details of the results found, as well as a link to download the product if applicable.

5.1.2.1. Results Summary

Total Results

Total Number of Results available for this query. If there are more results than the number displayed per page then a page navigation links will appear to the right.

Pages

Provides page navigation, which generate queries for requesting additional pages of results.

5.1.2.2. Results Table

The Results table provides a preview of and links to the results. The table consists of these columns:

Title

Displays title of the metacard. This will be a link which can clicked to view the metacard in the Metacard View.

Source

Displays where the metadata came from, which could be the local provider or a federated source.

Location

Displays the WKT Location of the metacard, if available.

Time

Shows the Received (Created) and Effective times of the metacard, if available.

Thumbnail

Shows the thumbnail of the metacard, if available.

Download

A download link to retrieve the product associated with the metacard, when applicable, if available.

5.1.3. Result View

This view shows more detailed look at a result.

Back to Results Button

Returns the view back to the Results Table.

Previous & Next

Navigation to page through the results one by one.

Result Table

Provides the list of properties and associated values of a single search result.

Metadata

The metadata, when expanded, displays a tree structure representing the result's custom metadata.