# **User Guide**

This section gives an overview of the Voyager application. It describes the user interface components, how to search and view your data, and various processes that can be run to help speed up day-to-day tasks.

## **User Interface**

The Voyager display is composed of a few basic components, including a textual search box, a toolbar containing some helpful menus, a search results area, an overview map, and filters, all of which will be explained in this section.



## Search Box

The search box is used for text queries and is an easy way to find items in the index. For more information on how to search using the text search box, go to Query Syntax.



## Menu Toolbar

The toolbar contains the navigational and functional menus within Voyager: Home, Sort, View, Tools. It also displays the number of results in the current search and provides the ability to navigate through the results pages.



## **Home Menu**

The Home menu has four options: Voyager Search, Saved Searches, Lists and Processing. Voyager Search clears any previous search, brings the interface to the main page and shows all indexed data. Saved Searches takes you to a list of previously saved searches. Lists displays the various lists you have created. Processing displays a history of the process tasks that have been run.





#### **Shortcut**

The Voyager GIS Data Discovery logo at the top of each page also clears your search and brings you back to the main page.

## **Sort Menu**

The Sort menu has a list of sorting options so you can see results in the way that makes most sense to you. This list is configurable via the Configure Sort dialog and also contains an option for reversing the direction of the search results.



## **View Menu**

The View menu enables a user to determine how they want the data to be displayed. There are five view options: Summary, Grid, Map, Table and Report The View tab also allows a user to determine and set configurations for Filters, Display, Table, Reports, and Sort.



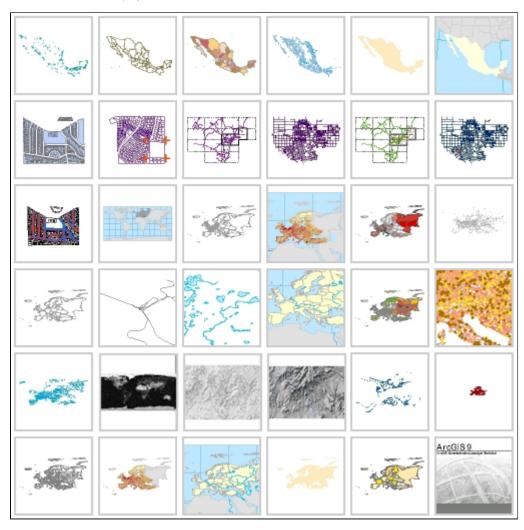
## **Tools Menu**

The Tools menu provides several things a user can do with the data that Voyager has discovered, including:Save This Search, Open RSS Feed, Open Results With, Process Results, Add Results to List, and Export Result List.



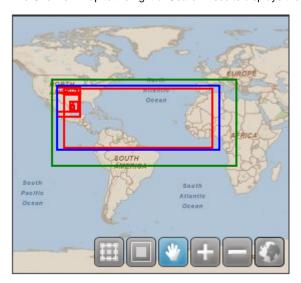
## **Search Results**

Below the toolbar, the search results are displayed in the type of View the user has chosen (Summary, Grid, Map, Table, Report). In this case, the results are displayed in the Grid View.



# **Overview Map**

The Overview Map to the right of Search Results displays the extents of the data on a map.



Color	Meaning	
Green	spatial extent that was searched (by drawing a polygon on the map)	
Blue	The extent of all results that match the given query	
Red	The footprint for each result that is displayed on the current page. Note that this is not all matching result	

## **Filters**

Below the Overview Map is a list of Filters, which are used to refine a search. The default filters are: Type, Subtype, Format, Geometry Type, Properties, Author, Spatial Reference, File Extension and Location, but they are configurable. The Show Inverse Option filters on the opposite value of any existing filter.



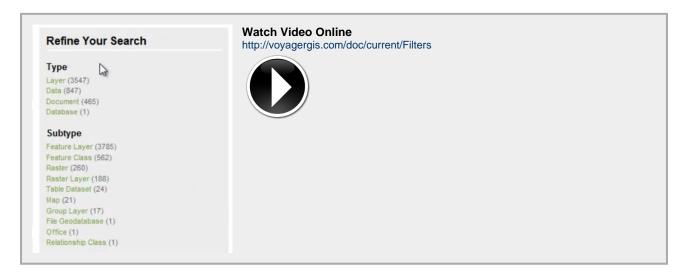
Within the Filters section, Field Statistics shows the total size, average size, and deviation for all files in the index.



Depending on the user's permission level, Admin Options may be available from the Filters section. The following actions can be taken on the **current set of results**:

- · Remove from the index, with the option of also deleting the corresponding thumbnails, metadata, and layer files
- Add results to the discovery queue, which re-indexes the items immediately
- Show the underlying query

# Admin Options Remove results from the Index Add results to discovery queue Show Raw Query



# **Searching for Data**

Searching for data can be done in different ways. Voyager provides filters, which can be used to narrow your set of results to just the data you are looking for. Another option is to do a textual search, using the search box. Once you have found what you are looking for, the results can be sorted by different fields.



## **Query Syntax**

By default Voyager searches over all text (including metadata) for matching items. Results that match the title or path are ranked above results matching any other text. To customize the default field weights, see Query Settings

In addition to the default behavior, Voyager supports explicit operators and field selection

#### **Operators**

#### OR

The OR operator is the default search operator. This means that if there is no operator between two terms in a search, the OR operator is used. The OR operator links two terms and finds a matching document if either of the terms exist in a document.

For example, to search for documents that contain either "Florida highways" or just "highways" use the query:

"Florida highways" highways

or

"Florida highways" OR highways

#### AND

The AND operator matches documents where both terms exist anywhere in the text of a single document.

For example, to search for documents that contain "rivers" and "lakes" use the query:

rivers AND lakes

#### **Fields**

Voyager supports fielded data. When performing a search you can either specify a field name, or use the default search which uses many fields.

You can search any field by typing the field name in lowercase followed by a colon ":" and then the term you are looking for. Searching by field names only produces results that match the particular field specified.

For example, to search for any documents with "Rivers" in the name field and "Florida" in the path field, use the query:

name:rivers AND path:Florida

Note: The field is only valid for the term that it directly precedes, so the query

name:major cities

Will only find "major" in the name field. It will find "cities" using the default search which uses many fields.

To search for 2 or more terms in a field name, quotes around the text are required. For example, to search the name field for "major cities", use the query:

name:"major cities"

#### Search by path

Paths in voyager can either be searched for using the standard field selection operator ":", or a special "=" operator that matches folders explicitly.

Using the standard "path:" syntax, the query is looking for words in the path. For example:

path:Desktop

Will return items with "Desktop" in the path.

Using the "=" operator will find files explicitly in a folder. For example:

path=F:\Desktop\NJ DEP\NJ100mhillshd\nj100mhill

Will find all results under this folder. Aditionally, the path= syntax triggers a special Path Navigation UI.

#### Wildcards

Voyager supports single and multiple character wildcard searches within single terms.

To perform a single character wildcard search use the "?" symbol.

To perform a multiple character wildcard search use the "\*" symbol.

The single character wildcard search looks for terms that match that with the single character replaced. For example, to search for "text" or "test" you can use the search

te?t

Multiple character wildcard searches looks for 0 or more characters. For example, to search for counties or countries, you can use the search:

count\*



Note: \* or ? are not valid as the first character in a search string

#### **Escaping Special Characters**

Voyager supports escaping special characters that are part of the query syntax. The current list special characters are:

+-&&||!(){}[]^"~\*?:

To escape these character use the \ before the character. For example to search for (1+1):2 use the query:

(1+1)\:2

#### **Lucene Query Syntax**

Text searches in Voyager are based on Lucene style syntax. So users can use operators, specific field names or wildcards to produce the results they require.

For more information about Lucene style syntax please refer to the following link: http://lucene.apache.org/java/3\_0\_1/queryparsersyntax.html

# **Sorting Results**

The Sort tab has a list of sorting options so you can see results in the way that makes most sense to you. This list is configurable via the Configure Sort dialog and also contains an option for reversing the direction of the search results.



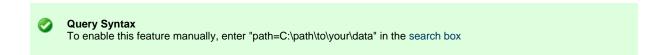


# **Path Navigation**

Path Navigation is new to version 1.2.3 in Voyager.

This allows filtering simply by clicking any of the folder or sub-folder locations from the path on the Detail Page.





# **Search Result Options**

Voyager provides options to a user when a thumbnail of an individual search result is clicked in the Summary, Grid or Map Views. These options are: Show Detail Page, Show Preview, Show Metadata, Open With, Locate on Disk, Process, Add to List, Remove From List, Extent, and Exclude item.



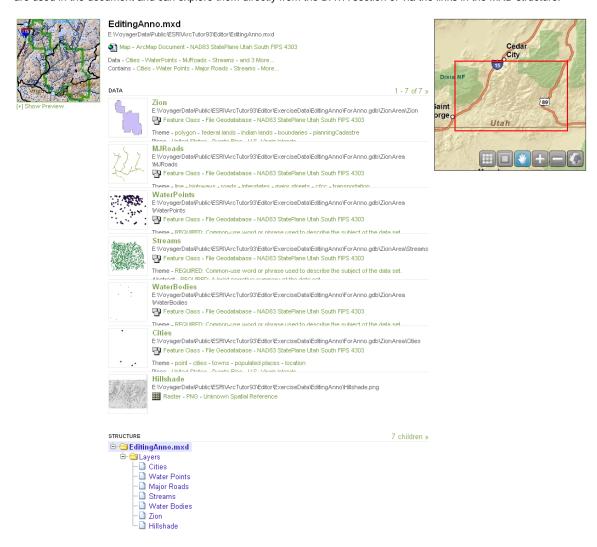
# **Detail Page**

The Detail Page reveals many details specific to this individual search result. By default, the details displayed include basic attributes like the name, path, theme, place, etc. What information is displayed can be configured via the Configure Display option under the View menu.



The detail page also shows links or relationships between the item and any other items in the index. For example, if the dataset is used in an MXD or Layer File, the MXDs or Layer Files will be displayed as links in the "USED BY" section.

Conversely, MXDs and Layer Files display the items within them in a tree structure, so users can see which Feature Layers and datasets are used in the document and can explore them directly from the DATA section or via the links in the MXD structure.



The relationships between items in a database are also captured and displayed. For example, databases show links to all of the items within them. Feature datasets show which database they are in, as well as the datasets they contain. And datasets have links to their

#### database and feature datasets.



## **Show Metadata**

Displays the item's metadata using the style selected from the dropdown menu. This Additional, custom style sheets can be added to this list.



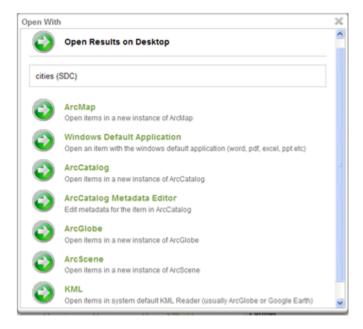
# **Show Preview**

Shows a larger, more detailed view of the dataset.



# **Open With**

The Open With option allows the user to open the individual search result in a variety of desktop applications, including ArcGIS desktop applications, KML viewer, or the Window Default Application.



## **Locate on Disk**

Opens Windows Explorer and navigates to the individual search result on disk.

## **Process**

This option opens the choices for processing the individual search result on desktop or server. The process choices are Clip and Ship, Convert to KML, Create Default Metadata, Copy Data or Mosaic. For more detailed information about the processes, see the Processing section.



## Clip and Ship

Extract a region of the results into a distributable bundle



#### Convert to KML

Convert item to KML



#### Create GeoPDF

Create a GeoPDF



#### Create Default Metadata

Create default metadata for items



#### **Create Raster Mosaic**

Combine all search results into a single Raster Mosaic



## Copy Data

Copies data from one location to another



#### Mosaic

Combine all Imagery into a single raster

## Add to List

This gives the user the ability to add the individual search result to either a new list or an existing list.

For more information about lists: Working with Lists

## **Remove From List**

This gives the user the option to remove the individual search result from a list.

For more information about lists: Working with Lists

## **Extent**

This gives the user the options to:

- Zoom to Extent -Zooms the map into the extent of this item
- Query Within Extent Performs a spatial query and returns all items whose extent falls completely within the current item's
  extent.
- · Query Extent Intersection Performs a spatial query and returns all items whose extent intersects the current item's extent.

All results are reflected in the overview map in the upper right-hand corner of the window.

## **Exclude Item**

This option allows the user to exclude an individual search result from the search.

## **RSS Feeds**

This tool allows a user to open search results in an RSS Feed, which will automatically notify them if something in their results changes.



See also: OpenSearch, RSS

# **Working with Views**

Once your index is created, you can view the items in the index in various ways, allowing you to visualize your information in the most appropriate way. Views are used to display the data in a layout of your choice (Summary View, Grid View, Overview Map, Table View, or Report View), with a configurable set of fields displayed and providing a useful set of filters for further refining your queries.

# **Display Options**

The View tab enables a user to determine how they want the data to be displayed. There are fire view options: Summary, Grid, Map, Table and Report.





# **Summary View**

The summary view displays a few pieces of information about each item, along with the thumbnail for the item.





## states.sdc

C:\Data\mxds\data\states.sdc

Feature Class - SDC Feature Dataset - WGS84

Theme - polygon - states - area - coastlines - boundaries

Place - Mexico

Abstract - Mexico States represents the states of Mexico with coastlines, international boundaries, and state boundaries.



## city.sdc

C:\Data\mxds\data\city.sdc

🕎 Feature Class - SDC Feature Dataset - WGS84

Theme - point - cities - population - location

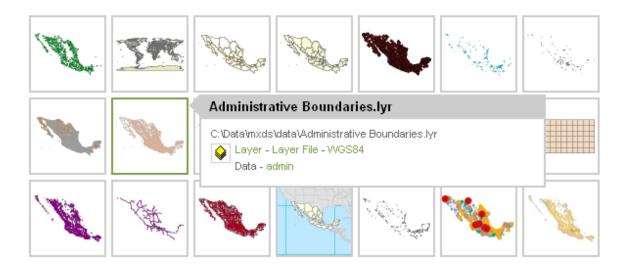
Place - Mexico

Abstract - Mexico Cities represents the locations of cities in Mexico.

To configure which fields are displayed, see Configure Display

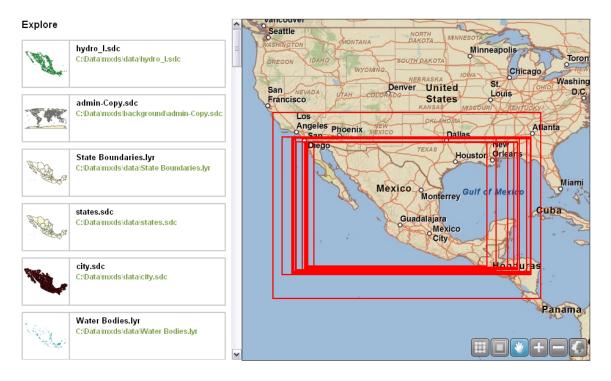
# **Grid View**

The grid view displays each item as a thumbnail only. When you hover over a thumbnail, more information about that item is displayed.



# **Map View**

The map view displays the relationship between the data and where it lies spatially.



## **Table View**

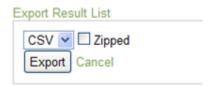
The table view displays results as a list. This is useful for comparing results based on a property, such as the size of the item in Bytes or the time it took to index the item.

Name	Bytes	Time To Read	Time To Index
➡ hydro_l.sdc	1.7 MB	0:00:00.109	0:00:00.250
admin-Copy.sdc	2 MB	0:00:00.219	0:00:00.234
♦ State Boundaries.lyr	11 KB	0:00:00.032	0:00:00.032
🔁 states.sdc	1.7 MB	0:00:00.125	0:00:00.141
🔁 city.sdc	121 KB	0:00:00.109	0:00:00.125
♦ Water Bodies.lyr	12 KB	0:00:00.031	0:00:00.031
🔐 urban.sdc	245 KB	0:00:00.110	0:00:00.125
Admin Areas (Municipios).lyr	15 KB	0:00:00.031	0:00:00.031
Administrative Boundaries.lyr	13 KB	0:00:00.031	0:00:00.031
admin.sdc	4.5 MB	0:00:00.094	0:00:00.109
♦ State Areas.lyr	13 KB	0:00:00.046	0:00:00.046
Railroads.lyr	10 KB	0:00:00.032	0:00:00.032
♦ Urban Areas.lyr	15 KB	0:00:00.031	0:00:00.031
world30.sdc	20 KB	0:00:00.079	0:00:00.079
🔁 contours.sdc	3.2 MB	0:00:00.078	0:00:00.094
🚰 rails.sdc	327 KB	0:00:00.094	0:00:00.109
🔐 roads.sdc	2.3 MB	0:00:00.250	0:00:00.250

To configure which fields shown in the table, see Configure Table



Tip: When displaying results in the Table View a user has the ability to export the result list in CSV, SHP or XML. This option is offered at the bottom of the page.

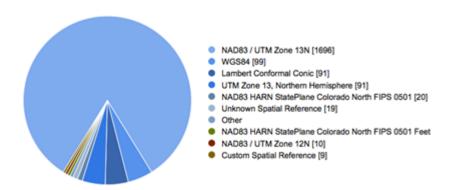


Alternatively use the Export Results List tool.

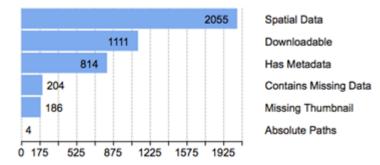
# **Report View**

The report view that generates graphs based on the configurable set of filters used to narrow search results. Graphs include pie and bar charts, are interactive and will work in any web browser (without the need for special plug-ins such as Flash or Silverlight).

#### Spatial Reference



## **Properties**



To configure the charts and graphs, see Configure Reports

# **View Configuration**

Views are fully configurable, allowing you to change the filters, reports, sort, display, and table options. Any user with the "configure\_views" permission can create custom views.

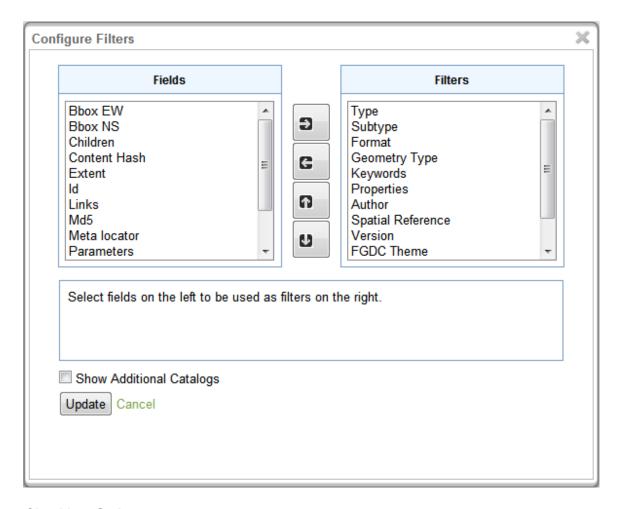
## **Configure Filters**

This option allows the user to select fields that will be used to filter query results. The filters are used to show a subset of the data, giving the user a better idea of the types of data in the index and to narrow down exactly what they may be searching for.

Additional filters can be added from the set of Fields on the left, or filters can be removed from the active Filters list by using the left/right arrow buttons in the middle of the window to move things into and out of the list. The display order the filters can also be changed using the up/down arrow buttons.

Default fields: type, subtype, format, geometry type, keywords, properties, author, spatial reference, version, theme, file extension and location





## **Checkbox Style**

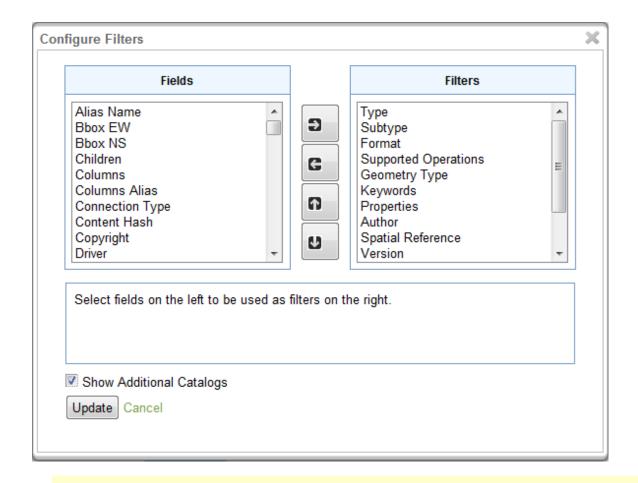
This filter style uses check boxes to select from multiple values at the same time. It effectively acts as an "AND" filter.

## **Select Style**

This is the default filter style – it shows each of the available options and allows you to click on a single value to refine your search. Note that once a value is selected the filter will be applied and other filterable values will no longer be available. This effectively acts as an 'OR' type of query.

## **Show Additional Catalogs**

To view data from both local and remote catalogs, select the Show Additional Catalogs option.



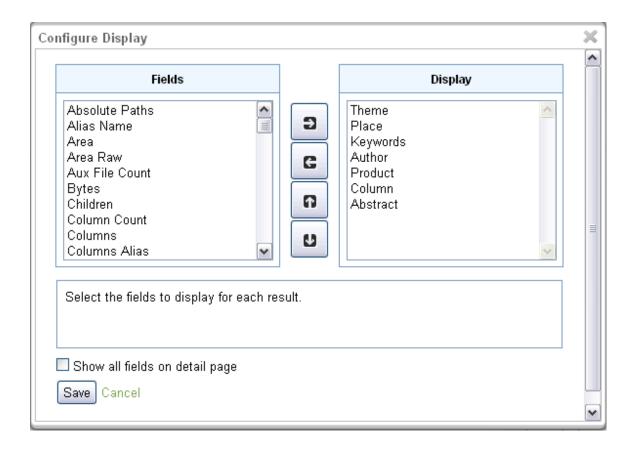
Configure Display

This option allows the user to select which fields will be displayed for each result. The items chosen here will all be displayed in the Detail Page for the item, but some will also be visible in the Summary View, when hovering in Grid View, and in Map View.

Remote catalogs must have been previously configured by the administrator. See Federated Catalog Search

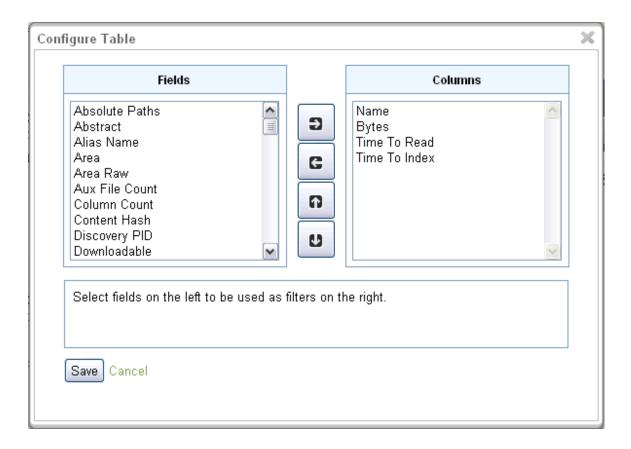
You can add or remove display fields, or change their display order using the arrow buttons in the middle of the window.

Default fields: theme, place, keywords, author, product, column and abstract.



# **Configure Table**

This option allows a user to choose which columns will be displayed in the Table View. You can add or remove display fields, or change their display order using the arrow buttons in the middle of the window.



# **Configure Reports**

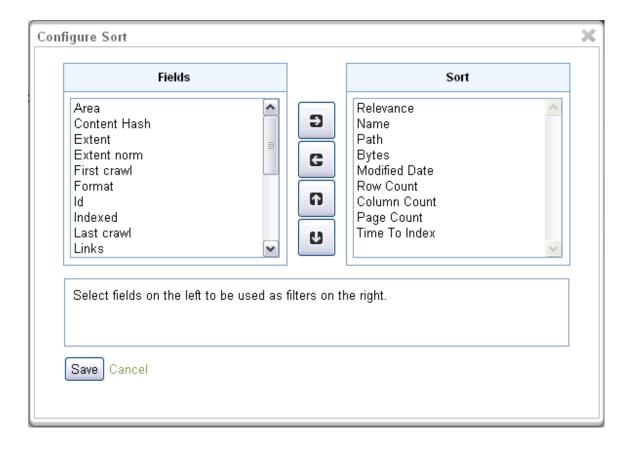
The reporting view displays a graph for each of the fields used to filter query results (as seen on the right side of the Voyager interface). To hide or remove a report the appropriate field can be added or removed from the list of filters.

# **Configure Sort**

This option allows a user to choose which fields are available for sorting query results.

You can add or remove display fields, or change their display order using the arrow buttons in the middle of the window.

Default fields: relevance, name, path, bytes, modified date, row count, column count, page count, time to index.

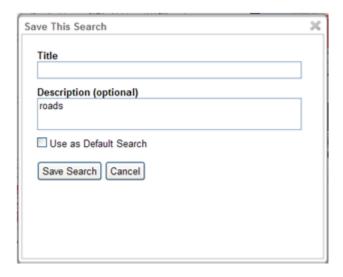


## **Saved Searches**

After configuring searches, it is good to save them, so you can use them in the future.

This tool allows a user to save their search results, name the search, give it a description and come back to that data at a later time or use it as the default search.





For a complete list of your Saved Searches, go to the Saved Searches page from the Home menu.



## Saved Searches

## Raster Properties

List of raster images with assorted properties.

## Datasets with an unknown spatial reference

Items with with an unknown spatial reference. Use filters to explore and the table via

## Items with Broken Data

Map layers with broken datasources

## Largest Files

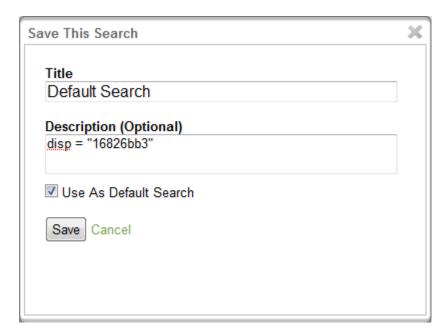
Datasets with the largest file size.

## Duplicate data

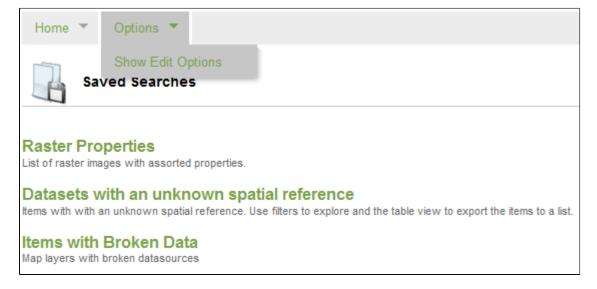
Use filters to examine items with similar schema but which might have different data

## **Default Search Configuration**

A default search can be configured and saved, so all users will see the same filters, display fields, table layout, and default view. To create a default search, configure the options to be used as default. Once everything is configured correctly, go to the "Tools" menu and select "Save This Search...". Enter a Title and Description for the search and select the "Use As Default Search" option.



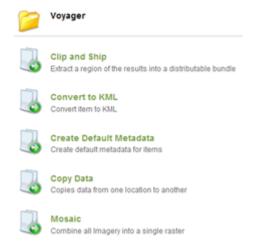
To set the default search to a Saved Search that was previously configured, go to the Saved Searches page and on the "Options" menu select "Show Edit Options". Edit any of the existing Saved Searches and select the "Use As Default Search" option.



# **Processing**

This tool allows a user to run the results of a search through a task or process, for example: Clip and Ship, Convert to KML, Create Default Metadata, Mosaic, etc. The user decides whether to run their process on the desktop or a server.

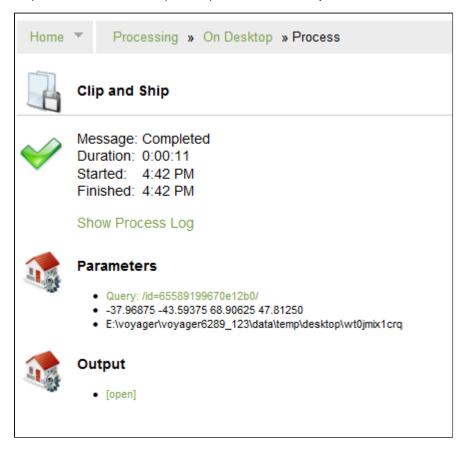
- If the option to Process Results on Server is chosen, the processing happens on the server and the user can download the
  results when it is finished.
- If the option to *Process Results on Desktop* is selected, the processing happens on the user's desktop machine and the results are accessible directly.



# **Server vs Desktop**

The same processes can run locally on the desktop or remotely on the server. The desktop option is only enabled if Voyager Desktop is installed on the client machine. The server option is only enabled if the license level is Workgroup or higher.

If a process is run on the desktop, the output is accessible directly from the local machine via the "open" link under "Output".



If a process is run on the server, the output is added to a zip file that can be downloaded via the "download" link under "Output".

Home \*

Processing » On Server » Process



# Clip and Ship



Message: Completed Duration: 0:00:07 Started: 4:49 PM Finished: 4:49 PM

Show Process Log (raw)



## **Parameters**

- Query: /id=65589199670e12b0/
- · -22.50000 -35.15625 66.09375 45.00000



## Output

[download]



1 To run geoprocessing processes on the Server, an ArcGIS Server license must be available.

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## **Standard Processes**

Voyager delivers useful processing tools 'out-of-the-box' however, the framework is designed to be extendable to your specific needs. For more information, see developer guide Custom Processes

## Clip and Ship

Clip and Ship gives a user the ability to extract a region of the results into a distributable bundle. Select the region to clip, browse for an output location and click Execute.





#### Clip and Ship

Extract a region of the results into a distributable bundle

78 Results SDE (1), LYR (15), MXD (3), CIB5 (1), SDC (12)

#### Clip Region

Select a clip region



## **Output Location**



Execute Clip and Ship

## **Convert to KML**

This gives the user the ability to convert a search result to KML. Select a region to clip, browse an output location and click Execute.



78 Results SDE (1), LYR (15), MXD (3), CIB5 (1), SDC (12)

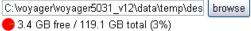
## Clip Region

Select a clip region



## **Output Location**

Where the output should go...



Execute Convert to KML

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## **Create GeoPDF**

Create GeoPDF gives a user the ability to create a GeoPDF containing a layer for each of the results. Select the region to clip, browse for an output location, choose a name for the new PDF and click Execute.



#### Create GeoPDF

Create a GeoPDF

Mexico Map.lyr, 36 KB (LYR)

## Clip Region

Select a clip region



## Output Location

Where the output should go...

E:\voyager\voyager6289\_123\data\temp\des browse

724.7 GB free / 923.4 GB total (78%)

## **GeoPDF Name**

Name of new GeoPDF

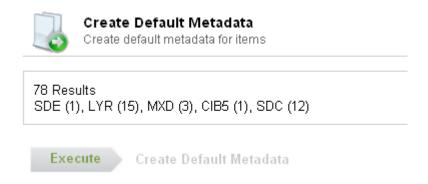
Mexico

Execute Create GeoPDF

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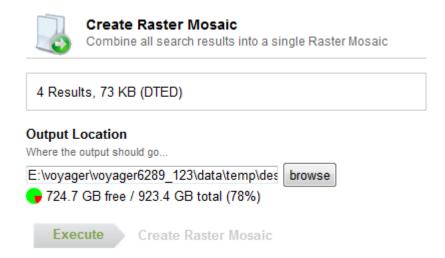
## **Create Default Metadata**

This process allows a user to create default metadata for data that does not currently have any metadata associated with it.



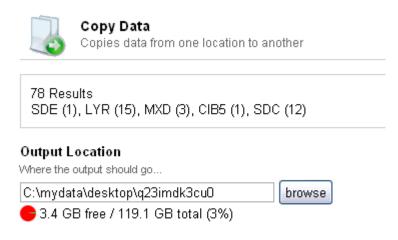
#### **Create Raster Mosaic**

Create Raster Mosaic allows a user to create a mosaic dataset from raster datasets in the index. Browse for an output location and click Execute.



## **Copy Data**

This process allows a user to copy data from one location to another.



Copy Data

Execute

## Mosaic

This process allows a user to combine imagery into a single raster.



#### Mosaic

Combine all Imagery into a single raster

9 Results, 300 KB (DTED)

## Clip Region

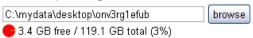
Select a clip region



-118.01000 33.99000 -114.99000 37.01000

## Output Location

Where the output should go..

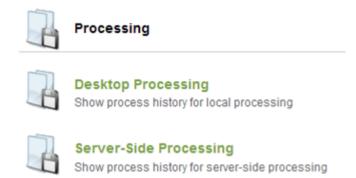


Execute Mosaic

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## **Process History**

The Process History Page displays two links to previously run Processes on either the Desktop or Server.



# **ArcMap Toolbar**

The Voyager ArcMap Toolbar provides seamless integration with ArcGIS Desktop. It allows you to search the Voyager index using text and spatial queries as well as drag-and-drop search results from Voyager Desktop into ArcMap.

The toolbar comes bundled with Voyager Desktop. It is an option that can be installed at the end of the installation process. See the Voyager Tools Installer section for more details.

ArcMap integrations works on ArcGIS 9.2, 9.3, 9.3.1, and ArcGIS 10.

The toolbar can be found in the list of ArcMap toolbars under "Voyager". Enabling it will allow the user to search the Voyager index by entering a text-based search, like "cities" or "roads", into the Voyager Toolbar textbox, or perform a spatial search by drawing an extent in ArcMap using one of the Voyager Search tools: Search Using Intersection or Search Within. Results of any query from the Voyager ArcMap Toolbar are displayed in the Voyager window. You can also launch Voyager manually using the Launch Voyager button.



# **Drag to ArcMap**

Search results found in Voyager can be added directly into ArcMap by simply dragging the item's thumbnail into ArcMap. The item can be placed at a specific location in the ArcMap Table of Contents by dragging the item over the TOC until the correct location is found, and then dropping it. The combination of easily finding data using Voyager directly or via the ArcMap Toolbar, then creating your map using the drag-and-drop feature will allow users to create maps faster than ever.

# **Search From ArcMap**

Draw box in ArcMap and get results in Voyager.



# **Working with Lists**

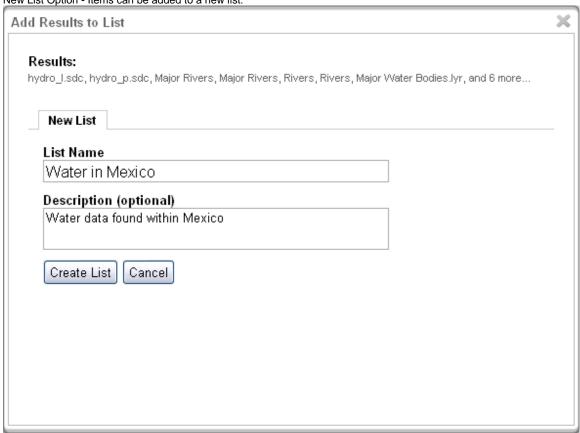
Lists hold search results that can be used at a later time, much like a shopping cart in an online store.



## **Add Results to List**

This tool gives a user the option of either adding their data search results to an existing list or creating a new list. Lists are useful when you are building up a set of data that you want to do something with later on (much like adding things to a shopping cart). Once a list has been created, all the results in that list can be run through one of the processes, opened in ArcMap, exported to a CSV file, etc.

New List Option - Items can be added to a new list:



Existing List Option - Items can be added to an existing list:



## **Export Results List**

This tool allows the user to export the list of results to different formats, including: CSV, XML, or even to a Shapefile. The fields that will be exported to the list is configurable. A few default fields have been set: id, name, path, and format. The user can choose other fields that make sense, or remove any of the default fields using the left/right arrow buttons in the middle of the dialog. The order of the fields can also be changed using the up/down arrow buttons. The user also has the option of adding the output to a zip file when it is complete.



