LizardTech

GeoGofer

User Manual

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Preface

The *GeoGofer User Manual* is written for geographic information system (GIS) professionals that want to search and manage geospatial imagery with LizardTech GeoGofer. The guide assumes basic knowledge of GIS, including knowledge of map projections and geospatial image formats.

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Chapter 1: Introduction

Product Overview

GeoGofer is a software solution for finding geospatial imagery, including raster imagery and LiDAR imagery. GeoGofer stores and queries image information using the ArcGIS Online platform.

Before you can search for images in GeoGofer, you must select the files or directories that you want to import into the database. Information about the images, including the file location, projection, and more, is stored in the GeoGofer database on ArcGIS Online. You must have an ArcGIS Online subscription to use GeoGofer.

To view information about the images in the database, use the **Table** pane. You can run queries to filter the images that display in the **Table** pane. Create queries in the **Query Builder** or type queries into the search box. You can save the queries that you create and access them in the **Queries** pane. You can also create a special kind of query called a tag. Tags are user-defined categories that you can use to label and organize images.

Additionally, you can use the **Map** pane to navigate to an image's location, then display information about the image in the **Table** pane. When you right-click an image in the **Table** pane or the **Map** pane, you can select actions to perform for the selected image. For example, you can zoom to the location of the image.

System Requirements

Before you install GeoGofer, verify that your system meets the minimum system requirements.

Operating System Requirements

You can install GeoGofer on 32-bit and 64-bit versions of the following operating systems:

- Windows 8
- Windows Server 2012
- Windows 7
- Windows Server 2008

Hardware Requirements

For optimal performance, verify that your system meets the following recommended hardware requirements:

- 2.5 GHz processor
- 4 GB RAM
- 1 GB of disk space for installation

ArcGIS Online Requirement

GeoGofer stores and queries image information using the ArcGIS Online platform. To run GeoGofer, you must have an ArcGIS Online subscription. For more information about ArcGIS Online, navigate to the following URL:

http://www.esri.com/software/arcgis/arcgisonline/

Software Requirements

GeoGofer requires the following software to run:

- Microsoft .NET Framework 4.5
- Visual Studio C++ 2010 Redistributable

If this software is not installed on your machine, the GeoGofer installer installs the software for you.

Additionally, you can use GeoGofer to open images in ArcMap and GeoViewer. ArcMap is an Esri application for processing and analyzing geospatial data. GeoViewer is LizardTech's free viewing application for raster and LiDAR imagery. To enable the functionality that allows you to open images in ArcMap, ensure that you have ArcMap 10.1 or 10.2 installed. You can install ArcMap before or after you run the GeoGofer installer. To enable the functionality that allows you to open

images in GeoViewer, select the option in the GeoGofer installer to download and install the GeoViewer software.

Getting the Software

When you purchase GeoGofer, you can download the software from an FTP site or you can install from a DVD. The installation software contains a trial license and the GeoGofer documentation.

Installation

Run the `setup.exe` program to install GeoGofer.

1. Log on the machine where you want to install GeoGofer with administrator privileges.
2. Navigate to the directory where you downloaded the installer or insert the installation DVD into your DVD drive.
3. Run the `setup.exe` program.

   The **GeoGofer Installation Wizard** appears.
4. The installation wizard prompts you to complete the following tasks:
   - Accept the License Agreement.
   - Select the directory where you want to install GeoGofer.
   - Install the Microsoft .NET Framework and Visual Studio C++ Redistributable.
   - Optionally, install GeoViewer, LizardTech's free raster and LiDAR viewer.
5. Click **Finish** to exit the installer.

Running GeoGofer

To run GeoGofer, click the desktop icon. Alternatively, click the Windows **Start** menu and click **Programs > LizardTech > GeoGofer**.

When the application opens, GeoGofer prompts you to sign in to ArcGIS Online. For more information on how GeoGofer uses ArcGIS Online and to configure ArcGIS Online, see *ArcGIS Online Administration* on page 35.

> *IMPORTANT: GeoGofer sends some information to ArcGIS Online without encryption. To enforce secure communication for all image information, configure your*

ArcGIS Online security settings before you run GeoGofer for the first time. For more information, see ArcGIS Online Security on page 35.

Enter the following information to sign in to ArcGIS Online:

- **Organization URL**. The URL for your ArcGIS Online organization. For example, you might enter the following URL:
  `https://myorganization.maps.arcgis.com/`
- **User Name**. The user name for your ArcGIS Online account.
- **Password**. The password for your ArcGIS Online account.

The first time that you run GeoGofer, GeoGofer creates a database for your imagery on ArcGIS Online, then prompts you to import imagery into the database.

Licensing

GeoGofer comes with a 14-day trial license. After 14 days, you must enter a permanent license code.

Licensing codes are specific to your machine. You can request a permanent license from LizardTech Customer Support.

Requesting a Permanent License

To request a permanent license, complete the following steps:

1. Run GeoGofer by clicking the desktop icon or by click the **Start** menu and clicking **Programs > LizardTech > GeoGofer**.

   GeoGofer starts.

2. On the **Tools** menu, click **Licensing**.

   The **Licensing** dialog appears.

3. Click **Copy licensing information to clipboard** to copy the locking code for your machine.

4. Open a web browser and navigate to the following URL:

   https://www.lizardtech.com/support/product-activation/

5. Fill out the form and paste your locking code in the **Locking Code** field.

> *NOTE: LizardTech Customer Support will send you a license code within one business day.*

Switching to a Permanent License

To switch to a permanent license, complete the following steps:

1. Run GeoGofer as an administrator by right-clicking on the desktop icon and selecting **Run as administrator**.
2. On the **Tools** menu, click **Licensing**.

   The **Licensing** dialog appears.
3. Enter your license code in the **License code** field.

> *NOTE: The licensing change takes effect the next time that you start the program.*

Chapter 2: Imports and Exports

Imports and Exports Overview

The import process saves information in the GeoGofer database about the images that you select. The export process copies images that you select to another directory for easy access. GeoGofer does not modify the original images.

The following list describes some of the information that GeoGofer stores for each image in the database:

- Image name
- File location
- Projection
- File format
- Size
- Date modified
- Number of bands

You can also export images to another directory for easy access.

Supported Image Formats

You can import raster and LiDAR imagery into GeoGofer.

The following table displays the file formats of the images that you can import:

Image Format Name	File Extension
Bitmap	.bmp

Image Format Name	File Extension
CADRG	.cadrg, .toc
DOQQ	.doq, .nes, .ses, .sws, .nws
DTED	.dt0, .dt1, .dt2
ECW	.ecw
GeoTIFF	.tif, .tiff, .tifw, .tifg
Imagine	.img
JPEG	.jpg, .jpeg
JPEG 2000	.jp2, .jpc, .jpx, .jpf, .j2k
LAN	.lan
LAS	.las
MrSID	.sid, .mg4, .mg3, .mg2
NITF	.ntf, .nsf
PNG	.png
Raw	.bbb, .bil, .bip, .bsq, .raw
Sun Raster	.ras

Importing Imagery

To import imagery into GeoGofer, click the **Import** button  in the **Table** pane. The **Import Files and Directories** dialog appears.

In the **Import Files and Directories** dialog, click **Add files** to select individual images that you want to import or click **Add directory** to import all of the images in a directory. Alternatively, drag files or directories into the **Import Files and Directories** dialog.

> *TIP: If you only want to import images with a specific file format, click **Tools > Preferences** in the menu bar to set the import preferences.*

Optionally, when you import images into the database, you can add a tag to the images. Use tags to organize images and make it easier to find the images again. For more information on tags, see *Tags Overview* on page 27.

When you are done selecting files and directories, click **Import** to begin the import process. The progress of the import process is displayed in the status bar.

Reviewing Imported Imagery

When the import process finishes, you may want to ensure that the information stored in the GeoGofer database is accurate and complete. You can change the status of an image to **Verified** to keep track of the images that you review. If an image is missing projection information, you can assign a projection.

Changing the Status of an Image

Each image that you import has a status. The status of an image is displayed in the **Table** pane.

The following list describes the possible values for the image status:

Imported

This is the default status for images that you import. Use this status to keep track of the images that you need to review.

Verified

Optionally, use this status to indicate that an image's information is correct in the database. To change the status of an image to verified, right-click on the record for the image in the **Table** pane. Then, click **Mark Verified**.

Missing

This is the status of images that cannot be accessed by GeoGofer. For example, if you move or delete an image and attempt to zoom to the image location in the **Map** pane, the status of the image changes to **Missing**.

> *NOTE: To check whether any of the images in the database have been moved or deleted, click **Tools > Manage Database** in the menu bar. Then, click **Check for Modified or Missing Files**.*

Assigning Projection Information

Images without projection information cannot be displayed in the **Map** pane. To assign a projection to an image, select from a list of projections or enter a custom well known text (WKT) string.

If you import an image without projection information, or if GeoGofer cannot read the projection information, the image is displayed in bold in the **Table** pane. When you assign a projection to an image, the projection information that you enter is written to an auxiliary file in the same directory as the image. GeoGofer uses the auxiliary file to display the location of the image in the **Map** pane. If the image directory is read-only, GeoGofer cannot write an auxiliary file in the same directory. Instead, GeoGofer stores the file separately and changes the `AlteredSRS` field for the image to 1.

*TIP: To find all of the images in the GeoGofer database that are missing projection information, you can select the `HasGeometry:False` query in the **Query Builder**. For more information, see The Query Builder on page 19.*

To assign a projection for the image, complete the following steps:

1. Right-click on the image and click **Change Projection**.

   The **Select Coordinate Reference System** dialog appears.

2. In the search box, enter the name of the coordinate reference system that you want to assign.

   GeoGofer returns a list of matching projections.

3. Click one of the coordinate reference systems that appear.
4. If the coordinate reference system cannot be found, select the **Use custom WKT** option and enter a custom WKT in the text box.
5. Click **OK**.

*NOTE: You can also change the projection of images that already display a projection. For these images, the projection information is used to display the image in the **Map** pane. If you export an image for which you have changed the projection, the changed projection information is stored in an auxiliary file rather than in the image itself.*

Re-Importing Imagery

If you change an image on the file system, you can import the image again to update the GeoGofer database.

When you import an image more than once, GeoGofer reads the image information and updates the database if the image has changed. If you have manually changed the projection for an image in the database, GeoGofer preserves the changed projection.

Exporting Imagery

When you export an image from GeoGofer, you make a copy of the image in another directory for easy access.

To export imagery, select one or more images that you want to export in the **Table** pane. Then, click the **Export** button  in the **Table** and select the directory where you want to save the exported imagery. The images that you export are saved with the following naming convention:

`<original image name>_<image ID>.<image extension>`

For example, if you export an image named `Seattle.sid`, the exported image might be saved as `Seattle_40.sid`.

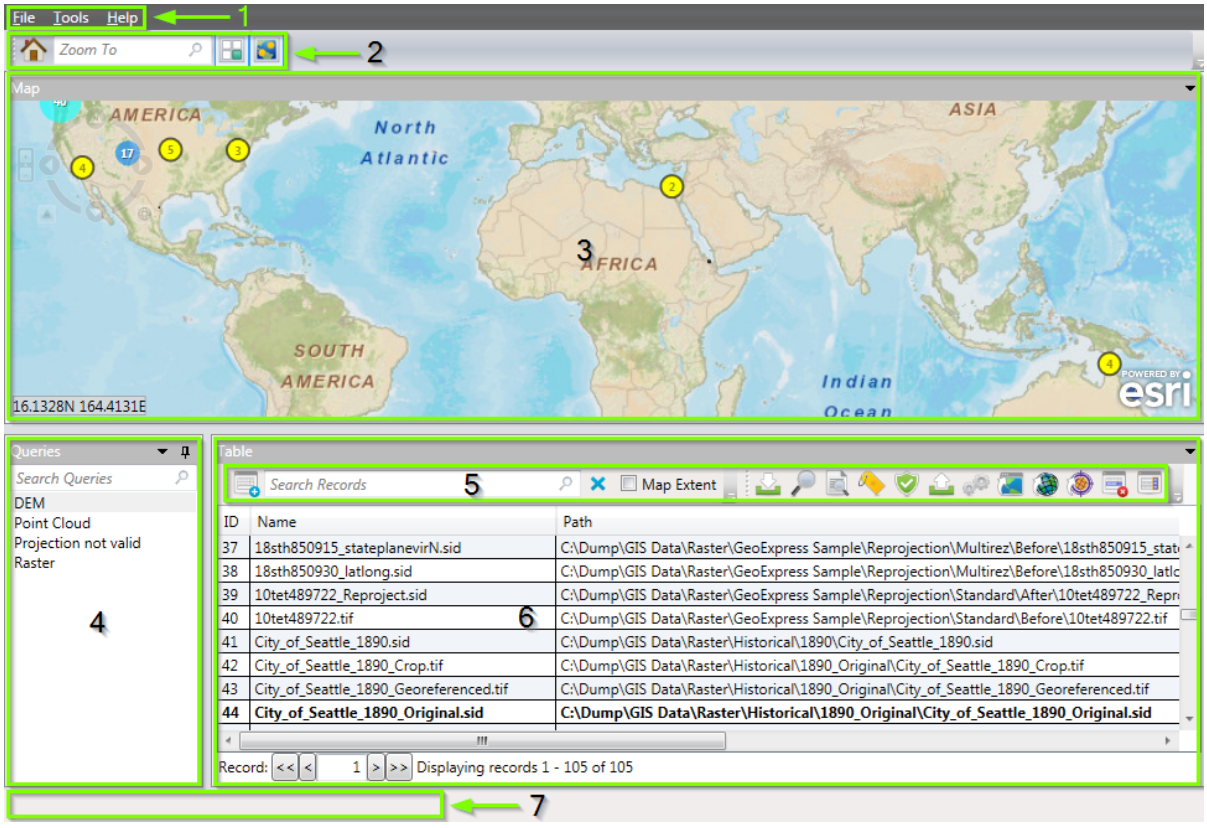
> *NOTE: For an image that you export, if you previously assigned another projection to the image in GeoGofer, the export process also creates an auxiliary file for the image. For more information on assigning a projection to an image, see Assigning Projection Information on page 10.*

Chapter 3: User Interface

User Interface Overview

Use the GeoGofer graphical user interface to import image information, to search for images, to display the image locations on a map, and more.

The following figure displays the GeoGofer user interface:



1. Menu Bar
2. Map Toolbar
3. Map Pane
4. Queries Pane
5. Table Toolbar
6. Table Pane
7. Status Bar

The location of the **Map** pane, the **Table** pane, and the **Queries** pane can be customized by clicking on the title of each pane, and dragging the pane to another location. To reset the location of each pane to the default location, click **Tools > Preferences**. Then, in the **Preferences** dialog, click **Restore Default Window Layout**.

Menu Bar

Use the menu bar to perform management tasks, to set preferences, to enter licensing information, and to access the help interface.

The following table describes some of the options that you can access from the menu bar:

Option	Description
File > Import	Save information in the database about the files and directories that you select.
File > Export	Select a directory to which you want to copy the images that are currently selected in GeoGofer.
Tools > Preferences	Set the maximum number of files to display in the table, select a basemap, select the file formats that you want to import, and set preferences for the log file.
Tools > Manage Database	Clear the GeoGofer database and check whether any of the images in the database have been moved or deleted.
Tools > Manage Queries	Create queries, delete queries, and edit existing queries.
Tools > Manage Tags	Create tags, delete tags, and edit existing tags.
Tools > Licensing	View your locking code and enter a license code.

Map Toolbar

The **Map Toolbar** displays controls for the map.

The **Map Toolbar** includes a search box that you can use to zoom to a location on the map. For example, you can search for the name of a city or a country. To zoom to the location of an image, run a search in the **Table** pane, right-click the image, then click **Zoom to**.

Click the **Home** button  to zoom to the full map extent. Click the **Hide Extents** button  to remove the rectangular image extents for each image from the map. Click the **Hide Clusters** button  to remove the clusters from the map. To display the extents or clusters on the map after they have been hidden, press the **Hide Extents** or **Hide Clusters** button again.

Map Pane

Use the **Map** pane to browse imagery on a single map. The images in the **Map** pane correspond to images in the **Table** pane. If you select an image on the map, it is also selected in the **Table** pane.

If multiple images on the map are in close proximity, the images are grouped together in a cluster. Click on a cluster to zoom to the aggregate extents of the component images. If the cluster contains five images or fewer, you can rest the mouse pointer over the cluster to display a list of the component images. To hide the image clusters, click the **Hide Clusters** button  in the **Map Toolbar**.

When you zoom to an image, the map displays a rectangle of the extents of the image. To hide the image extents, click the **Hide Extents** button  in the **Map Toolbar**. You can right-click on an image to perform additional actions for the image. For example, you can zoom to the image and display information about the image.

> *TIP: To select multiple images on the map, hold the **Control** key and click on the images that you want to select. If you right-click on one of the images in the selection and click **Zoom to**, the selected action applies to all the images in the selection. If you right-click on one of the images in the selection and click **Details**, the dialog that appears only displays information about the image that was selected last.*

Queries Pane

The **Queries** pane contains a list of saved queries. Queries are criteria that you can use to filter the images that display in the table and on the map.

Click on a query in the **Queries** pane to run the query. To add, edit, or delete queries, right-click in the **Queries** pane and click **Manage Queries**. You can also use the **Query Builder**  in the **Table** pane to add queries. For more information on queries, see *Queries Overview* on page 19.

> *NOTE: The queries that you create can include tags, which are a convenient way of categorizing images . To add, edit, or delete tags, right-click in the **Queries** pane and click **Manage Tags**. For more information on tags, see Tags Overview on page 27.*

Table Toolbar

The **Table Toolbar** displays controls for the **Table** pane. Use the toolbar to search for images in the table, to import imagery, and to perform operations on the images that you select in the table.

Use the search box in the **Table Toolbar** to search the file name and file path of images in the table. To limit the results of a search to the images currently visible on the map, select the **Map Extent** check box. For example, you want to search for images in the Seattle area that include NAIP in the title. Use the map to zoom to the Seattle area, select the **Map Extent** check box, and enter NAIP in the **Table Toolbar** search box.

In addition to searching the table, you can perform the following operations in the **Table Toolbar**:

Operation	Icon	Description
Build query		Search by advanced criteria and enter multiple search criteria. For more information on queries, see *Queries Overview* on page 19.
Import		Select the images for which you want to store information in the GeoGofer database. For more information, see *Imports and Exports Overview* on page 7.
Zoom to		Zoom to the location of the selected image or images in the **Map** pane.
Details		Display additional information about the currently selected image. If more than one image has been selected, GeoGofer displays information about the image that was selected last.

Operation	Icon	Description
Tag		Apply a tag to the currently selected image or images. For more information, see *Tags Overview* on page 27.
Mark verified		Change the status of an image to **Verified** to keep track of the images that you have reviewed. For more information, see *Reviewing Imported Imagery* on page 9.
Export		Copy the currently selected image or images to a directory that you specify.
Change projection		Change projection information for the selected image or images in the GeoGofer database. For more information, see *Assigning Projection Information* on page 10.
Open file location		Display the directory that contains the selected image or images. If more than one image has been selected, GeoGofer displays the directory that contains the image that was selected last.
Open in ArcMap		Open the selected image or images in ArcMap. If ArcMap is not installed, this operation is not available.
Open in GeoViewer		Open the selected image or images in GeoViewer. By default, GeoViewer is installed as part of the GeoGofer installation process.
Delete		Delete the selected image or images from the GeoGofer database. This operation does not delete the image from the file system.
Columns		Select the columns that you want to display in the **Table** pane.

*NOTE: Many of the operations in the **Table Toolbar** are only available when you have selected one or more images in the **Table** pane.*

Table Pane

The **Table** pane displays information about the images stored in the GeoGofer database. To filter the images that display in the **Table** pane, use the search box in the **Table Toolbar** or click on a saved query in the **Queries** pane. The images in the **Table** pane correspond to images in the **Map** pane.

To select multiple images in the **Table** pane, hold the **Control** key and click on the images that you want to select. Alternatively, when you select one or more images in the **Map** pane, the image or images are automatically selected in the **Table** pane as well. Right-click on selected images in the **Table** pane to perform operations on the selected images. The operations in the right-click menu match the operations in the **Table Toolbar**. For example, you can zoom to the selected images.

The columns in the **Table** pane are sortable and customizable. You can drag the columns to re-order them. Additionally, to change the columns that you want to display, click the **Columns** button  in the **Table Toolbar**.

The lower-left corner of the **Table** pane displays information about the number of images, or records, that are currently displayed in the **Table** pane. If the number of records in the database exceeds a specified maximum for the table, the records are displayed on multiple pages. Click the forward and backward arrows to move between pages. By default, the **Table** pane displays up to 10,000 records at a time. To change the maximum number of records that appear for each page, click **Preferences** on the **Tools** menu and enter another value in the **Max Records** field.

Status Bar

The status bar displays information for the operations that you run. For example, when you import imagery into GeoGofer, the status bar displays the progress of the import operation.

The status bar displays information about the following operations:

- Import operations
- Export operations
- Tag operations
- Query operations

Additionally, for large operations, the status bar includes a **Stop** button  to cancel the current operation.

Chapter 4: Queries

Queries Overview

Queries are criteria that you can use to filter the images that display in the table and on the map.

Run queries from the **Table** pane. You can create a query that you want to run in the **Query Builder** or you can enter a query manually in the search box.

> *NOTE: By default, when you enter a value in the search box, GeoGofer compares the value against the file name and file path. To enter other queries manually, see Query Components on page 20.*

Save queries that you use frequently to the **Queries** pane. To add, edit, or delete queries, right-click in the **Queries** pane and click **Manage Queries**.

The Query Builder

The **Query Builder** is a graphical user interface that you can use to create queries.

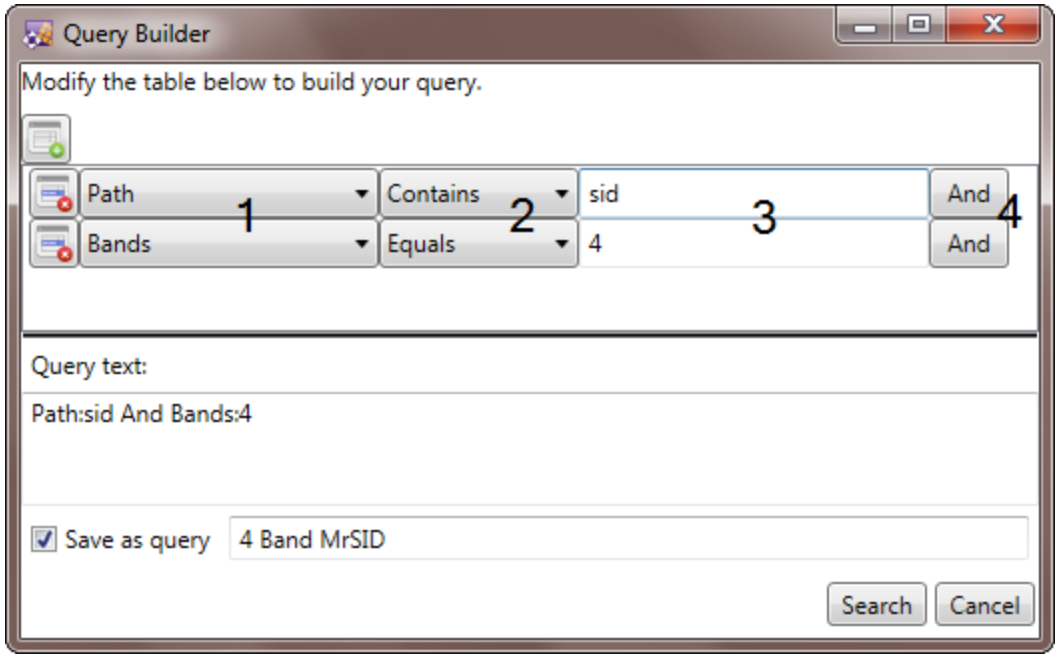
To access the **Query Builder**, click the **Build Query** button  in the **Table** pane. Use the drop-down boxes to create the query. To enter multiple search criteria, click the **Add Query Row** button  . For more information on the search criteria that you can select, see *Query Components* on page 20.

To save the queries that you create in the **Query Builder**, select the **Save as query** option before you click **Search**. Saved queries appear in the **Queries** pane.

Query Components

Queries that you create in the **Query Builder** consist of search fields, operators, search values, and search logic. Learn the components of a query to create more advanced queries and to enter queries manually.

The following figure shows the components of a query in the **Query Builder**:



1. **Search Fields**. The image attribute that you want to search.
2. **Operators**. The way that you want to compare the search value against the search field. The available operators depend on the field that you select.
3. **Search Values**. The value that you want to search for. For some search fields, the search value field changes to a drop-down or date picker.
4. **Search Logic**. The way that you want to display results for multiple search criteria.

You can view the text representation of a query in the **Query text** field. To run queries quickly, you can enter the query text directly into the search box of the **Table** pane.

Search Fields

A search field describes the type of image information that you want to search. Search fields can include image metadata, like projection information, and file information, like the location of the

image. The name of a search field is the same in the **Query Builder** drop-down box and in the query text.

The following table describes the search fields that you can select in the **Query Builder**:

Search Field Name	Description
AlteredSRS	A flag to indicate that the coordinate reference system for the image was changed in GeoGofer, but could not be saved to an auxiliary file alongside the image. The only possible value is 1, otherwise the field is blank. For more information, see *Assigning Projection Information* on page 10.
Bands	The number of bands included in the image. Alpha bands are included in the number of bands.
BitDepth	The number of bits in each band of the image. Values include, but are not limited to, 8 and 32.
BoundsP0_X	The X coordinate of the first point for the image extent.
BoundsP0_Y	The Y coordinate of the first point for the image extent.
BoundsP1_X	The X coordinate of the second point for the image extent.
BoundsP1_Y	The Y coordinate of the second point for the image extent.
BoundsP2_X	The X coordinate of the third point for the image extent.
BoundsP2_Y	The Y coordinate of the third point for the image extent.
BoundsP3_X	The X coordinate of the fourth point for the image extent.
BoundsP3_Y	The Y coordinate of the fourth point for the image extent.
Channels	The number of image channels or fields for a LiDAR image. For example, a typical LiDAR image will have channels for X, Y, Z, and intensity values among others.
ColorSpace	The color space of the image. For example, you might enter RGBA for an image with red, green, blue, and alpha bands.
CR	The compression ratio of an image. For example, you may want to find images that have a compression ratio greater than 10.
DatasetType	The type of image. Values include Raster and PointCloud.
DataType	The data type of the image. An image may be signed or unsigned, and it may use integer or floating point values. For example, to find all unsigned integer images, you might search for images whose data type contains UINT.

Search Field Name	Description
EPSG	The EPSG code of the image.
FileDate	The date that the file was last modified. If you select this search field, a date picker appears.
FileSize	The size of the file. If you select this search field, an additional drop-down appears with unit information.
Format	The file format. For example, you might enter MrSID or JPEG 2000. For a full list of supported file formats, click **Tools > Preferences**, then click **Imports**.
GeoX	One coordinate of the upper left point in the image. For images with latitude and longitude values, this corresponds to the longitude.
GeoY	One coordinate of the upper left point in the image. For images with latitude and longitude values, this corresponds to the latitude.
HasGeometry	Whether the image has projection information. If you select this search field, the search value field changes to a drop-down box that restricts values to True or False.
Height	The height of the image in pixels.
NoData	The no data value for an image. Values include AllMin, AllMax, None, and Custom. For example, 8-bit images have values from 0 to 255. If the no data value is 0, this corresponds to AllMin. If the no data value is 255, this corresponds to AllMax.If the no data value is 73, this corresponds to Custom.
Path	The file path.
Points	The number of points in a LiDAR point cloud.
Status	The status of the image. Values include imported, verified, or missing. For more information, see *Changing the Status of an Image* on page 9.
Tag	The list of tags applied to the image.
Width	The width of the image in pixels.
WKT	The Well Known Text (WKT) string of the image.
XRes	The X resolution of the image.
XRot	The X rotation of the image.
YRes	The Y resolution of the image.

Search Field Name	Description
YRot	The Y rotation of the image.

TIP: To find images with an alpha band, search for images with a color space that ends with A. For example, you might enter the following query text:

`ColorSpace:$A`

Operators

An operator determines how search values are compared against the search field. The available operators depend on the search field that you select.

Some of the operators use the same syntax, but have different meanings depending on the search field. The following table describes the operators that you can select in the **Query Builder**:

Operator Name	Operator Query Text	Description
After	:>	For dates only. The date in the search field is after the date that you enter as the search value.
Before	:<	For dates only. The date in the search field is before the date that you enter as the search value.
Contains	:	The search value is included somewhere in the search field.
Ends With	:$	The search field ends with the search value.
Equals	:=	The search field is equal to the search value.
Greater Than	:>	The search field is greater than the search value.
Is	:	The search field is equal to the search value. This operator is for search fields that can only have true or false values.
Less Than	:<	The search field is less than the search value.
Not Equals	:!	The search field equals anything except for the search value.
On	:	For dates only. The date in the search field is the same as the date that you enter

Operator Name	Operator Query Text	Description
		as the search value.
Starts With	:^	The search field begins with the search value.

Search Values

A search value is the value that you want to search for. For some search fields, the search value field changes to a drop-down or date picker.

Search Logic

Use search logic to determine the way that you want to display results for multiple search criteria. You can select **And** or **Or**.

Select **And** to display the query results that match all of your criteria. Select **Or** to display the query results that match one or more criteria.

Query Management

To add, edit, and delete queries, right-click in the **Queries** pane and click **Manage Queries**. Alternatively, click **Manage Queries** on the **Tools** menu.

You can also use the **Manage Queries** dialog to apply a tag to the image results for a query. For more information, see *Applying a Tag to Query Results* on page 29.

Adding a Query

Add new queries from the **Table** pane or from the **Manage Queries** dialog.

To add a query from the **Manage Queries** dialog, complete the following steps:

1. Right-click in the **Queries** pane and click **Manage Queries**.
2. Click the **Add Query** button  .

   The **Add Query** dialog appears.
3. Use the drop-down boxes to create the query. To enter multiple search criteria, click the

Add Query Row button  .

4. Click **Add** to create the query.

Editing a Query

Edit a query to add, edit, or delete search criteria.

To edit a query, complete the following steps:

1. Right-click in the **Queries** pane and click **Manage Queries**.
2. Select the query that you want to edit.
3. Click the **Edit Query** button  .

   The **Edit Query** dialog appears.
4. Add, edit, or remove search criteria.
5. Click **Save**.

Deleting a Query

You can delete one or more queries at a time.

Complete the following steps to delete a query:

1. Right-click in the **Queries** pane and click **Manage Queries**.
2. Select one or more queries that you want to delete.
3. Click the **Delete Tag** button  .

Chapter 5: Tags

Tags Overview

Tags are user-defined categories that you can use to label and organize images. You can apply multiple tags to the same image.

By default, when you create a tag, the tag is also saved as a query. The tag then appears in the **Queries** pane as a convenient way of viewing all the images that have that specific tag.

Applying a Tag to an Image

You can apply tags to the images that you select in the **Table** pane.

To apply a tag to an image, complete the following steps:

1. In the **Table** pane, select one or more images to which you want to apply a tag.
2. Click the **Tag Selected Files** button  .

   The **Tag** interface appears.
3. Search for an existing tag or click **Create New** to create another tag.

> *TIP: To create a tag quickly, enter the name of the tag that you want to create in the search box of the **Tag** interface, then press enter.*

Tag Management

To add, edit, and delete tags, right-click in the **Queries** pane and click **Manage Tags**. Alternatively, click **Manage Tags** on the **Tools** menu.

Adding a Tag

Add new tags from the **Table** pane or from the **Manage Tags** dialog.

To add a tag from the **Manage Tags** dialog, complete the following steps:

1. Right-click in the **Queries** pane and click **Manage Tags**.
2. Click the **Add Tag** button  .

   The **Add Tag** dialog appears.
3. Enter a name for the tag and an optional description.

   *NOTE: By default, the tag is also saved as a query so that you can access it from the **Queries** pane. If you do not want the tag to appear in the **Queries** pane, clear the **Save as query** option.*

Editing a Tag

Edit a tag to change the name or description of a tag. You can also edit a tag to remove the tag from the **Queries** pane.

To edit a tag, complete the following steps:

1. Right-click in the **Queries** pane and click **Manage Tags**.
2. Select the tag that you want to edit.
3. Click the **Edit Tag** button  .

   The **Edit Tag** dialog appears.
4. Optionally, change the name or description of the tag.
5. Optionally, clear the **Save as query** option to remove the tag from the **Queries** pane.

Deleting a Tag

You can delete one or more tags at a time.

Complete the following steps to delete a tag:

1. Right-click in the **Queries** pane and click **Manage Tags**.
2. Select one or more tags that you want to delete.
3. Click the **Delete Tag** button  .

Applying a Tag to Query Results

You can use queries to apply a tag to many images at a time.

To apply a tag to all of the images that match a query, complete the following steps:

1. Right-click in the **Queries** pane and click **Manage Queries**.
2. Select a query for which you want to apply a tag.
3. Click the **Tag Records** button  .
4. Select an existing tag or create another tag, then click **Apply**.

Chapter 6: Preferences

Preferences Overview

To change the default preferences, click **Tools > Preferences** in the menu bar.

The following list displays some of the preferences that you can change:

- The history length for queries
- The basemap to display
- The file formats to include in import operations
- The license code
- The logging level

General Preferences

The **General** tab of the **Preferences** dialog includes the following preferences:

- **Layout**. The option to restore the default window layout. If you move the panes in GeoGofer, you can use this option to restore them to their default locations.
- **Query History**. The number of recent queries to save. When you start to enter a query in the search box of the **Table** pane, the search box displays query suggestions from the list of recent queries.
- **Query Results**. The maximum number of records to display for each page of query results.

Map Preferences

Use the **Map** tab of the **Preferences** dialog to set the default basemap in GeoGofer. Set a local basemap or use one of the basemaps included with ArcGIS Online.

You can use local basemaps saved as tile package layers. These files have a .tpk extension. Alternatively, use one of the basemaps included with ArcGIS Online. By default, the basemap is set to the Streets basemap from ArcGIS Online.

Import Preferences

Use the **Import** tab of the **Preferences** dialog to select the file formats that you want to include when importing files from directories.

For example, if you do not want to import LAS files, clear the LAS selection in the list of file formats. For more information on supported file formats, see *Supported Image Formats* on page 7.

Licensing Preferences

Use the **Licensing** tab of the **Preferences** dialog to view your locking code and to enter a license code.

For more information, see *Licensing* on page 4.

Logging Preferences

Use the **Logging** tab of the **Preferences** dialog to set the log level, change the log file name, and view the current log file.

Log Level

You can select one of the following log levels:

- Off
- Error
- Warning
- Info
- Verbose

Log File Name

Click the **Log file name** button to change the name of the log file. You can also change the location of the log file. However, the log file must always have a .log file extension.

Open Current Log File

Click the **Open current log file** button to view the log file.

Chapter 7: Administration

Administration Overview

Complete administrative tasks to configure ArcGIS Online settings and to manage the GeoGofer database.

ArcGIS Online Administration

For most tasks that you perform in GeoGofer, GeoGofer communicates with ArcGIS Online in the background. However, you may want to access the ArcGIS Online web interface to configure ArcGIS Online settings and to verify service availability.

ArcGIS Online Performance

To ensure optimal performance for GeoGofer, configure your organization's ArcGIS Online settings to allow nonstandard SQL queries. You must be an organization administrator to configure ArcGIS Online settings.

GeoGofer uses nonstandard SQL queries to display a large number of query results and to query for images quickly. To allow nonstandard SQL queries, open a web browser and sign in to ArcGIS Online with an administrator account for your organization. Navigate to your organization's security settings, and clear the option to **Allow only standard SQL queries**.

ArcGIS Online Security

GeoGofer always uses HTTPS to sign you in to your ArcGIS Online account securely. However, GeoGofer sends and receives some information from ArcGIS Online using HTTP. To ensure secure communication between GeoGofer and ArcGIS Online, configure security settings in ArcGIS Online.

The following list describes the information that GeoGofer may send and receive using HTTP:

- **Image information**. GeoGofer stores information about your images in a database on ArcGIS Online. The database is hosted as a feature service. When you run queries in GeoGofer, you access the feature service on ArcGIS Online.
- **Basemap information**. GeoGofer uses ArcGIS Online basemaps by default. When you view a location, GeoGofer requests basemap tiles from ArcGIS Online.
- **Geocoding information**. GeoGofer uses ArcGIS Online as a geocoding service. When you search for a location in GeoGofer, ArcGIS Online returns coordinates for the location.

To send and receive this information using HTTPS, you must configure your organization's ArcGIS Online security settings before you run GeoGofer for the first time. The first time that GeoGofer runs, it creates the GeoGofer database as a feature service on ArcGIS Online. The feature service is configured to use HTTP unless you have already configured ArcGIS Online to use SSL only.

> *IMPORTANT: If you change the security settings after the feature service is created, GeoGofer will not be able to communicate with ArcGIS Online.*

To configure security settings for ArcGIS Online, open a web browser and sign in to ArcGIS Online with an administrator account for your organization. Navigate to your organization's security settings, and click **Allow access to the organization through SSL only**.

ArcGIS Online Availability

Like any web service, ArcGIS Online may undergo rare periods of unavailability. If you encounter errors performing tasks in GeoGofer or signing in to your ArcGIS Online account, you may want to verify service availability for ArcGIS Online.

ArcGIS Online publishes the availability of ArcGIS Online services at the following URL:

http://status.arcgis.com/

GeoGofer uses the following ArcGIS Online services:

- Hosted Feature Services
- Esri Basemaps
- Geocoding

Database Management

The GeoGofer database is stored on ArcGIS Online as a feature service. From GeoGofer, you can manage the database to delete it or to check for modified or missing files.

To manage the database, click **Manage Database** on the **Tools** menu.

Deleting the Database

When you delete the GeoGofer database, the GeoGofer feature service is deleted from your ArcGIS Online account. Deleting the GeoGofer database clears information for all of the images imported into GeoGofer.

To delete the GeoGofer database, complete the following steps:

1. On the **Tools** menu, click **Manage Database**.

   The **Manage Database** dialog appears.

2. Click **Delete Database**.

   A confirmation dialog appears.

3. Click **Delete**.

   The GeoGofer application closes and the GeoGofer feature service is deleted from ArcGIS Online.

NOTE: Alternatively, you can open a web browser and sign in to your ArcGIS Online account. Then, find the GeoGofer feature service in your list of content, and delete the GeoGofer service from your account.

Checking for Modified or Missing Files

When you check for modified or missing files, GeoGofer verifies that none of the images in the database have been modified, moved, or deleted.

To check for modified or missing files, complete the following steps:

1. On the **Tools** menu, click **Manage Database**.

   The **Manage Database** dialog appears.

2. Click **Check for Modified or Missing Files**.

   A confirmation dialog appears.

3. Click **Yes**.

   The operation runs in the background and changes the status of modified or missing files. For more information, see *Changing the Status of an Image* on page 9.

   *TIP: To view a list of all the modified or missing images, run a query for images whose status does not equal imported. For example, you might enter the following query text into the search box of the **Table** pane:*

   `Status:!Imported`