



New Features in GeoCue 6.1 Products (r3)

September 30, 2009

Important Note: This guide provides information only about changes from GeoCue 6.0 to 6.1. Please see the appropriate user guide for full information regarding the use of GeoCue products.

GeoCue Corporation
9668 Madison Blvd.
Suite 101
Madison, AL 35758

1-256-461-8289
www.geocue.com

NOTICES

The material in GeoCue documents is protected by United States Copyright laws.

You may make as many copies of this document for use internal to your company as you desire. Please do not distribute this document outside of your company without first discussing with us.

Trademarks, Service Marks

- *MapObjects* and *ESRI* are trademarks of Environmental Systems Research Institute.
- *Windows* and *.NET* are trademarks of Microsoft Corporation
- *MicroStation* is a trademark of Bentley Systems Incorporated
- *TerraScan* is a trademark of TerraSolid Oy
- *ImageStation* and *DMC* are trademarks of Intergraph Corporation
- *Summit Evolution* is a trademark of DAT/EM Systems International
- GeoCue®, NIIRS10®, CuePac® are registered trademarks of GeoCue Corporation
- SOCET SET is a trademark of BAE Systems
- GPro is a service mark of Leica Geosystems
- LYNX™ is a Trademark of Optech

Getting Help

This guide contains information about using features new to Version 6.1 of the GeoCue product family.

We are sure that you will experience different problems with GeoCue that range from installation issues to defects that made it through our testing undetected. We hope that you will immediately contact us with any problems or questions and have the patience to work with us through a successful GeoCue deployment.

Please contact us via phone or email for assistance with or comments about GeoCue products.

email:

Support@geocue.com

Phone:

01-256-461-8289

Just ask for GeoCue help and you will get connected with someone who can assist you. There is usually someone in the office between the hours of 0600 and 1800 CDT, USA on weekdays. Weekends are sort of hit or miss.

Fax (always on):

01-256-461-8249

Contents

1	Introduction	1-1
2	GeoCue Server and GeoCue Client	2-2
2.1	Performance	2-2
2.1.1	Partial Image Loading	2-2
2.1.2	Entity Load Sets	2-4
2.2	National Geodetic Survey GEOID 2009 (North American Users)	2-6
2.3	Entity Manager	2-6
2.3.1	Enhancements to Entity Manager Pre-filter	2-7
2.3.2	Loading a Named Queue from Entity Manager	2-8
2.4	Checklist Changes	2-9
2.4.1	Autorun Next Step Indicator	2-10
2.4.2	Intentionally Skipped	2-10
2.4.3	Utility Step Prerequisite Steps	2-13
2.4.4	"Unordered" Checklist Groups	2-15
2.5	Named Queue Features	2-20
2.5.1	Load Sets	2-20
2.5.2	Loading from Entity Manager	2-20
2.5.3	Queue Skip Interval	2-21
2.5.4	Auto Play Feature	2-21
2.6	Import ISPM Projects and Models, Launch ISSD	2-22
3	Environment Builder	3-1
4	GeoCue Project Dashboard (D)	4-1
5	LIDAR 1 CuePac	5-1
5.1	Import GPS Track	5-1
5.2	Support for Mission Boundaries	5-1
5.3	Support for Mission Plan Import	5-3
5.4	Import SBET, Import TerraScan Trajectories Dispatchable	5-3
5.5	Support for the ESRI version of LP-360	5-3
6	DMC PPS CuePac (D)	6-1
7	LYNX MMS CuePac (D)	7-1
8	GeoCue Project Portal	8-1
9	Concluding Remarks	9-1

1 Introduction

GeoCue 6.1 is the GeoCue feature upgrade release for fall 2009. GeoCue has now been in heavy day-to-day production (in commercial release) for about 5 years. Many of the new features that have appeared in GeoCue are a direct result of the feedback that we received from our user base of GeoCue customers.

GeoCue Version 6.1 and the associated CuePacs contain a number of new features. The highlights of these new features are described in the following sections.

Note: GeoCue Server is available in three versions. Sections that apply only to a specific version will be denoted as follows:

- GeoCue Workstation (W)
- GeoCue Professional (P)
- GeoCue Departmental (formerly Enterprise) (D)

2 GeoCue Server and GeoCue Client

This section contains the highlights of new features in the core GeoCue products; GeoCue Server and GeoCue Client.

2.1 *Performance*

GeoCue version 6.1 includes significant performance enhancements for very large projects (> 50,000 entities). Most of these enhancements should appear as improved performance (speed) and reduced memory footprints. There is no user interaction required to avail of these enhancements except:

- On-demand image loading
- Entity Load Sets
- Maximum number of entities settings

Other areas of enhanced performance include:

- Significantly improved performance of *Select* for very large data sets
- Improved RasterVue initial image load performance
- Checklist and property panes do not load when they are hidden, improving update performance

2.1.1 Partial Image Loading

In anticipation of using GeoCue as a platform for managing very large image sets, we have added the ability to partially load images on an image layer. This is useful for working in sub areas of large image sets. To use this feature:

1. Activate the properties dialog for the image layer and uncheck the "Always Load Images" option. This will cause all loaded images on the layer to unload when you close the dialog.

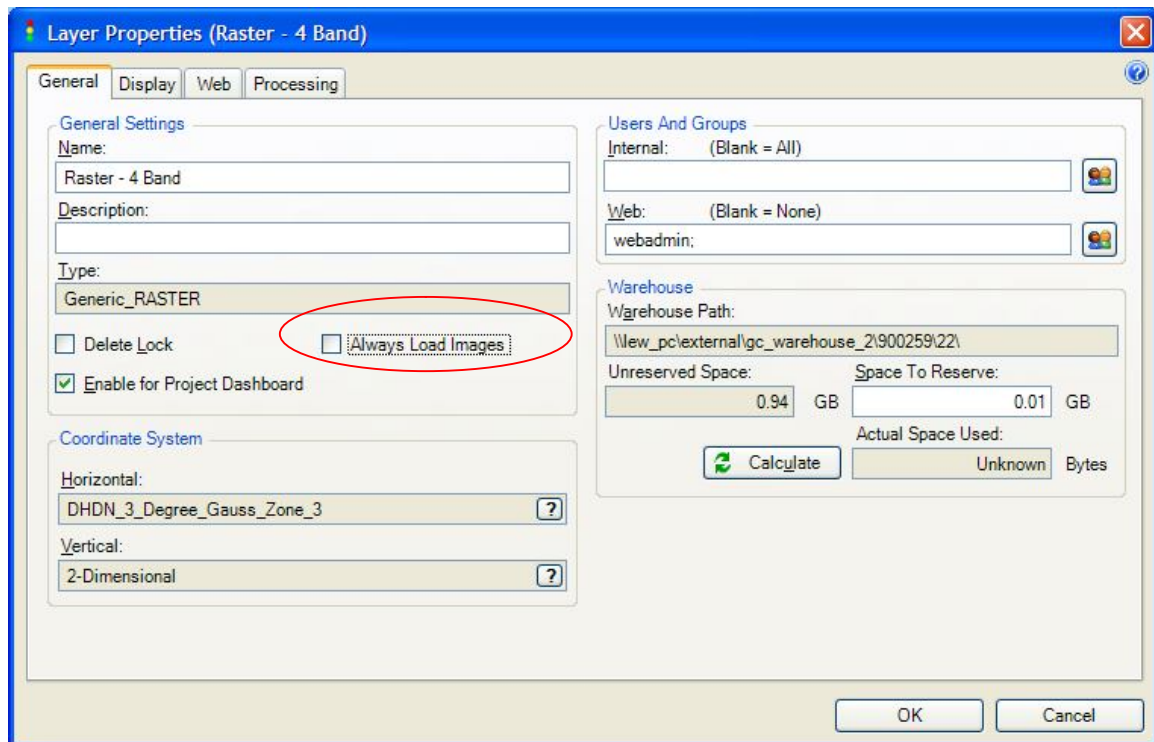


Figure 1: Turning off image loading

2. Select, in the Map View, the images that you wish to load
3. Right click in the Map View and choose *Load Images* (see Figure 2)

The selected images will load into GeoCue Client. Note that *unloaded* images will have a cross-hatch symbology if you enable the Image Load Set symbology. Image Load Sets created on a per-client, per-session basis and thus are not remembered between sessions. Thus images loaded by one user will not appear in another user's GeoCue Map View. If you need to share "load sets" and/or remember them between sessions, use the new Entity Load Set facility of Named Queues

Note that this feature will allow you to manage tens of thousands of images in a GeoCue project. Make sure you turn off "Always Load Images" on the layers that will contain large sets of images *prior* to inserting the images into GeoCue!

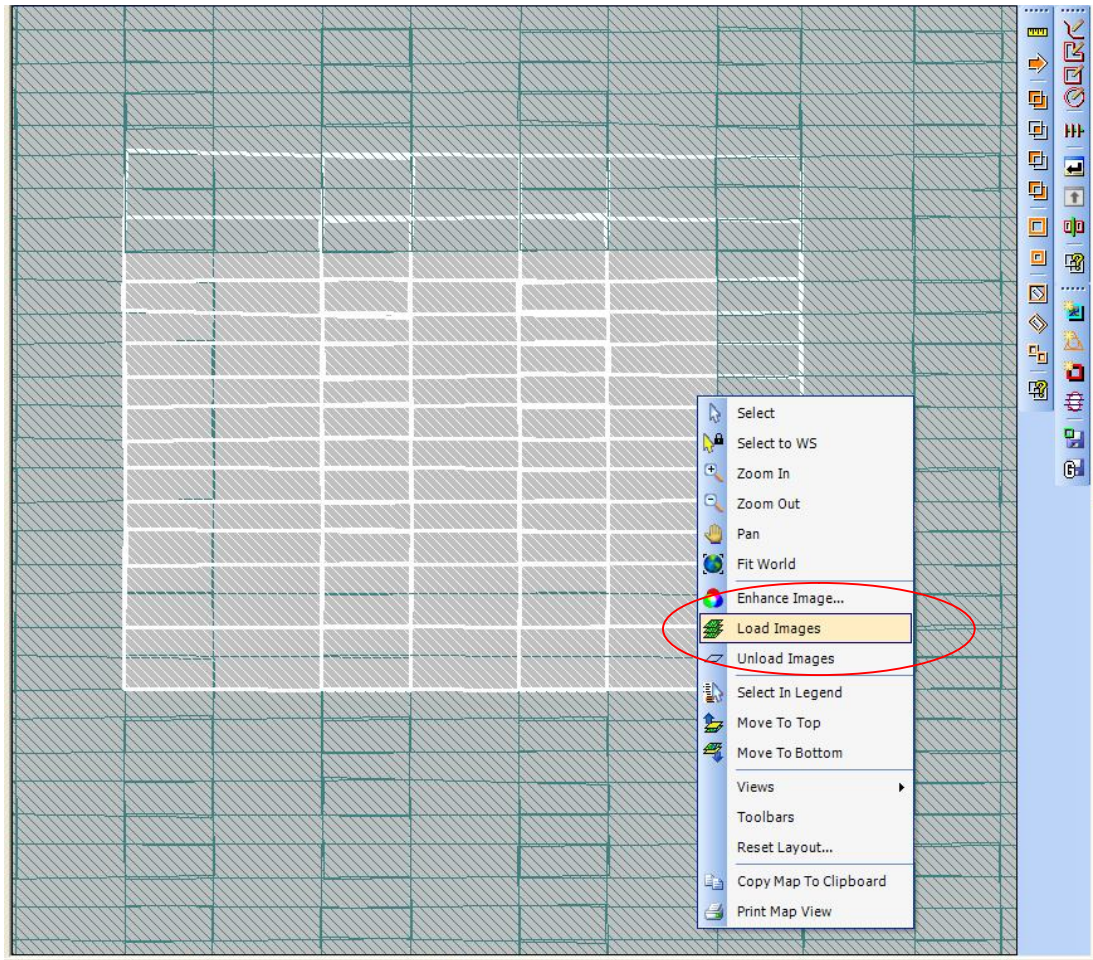


Figure 2: Explicit Image Loading

Image Load Symbology is enabled/disabled via the new tool in the Symbology toolbar (Figure 3). Note that unlike other symbology settings, the Image Load State symbology is not controlled on a per layer basis in the legend.

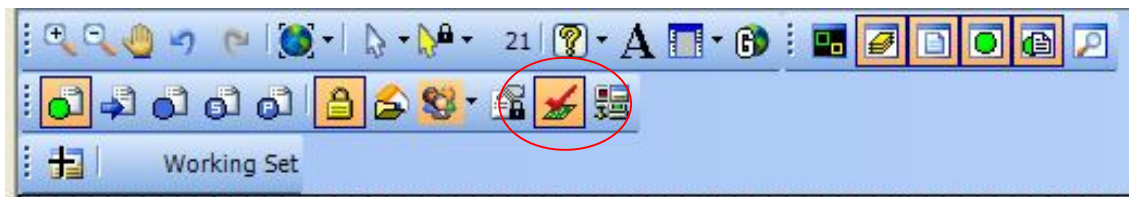


Figure 3: Image Load Symbology

2.1.2 Entity Load Sets

GeoCue Server now maintains a caching system of entities to improve performance for very large project. A new option in GeoCue -> Options allows you to set the maximum

number of entities that can be in memory on the GeoCue Server (see Figure 4). Note that you must have GeoCue Administrator privileges to access this tab of the GeoCue Options dialog. If you find that GeoCue Server is consuming more memory than desired, reduce this setting. Be careful in that too low a setting will cause significantly degraded performance on the server. Note that this setting does not affect the memory footprint of GeoCue Clients.

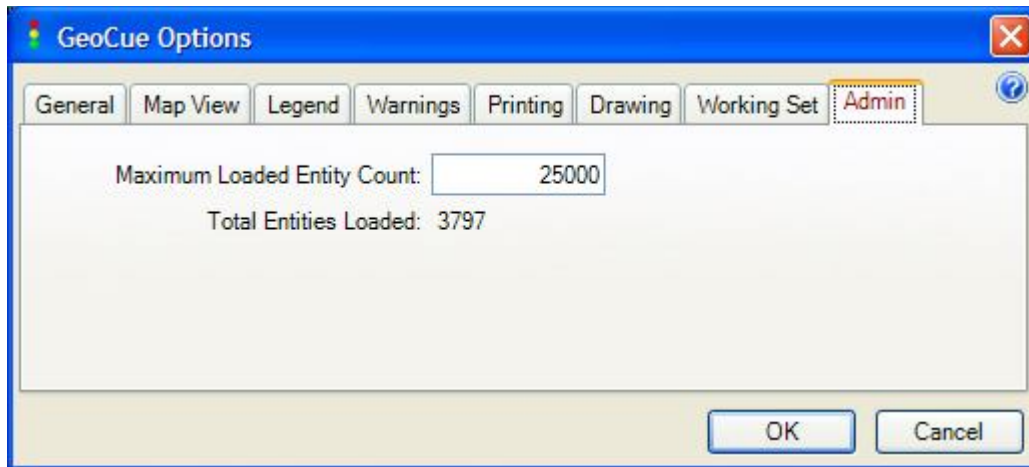


Figure 4: Setting the Server load limit

It is sometimes desired (for performance reasons) to force GeoCue Server to always keep certain entities loaded. This ensures that the entities are loaded into Server memory anytime a user has the associated project open¹. This is accomplished by adding the entities to a Named queue and setting the new "Entity Load Set" property (see Figure 5).

¹ They actually remain loaded at all times since they may be needed in a background task.

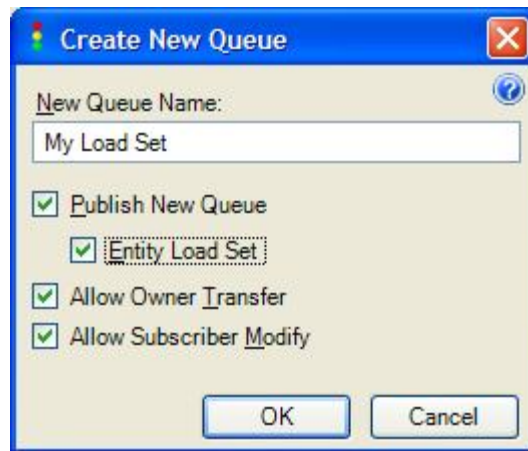


Figure 5: Creating a Load Set

Note that if the entities are Rasters, the associated rasters will load each time the project is opened.

You should clean up Load Sets as soon as you no longer need them since they reduce the Server Dynamic Entity cache size.

2.2 *National Geodetic Survey GEOID 2009 (North American Users)*

The National Geodetic Survey's (NGS) newly released Geoid 2009 has been added as a supported model within GeoCue's vertical datums (NAVD88, Geoid 2009).

2.3 *Entity Manager*

Several enhancements have been made to Entity Manager, the entity metadata viewer for GeoCue.

NOTE: Entity Manager is a "non-modal" dialog. This means that you can keep Entity Manager up during your entire GeoCue session. Entity Manager has bidirectional connectivity to the graphics in the Map View. This provides a very powerful query tool.

2.3.1 Enhancements to Entity Manager Pre-filter

We added, in GeoCue version 6.0, a *pre-filter* to Entity Manager to improve load performance when working in projects with a large number (i.e. >10,000) of entities. We have added a few new features to the pre-filter in version 6.1 (see Figure 6).

The initial set of radio button controls allow you to do quick, common filtering:

- All Entities – Effectively turns off the pre-filter and loads all entities in the project
- Only Entities in the Working Set
- Only Entities Selected in the Map View
- Entities from Layers Selected Below – this option activates the lower section of the dialog where you filter by entity *type*. Selecting this option puts you in the modes supported by GeoCue 6.0.

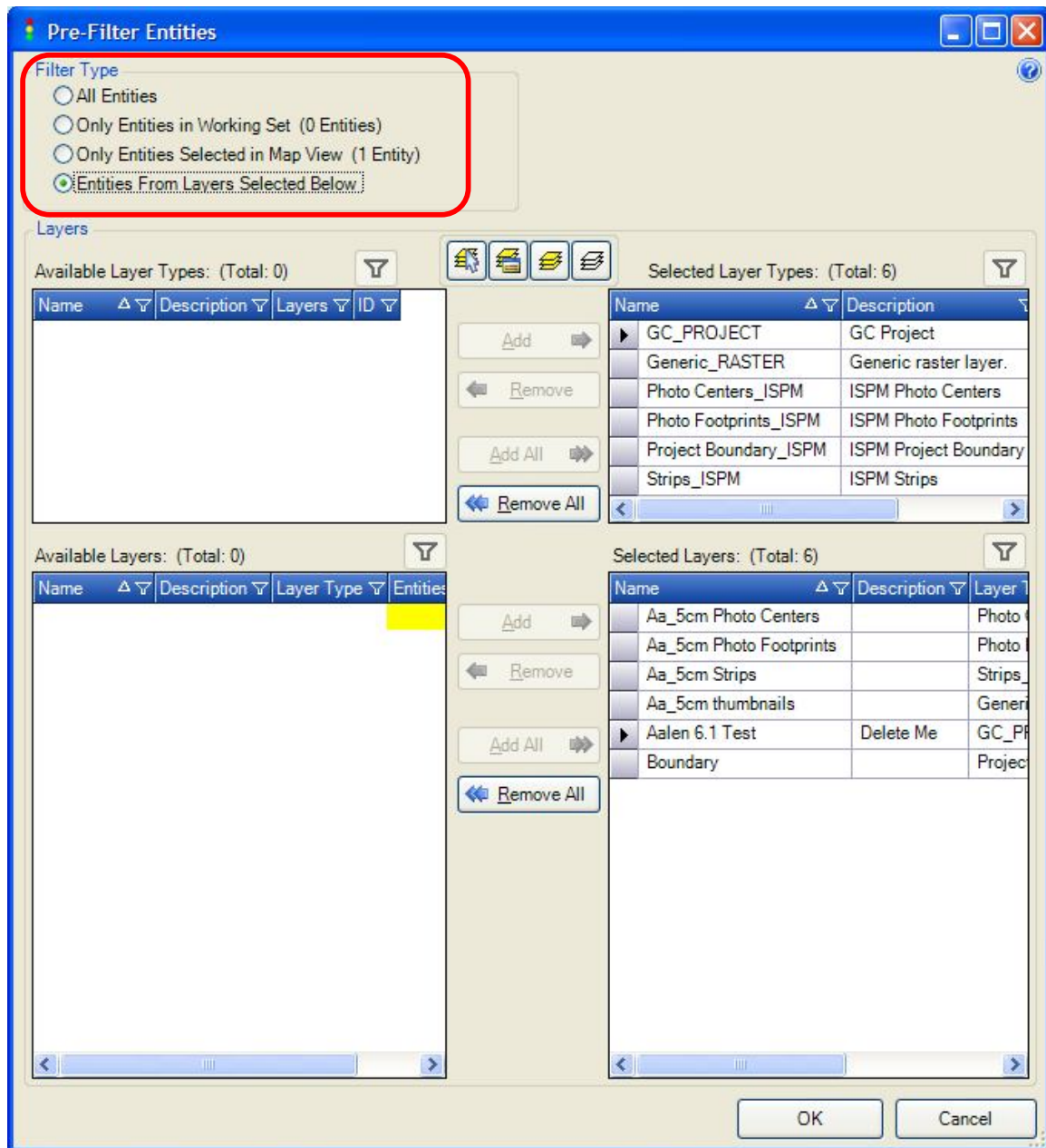


Figure 6: Entity Manager Pre-filter

2.3.2 Loading a Named Queue from Entity Manager

Two new toolbar buttons have been added to Entity Manager that allow you to load a GeoCue Named Queue. This is useful when you want to put entities into a Named Queue in a specific order. For example, you might sort Mobile Mapping System (MMS) camera stations by GPS time and add them, in this order, to a Named Queue. This will allow you to view the images in chronological sequence in RasterVue (you can use the new Auto play feature of the queues for such tasks). The Named Queue toolbar buttons

are shown in Figure 7. The button on the left adds Entities of *Selected* rows (those highlighted in orange) to the currently *active* named queue. The button on the right adds all visible rows to the currently active named queue. The *Active* named queue is the queue with the *Active* check set (Figure 8). The Active Queue toggle acts like a radio button control if you are using multiple Named Queue toolbars² (e.g. Activating Named Queue toolbar B deactivates the previously active toolbar).

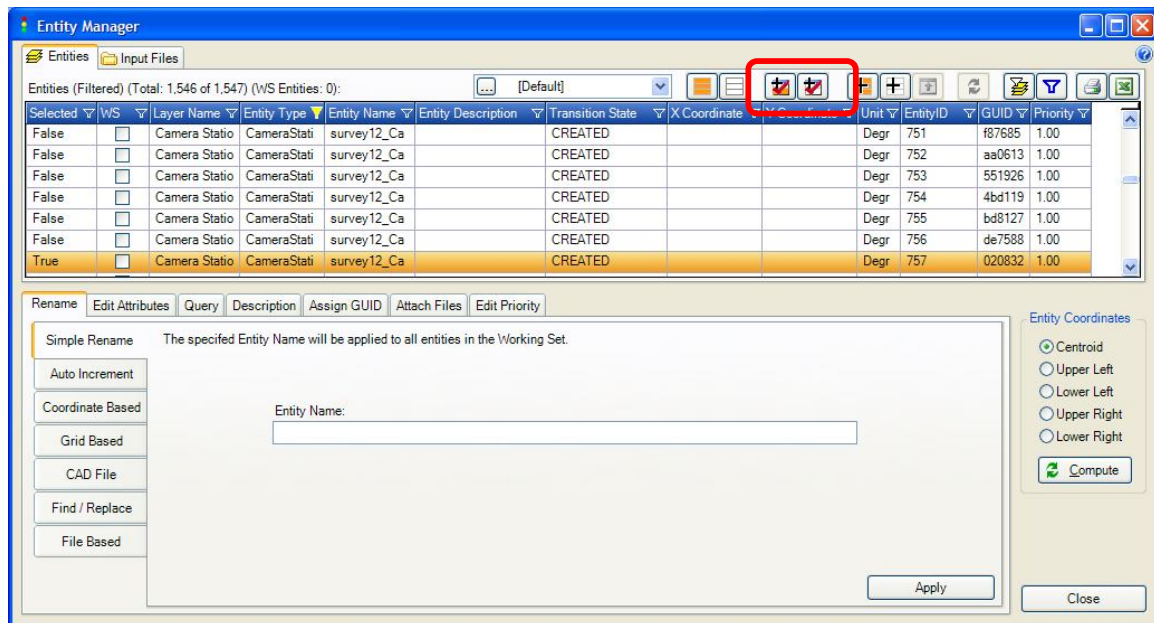


Figure 7: Add to a Named Queue



Figure 8: Active Queue toggle

2.4 Checklist Changes

Several enhancements have been made to the GeoCue Checklist system.

² You can have up to four Named Queue toolbars.

2.4.1 Autorun Next Step Indicator

Sometimes a step in a checklist is programmed to automatically run the next step when the current step successfully completes. An example of this is the DMC PPS CuePac where "Run Geometric Processing" can be set to automatically run if "Run Radiometric Processing" successfully completes. There is now an indicator in the checklist to make this configuration obvious.

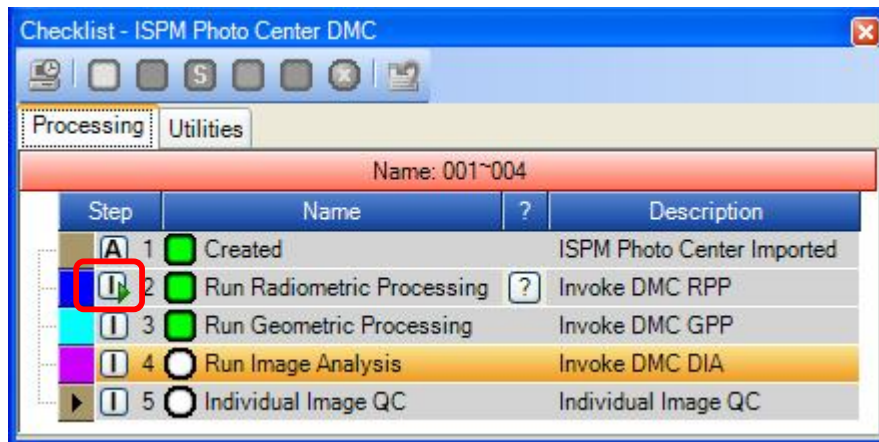


Figure 9: Autorun Next Step indicator

2.4.2 Intentionally Skipped

GeoCue checklists support the idea of an *optional* step. This is a step that need not be run before the subsequent step can be run. For example, you may set a QC step as Optional.

2.4.2.1 Executing Intentionally Skipped Steps

Some users have requested a mechanism to force a user to indicate that she intentionally skipped an optional step (as opposed to just forgetting to execute it). We have added the notion of an intentionally skipped step to GeoCue 6.1 to accommodate this need. This resulted in the addition of a new step type (intentionally skipped required) and a new checklist step action (Intentionally Skip). These new facilities are illustrated in Figure 10.

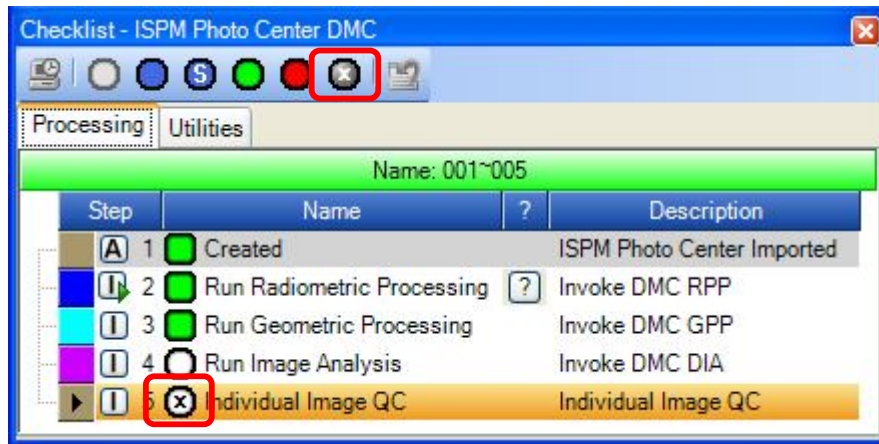


Figure 10: Intentionally Skipped Mechanism

Note that we have set the *Individual Image QC* step as requiring the user to either run the step or explicitly set it as *Intentionally Skipped*. Note the new **state** button in the toolbar for setting intentionally skipped. When *Intentionally Skipped* is executed, the step icon changes as indicated in Figure 11.

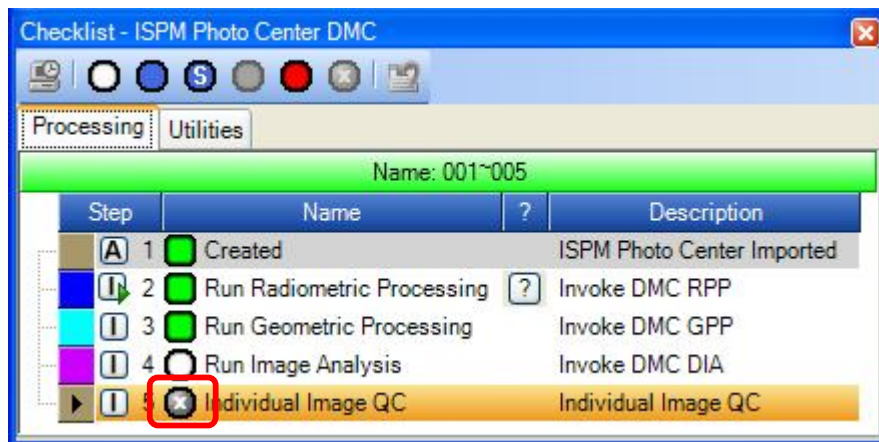


Figure 11: Symbol for an Intentionally Skipped step

2.4.2.2 Creating Intentionally Skipped Steps

Intentionally Skipped steps are established using Environment Builder, Checklist Tab, Modify Checklist button (see Figure 12).

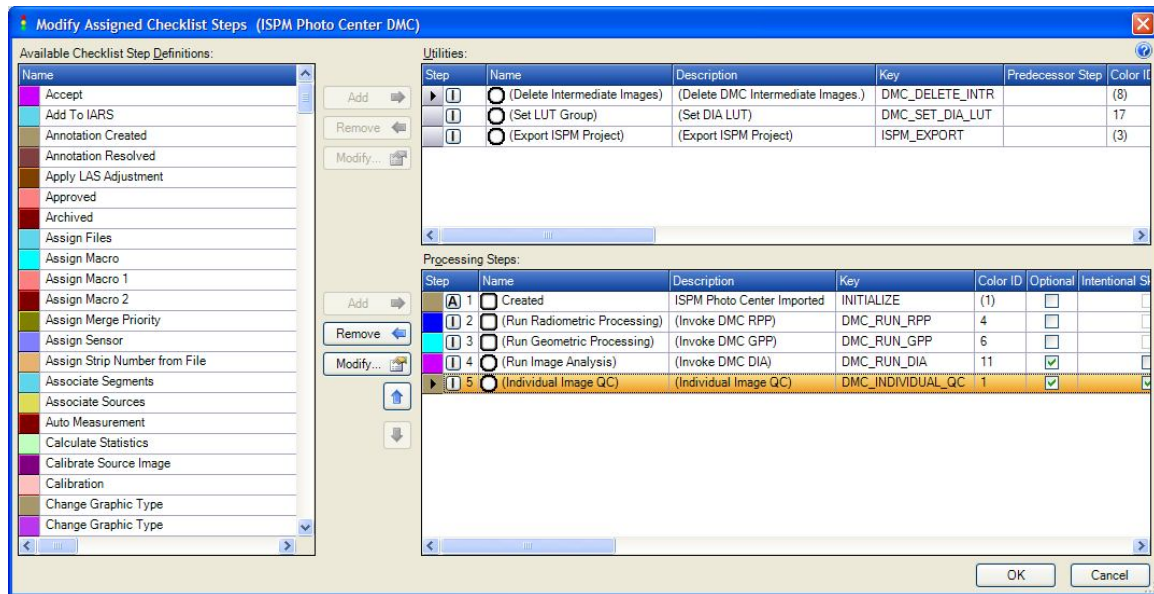


Figure 12: Environment Builder, Modify Checklist function

Select the checklist step to be modified (in our case, Individual Image QC) and press **Modify** (or double left click on the desired step). This brings up the dialog of Figure 13. Set the **Intentional Skip Required** option. Note that only an Optional step can be set to this mode.

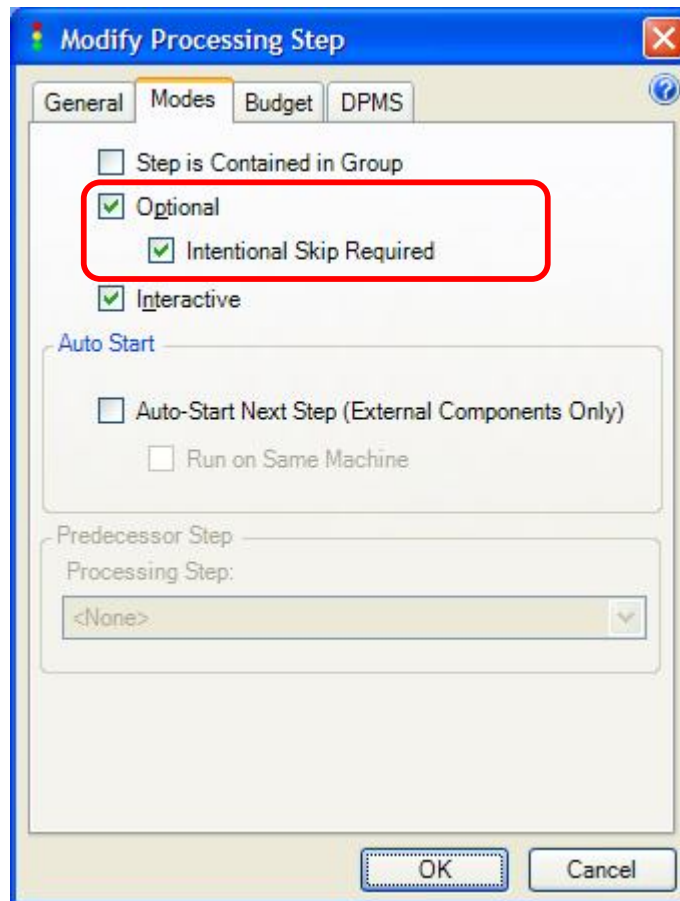


Figure 13: Setting the Intentionally Skipped mode

2.4.3 Utility Step Prerequisite Steps

Sometimes it is necessary to execute some of the Processing steps on an Entity before a particular Utility step can be executed. For example, a LAS Working segment entity must be *populated* before it can be *View in PointVue*. Prior to 6.1 this relationship could not be "hardcoded". Instead, users simply had to know the prerequisites. GeoCue 6.1 has added a facility to enforce prerequisites on Utility steps. Note that in this version of GeoCue, the prerequisite can only be from the Processing steps of the *same* entity. Note in Figure 14 that the *View LAS in PointVue* utility step has a prerequisite (predecessor step) of step 3 from the Processing group. This group is shown in Figure 15 where we see the required predecessor is ***Populate***.

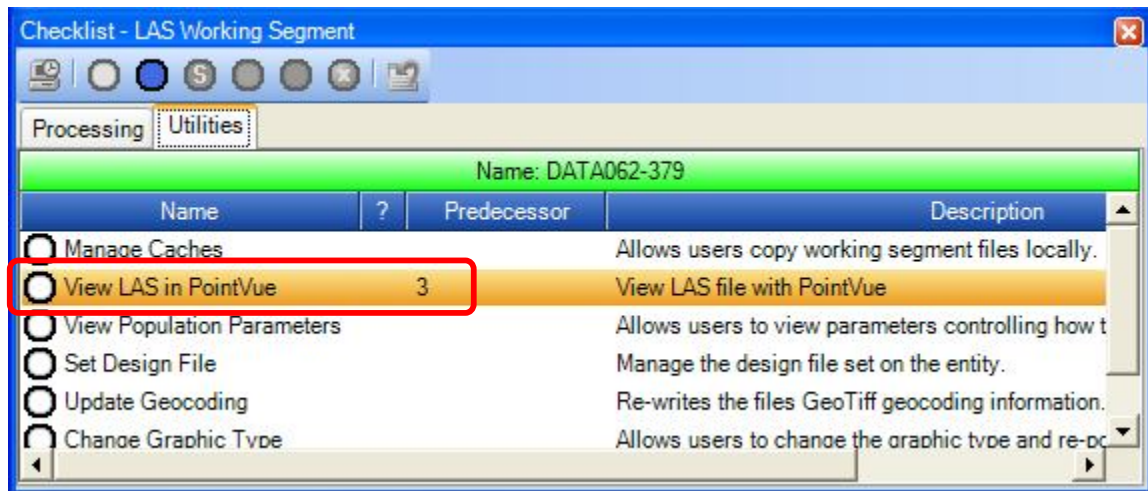


Figure 14: Prerequisite Step

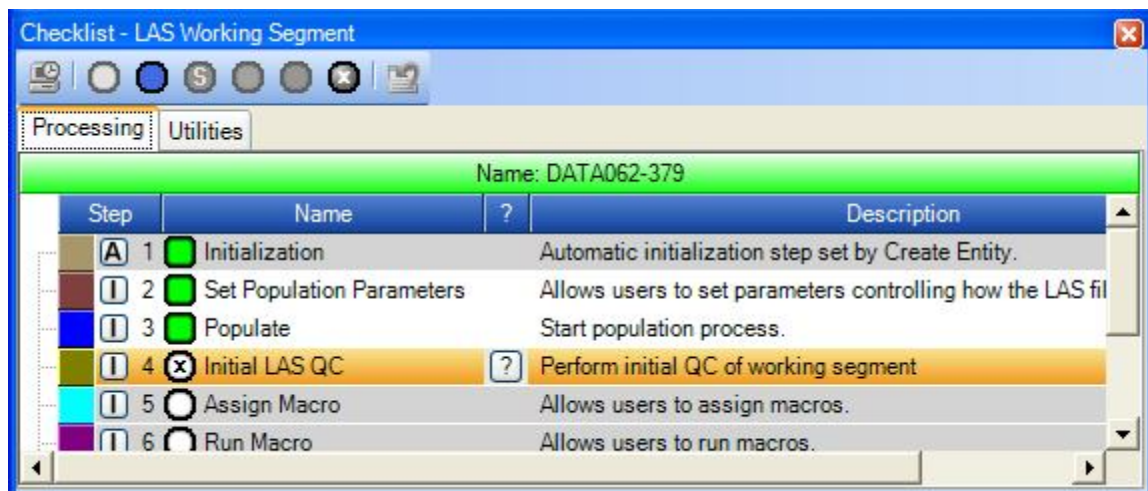


Figure 15: The Predecessor Step to View in PointVue

Predecessor steps for Utility checklist steps are set in Environment Builder, Checklist tab. Select the desired checklist and **Modify Group**. Next select the desired Utility step and press **Modify** (or double left click the desired step). This displays the dialog of Figure 16. On the **Modes** tab, select the desired Predecessor step in the drop-down list.

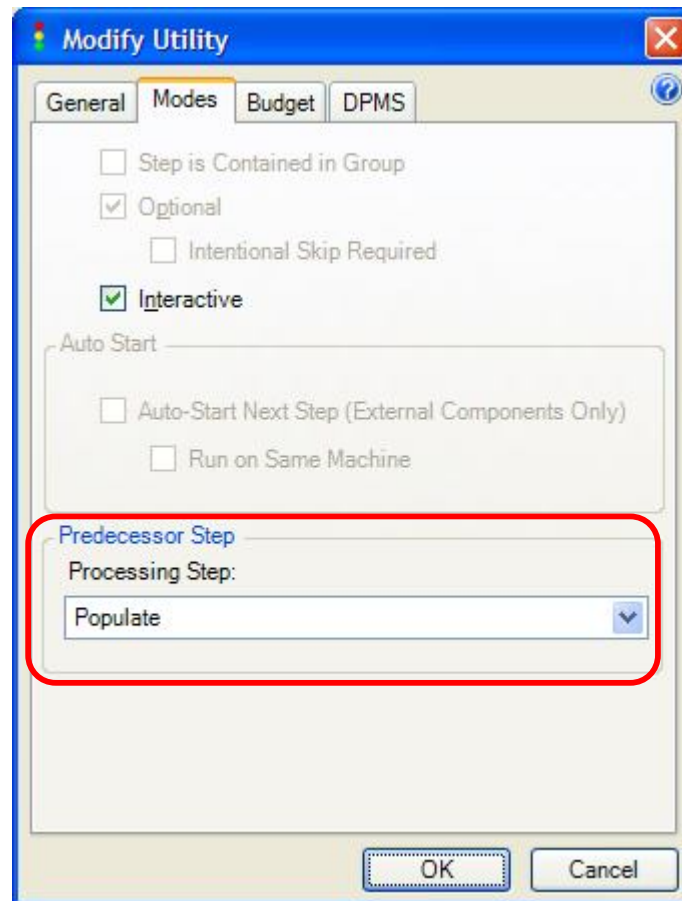


Figure 16: Setting the Predecessor Step

2.4.4 “Unordered” Checklist Groups

GeoCue requires that Processing checklist steps be executed in the order in which they appear in the checklist (Utility steps can be executed in any order assuming their predecessor steps, if any, have been executed). This presents a logic problem if you have a series of tasks that can or need be executed in random order. For example, you might have the steps:

- GPS Data Received
- LIDAR Source Data Received

but you have no idea which will arrive first.

2.4.4.1 Using Unordered Groups

We have added the concept of Unordered Groups for checklist to accommodate this need. Consider the group shown in Figure 17. Here we have a group called "Mission Tasks." This group comprises three steps:

- GPS/IMU Data Processing
- GPS/IMU Data on Server
- LIDAR Data on Server

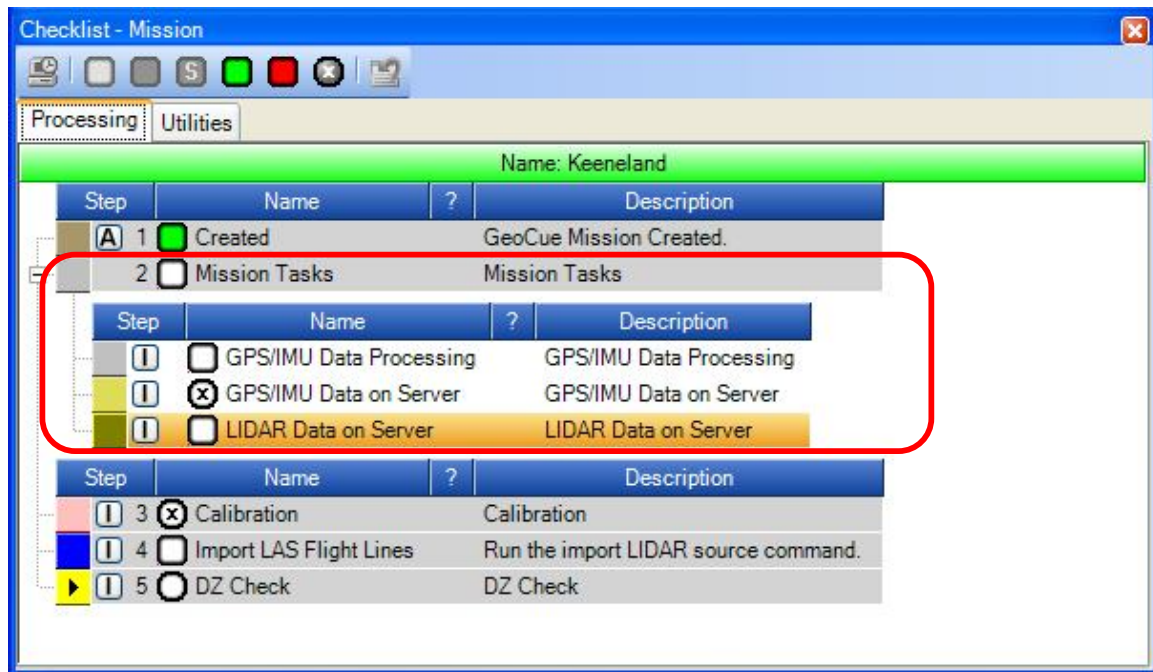


Figure 17: An Unordered Checklist Group

Two of the steps are mandatory whereas the "GPS/IMU Data on Server" is optional (with the requirement that if it is not to be executed, it must be "Intentionally Skipped").

The steps within this group can be executed in any order.

Note that Optional Steps within an Unordered Group must be of type "Intentionally Skipped" (Environment Builder handles this automatically).

The group steps are executed the same as any step in a GeoCue checklist. Note that the Group level entry itself (in our example, "Mission Tasks") cannot be executed. It simply represents the aggregate state of its grouped steps. Similarly, a history is not maintained at the Group level but at each member step.

Note, for example, that we can execute the mandatory step "LIDAR Data on Server" prior to executing the other mandatory step in the group, "GPS/IMU Data Processing" (see Figure 18).

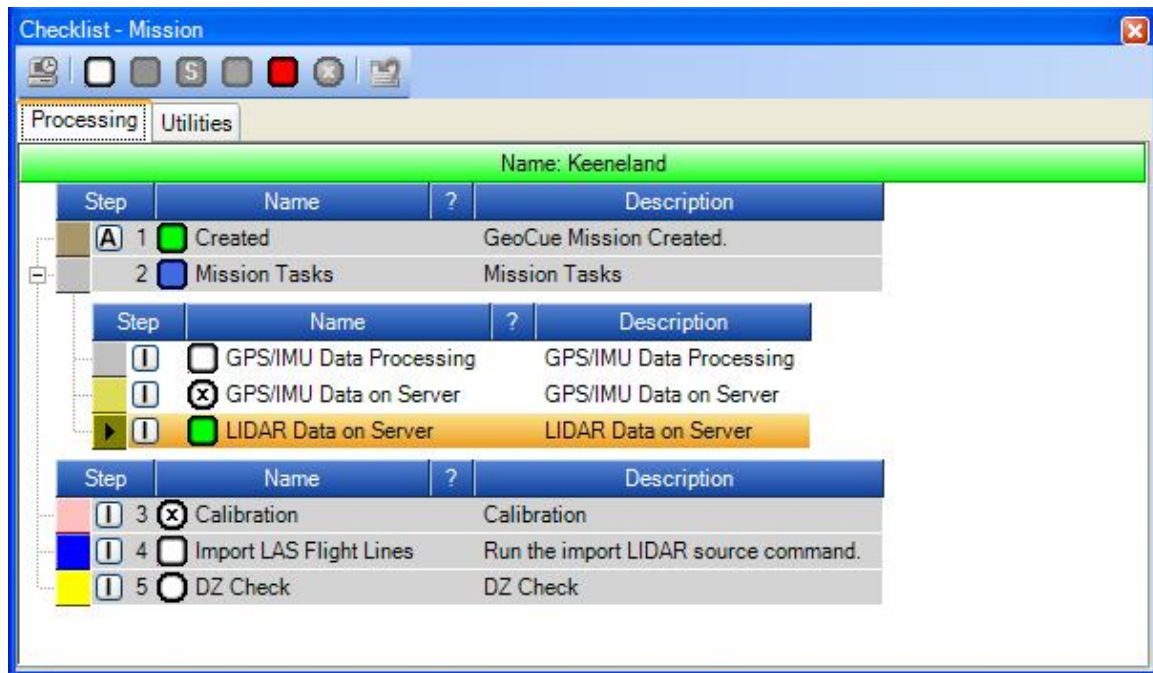


Figure 18: Executing out-of-order mandatory steps in an unordered group

The Group step icon will be Mandatory if any grouped step is mandatory otherwise it will be Optional.

The Group step transitions according to the rules listed in Table 1.

Table 1: Unordered Group Status Rules

Transition	Rule
Not Started	All contained steps are Not Started
In Progress	Any contained step set to In Progress, Suspended, Pending or Intentionally Skipped
Suspended	Never occurs on an Unordered Group
Pending	Never occurs on an Unordered Group
Complete	All contained mandatory steps Complete, All Optional Step either Complete or Intentionally Skipped
Error	Any contained step set to Error

2.4.4.2 Creating Unordered Groups

Unordered Groups are created using Environment Builder. The following is the outline of the creation process:

1. Create a Checklist Step Group using the Checklist Step tab of Environment Builder (Figure 19). Set the Normal/Group radio button to Group.

The screenshot shows the 'New Checklist Step Definition' dialog box. The 'Step Definition Name' is 'Mission Tasks', 'Description' is 'Mission Tasks', 'Key' is 'MISSION_TASKS', 'Color ID' is '5', 'Users and Groups' is empty, 'Step Definition Guide' is empty, 'Effort Type' is 'Interactive', and 'Step Type' is 'Group' (selected). The 'Step Definition Actions' tab is active, showing options for 'Not Started', 'In Progress', 'Suspended', 'Complete', and 'Exception'. The 'Allow Interactive Transition' checkbox is checked. The 'E-Mail Notification' section is at the bottom right.

Figure 19: Creating a Group Checklist Step

2. Bring up the Checklist to which you wish to add the Group in Modify Assigned Checklist Steps (Select the Checklist from the Checklist tab in Environment Builder and select Modify Group)
3. Select the Group step in the *Available Checklist Step Definitions* section of the dialog and press the **Add** button to the left of the Processing Step section of the dialog. This will add your Group step as the last Processing Step (Figure 20).

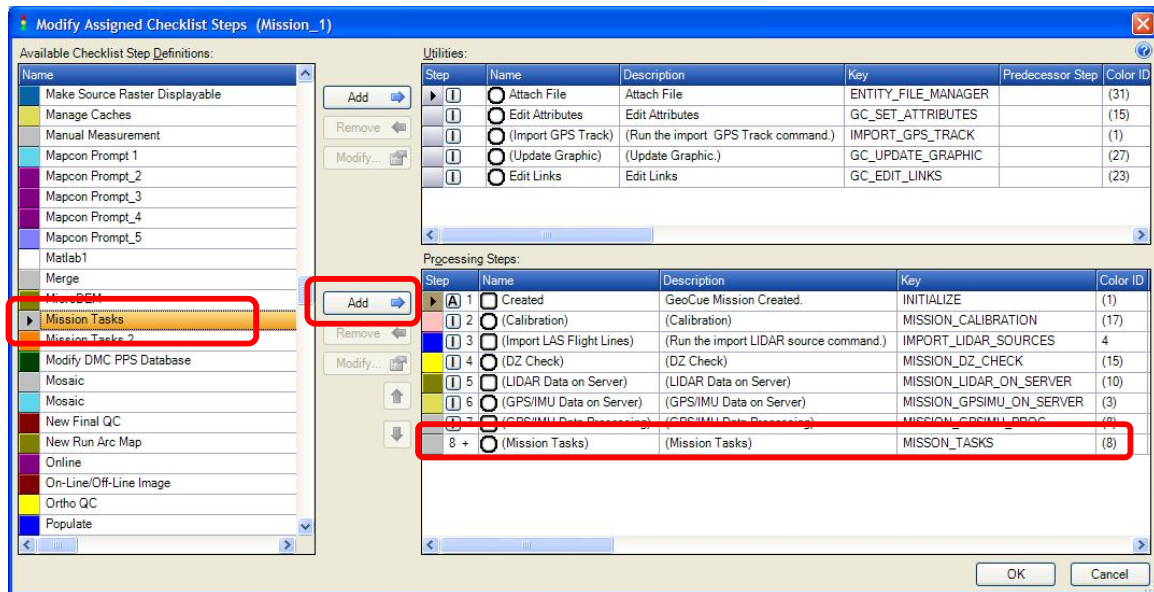


Figure 20: Adding the Group to the Checklist

4. Move the Group step to the position in the list where it is to appear (using the up and down arrow buttons). All group member steps must be placed immediately below the Group step
5. Modify each step that is to be a member of the Group by selecting the step and pressing the **Modify** button. Select the Modes tab and check the *Step is Contained in Group* option. Note that you must work from the top step of the group down. If you set the Step to Optional, the *Intentional Skip Required* option will be automatically selected since all optional steps within an Unordered Group must be of this type.
6. OK out of the dialogs and your Checklist is complete.

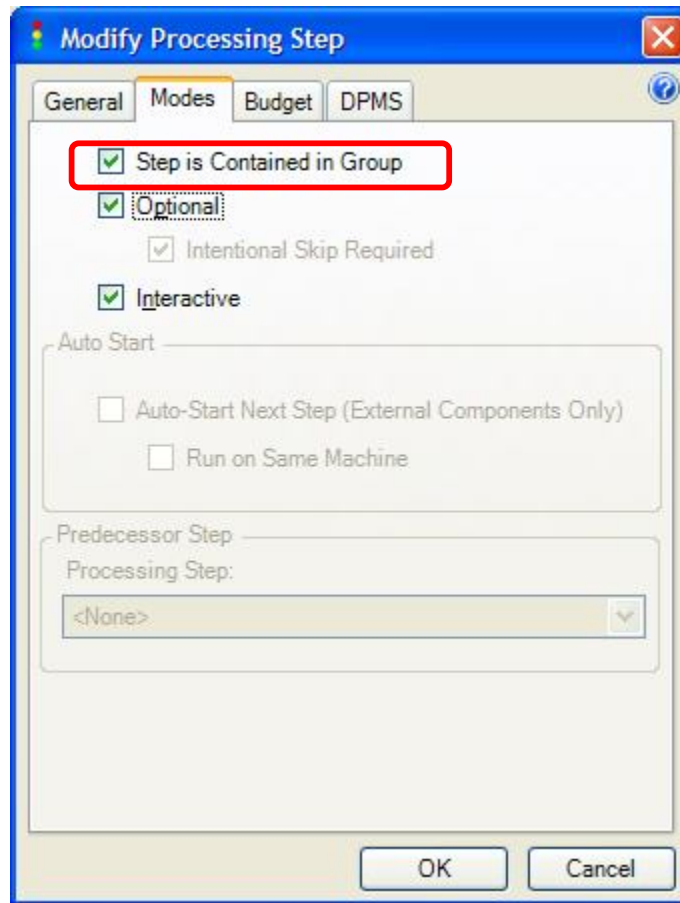


Figure 21: Setting Group membership on a Step

2.5 Named Queue Features

We have made several enhancements to GeoCue Named Queues.

2.5.1 Load Sets

A named queue can now be designated as an Entity Load Set (note that this requires that the queue be Published). This feature was discussed in the Performance section of this document.

2.5.2 Loading from Entity Manager

The *Active* queue can now be directly loaded from Entity Manager. This was discussed in the Entity Manager section of this document.

2.5.3 Queue Skip Interval

Named Queues now allow you to specify a *skip* interval (Figure 22). For example, if you set this value to 5, the queue will advance or reverse by 5 entities each time you press the advance/reverse button. This feature is also honored during auto play (next section).



Figure 22: Skip Interval on Named Queues

2.5.4 Auto Play Feature

An Auto Play feature has been added to Named Queues. This allows the Queue to automatically advance or reverse. This feature is activated by holding down the **Control** key while pressing the forward or reverse button on the queue. When this is done, the queue will auto advance (or reverse) and the play button will change to a **Stop** button. You can stop playback by pressing the Stop button with the cursor and left click, by pressing the Space Bar or by pressing the **Escape (ESC)** key.

The speed of the advance/reverse is set on the Queue Manager dialog (see Figure 23).

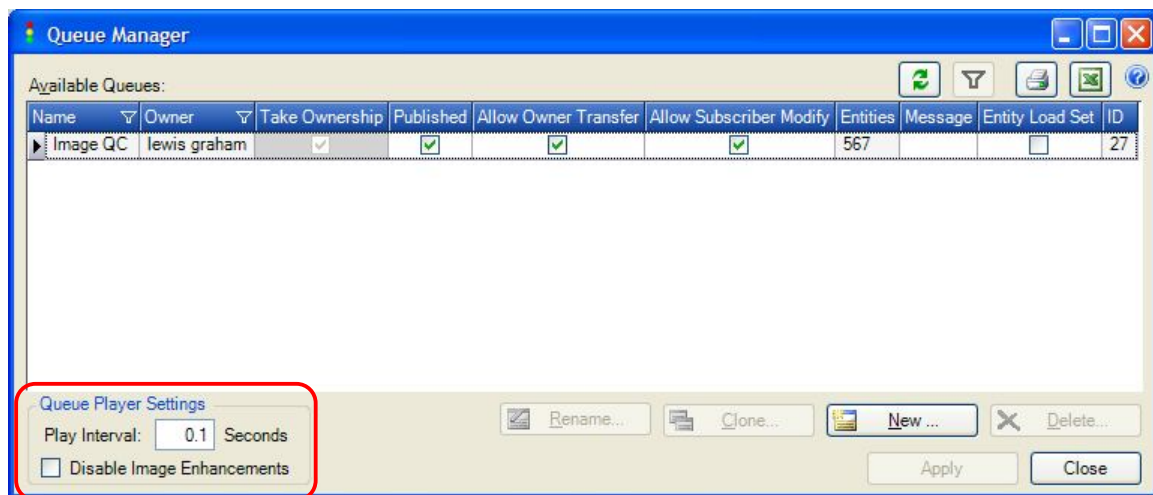


Figure 23: Named Queue Auto Play speed

The *Disable Image Enhancement* toggle causes RasterVue to suspend enhancements while you are auto playing images. This is useful for speeding up the playback rate.

Note that you can temporarily disable Image Enhancement during playback by pressing and holding the **Control (CTRL)** key.

This new auto play feature is very useful for rapid QC operations such as stepping along MMS images or reviewing aerial images for cloud cover.

2.6 **Import ISPM Projects and Models, Launch ISSD**

GeoCue includes commands for loading Intergraph ImageStation Photogrammetric Manager (ISPM) projects and for launching ImageStation Stereo Display from a Stereo Model footprint. This allows you to configure workflows for stereo compilation in an Intergraph photogrammetric workflow. Please contact us if you are interested in configuring this flow.

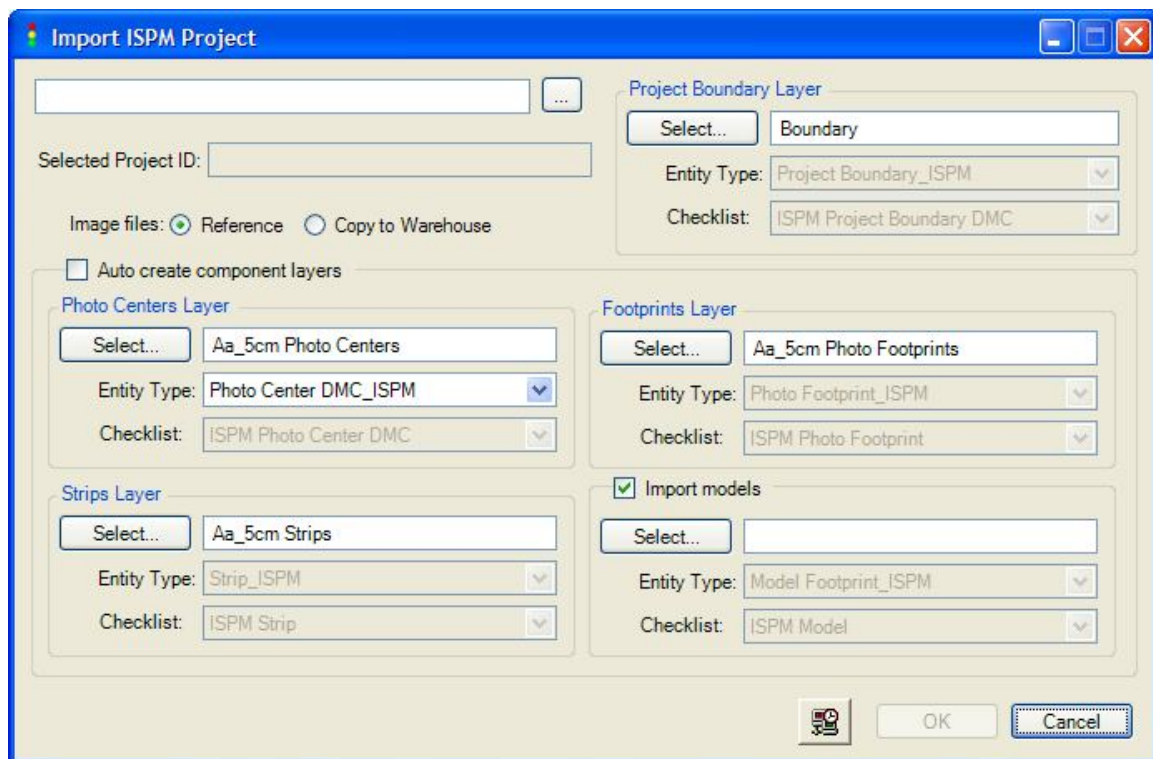


Figure 24: Import ISPM Project

3 Environment Builder

There are a number of new features in Environment Builder, the tool used for configuring GeoCue workflows. These changes are primary focused on support for the new checklist capabilities added in GeoCue 6.1. These changes/additions include:

- Designing Unordered Groups
- Setting predecessor requirements for Utility Steps
- Addition of an Import ISPM project command (in the EB command table)
- Addition of a Launch ISSD command (in the EB command table)

4 GeoCue Project Dashboard (D)

GeoCue Project Dashboard is an all new application (released with GeoCue version 6.0) designed to work in concert with GeoCue Departmental Server and GeoCue Project Administrator. Project Dashboard is a web server application that provides a *dashboard* view into multiple GeoCue projects (in release 6.1, all projects must be hosted in the same GeoCue Departmental Server). The primary work for release 6.1 has been performance enhancements.

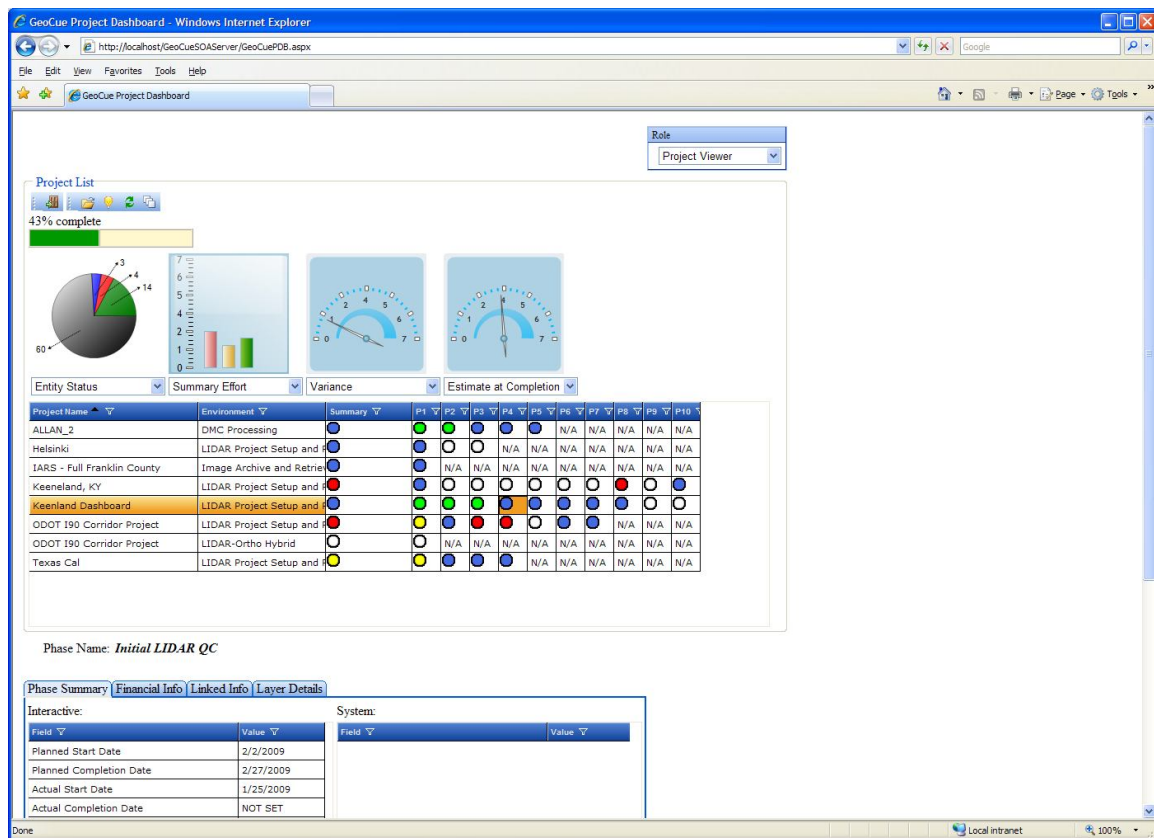


Figure 25: GeoCue Project Dashboard

NOTE: GeoCue Dashboard is currently being offered as a free preview trial. It will become part of GeoCue Federator with the GeoCue 7.0 release. Customers who engage GeoCue for Dashboard training prior to the release of GeoCue 7.0 will have the opportunity to acquire GeoCue Federator for maintenance only.

5 LIDAR 1 CuePac

We have added a number of features to the LIDAR 1 CuePac. These additions and changes are highlighted in the following subsections.

5.1 *Import GPS Track*

A new import command has been added to the **Sources** menu to import a GPS track. This creates a graphic of GPS data that can be use as a reference or as a QC tool to ensure that the desired flight lines were collected. These data typically precede creation of the SBET.

5.2 *Support for Mission Boundaries*

We have added the concept of a Mission boundary to the LIDAR 1 CuePac. This is a polygonal entity that is used to collect data elements associated with a single mission (sortie). A Mission Boundary (white) is depicted in Figure 26 along with an associated SBET (red) and flight lines (yellow).

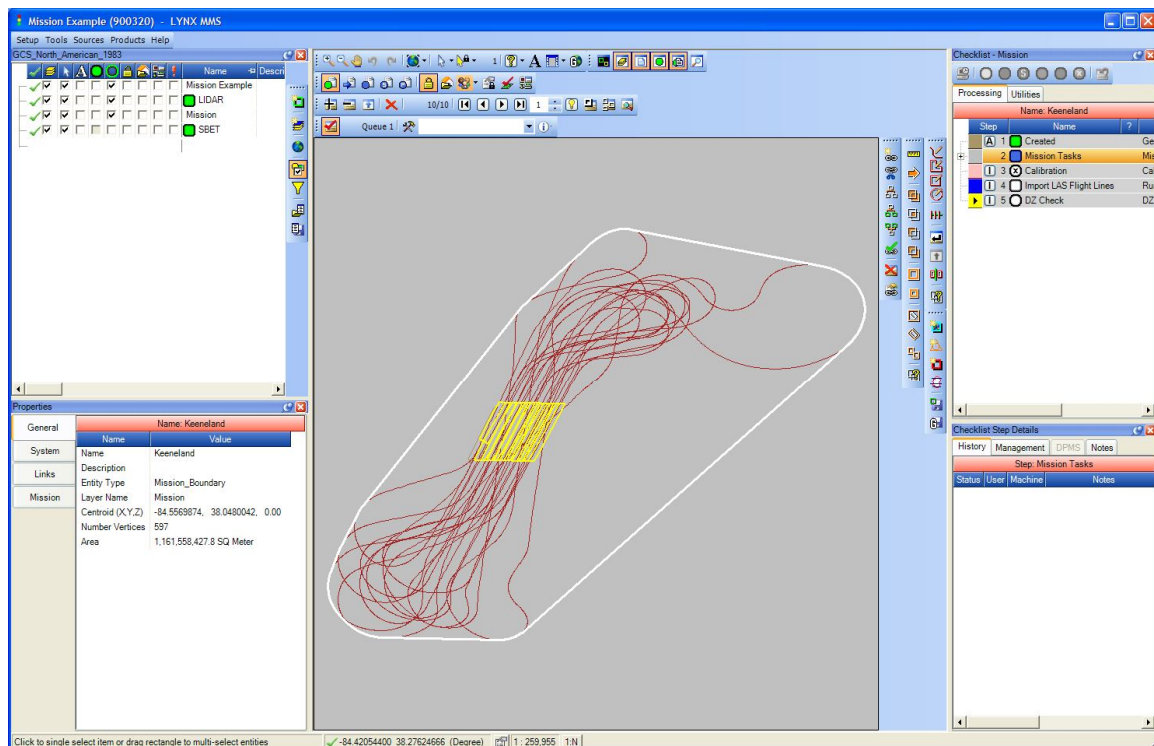


Figure 26: A LIDAR Mission Boundary (polygon in white)

The mission boundary can be created via the following techniques:

- Create Entity command in GeoCue
- Import SBET
- Import GPS Track

The mission boundary includes a default checklist. You will, no doubt, want to modify this for your particular data acquisition workflows.

The Mission Boundary includes a Utility Checklist step to allow modification of the associated graphic. When executed, this checklist step displays the dialog of Figure 27. This allows you to change the size and/or shape of the associated graphic.

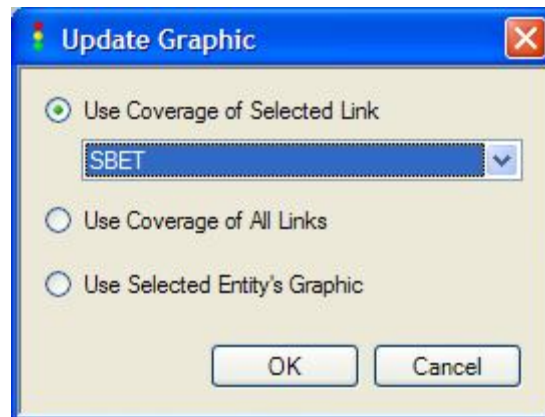


Figure 27: Update Figure 27the Mission Boundary graphic

The Mission Boundary contains *links* to the following entities (if they are present):

- GPS Track
- SBET
- LIDAR Sources

An example of the links on a Mission Boundary are depicted in Figure 28. You can use the *tracing* tools in GeoCue to quickly find the LIDAR sources associated, for example, with an SBET.

Properties

General	Name	Value
System	Name	SBET
	Link ID	692
	Link Definition ID	51
Links	Type	ONE_TO_ONE
	Linked Entities	1
Mission	Linked IDs	49
	Name	LIDAR Sources
	Link ID	693
	Link Definition ID	57
	Type	ONE_TO_MANY
	Linked Entities	11
	Linked IDs	53,54,55,56,57,58,59,60,61,62,63

Figure 28: Mission Boundary Links

5.3 *Support for Mission Plan Import*

We have added support for mission plan graphics from ALTM NAV (Optech's planning software). We have also extended the types of TrackAir mission plans supported in GeoCue. These tools are available from the "Import Acquisition Plan" tool on the Utilities toolbar of the GeoCue Client.

5.4 *Import SBET, Import TerraScan Trajectories Dispatchable*

The Import SBET and Import TerraScan Trajectories commands (on the LIDAR 1 Sources menu) now use the standard GeoCue file browser dialog and are fully dispatchable to remote machines.

5.5 *Support for the ESRI version of LP-360*

We have added full support for the integration of QCoherent's LP-360 in to a LIDAR 1 workflow. This capability is enabled via a checklist step in the checklist step library:

"Process in Full LP360"

6 DMC PPS CuePac (D)

Several new features have been added to the Digital Mapping Camera, Post-Processing System (DMC PPS) CuePac. These are fully documented in the DMC PPS CuePac User Guide. They include

- Thumbnails from the DMC video camera can now be imported into the project. This is useful for initially setting Lookup Tables (LUTs).
- Log files from both the RPP and GPP processes are attached, on an individual basis, to the ISPM project photo centers. This provides immediate access to the log files for diagnosing errors in either of these processes.
- Produced images can now be quickly viewed by using the new “auto play” feature of named queues.

7 LYNX MMS CuePac (D)

This is an all new CuePac for the Optech LYNX™ Mobile Mapping System (MMS). It includes functions to:

- Import LYNX camera stations
- Manage LYNX camera calibration files
- Import “takes” from multi-laser sensor platforms (a LYNX system typically includes two laser scanners)
- Creates the new accuracy encoded TerraScan trajectory file from laser takes and imported SBET files
- Allows viewing of LYNX camera images in RasterVue
- Supports millimeter project scaling

The LYNX MMS CuePac is a Server-licensed module. This means that only one CuePac is required per GeoCue Departmental Server cluster. Note that this CuePac *augments* the functions of the LIDAR 1 CuePac and thus a LIDAR 1 CuePac license is required for each GeoCue Client and each remote processing machine.

The MMS CuePac is documented in the MMS CuePac User Guide.

8 GeoCue Project Portal

Several new enhancements have been made to Project Portal. Among these are:

- A new GeoCue Web Accelerator generates vector files in the background to accelerate display operations in Project Portal
- You can now set the “zoom scales” in GeoCue Project Portal separately from the GeoCue Client zoom levels (see Figure 29). This is controlled via a new tab on the layer Property pane in GeoCue Client
- You can set visibility and selectability of GeoCue Project Portal layers via the layer property controls in GeoCue Client (in the previous version of GeoCue Project Portal this had to be accomplished via permission settings)
- You can hide the legend and/or the property pane in GeoCue Project Portal via the Project Portal configuration tool

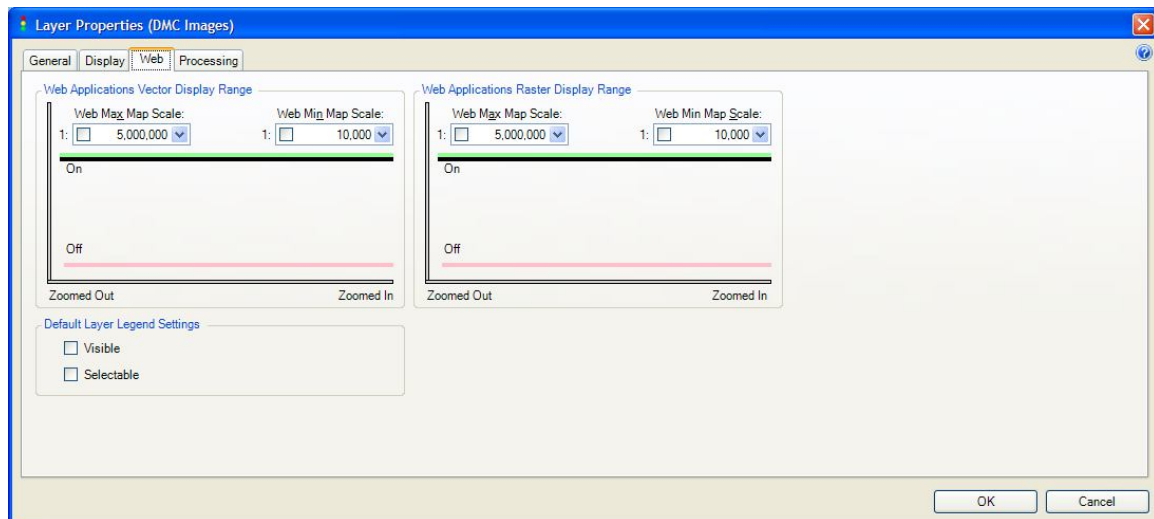


Figure 29: Setting Zoom toggles and Visibility/Selectability for layers in Project Portal

9 Concluding Remarks

We hope that you are finding working with the GeoCue product family to be a significant increase in productivity and ease of use. Hopefully you have not discovered too many software defects.

This release of GeoCue has added major new features that will allow you to deploy GeoCue process management technology in a wide range of application areas

As always, please contact us and let us know of the problems that you encounter and the new features that you would like to see added to the GeoCue product family.