



GeoCue Project Dashboard
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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

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1 Introduction

GeoCue Project Dashboard (“Dashboard”) is the next generation of Project Management software from GeoCue Corporation. Project Dashboard provides:

- Web-based interface to GeoCue project status
- Synoptic view of the overall status of all active projects
- Dashboard gauges of project vital statistics such as Estimate to Complete and Variance
- Ability to quickly “drill down” into each phase of a project
- Support for project steps (we call these “Phases”) that are not tied to GeoCue *entities*
- Roll-up of the status of entities and layers in GeoCue projects
- Segregation of Machine Time reporting from Human Time reporting
- Completely user configurable

Project Dashboard will allow a new level of capability for companies to estimate projects and then track the production of the projects against those original estimates. As with all GeoCue tools, the goal of Dashboard is to allow companies to do more in less time at greater accuracy.

NOTE: Project Dashboard requires at least one license of Project Administrator. Project Administrator is presented in a separate User Guide.

2 A General Overview of Project Dashboard

In this section of the document we provide a general overview of the operations of Project Dashboard.

Most day-to-day interactions with Dashboard will occur via the web interface, Project Dashboard. Certain administrator functions will need to be performed via the Project Administrator tool (discussed in a separate User Guide).

Project management and configuration is performed via Project Dashboard and Project Administrator. Dashboard is a “role” based system, providing several levels of access as defined in Table 2-1. Access to Dashboard is via a web browser interface. Access to Project Administrator is via GeoCue Client.

Table 2-1: Dashboard vs. Administrator Activities

<i>Access Role</i>	<i>Activities</i>	<i>Dashboard</i>	<i>Administrator</i>
Project Viewer	Viewing the status of projects for which access has been granted	√	
Project Worker	Updating project information as a component of production	√	
Project Manager	Defining the Phases and Linked Steps that will be tracked in a project. Assigning levels of effort and personnel who will work aspects of the project at the Phase level.	√	
Production Manager	Fully configuring GeoCue projects. Setting production expectations at the entity level (Budgeted Effort, Start Date, Assigned User and so forth)		√
Project Administrator	Setting project access permissions, activating/deactivating projects	√	√

Project Dashboard contains four access levels (also referred to as *roles*):

- Project Viewer
- Project Worker
- Project Manager
- Project Administrator

The access level granted to a user who logs into the Project Dashboard interface is determined by the standard GeoCue authentication system. After logging in, the user selects the mode of access. Permissions are hierarchical; a Dashboard Administrator can select Viewer mode, Worker mode, Manager mode or Admin mode whereas a Dashboard Viewer can only select Viewer mode. The dialogs presented by Project Dashboard depend on the currently selected access role. Examples of actions permitted at the various roles are depicted in Table 2-2.

Table 2-2 Project Dashboard Functions

Action	Project Viewer	Project Worker	Project Manager	Project Administrator
Create GeoCue Project			√	√
Enable/Disable Projects for Project Dashboard Access				√
View Projects	√	√	√	√
View Production Phases	√	√	√	√
Update Production Phase Status		√	√	√
Modify Production Phase Definition			√	√
Create/Delete Production Phases			√	√
Export to Excel	√	√	√	√
Save Project Template			√	√
Assign Users to Projects			√	√
Assign Users to Phases			√	√
Add Files to a Project		√	√	√
View Files on a Project	√	√	√	√
Status Formulas: Select Conditions Available			√	√
Status Formulas: Assign Conditions to Status Values			√	√
Status Formulas: Modify Email Alerts			√	√
Add notes to Manual Phases		√	√	√
Change Status of Manual Phases		√	√	√
Change Order of Phases in a Project or Group Phase			√	√

In the following sections we present a “walk through” of Project Dashboard, based on the currently selected access mode. In all cases, the user logs into Project Dashboard using a standard web username/password combination (these are set by a GeoCue System Administrator within GeoCue Client). Within the initial entry page of Project Dashboard, the user will select their desired interaction role via a drop-down menu (Viewer, Worker, Manager, Administrator). This drop-down presents only choices enabled via the logged in user’s maximum permission level.

3 Viewer Role

Viewer Role is used to view the status of projects in Dashboard. No data entry or project modifications are available in this role. Thus this is suitable for executive management status views as well as client or subcontractor viewing.

NOTE: Unlike Project Portal, Project Dashboard, in the current release, does not allow you to hide or expose project phases based on a user login. It does allow you to hide entire projects.

3.1 Project View

The general appearance of Dashboard in Viewer role, when logging in for the first time during a session, is presented in Figure 3-1.

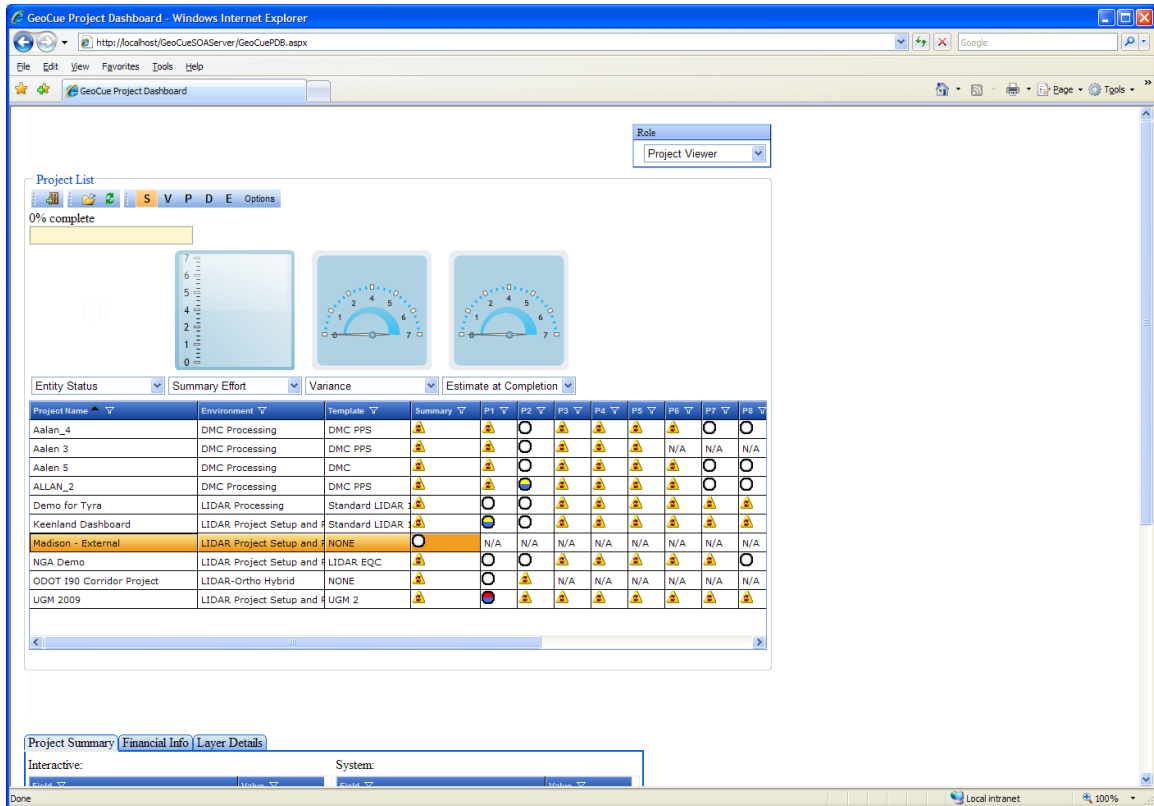


Figure 3-1: Initial login view of Dashboard

Only projects for which the logged in user has viewing permission will be displayed. The displayed columns and their descriptions are listed in Table 3-1.

Table 3-1: View mode columns

<i>Column</i>	<i>Description</i>
Project Name	The name of the project. This is identical to the project name that appears in GeoCue Client
Environment	This is the workflow of the project. Note that in Dashboard, a separate entry appears for each defined environment of a project (assuming that it has been permission enabled for the logged in viewer)
Template	This is the Dashboard definition for the project. It specifies the phases that have been defined for this particular view of the project.
Summary	Pressing the icon of a project in this column updates all phases for the project and sets display items (graphs, summary tables) to reflect the summary status of the project.
P1..Pn	These columns represent individual <i>phases</i> of a project. Hovering the mouse pointer over the phase will display the name of the phase within the current project. Pressing the phase icon will update the display to reflect the selected phase (graphs and tables)

3.1.1 Updating Phases

Note that most icons are in the “out of synchronization” status (Figure 3-2).



Figure 3-2: Out of Synch indicator

Clicking on any phase icon will force an update of the data associated with that phase. Clicking the Project Summary icon will force an update of the entire project. Finally, pressing the “refresh” tool on the main toolbar will force *all* projects in the user’s view to be updated.

NOTE: We have configured the initial version of Dashboard such that users must manually refresh phase and/or project status. This is because updates can be slow for linked phases where the linked phase contains large numbers of entities. Using the current strategy allows users to selectively update only the data in which they are interested.

3.2 Project Phases

A project *phase* is a user defined portion of a project that a Project Manager has selected for status tracking. Dashboard Projects must be defined by a user in Project Manager role (described in a subsequent chapter). Project Dashboard supports three types of phases:

3.2.1 Linked Phase

A *linked phase aggregates* the status of a particular checklist step on *entities* in a GeoCue project. For example, a QC Phase could link to the Quality Check step on all of the Ortho Images within an ortho production. If the example project contained 2,000 ortho entities, the linked phase would provide a single, composite status for these 2,000 entities. Thus GeoCue Client provides status views of individual entities whereas Dashboard provides aggregated (composite) views of the collection of entities. Updates to linked phases are always performed via GeoCue processing activities and never directly in Project Dashboard.

3.2.2 External Phase

An *External phase* is a project item that a manager wishes to track that is not associated with an underlying GeoCue project. For example, the Project Manager may have created a phase called *Survey Planning* to track the progress of this particular project activity. Updates (in Worker Role) are performed on external phases directly via Project Dashboard entries.

3.2.3 Group Phase

A *group phase* allows a user to define a collection of subphases. The subphases can be any combination of Linked or External phases. In the current release, a group phase cannot contain a group phase (meaning Dashboard supports only one level of phase nesting). Declaring group phases is useful when it is desirable to be able to summarize

an activity but also drill down into that activity if desired. For example, a Survey group phase might comprise the following subphases:

- Plan Survey (External Phase)
- Collect Data (External Phase)
- Reduce Data (External Phase)
- Import Survey points into GeoCue project (Linked Phase)

Clicking on a Group phase in Dashboard will set all status views to reflect the aggregate of the phases that comprise the group as well as expand the phases to allow individual selection of members. Figure 3-3 depicts an expanded group phase that comprises three subphases.

Group Name	Group Status	P1	P2	P3
Survey				

ODOT I90 Corridor Project	LIDAR-Ortho Hybrid	NONE				N/A	N/A	N/A	N/A	N/A
UGM 2009	LIDAR Project Setup and P	UGM 2								

Figure 3-3: An expanded Group Phase

3.3 *Status View*

Clicking on the *summary* icon for a particular project will update the status for all phases of the project, set the Dashboard gauges to reflect summary information about the selected project and set summary tables to that project. The status view for the project “Keenland Dashboard” is depicted in Figure 3-4.

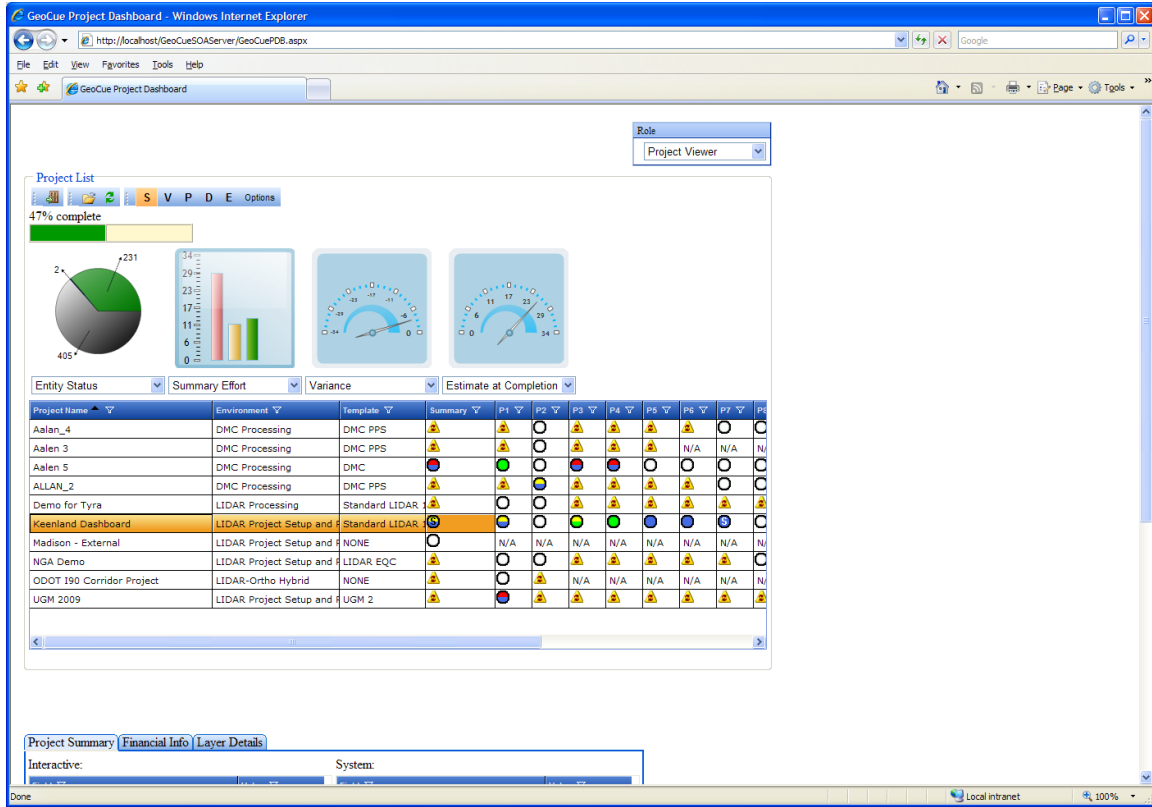















Figure 3-4: Summary Status view

3.3.1 Icon Descriptions

The status of project phases as well as the status of the summary phase are indicated by icons in Project Dashboard. The descriptions of the possible icons are listed in Table 3-2. Note that Project Dashboard supports two *exception* levels – WARNING and ERROR. We use *hybrid* icons to indicate an exception condition. Thus we treat processing state (not started, in progress, etc.) separately from exception conditions. This allows a summary icon to convey a hybrid state such as a phase is complete (green) but under a warning condition because it finished late (yellow). Note that Project Managers can configure various exception conditions for project phases. In general, an icon displays the Exception status in the upper half and the Progress status in the lower half of the icon. If a phase is not in an Exception state, the entire icon indicates the Progress state.

Table 3-2: Icon descriptions for Project Dashboard

Icon	Description
	Out of date
	Invalid
	Not Started
	In Progress

<i>Icon</i>	<i>Description</i>
	Suspended
	Pending
	Complete
	Not Started with Error
	In Progress with Error
	Suspended with Error
	Pending with Error
	Complete with Error
	Not Started with Warning
	In Progress with Warning
	Suspended with Warning
	Pending with Warning
	Complete with Warning

3.3.2 Gauges

Note that the *Percent Complete* gauge is always present and reflects the estimated completion status of the project based on the Actual Effort compared to the Estimate at Completion (more details on these statistics are presented in a later section).

There are four gauges spaces reserved above the project table. The gauges supported in the current release include:

- % Complete
- Entity Status
- Summary Effort
- Variance
- Estimate at Completion

3.3.2.1 Percent Complete

Percent Complete is a dial gauge that reflects the same information as the bar graph. Percent Complete is computed as the ratio of the Actual Effort (AE) to the Project Estimate at Completion (EAC).

3.3.2.2 Entity Status

Entity Status is a pie chart that reflects the status of the entities that are either directly linked to the phase under inspection or are aggregated from dependent phases (subphases for groups and all phases for the summary icon).

3.3.2.3 Summary Effort

Summary Effort is a three bar graph where (hovering the mouse over the graph will display the meaning of the bars):

- Red = Budgeted Effort
- Yellow = Actual Effort
- Green = Estimate to Complete

The vertical units are *hours*.

3.3.2.4 Variance

Variance is the Estimate at Completion minus the Budgeted Effort:

$$\text{VAR} = \text{EAC} - \text{BE}$$

3.3.2.5 Estimate at Completion

Estimate at Completion is the Actual Effort plus the Estimate to Complete

$$\text{EAC} = \text{AE} + \text{ETC}$$

3.4 View Role Toolbar

At the top of Project Dashboard is the toolbar (Figure 3-5).



Figure 3-5: Viewer Role Toolbar

These tools, moving from left to right are:

- Logout – Press this tool to log out of your Dashboard session
- Select Projects
- Update all projects (caution – this can take some time if you have several large projects that are out of date)
- The five letter tools (we ran out of time to build icons in this release!) allow you to switch between different project statistics:
 - **S** – Standard mode
 - **V** – Variance mode

- P – Projected Variance mode
- D – Schedule mode
- E – External Financial System comparison mode
- Options – Allows you to set range information for the view modes

3.5 Selecting Projects

Project Dashboard allows you to configure the projects that you would like visible in your instance of Dashboard. You can enable for viewing from a list of projects for which permission for your login has been granted. Pressing the *Select Projects* tool (see previous section) expands the project list to include all projects for which the current login has been granted permission (Figure 3-6).

Select	Project Name	Environment	Template	Summary	P1	P2	P3	P4	P5	P6
<input checked="" type="checkbox"/>	Aalan_4	DMC Processing	DMC PPS							
<input type="checkbox"/>	Aalen	DMC Processing	NONE		N/A	N/A	N/A	N/A	N/A	N/A
<input checked="" type="checkbox"/>	Aalen 3	DMC Processing	DMC PPS							N/A
<input checked="" type="checkbox"/>	Aalen 5	DMC Processing	DMC							
<input type="checkbox"/>	ACA-1	LIDAR Project Setup and F	NONE		N/A	N/A	N/A	N/A	N/A	N/A
<input checked="" type="checkbox"/>	ALLAN_2	DMC Processing	DMC PPS							
<input type="checkbox"/>	Allan_3	DMC Processing	NONE		N/A	N/A	N/A	N/A	N/A	N/A
<input type="checkbox"/>	Ashtabula - Local	LIDAR Project Setup and F	NONE		N/A	N/A	N/A	N/A	N/A	N/A
<input type="checkbox"/>	Ayres - Grant County	LIDAR Project Setup and F	NONE		N/A	N/A	N/A	N/A	N/A	N/A
<input type="checkbox"/>	Baghdad	LIDAR Project Setup and F	NONE		N/A	N/A	N/A	N/A	N/A	N/A
<input type="checkbox"/>	BH - Imagine Change Detection	Imagine Demo	NONE		N/A	N/A	N/A	N/A	N/A	N/A

Figure 3-6: The Project List expanded by the *Select* tool

To add a project to your view list, check the box at the left of the project row. Conversely, you can remove a project from view by deselecting this box. Note that, just as in GeoCue Client, you can sort the project list by pressing the column heading. You can also apply *filters* to the list by pressing the filter icon in the column header.

3.6 Alternate View Modes

The *Standard* view provided in Project Dashboard shows the status of Phases of a project in terms of the progress state and error state. For example, you can see that a particular phase is *in-progress* and has no declared errors or that a state was completed but has a warning condition. Other view modes are provided to allow quick assessment of other aspects of projects.

3.6.1 Variance Mode

Variance mode switches the phase icons to display the variance condition of each phase. We use the standard project management definition of variance:

$$V = EAC - BE$$

where V is variance, EAC is the computed Estimate at Completion and BE is the original Budgeted Effort. Obviously a positive variance means a budget overrun (bad) and a negative variance means a budget under-run (good). Figure 3-7 provides an example view of Variance mode.

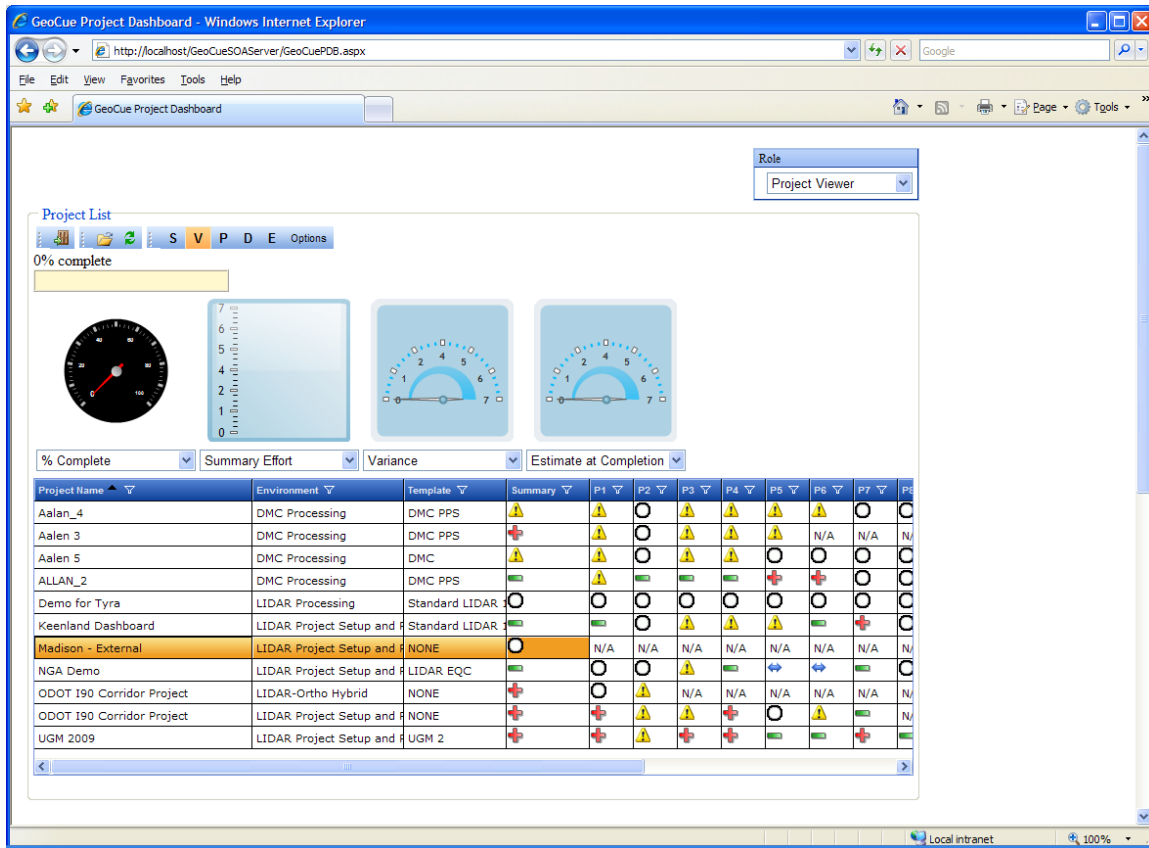




Figure 3-7: Variance mode display

The icons and their meaning in variance mode are listed in Table 3-3.

Table 3-3: Icon descriptions for Variance Mode

Icon	Description
	Out of date
	Invalid
	Variance is in the neutral range

<i>Icon</i>	<i>Description</i>
	Positive variance above the neutral range
	Negative variance below the neutral range

Out of Date - the phase display is not currently synchronized with the Server value for this phase. Press the phase icon to force an update.

Invalid - the phase does not contain all of the data necessary to compute the value. For example, if a budgeted effort was not set for the phase, a variance cannot be computed.

Neutral Range – You may not want to flag variance as either good or bad if it is within a certain percentage of zero. The options tool allows you to set the neutral range threshold.

Positive Variance – the variance is positive and above the upper threshold of the neutral range (meaning that the budget is being overrun on this phase)

Negative Variance – the variance is negative and below the lower threshold of the neutral range (where you want all of your project phases to be!)

3.6.2 Projected Variance Mode

Project Dashboard *Linked* phases generally aggregate many *entities* into a summary status view. For example, a phase called QC might link to the QC step of 2,000 ortho entities in a GeoCue project. Aggregate Variance is computed as simply the sum of the variance of each of the entities. By equation, an entity that has not been started has a variance of zero because its Estimate to Complete will be equal to its Budgeted Effort. Thus if two entities have been completed, each with 1 hour of positive variance, the overall phase variance will be 2 hours. However, if the trend continues, the total variance when the phase is complete will be 2,000 hours. Thus this release of Project Dashboard performs a linear projection on linked phases to predict the end of phase variance.

3.6.3 Schedule Mode

Schedule mode compares the percent complete of the phase (as computed from management statistics) to the planned schedule. The computed percent complete is the ratio of the Actual Effort to the *projected* Estimate at Completion. This computed percent complete is then compared, in a linear algorithm, to where the phase should be in terms of the Planned State and Planned Completion dates.

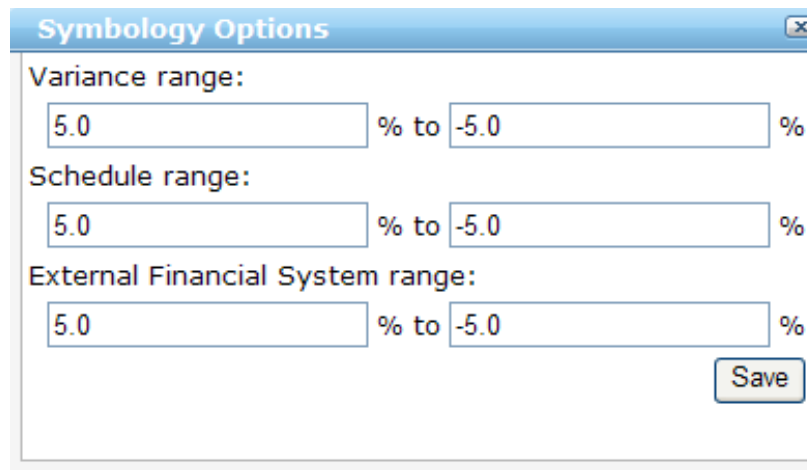
If budget information has not been entered for the phase (e.g. Budgeted Effort) or planned State/End dates have not been entered for the phase, the invalid icon will appear.

3.6.4 External Financial System Mode

The External Financial System (EFS) mode compares the actual project statistics to those input from an EFS. EFS data typically originate from the corporate/agency budget tracking system for the project. For example, when the project was estimated, phases in an EFS (such as Deltek) might have been loaded with the budget hours for the project. However, the Production Manager no doubt has created a different budget based on more intimate knowledge of the project work. This display mode compares EFS Budgeted Effort to Project Dashboard Estimate at Completion for the phase.

3.7 *Setting Ranges for Alternate View Modes*

The ranges for the alternative view modes are set by selecting “Options” from the View Mode toolbar. This displays the range dialog of Figure 3-8.



The image shows a dialog box titled "Symbology Options" with a close button in the top right corner. It contains three sections, each with a label and two input fields separated by "% to %".

- Variance range:** The first input field contains "5.0" and the second contains "-5.0".
- Schedule range:** The first input field contains "5.0" and the second contains "-5.0".
- External Financial System range:** The first input field contains "5.0" and the second contains "-5.0".

A "Save" button is located at the bottom right of the dialog box.

Figure 3-8: Setting alternative view mode ranges

Simply key in the upper and lower range limits (as percentages) in the appropriate section of the dialog. Press *Save* to preserve the values.

3.8 *Tabular Data*

Project Dashboard, in View Role, presents a set of tabbed information at the bottom of the window. The visible tabs depend on the selected phase type.

3.8.1 Project Summary Phase Information

When a project summary phase is selected (by pressing the Summary icon for the desired project), three tabs of information are presented (Figure 3-9). The content is discussed in the following subsections.

Project Summary		Financial Info	Layer Details
Interactive:		System:	
Field ▾	Value ▾	Field ▾	Value ▾
Planned Start Date	1/25/2009	Planned Start Date	NOT SET
Planned Completion Date	4/2/2009	Planned Completion Date	NOT SET
Actual Start Date	1/26/2009	Actual Start Date	1/25/2009
Actual Completion Date	NOT SET	Actual Completion Date	NOT SET
Production Manager	john smith	Production Manager	john smith
Budgeted Effort (BE)	28.35	Budgeted Effort (BE)	0.24
Actual Effort (AE)	11.31	Actual Effort (AE)	0.33
Estimate to Complete (ETC)	13.64	Estimate to Complete (ETC)	0.01
Estimate At Completion (EAC)	24.96	Estimate At Completion (EAC)	0.33
Percent Complete	46.27%	Percent Complete	98.53%
Variance (Var)	-3.392	Variance (Var)	0.091

Figure 3-9: Tabs displayed when Project Summary is depressed

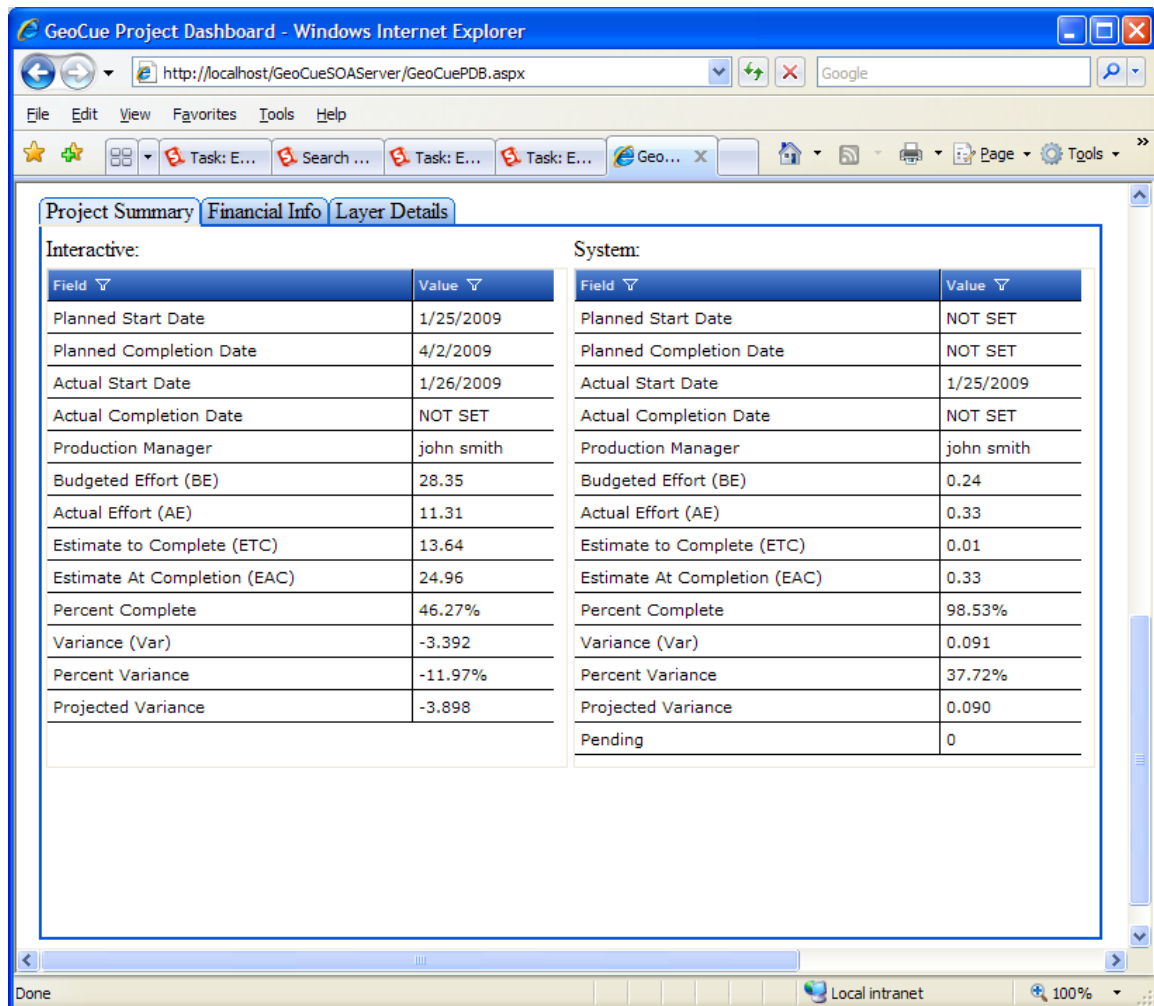
3.8.1.1 Project Summary

The Project Summary tab presents aggregated information regarding the entire Dashboard Project. These data are segregated into two separate columns:

- Interactive – These phases include all External Phases as well as Linked Phases that link to interactive checklist steps in GeoCue. In general, an Interactive phase requires human work.
- System – System data is aggregated from Linked Phases that link to checklist steps in the associated GeoCue project that have been designated as *System*¹. System phases are typically steps that are performed in batch by GeoCue (such as distributed processing tasks).

Some data (such as Production Manager) are manually entered for the Dashboard project whereas the bulk of information is automatically aggregated by Project Dashboard. For example, the project management statistics such as Budgeted Effort, Actual Effort and so forth are the summation of this information across all project phases (again, with Interactive and System separately tracked throughout the system).

¹ Note that this designation is performed in the Checklist modification section of Environment Builder.



3.8.1.2 EFS Summary (Financial Info)

GeoCue Project Dashboard provides the ability to compare actual project statistics to those from an external system. It is our vision that this external data will eventually come from linking Project Dashboard directly into an external financial system such as Deltek. In the current release of GeoCue Project Dashboard, the External Financial System (EFS) is imported into the system from an Excel spreadsheet.

The EFS tab allows you to compare budgeted information from an external source to that being accumulated within Project Dashboard (see Figure 3-10). The data are *always* in hours, not in financial units.

Project Summary Financial Info Layer Details			
Value ▾	Dashboard ▾	Financial ▾	Difference ▾
BE	28.35	0.00	-28.35
AE	11.31	0.00	-11.31
ETC	13.64	NOT SET	N/A
EAC	24.96	0.00	-24.96
Variance	-3.39	0.00	3.39
Planned Start Date	1/25/2009	NOT SET	N/A
Planned Completion Date	4/2/2009	4/2/2009	0.0 hours
Actual Start Date	1/26/2009	NOT SET	N/A
Actual Completion Date	NOT SET	NOT SET	N/A

Figure 3-10: External Financial Information tab

3.8.1.3 Layer Details

The Layer Details tab (Figure 3-11) provides an aggregated summary of all of the layers in associated GeoCue projects that are *linked* into the Project Dashboard project.

Project Summary Financial Info Layer Details						
Layer Name ▾	Step Name ▾	# Entities ▾	# Complete ▾	# Error ▾	# Warning ▾	# In
LIDAR_SOURCE	Import LAS Flight	11	11	0	0	
LAS_WORKING	Populate	0	0	0	0	
QC Tiles	Populate	81	81	0	0	
Edit Calls	Populate	0	0	0	0	
LAS_WORKING	Assign Macro	0	0	0	0	
QC Tiles	Assign Macro	81	12	0	0	
Edit Calls	Assign Macro	0	0	0	0	
LAS_WORKING	Assign Macro	81	68	0	0	

Figure 3-11: Layer Details tab

If the Dashboard project does not include any linked phases, this table will be empty.

3.8.2 Group Phase Information

When a Group phase is selected, the tabs displayed are entitled the same as for the Project Summary Phase. In this case, the information applies to the summary of the phases that are collected into the group.

3.8.3 External Phase Information

When an External phase is selected, the tabs displayed are as described in the following subsections.

3.8.3.1 Phase Summary

The Phase Summary tab contains summary phase data about the selected phase. Note that External Phases are always considered *Interactive* and thus the System column will not appear on this tab.

3.8.3.2 Status

Data for External Phases are manually entered using tools under the Worker Role of Project Dashboard. For example, if an External Phase called *Survey* were established for a project, users (via a Worker Role tool) would enter data for the phase as work were performed (status, amount of time spent on the work, estimate to complete). These entries are stored in the Project Dashboard database and can be viewed on the Status tab of the External phases (see Figure 3-12).

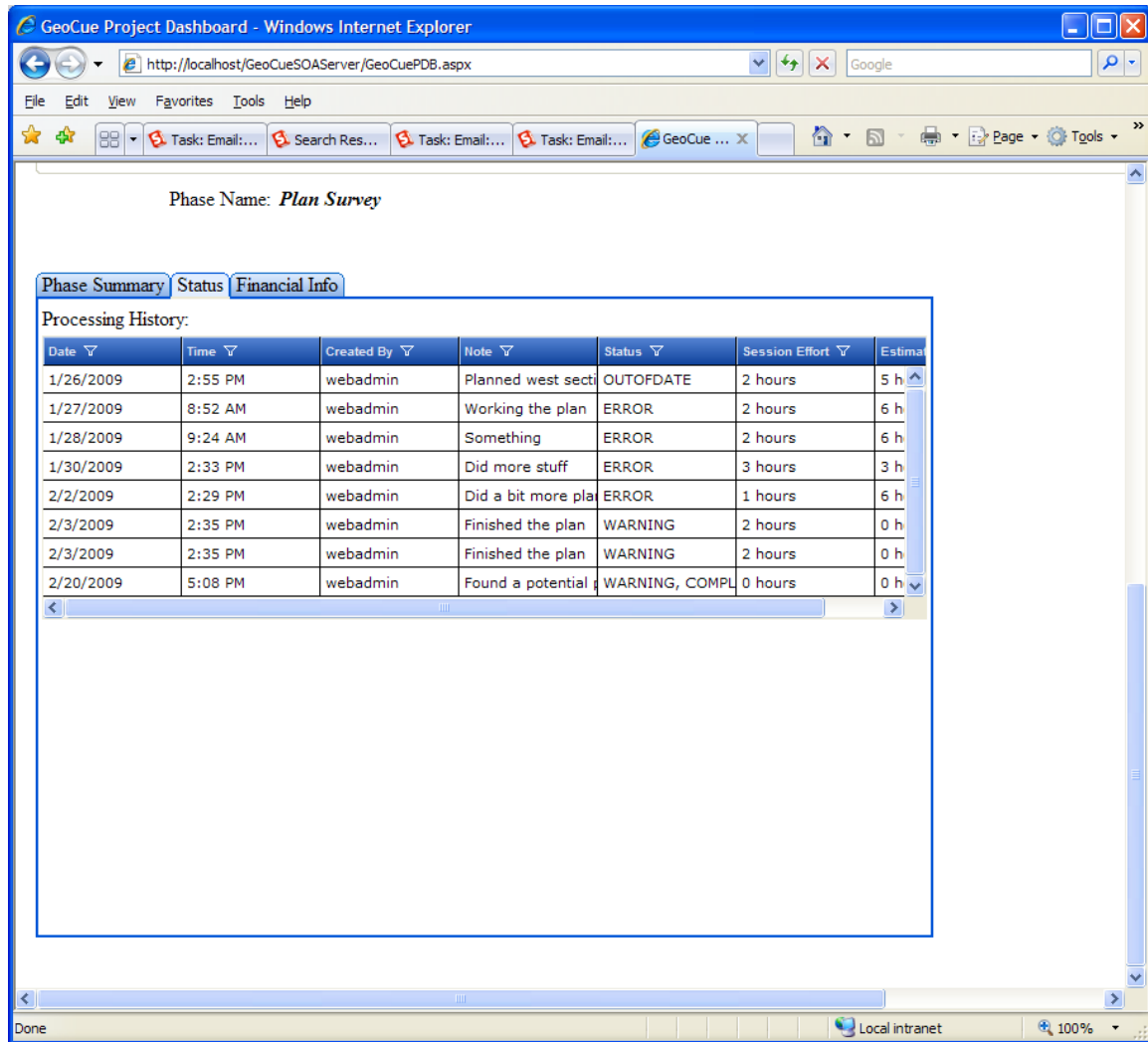


Figure 3-12: Status tab for External Phases

3.8.3.3 EFS

The External Financial System data for External Phases is presented in the same manner as for a summary phase.

3.8.4 Linked Phase Information

When a Linked phase is selected, the tabs displayed are as described in the following subsections (there are four tabs for linked phases)

3.8.4.1 Phase Summary

The Phase Summary tab contains summary phase data about the selected phase. Note that Linked Phases are always considered entirely *Interactive* or entirely *System* and thus only one column will appear on this tab (Interactive or System depending upon the phase labor type).

3.8.4.2 EFS

The External Financial System data for External Phases is presented in the same manner as for a summary phase.

3.8.4.3 Linked Info

A linked phase links to a checklist step on GeoCue *entities*. The Linked Info tab allows you to see the defined linkage for the phase (Figure 3-13).

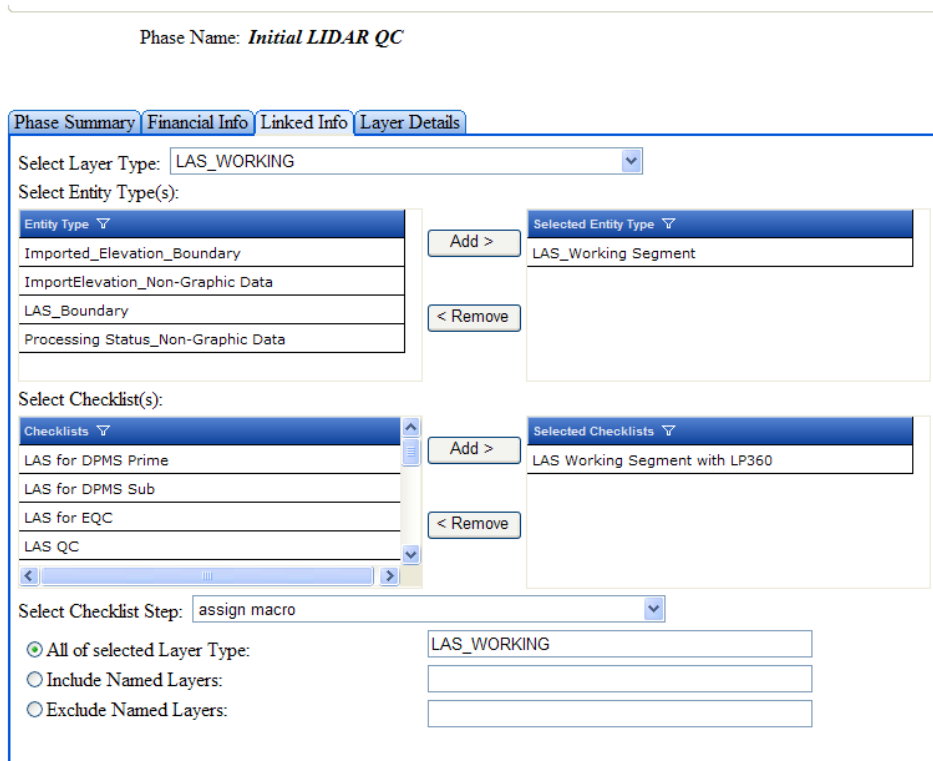


Figure 3-13: The Linked Info tab

Ultimately, the linked phase will link into a homogeneous checklist step on *entities* located on the selected layer type. Usually this will be a checklist step on entities all of the same type such as LAS Entities, checklist step Initial Quality Control. However, if different entities are using different checklist steps but share a common step, this can be linked into a single phase. The linkage path is traced via the Linked Info tab.

A linked phase can link in to only one layer *Type*. The type is displayed at the top section of the tab.

The Checklist Step entry shows the ultimate checklist step to which this Project Dashboard phase is linked.

Project Dashboard allows the Project Manager to exclude selected layers by name or included only selected layers by name in the phase aggregation. These inclusions/exclusions (if any) are indicated at the bottom of the tab.

3.8.4.4 Layer Details

The Layer Details tab provides an aggregated summary of all of the layers that are linked to this phase. All of the layers will be of the same Layer Type. Note that this information is relayed in pie chart form if Layer Details is one of the selected graph types.

4 Worker Role

Worker Role is designed to allow non-GeoCue workers the ability to update data to non-linked phases (i.e. Linked Phases).

Worker Role is selected from the Role selector drop-down menu. The logged-in user must have at least Worker permission to access at this level.

4.1 Adding External Phase Information

When a External Phase is selected while in Worker Role, the middle tab (of the tabbed section of the interface) is labeled *Update Status*. This tab is selected to add a work increment (Figure 4-1).

Date	Time	Created By	Note	Status	Session Effort	Estima
1/26/2009	2:55 PM	webadmin	Planned west secti	OUTFODATE	2 hours	5 h
1/27/2009	8:52 AM	webadmin	Working the plan	ERROR	2 hours	6 h
1/28/2009	9:24 AM	webadmin	Something	ERROR	2 hours	6 h
1/30/2009	2:33 PM	webadmin	Did more stuff	ERROR	3 hours	3 h
2/2/2009	2:29 PM	webadmin	Did a bit more pla	ERROR	1 hours	6 h
2/3/2009	2:35 PM	webadmin	Finished the plan	WARNING	2 hours	0 h
2/3/2009	2:35 PM	webadmin	Finished the plan	WARNING	2 hours	0 h
2/20/2009	5:08 PM	webadmin	Found a potential	WARNING, COMPL	0 hours	0 h

Figure 4-1: The Update Status tab

When a user has done an increment of work associated with an external phase, these data are recorded by selecting the *Update Status* tab and then pressing the *Add Record...* button. This will display the dialog of Figure 4-2.

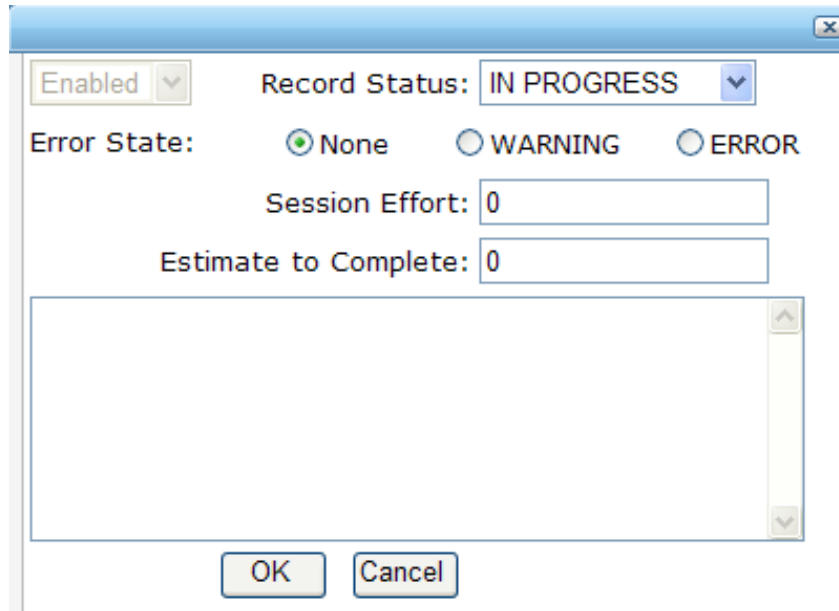


Figure 4-2: Adding a Work Increment

4.1.1 Progress State

The first action is to set the current *Progress* status of the task. This is one of:

- Not Started
- In Progress
- Suspended
- Complete

Not Started is the initial condition of a task. A user can reset a task to Not Started if all work to date has been ineffective and the task simply needs to be reset. Note that the history of work that has been performed to date on the task is not lost.

In Progress means that an increment of work has been performed but the phase has not been completed..

Suspended indicates that the work on the phase is being held up, typically by some other dependency.

Completed indicates that all work for the phase is now complete. No other data entries should be made subsequent to indicating a phase is complete.

4.1.2 Error Status

The user can set an error state for the phase. This state defaults to no error. A status of Warning usually indicates a status that needs to be noted but does not halt the phase. A status of Error typically indicates a condition that requires external attention before the phase can continue.

Note that the setting of error status is entirely up to the user with no enforcement by Project Dashboard. For example, a Worker could declare an Error but still continue to add progress notes.

4.1.3 Effort Entry

The next section of the dialog allows the Worker to enter the amount of effort expended during this session. The first entry is the Session Effort. This is the amount of time, in hours, that was devoted to this phase during this session. The second is the Estimate to Complete. This is the estimate, in hours, of the amount of effort remaining to complete this Phase. Note that entering ETC is critical to projecting an accurate status of projects. Thus project technicians should be encouraged to consistently provide accurate estimates to complete when they update status.

4.1.4 Session Note

The final section of the dialog allows the Worker to enter a session note. This should generally indicate what has been accomplished during the session.

An example entry for a Survey Phase is shown in Figure 4-3. Note that the worker has indicated that the Phase is not complete (by virtue of the status being set to In-Progress) but a warning has been declared (we assume due to the Total Station requiring calibration).

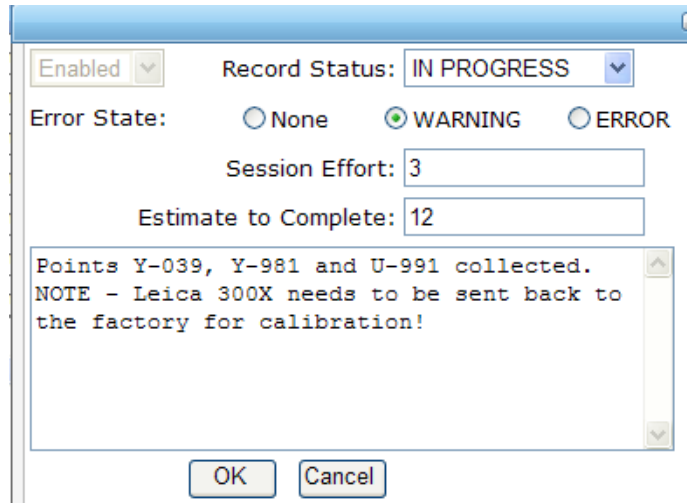


Figure 4-3: An example Session

5 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. In addition, it provides new enhancement to the Command Dispatch System (GeoCue Departmental Server only) that clearly places GeoCue as best in class for distributed processing in geospatial applications.

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.

6 Acronyms

AE	Actual Effort
ASP	Active Server Page
BE	Budgeted Effort
EAC	Estimate At Completion
EFS	External Financial System
ETC	Estimate To Complete
GUI	Graphical User Interface
Dashboard	GeoCue Project Dashboard
PA	Project Administrator
PM	Project Manager
SE	Session Effort
SOA	Service Oriented Architecture
TBD	To Be Determined
V	Variance
%V	Percent Variance
WSDL	Web Services Description Language

