



AVEVA ReviewShare 1.4
User Guide

AVEVA Solutions Limited

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ReviewShare User Guide

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1 Introduction to AVEVA ReviewShare

AVEVA ReviewShare allows design teams to collaborate closely on the design of a project, in order to share knowledge and maximise design integrity.

Design documents can be sent out by e-mail, to multiple reviewers if necessary. Each recipient opens their ReviewShare document which is attached to the e-mail which in turn launches ReviewShare into a full 3D viewer. Users can then mark-up the 3D model and then send back comments to the originator, or forward to other reviewers.

Essentially ReviewShare is a model viewer with the ability to record and distribute comments in a compact XML file format.

The link between the 3D model and ReviewShare is via an AVEVA ReviewShare Server, which is supplied as part of AVEVA Review.

Anyone using ReviewShare without a connection to a ReviewShare Server cannot access a 3D model, however in this case a 2D snapshot is available to mark-up and annotate which can then be distributed via e-mail.

This User Guide describes how to use ReviewShare to view and comment on existing model data which has been distributed using Review.

1.1 Who Should Read This Manual

Prior knowledge of design software is not a requirement, however a familiarity with other AVEVA products will help maximise the use of this application.

1.2 How to Use This Manual

The User Guide is not a tutorial, but examples are made throughout to illustrate aspects of the user interface.

1.3 Other Documentation

The following documents may be useful when reading this guide:

AVEVA Review User Guide

AVEVA Review Installation Guide

AVEVA ReviewShare Installation Guide

AVEVA ReviewShare Server Installation Guide

1.4 System Requirements

The following table lists the supported operating systems, as well as e-mail clients supported by ReviewShare:

OS	Windows Server 2003 Service Pack 1 Windows Vista Windows XP Service Pack 2
Required	DirectX Version 9c, .Net Framework 3.0 (available from Microsoft web site)
Mail Client	Office 2003 Office 2007 Outlook Express

The following table lists the minimum hardware specification to successfully run ReviewShare:

CPU	1 GHz 32-bit (x86)
RAM	1 GB of system memory
HDD	40 GB hard drive with at least 15 GB of available space
Graphics Card	Support for DirectX 9c graphics with: WDDM Driver 128 MB of graphics memory (minimum) Pixel Shader 2.0 in hardware 32 bits per pixel

The following table lists the recommended hardware specification for optimum performance of ReviewShare:

CPU	2 GHz 32-bit (x86)
RAM	2 GB of system memory
HDD	40 GB hard drive with at least 15 GB of available space
Graphics Card	Support for DirectX 9c graphics with: WDDM Driver 128 MB of graphics memory (minimum) Pixel Shader 2.0 in hardware 32 bits per pixel
Input device	SpaceNavigator

2 ReviewShare Document Format

A ReviewShare Document is an XML-based, threaded collaboration file (filename.rvf) containing the following component parts:

- A *Discussion Header* details information about the originating author such as discussion title, purpose, date and time etc.
- A *Comment Header* records a comments author and the date and time the comment is created.
- A *Comment Body* contains the actual comment text and content references as detailed below.

Content references are references to 3D models held on a central ReviewShare Server. They contain:

- Details of specific view states.
- References to identified AVEVA objects.
- Embedded 2D images of the view-states (for use in thumbnail view and when in off-line mode).
- Embedded 2D screen captured images (to support 2D collaboration of any captured data).
- Hyperlinks to external Web Pages.
- Metadata describing the identity and status of this content.
- Mark-up and annotation overlays.

Content references are primarily used to populate the *View Pane*.

3 ReviewShare User Interface

AVEVA ReviewShare is designed to have a flexible, easy to use user interface. There are two main components:

- The *Comment Pane* (the default view) displays the comment thread, complete with metadata, comment text and thumbnail views.
- The *View Pane* displays the 2D and streamed 3D content referenced from the discussion created in the Comment Pane.

3.1 ReviewShare Toolbar

When running ReviewShare, a toolbar is always visible in the upper portion of the window containing the following tools.



Create new ReviewShare document.



Create new comment in the currently open document.



Load ReviewShare (.rvf) document from file.



Note: Saves the current ReviewShare document as an .rvf file.



Saves the current ReviewShare document to file. When saving it is possible to select the following file types:

- Native ReviewShare (.rvf) document
- XML Paper Specification (.xps) document which can be used in Microsoft Office applications



Provides a formatted print out of the entire discussion, including the discussion header, the posted comments and their associated thumbnail views.



Email the ReviewShare document.

The following actions will take place when this button is clicked:

- Launch the default e-mail application (e.g. Microsoft Outlook) with a new message.
- The Subject line is set to the discussion title.
- An rvf document is automatically attached to the e-mail.
- The e-mail body will contain a 2D image of the current ReviewShare 3D view and a link to the AVEVA ReviewShare download site.



Arrange comments as a multilevel list i.e. subsequent comments are indented.

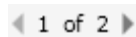
3.1.1 Comment Pane

The Comment Pane contains the actual discussion document, including header and comment posts.

A set of buttons which change the appearance of a discussion document are visible at all times, these are located at the bottom right of the AVEVA ReviewShare window.



Display the document thread one page at a time (as it would display when sent to a printer). When in this mode, navigation buttons will display at the base of the page indicating what page the user is viewing along with next and previous buttons.



Display the document thread two pages at a time side by side. As with the one page mode, page navigation will appear where appropriate.



Display the document thread in a continuous scrolling page. In this mode there is no requirement for page navigation.

It is also possible to magnify the display area using a scroll bar and plus minus buttons situated to the right of the above group.



Further tools are available when editing a discussion document; these are detailed in later sections.

3.1.2 Find Text within a Document

ReviewShare has a search feature which allows the user to find text, or phrases within a discussion.

The Find tool is activated by clicking the Find button located at the bottom left of the ReviewShare window:



This will expand an input field to the right of the Find button. The user can enter a word or phrase it wants to search for.



To the right of the input field a set of buttons are also displayed:



Clicking the down arrow will expand a list of match criteria.



The following table details the function of each match criteria.

Match whole word only	Search for the exact text the user enters in the input field as a complete word (The default search is to find text within a word).
Match case	Make the search case sensitive matching upper and lower case characters where input.
Match diacritic	Match diacritical marks when searching for text of Middle Eastern languages.
Match kashida	Match kashida (tatweel) characters when searching for text of Middle Eastern languages
Match alef hamza	Match alef characters with hamza or madda when searching for text of Middle Eastern languages.

It is possible to search for multiple occurrences of input criteria using the following navigation buttons:

-  Navigate to the previous occurrence of the input criteria within the discussion
-  Navigate to the next occurrence of the input criteria within the discussion

3.1.3 Information Frame

The ReviewShare User Interface has reserved space for an "information frame", linked to the AVEVA web server. This displays useful information about AVEVA products, services and events. It is located below the comment pane.

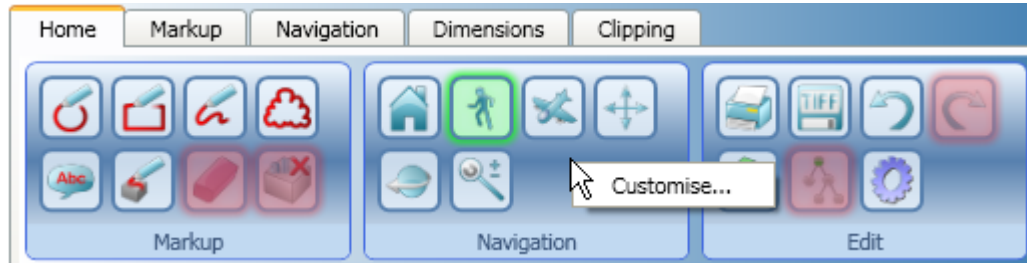
3.2 Customising the Toolbar

Within ReviewShare it is possible to customise the toolbars. The user can add new command buttons, remove command buttons or reset the toolbar to the original default settings. It is also possible to specify which command buttons will be available on the **Favourites** toolbar.

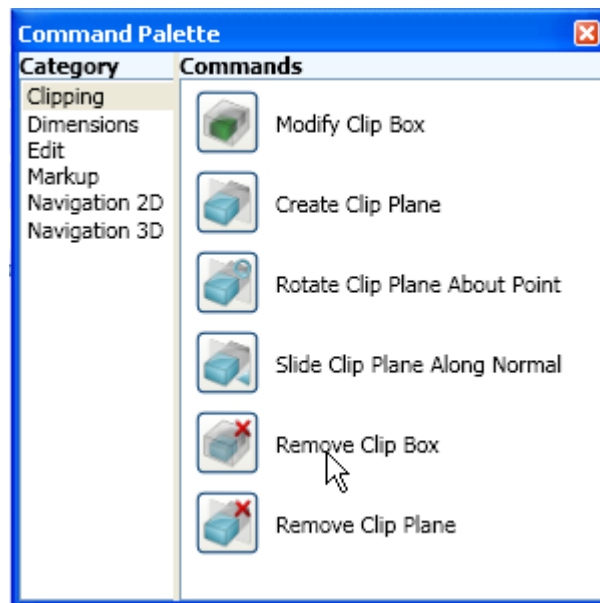
3.2.1 Adding a Command Button to the Toolbar

The user can add command buttons to any toolbar within the Viewer.

1. Within the **Viewer**, select the toolbar that the user wants to add a new command button.
2. To see the Command shortcut menu, right-click anywhere in the current toolbar area.



3. From the shortcut menu, select **Customise**. The **Command Palette** will appear. This contains the command buttons for each toolbar category.



4. Select the toolbar **Category** that contains the command button the user wants to add to the current toolbar.
5. Drag the command button from the **Command Palette** to the current toolbar.

Note: The user can repeat steps 4 and 5 to add more command buttons to the toolbar.

6. When the user has finished adding command buttons, right-click anywhere on the toolbar. From the shortcut menu, select **End customisation**. This will save the changes and return the user to the Viewer.

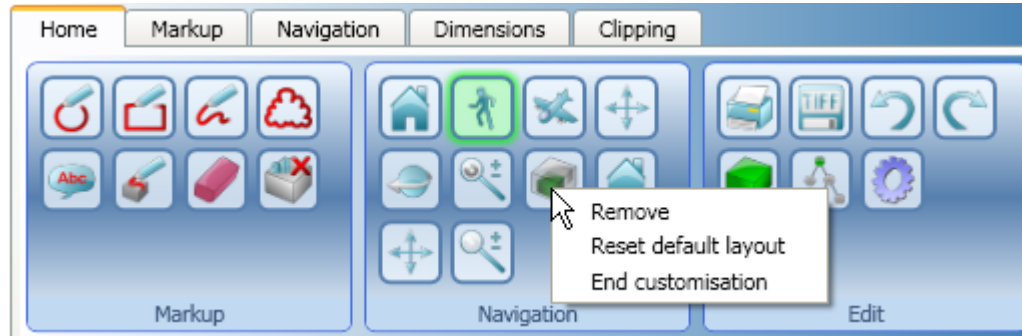
Note: The user can select command buttons from different toolbar categories onto the current toolbar.

3.2.2 Removing a Command Button from the Toolbar

Within the ReviewShare Viewer, the user can remove a command button from the toolbar.

1. Within the ReviewShare **Viewer**, select the toolbar that the user wants to change.
2. To see the Command shortcut menu, right-click anywhere in the current toolbar area.

3. From the shortcut menu, select **Customise**. The **Command Palette** will appear.
4. On the current toolbar, hover the pointer over the command button that the user wants to remove.



5. Right-click the highlighted command button to see the shortcut menu. From the shortcut menu, select **Remove**. The command button is removed from the current toolbar.

Note: The user can repeat steps 4 and 5 to remove more command buttons from the toolbar.

6. When the user has finished removing command buttons, right-click anywhere on the current toolbar. From the shortcut menu, select **End customisation**. This will save the changes and return the user to the Viewer.

3.2.3 Reset the Toolbar Default Layout

Within the ReviewShare **Viewer**, the user can reset the layout of a toolbar to its default settings.

1. Within the ReviewShare **Viewer**, select the toolbar that the user wants to change.
2. To see the Command shortcut menu, right-click anywhere in the current toolbar.
3. From the shortcut menu, select **Customise**. The **Command Palette** will appear.
4. Right-click on the current toolbar to see the shortcut menu. From the shortcut menu, select **Reset default layout**. The current toolbar will be reset to the default command buttons that appear on the **Command Palette** for that toolbar category.

4 Creating a ReviewShare Document

When creating a ReviewShare document the display will default to the Comment Pane.

The Comment Pane is used to display the complete comment thread, along with discussion header information, all posted comments and associated views.

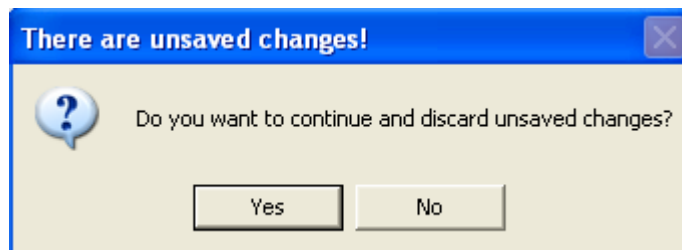
Upon starting ReviewShare a new document will be automatically created for the user so they can immediately begin work.

In addition, creating a new document will also do the following;

- Provide a cleared Discussion Header Section ready to receive new input.
- Automatically create a new Comment ready for the user to begin input.

At any time, during editing or review of the current document, the user can create a new document and abandon the current one. The user should of course save any changes to the existing document - if they wish to keep those changes - before creating a new one.

Note: Before abandoning a document the user will be prompted to save any changes before continuing.



The following section contains an example of creating a ReviewShare document.

4.1 Discussion Header

A set of fields are used to record information about the subject and the author of the discussion.

The following table lists the fields and how they should be populated:

Note: The fields in the Discussion Header can be changed to meet any specific business requirement by a system administrator. This is described in detail in [Customising the ReviewShare Header](#).

Title	Enter a discussion title.
Security	Will display the current document protection status. By default security is not applied to a document. Clicking the padlock button to top right of the comment pane will enable security (See ReviewShare Document Security).
Description	Description of the discussion.
Originator	Automatically populated with the currently logged in Windows user ID and e-mail address. It is not possible to edit the ID but the e-mail address can be amended. Any changes made to the e-mail address will automatically replicate through all of the Comment Headers which have been authored by the same user.
Created	Automatically set to the time and date of when the document was created.
Modified	The date and time the document was last edited.
Area	Represents the physical location within the Plant or Ship design that the user is commenting on. For example a UNIT within a process plant, or a block in a ship.
Discipline	Enter descriptive detail about the discipline for example P&ID.
Reference	List here any specific ID's of items that are under review.
Status	Enter descriptive text about the status of the discussion.

Information contained in the Discussion Header is also referred to as Document Metadata.

1. Fill in the document header as summarised in the above table.

4.1.1 Editing Header Information

Once a document has been saved, the fields for the Discussion Header are set to a read-only state.

Similarly, loading an existing document will ensure the Discussion Header starts off in the read-only state.

ReviewShare permits only the originator (or author) of the document the facility to edit existing fields in the Discussion Header. To place the Discussion Header back into a read-write state the author/originator may move the mouse cursor over the Discussion Header and then click the **Edit All** button that appears at the bottom right of the area.



This button will not appear for users not logged in under the user name shown in the Originator field as defined in the Discussion Header.

When the author/originator has finished editing the Discussion Header, they can place those fields back into the read-only state simply by re-saving the current document.

4.2 Creating a New Comment

There are three standard scenarios for when to create a new Comment;

- The author/originator wishes to create the first Comment in the document to begin the discussion.
- People who are sent the document and read the author/originators initial Comment wish to reply directly to that comment or another existing comment to continue that particular discussion.
- Either the author/originator or receiver of the document wish to start a new discussion within the document.

4.2.1 Creating a New Root Comment

The ReviewShare command bar contains the **Create New Comment** button:



When clicked a new Comment will be added to the end of the current document as a root Comment. The new Comment is placed in an edit-mode to enable the current user to create and edit the content.

4.2.2 Comment Header

The comment header will be automatically populated with the following information.

- The current poster's Windows user ID and e-mail address.
- The date and time the post is created (this can not be edited).

Although the e-mail address is automatically populated this can be edited. Any changes made to the email address will automatically replicate through the entire discussion thread (including the Discussion Header if the comment author is the same as the discussion originator).

4.2.3 Comment Body

The comment body contains an area allowing the input of text and references to 2D and 3D model data.

Note: It is only possible to insert 3D model data when a discussion (.rvf file) has been created or edited in Review, once inserted the 3D model data can be commented on in ReviewShare. A suitable ReviewShare Server must be running to be able to interact with 3D model data in ReviewShare.















Above the comment header there is a pulldown which can be expanded containing a set of authoring tools which allow for rich text mark-up.

1. Select the Document Tools pulldown to display comment authoring tools.



4.3 Authoring Tools

The following tools are available when authoring a comment. Clicking a button will toggle the text input format, clicking again will toggle back to the original formatting. Some tools have keyboard short cuts which are also listed below:

-  Apply bullet points to text (CTRL+SHIFT+L)
-  Numbering - Use to create a numbered list
-  Align text left (CTRL+L)
-  Centre align text (CTRL+E)
-  Align text right (CTRL+R)
-  Justified text (CTRL+J)
-  Increase text indent
-  Decrease text indent
-  Cut selected text to clipboard (Note this tool will be ghosted until a region of text has been selected) (CTRL+X)
-  Copy selected text to clipboard (Note this tool will be ghosted until a region of text has been selected) (SHIFT+F2)
-  Paste text from clipboard (CTRL+V)
-  Undo previous text change (CTRL+Z)
-  Redo previous undo event (CTRL+Y)
-  Make text bold (CTRL+B)



Make text italic (CTRL+I)



Underline text (CTRL+U)



The Grow tool will increase the size of the text



The Shrink tool will decrease the size of the text.

It is possible to include hyperlinks in the comment text by typing in a link exactly as the user would in a web browser (for example <http://www.aveva.com>), the text will automatically convert to an appropriate link which will in turn launch the relevant application when clicked.

RTF content can also be pasted directly into the comment from applications such as Microsoft Word, the original text formatting and colour will be retained. However images can not be directly pasted, they must be attached using the following methods.

4.4 Attaching Images and Views

Images and 3D views can be attached to the comment, these display as thumbnails below the comment text. The thumbnail image will indicate if the content is a 2D image or a 3D view of the model.

Clicking the thumbnail will open the [2D Viewer](#) or the [3D Model Viewer](#) depending on the content.

Web page captured images will open the system default Internet Browser if a valid URL was written in the thumbnail caption field.

Adding an image or view to the comment is achieved by clicking the left mouse button on the following icon which is always visible when editing the body of a comment.



Note: Each time the user captures an image, the Figure number in the annotation is incremented.

Note: The user can capture the same image within the comment and mark it up differently.

When clicked upon, a selection of options will become visible depending on the type of data which is being reviewed. The following options are possible:

4.4.1 Model View Capture

Allows the current [3D Model Viewer](#) camera to be captured. If viewed while not connected to a ReviewShare Server, the thumbnail will open a 2D capture of the current 3D camera view in the [2D Viewer](#). If viewed while connected to a ReviewShare Server the [3D Model Viewer](#) will open and position the camera to the co-ordinates where the capture was made.

Note: This option will not be visible if the user has not already opened and have visible the Viewer window within ReviewShare. To make sure the Viewer is open the user can

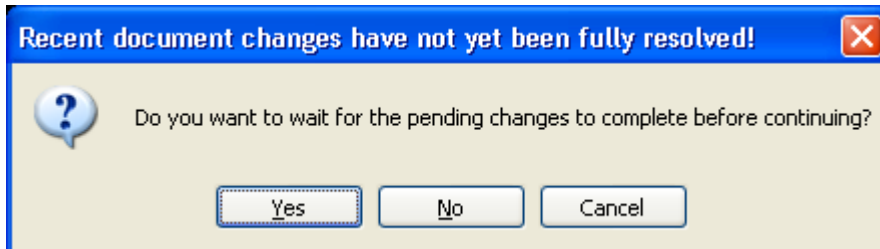
move the mouse cursor over an image thumbnail in a Comment (which is currently in read-only mode) and then left click. This will activate the thumbnail image in the Viewer and also make sure the Viewer stays visible.

If *On Demand Publishing* is in use then a red glow effect will be visible around the capture thumbnail while ReviewShare waits for the model data to be copied to and recognized by the ReviewShare Server .



While ReviewShare is waiting for the ReviewShare Server to publish the captured model data the **OK** button will be greyed out. The user can however cancel changes and continue to work.

If the user tries to Save, Email or Print the document while ReviewShare is waiting for an on demand published file then the user will be prompted as follows:



Click **Yes** to cancel the Save, Email or Print request and continue to wait for the ReviewShare Server.

Click **No** to stop waiting for the ReviewShare Server. This resultant capture will be a 2D image (as would be the case if On Demand Publishing was not used).

Click **Cancel** to cancel the Save, Email or Print request and continue to wait for the ReviewShare Server.

4.4.2 Screen Capture

This will allow the user to take a screen shot of any running application or portion of the desktop. When selected a red highlight tool will become visible, moving the pointer around the screen will highlight an on screen element such as a window which will be captured once the left mouse button is clicked.

Once the image is captured a thumbnail is added to the comment and the user is prompted for a caption for the thumbnail.

Capture a Region of the Screen

An alternative screen capture mode allows the user to capture a specific region of the screen rather than a specific Window or Control. Immediately after selecting the **Screen Capture** from the list click and hold the **C** key on the keyboard and do the following:

1. As the user moves the mouse a blue box will be drawn on the screen starting from the position the mouse cursor was at when **C** key was first depressed.
2. Drag the mouse down and right across the screen from the start point and then release the **C** key when the user has finished defining the capture region.
3. Move the mouse cursor back over an edge of the capture region border and its colour will change to red to indicate the user has a valid region.
4. Left-click on the capture region border whilst it is red to complete the capture.

At any point during this process click the **Escape** keyboard key to abandon the capture.

4.4.3 Web Page Capture

This option is similar to the Screen Capture tool with the only difference being the caption; this is in the format of the URL which points to the Web Page the capture was taken. The user should either type or paste the URL here after capturing the image.

4.4.4 Deleting an Image

Once a Comment area is placed into edit-mode, any existing captured images will now have a delete button positioned at the top right of the thumbnail (a red X).



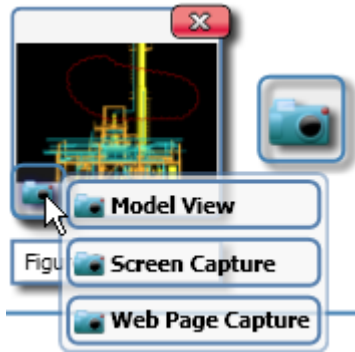
Click the delete button to remove unwanted captured images from the thumbnail list.

4.4.5 Marking up an Image or View

Once an image or view has been captured, the user can mark it up using the [Mark-up and Annotation Tools](#) within the ReviewShare Viewer.

ReviewShare allows the user to mark-up and save changes in the Viewer when the user is creating a comment.

To save mark-up changes that have been drawn, click the **Small Camera Icon** in the bottom left of the Thumbnail. The user can then select Model View to recapture the marked up view.



The feature is only available in edit-mode.

4.5 Committing and Editing Comments

4.5.1 Click Cancel to Abandon Changes

Clicking the Cancel button has two possible outcomes;

1. If the user chooses to create a new Comment (either a root or reply Comment) then clicking **Cancel** will also remove the Comment object from the document. The document will thus be restored to its state as of before the user clicked the **Create New Comment** command bar button or the **Reply** button on an existing Comment.
2. If the user chooses to edit an existing Comment then clicking the **Cancel** button will abandon any changes the user has made to the text and also any changes the user has made to the image capture list. The document will thus be restored to its state as of before the user clicked the **Edit** button on the existing Comment.

Note: The user may paste text into the Comment whilst it is in edit-mode. It is also currently possible to paste images and other similar non-text information into the box. However ReviewShare does not currently support retaining in-text images hence the alternative set of controls below the text area which allow the user to capture image and/or model data from a chosen source.



4.5.2 Click OK to Accept Changes

Clicking the **OK** button has two possible outcomes;

1. If the user chooses to create a new Comment (either a root or reply Comment) then clicking **OK** will write the Comment to the document at the current location and set it to read-only.
2. If the user chooses to edit an existing Comment then clicking **OK** button will replace the content of the Comment with the current changes, set it to read-only and leave its position in the document as it was before the user started editing.



In the above two cases, the Discussion Header will also automatically update the **Modified** field to show the user has made the alteration at the current time and date.

4.5.3 Deleting an Existing Comment

It is possible to delete an existing comment. However, the delete button will only appear for the author of the comment (i.e. the person who wrote it originally).



4.5.4 Editing an Existing Comment

When the user first creates a new Comment, the user interface for the control is placed into an edit-mode. Whilst in edit-mode the user can type into a Comment, delete existing text or capture new images to the pre-defined list within the Comment control.

Once the user has finished editing the content of a Comment they can accept changes by clicking the **OK** button.



This will exit the edit-mode of the Comment and set it to read-only.

If the user has already entered a Comment but wish to change it at a later date, the user can do so by moving the mouse into the Comment area and the click the **Edit** button which appears at the bottom right of the control.



The **Edit** button will only appear for the author of the comment (who ever wrote it originally) who can be identified by the user in the Comment Header.

4.5.5 Reply to an Existing Comment

To reply to a specific existing Comment, the user should move the mouse cursor over that Comment and wait for the **Reply** button to appear at the bottom right of the Comment area.

Click the **Reply** button to insert a new Comment directly below the existing Comment.



Reply Comments are always inserted directly below the Comment replied-to, a discussion thread is actually displayed in reverse order such that the more recent comments are closer to the original comment.

Note: The user can reply either to a root Comment (a non indented Comment) or to a Reply Comment (and indented Comment). As such when the user clicks the **Reply** button on a Comment that already replies to another the user is replying directly to that Comment and not necessarily to the originally root Comment.

5 View Pane

The ReviewShare view pane is used to display both 2D images and 3D streamed model data.

The view pane has different states, automatically switching to display the appropriate 2D or 3D viewer depending on what thumbnail is being activated in the comment pane.

The view pane has the following active states:

- When the mouse pointer is moved over a thumbnail the view pane will automatically open to display a preview of the 2D image or 3D view.
- Moving the pointer away from the thumbnail will automatically close the view pane.
- To keep the view pane permanently open (active) click once on a thumbnail image, this will also memorise the camera position in a 3D view.

When the view pane has been made active, previewing behaviour is slightly different.

- When the mouse pointer is moved over a thumbnail the view pane will automatically transition to display a preview of the 2D image or 3D view.
- Moving the pointer away from the thumbnail will restore the original position in the 3D model or 2D image that was set when making the view pane active.

5.1 2D Viewer

2D content is displayed when the user opens a 2D screen capture thumbnail from the comment pane, or when opening a 3D model view when not connected to the server.

The 2D view supports the following capabilities:

- Zoom in/out
- Pan
- 2D Mark-up tools

For further information refer to [View Pane Tools](#).

5.2 3D Model Viewer

Used for viewing streamed 3D model data from a ReviewShare Server. The 3D model view is opened from a thumbnail located in the thread of a comment.

This view allows for mark-up to be applied directly to the 3D model to help illustrate any comments created in a discussion.

Note: Interactive 3D views must first be published to the ReviewShare Server using Review and then they can be modified and annotated using the ReviewShare 3D Model Viewer.

5.3 View Pane Tools

The view pane contains a tabbed set of tools designed to facilitate navigation and mark-up. Certain tools may be ghosted depending on what the view pane is currently displaying.

A Home Tab contains a pre-selected set of commonly used tools from the following sections. Most tool sets are placed within their own tab, the exception being the Editing Tools which are located under the Home Tab.

Most tools have alternate behaviour when the mouse scroll wheel is used or if the user clicks the right hand mouse button. The behaviour of the mouse can be customised and is described in detail in [Viewer Options](#). The default mode of operation is described in the following sections.

5.3.1 Editing Tools

The following commonly used editing tools are available. This set of tools do not have an individual tab, they are accessible through the Home Tab.



Print the current 3D camera view.



Save as TIFF a current 3D camera view as a TIFF file.



Undo any changes (such as mark-up) made in the 3D view.



Redo changes made in the 3D view.



Select an element within the 3D view.



Select Parent the parent element of the currently selected element in the 3D view.



Options opens the [Viewer Options](#) window allowing the user to customise how the 3D Model Viewer draws models to screen.

5.3.2 Standard Navigation

The following standard navigation tools are available in the view pane and are located in a Navigation Tab.



Home zooms out the 3D view to display the full model.



Walk slowly moves the 3D view in a set plane. Hold down the left mouse button while dragging the pointer upward or downward to move forward or backward, dragging left or right will rotate the view. In this mode the mouse scroll wheel performs a pan up/down and the right mouse button is in **Look** mode, allowing the user to look around without changing the view position.



Fly moves the 3D view in all 3D axes. Hold down the left mouse button while dragging the pointer to adjust the path of the camera. In this mode the mouse scroll wheel performs a pan up/down and the right mouse button is in **Look** mode, allowing the user to look around without changing the view position.



Pan the clicked object horizontally or vertically in the 3D view. Hold down the left mouse button and drag the pointer left to right, up or down. In this mode the mouse scroll wheel performs a **Walk** forwards/backwards action and the right mouse button is in **Orbit Point** mode.



Orbit Point rotates the 3D model around its current axis. In this mode the mouse scroll wheel performs a zoom in and out function and the right mouse button is in **Look** mode, allowing the user to look around without changing the view position.



Zoom To Object Region holding the left mouse button, draw a region around a designated area. The 3D view will zoom to this region. In this mode the mouse scroll wheel performs a **Walk** forwards/backwards action and the right mouse button is in **Look** mode, allowing the user to look around without changing the view position.



Zoom To Point click and hold the left mouse button and drag forwards and backwards to zoom in towards the cursor or away from the cursor respectively. In this mode the mouse scroll wheel performs a zoom in and out function and the right mouse button is in **Look** mode, allowing the user to look around without changing the view position.



Zoom To Selection will zoom the camera to focus on the currently selected element.



Look mode will rotate the 3D view camera about its axis. In this mode the right mouse button will slide the camera along a set plane.



Slide mode will slide the 3D view camera along a set plane. The right mouse button will **Walk** the camera forward/backward.

5.3.3 Mark-up and Annotation Tools

The following tools can be used to mark-up the 3D view with graphical annotations. These tools are available in the Mark-up Tab.



Hide Selection the currently selected object from the 3D view.



Show All previously hidden objects in the 3D view.



Isolate Object the currently selected object in the 3D view. The effect is that all other elements in the model will be removed from the view.



Isolate Parent Object will isolate the currently selected element and its parent element in the 3D view. Repeated clicking will traverse the element hierarchy bringing each back in to view.



Remove all modifications made in the 3D view.



Circle use to draw a coloured circle around a selection within the 3D view (care should be taken if the camera view is changed, see Move to mark-up View Plane).



Rectangle use to draw a coloured box shape around a selection within the 3D view (care should be taken if the camera view is changed, see Move to mark-up View Plane).



Freehand 2D use this as a coloured pen tool to draw freehand within the 3D view. The mark-up will be applied to the view plane only (care should be taken if the camera view is changed, see Move to mark-up View Plane).



Cloud use to draw a coloured cloud shape around a selection within the 3D view (care should be taken if the camera view is changed, see Move to mark-up View Plane).



Advanced Cloud tool allows the user to draw a coloured cloud shape around a selection within the 3D view. The user can drag the edge to adjust the number of curves forming the cloud.



Callout to create click within the 3D view and enter some text, a second click will draw a callout from the selected element (care should be taken if the camera view is changed, see Move to mark-up View Plane).



Freehand 3D draws freehand onto a face of an object within the 3D view.



Highlight Object tool will fill the selected object a selected colour.



Note create a note box within the 3D view allowing the user to enter some text against an element.

The user is advised that the default font size of the note text is 18. If the user wants to change this font size the user must refer to [Display Preferences](#).



Make Object Translucent will make the currently selected object translucent. Hold the left mouse button and drag up and down to increase or decrease the translucency of the object.



Edit Markup Text annotated text created using the Callout tool.



Change Markup Colour select from a colour palette the pen colour for the annotation tools.



Delete Markup the selected mark-up from the 3D view.



Move to mark-up View Plane. If the 3D Camera view has been moved during a mark-up session using the navigation tool this will re-orientate the camera with any current mark-up in the 3D view.

5.3.4 Dimension Tools

Dimensioning displays the results of a measurement in the [3D Model Viewer](#). Several ways of measuring different types of items are provided. These tools are available in the Dimensions Tab.



Context Dimension allows the user to measure the length or radius of a single item.



Angle Dimension measures the angle between two linear items. Will also measure the angle subtended by an arc, for example the angle of a pipe elbow or cable tray turn.



Point To Point Dimension measures the distance between any two selected points.



Shortest Distance Dimension measures the shortest distance between two selected items.



Along Axis Dimension measures the distance between two points along a specified axis.



Dimension XYZ Mode modifies the current dimensioning tool to appropriately display the x, y and z components of the resultant dimension.

5.3.5 Clipping Tools

The following tools allows the user to clip the *3D Model Viewer* to display only elements which are wholly inside or outside a predefined 3D box or plane. These tools are available in the Clipping Tab.



Create New Clip Plane in the 3D view.



Slide Current Clip Plane along Normal. Can aid the user visualise the internals of structures.



Rotate Clip Plane About Point a selected point in the model.



Remove Clip Plane from the 3D view.



Modify Clip Box this will open a popup prompting for dimensions for the clip box.



Remove Clip Box from the 3D view.

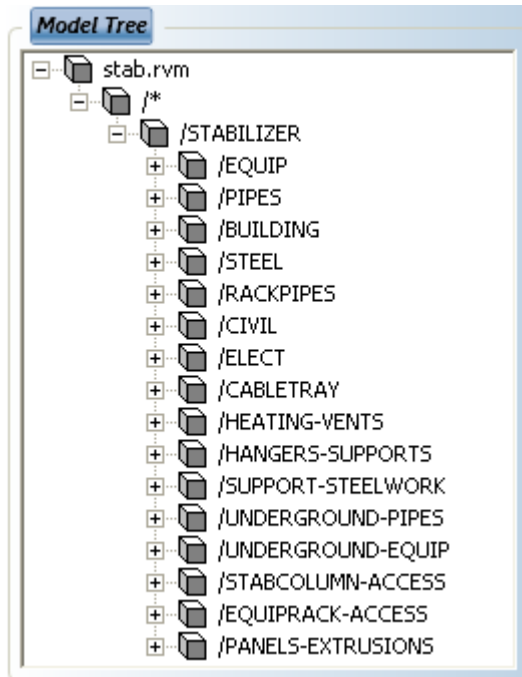
5.3.6 Model Tree Panel

The 3D View Panel has a collapsible Model Tree panel.

1. Click the **Model Tree** button in the footer of the **Viewer** to expand the Model Tree panel



A hierarchical list of the elements within the model will be displayed.



It is possible to expand and collapse the tree view using the following buttons:

- ⊕ Use the plus button to expand and display elements below the selection.
- ⊖ Use the minus button to collapse the currently selected element in the tree view.

2. Click on an entry in the list.

When an entry in the model tree is selected the 3D model view will highlight the element green. The element in hierarchy will also be represented by a green filled box.



The owning elements are represented in the hierarchy by a green and red box.



Navigation of the model is particularly enhanced when using the model tree in combination with the [Standard Navigation](#) tools. For example:

3. Click the zoom to selection button.



The Zoom to selection icon will move the 3D view camera to suitable position to be able to survey the currently selected element in the model tree hierarchy.

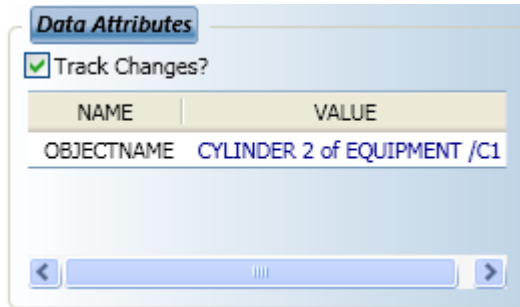
5.3.7 Data Attributes

ReviewShare provides the user with the ability to view attribute data for model objects selected in the 3D view.

1. Click the **Data Attributes** button in the footer of the Viewer to expand the Data Attributes panel.



A list of data attributes will appear in the Data Attributes panel. However, this will only be populated if attribute data was loaded in Review when the ReviewShare document was created. If not, the pane will be blank.



Within the Data Attributes panel the user can select a particular object or all objects that relate to a particular type. Data is retrieved from the ReviewShare Server and the model is displayed with the selected objects highlighted.

The Track Changes checkbox allows the user to see the changes applied in the Viewer or Data Attributes list.

The Data Attributes results list can be sorted into alphabetical sequence by clicking on the appropriate attribute heading.

Clicking on an object in the Viewer will result in the relevant attribute data for that object appearing in the Data Attributes pane.

5.4 Quick Search Tool

The user can quickly search for an element within a 3D model. The quick search tool is located at the bottom of the 3D Viewer window.

Note: The quick search tool is not available for 2D screen captures.



The main components of quick search are the **Search** text box and a button allowing the user to change the way that the searched item is displayed in the viewer.

5.4.1 Search Text Box

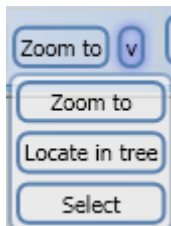
In the **Search** text box enter the name of an element to locate. Search is **case sensitive** and will return all elements in the model **beginning** with the search text entered.

5.4.2 Search Action Button

The action that takes place once a search has been conducted can be changed to one of the following;

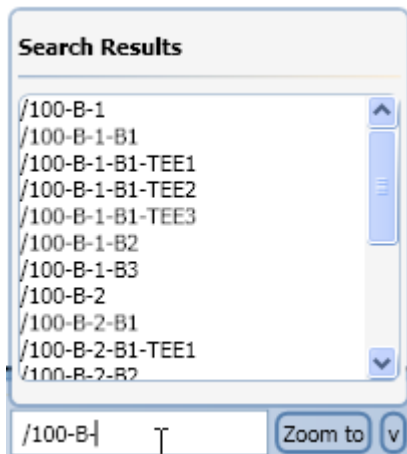
- Zoom to
- Locate in tree
- Select

The current search action can be set by clicking the **down arrow** next to the action to display a drop down list:



5.4.3 Using the Quick Search

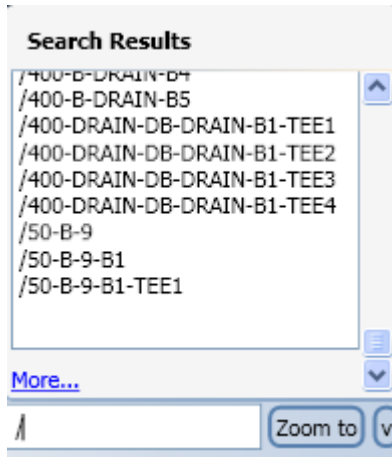
To locate an element the user must enter search criteria into the **Search** text box. As soon as the user starts typing a popup is displayed showing a list of elements in the model which have a name containing the entered text. The list will shorten as the user continues to type.



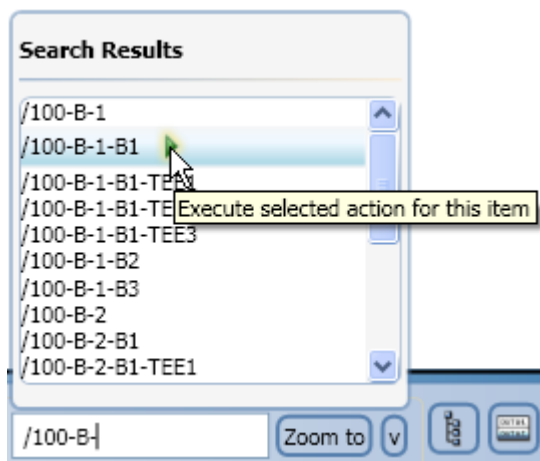
For instance in stab.rvm entering search text /C11 will return the results displayed above.

Whilst entering search terms ReviewShare will auto-complete the search text with the first search result found.

If there are lots of results then the user can page through the results by scrolling to the end of the list and clicking **More**.



If the element the user is searching for is available in the results list, move the mouse over the results and click on the green arrow icon to perform the active search action on that element.



If the user would rather just copy the text from the results list into the search text box, just click the result item normally, i.e. not on the icon. The user can perform a search action on this text at a later stage by clicking the **Action** button.

5.5 Viewer Options

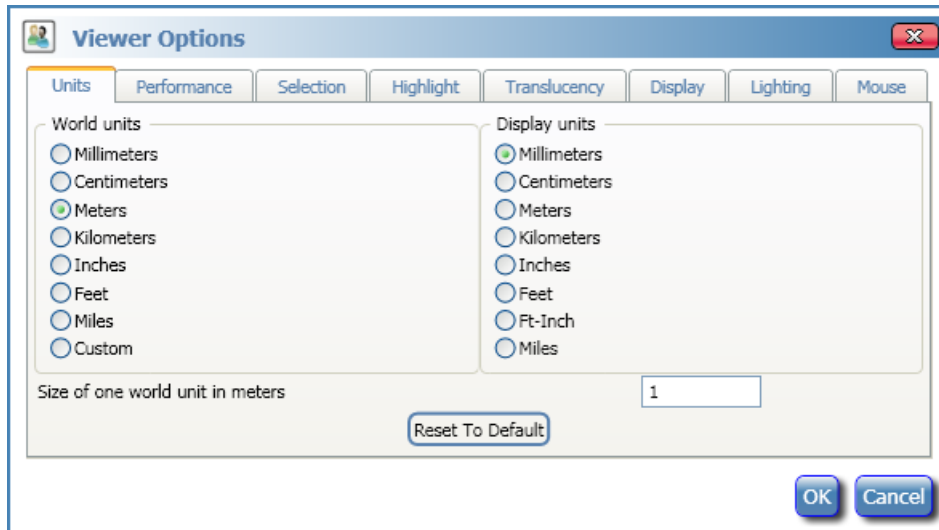
The Viewer Options window allows changes to be made to the way ReviewShare draws and interprets model data in the 3D Model Viewer.

Clicking the Options button in under *Editing Tools* will launch the Viewer Options Window.



5.5.1 Changing the Viewer Options

The Viewer Options window is divided into seven tabs. These are **Units**, **Performance**, **Selection**, **Highlight**, **Translucency**, **Display** and **Lighting**.



5.5.2 Units

The Units Tab allows the World Units and Display Units to be changed. The 3D viewer will update in real time to reflect any changes made to the World Units and Display Units.

Clicking **Reset to Default** at any stage will revert both the World and Display units to Meters.

World Units

World Units specifies the unit of measurement of the model itself.

The following pre-defined measurements are available

- Millimeters
- Centimeters
- Meters
- Kilometers
- Inches
- Feet
- Miles

To create a custom unit of measurement do the following:

1. Click on the **Custom** option button under World Units.
2. Click in the **Size of one world unit in meters** field.
3. Enter a numeric value. The value has accuracy to three decimal places.

Display Units

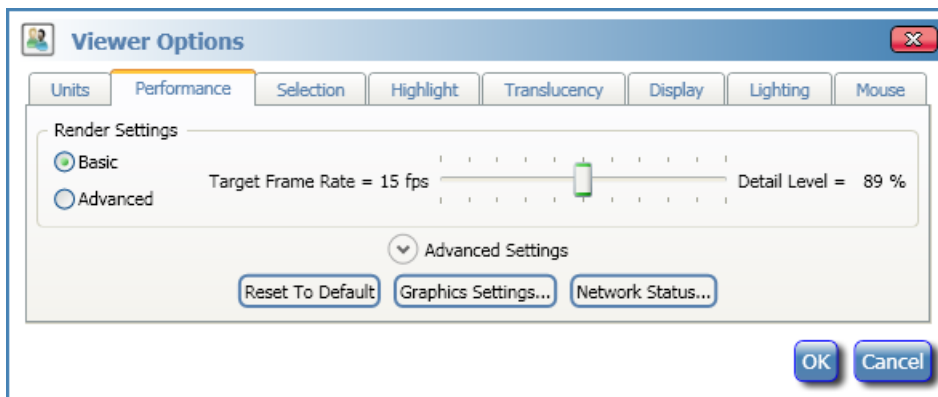
Display units will specify the units that ReviewShare will use when reporting results of measurements, for example when using the Dimensioning tools to measure distances.

The following options are available:

- Millimeters
- Centimeters
- Meters
- Kilometers
- Inches
- Feet
- Miles

5.5.3 Performance

The Performance tab provides a set of controls which allow ReviewShare to be optimised for the workstation's hardware.



- **Render Settings**

Depending on the detail and complexity, the process of drawing a model to the 3D view can be CPU and Graphics card intensive. Performance gains can be achieved by reducing the detail of the 3D model view while conducting tasks that may not require the full rendered model to be visible, such as zooming, rotating and moving.

When the **Basic** option button is selected the user can adjust the detail of a 3D model view by adjusting a slider. Moving the slider to the left will compromise the detail of the 3D view in preference of a more consistent frame rate. Moving the slider to the right will compromise the frame rate in preference of a more detailed 3D render.

If the user clicks the **Advanced** option button then more control will be available to independently change the **Image Quality** and **Maximum Frame Rate**.

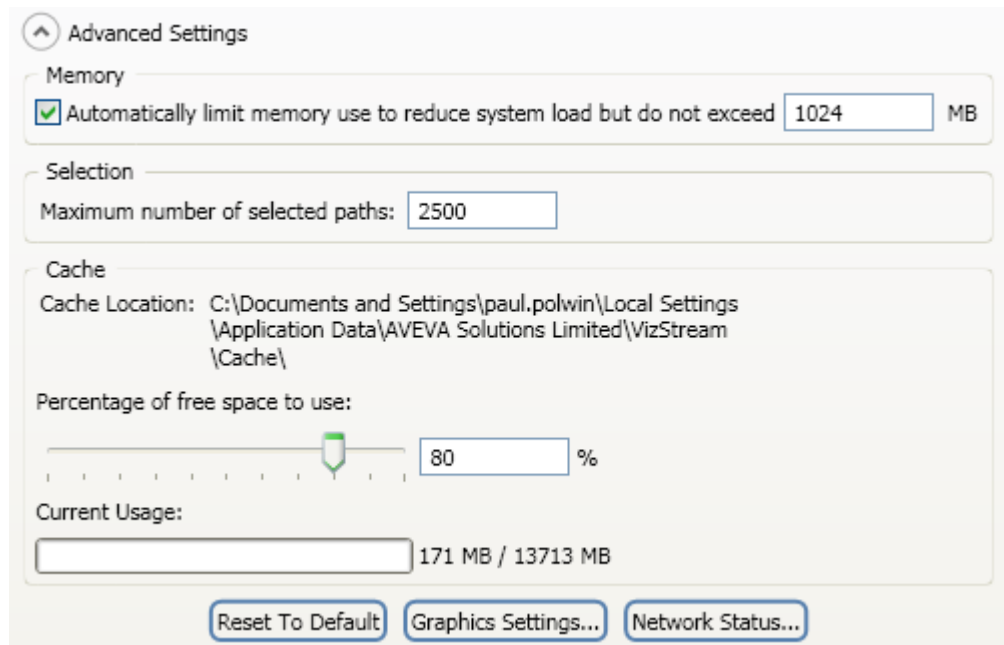
The image quality can be directly controlled by adjusting the **Image Quality** slider. The slider is measured as a percentage, for example 35.000 equates to 35% quality.

The frame rate, measured in frames per second (f/s) can also be adjusted by specifying the rate as a decimal value in the **Maximum frame rate** field. Reducing this value can improve performance on under powered workstations.

Note: Increasing this value beyond its default can have a detrimental effect in performance.

- **Advanced Settings**

Click to expand Advanced Settings that allow the user to edit Memory, Selection and Cache settings.



- **Memory**

By default, ReviewShare dynamically grows and shrinks the size of its buffer pool (cache) depending on the physical memory load reported by the operating system and complexity of the model. As long as enough memory is available to allow paging (between 4 - 10 MB), the ReviewShare buffer pool can continue to grow.

Clicking the **Automatically limit memory use to reduce system load** check box will allow ReviewShare to automatically monitor memory usage so that performance of other running applications is not compromised. Alternatively if left unchecked a cap may be specified in the **But do not exceed** field, this should be an integer value as megabytes.

- **Selection**

Selection limits the number of objects that can be selected at one time from the Select Tool (see [Editing Tools](#)).

- **Cache**

ReviewShare will automatically use the local hard drive to cache data. This means that subsequent requests for information are much faster.

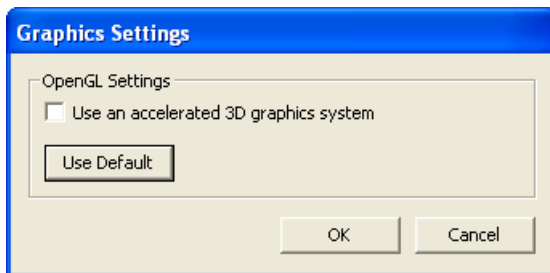
Within ReviewShare, it is possible to specify the amount of free space available for the cache data. Move the **Percentage of free space to use** slider to the right to increase the percentage and to the left to reduce the percentage. Alternatively, the user can specify an actual percentage value by typing directly into the Percentage box, which is adjacent to the slider.

The **Current Usage** box indicates how much of the free space that has been allocated for cache data is being used.

The **Reset to Default** button will restore the **Performance** values to their original settings.

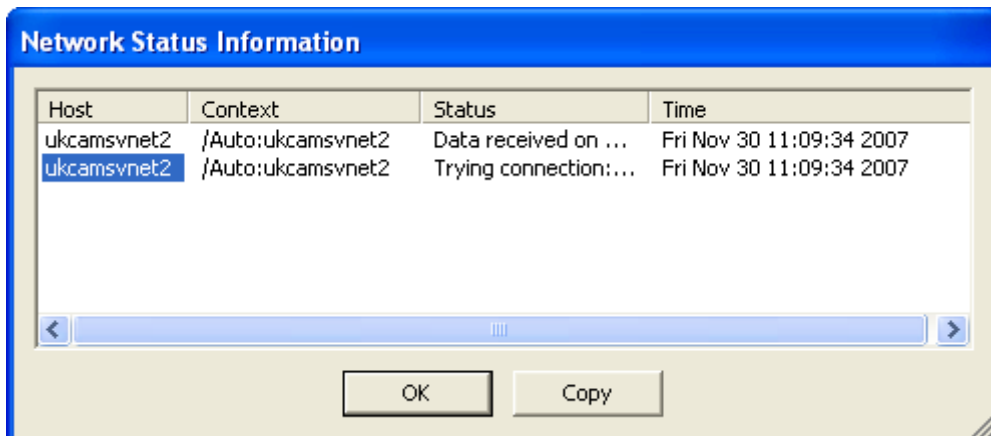
- **Graphics Settings**

Performance gains can be made by utilising an OpenGL 3D accelerated graphics card. In some cases the a workstation may not meet requirements or the card may not be supported, in this case OpenGL acceleration can be disabled by unchecking **Use an accelerated 3D graphics system**. When possible this should be checked.



- **Network Status**

Clicking Network Status will open the Network Status Information window. This will display a summary of a set of tests to maintain a connection with a ReviewShare Server. Traffic tests are conducted on the appropriate ports (See the ReviewShare Server Install Guide for a complete list of used ports).

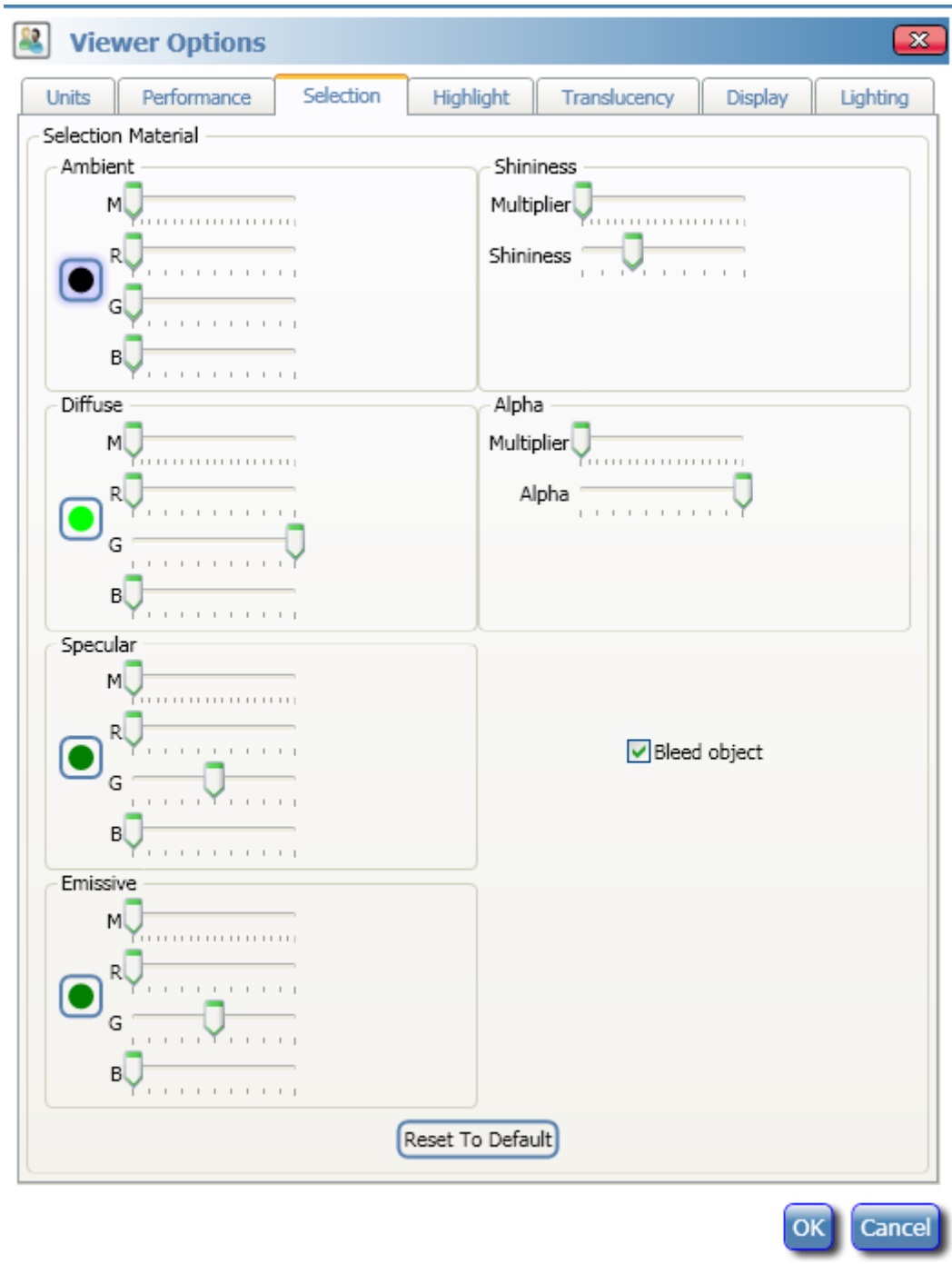


Clicking on **Copy** will store the content of the report in the clipboard, this can then be pasted directly into another application such as Notepad or MS Word.

Click **OK** to close the report.

5.5.4 Selection

The **Selection** tab allows the user to change the appearance of selected objects in the 3D viewer.



- **Selection Material**

Sliders control the intensity in the 3D viewer of each basic colour component; **M**aterial (the pre-defined colour/texture), **R**ed, **G**reen, **B**lue.

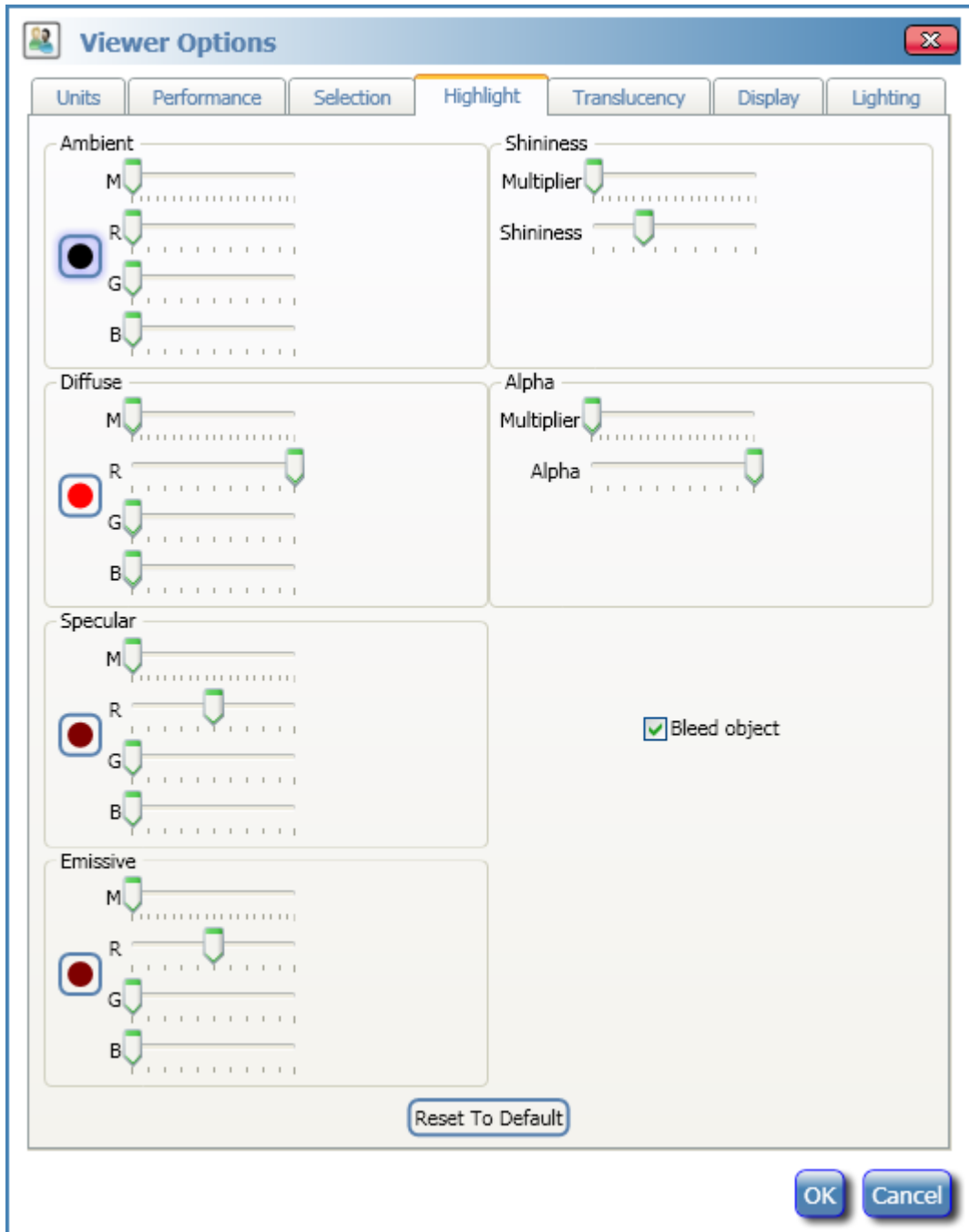
To change a setting, move a slider to the required position. Moving a slider to the right will increase the intensity of a property. Moving a slider to the left will decrease the intensity of a property.

The following settings are common to the **Selection**, **Highlight** and **Translucency** tabs and control the way an object is rendered in the 3D viewer:

Ambient	Controls the amount of ambient light that the Selection Material emits.
Diffuse	Diffuse reflection controls how incoming light is reflected in a broad range of directions.
Specular	Specular reflection controls the way in which light from a single incoming direction (a ray) is reflected into a single outgoing direction.
Emissive	Adds light to the shader independently of the lighting in the scene.
Shininess	Controls the shininess of the element selected.
Alpha	Controls the transparent texture of the element selected.
Bleed object	<p>If the selected object is rendered in the 3D viewer behind other objects then checking this option will bring it to the front.</p> <p>This means the user will have an unobstructed view of the selected object.</p>

5.5.5 Highlight

The Highlight tab allows the user to change the appearance of objects that have been highlighted in the 3D viewer using the Mark-up **Highlight** button. (See [Mark-up and Annotation Tools](#) for more information).

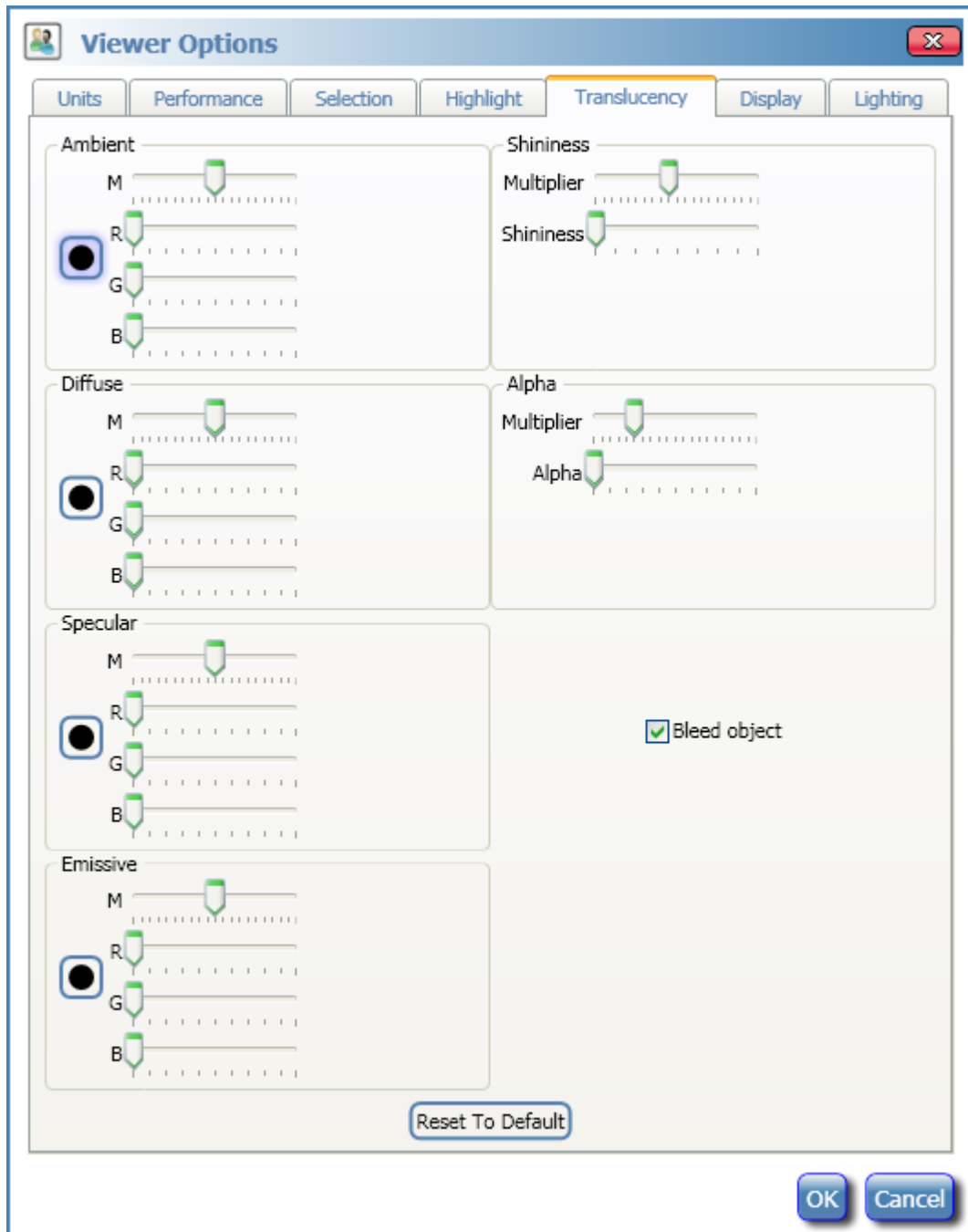


To change a setting, move the slider to the required position.

The options on this form are common to the **Selection**, **Highlight** and **Translucency** forms. For a detailed explanation refer to [Selection Material](#).

5.5.6 Translucency

The **Translucency** tab allows the user to change the appearance of objects that have been made translucent in the 3D viewer using the Mark-up **Translucent** button. (See [Mark-up and Annotation Tools](#) for more information).

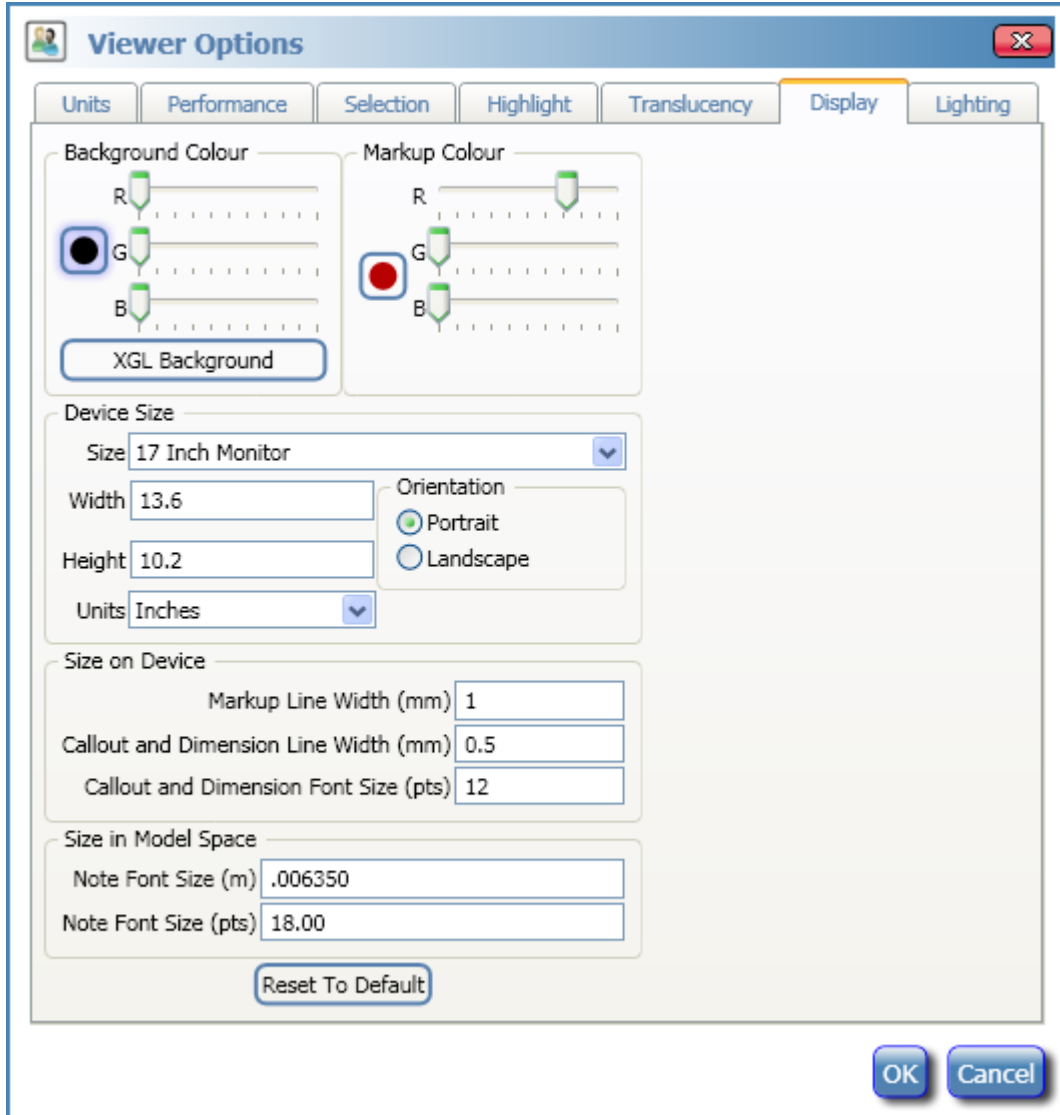


To change a setting, move the slider to the required position.

The options on this form are common to the **Selection**, **Highlight** and **Translucency** forms. For a detailed explanation refer to [Selection Material](#).

5.5.7 Display

The **Display** tab allows the user to change the display settings of the device.



- **Background Colour**

The user can change the background colour of the viewer by moving the slider to the required position. Moving the slider to the right will increase the intensity of the property.

Selecting **XGL Background** will reset the background colour to the original colour when the file was created.

Adjust the **Red Green** and **Blue** sliders to change the Background Colour.

- **Markup Colour**

The user can change the markup colour by adjusting the **Red Green** and **Blue** slider to the required position. Moving the slider to the right will increase the intensity of the property.

- **Device Size**

The **Device Size** allows the user to scale the object when it is displayed on screen or printed. It is particularly useful when doing markups for printing.

The **Size** pulldown contains a pre-defined list media sizes for screen or paper. Select from the **Size** pulldown to populate the **Width** and **Height** fields with appropriate values.

Select **Custom** from the **Size** pulldown to be able to input specific values in the **Width** and **Height** fields.

Click on **Portrait** or **Landscape** to invert the Width and Height fields.

Select **Inches** or **Millimeters** or **Centimeters** from the **Units** pulldown to change the method of measurement used in the Width and Height fields.

- **Size on Device**

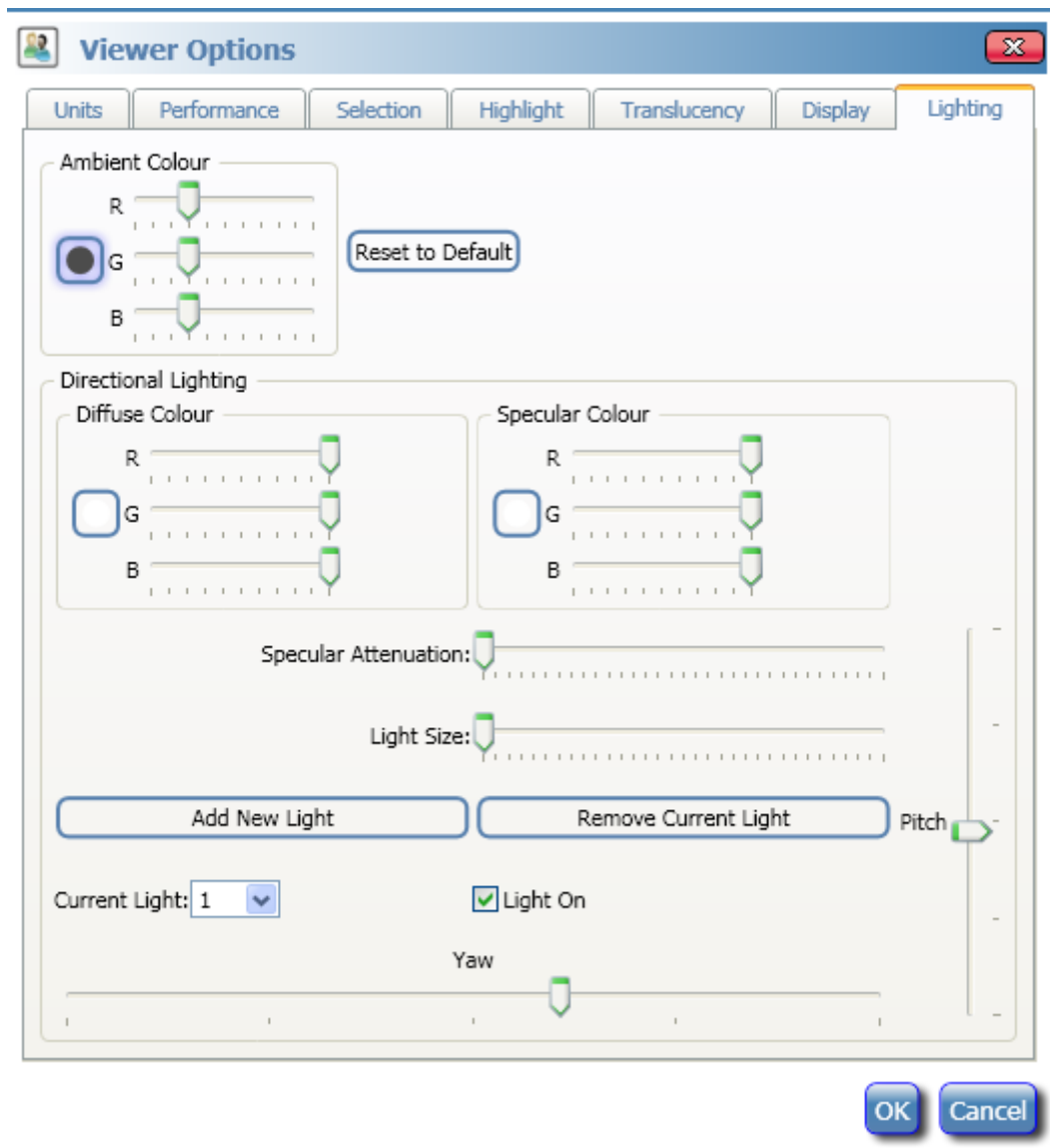
The **Size on Device** allows the user to change the settings for the markup line width, callout dimension line width and callout dimension font size. Each value should be populated with a numeric value measured in millimeters (mm).

- **Size in Model Space**

Size in Model Space provides the user with the ability to change the Note font size.

5.5.8 Lighting

The **Lighting** tab allows the user to change the lighting settings and light sources in the 3D viewer.



- **Ambient Colour**

The **Ambient Colour** is the colour of all the light that surrounds the objects in the Viewer. The user can change this by adjusting the Red, Green and Blue sliders.

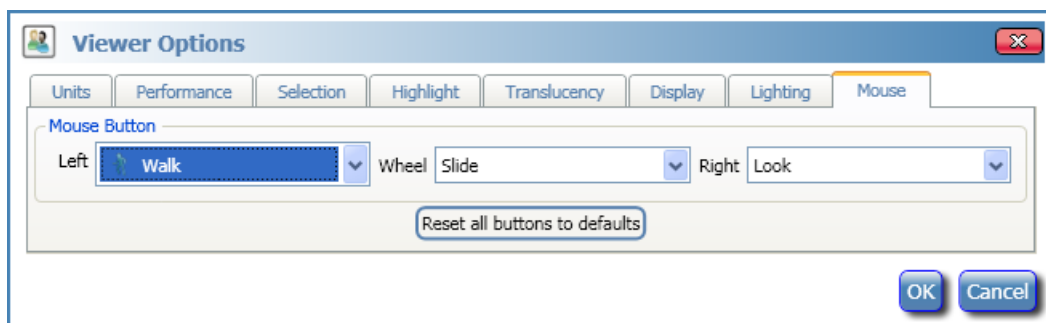
- **Directional Lighting**

Directional Lighting provides the user with the ability to define the type of light source, the number of light sources, its direction and size. This is possible by adjusting the sliders. Changes to settings are applicable to the current light source.

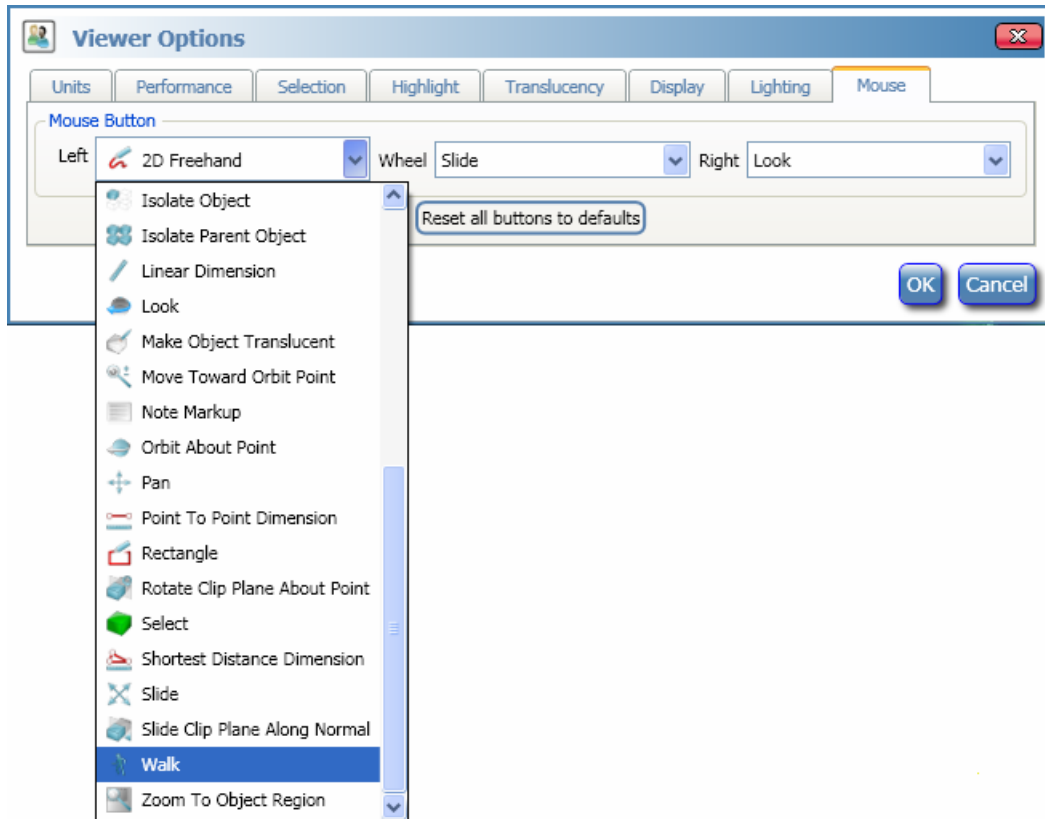
Option	Function
Diffuse Colour	Diffuse reflection controls how incoming light is reflected in a broad range of directions.
Specular Colour	Specular reflection controls the way in which light from a single incoming direction (a ray) is reflected into a single outgoing direction.
Specular Attenuation	This will polarise the lighting of the model. In particular, it will help to reduce the surface reflections from multiple light sources.
Light Size	Increases the size of the light source.
Add New Light	Add a new light source to the 3D Viewer. When adding a new light source, the user can position the light by adjusting the Pitch and Yaw sliders. Note: By default, the 3D viewer has one light source.
Remove Current Light	Remove the current light source, as indicated in the Current Light box, from the 3D Viewer.
Current Light	Indicates the current light to which the settings will be applied.
Light On	Allows the user to switch the current light source On or Off.

5.5.9 Mouse

The user can customise what toolbar functions are bound to the right mouse button and mouse scroll wheel when the user is in the [2D Viewer](#) or [3D Model Viewer](#).



The **Left** pulldown relates to the individual commands described in [View Pane Tools](#).



After selecting a command in the Left pulldown the user can then choose what commands are associated with the mouse wheel and the right hand mouse button.

For example when **Walk** is selected for the left mouse button operation, the default behaviour would be to **Slide** when using the scroll wheel and to **Look** when the user clicks the right mouse button (when in **Walk** mode).

From the Mouse configuration page the user can change this behaviour by selecting the view pane tool such as **Walk** in the left pulldown and then choosing a new command to be associated with the Wheel and the Right mouse button.

The modes of operation that can be associated with the mouse scroll wheel are:

- None
- Move Toward Orbit Centre
- Move Toward Orbit Point
- Slide
- Walk
- Zoom

Any of the commands listed in [View Pane Tools](#) can be bound to the right mouse button.

6 ReviewShare Document Security

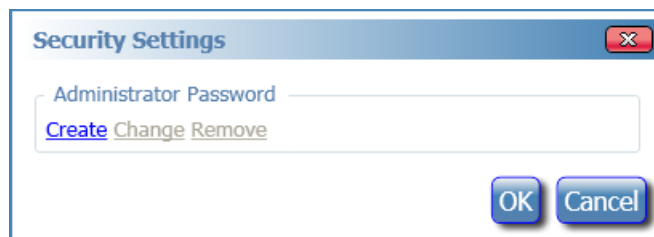
ReviewShare allows users to set security options on the rvf document. These are defined by the originator when the ReviewShare document is first created.

1. Click the **Security Settings** button located at the top right of the comment pane.

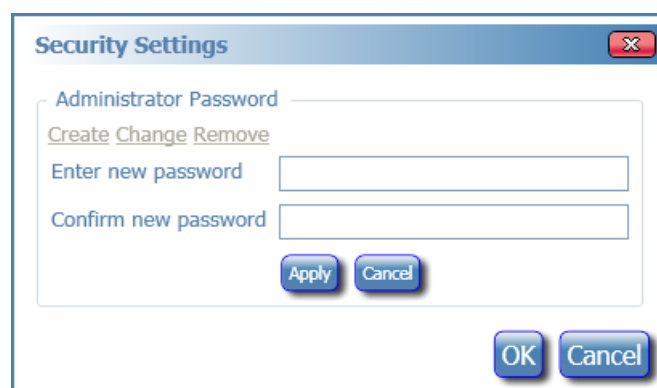


To enable security the originator must first create an administrator password.

2. Click **Create** in the security settings window.

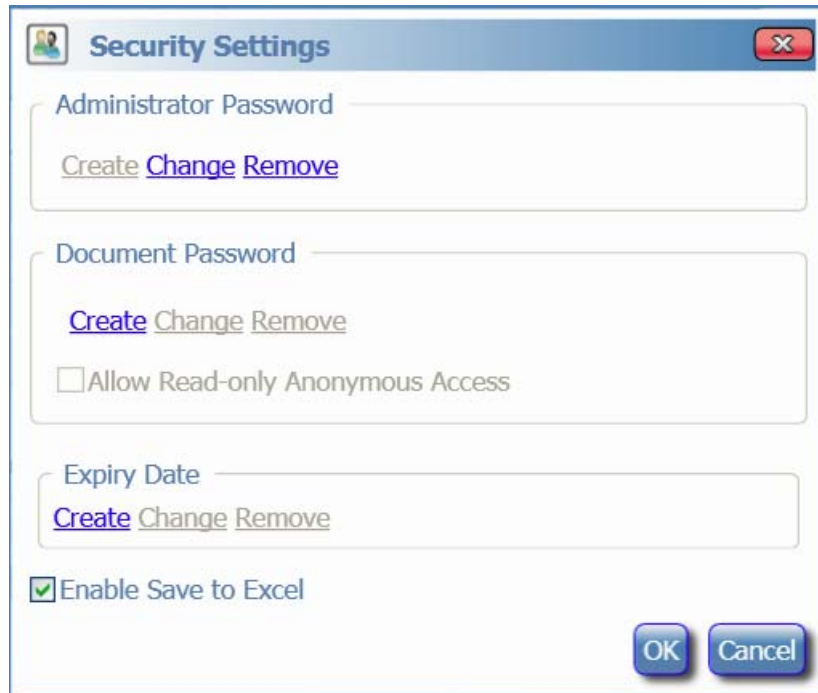


The window will expand to display fields where an administrator password can be entered.



3. Enter new password.
4. Confirm new password by entering a second time.
5. Click **Apply** to set the password.

When document security is enabled a number of features will become available and the security window will expand to allow administration of these features.



The screenshot shows a 'Security Settings' dialog box. It has a title bar with a user icon and a close button. The dialog is divided into three main sections:

- Administrator Password:** A text input field with links for 'Create', 'Change', and 'Remove' below it.
- Document Password:** A text input field with links for 'Create', 'Change', and 'Remove' below it. Below these links is a checkbox labeled 'Allow Read-only Anonymous Access'.
- Expiry Date:** A text input field with links for 'Create', 'Change', and 'Remove' below it.

At the bottom of the dialog, there is a checked checkbox labeled 'Enable Save to Excel' and two buttons: 'OK' and 'Cancel'.

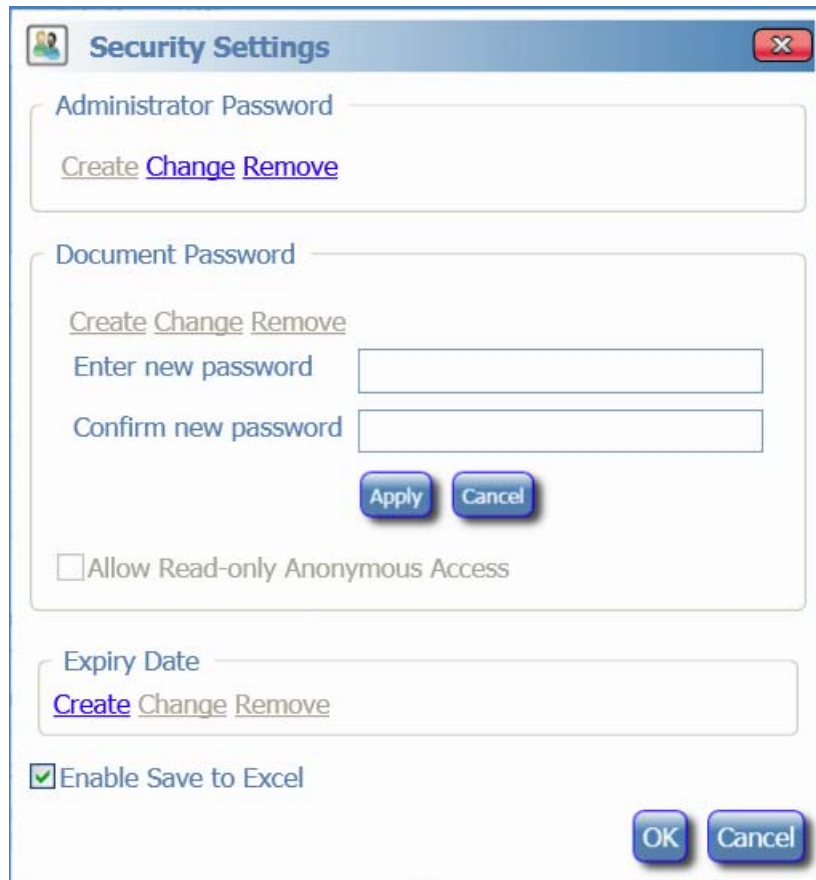
At any stage clicking **OK** will commit the security settings. **Cancel** will discard any changes made to the security settings.

After creating an Administrator Password it is possible to **Change** or **Remove** the password. However if this is done in a later session, the Administrator must first login with the correct password.

6.1 Password Protection

Once document security is enabled an administrator can create an additional user level password.

1. Click on the **Create** button under Document Password.



The window will expand to display a prompt for a new password.

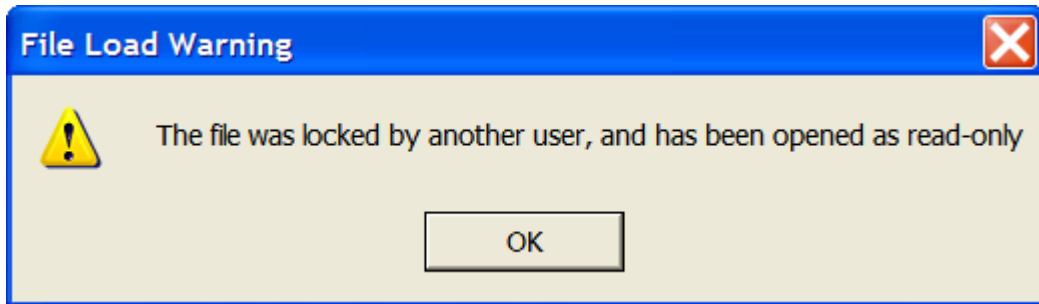
2. Enter a new password.
3. Confirm new password by entering a second time.
4. Click **Apply** to set the password.

When the Administrator sets a document password on the document, the administrator has the option of allowing read-only access to the document if the password is not known by a user (instead of totally denying access to the document). The Administrator has to select the checkbox, as shown below.

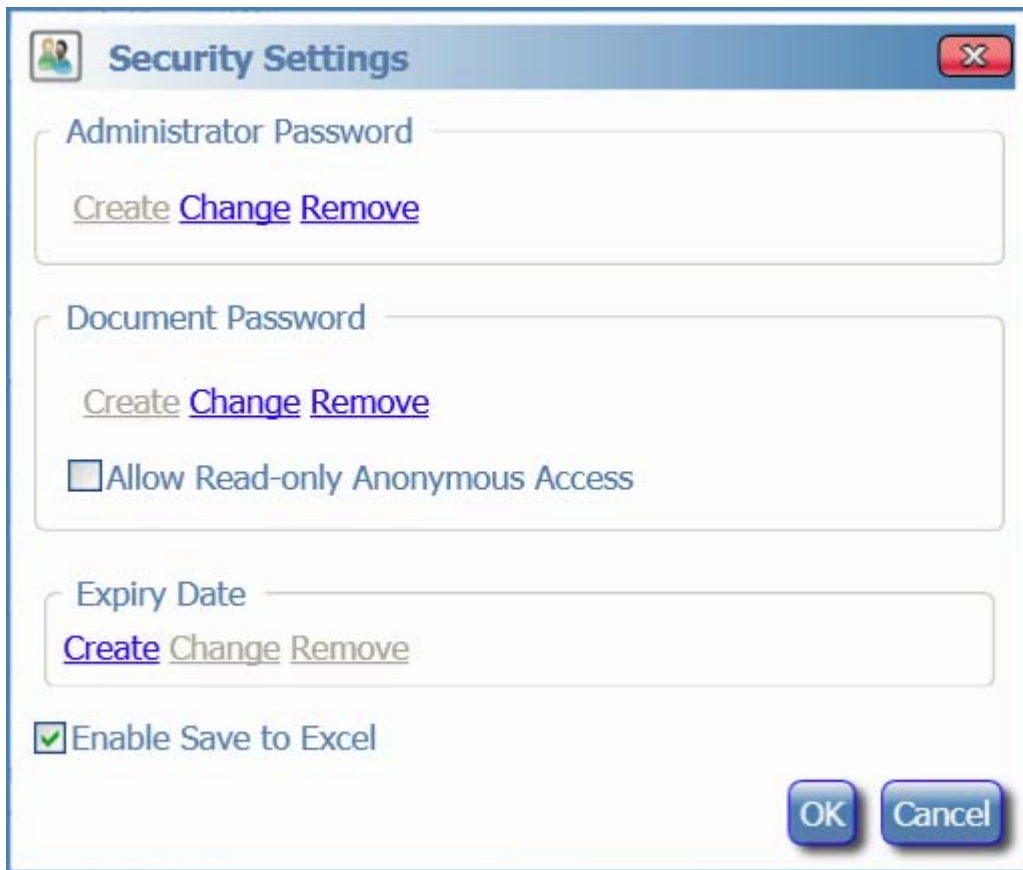
Allow Read-only Anonymous Access

Read-only means that the user can see all comments, view all embedded thumbnails, but the user is no longer able to Reply, Delete or Edit any comments (these buttons will be removed from view).

Note: When a user opens a file, the user gets writable lock unless password protected. If a second user tries to open the same file, the user can open the file as read-only and will be prompted with the following message.



When a user tries to open a document with a password and then clicks cancel on the dialog, the document will automatically open as a read-only file if the above check box has been selected (the document title will inform the user that the document is read-only) otherwise the user would be denied access to the document.



When document security is set any recipient of the rvf document will be prompted to enter the password upon opening the document in ReviewShare. The collaboration thread and contents will not be displayed until the correct password is entered.

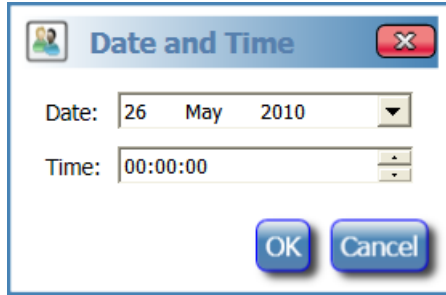
After three incorrect attempts the dialog will disappear as if the user has cancelled the dialog (if the document has read-only access, the document will open as read-only after three failed attempts).

If the administrator is logged in it is possible to **Change** or **Remove** the Document Password.

6.2 Expiry Date

The originator can set an expiry date on the rvf document.

1. Click the **Create** button under Expiry Date.
 A popup window will appear prompting for an Expiry Date and Time.



2. Select an Expiry Date and Time.
 After this date the ReviewShare Viewer will show only an expiry message when the .rvf document is opened.
 This can be overruled by entering the appropriate administrator password.
3. Click **OK**
 If the administrator is logged in it is possible to **Change** or **Remove** the Expiry Date.

6.3 Disable Security

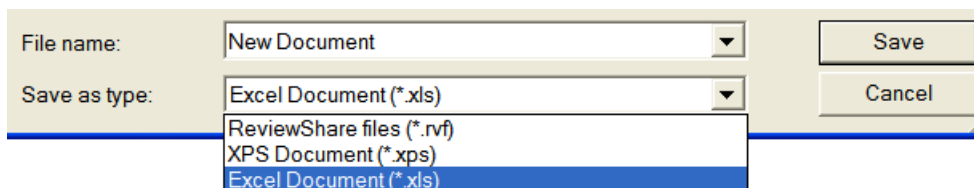
When an administrator has logged into a ReviewShare document the security can be completely disabled by clicking the **Remove** button under Expiry Date, Document Password and Administrator Password and then clicking **OK**.

6.4 Enable Save to Excel

When an administrator has logged into ReviewShare document and is in the Security Settings dialog, at the bottom of the dialog screen there is checkbox to **Enable Save to Excel**, as shown below:



If the user selects this checkbox, this enables an entry (**Excel Document *.xls**) at the bottom of the **Save As** dialog when the user saves a ReviewShare document (as long as Microsoft Excel is installed on the Machine), as shown below:



The user is able to save the ReviewShare document as an Excel file, which will contain all the fields and data of the ReviewShare document in a table format, an example is shown below.

	A	B	C	D	E	F
1	Title					
2	Description					
3	Originator	A User				
4	OriginatorEmail					
5	CreatedDate	20/05/2010 09:25				
6	ModifiedDate	20/05/2010 10:23				
7	DocumentVersion	1.004				
8	Area					
9	Discipline					
10	Reference					
11	Status					
12						
13	Comment Number	UserName	Email	Date	Content	Thumbnails
14	1	A User		20/05/2010 09:25		
15						
16	Image	Label	Server Model			
17						
18						

By default the **Enable Save to Excel** checkbox is checked.

7 Continuing a ReviewShare Discussion

Once an initial ReviewShare document has been created and distributed, other users can continue a discussion by replying to existing comments.

The following section illustrates how comments can be added to an existing discussion and quickly re-distributed.

1. In ReviewShare toolbar click **Load ReviewShare** button.



This will display a standard Windows file open dialog.

2. Choose an existing .rvf file (see [Creating a ReviewShare Document](#) if a file is not present).

The Comment Pane will now be updated and the Discussion Header will be populated with details of the originating author and details of the purpose of the discussion. The body will also be populated with any previous comments which have been made.

3. Hover over an existing comment to display the Edit and Reply buttons.

Note: Previous comments can only be edited by the original author.

4. Click **Reply** to create a response to a comment (refer to [Reply to an Existing Comment](#) for details).



Note: If model data has been included in the comments using the capture tool then thumbnails will be visible. Refer to [View Pane](#) for details on viewing embedded images.

5. Click **OK** to commit the comment.
6. Save the ReviewShare file using the **Save ReviewShare document to file** button.



The discussion can also be forwarded by email using the **Email this ReviewShare document** button.

8 Review Add-in

A CAF (Common Application Framework) add-in allows the ReviewShare document to be displayed within the Review application.

The add-in allows the user to create new .rvf documents as well as view and respond to existing ReviewShare collaboration threads.

8.1 Add-in User interface

The user interface of the ReviewShare add-in is in most cases the same as the stand-alone interface. This section outlines additional features that become available to collaborators running the Review product.

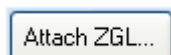
The ReviewShare button in the toolbar of Review will open the add-in.



8.1.1 Attach ZGL Files

It is possible to include ZGL or XGL file data in a ReviewShare document.

Click the **Attach ZGL** button to open a standard Windows file browser dialog.



From the **File Type** pulldown select either **ZGL file (*.zgl)** or **XGL file (*.xgl)** types.

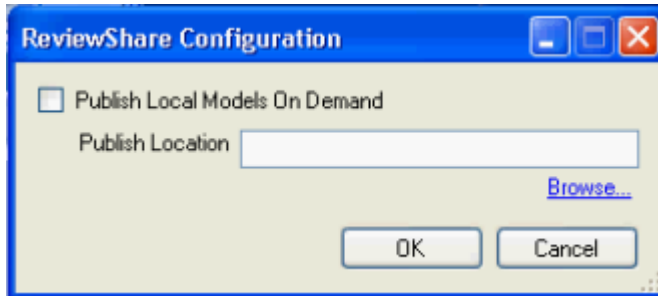
Click **Open** to attach the file to the ReviewShare add-in 3D view pane.

Note: Attaching a ZGL or XGL file to the ReviewShare 3D view does not actually attach the file to the ReviewShare document itself. It only provides the ability to take captures of the 3D view (these are ultimately what is attached to the ReviewShare document discussion).

8.1.2 On Demand Publishing

ReviewShare models that are to be shared must be published on a ReviewShare Server data directory or a ReviewShare replication directory.

Click the **Option** button to specify a path to a ReviewShare Server data directory or ReviewShare replication directory. Review will then automatically publish the model data.



Option	Function
Publish Local Models On Demand	Enables the local Review model to be published as a ReviewShare model.
Publish Location	The ReviewShare Server Data directory or ReviewShare Replication Directory where the model is to be published.
Browse	Allows you to find the location of the ReviewShare Server Data directory or ReviewShare Replication Directory where you wish to publish the model.

If the check box **Publish Local Models On Demand** is checked then the currently opened model Review model data will be copied to the specified ReviewShare location. The ReviewShare addin will then wait for the ReviewShare Server to create a streamable file that ReviewShare can then read (however the user can continue to work while the process takes place).

8.1.3 View Pane Visibility

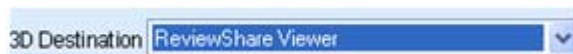
When the ReviewShare add-in has been launched the ReviewShare View Pane visibility can be toggled using a toggle button located in the toolbar.



The add-in allows users to focus on/select objects in the Review model by selecting objects in the ReviewShare view.

8.1.4 View Pane Source

When running the ReviewShare add-in within Review it is possible to use either the Review Observer window or the ReviewShare View Pane as the 3D preview and work area. This is toggled by selecting the source pulldown.



The user is able to synchronise the ReviewShare view-state with the Review view-state, provided the loaded Review model matches that of the ReviewShare model.

8.2 Capturing from Review Cameras

The ReviewShare add-in is able to capture data from various views.

Click on the capture tool will reveal the following extended capture modes:



Observer

Allows the current Review Observer view to be captured; if viewed while not connected to a ReviewShare Server (or Replication directory), a thumbnail will open a 2D capture of the current 3D camera view in a 2D Viewer. If viewed while connected to a ReviewShare Server (or Replication Directory) the 3D Model Viewer will open and position the camera to the coordinates where the capture was made.

Observer with Data

If attribute data has been loaded into the DataViewer then this will be included in the ReviewShare document along with the current Review Observer view (as above).

ReviewShare Viewer

This will capture directly from the ReviewShare add-in built in 3D Viewer.

Camera Number

In Review it is possible to set up multiple camera angles. The ReviewShare add-in allows capturing from any of these.

Camera Number with Data

If attribute data has been loaded into [The DataViewer](#) then this will be included in the ReviewShare document along with the captured camera angle.

9 Deployment

The AVEVA ReviewShare application is available for download from the AVEVA Web Site by either:

- Navigating direct to the AVEVA Web Site and following the links to the download site.
- Clicking on the download link in the ReviewShare e-mail.

Note: Users will be expected to enter personal details such as name, e-mail address, company name and company address when downloading the product.

ReviewShare also comes bundled as part of the AVEVA Review product.

10 Constraints

10.1 VizStream Viewer Support

ReviewShare is a direct replacement for the VizStream Viewer released at version 6.3. The VizStream Server will need to be upgraded to support ReviewShare and will no longer be compatible with the VizStream Viewer. Support for the VizStream Viewer has been withdrawn at the release of Review 6.4.

10.2 Licensing

The AVEVA ReviewShare viewer and add-ins will not be licensed in themselves. However the AVEVA ReviewShare Server that delivers 3D content to ReviewShare will be licensed on a concurrent user basis. Review customers will be issued with 4 concurrent server licenses for each license of Review i.e. a customer with 10 Review licenses will be able to support up to 40 users accessing the AVEVA ReviewShare Server from ReviewShare at any one time.

11 Customising the ReviewShare Header

It is possible to customise the fields which are present in the document header. Customisation should only be conducted by an administrator.

ReviewShare has a set of mandatory fields which are included in a discussion document, these fields can not be deleted or customised, they are as follows:

- Security
- Description
- Originator
- Created
- Modified

Additional fields can be added to the ReviewShare user interface by customising the **config.xml** file stored in the **Common Application Data** folder.

On Windows XP this can be found in:

```
C:\Documents and Settings\All Users\Application Data\AVEVA  
Solutions Limited\ReviewShare
```

And on Vista this can be found in:

```
C:\ProgramData\AVEVA Solutions Limited\ReviewShare
```

For each new field an entry in the XML file must be created. The config.xml file has a very simple structure, the following table lists the elements within the config.xml file which can be created or edited manually.

HeaderSection	Container element for the new field. For every field to display in the ReviewShare header, a HeaderSection element must be created.
Name	Nested within the HeaderSection element, this element defines the name of the field to be displayed in the ReviewShare interface.
DefaultText	Nested within the HeaderSection element, this optional element is used to display a default value for the field in the ReviewShare interface.

The XML file shipped with the ReviewShare software is pre-populated with the following fields (To see how these display in the user interface refer to [Discussion Header](#)):

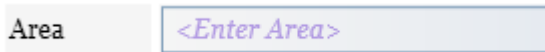
- Area
- Discipline
- Reference

- Status

The following code sample is the content of the config.xml file which is shipped as standard with ReviewShare, it is possible to see how the above fields are created:

```
<?xml version="1.0" encoding="utf-8"?>
<config xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:xsd="http://www.w3.org/2001/XMLSchema">
  <HeaderSection>
    <Name>Area</Name>
  </HeaderSection>
  <HeaderSection>
    <Name>Discipline</Name>
  </HeaderSection>
  <HeaderSection>
    <Name>Reference</Name>
    <DefaultText>&lt;Enter Reference&gt;</DefaultText>
  </HeaderSection>
  <HeaderSection>
    <Name>Status</Name>
  </HeaderSection>
</config>
```

By default in ReviewShare, if the Default Text value is not specified ReviewShare will prompt **<Enter XXX>** where XXX is the field name, such as Area.



In the above code sample the Reference field actually has a default value applied, but in this case the value has only been populated to illustrate how the code should be structured, the actual value will be output in the same format as ReviewShare would normally display a field without a default value; **<Enter Reference>**.

Note: The XML file uses UTF-8 encoding, in the above sample the default value for Reference contains < and > this is used to achieve the characters < and > respectively. When using characters < and > outside the confines of xml markup they should always be UTF-8 encoded, otherwise the file may become malformed.

In the HeaderSection element which contains the nested Area field, make the following changes to the config.xml file, adding a new element **DefaultText**:

```
<HeaderSection>
  <Name>Area</Name>
  <DefaultText>Please enter a value for Area</DefaultText>
</HeaderSection>
```

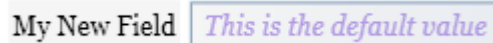
This will result in the following output in the ReviewShare user interface:



Creating a new field in the ReviewShare header is simply a case of adding a new **HeaderSection** block:

```
<HeaderSection>
  <Name>My New Field</Name>
<DefaultText>This is the default value</DefaultText>
</HeaderSection>
```

The result in ReviewShare is as follows:



My New Field *This is the default value*

Note: The order that the fields display in ReviewShare is governed by the order in which the HeaderSection elements are listed in the config.xml file.

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