



Electronic Plan Solutions

Using ProjectDox® - HTML Viewer



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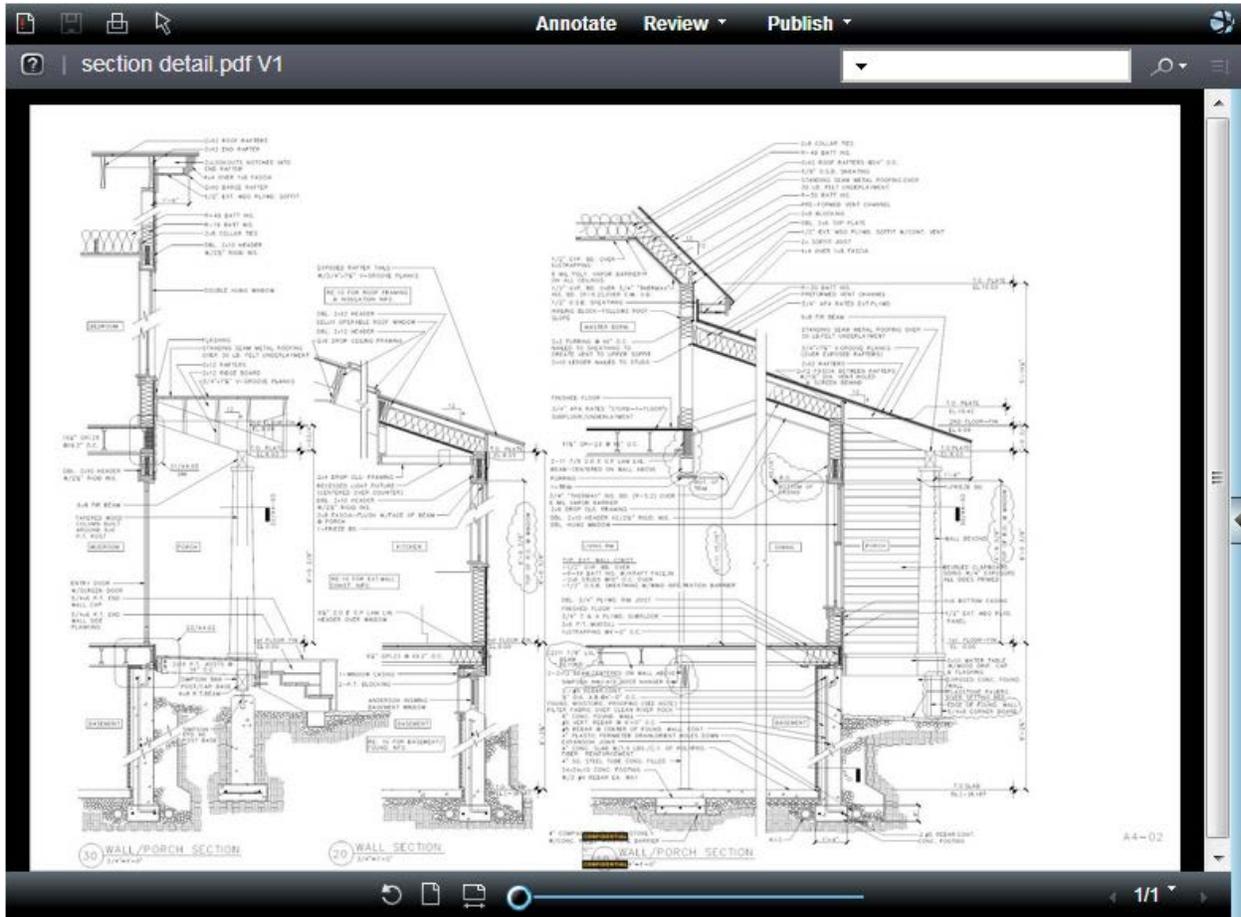
1 About this Guide

This guide provides an overview of the ProjectDox HTML Viewer Visualization Tool and provides details for the most commonly used features. The guide is designed for end users who are using their browsers to view documents, via web page links, that were processed and cached through the ProjectDox Server. The ProjectDox HTML Visualization Tool allows users to view, zoom, pan, rotate, review markups, search, and print documents and images quickly and easily.

2 Introduction

Two document viewers are installed on the ProjectDox end user's machines, providing instant viewing and printing of a wide variety of document formats directly through the default browser. The viewer options include the heavily featured ActiveX viewer, and the limited-feature HTML viewer. The HTML Viewer provides users the capability to load a wide variety of document types from the Server online using a web browser. Documents are processed with the Enterprise Server as HTML output and are presented in this streamlined viewer and supports view, search, annotation, redaction, print, and publish.

The HTML Viewer will be set up as part of the ProjectDox integration will launch from document links or menu commands within the ProjectDox application.

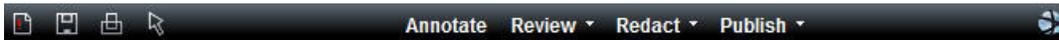


Typically, the HTML Viewer will be set up as part of an integration. In this case, HTML Viewer will launch from document links or menu commands within the integration application.

3 HTML Viewer Toolbars

Below are all of the toolbars that can become available in the HTML Viewer user interface. The availability of the toolbars and their options is dependent on the options your administrator has enabled.

Task Bar



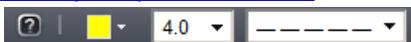
Viewing Tools and Page Control



Search

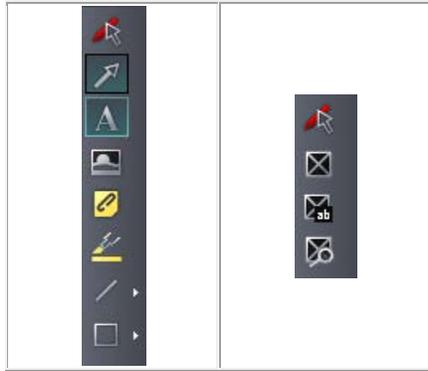


Markup Properties Toolbar

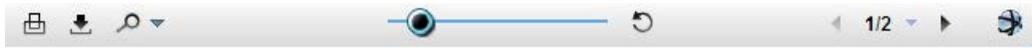


Annotate Toolbar

Redact Toolbar



[Simple View Toolbars:](#)



4 Document Navigation

4.1 Task Pane

The Task Pane can be toggled open or close by clicking on the centered arrow of the bar on the right side of the viewing window. The panel can be resized by dragging the bar right or left.



The tabbed panels available in HTML Viewer include:



[Thumbnails](#)

[Changemark](#)

4.2 Page Thumbnails

The Thumbnails tab reveals a scrollable thumbnail navigation panel. When clicked, the pages of the currently opened file appear in the panel as small clickable thumbnail images.

Pages containing markups will appear with a red markup indicator icon (!) on the right edge of the thumbnail image.

For large documents, using the scroll bar to navigate down the list of thumbnail images will pause the sequential loading process. Loading will continue on the page you scroll to. This allows you to scroll to any page thumbnail in a large document without having to wait for all page thumbnails to finish loading sequentially.

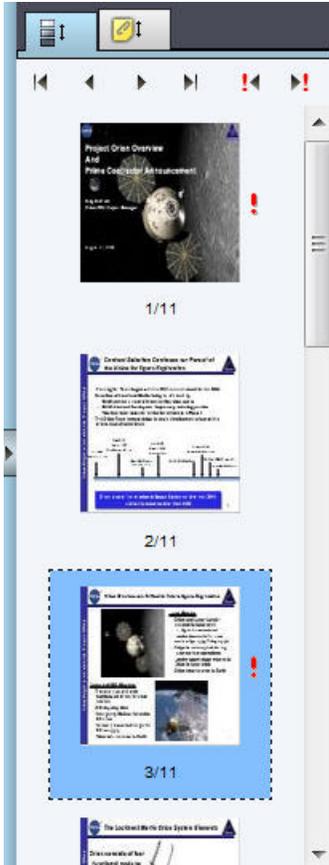
The thumbnail panel contains 4 navigation buttons:

First page -- Takes you to the first page.

Previous page -- Takes you to the previous page.

Next page -- Takes you to the next page.

Last page -- Takes you to the last page.



Note that in the Thumbnail view panel, the HTML Viewer will display the (!) symbol next to each page containing existing entities regardless of whether or not it can render the entity. This serves as a notification that when exporting the file to PDF or TIFF, an [unsupported entity](#) that can't be seen may be burned in to the published file.

4.3 Page Navigation

The document can be paged by scrolling using the scrollbar, scroll wheel, thumbnails or the page navigator. To move through the pages of the document using the scroll bar, slide the scroll handle up and down. To scroll using the scroll wheel, roll the wheel down to increase the page number and roll the wheel up to go to a previous page.

To use the thumbnails, activate the thumbnails panel and click on a thumbnail to view the respective page. The current page will be highlighted in the thumbnail panel.



To use this feature, click the down arrow and select a page number from the drop down list to change the current view to the page specified.

Use the Previous Page and Next Page arrows to navigate sequentially through the document pages.

Zooming

To quickly zoom in and out of the document, use the zoom slider at the bottom of the viewing window. Moving the slider to the left will zoom out. Moving the slider to the right will zoom in.



4.4 Rotate

You can rotate an image counter-clockwise in 90 degree increments. Click  on the page navigation toolbar until the page is rotated to the desired view.

4.5 Fit Width

The Fit Width command changes the zoom level so that the entire width of the document appears in the window. This is most useful to avoid having to scroll left and right to read the text.

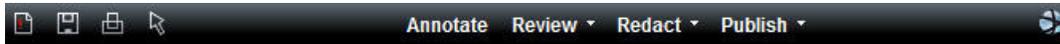
To zoom an document to width, click  on the toolbar. Documents (excluding PDF) are opened automatically at Fit Width when loaded in unless they are recognized as CAD drawing files. In that case, they are opened at Fit All.

4.6 Fit All

Fit All  changes the view so that the full image is visible in the window. Files recognized as CAD drawings are automatically zoomed to extents when opened in HTML viewer (Documents open at Fit Width.)

5 Tasks

5.1 Task Bar



The **Task Bar** contains buttons for the commonly used commands. From left to right, these are:



Below the Task bar is a toolbar containing the following buttons:



 Click on this button and then click Help to access this online help, or an About to view version information and to visit the IGC website.

5.2 Print a File

To print the open document with the default printer settings, click . Note that the print options and dialog shown is dependent on which browser you are using. See the feature availability matrix table in the next section for details.

1. If the document contains Changemark annotations or redaction reasons, you may select to print a summary sheet of each:

- **Print Changemark notes:** When selected, the content associated with each Changemark note will print at the end of the print job as an appended page. Only the Changemark notes that fully appear in the printed output page will appear if the page is a zoomed view only. Each note receives a unique number that can be matched up to the text printout. Printed information includes the Changemark title, author, date and time authored, the note content, and any hyperlink reference.
 - **Print redaction reasons:** If redaction entities exist in the current document, and reasons have been set, you can choose to print [redaction reasons](#) summary pages. When printed, the redacted entities display text with numbered references corresponding to each reason listed in the summary page.
2. Click [Watermark/Banners](#) if you would like to set or adjust the watermark or banners that will print with the current document.
 3. Click the **Print** button.



4. To change the default settings:
 - a. To change the Destination printer, click the **Change** button and select a printer from Local Destinations or enter the network path to a shared printer.
 - b. From the *Pages* section, specify a print range of either All pages, or designated pages (then specify page numbers or dashed page ranges, using a pipe as a separator, for example: 1|3|5-12). **Note:** Depending on the browser you are using, the option to print "Current page" may be available. The client will always send the entire document to the printer, so the current page recognized will always be page 1 of the document. Unless page 1 is the currently viewed page you wish to print, type the number of the page in the Pages text field instead of choosing the current page option.

- c. In the *Copies* section, specify the number of copies to print by using the +/- buttons to increase or reduce the copies value. You can select whether to collate multiple copies. Selecting this option will update the values in the *Total: (n sheets of paper (n pages))* results at the top of the Print dialog.
- d. In the *Layout* section, select your page layout options of Portrait or Landscape.
- e. In the *Color* section, select whether to print the file in Color or Black and white.
- f. In the *Margins* section, select Default, None, Minimum, or Custom to use for your print margins. If Custom is selected, when you mouse over the preview window of the print dialog, you can click on each margin text field that appears and enter a custom value for each of the four page margins.
- g. In the *Options* section, you can choose whether to print the file with Headers and footers, and whether to print on both sides of the paper. (Number of sheets of paper and number of pages information updates at the top of the Print dialog when this option is selected).
- h. Observe the preview area of the *Print* dialog to verify the document appears as expected.
- i. At any time, you can hover your mouse in the lower right corner of the preview area to summon additional preview buttons to change your current view. From left to right, these are **Fit Extents**, **Fit Width**, **Zoom Out**, and **Zoom In**.



5. Click **Print** to print the file or alternatively, click the "**Print using system dialog**" link at the bottom of the print screen to summon the Windows Print dialog.

5.2.1 Feature Availability Matrix

Depending on your browser configuration, the following Print features will be available in the HTML Viewer.

Browser With Acrobat Plug-In	Markups	Banners / Watermarks	Changemark Summary	Redaction Reasons
Internet Explorer 9	X	X	X	X
Chrome	X	X		
Firefox	X	X		
Safari	X	X*		

Browser Without Acrobat Plug-In	Markups	Banners / Watermarks	Changemark Summary	Redaction Reasons
Internet Explorer 9	X	X		
Chrome - With "Chrome PDF Viewer" Plugin	X	X	X	X
Chrome - No "Chrome PDF Viewer" Plugin	X	X		

Firefox	X	X		
Safari - With "WebKit built-in PDF" Plugin	X	X	X	X
Safari - No "WebKit built-in PDF" Plugin	X	X		

To obtain the optimal PDF plugin printing experience, please update your browser to the most recent version available.

***Safari Limitation:**

Problem: Banners do not appear on the printed page when using Safari browser.

Solution: The HTML Print feature in Safari is PDF-based, and prints PDFs at a scale that masks out the margins containing the banners. To resolve this known issue, set the scale to 90% in the native Safari print dialog, and banners will show up.

5.3 Select Tool

The select tool  is used to pick interactive elements in a document or drawing. With it, you can view any markup attributes (mouse over reveals attribute information such as author, timestamp), and launch [hyperlinks](#) contained in any hyperlinked markup entities.

5.3.1 Copy Text

You can select text contained in a document or a drawing file and copy it to the Clipboard for pasting into another application.

1. Use the Select tool  to click and drag a selection box around the text you want to copy. The selection box can include as little as one letter, or as much as all of the text contained in the page.
2. In the resulting text selection box that appears, you can select some or all of text it contains. You may optionally use the **Merge Lines** button to remove the line breaks from the selected text before copying to the clipboard.
3. From the right mouse button menu, select **Copy**. You can then paste the contents of the Clipboard into another application such as Notepad or Microsoft Word. You can also use <Ctrl> + <C> to copy.
4. Click **Close** to close the dialog.

See Also:

[Select Markup](#)

5.4 Undo/Redo

A history stack of all document events allows you to undo-redo certain events by using undo and redo keyboard commands (<Ctrl> + <Z> and <Ctrl> + <Y>).

In addition to all annotation actions, the following redaction actions can be undone and redone:

- Find text and redact text
- Un-redact text
- Redact area

6 Search

6.1 Text Search

The Search box allows you to search for text (normal phrases and text patterns) contained in a document or drawing file.



1. For a simple term search, type the word or phrase you want to search for in the search edit field.
2. For more advanced searching options, you can specify the following search preferences from the search menu (click the down arrow) .

Down - progressively searches for the next instance in the document.

Up - progressively searches for the previous instance in the document.

Match case - searches for the text exactly as typed with upper and lower case characters.

Find whole word only - finds the typed characters as an entire word as opposed to being part of a longer word. This option is disabled when *Regular Expression* is selected.

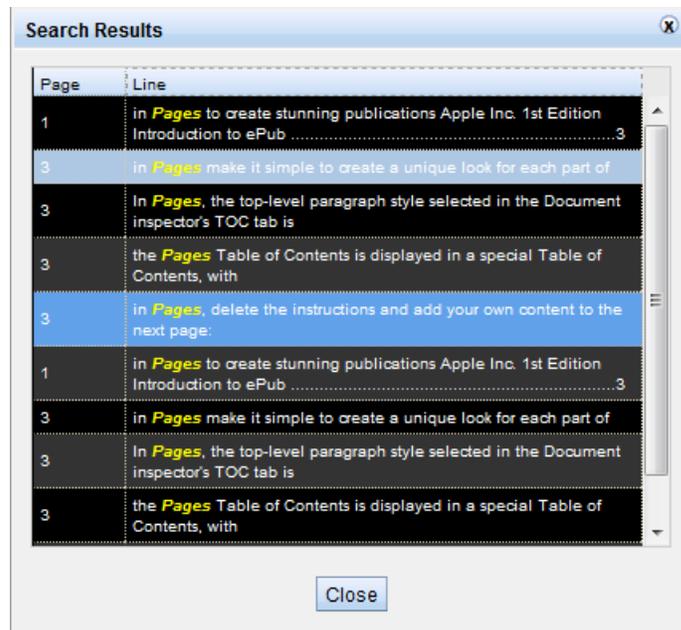
Regular Expression - if selected, the search will run using regular expressions. (No need to type [regex](#): as part of the search string) If not selected, search uses classic search algorithms. See also multi-term searching below.

Term Hit - toggles the highlighting mode on or off for viewing found text patterns. When selected, all matching results in the current document display highlighted in yellow.

3. Click  to launch your search. Press [Enter] to navigate to and highlight the next search instance.

When the search is complete, the results can be seen in the document color-highlighted. A Search Results pop-up dialog displays each line of text and page number of the resulting instances in the document. When you click on each line in the search results box, the document will scroll to the page where the term was found and display that particular instance and the search results list dialog will be hidden.

To summon the *Search Results* list after performing a search, click the  button next to the search text field. You can close the dialog with the **X** in the upper right corner.



- The "x" in the right side of the search term field clears the current search results, including any highlights.
- The arrow on the left side provides a drop down pick list of recently searched A term from this list can be selected for searching.

Multi-term searching:

When the **Regular Expression** search option is on, you can input multiple search terms separated with an OR (pipe "|") symbol. For example, entering the string `Oregon|California|Nevada` will result in all found instances of the three separate terms to be included in the consolidated search results.

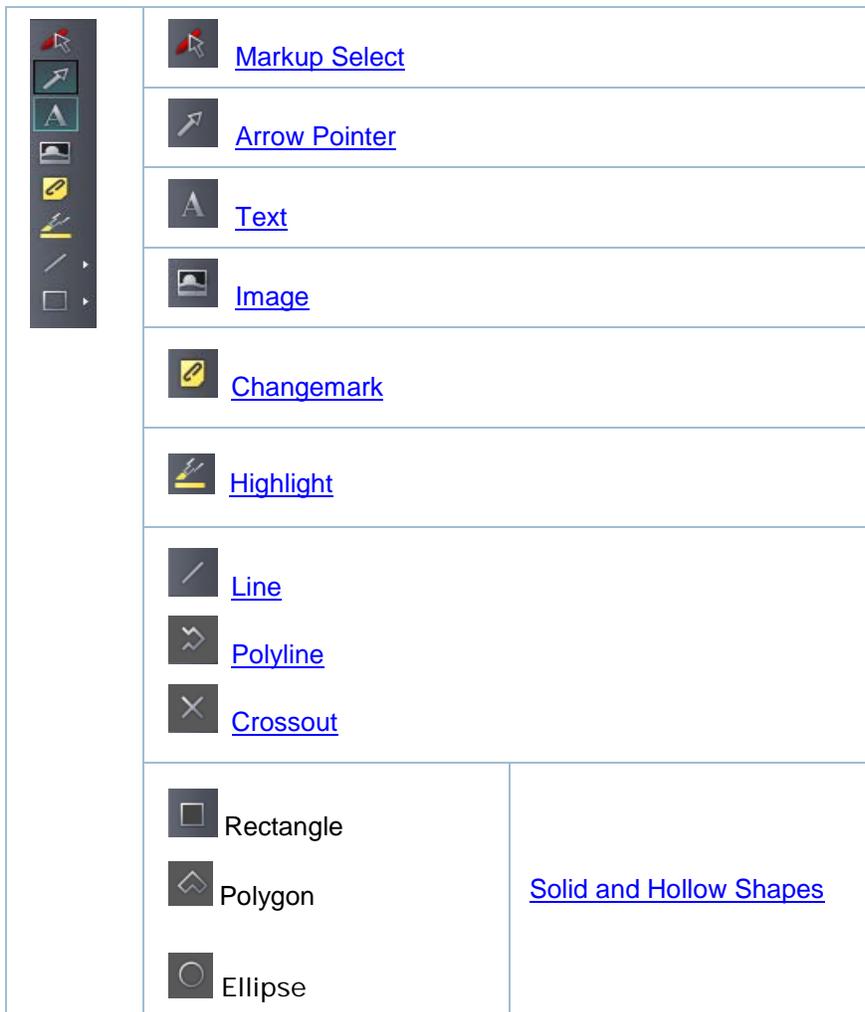
Note that if you are searching for a pipe character itself, the pipe must be preceded by a single backslash. Example: `"\"`.

A single slash is a reserved search character. When searching for words or phrases that contain a backslash character `"\"`, you must use two slashes for each instance. Examples: Type `"and\\or"` to find `"and/or"`. Type `"\\C"` to find `"\C"`.

7 Annotate

7.1 Markup Toolbar

The **Markup** toolbar contains related groups of markup tools. To invoke the Markup Toolbar, click **Annotate**. (The markup tools are only available if your Server Administrator and license allows and enables this feature.)



7.2 Markup Files

Markups allow you to annotate documents without altering the document itself. All markup entities are saved in a markup file, which is associated and overlaid on the image. There can be more than one author per markup file. A new layer is automatically created for each new markup file author (determined by the login user name), allowing them to see other authors' markups, but not edit them.

You can [create](#) new markups, open an existing markup for [editing](#), [overlay](#) one or more markups on its source document for review, or permanently [publish](#) markups and redactions to PDF, or TIFF output files.

What do you want to do?

- [Create Markups](#)
- [Open Markups for Editing/Edit Markups](#)
- [Overlay Markups for Review](#)
- [Close Markups](#)
- [Save Markups](#)
- [Publish Markups/Redactups](#)

7.3 Select Markup Entity

The Select Markup tool allows you to select entities to move, copy, resize, reshape, or delete.

1. Click  on the **Annotate** toolbar.
2. Once the tool is active, click on a markup entity to select it.
3. [Edit](#) the entity as desired.

7.4 Creating Markups

To enter Annotate mode and create a new markup file:

1. Click . You can also enter Annotate mode by clicking  on the task bar and then clicking **New** from the popup menu.
2. Select the desired markup tool from the [Markup Toolbar](#). Note that markup entities must be placed within a single page limit and cannot span multiple pages.
3. Once created, you can [save](#) your markup layer to be reviewed with the current file and/or [publish](#) the file as a new rendition in PDF or TIFF with the markup layer permanently overlaid.

7.5 Saving Markups

Markup files are saved as XRL files.

1. Once you have [created a markup](#) layer, click  on the task bar to summon the Save As dialog.
2. You can also summon a markup Save dialog by clicking  on the task bar and selecting **Save** or **Save As**.
3. Type a file name in the text box and click **OK**.



Usage Notes

- If markup entities are created or changed on the currently open file, and you attempt to leave annotation mode at any time before saving those markups, a prompt displays asking if you would like to save the markup file.
- HTML viewer cannot open older version markup files (created with previous Brava Enterprise versions).

See Also:

[Publishing Markups](#)

7.6 Closing Markups

To close the currently active markup:

1. To close an editable markup, click  on the task bar and select **Close** from the drop-down menu. You will be prompted to save the file before closing if the markup has not been saved yet or if changes have been made since the last save action.
2. To close markups that are opened for review, select **Close Review** from the review button drop down  and select the overlaid markups in the list that you want to close. If only one markup is opened for review, it is automatically closed. No markup list will appear.

Markups that have been [published](#) can never be opened or closed. They are permanently embedded into the published PDF or TIFF rendition.

7.7 Editing Markups and Redactups

You can edit (if you are the author) markup entities in the active (editable) markup file. You can create new markup entities or use the [Select Markup Tool](#) to select existing entities to resize, reshape, move, or delete. The Select Markup tool must be active when selecting and editing markup entities.

To open a markup file for editing:

1. With a document opened in HTML client (that has markup files associated that you have previously authored), click  on the task bar and select **Open...**
2. From the *Available Markup Files* dialog, select a previously authored markup file you wish to open. There can only be one markup file open for edit at a time. If a markup file is currently open, it is closed (with prompt to save if changes have been made) and the selected file is opened.
3. Click **Close**.
4. Click  on the **Markup** toolbar.
5. Click on the markup entity you wish to edit.

6. Edit the markup/redactup entities as desired. You can move, resize, delete, or reshape entities.
- Hold the left mouse button down on any of the 8 resize handles (to resize), or on the entity itself (to move), and then drag and release the mouse to set the new position.
 - To **delete** the selected entity, press <Delete> .
 - To **rotate** the selected entity, click near the green handle in the center of your entity. Drag the mouse in the direction you wish to rotate and release the mouse button to set the entity. For finer tolerance, the further away from the center the mouse is, the finer grained control you will have in rotating the entity.
 - To **change the shape** of a selected line or polyline entity, click on one of the independent edit handles (white boxes) or anchor points (black dots) and drag in any direction.
 - To **change the color** of the selected entity, choose a new color from the markup or redactup properties [color menu](#).
 - You can change selection of additional [markup properties](#) from various drop down selection boxes, such as line width, line styles, fill type, etc.
 - To add a [hyperlink](#), select the markup entity, click the add hyperlink button  from the markup properties, and type a URL from the hyperlink text box.
 - To edit a [Changemark note](#)'s text, editing must be done to the Changemark entity itself. The text cannot be edited directly in the Changemark note List pane. You can also add a [reply](#).
 - To edit a [Markup Text](#) annotation, double click on the entity and edit the text contained in the *Text Annotation* dialog's text field.
7. To close a markup file, click  and select **Close**. If you have made changes to the markup file, you are prompted to save those changes.

7.8 Publishing Markups

You can publish markups with any native files and output to PDF and TIFF format. This means that when the publishing action completes, the markups and resulting redactions, as well as the currently set banners and watermarks are burned into the newly created PDF or TIFF rendition and can never be closed or edited.

To publish markups:

1. Open a file and [create a markup](#) layer. You may also open one or more markup layers [for review](#).
2. Click **Publish** on the task bar.
3. All currently opened markup layers are permanently published with the file's content. When a user opens a file that has been published with markups, both the markups and document are automatically visible.

7.9 Markup Tools

7.9.1 Arrow Pointer

The Arrow Pointer tool  allows you to draw an arrow.

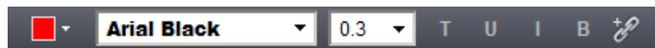
1. Press the left mouse button where you want the arrow point to begin, then drag and release the mouse where you want the line to end.
2. [Edit](#) the markup as desired. If the markup is not currently active, use the [Select Markup Tool](#) to pick it.
3. Select a line color, line style, and size from the [Properties](#) bar.

7.9.2 Markup Text Tool

7.9.2.1 Markup Text

Click  on the **Markup** toolbar to place text directly on the image (as opposed to in an annotation).

1. Click on the document in the location where you would like the text to begin.
2. Type or paste copied text into the *Text Annotation* dialog that appears. Press <Enter> at the end of each line if you would like to enter multiple lines of text rather than have the text appear as one long string. Click **OK**.
3. From the Markup Properties bar, select the desired font properties. You can [edit](#) the markup as desired. You can [change the font](#), style, [size](#), color, and [background](#) of the markup text box. You may use [tokens](#) in your text strings that dynamically update, or that prompt the user to update the string through an edit field dialog. You may also add a [hyperlink](#) to the annotation.



4. If the markup is not currently active, use the [Select Markup Tool](#) to pick it (single click). Note that markup text can only be selected and edited when the Select Markup Tool is active.
 - You can press the left mouse button and drag the text box to another location and you can adjust the font size using the drop down control on the Markup Properties bar.
 - To rotate the text, select the entity then click and drag the green rotation handle in any direction. For finer tolerance, the further away from the center the mouse is, the finer grained control you will have in rotating the entity.
 - To edit the text, with the Select Markup tool active, double click on the text annotation and edit the text that appears in the markup text dialog.

See Also:

[Markup Text Background](#)

[Markup Font/Size](#)

7.9.2.2 Markup Font

Change the font name, style, and size for markup text through markup properties tools. To change the markup text font:

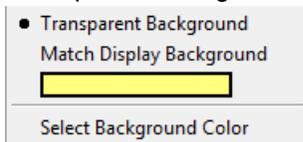
1. Select your desired options from the text properties toolbar. You can select the font name, size, and color. Use the **B**, **U**, and **I** buttons to apply Bold, Underline, and Italics to the font. The [markup text background](#) button **T** allows you to show the markup entity text box with transparent or filled background, or choose a custom color to use.
2. Click on the document where you would like to place the text and enter or paste text into the Text Annotation dialog text field.
3. Click **OK**.

Text annotation size: Font size values are a scale factor relative to the actual size of the drawing or document currently being viewed. This scaling allows the same font size value to work similarly in documents that are 8.5 x 11 inches and drawings that may be 200 miles wide in world-space height.

*Note that the Underline text annotation feature is not available in Firefox due to a browser limitation.

7.9.2.3 Markup Text Background

When the [Markup Text](#) tool is active , you can select the text box background type through the Markup Text Background tool **T** drop down menu. The following options are available:



Transparent Background - The background is transparent and all text and geometry is visible beneath the text box.

Match Display Background - This option changes the markup text background color to the document's default background color. The background is opaque and no text box border is displayed.

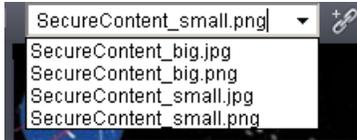
(Solid Color) - Displays the currently selected markup text background color (see below). When chosen, the background color is opaque with a solid border that matches the current markup text color.

Select Background Color - This option launches the markup text background color palette. You can choose a custom color from the **Color** chooser dialog. The chosen color will be used when **(Solid Color)** is selected from the tool's drop down menu.

7.9.3 Insert Image

You can use this tool to insert external images (JPG, GIF, or PNG) into your current markup or redactup layer. Once selected, images can be resized and positioned where you want them.

1. Click the  button and select an available image from the properties bar drop down list that you would like to insert. Images are created and provided by your administrator. The list is provided by the server and the contents correspond to a raster image directory in the Server install folder.



2. You can set the raster image by one of the following methods:
 - a. Left-click and hold in the window to set the first corner point of the image, drag the mouse to where you want to set the second point, and release.
 - b. Left-click on a point in the document where you want to center the image. The image is inserted into the document matching your orientation and is calculated to its natural size, relative to the document or drawing size.
3. The new entity can be [moved and resized](#) just like any other markup entity.
4. You can set multiple instances of this same image entity.

Image Special Considerations

Images (JPG, GIF, or PNG files) are created in an image editor for use with "Insert Image" Markup tool.

The following special considerations apply to the creation, use, and behavior of images :

- The image should be created in the desired size. The Viewer will not scale the image. If the image is created at 2 inches by 2 inches, it will be placed at that size on either a 36" X 48" sheet or an 8.5" X 11" sheet.
- Once created, the image files must be loaded to the server in a location available to the Job Processor.
- Black and white images have special behavior when viewed:
 - If an image is "black" and "white" only, the black pixels are drawn with the entity's current color and white pixels are drawn transparent.
 - What determines whether or not an image is considered color or black and white? The Viewer examines every pixel to determine if they are 0,0,0 (black) or 255,255,255 (white). The test has a tolerance of 60, meaning that a pixel is considered black if all of its values are within 0 to 60. A pixel is considered white if its values are all within 195 to 255.
 - If an image contains a third color, outside of the black/white tolerance, all colors are drawn opaque.

7.9.4 Markup Highlight



Creates highlight entities by having the user draw a rectangle anywhere on the current file.

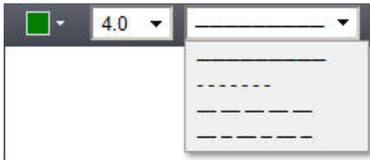
Unlike the filled shape entity, which can be set to highlight, filled or hollow, the new "highlight" entity is only a highlight. Color options can be selected as with any other markup entity. The entity created with

the highlight tool is essentially the same as creating rectangle entity  with a highlight fill, but there is no option to select or edit the fill type for highlight.

See Also:[Highlight Properties](#)**7.9.5 Straight Line**

The Line tool  allows you to draw straight lines in any direction.

1. If the markup is not currently active, use the [select markup](#) tool to pick it.
2. Press and hold the left mouse button where you want the Line or Arrow Pointer to begin, drag and release the mouse where you want the line to end.
3. [Edit](#) the markup as desired. The Line tool provides options for color, line style, and line thickness.

**7.9.6 Polyline**

The Polyline  tool allows you to draw a jointed line.

1. Click the left mouse button where you want the line to begin.
2. Move the mouse pointer to where you want the polyline's first vertex to be and click the left mouse button to set the point. Continue to left click until all points are set.
3. Double-click where you want the polyline to end to set the line.
4. [Edit](#) the markup as desired. The Line tool provides options for color, line style, and line thickness. If the markup is not currently active, use the [select markup](#) tool to pick it.

7.9.7 Crossout

The Crossout tool  is used to place an "X" over an area of the image.

1. Press and hold the left mouse button and drag the mouse pointer to draw the shape on the image.
2. Release the mouse button to set the entity.
3. [Edit](#) the markup as desired. If the markup entity is not currently active, use the [select markup](#) tool to pick it.

7.9.8 Solid and Hollow Shapes

The Solid Shapes group allows you to draw solid (filled) or hollow (unfilled) Rectangle , Ellipse , or Polygon shapes . Hollow markups render just the outline.

Select one of the above markup shapes from the [Markup toolbar](#) and select your desired options from the [markup properties](#) toolbar. Options include color and fill type (hollow, solid, highlight, or background fill).

For the Filled or Hollow Rectangle or Ellipse:

1. Press the left mouse button on a starting point and drag the mouse pointer to draw the shape.
2. Release the mouse button to set the entity.

For the Filled or Hollow Polygon:

1. Click the left mouse button where you want to set the first vertex of the polygon.
2. Move the mouse pointer to where you want the second vertex and click the left mouse button again.
3. Set any remaining vertices, and then click the left mouse button on the first point to set the entity. You can also double-click the left mouse button at the last vertex position and the Viewer automatically fills in the last line segment for you (connecting the last vertex point to the first).

[Edit](#) the markup as desired. If the markup is not currently active, use the [select markup](#) tool to pick it.

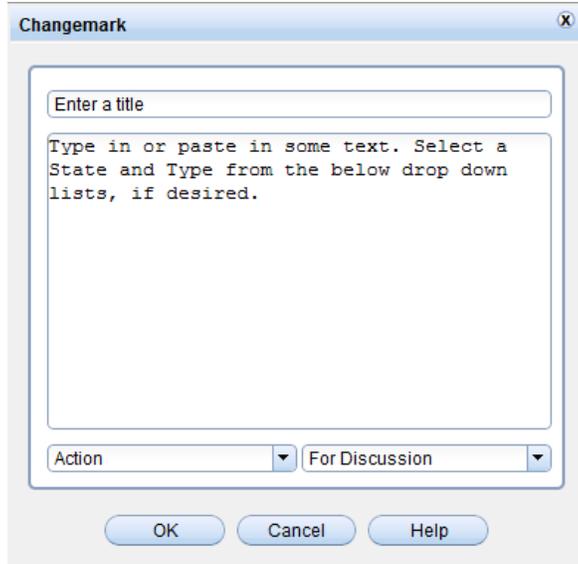
7.10 Changemark Notes

7.10.1 Creating Changemark® Notes

The Changemark® feature allows authors of markups to assign a placeholder and descriptive text and/or a hyperlink to a particular markup. All Changemark notes contained in the opened markup files appear in the Review Changemark tab. This allows reviewers to step through each Changemark annotation so no comments are missed.

From the [Changemark](#) tab, Changemark notes can be [filtered](#) by content, and sorted by author, title, date, type, state, position in the document, or by number of Changemark replies. Reviewers can enter into discussions by adding their comments using the Add Reply link at the bottom of the [Changemark discussion](#) panel.

1. To enter Annotation mode, click the Annotate button  or click  and select **New** to create a new markup layer.
2. Click  on the Markup toolbar to place a single Changemark note.
3. Draw the shape on the image by simply clicking on a location. A Changemark note of default size (50 pixels) is created at that location.



4. Enter the title of the Changemark note in the title text box, and then press <Tab>.
5. Type any descriptive text necessary (this entry is optional and can be quite extensive) in the scrolling window and click **OK**. (You can also copy text from the clipboard and select **Paste** from the right mouse button menu).
6. By default, the Changemark *Type* is set to **Action**, and *State* is **For Discussion**. You can set different [Types and States](#) from the available drop down lists, depending on if and how you are using Changemark in a [discussion](#) workflow. Click **OK** to close the Changemark text dialog.
7. Click **OK** to close the Changemark note dialog
8. You can [edit](#) the Changemark note's color, size, or position if desired. If the Changemark note is not currently active, use the [select markup](#) tool to pick it. Double-click the Changemark entity to edit its contents.

See Also:

[Reviewing Changemark notes](#)

[Filtering Changemark notes](#)

[Changemark Discussion](#)

[Editing markups](#)

7.10.2 Changemark® Discussion

The Changemark® Discussion feature adds the ability to respond to someone else's [Changemark](#) comment. When reviewing Changemark in Edit or Review mode, users can reply to any comment contained in the file and save the reply as a part of a Changemark discussion.

If the markup file being replied to has been opened for **edit**, the replies are saved in that same markup file and reviewers need to open only one associated markup to view the entire discussion.

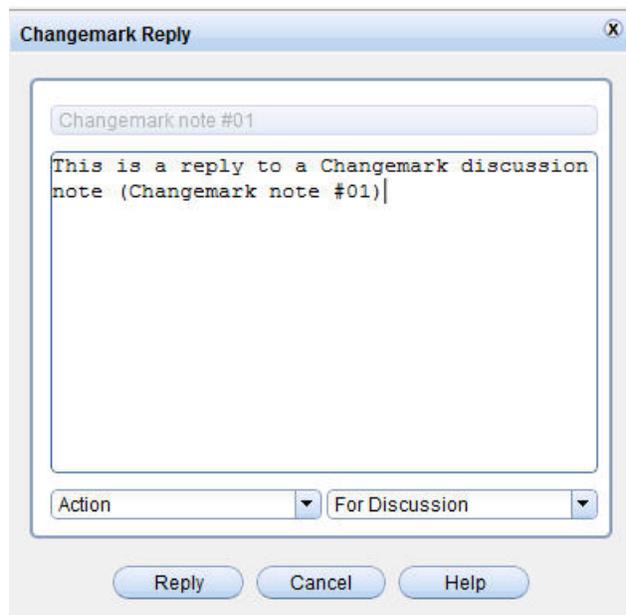
If the markup file being replied to has been opened in **review** mode, the Viewer will automatically create a new editable markup layer and only the Changemark reply is saved to that new markup layer, separate

from the parent markup. Reviewers will need to open both the parent markup file and all associated reply markup files that multiple reviewers have created to view the entire discussion.

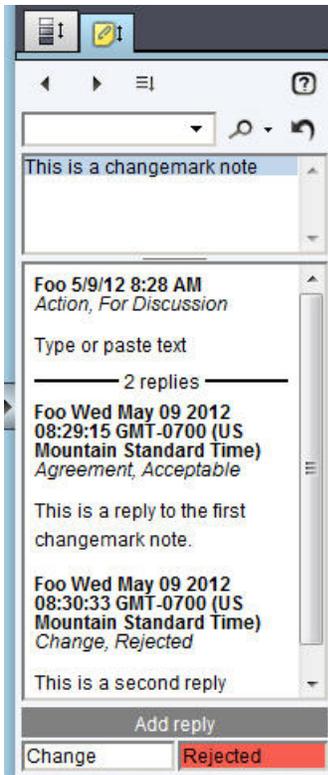
Along with the text content of the note, replies added to the discussion will display the author name, time and date stamp, and the [Type and State](#) assigned to that entry. When reviewing Changemark discussions, the type and state of the last entry is displayed as the current type and state at the bottom of the Changemark review panel.

To use the Changemark Discussion feature in Edit mode (recommended):

1. Open a file in the Viewer that you would like to start a discussion for, or that has an associated Changemark discussion already started.
2. If you would like to start a discussion, simply create a [new markup](#) file and [add a Changemark note](#). If you would like to view and reply to an existing Changemark note, click ->**Open** and select the markup file containing the Changemark note.
3. Select the Changemark note from the Changemark list panel that you would like to reply to and click the **Add Reply** link near the bottom of the panel.
4. In the *Changemark Reply* dialog, enter your reply in the *Reply* text field and select a Type and State (optional) and click **Reply** to commit your comment to the Changemark discussion. The selected type and state is persisted during the session, but not between sessions.



5. The discussion displays in the Changemark discussion panel along with all associated replies. The type and state of the last entry display as the current status. Note that the status can only be changed by adding a new reply. A different discussion thread is kept for each Changemark note contained in the file, and all associated discussions are saved and can be accessed through the one associated markup file.



6. If you have started or replied to a discussion in *Annotations* mode, Click  on the task bar to [save](#) the discussion as part of a new or existing markup layer. Reviewers need to only open the one markup file to view the complete discussion.

To use the Changemark Discussion feature in Review mode:

When a markup file is open for review, that means the markup is read-only and cannot be written to. Therefore, in these situations, any replies made to a review Changemark note must be made in an editable markup layer, which is created automatically and must be saved as a separate markup file. This fact changes the manner in working with Changemark discussions which is described below.

1. Open a file in The Viewer that has an associated Changemark discussion already started.
2. Click  and select the markup file containing the discussion.
3. Select the Changemark note from the Changemark list that you would like to reply to and click the **Add Reply** link near the bottom of the panel.
4. In the *Changemark Reply* dialog, enter your reply in the *Reply* text field and select a Type and State (optional) and click **Reply**.
5. The discussion displays in the Changemark discussion panel along with all associated replies of the review markup file. The type and state of the last entry display as the current status.
6. [Save](#) your reply as a new markup file. This file will contain only the reply objects or other markup entities that you have added and is kept as a separate markup file to the original parent markup containing the Changemark note.

Caution:

Note that if you close review of the current file, the editable reply markup is still open and needs to be saved, even though the reply text will no longer be visible without the presence of the parent markup.

You must assign this file a different name as the file that was opened for review. Assigning the same name will overwrite all of the existing markup file data with just your reply data. For ease of identification and manageability in your workflow, a suggested naming convention for these associated replies might be `<filename>_<username>_reply<001>.xml`

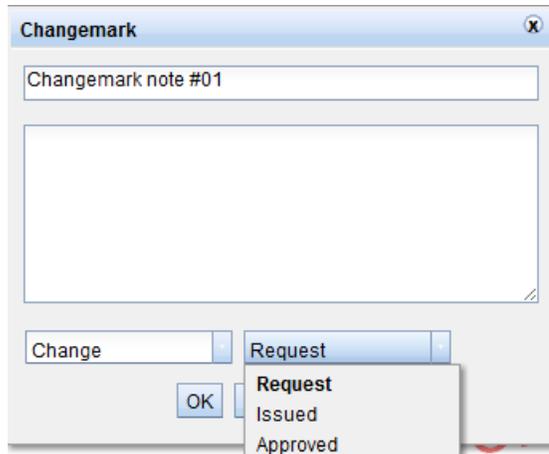
To view the entire discussion, users in your workflow will need to open the parent markup file containing the original Changemark note, as well as all associated reply markup files created by other users in review mode. If only the associated markup files are opened, without the parent, no replies will be visible and the markup file(s) will appear to be blank.

7.10.3 Changemark® Types and States

Used in the Changemark® Discussion Panel, *Type* and *State* are attributes that can be assigned to the original Changemark content and to each reply that is added to a discussion. These Types and States are displayed for each Changemark note contained in the Changemark List, at the bottom of the panel. In a [Changemark discussion](#), only the type and state for the last entry (reply) of the discussion displays as the current Type/State. The Type/State that was assigned for each post is reflected in the text of the discussion thread, right below the author and time/date stamp.



When [creating a Changemark note](#) or replying in a Changemark discussion, drop-down lists are available for selecting the Type and State. After the *Type* is selected, the *State* drop-down will show only the States associated with the currently selected Type.



The Changemark dialog will initially select the Type/State marked as the default type in *ChangemarkConfig.xml*.

The following Types and States are set in your default installation, but these values can be customized by an administrator, by editing the *ChangemarkConfig.xml* file in the installed HOMEPATH "`<user profile>\IGC\x7_<version>`" directory. In addition, administrators can set custom colors for each entry by specifying the RGB color values for each corresponding State listed in the file. The Type, State, and color information that is defined when you create the Changemark note (or reply to a Changemark note) is saved in the markup file and can be reviewed by other users.

Type	State	RGB Value	Color displayed
Action	For Discussion (default)	193,235,255	Light blue
	An Idea	95,255,150	Light green
	Investigate	255,190,110	Orange
	Typo	255,205,160	Light orange
	Revision Error	255,250,180	Light yellow
Change	Confirm	180,140,200	Light purple
	Urgent	255,90,80	Red
	Request (default)	195,235,255	Light blue
	Issued	255,255,255	White
	Approved	95,255,150	Light Green
	Rejected	255,90,80	Red
	Superseded	0,0,139	Dark Blue
	Released	0,0,0	Black
	Verified	180,140,200	Light purple
	Completed	0,0,0	Black
Agreement	Closed	100,200,255	Blue
	Notice	0,0,0	Black
	Acceptable (Default)	95,255,150	Light Green
	Can't do	0,0,0	Black
	Carve out	255,250,180	Light yellow
	Typo	255,90,80	Red

	Discuss Further	195,235,255	Light blue
	Make Reciprocal	195,235,255	Light blue
	Reword	255,90,80	Red
Issue	Undetermined (Default)	195,235,255	Light blue
	Critical	255,90,80	Red
	High Priority	255,230,95	Yellow
	Med Priority	255,240,215	Light peach
	Low Priority	195,235,255	Light blue
	Closed	0,0,0	Black
Status	Investigate (Default)	195,235,255	Light blue
	Pending	195,235,255	Light blue
	Working	195,235,255	Light blue
	Review	195,235,255	Light blue
	Completed	0,0,0	Black
	Closed	0,0,0	Black
Missing	Approval (Default)	255,90,80	Red
	Signature	255,90,80	Red
	Account No	255,90,80	Red
	Verification	255,90,80	Red
	Amount	255,90,80	Red
	Address	255,90,80	Red
	Other	255,90,80	Red
Project	Concern (Default)	195,235,255	Light blue
	Deliverable	195,235,255	Light blue
	Cost/Benefit	195,235,255	Light blue
	Feasibility	195,235,255	Light blue
	Resources	195,235,255	Light blue
	Estimate	195,235,255	Light blue
	Scheduling	195,235,255	Light blue



Usage Notes

- If a user's configuration file defines state "X" to be colored green, but the markup entity they are reviewing has "X" defined as blue, the state background will appear blue. This occurs when different users have different types and states defined.
- The State font color is normally black. If the background color for the State has a luminance less than 80, the state will display using a white font.

7.10.4 Changemark® Filters

On the Changemark® [panel](#), you can filter Changemark notes by content and review the results sorted by title, author, date, type, state, position in the document, or number of replies.

7.10.4.1 Filter by Content

You can filter the Changemark list by a word or phrase appearing in the Changemark's title or description. Only the Changemark notes containing the requested word or phrase will display in the Changemark list when the search is executed.

To filter Changemark notes by text content that appears in either the Changemark title or description, type the word or phrase in the Search text box and click  (you can turn on *Whole Word* or *Match Case* filters by selecting one or both of these options through the search arrow drop down menu).

Changemark Search Content Options:

Cumulative - if checked, searches only within results of previous search. If unchecked, the search will query all Changemark in the document.

Match Case - searches for the text exactly as typed with upper and lower case characters.

Whole Word - finds the typed characters as an entire word as opposed to being part of a longer word.

Term Hit - if checked, search terms will appear highlighted yellow in the results.

7.10.4.2 Sort by Attribute



Included in the Changemark panel is a drop down menu  that will sort the current Changemark results by "Title", "Date", "Author", "Type", "State", "Position", or "Replies". Selecting one of these commands sorts the currently available Changemark notes by that attribute and displays the resulting list in ascending order.

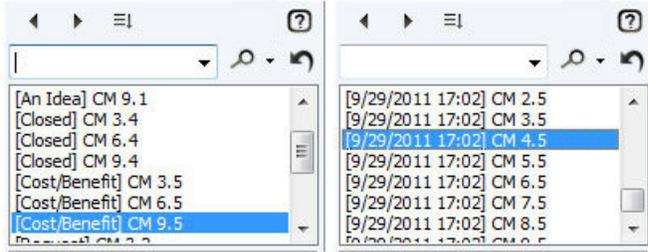
The **Date** attribute sorts the Changemark notes by their creation date, unless a reply is present. In that case, the time stamp of the latest reply (rather than time stamp of the original Changemark creation) is used to determine order of the Changemark.

For information about **Type** and **State** filters, see [Changemark Types and States](#).

Position sorts the Changemark notes in the order that they appear in the document pages.

When a Changemark discussion exists, you can use the **Replies** attribute to sort by the number of replies that are contained in each Changemark discussion.

To assist with visibility, when sorting Changemark notes, the resulting list displays (in brackets) the current sort criteria, followed by the Changemark title. For example, State filter results would appear as *[State] Title*, or Date would appear as *[Date] Title*:



To return to the list of all Changemark associated with a file, click the *Show All* button .

The Changemark panel shows the details for the currently selected Changemark note. If you select a Changemark note in the viewing window (using the Select tool), the details for that Changemark note are shown.

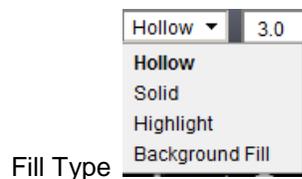
See also:

[Reviewing Changemark notes](#)

7.11 Markup Properties

7.11.1 Markup Properties Tools

The markup properties toolbar is available when creating or editing markup files. You can edit the available markup properties individually or to a group of entities. Use the [Select Markup](#) tool to pick and edit one or more markup entities.



Fill Type

The Fill Type properties are only available for the Rectangle, Ellipse, and Polygon tools.

[Solid](#)

[Hollow](#)

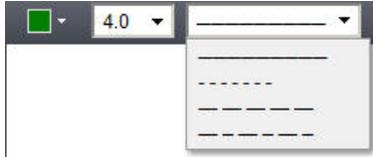
[Highlight](#)

[Background Fill](#)

The [Insert Image](#) tool provide a drop down list in the Properties toolbar of available image and stamp files.

7.11.2 Line Style and Width

You can change the line width of existing markup lines. If the markup is not currently active, use the [select markup](#) tool to pick it. Change the style and width of markup lines by using the Line Style and Line Width tools:



Select a new line style and line width (from 0-10) from the drop down boxes when available from the [Markup properties](#) toolbar.

7.11.3 Highlight Properties

This property allows you to draw translucent shapes. Highlights can be selected from the drop down menu as a property for the Rectangle, Ellipse, and Polygon tools.

Select one of the above markup shapes from the [Markup toolbar](#) and select your desired options from the [markup properties](#) toolbar.

For the Rectangular or Elliptical Highlight tools:

1. Click and hold the left mouse button and drag the mouse pointer to draw the shape.
2. Release the mouse button to set the entity.

For the Polygon Highlight:

1. Click the left mouse button where you want to set the first vertex of the polygon.
2. Move the mouse pointer to where you want the second vertex and click the left mouse button again.
3. Set any remaining vertices, and then click the left mouse button on the first point to set the entity. You can also double-click the left mouse button at the last vertex position and The Viewer! automatically fills in the last line segment for you (connecting the last vertex point to the first).

[Edit](#) the markup as desired. If the markup is not currently active, use the [select markup](#) tool to pick it.

7.11.4 Markup Color

You can change the color of any markup entity, including [redactups](#), using the 12 predefined markup colors. You can also select from a wider range of colors by selecting the "More" button from the markup color list. This summons a color chooser dialog box containing a wide range of color options. Each markup can be a different color and it can be changed at any time.

To change the markup color, click  on the [markup properties](#) toolbar when available and select the new color from the drop-down. Click **More...** to access the custom color dialog.

7.11.5 Background Fill

Background fill is the same color as the current image background color however, it is white when printed. Background fills cover the designated area giving the impression that the area has been hidden; note however that this information is not truly hidden since any text underneath the fill can be searched or copied, or, if the background fill is not part of a published markup, the markup can be closed. To truly block out information, a markup containing redactup entities needs to be published.

Background fills can be used to allow extra space for comments and other markups. They can be selected from the drop down menu as a property for the Rectangle, Ellipse, Polygon, and Sketch Polygon tools. Select one of these markup shapes from the Markup toolbar and select your desired options from the markup properties toolbar.

To draw a Rectangular or Elliptical Background fill:

1. Click and hold the left mouse button and drag the mouse pointer to draw the shape.
2. Release the mouse button to set the entity.

For the Poly Background fill:

1. Click the left mouse button where you want to set the first vertex of the polygon.
2. Move the mouse pointer to where you want the second vertex and click the left mouse button again.
3. Set any remaining vertices, and then click the left mouse button on the first point to set the entity. You can also double-click the left mouse button at the last vertex position and the Viewer automatically fills in the last line segment for you (connecting the last vertex point to the first).

Edit the markup as desired. If the markup is not currently active, use the select markup tool to pick it.

7.11.6 Hyperlinks

A hyperlink contains a pointer to a text, image, sound or video file or a web address. When you launch a hyperlink contained in a Changemark or markup entity, the application associated with that file type is automatically launched and the specified file is loaded. If the hyperlink references a web address, the default browser is launched and goes to the specified URL.

7.11.6.1 Add a hyperlink

You can attach a hyperlink to a [Changemark note](#) or to any [markup](#) entity.

To [edit](#) a Changemark or entity to add a hyperlink, click  to select the entity and then click  to enter a specific URL in the text box. Only one hyperlink URL can be assigned to each markup object. In the case of Changemark notes, any URL entered into the Changemark text field will automatically become an active hyperlink in the Changemark panel and can include multiple URLs. In addition, URLs added to the panel in [Changemark Discussion](#) mode will also be active.

7.11.6.2 Launch a hyperlink

To launch a hyperlink from within a HTML Client window, use the select tool  to move the cursor over an entity containing a hyperlink (pointer changes to a hand) and left-click.

To launch hyperlinks contained in Changemark, open the [Changemark panel](#) and click on any active hyperlink (indicated with underlined blue text). The URL will launch in a separate browser window.

Note that administrators can specify through a parameter how hyperlinks launch in the viewer.

default launches each document in its own separate window

one launches all documents in a separate window as the Viewer

self launches documents in the frame (if frameset present) that the Viewer is in.

top launches documents in the same instance of the browser window replacing its current contents.

7.12 ActiveX Markup Compatibility

HTML Viewer supports a limited subset of annotations created with the ActiveX product line. Supported entities can be opened for edit (if you are the author) or for review in HTML. Additional markups can be created and saved in HTML viewer as a new markup file, which can then be loaded in any ActiveX product if desired.

Supported annotations that can be rendered and authored include the following:

- Arrow (including Byzantine)
- Changemark
- Crossout
- Ellipse
- Highlight
- Raster stamp
- Line
- Polygon
- Polyline
- Rectangle
- Text
- Redaction (but no peekthroughs)

The following ActiveX annotations are not rendered in the HTML viewer if they exist in a markup overlay, but will be exported and printed.

- Rounded rectangle
- Squiggle
- Stamps
- Sketch
- Cloud
- Arc
- Scratchout
- Strikethrough
- Text Highlight
- Text Underline

Note that in the [Thumbnail](#) view panel, the HTML Viewer will display the (!) symbol next to each page containing existing entities regardless of whether or not it can render the entity. This serves as a notification that when exporting the file to PDF or TIFF, an unsupported entity that can't be seen may be burned in to the published file.

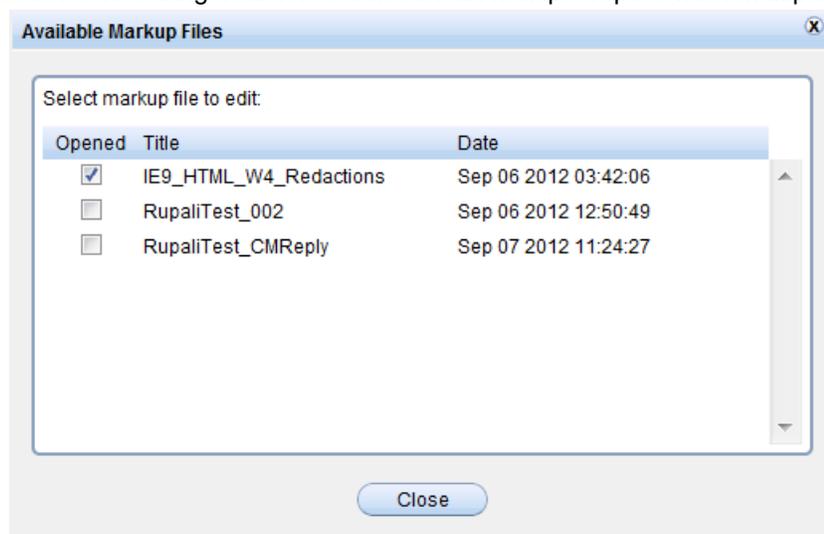
8 Review

8.1 Overlay Markups for Review

Though an image file can have only one editable markup associated with it, there can be multiple overlaid, or read-only markups attached. Markups opened for review cannot be edited, but one or more overlaid markup layers can be permanently [published](#) with the current file, along with any newly created markup layers, as a new markup. If markup layers have been published to the current file, then those burned in markups (including any Changemark® notes and [discussions](#)) are now part of the current file and cannot be opened or closed independently.

1. Click **Review** and then select one or more available markup files from the *Available Markup Files* dialog.
2. Click **Close**.

Changemark discussion note: If users in your workflow have replied to existing discussions while in Review mode, their replies will have been saved as associated markup files (because the review markup is read-only). The original markup file containing the Changemark discussion and all associated reply markup files will need to be opened for review to view the entire conversation when selecting the original Changemark note from the list. The replies will reside in the original markup file if the user has replied while in edit mode. One Changemark note can contain multiple replies from multiple authors.



3. To step through each page that contains [Changemark notes](#), from the Review drop down, select **Next Changemark Note**. If a Changemark note is found, the Changemark panel becomes the active panel of the [Task pane](#), which opens automatically if currently closed. You can use the next and previous arrow in the Changemark panel to navigate through the open Changemark notes.
4. In markup review mode, you can review and reply to any [Changemark discussions](#) that exist.
5. To close a markup file that is currently open for review, select **Close Review** from the Review button drop down menu. If only one file is open for review, it is automatically closed. If more than one file is opened, the *Available Markup Files* dialog displays where you can specify which files you wish to close. Deselect the check box in order to close the markup file and then click **Close** to close the dialog
6. If you have added replies to a [Changemark discussion](#) while in markup review mode, an editable markup layer will have been created to contain the associated reply data (since the review markup is

read only). The reply layer remains open and unsaved even after you have closed the review markup (though now you will not be able to see the data). You will need to save the reply markup with a unique file name and this new reply file will need to be opened by reviewers along with the markup file containing the associated Changemark note to be visible.

8.2 Review Changemark® Notes

You or subsequent reviewers can view a list of all the Changemark® notes associated with a document through the Review Changemark panel. The panel shows the detailed information (content, author name, timestamp, date, type, and state) about the Changemark that you have selected to review from the list or from the viewing window. Any replies to that Changemark note are also listed in chronological order. If you are reviewing Changemark notes that you authored in the active markup file, you can also edit the Changemark.

1. Open the image with the appropriate markup open or overlaid (Click  and select one or more available markup files from the *Available Markup Files* dialog).

Changemark discussion note: If users in your workflow have replied to existing discussions while in Review mode, their replies will have been saved as associated markup files (because the review markup is read-only). The original markup file containing the Changemark discussion and all associated reply markup files will need to be opened for review to view the entire conversation when selecting the original Changemark note from the list. The replies will reside in the original markup file if the user has replied while in edit mode and one Changemark note can contain multiple replies from multiple authors.

2. From the  drop-down menu, select **Review Changemark Notes**. The Changemark panel becomes the active panel of the [Task pane](#), which opens automatically if currently closed.
3. Existing Changemark notes can be sorted by title, author, date, type, state, or position by selecting the appropriate sorting order  from the drop down list. Position sorts the Changemark note in the order that they appear in the document pages.
4. You can [search and filter](#)  Changemark notes by content and/or title by entering a word or phrase in the search text box. (Click Show All  to return all Changemark notes to the list.)
5. Click on a resulting Changemark note that you wish to view. The original Changemark text displays in the panel's lower frame, including any [discussion](#) replies that have been added. The current [type and state](#) of the Changemark note are displayed at the bottom of the panel



Note that if replies are present in opened markups, but the markup file containing the associated Changemark note is not open, the reply will not be displayed in the pane. You must select the original Changemark note that contains the discussion and all associated replies that exist in the currently overlaid markup files will then display in the Changemark panel.

6. You can progress sequentially through the Changemark notes by using the **Next** and **Previous** arrow buttons . You can also step through Changemark notes by selecting **Next Changemark Note** and **Previous Changemark Note** from the Review drop down..
7. In markup review or edit mode, you can enter into any active [discussion](#) from the Changemark panel by adding a reply (click *Add Reply*). When a reply is submitted for a Changemark note opened in review mode, a new editable markup layer is created (if one is not currently open) where the reply information is stored.



Usage Notes

- Using Acrobat, you can review Changemark notes information that exists in files that have been [published](#) to PDF if Append Changemark notes was chosen as a publishing option.
- If the published file is PDF format, Changemark notes appear as PDF comments when viewed in Acrobat if the "Insert markup as PDF Comments" option is selected in the publish dialog.

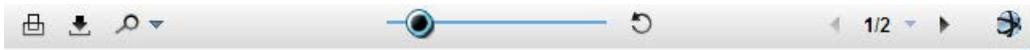
See also:

[Creating Changemark Notes](#)

8.3 Simple View

The HTML viewer can launch using alternate HTML pages. The *simple-black.html* and *simple-white.html* launch pages can be used to review documents in a simplified view interface. This interface presents a streamline viewing toolbar offering only [Print](#), Download (see below), [Search](#), [Zoom](#), [Rotate](#), and [page navigation](#) tools.

Simple-white toolbar:



Simple-black toolbar:



8.3.1 Download Document



Available only from the two simple view interfaces, the Download document button allows you to download the current file to a directory on your local system.

If the document path is set in the `GetSignedConfig(jsp or aspx)` file, and the download parameter is set to True, the Download button will be available on the HTML Viewer simple interface toolbars.

9 Redact

9.1 About Redaction

About Redaction: Enterprise software allow users to designate a [markup](#) file containing redactup entities (rectangular solid covers to mark an area for redaction) to be published with the file as a redacted document rendition (as a PDF or TIFF output file). This means that the redactions associated with the [published](#) document can never be edited or removed by the end-user and the text and images beneath the redactup entities can not be viewed, copied, or searched. Redactions are used to conceal sensitive information for legal, financial, privacy, and security reasons, for example.

The following redaction tools are available through the [Redaction toolbar](#) which displays when you click



[Redact Area](#)

[Redact Text](#)

[Find and Redact](#)

To redact a document:

1. Open a file you would like to redact and use any of the redaction tools listed above to place your redactup entities.
2. Verify your redactups to be finalized.
3. [Finalize](#) the file as a redacted PDF or TIFF version for distribution. (You can optionally [publish a Draft](#) version to be circulated for review.)

Redactions can never be exposed on published PDF and TIFF files. The file will open, but any redactup entities remain opaque and areas (including any searchable text) beneath them are permanently removed. You cannot turn off the visibility state of a markup or redaction layer that has been published as a redaction.

9.2 Glossary of Terms

Throughout the redaction portion of this user guide, you will see the following terms used. This page provides a brief description of each:

Redactup

A marked area (transparent rectangle) on a document that will result in a Redaction when finalized.

Redaction

A Redactup that has been finalized into a "Redaction" that results in opaque cover up and content removal.

Redact

The action of creating a Redactup.

Verify

The act of manually reviewing (and editing, if needed) each redactup that has been placed on a document before finalizing the redactions through publishing.

Finalize

The act of publishing a file that has marked areas (redactups) for redaction. Text under redactups will be removed upon finalize and redactups will become redactions.

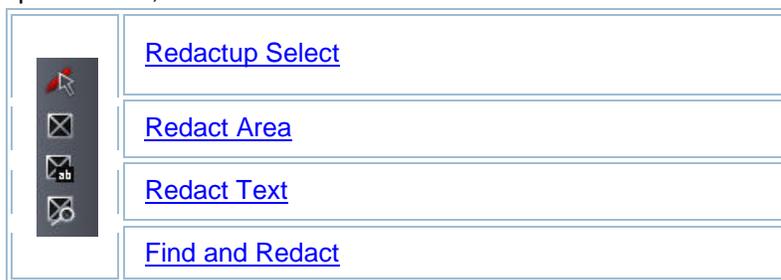
Draft

The act of publishing a PDF draft of proposed redactions for distribution and review before finalizing.

9.3 Redaction Toolbar

The vertical **Redaction** toolbar is available when the Viewer is in Redact mode and contains related groups of redaction tools. (The redaction tools are only available if your Server Administrator allows and enables this feature.)

From top to bottom, the tools are:



Additional menu options available from the **Redact** button include:

- [Finalize Redactions and Publish](#) (PDF/TIFF)
- [Publish Review Draft As](#) (PDF/TIFF)

9.4 Redact Area Tool

The Redact Area tool  allows you to manually place one or more rectangular covers over areas of a sensitive or confidential document to block only certain portions from being viewed, searched, or copied after the file is published to [PDF](#) or [TIFF](#).

To create a Redact Area entity:

1. Open a document containing text or images that you would like to redact.
2. Click **Redact**  from the task bar to display the Redaction toolbar.
3. Click the *Redact Area* tool  from the Redaction toolbar.
4. Click and hold the left mouse button and drag the mouse pointer to draw the rectangular shape on the image.
5. Release the mouse button to set the entity.
6. Enter a [reason](#) for the redaction in the Reason text field, if desired. A list of recently used reasons is available in the Reason drop down.
7. [Edit](#) the redactup as desired, including changing its [color](#). If the redactup is not currently active, use the [Select Markup](#) tool to pick it.

8. It is recommended to manually review and verify the redactups before publishing a finalized redacted version.
9. To complete the redaction, the markup must be published as a redacted version of the current file, otherwise the redactups will just remain as transparent entities. Select **Finalize Redactions and Publish As** from the  drop down menu and select your publishing options. See the [Finalizing](#) topic for help with publishing redactions.

See Also:

[Publishing Markups](#)

9.5 Redact Text Tool



The Redact Text tool allows you to manually place a redactup over a section of selectable text. Unlike the Redact Area tool, image areas are not included in the selection. Use the Redact Text tool to directly select text to redact or redact all like instances of a selected word or phrase.

To create a Redact Text entity:

1. Open a document containing text that you would like to redact.
2. Click the Redact Text tool  from the Redaction toolbar.
3. Select a [reason](#) for the redaction if desired or required.
4. To select text for redaction, click and hold the left mouse button and drag the mouse pointer directly across the text you wish to redact. Consecutive lines of text are selected if you drag the cursor straight down a page. **Note that selecting a single word or term will find and select for redaction all like-terms contained in the document.**
5. Release the mouse button to set the entity. The currently selected reason is applied.
6. Once the redactups are created, they are all independent and any [changes](#) made to one does not affect other redactups. Note that the [Undo](#) command undoes all the redactups made with this tool at once.
7. To complete the redaction, the redactups must be finalized and published as new PDF or TIFF file version; otherwise the redactups will just remain as transparent entities. See [finalizing](#) redactups.

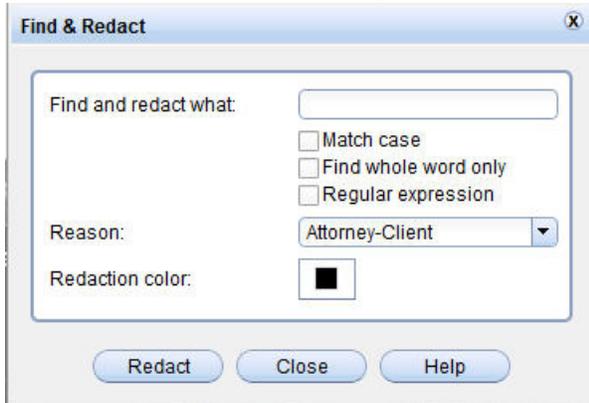


Usage Notes

- When the tool is active, selected text is automatically searched for, and like instances are redacted, throughout the document - whether that be one word, or an entire paragraph.
- The tool will not redact your text selection if it is only 1 character long.
- If your text selection is 2 or 3 characters long it will perform the search with "match case" enabled, otherwise, it will perform the search with "match case" disabled.
- If your selection contains whole words, and the first and last character are not punctuations, then it will perform the search with the "whole word" option enabled, otherwise, it will perform the search with the "whole word" option disabled.
- A character will only be included for selection and redacted if its center point is captured.

9.6 Find & Redact

This tool lets you run a command, for just the open file, that finds and marks for redaction multiple instances of a common word or phrase simultaneously.



1. Click  from the task bar to display the Redaction toolbar.
2. Click the Find & Redact tool  from the toolbar.
3. Enter a find phrase in the text field of the Find & Redact dialog. Search wildcards are supported in the string to find and redact.

Find and redact what:

4. Use the **Find whole word only** option to find the typed string as an entire word as opposed to characters that are part of a longer word. Example, "state" finds only instances of "state" and ignores "stated", "statement", "estate", etc. This option is disabled when *Regular expression* is selected.
5. Select **Match case** to specify searches for the text exactly as typed with upper and lower case characters.
6. Enable **Regular expression** to perform simple regular expression searches without the need to learn advanced syntax. Once checked, the contents of the "Find and redact what:" text box is interpreted as a regular expression, as if the user had prefixed the search term with the regex:: search mode modifier. This option facilitates simple wildcard matching. If not selected, search uses classic search algorithms. See examples below.
7. You can click the **Redaction color** box to summon a limited color selection panel. For additional color choices, clicking *More..* prompts a standard Windows color selection dialog.
8. Optionally, you can enter a [reason](#) for redaction in the Reason text field. You can use common exemption codes as reasons.
 - If this field is populated, the phrase is added as a text attribute to the redaction and displays on top of the redacted rectangle entity when the file is published. Reason codes can be included as a summary page in the published and printed output.
9. Click **Redact** to find and redact all phrases that match the redaction find string.
10. A dialog appears informing you how many instances were found and marked for redaction. Click **OK** to return to the *Find & Redact* dialog.
11. Select **Close** to exit, or adjust the text string and perform another Find & Redact action.

12. To complete the redaction, the file must be published as a redacted version of the current file, otherwise redactups will just remain as transparent entities. Select **Finalize Redactions and Publish As -> (PDF or TIFF)** from the  drop down menu and select your publishing options. See the [Publishing](#) topic for help with publishing markups. You should also verify the redactups that were set before publishing a redacted version.

Raster/graphic text is not handled by the find and redact functions. It is strongly recommended to manually review any bulk redactions for accuracy as extra spacing and line wrapping may cause phrases to not be recognized by the Find text commands.

9.7 Redaction Reasons

When using the [redaction tools](#), you can optionally assign a redaction reason code to each redactup entity placed on the document. Each entity can have a different reason code, if you so choose. Common exemption codes can be used as reasons. Reasons are entered and persisted in the users *Reasons.ini* file, or the field can be configured to use an integration URL to a custom reason code file. If a custom reason file is used, only the reasons from the drop down list may be selected and users may not manually type in new reasons.

If enabled manually, reasons are entered in the current redaction tool's *Reason* text field (found in the tool's properties bar or dialog). If a new reason is entered, the reason is assigned and added to the drop down list upon hitting <enter>. The last reason used is persisted between sessions.

9.7.1 Printing Redaction Reasons

If Redaction Reasons are associated with any redactup entities contained in a document you are printing, the **Print redaction reasons** check box can be selected in the Print Options dialog. When selected, the content associated with each Redaction Reason will print at the end of the print job as a separate summary sheet. Each reason receives a unique number that can be matched up to the text printout. Printed information includes the Redaction Reason string, author, date and time authored. Text that is too long for the area is first sized to fit, then truncated if it is still too long.

9.8 Finalizing Redactions

You can publish redactions and output to TIFF or PDF format. This means that when the publishing action completes, the redactups and resulting redactions, as well as the currently set banners and watermarks are included within the newly created file and can never be closed or edited.

Before producing a final redacted version of the file, you can optionally produce an unredacted [PDF or TIFF draft](#) of the proposed redactions to be distributed for review purposes only.

To finalize redactions:

1. Open a file and [create a markup](#) or [redactup](#) layer. You may also open markup layers [for review](#).
2. If you have placed entities for redaction, you should verify your redactups before publishing the file as a redaction.

3. Click the **Publish** drop down arrow on the task bar and select a publishing output format: **Publish to PDF** or **Publish to TIFF**. When publishing redactions, you can select **Finalize Redactions and Publish as --> PDF (redacted)** or **TIFF(redacted)** from the  drop down menu.
4. All currently opened markup layers are permanently published with the file's view. If the editable markup contains redactup entities, the markup layer is automatically published as a [redaction](#). Redacted files are renditions of the original file that have had all sensitive or proprietary information securely and permanently removed and can be used for outside distribution.
5. Select your publishing options for the desired output format and choose a destination location.
6. When a user opens a file that has been published with markups or redactions, both the markups and document are automatically visible.

Publishing of Markup Entities

Markups that don't contain redactup entities can be published with the current file to a PDF or TIFF file and any markup that is opened for review or edit is stored. The output file is a snapshot of the current view as a new file with markups permanently overlaid.

Publishing of Redactup Entities

Markups that contain redactup entities are published (finalized) to the output PDF or TIFF file for the purpose of redaction. A redaction processes these entities to disallow viewing, copying, or searching of concealed text.

Once a redactup contained in a markup layer has been published as a redaction (except in the initial view after publishing, where an [Undo](#) of the finalize redactions can be performed), no mechanism exists for you, as the author, to edit or remove that redaction.

When a user opens a published file that has markups and/or redactions, both the markups and document are automatically visible. Published markup layers cannot be closed, however, they can be printed and [reviewed](#).

When publishing redactions as [TIFF](#) and [PDF](#) files, you can choose whether or not to include the [redaction reason](#) code summary as an appended page.

See Also:

[Redaction](#)

[Publishing Review Drafts](#)

9.9 Publishing Review Drafts

Before [finalizing](#) a document for redaction, you can publish a PDF or TIFF draft version of the current document for review purposes. The redactups on review drafts remain transparent and allow you to review what will be redacted (with complete reasons) on the finalized document. The draft is merely a distributable snapshot of what is currently selected for pending redaction. To create a PDF/TIFF with true redactions, use the Finalize option.

To publish a review-only draft:

1. [Create a redactup](#) for the file you would like to publish as a review draft.
2. From the **Redact** drop-down menu , select **Publish Review Draft As**.

3. Select **PDF (unredacted)** or **TIFF (unredacted)**.
4. Select your PDF or TIFF Draft publishing options and click **Publish**.

When a PDF review draft is opened in Acrobat, the redaction reasons display in Adobe comments (Author/Reason) for quick review. (In the order they appear on the document, not by time stamp.)



Usage Notes

- When a review draft is opened in the Viewer, the redactions contained in the draft cannot be selected, edited or finalized. They are now part of the PDF file.
- The original redaction file (.xrl) is the working draft which can be verified and finalized at any time.
- [Reason codes](#) contained in a draft do not display on the review draft entities until the file is finalized.
- If the currently loaded file has already been finalized for redaction, the *Publish Review Draft As* menu item is disabled. Finalized redactions cannot be published as a review draft. However, you can close and reload the document along with the markup file containing the redactions in order to publish a draft.

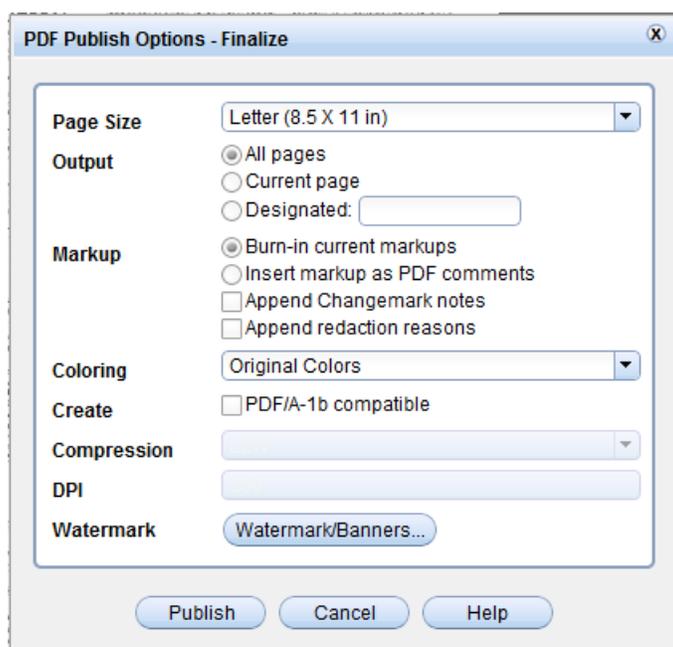
10 Publish

10.1 Publishing Files to PDF

Enterprise HTML Viewer allows you to publish the currently viewed file (with or without open markups) to either PDF or TIFF format.

To publish to PDF:

1. Open a file you would like to publish.
2. Click the drop down arrow on **Publish** and select **Publish to PDF**



3. On the **Publish** options dialog, select your desired publishing options:
 - a. In the *Page Size* section, select a size from the drop down box to force the PDF output to fit a particular paper size.
 - b. In the *Output* section, select whether to publish **All pages**, **Current page**, or you can enter **Designated** pages as page numbers or dashed page ranges separated by pipes. For example 2|5|6|10-14|18 publishes only the 9 pages specified, in the order entered.
 - c. In the *Markup* section, select how you would like to handle processing markups on the file:
 - o Select **Burn-in current markups** to permanently burn in any open markups into the published output. They become a permanent part of the document image and are not PDF comments. Changemark notes are always transferred over as PDF Comments to allow the Changemark details to be reviewed with other PDF viewers.
 - o Select **Insert markup as PDF Comments** to save any open markups as PDF comments. If markups are saved as PDF Comments, they can be altered from Acrobat Professional.
 - o If Changemark notes are associated with the document, you can select to **Append Changemark notes**. When selected, the content associated with each Changemark note will print at the end of the print job as an appended page. Only the Changemark notes that fully appear in the printed output page will appear if the output page is a zoomed view. Each

note receives a unique number that can be matched up to the text printout. Printed information includes the Changemark title, author, date and time authored, the note content, discussion details, and any hyperlink reference.

- o If redaction entities exist in the current document, and reasons have been set, you can choose to append [redaction reasons](#) summary pages by selecting **Append redaction reasons**. When the published PDF file is viewed, the redacted entities display text with numbered references corresponding to each reason listed in the summary page.
 - d. In the *Coloring* section, select how you would like to handle publishing colors in the file for both the Document and markup layer(s):
 - o "Original Colors" -publishes with original colors
 - o "Grayscale" - publishes in shades of black to white
 - o "Lines as black" - publishes all lines black
 - e. In the *Create* section, you can choose whether to create **PDF/A-1b compatible** file.
 - f. In the *Watermark* section, you can also choose to include *Publish* [watermarks and banners](#) in your published PDF file by setting these through the **Watermark/Banners...** button.
4. When you have chosen your desired options, click **Publish**.
 5. When publishing is complete, you are given the option to download and view the published file in your browser's default PDF viewer.

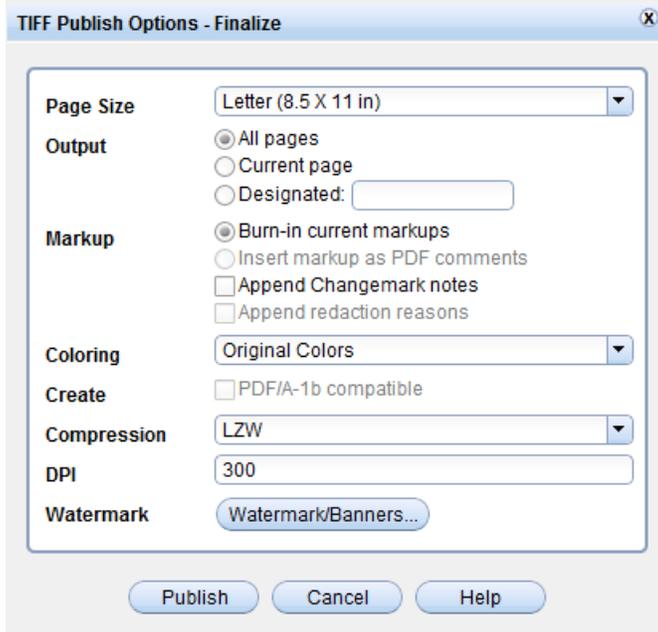
The selected pages, including any open markup layers, are published to PDF - not just the current view. Additionally, any banners or watermarks that are set will be burned into the output PDF file.

10.2 Publishing Files to TIFF

Enterprise HTML Viewer allows you to publish the currently viewed file (with or without open markups) in either PDF or TIFF format.

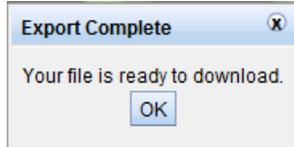
To publish as TIFF:

1. Open a file you would like to publish.
2. Click the drop down arrow on  and select **Publish to TIFF**

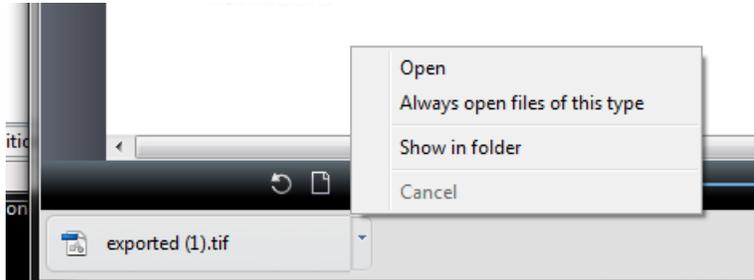


3. On the **Publish** options dialog, select your desired publishing options:
 - a. In the *Page Size* section, select a size from the drop down box to force the TIFF output to fit a particular paper size.
 - b. In the *Output* section, select whether to publish **All pages**, **Current page**, or you can enter **Designated** pages as page numbers or dashed page ranges separated by pipes. For example 2|5|6|10-14|18 publishes only the 9 pages specified, in the order entered.
 - c. In the *Markup* section, select how you would like to handle processing markups on the file:
 - o If Changemark notes are associated with the document, you can select to **Append Changemark notes**. When selected, the content associated with each Changemark note will print at the end of the print job as an appended page. Only the Changemark notes that fully appear in the printed output page will appear if the output page is a zoomed view. Each note receives a unique number that can be matched up to the text printout. Printed information includes the Changemark title, author, date and time authored, the note content, discussion details, and any hyperlink reference.
 - o If redaction entities exist in the current document, and reasons have been set, you can choose to append [redaction reasons](#) summary pages by selecting **Append redaction reasons**. When the published TIFF file is viewed, the redacted entities display text with numbered references corresponding to each reason listed in the summary page.
 - d. In the *Coloring* section, select how you would like to handle publishing colors in the file for both the Document and markup layer(s):
 - o "Original Colors" -publishes with original colors
 - o "Grayscale" - publishes in shades of black to white
 - o "Lines as black" - publishes all lines black
 - e. Compression options are available from the drop down: Use the default LZW, or select a preferred compression type of JPEG, PackBits, or CCITFAX4.
 - f. The default resolution is 300 DPI (dots per inch). You may enter a preferred resolution in the text box provided. The minimum DPI value is 60 and the maximum is 1200.

- g. In the *Watermark* section, you can also choose to include *Publish [watermarks and banners](#)* in your published TIFF file by setting these through the **Watermark/Banners** button.
4. When you have chosen your desired options, click **Publish**.
5. When publishing is complete, an Export Complete message displays. Click OK.



6. You can now download and view the published file in your default TIFF viewer.



The selected pages, including any open markup layers, are published (burned in) to TIFF - not just the current view. Additionally, any banners or watermarks that are set will be burned into the output TIFF file.

10.3 Watermark/Banners

Banners are strings of specific information (date, time, page number, user name, etc.) assigned to a location on the document header and footer. The **watermark** is a semi transparent character string that stretches from the lower left corner to the upper right corner of the printed or published document. Watermarks and banners can be used to support ISO 9000 and QS 9000 quality standards. They can contain text strings, [token](#) values, or optionally (through integrations API), metadata fields from document management and product life management systems can be extracted and inserted into the banner or watermark. With 12 possible banner locations, you can add as much text as you need to provide sufficient traceability and status.

Any of the banners or watermarks may be defined (added) by the administrator or by you. Any strings that have been set by an administrator (specified on the server or in the security XML file) will not be editable if this restriction has been set.

Banners and watermarks display on the published output PDF or TIFF file (electronic), and on the printed output.

See Also:

[Use Tag values](#)

[Add/edit a banner or watermark](#)

10.4 Adding, Editing Watermarks/Banners

You can add, edit, or clear banners or the watermark if they have not already been defined on the Server or in the html parameters.

Banners and watermarks display on the PDF or TIFF published output file and not on the viewing screen (except in the Watermark/Banner dialog preview). Set banners and watermarks also display on the printed output.

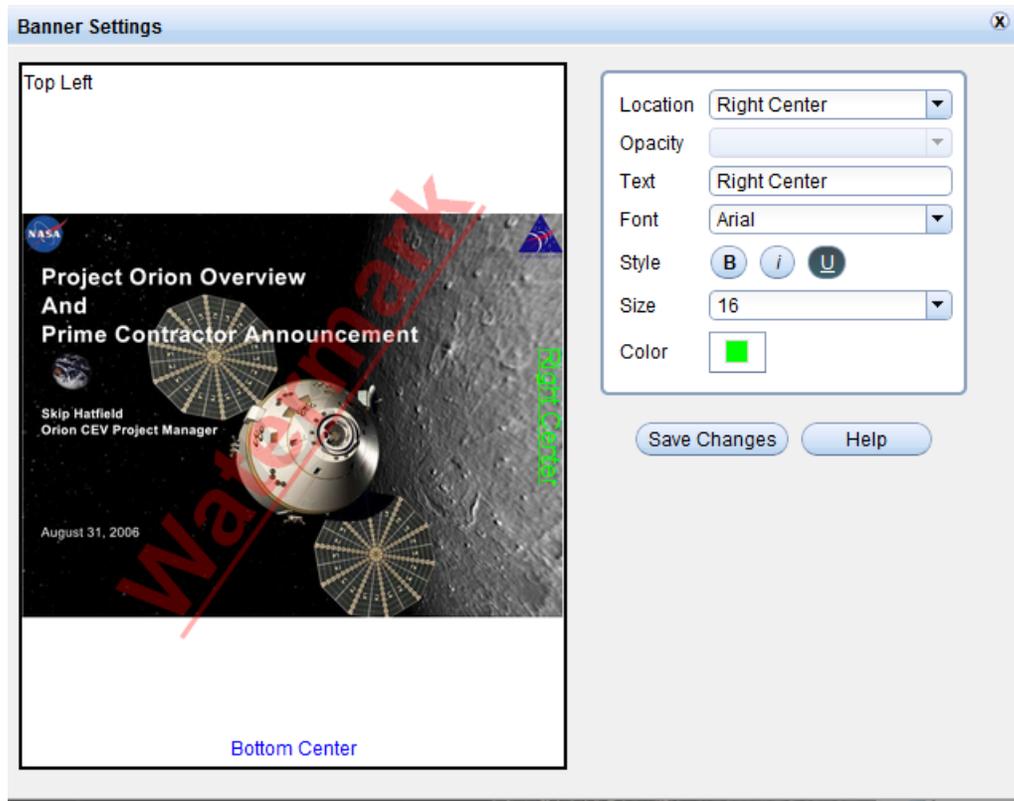
To access the watermark and banners dialog, either:

Click  -> **Publish to PDF** or **Publish to TIFF** on the task bar and select **Watermark/Banners...** from the *PDF/TIFF Publish Options* dialog.

Click  and select **Watermark/Banners...** from the *Print Options* dialog.

To set the banners and watermark:

1. Select a banner **Location** (e.g., Top Left) from the drop down or select Watermark to set the watermark string.
2. Type in the desired **Text** string or enter a [token](#). You can use multiple tokens in one banner or watermark string (for example: %Date %Time).
3. Select your desired **Font** settings from the font name, style, size, and color drop downs.
 - Watermark font size is not affected by your font Size selection (this option affects banner strings only).
 - Opacity only affects the opacity of the Watermark string and not the banner strings.
4. The preview screen is automatically updated with each change. Click **Save Changes** to apply your changes and close the **Banners** dialog box.



See also:

[Using Tag values](#)

[About Banners and Watermarks](#)

10.5 Tokens

Print banners and the watermark can contain text strings or one of the available token values below.

%Date - Inserts the date the print was spooled. If the tags are viewed on screen, the time at which the screen was last refreshed displays.

% SysDatePlusDays(x) - Inserts a date the specified number of days past the system date. Replace "x" with the desired number of days. Negative numbers of days may be entered. Be sure to close the parenthesis when you add the number of days.

%Time - Inserts the time the print was spooled based on a 12 hour clock (AM/PM). If the tags are viewed on screen, the date on which the screen was last refreshed displays.

% MilTime - Inserts the time the print was spooled based on a 24 hour clock.

Note that all of the date and time specific tokens above are based on the current UTC time.

%Title - Inserts the name of the document.

%Page - Inserts the page number.

% TotalPages - Inserts the total number of pages.

%BatesPgNo(x) - Bates Number. This tag is used to indicate the starting page number and the number of digits to use. For example, %BatesPgNo(0002) would place 0002 on the first page, 0003 on the next page, etc.

%% - Inserts a single % character.

%DBString(x) - This tag is used to resolve custom tags for products that integrate with the Viewer. Replace "x" with any printable character except a right parenthesis, ")". See notes below.



Usage Notes

- You may use multiple, differing tokens in any single banner or watermark string (for example %Date %Time %Title might result in the string 7/14/2010 3:03 PM MyDocument.pdf). The tokens can be used in conjunction with additional words and spaces. For example Today is %Date, at exactly %Time results in Today is 7/14/2010, at exactly 3:03 PM
- Tag values are case insensitive.
- A Bates Number is considered to be both the prefix and the page number WITH leading zeros. To create a bates ID, you can add text preceding the tag. For example, **Smith vs. Jones%BatesPgNo(00001)** would result in Smith vs. Jones000001 being printed on the first page, Smith vs. Jones000002 printed on the second page, etc.
- Using the **%DBString(x)** token allows you to incorporate database attributes into your watermarks and banners. For example, the following show the resulting printed string of various typed input:

Input: This document was created on **%DBString(r_creation_date)** by **%DBString(owner_name)**.

Output: *This document was created on 11/15/2007 by John Johnson.*

Input: Document "**%DBString(object_name)**" was modified by **%DBString(r_modifier)** on **%DBString(r_modify_date)**.

Output: *Document "neo.doc" was modified by Pat McDonald on 1/12/2004.*

Input: Reviewed and Approved, Version **%DBString(r_version_label)**

Output: *Reviewed and Approved, Version 1.6*

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