Brava!® Enterprise 7.0

ACTIVEX CLIENT USER GUIDE

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Brava!® Enterprise is web server software designed to help you view, print, publish, annotate, analyze, and redact native format documents, images, CAD files, and our own secure CSF format quickly and easily within and across the enterprise.

While this online help contains information for all Brava! Enterprise features, Brava! is a highly customizable software application and several factors will determine which features are available to you. READ MORE...

Choose a topic below to get information on a specific Brava! Enterprise feature.

- Toolbars
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NEW FEATURES IN THIS RELEASE

The following features and enhancements were implemented in Brava! Enterprise:

7.0 SR1 Changes

1. Text Compare Reporting. Ability to generate a merged text compare report and output the results to PDF.
2. Keyboard Accessibility. Navigation of user interface through keyboard controls.
3. "name" search mode

7.0 Changes

1. Modernized and redesigned user interface. Reorganized by process instead of by feature (annotate, redact, review, measure, and publish mode buttons are used to access the tools for each process).
2. Ability for administrators to apply predefined or custom themes (skins) to the client viewers.
3. Compare feature enhancements include:
   - Document text compare implemented as a new text level compare tool (vs. image compare).
   - Compare views are presented as buttons instead of drop down items.
   - Side-by-side and overlay compare improved to allow navigation by document Changemarks.
4. Text Search enhancements include use of Regular Expressions as a search option, ability to change Highlight color, ability to alternate search targets.
5. Search results are cached resulting in instantaneous secondary searches.
6. Measurement is enhanced to include a results accumulator (measure takeoff). Ability to create multiple measurement categories and to cut and paste the results into other applications. Results saved in markup file.
7. New Text Strikethrough and highlight markup entities.
8. <Esc> key cancels markup and measurement entity creation before set.
9. %IPAddress and %Hostname added as watermark and banner tag options.
10. Support for Windows 7 as a client operating system.
11. Event history kept per document instead of per page allows additional redaction and measurement feature undo/redo capabilities.
12. Improvements and enhancements to settings persistence logic. New optional parameter allows administrators to enable/disable persistence.
13. Publishing improvements include:
    - Publishing options dialogs updated for uniformity and consistency.
    - CSF publishing improvements including support of page range and page size selection.
    - Coloring options in Publish dialogs allow setting Document and Markup colors separately.
    - Both Print and Publish banners and watermarks can be set and can be forced on published documents through the *security.xml* file.
    - "Unredacted view" security permission added to CSF Publish options that allows access to unredacted version of a document via set password.
    - Markup Burn-in, Review, and Authoring permissions combined into one CSF security option "Markup".
    - Print/Copy/Save As permissions combined into one CSF security option.
15. Changemarks feature improvements include:
    - Changemarks (Annotations) discussion feature provides a tool for back-and-forth dialog (replies) among a group of reviewers within a single Changemarks entity.

- The Changemarks "find" feature is enhanced to include both search all, and cumulative (search within results)
- Single click placement of Changemarks entities (rather than click and drag rectangle).
- Updated Changemarks panel user interface to accommodate annotation discussion.
- With the new Changemarks with text highlight, the highlighted text is copied to the clipboard to allow insertion into the comment.
- Enhanced graphics
- Support for hyperlinks and formatted text in Changemarks text dialog.
- New Type and State property fields added.
- Term hit highlight added to Changemarks note search options.

16. Four new combination Changemarks entity types added (along with new mouse tools). Once placed, entities are independent of each other:

    - Changemarks with Cloud
    - Changemarks with text highlight
    - Changemarks with highlight
    - Changemarks with arrow

17. Redaction Feature upgrades include:

    - New search macro [:ocr_ssn:] - Similar to [:ssn:] except allows both numbers and characters in the pattern string. Improvements to [:ssn:] macro
    - Reasons tab added to Options Settings dialog offers setting to specify using either predefined reason code lists or user defined reason codes
    - Ability to publish and distribute a review draft (PDF or TIFF) before finalizing the proposed redactions.
    - Find and Redact From/To redaction tool added to toolbar. Redacts everything between two defined phrases.
    - Publish to CSF added to the Publish (Finalize) menu as a third option for redacted output format (along with TIFF and PDF).
    - Finalize permission "Unredacted view" added to CSF Publishing Options to allow certain users to view an unredacted version of a file (via password).

FEATURE AVAILABILITY

While this online help contains information for all Brava! Enterprise features, Brava! is a highly customizable software application and several factors will determine which features are available to you, as well as certain default behaviors.

Factors that determine feature availability include:

- The type of license you have purchased for Brava Enterprise will determine feature and format availability.
- Running Brava! through an integration such as Webtop, OpenText, Oracle, etc. Your integration administrator will determine the available Brava Client features via server parameters.
- Server parameter settings as determined by your administrator (see note below)
- Any Visual Rights settings that have been set on a CSF file

Note that only licences formats can be opened in Brava Enterprise. If a file that you are loading contains embedded files of formats that your Brava license does not support, then you will be prompted to either continue loading the file without the embedded format(s), or abort the operation.

Server Parameters:

All Brava! Client features, tools, and menu items can be enabled or disabled through an associated server parameter. A disabled feature will either be grayed out, or completely missing from the Brava! Enterprise Client. Other parameters control the behavior of the Brava Client. If you are an administrator, please refer to the *Brava Administration Guide*, located in your Brava install directory, for a complete list of these customizable parameters and their usage.

WHAT IS CSF?

Informative Graphic's Visual Rights® technology is designed for securely sharing content (document, image, and CAD files). Content Sealed Format (CSF) allows you to maintain control of what users can do with your intellectual property and data. And because CSF is not a public, open format like PDF, it cannot be edited or converted by any third party programs. Simply put, CSF is a compressed, encrypted, accurate rendition of your document, image or CAD drawing file.

You can use the Net-It® Now print-capture utility to create a CSF file from any Windows application, then distribute it for protected viewing with the free Brava!® Reader or Brava!® Desktop/Enterprise.

Brava Desktop and Brava Enterprise can also publish native formats to CSF, PDF, and TIFF along with a currently open markup, including redactups (block areas/text from view, search, copy and print). Authors of CSF files can choose to set passwords on any published redactions (PDF and TIFF redactions can never be revealed).

When you create a CSF file, you can add a variety of persistent security controls that include:

- Password protection (on entire document and/or on redacted areas)
- Expiration dates
- Permit Print, measure, markup, copy, and other features
- Add watermark and print banners

View More Details about CSF Publishing

Documents can be published to CSF format using IGC's Brava! Desktop®, Brava! Enterprise®, Net-It Enterprise®, Redact-It® Enterprise, Net-It® Now, or MYRIAD® software.

To view a document secured with Visual Rights, simply select a published CSF document to view through Brava! Enterprise, Brava! Desktop, Brava! Reader, or Brava! Free DWG Viewer which read the document's file rights before displaying a document page. Note that Brava! Flash viewer does not support loading of CSF files that have any Visual Rights set on the file.

The Brava viewers contain a lock icon in the status bar when a CSF file is loaded. When you click this icon, a dialog displays informing you of the rights the document has enabled or disabled. For example:

Permitted Visual Rights®

Printing : No
Copy To Clipboard : No
Measurement : No
View By Layer : No
Save As : Yes
Markup Review : No
Markup Authoring : No
Burn In Markups : No
File Expires : Never
File Password Protected : No

See Also:

Publishing to CSF

WHY CSF?

CSF: Compressed, Content Sealed Format from Informative Graphics®

Share Content - Keep Control

CSF format allows you to securely share content. Our Visual Rights® supported content publishers render document, image, and CAD files into an accurate, encrypted, and compressed content sealed format that embeds persistent content usage controls. CSF files can be viewed with rights protection using the easy-to-use, fast, and freely distributed Brava! Reader.

Advantages of creating CSF include:

- Permit or disable print, copy, measure, markup, and analyze
- Expire document use by date
- Burn-in watermarks and banners
- Password protect
- Redaction (block out)

Easily create CSF files with one of these software choices:

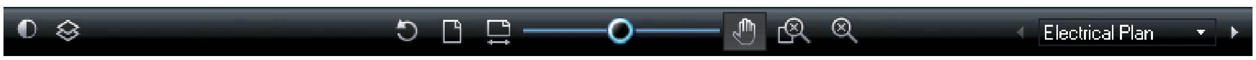
- Download the free **Net-It Now** CSF Writer software (web site: www.net-it.com) Net-It Now installs a print driver that can create CSF files from any Windows application. The software is free!
- Try **Brava! Desktop** (web site: www.bravaviewer.com) Brava! Desktop loads a wide variety of native file formats and can publish them to CSF format (as well as PDF, TIFF, and DWF). Brava! Reader and Brava! Free DWG viewer will load a limited selection of formats and can publish them to CSF format. With Brava! Desktop, you can also add markups or block out content (redaction) in the resulting secure CSF file. Brava! Reader and Brava! Free DWG Viewer will view these CSF files with burned in markups and redactions.
- **Redact-It Desktop** (web site: www.infograph.com/redact-it.asp) is full featured redaction software. Redact-It safely removes privacy information and sensitive content from documents, images and even e-mail. With unique features like reusable scripts, extensive logging and enhanced verification, Redact-It is the best tool for electronic redaction available and can publish to CSF, TIFF, and PDF.
- Similar to Brava Desktop, **MYRIAD** http://www.myriadviewer.com loads a variety of 2D **and** 3D native file formats and can publish them to secure 2D (CSF) or 3D (3DF) output files.

ALL TOOLBARS

Below are all of the toolbars that can become available in the Brava! Enterprise user interface. The availability of the toolbars and their options is dependent on the options your administrator has enabled. In addition, when viewing CSF files, buttons may be disabled depending on the Visual Rights set for that file.

Brava Functions Toolbar

Viewing Tools and Page Control

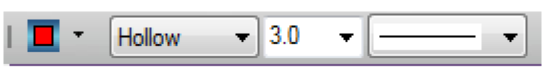


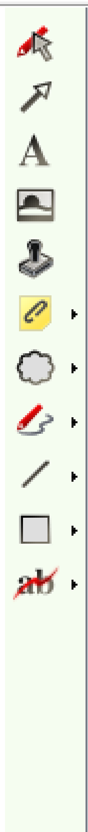
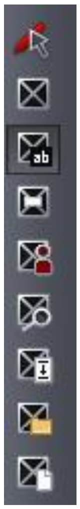
Find

Compare Toolbar

Status Bar

Markup Properties Toolbar



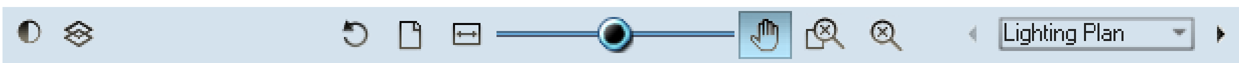
Annotate Toolbar	Redaction Toolbar	Measure Toolbar
		

VIEWING TOOLS

DISPLAY TOOLS

VIEW TOOLS

You can change the way the image displays within Brava! by using the various view tools. The horizontal scroll bar contains buttons for the less frequently used display commands. From left to right, these are:



Change Background Color

Show Layers

Rotate 90

Fit All

Fit Width

Zoom In/Out Slider

Pan/Zoom

Zoom Window

Magnifier

Page Control

See Also:

Display Options

DISPLAY COLOR

Change Background Color

You can change the background color of file types with "transparent" background colors, such as monochrome raster and vector file types (color raster files are not affected) to black, white, or gray. If you change the background color to the same color as the selected foreground color for monochrome images, the foreground color will automatically be changed.

To change the background color, click  on the scroll bar and select **Black**, **White**, or **Gray** from the pop up menu. Background color can also be accessed through the view window right mouse button menu. If you select the Default menu item, Brava! Enterprise will decide through driver directives which background color to use (for example, CAD file backgrounds will use black, office formats will use white, etc.).

You can toggle through the background colors using the hotkey <Alt> + <B>

Background color is persisted between opening like file types (document or drawing). For example, if you set the background color on a currently viewed .PDF file to gray, and then set the background color on a .DWG file to white, subsequent document files (pdf, tiff, doc, xls, etc.) display with a gray background while subsequent drawing files (dwg, dwf, dgn, prt, etc.) display with a white background.

Monochrome Mode

Viewing in Monochrome Mode changes all lines of a color image to a single color (the default is black). Markup entities remain in color for quick identification.

Click on the scroll bar and select **Display Monochrome** to change to monochrome mode. Click **Display Color** to return to color mode.

When Monochrome Mode is active, the image displays and prints in black and white.

See Also:

Markup Text Background Color

Background Fill

VISIBLE LAYERS

You can turn image layers (e.g., layers of a DWG file) on or off through the *Set Visible Layers* dialog box. If no layers exist, this button is disabled.

1. Click on the scroll bar or hit +.
2. Select the check box(es) next to the layer(s) you wish to show or hide. A check mark indicates visibility is on. Click **Hide All** to turn the visibility of all layers off, or **Show All** to turn the visibility of all layers on.
3. Click **Apply** to update the image display without closing the dialog box. (You can click **Restore Defaults** to undo any changes you have made).
4. Click **OK** to update the image display and close the dialog box.

This menu option is disabled if the View by Layer permission is disallowed on a published CSF document.

ROTATE

You can rotate an image counter-clockwise in 90 degree increments. Click on the scroll bar until the image is rotated to the desired increment.

You can also rotate an image clockwise or counterclockwise through the right mouse button menu (**Rotate/Mirror->Rotate Clockwise** or **Rotate Counterclockwise**) in 90 degree increments.

To rotate a markup entity see Editing Markups.

Hotkeys available for these functions are <Ctrl> + <Space> (clockwise) and <Ctrl> + <Shift> + <Space> (counterclockwise).

MIRROR

You can flip a raster image (such as a TIFF file) horizontally with the Mirror tool. From the right mouse button menu, select **Mirror** to toggle the mirror image on or off.

Usage Notes

- Hotkey for the Mirror tool is <Ctrl> + <F>
- You can create markups on images that have been mirrored, however, when the image and markup are reloaded for viewing, you will need to mirror the image again for the markup to display correctly over the image.
- When navigating through or doing a print preview on a multi-page document, the mirror setting is retained (persisted) when navigating back and forth through the document pages. In addition, printing when doing a print preview with the mirrored state intact will print the image correctly as seen in the preview.

- If a raster file is loaded using INSO drivers, the image is treated as vector and therefore the mirror function will have no effect.

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 Brava! (Documents open at Zoom Width.)

Fit all can also be triggered with the <Ctrl> + <E> hotkey.

FIT WIDTH

The Fit Width command changes the zoom level so that the entire width of the image appears in the window. This is most useful for 8.5 x 11 documents so you do not have to scroll left and right to read the text.

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

Fit width can also be triggered through the <Ctrl> + <W> hotkey.

PAN

To pan across an image, click  on the toolbar. Note that the mouse pointer changes to a hand icon. Click and hold the left mouse button while dragging the mouse pointer in the direction you wish to move the image.

While in pan mode, you can press the right mouse button and move the pointer up and down to zoom in and out of an image. Up increases magnification while down decreases it.

As with the Select tool, hyperlinks contained in the document are recognized when moused-over and can be launched when the pan tool is active.

Panning can also be triggered by using the <Ctrl> + <Shift> + <A> hotkey combination

ZOOM WINDOW AND ZOOM IN/OUT

Zoom Window

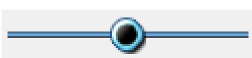
Click  to access the Zoom Window command:

Zoom Window. You can change the zoom area by dragging a box, or window, around the area you want to zoom in on. The area within the box will fill the image window. Simply click and hold the left mouse button, then drag the mouse around the area you wish to fill your viewing area.

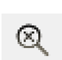
While in Zoom Window mode, you can press the right mouse button and move the pointer up and down to **zoom in and out** of an image. Up increases magnification while down decreases it.

Note: You can use the hotkeys <+> or <-> on the numeric keyboard to zoom in and out while any tool is active. First click inside of the viewer frame window and then hit the + key to increase magnification or the - key to decrease magnification. If you are using a laptop that has no numeric keyboard, use the +/- keys while in Num Lock mode.

Zoom In/Out tool

 You can use the viewer's zoom slider bar to zoom in and out of the document. Press on the slider button while dragging it right to increase magnification and left to decrease magnification. The button returns to center position on release and can be dragged repeatedly to increase/decrease magnification.

MAGNIFIER

The Magnifier tool summons a rectangular "magnifying glass" in your viewing window. Use this tool to zoom into smaller areas on a larger image.

Adjust the magnification by pressing on and dragging the zoom adjustment handle 

on the right side of the rectangle window. Dragging upward increases magnification while dragging downward decreases it. You can also adjust magnification by right clicking in the window and dragging up or down, or by using the mouse wheel up and down to zoom in and out..

Move the magnifier by clicking and holding the left mouse button on the magnifier window, then dragging.

Resize the magnifier by clicking and holding one of the four corner resize handles and dragging.

Close the magnifier by clicking the red "x" in the upper right corner.

Toggle the magnification behavior (eyeglass, bird's eye, or dock) through the small icon in the upper left corner of the magnifier window. Click the icon to toggle between the behaviors.

 *Eyeglass* - When this icon is displayed in the magnifier, you can click on any area of the drawing or document and the magnifier will snap to that area and display the selected section.

 *Bird's Eye* - When this icon is displayed, a small rectangle displays with your cursor when it is moved off of the magnifier window. You will notice that as you move your cursor around the document or drawing, the area contained in the cursor's small rectangle displays in the magnifier window (bird's eye view).

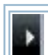
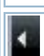
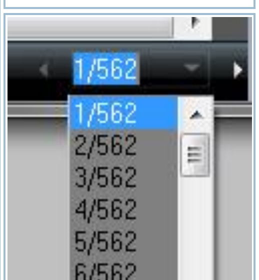
 *Dock* - When this mode is selected, you can click on an area of the page that will stay "docked" in the magnifier window. If you scroll the current page, the view that's in the magnifier stays the same.

See also:

Measurement Magnifier

PAGE CONTROL

When you view a multi-page document or drawing file, the paging controls display on the scroll bar.

	Changes to the next page of the document. If you are viewing the last page, it changes to the first page.
	Changes to the previous page. If you are viewing the first page, it changes to the last page.
	Allows you to specify the page you wish to view. You can type a page number and hit <Enter>, or select a page name or number from the drop-down list box. A typed entry (for example, 25) displays as #page/#total pages (25/72, for example).

Scrollable Paging

With document files, you can scroll through pages using the mouse wheel or vertical scroll buttons.

If the file is not a document, the behavior of the mouse wheel and scroll buttons is to zoom in and out.

Thumbnail Paging

If enabled, thumbnail navigation is available for document pages via a scrollable thumbnail panel. Selecting an image in the thumbnails panel changes the current view to the selected page. You can float your mouse over each thumbnail to view page/sheet name, if available. See also Page Thumbnails.

Note: You can control the order that multi-page DWG files appear in the file list through the *myrdrv.ini* file located in your Brava! installation directory. In the [DWG2DL] section of the file, adjust the value of the *PageLoadOrder* parameter according to the following preference:

0: Paperspace first

1: Modelspace first

2: Paperspace only

3: Modelspace only

4: Similar to 0 except the last active layout is first.

Example: PageLoadOrder=0

If there is only one page, it is loaded irrespective of the *PageLoadOrder* setting.

DISPLAY OPTIONS

Available from the right mouse button, Options menu are various check boxes that let you alter the way the image displays in the view window such as Fit Width, Fit All, next and previous paging commands, and the edit commands (copy, paste, and delete).

- Select **Animate View Changes** if you would like to turn on this feature. When selected, the image makes animated transitions from one viewpoint to the next when using any of the viewpoint transition tools such as the zooming and rotate tools. When this feature is turned off, the image will snap to each viewpoint change.
- Select **Show Line Weights** to display an entity's true line width. If not enabled, the view displays with all controllable vector lines drawn at one pixel thickness regardless of the entities true line width. The one pixel with stays constant at zoomed magnification when this option is disabled. Disabling the *Show Line Weights* command is useful when viewing files containing entities of unusual thicknesses that can obscure other entities if displayed at their true width.

Note that this option overrides the state of the ***Show AutoCAD Line Weights*** **option and if unchecked, line weights will not display at all.**

- Select **Show AutoCAD Line Weights** to display any line weights that have been set in CAD files. The line weights display on screen, and weights are maintained when publishing to the available output formats (TIFF, PDF, and CSF). Note that Brava Reader cannot open AutoCAD files directly, but may open a CSF file that was produced from a file with the relevant line weights. Note that the *Show Line Weight* option must also be enabled to use this feature.
- GDI++ support is provided for viewing vector-based files with Anti-Aliasing (smooth lines). A right mouse menu option **"Smooth Edges (Slower)"** allows you to turn off Anti-Aliasing to improve display performance if desired. If GDI++ is not available, this menu option is grayed out.

You can also control the Background color toggle from the right mouse button menu. Select **Background Color** to switch from white, to gray, to black. Select **Default** to use the background color determined by the driver directives.

You can flip a raster image horizontally with the Mirror tool. Select **Rotate**/**Mirror** to toggle the mirror image on or off.

Select **Show Pane** and choose one of the four available panel views from the submenu. The Brava task pane opens up (if not already open) on the right side of the viewer with focus on the selected panel.

PLACEKEEPERS

Placekeepers provide a simple way to temporarily save and traverse a list of view states. These Placekeepers are session based place markers and do not carry forward from session to session.

The three Placekeepers commands can be accessed from the **Marks**-> command of the right mouse button menu.

Add Placekeeper - This command saves the current view state to the end of the list of saved Placekeepers . A new Placekeeper can be set whenever there is a change in **zoom level**, **rotation**, **page number**, or **compare view mode**. (A new Placekeepers cannot be added for a pan location change.) A maximum of 1000 Placekeepers can be added. You can use the hotkey <Ctrl> + <K> to add a Placekeeper of the current view state.

GoTo Placekeepers - This command toggles through the list of saved Placekeepers . You can also use the hotkey ,Ctrl> + <Alt> + <K> to navigate through the Placekeepers .

Remove Added Placekeepers - This command clears the list of saved Placekeepers . Placekeepers only exist during the viewing of a single file. When the file is closed, all saved Placekeepers are cleared. Currently, Placekeepers lists cannot be persisted in Brava! Enterprise .

Placekeeper Navigation Examples:

Load a multi-page (3 or more pages) document

Hit page down 3 times

Press Ctrl + Alt + Left Arrow (back) 3 times

1st back goes to top of page 3

2nd back goes to top of page 2

3rd back goes to top of page 1 (starting view)

Load a multi-page (3 or more pages) document

Scroll the view until the fourth page is visible

Press Ctrl + Alt + Left Arrow (back) 3 times

1st back goes to bottom of page 3

2nd back goes to top of page 3

3rd back goes to bottom of page 2

Placekeeper navigation key combinations:

Ctrl + Alt + Left Arrow - Back

Ctrl + Alt + Right Arrow - Forward

Previous View (Back) menu item can be found at the top of the right mouse button menu. (No Next View (Forward) menu item exists)

RIGHT MOUSE CONTROLS

When using certain tools, clicking the right mouse button brings up a pop-up menu containing various display and edit commands. However, when the Pan, Magnifier, and Zoom Window tools are active, the right mouse button can be used as an added navigational control to quickly zoom in and out.

The right mouse button navigation is available for the following view tools:

Pan tool  Zoom Window tool  Magnifier tool 

While using any of these three tools, you can press and hold the right mouse button while moving the pointer up and down to zoom in and out of an image. Up increases magnification while down decreases it.

Mouse Wheel

The mouse wheel behaves differently depending on the type of file being viewed. When using the mouse wheel while viewing a document file, the document will scroll up and down. If used while viewing a drawing file, the drawing will zoom in and out. Up increases magnification while down decreases it.

FILE COMPARISON TOOLS

COMPARE DOCUMENT OVERLAYS

Brava! Enterprise 's Overlay Compare feature allows you to perform a graphical or textual comparison of two file versions. **This feature is only available if it has been set up and configured by your integration administrator.** Currently, Compare is a view only feature and no output options are available.

COMPARISON TOOLS

The Comparison toolbar appears at bottom of viewing window. The toolbar contains various buttons for different viewing options. Depending on the viewing option currently chosen, alignment buttons (nudge alignment, set alignment points, and clear align), and a transparency slider may be present. Note that while viewing in Compare mode, most of the functionality associated with Annotate, Review, Redact, Measure, and Publishing (except Save View as JPG) will not be available for use.

Overlay

Use this button to overlay both versions on top of each other. Use the slider to change the transparency of each file - left to dim the compare version, right to dim the open version.

Overlay Differences

With this button, the compare file version opens overlaid on the open file. The open file displays in **red** (deleted geometry or text), and the compare file displays in green (added geometry or text). Geometry/text that has not changed (common between both revisions) is **gray**.

Use slider to change transparency for clearer visibility of the file differences - right to dim **red** (deleted) areas, left to dim **green** (added) areas.

Side-By-Side

Both versions are displayed in a split-screen view. Move the slider to view transparent differences overlaid in each version.

Text Comparison

While a graphical comparison is useful for viewing differences in CAD drawings (as overlaid images), this method has limitations when it comes to comparing the actual text contained in a document file. Use the Text Comparison mode to view the (non WYSIWYG) text content comparison of the open and compare documents.

Open File (Only)

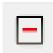
Only the file that was first opened is displayed (normal colors). The set alignment points for comparison tool is available in this mode. All Annotate, Review, Redact, Measure, and Publish features are supported in this compare mode only.

Compare File (Only)

Only the file that was opened for compare is displayed (normal colors). The set alignment points for comparison tool is available in this mode. Measure, and Publish features are supported in this compare mode.

Additions

Only added areas (areas present in the compare version, but not in the open version) are displayed in **green**.



Deletions

Only deleted areas (areas present in the open version, but not in the compare version) are displayed in **red**.

Unchanged

Only areas that are present in both the compare version and open version are displayed in **gray**.

Transparency Slider

This tool is available for *Overlay*, *Overlay Differences*, and *Side-by-side* modes to adjust the transparency amount of the two documents. In the two overlay modes, move the slider to the left to reduce the transparency of the *Compare* document (additions), move the slider to the right to reduce the transparency of the *Open* document (deletions). When the slider is centered, both documents display at 50% transparency.

In Side-by-side mode, center the slider to view the changes side by side, overlaid at 25% transparency. Move the slider all the way to the left to view 50% transparency, or all the way to the right for 0% transparency (no overlay).

Nudge Alignment

This button is available when using the *Overlay, Overlay Differences, Side by Side, Additions, Deletions*, and *Unchanged* viewing modes. You can use the Nudge Alignment commands to nudge and re-scale a compare image or drawing to an open drawing, allowing you to interactively make small adjustments to align the files more precisely. This feature is especially useful for comparing two TIFF images that contain the same text but have different line spacing. Click the Nudge Alignment button and select a direction to nudge the compare file by one increment.

You can also use the hot keys below to quickly nudge the alignment. Use one of the following key combinations (once or multiple times) to nudge the overlaid "older version" in the desired direction:

<Ctrl> + <Left arrow> = nudge position left

<Ctrl> + <Right arrow> = nudge position right

<Ctrl> + <Up arrow> = nudge position up

<Ctrl> + <Down arrow> = nudge position down

 Text Compare Reporting

You can close the comparison file (and toolbar) at any time by selecting **Close Compare** from the **File** menu.

SET ALIGNMENT POINTS

Used with file version comparisons, the Set Alignment Point tool allows you to compare two versions of a file that are of different scales, or world page sizes. This tool is especially convenient when a major version of a file has multiple sections saved as separate files.

The alignment tool allows you to define a single identical location on each file that is used as a common alignment section when the two files are overlaid.

To use the Align tool:

1. Open a document and use the Compare tool to open a second comparison file that is of any scale.
2. Select **Open File (Only)** from the Comparison tools to view the first document you opened.
3. Click on the **Set Alignment Points** button. The cursor changes to a measurement selection tool and will allow you to precisely select two picking points on the image. Identify a small section of the image that is contained in both the first and second document.
4. Left click on the start point and then left click on an end point of a common section to define the alignment.
5. Select **Compare File (Only)** from the Comparison tools to view the second document you opened for comparison.
6. Click on the **Set Alignment Points** button and select the exact same points of the section that you chose to use in the first document. Now, if you select any of the compare features from the drop down list (Overlay, for example), the points placed in the first file are pinned to the points placed in the second file. When alignment is active, both documents display at exactly the same scale.
7. Once you have successfully chosen two identical alignment points in each document, the **Clear Alignment Points** button becomes available. You can restore the original view at any time by clicking this button to remove your set alignment points.

Note: The following hotkeys can be used while in Compare mode (excluding Text Compare) to nudge the overlaid "older version" in the desired direction:

<Ctrl> + <Left arrow> = nudge position left

<Ctrl> + <Right arrow> = nudge position right

<Ctrl> + <Up arrow> = nudge position up

<Ctrl> + <Down arrow> = nudge position down

TEXT COMPARE

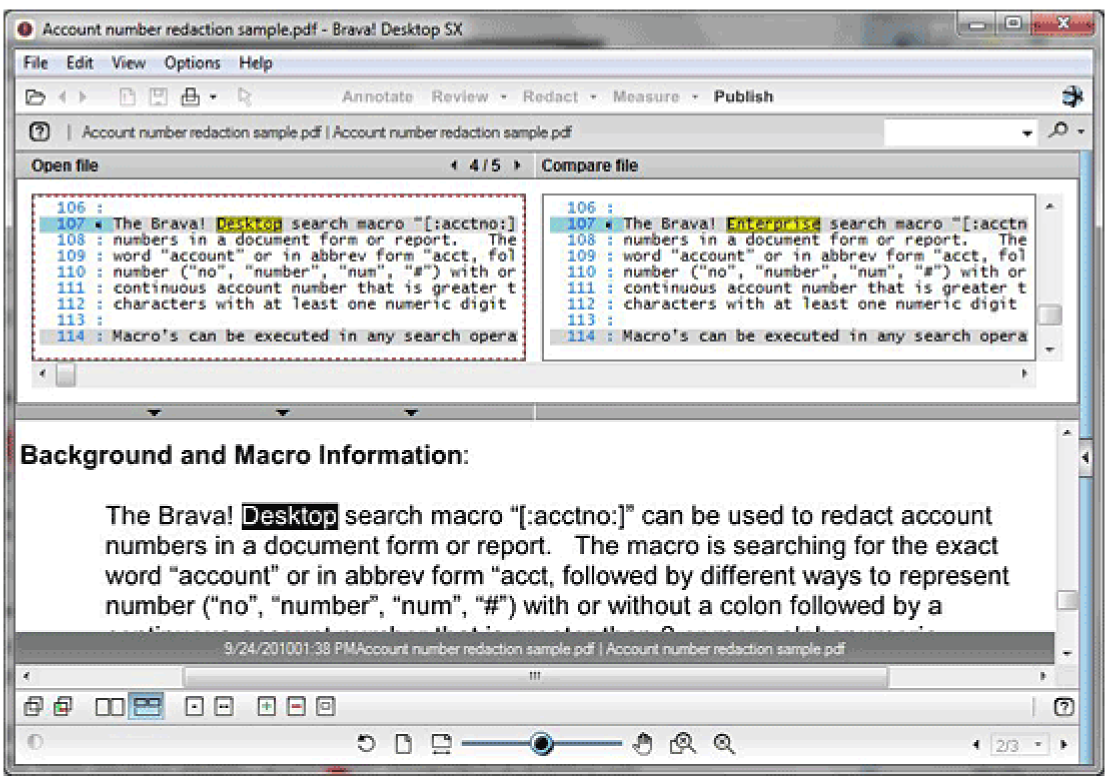
Available from the Compare toolbar, the Text Compare tool allows you to perform a non WYSIWYG comparison of the searchable text contained in two file versions.

Comparing documents by graphic overlay (Overlay, Overlay Differences, Side by Side Compare, etc) works well for engineering / CAD drawings and images, but it does not work well for office documents that are mostly text. Text Compare feature resolves this by highlighting the actual text differences between two compared documents.

1. Open two files (containing searchable text) for comparison in Brava! Enterprise.
2. Click the **Text Comparison** button  from the Compare toolbar.
3. If no differences are found between the two documents, a message appears stating so. If differences are found, the document is shown in split screen mode with the open and compare files displayed in two windows as lines of text, and the WYSIWYG view of the *Compare* or *Open* file shown beneath. Text differences between the two documents are highlighted in yellow, red, or green (see notes section below).

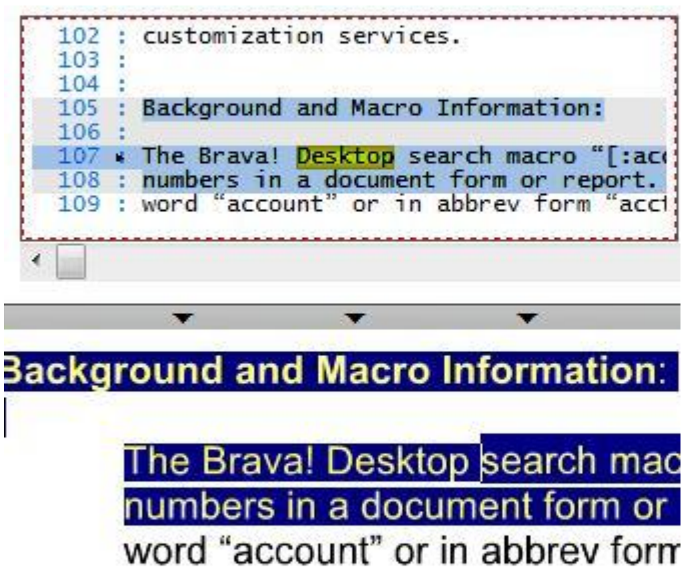
You can generate a merged comparison report of the two documents and output as a PDF file. See Text Compare Reporting.

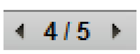
ABOUT TEXT COMPARE VIEW



- The *Open File* and *Compare File* labels in the top portion of the window correspond to which document is the originally opened document and which document was opened for compare.

- The arrow indicators along the middle gray bar  show which document is currently being shown in the view window below. If the open document is shown, the arrows are below the open document in the compare window. If the compare document is shown, the arrows move to be below the compare document.
- Clicking anywhere in either the *Open File* or *Compare File* text windows changes the document being viewed in the window below. Any text that is highlighted in the text view window (hold down the left mouse button and drag across any text) is also shown highlighted in the document view window allowing you to easily identify changed areas. Note that highlighted text can be copied to the clipboard by using the <Ctrl> + <C> hotkeys.

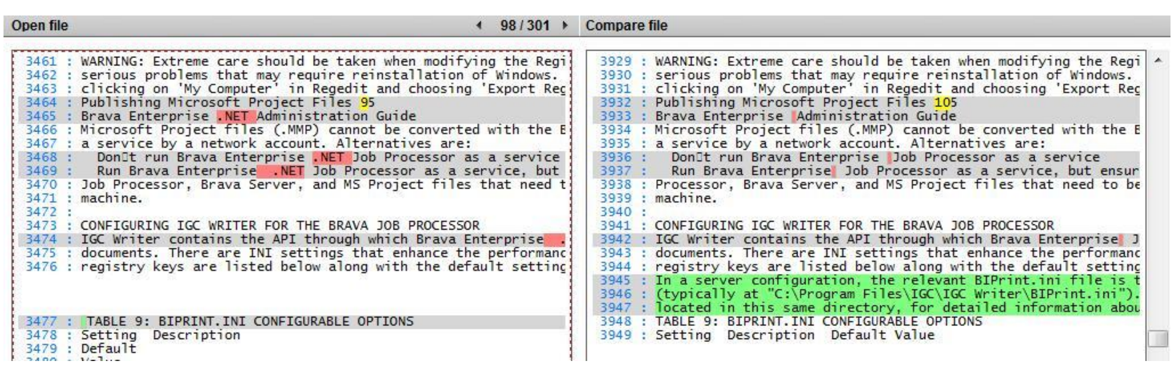


- The count  shows the number of lines with changes and indicates which changed line is currently selected. The (*previous* and *next difference*) arrows to the left and right allow for moving to the next and previous changed line. In the example above, 5 lines (of 119 total lines) have changes and line 107 (currently being viewed) is the 4th of those 5 lines in the document with changes.
- The Text Compare views shows differences between the two documents using color:

  - Red indicates something that was deleted out of the open document.

  - Green indicates something that was added to the compare document.

  - Yellow indicates something that has changed between the two documents.



Whenever there is a green or a red difference, there is a corresponding "placeholder" in the other compare view. A placeholder is a thin indicator of "where the text used to be" in the case of red. Or "where text was inserted" in the case of green. These placeholders are not actual characters in the text but are simply indication markers.

If you left click on any red, green, or yellow component, it (and the corresponding difference bit in the other view) is highlighted. This is useful in lines with many differences where it is difficult to discern which bit pairs with which bit. When a paired set of differences are highlighted, the same text will be selected in the lower view.

Corresponding bits may not be on the same line in each view. Sometimes they are on different lines, depending on how the document wrapped text from line to line. When lines get too far out of synch, blank lines are inserted to help keep the lines in the same relative vicinity.

NOTES ON USAGE AND BEHAVIOR.

- You cannot open or create markups in Text Compare mode.
- Publishing is not available in this mode, except for Save as JPG.
- The Comparison Text button is disabled when either of the comparison documents is an image (contains no searchable text).
- The top half of the screen shows the split view of the open document and compare document side by side. These views are raw text only and contain no images or other graphics, and no document formatting (fonts, text sizes, etc.). The two views are synchronized, meaning they scroll vertically and horizontally together.
- The bottom half of the screen shows a single document view, complete with normal graphics and formatting. This view shows the document, depending on which of the top views you click on.
- If a noted change is to the left or right of either view's visible area, a small arrowhead appears on the left or right edge of that line, indicating the need to scroll that direction to see the paired text that is highlighted.
- The currently selected line in the Text Compare window displays an * on that line, and in the corresponding line in the compare view.
- Lines of text with a gray background indicate that the lines contain differences. This is useful for scrolling through a document looking for changes.
- Lines of text with a white background indicates lines of text that have not changed significantly. This would include changes in spaces, tabs or carriage returns. Case changes are considered significant enough to flag as changed.
- The Text Compare windows support the following mouse and keyboard functions:

  mouse *wheel* scrolls up and down

  keyboard *arrow* keys scroll up, down, left, and right

  <Home> key scrolls the view to the top of the document

  <End> key scrolls the view to the bottom of the document

  <Page Up> and <Page Down> keys scrolls the view up or down one (visible) page worth of text

TEXT COMPARE REPORTING

In Text Compare mode, you can export the merged results of your two-document comparison to a PDF file which can be printed or saved to a file system. The entire comparison is merged and the report contains the following information:

- File names: The display name of the original and compare documents are shown in the Compare report PDF file. Descriptions of the older and newer versions of the document can be customized within an integration.
- Date and time that the report was published.
- Merged content : The contents of the older document, merged with the additions and changes appearing in the newer document.
- A list of statistics for number of differences existing for each type of text change.
- For any line that contains a difference, a black vertical line along the left edge of the document displays as a visual indicator of a difference existing in that location.
- Color legend: The color legend reflects the type of text changes in the merged content:

  ~~Red text with a strikethrough~~ == text deleted from the older document

  Green text with an underline == text added in the newer document

  Yellow / Brown text with an underline == text changed, newer version

  ~~Yellow / Brown text with a strikethrough~~ == text changed, older version

To generate a text compare report:

1. Open two documents for comparison.
2. From the Compare toolbar, click the compare report button 
3. In the *Export Text Compare Report* dialog, browse to a directory where you would like to export the pdf file and click Save.

By default, the document is assigned a merged filename of the two files being compared. For example, if the two docs were named *Open.doc* and *Compare.doc*, the output file would be named *Open_doc_Compare_doc.pdf*.

Report uses and benefits:

This text compare report can be used for several purposes. One use might be for verification that requested edits have in fact been done correctly. Another might be to serve as a record of the edits that can be kept for auditing purposes. In the first case, a user who doesn’t edit the documents or have Brava installed, is provided with a compare report (either electronically or on paper). He might even be provided with a package that contains the “before” version, the “after” version, and the compare report. Once the “after” document is approved, the compare report has little value to the user. This leads to the second case of the compare report serving as a record of the change history of a document. Document management systems are good at recording editing and version check-in activities, but the system has no visibility as to the changes that occurred within the document. By keeping a copy of the compare report a complete record of the changes made can be retained.

Usage Notes

- The header text of all reports can be localized
- Legend colors cannot be customized in this release
- If either of the files being compared is a CSF file with *print/copy/save as* visual right restrictions set, exporting to PDF is not permitted.

VIEWING IDW FILES

Installing Autodesk Inventor View for Inventor (IDW) Support

You must install Autodesk Inventor View on the Job Processor machine in order for Brava! Enterprise to publish Inventor files. Brava! Enterprise supports Inventor natively using the IDW2DL.dll driver with Autodesk Inventor View and you do not have to use the Inventor application print driver to publish the .IDW file format.

1. On the Brava Enterprise Job Processor machine, browse to http://www.infograph.com/support/bravaInventor.htm
2. Download Autodesk Inventor View 2009* for Brava Enterprise. Autodesk Inventor View version 2008 supports Inventor version 6 through version 2009 files.
3. Install Autodesk Inventor View 2009, accepting all of the default values.

*Autodesk Inventor View 2009 is not supported on Windows Server 2003 or Windows Server 2008 operating system. Customers running these "Server" operating systems should install Autodesk Inventor View **2008**.

BRAVA TASK PANE

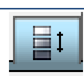
BRAVA! TASK PANE

The Brava! Task Pane can be toggled opened or closed by clicking on the centered arrow of the bar on the right side of the Brava Viewer . The Pane will also open when any of the tabs are summoned through the right mouse button **Show Pane->** menu item.

The tabbed panels available in Brava! Enterprise include:

Thumbnails	<Ctrl> + <T>
Bookmarks	<Ctrl> + <B>
Changemarks	<Ctrl> + <Shift> + <M>
Takeoff	<Ctrl> + <Alt> + <T>
Verify Redactions	<Ctrl> + <Shift> + <V>

Each tab has a hotkey associated with it. If the Task Pane is not displayed, the pane will display when the hotkey is pressed, with the associated tab displayed. If the tab is displayed, the hotkey press will hide the Task Pane.

 PAGE THUMBNAILS

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

You can open the Thumbnails panel at any time through any of the following methods:

- Opening the Task Pane and clicking the Page Thumbnails tab
- Using the hotkey <Ctrl>+<T>
- Selecting **Show Pane ->Page Thumbnails** from the right mouse button menu

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.

Resizing Page Thumbnails

If Thumbnail resizing is enabled by your administrator, you can right click on the Thumbnails panel to display a Page Thumbnails sizing menu and make the image sizes larger or smaller - up to ten increments. Select *Reduce Page Thumbnails* to decrease the thumbnail image size, or select *Enlarge Page Thumbnails* to increase their size. If you have enlarged or reduced the thumbnail sizes, selecting *Default Size* resets them to their original size. The panel itself cannot be resized.

Usage Notes

- Thumbnails won't display loaded markups unless the file is a CSF with published markups.
- Thumbnails will have a red exclamation mark next to them ! if there are markups on the page (whether the markup is published to, opened for edit, or opened for review).
- Thumbnail images are always drawn with the default background color, all layers on, and non-monochrome, regardless of the main view display settings.

The thumbnail panel contains 6 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.

The following buttons are disabled if no markup entities are present.

Previous markup page -- Takes you to the previous page containing a markup.
Next markup page -- Takes you to the next page containing a markup.

BOOKMARKS

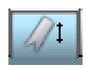
Internal Bookmarks

Bookmarks are placeholders that make it convenient for users to recall a previously saved zoom view or page in a document or drawing. Formats that support bookmarks in Brava! Enterprise are PDF (page bookmarks) and AutoCAD (2D DWG Views).

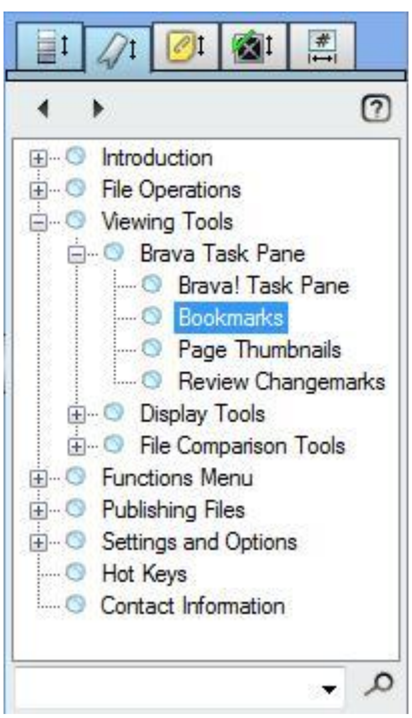
Brava allows you to view these self-referencing bookmarks that have been previously authored in the file's native source application. These type of bookmarks that have been pre-authored in the current file being viewed are referred to as "Internal Bookmarks".

Review Bookmarks

You can open the Bookmarks panel at any time through any of the following methods:

- Opening the Task Pane and click the Bookmarks tab 
- Using the hotkey <Ctrl> + <B>
- Selecting **Show Pane -> Bookmarks** from the right mouse button menu

The bookmark panel lists only the bookmarks internal to the document being viewed.



List Display

Bookmarks can have child bookmarks (Acrobat nested bookmarks are supported). If a bookmark contains a child element, it can be expanded by clicking on the plus symbol. If you click on a bookmark contained in the list, you are taken to that bookmark location, shown at the view state that was established when the bookmark was added.

Some bookmarks are containers only (for active child bookmarks) and do not have a location associated with them. These container bookmarks are indicated by a gray colored icon next to them. They can be expanded and collapsed, but clicking on these bookmarks does nothing.

 Active Bookmark

 Active Bookmark with Children

 Bookmark Container with Active Children

Next/Previous Buttons 

A "Next" and "Previous" buttons allow you to quickly navigate to the next and previous bookmarks. If the last viewed bookmark was a child, you are taken to the next parent.

You can also navigate to the next bookmark using the hotkey <Ctrl>+<Alt>+<B>

Bookmark Title Search

The search field allows you to search for bookmark titles. Brava looks for a match of the text you enter to any partial string of the bookmark titles and will expand the tree as needed to show the resulting matches. The first resulting title is highlighted so you can choose to select and view that bookmark. Click the search icon or hit <Enter> to go to the next resulting match.

FUNCTIONS MENU

BRAVA FUNCTIONS TOOLBAR

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

 Markup File

 Save Markup

 Print, Print Region, Watermark/Banners

 Select

Annotate

Review (markups)

Redact

Measure / Takeoff

Publish - Publish to CSF, Publish to PDF, Publish to TIFF, Save Current View As JPG

 Search

 This button is available from the Status bar, directly beneath the Brava Functions toolbar. Also available from the **Help** submenu are options to launch the Brava! Online help file (Contents), suggest new features, and launch the Brava! About screen.

UNDO/REDO

A history stack of all document events allows you to undo-redo certain events by selecting **Undo** or **Redo** from the right mouse button menu.

New with this release, the following actions can now be undone and redone while using Brava:

Redaction features include:

- Find text and redact
- Find text and un-redact
- Redact all raster images
- Redact zone
- Un-redact zone
- Load markup entities from embedded markup in redaction script command

Measurement features include:

- Create measure category
- Edit measure category
- Delete measure category

Note that when a "Save As" or "Consolidate Markups" command is executed, the Undo/Redo history is cleared. When the history is cleared, the Undo/Redo commands will not be available to redo or undo the last series of session events.

MARKUP

 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 author's 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 redactups to CSF, PDF, or TIFF output files.

The symbol indicates that markup files exist on the server for the current document.

What do you want to do?

- Create Markups
- Open Markups for Editing/Edit Markups
- Overlay Markups for Review
- Consolidate Markups
- Close Markups
- Save Markups
- Publish Markups/Redactups
- Change Markup Ownership
- Create a Markup Stamp Template
- Create Redactions
- Start or reply to a Changemarks Discussion

See also:

Markup Toolbar

CREATING MARKUPS

To enter Annotate mode and create a new markup file with Brava!:

1. Click 

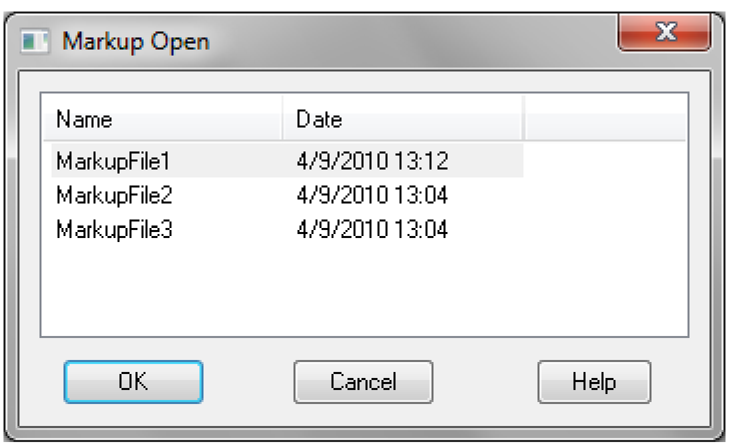
 *
2. Select the desired markup tool from the Markup Toolbar.
3. Once created, you can save your markup layer to be reviewed with the current file and/or publish the file as a new rendition in PDF, TIFF, or CSF with the markup layer (including takeoffs and redactups) permanently overlaid.

*You can also enter Annotate mode by:

- clicking  on the toolbar and then click **New** from the pop-up menu
- using the <Ctrl> + <N> hotkey

EDITING AND COPYING MARKUPS AND REDACTUPS

You can edit (if you are the author) and copy markup and redactup entities in the active (editable) markup files. You can create new markup/redactup entities or use the Select Markup Tool to select existing entities to resize, reshape, move, copy, or delete. The Select Markup Tool must be active when selecting and editing Markup Text.



To open a markup file for editing:

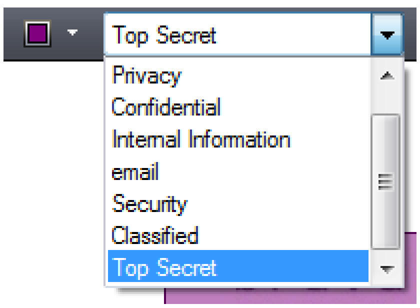
1. With a document opened in Brava! Enterprise that has markup files associated that you have previously authored, click on the toolbar and select **Open...**.
2. From the *Open Markup* dialog, select a previously authored markup file you wish to open. There can only be one markup file open for edit 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 **OK**.
4. Click on the **Markup** toolbar.
5. Select the markup entity you wish to edit. You can select more than one markup entity by pressing <Ctrl> while clicking on the desired markups, or by drawing a bounding box around a group of entities that you wish to select. Holding down the <Ctrl> Key is not necessary when drawing a bounding box for selection, but the entities you want included must be entirely contained within the selection box boundaries. Any entities that are hanging over the box's edges will not be included.
6. Markup files can contain redactup entities, which can be copied and edited just like markup entities, if they have not been finalized (unfinalized redactups will appear transparent). They can be edited in both markup edit mode, and in Verify mode.

If you are not the author of the markup file, see Changing Markup Ownership.

7. Edit the markup/redactup entities as desired. You can move, resize, delete, copy, 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.
   - To **delete** the selected entity, press <Delete> (on your keyboard or from the right mouse button menu).
   - To **cancel** (reset) an entity being drawn (before the entity is set), click the <Esc> key. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.
   - To **copy** and **paste** the selected entity, use the <Ctrl> + <C> hotkey, or select *Copy* from the right mouse button menu and *Paste (*<Ctrl> + <V>) into another area of the same page, another page in the document, or another document open in another Brava window. See section below for more information about copying entities.
   - To **rotate** the selected entity, click on the green ball extending from the center of your entity. The cursor changes to . Drag the ball in the direction you wish to rotate and release the mouse button to set the entity. For finer tolerance, click and drag the green handle farther away from the center point of the entity and then rotate. The entity will rotate in much smaller increments when the handle length is increased.
   - To **change the shape** of a selected 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, end arrow styles, line styles, fill type, etc.
- To add a hyperlink, select the markup entity, click the add hyperlink button  from the markup properties, and type or select a URL from the hyperlink text box.
- To edit a Changemarks note's text, editing must be done to the Changemarks entity itself. The text cannot be edited directly in the Changemarks note List pane.
- To edit a redaction reason, select one or more unfinalized redactups and either type a new reason in the properties text field and hit <Enter> or simply select a different reason from the available drop down list. If multiple redactups with different reasons were selected, all reasons will be updated to the new selection.



8. 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.

Copying Markups and Redactups

- You can select and Copy an entity or group of entities through the right mouse button menu command. (Changemarks and edit text entities cannot be copied/pasted.) Hold down the <Ctrl> key to select multiple entities by left clicking on each one (or draw a bounding box around a group of entities) and right click to Copy. You can Paste the entities into the same page or into a different page of the same document. In addition, you can paste the copied entities into pages of documents that are open in other Brava windows.
- <Ctrl> + drag copies the selected entity, <Shift> + drag lets you move the selected entity along the X or Y axis only.
- If editing entities on a multi-page document, you can copy selected entities to all pages if your administrator has enabled this feature. Use the **Copy Entities to Designated Pages** button  in the markup properties bar to copy all selected copy able entities to all or designated pages of the document. Entities that cannot be copied include edit text, and Changemarks. From the **Copy Entities to Designated Pages** dialog, select whether to copy selected entities to *All pages*, or *Designated pages*. If Designated pages is selected, enter page numbers and/or page ranges, separated by commas. For example; 3,5,9-15. Changes made to a copied entity on one page have no impact on any of the entities contained in other pages.
- When finished editing, save the markup or finalize the redactup through publishing.

Markup layers that have been published can never be edited or deleted.

CLOSING MARKUPS

To close the currently active markup:

1. To close an editable markup, click on the toolbar 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.
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. You can also access the *Close Review* command through the menu item **File-->Markup-->Close Review**.

- Markups that have been published can never be closed.
- The following keystrokes are available to quickly execute the close markup and close review commands.

  <Ctrl> + <Shift> + <C> = Close Markup

  <Ctrl> + <Shift> + <R> = Close Review

CONSOLIDATING MARKUPS

If this feature is enabled by your administrator (via a server parameter), you can transfer all open markup entities into one new consolidated markup file. To do this:

1. Click .
2. Select the markup files you wish to consolidate. You must open at least two markups to use this feature.
3. Click and select **Consolidate Markups**
   - A new markup file is created for edit, and all of the markup entities in the markups selected for consolidation are copied to this new markup file. All markup files that were opened for review are closed after the command is executed. The entities in the consolidated file retain their original author information and ownership does not change by default.

- If any markup entities exist that have been published to the file (burned in), they are not included in the consolidated markup.

4. Save the current consolidated markup. The consolidate command cannot be undone, however, you can close the markup opened for edit and choose not to save the consolidation.

Usage Notes

- Executing a Consolidate Markups command clears the Undo/Redo event history.
- If the markup files contain takeoff categories, those categories will be consolidated, and their totals recalculated ONLY when category properties match exactly (name, color, type, sytem, unit, precision, etc.). Any differences will be recognized as a separate category.

STAMP TEMPLATES

A Stamp Template is a group of markup entities, defined by an author as a "stamp". The template can contain any of the *available* markup entities, including dynamic text (similar to banner strings) that update when a user adds the stamp to a markup layer that is open for edit.

To create a New Stamp Template:

1. Open a document to use as a reference in regard to size and shape of the stamp template you wish to create.
2. Verify that you are on **page 1** of the document.
3. Click on the toolbar. Select **Stamp Templates --> New**. (Note: If the option is not available, see notes below about permissions.)
4. The Markup toolbar opens. Use the available markup tools (see note) to create a group of one or more entities and/or raster images that will be saved as a single stamp template. You can use wildcards in your stamp's Markup Text that will dynamically update to the tag's value when in use.

Note that the following tools are not available for use with the stamp tool: Changemarks, redactups, hyperlinks, and edit text group tools.

- To allow reviewers to manually update values contained in a markup stamp, use the Token button. When used in a markup text string of your stamp template, you can set user prompts via the %prompt("Label_String") token. When the user inserts, or double clicks a markup stamp, a text entry field displays, prompting them to enter requested information. This text entry field can be edited at any time during the review process until the markup stamp is finalized through publishing.
- When inserting dynamic stamp tokens into markup text strings, an integration can use the custom **%dbupdatestring(field value)** token in the stamp template to allow communication with the integration database and to dynamically update the stamp's field label values when the stamp is inserted into a markup, or when a reviewer double clicks on the inserted markup stamp. For example, the following tokens:

%dbupdatestring(Date)

%dbupdatestring(Time)

%dbupdatestring(Author)

%dbupdatestring(Priority)

%dbupdatestring(Status)

Produce the following table model:

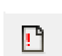
Field label	**Value**
Date	May, 08, 2008
Time	13:00:31
Author	Joe Smith
Priority	HIGH
Status	REVIEW

5. To save the group as a stamp template, click  and select **Stamp Templates --> Save** or **Save As.**
6. Enter a name for the new template and click **OK**. The template is saved to the server's list of available stamp templates (by default C:\Program Files\IGC\Brava!\Brava! Server\stamptemplates) that users may summon when inserting a stamp into an editable markup layer. A newly created or updated stamp becomes immediately available to an end user when he accesses the server folder through the markup stamp **Browse** button.

Note:Stamp templates created in one file format (such as PDF) should only be applied to files of the same format type or the stamp may not be applied with the correct scaling for the file format. It is recommended that you append the file type to the name of the stamp template, for example, a template created on a PDF document might be named *template1_pdf.xsp*.

7. To exit Stamp Template mode, select either  -->**Stamp Templates**-->**Close** or **File-->Markup-->Stamp Templates-->Close**.

To Edit an existing Stamp Template:

1. Open the file on which the original Stamp Template that you wish to edit was created. Stamp templates should be edited against the same document each time.
2. Click  on the toolbar and select **Stamp Templates --> Open**
3. In the *Open* dialog, browse to and select a template file (XSP), then click **Open**. The template opens at the same coordinates as when it was last saved.
4. You can edit the individual elements of the template as any other markup file by adding, deleting, moving, and copying markup entities. (Note that you cannot copy markup entities to other pages of the document. The template must be created only on page 1.)

5. When finished editing, select --> **Stamp Templates-->Save** to save the template with the same name. Select **Save As** if you would like to save the template with a different name.

- When a new or existing stamp template is open for edit, the Save Markup menu items are disabled. In addition, the following markup tools are not available and cannot be used when creating stamp templates: Changemarks, redaction tools, Place Stamp, hyperlink, and edit text tools.
- A group of entities can only be saved as a stamp template that were created on the first page of the current file.
- After saving a template that contains dynamic tags, you should verify that the template works as expected by opening up another browser session, loading a file, and creating a new markup layer that includes the stamp to be tested.
- The stamp template feature may not be available if your administrator has disabled this feature through its optional parameter *EnableMarkupStampTemplate*.
- Stamp authoring can be disabled separately from stamp usage. If this feature (stamp authoring) is disabled, you will still be allowed to use the stamps (available from the markup toolbar Insert Stamp tool) that a user with more privileges creates.
- Recently used stamp templates are persisted in *ViewerConfig.xml* as <FileOptions><StampMrkDir><filepath>

SAVE

SAVING MARKUPS

Markup files are saved as XRL or DXF files.

1. Once you have created a markup layer, click on the toolbar to summon the *Save Markup File* dialog.
2. You can also summon a markup Save dialog by clicking on the toolbar and select **Save**, **Save As**, or **Save As DXF.**
3. Accept the suggested markup name (same as the source file name) or type a file name in the **File Name** text box and select a directory to save the markup xrl file. For example, a markup created on *AdminGuide.pdf* will have a suggested markup name of *AdminGuide_pdf.xrl*). Markups saved with

Save or **Save As** are stored with the extension *.xrl. Markups saved with **Save As DXF** are stored in *.dxf format and can also be opened in CAD applications.

4. Click **Save**.

Usage Notes

- The following keystrokes are available to quickly execute the save markup commands.

  <Ctrl> + <S> = Save Markup

  <Ctrl> + <Shift> + <S> = Save Markup As

- Markup layers that contain redactup entities must be published to complete the redaction.
- Brava Enterprise ActiveX viewer can open and save older markup files (created with previous Brava versions). The files are converted to the current markup format, which can be viewed in the Brava Flash Viewer, if needed. (The Flash viewer does not support loading older version markup files.)

See Also:

Publishing Markups

Publishing Markups to PDF Files

PRINT

PRINTING

If your Brava! Server administrator allows and enables it, you can use the Brava! Printing functions.

Images print as they appear on the screen. If you have a markup open or overlaid, it will print on the image.

What do you want to do?

- Print a file
- Print a region
- Print with banners
- Add a Watermark

See Also:

Print to Scale

Print Troubleshooting

PRINT A FILE

To print the open document with the default printer settings, click (or you can use the hotkey + < P>).

Note: If Printing is disabled by Visual Rights, the print button and menu item will not be available. Additionally, Print Screen functionality will be disabled.

To change the default settings:

1. Click on the toolbar and select **Print** from the submenu**.**
2. To change printers click **Printer Setup** and select a printer from the printer **Name** drop down box. Click **Properties** to make any adjustments to the printer properties. You can change the printer's paper tray or change the paper orientation (landscape or portrait) Click **OK** to close the printer *Properties* and Printer *Setup* dialog boxes.
3. From the *General* tab, specify a **Print Range**:
   - *Print Range* includes **All pages**, **Current page**, **Pages from:To:** (specify page numbers), and **Current View**. Current View only prints the part of the image that occupies the viewing window. Current View attempts to use the paper's entire printable area, so the printout can contain some portion of the image that is not visible in the viewing window.
4. In the *Options* section, you can set your desired print options:

   a. The **Number of copies** to print.

   b. The minimum printed Line Thickness**.**

   c. **Print** color options include "Original Colors" (file prints with original colors; markups print with color), "As Grayscale" (file prints in shades of black to white; markups print grayscale), and "Lines As Black" (file prints all lines black; markups print with color). The *Original Colors* option is only available if the selected printer supports color printing.

   d. Select the **Automatically rotate for best fit** check box if you want Brava! to determine if rotating the image by 90 degrees will allow more of the image to fit on the printed page.

   e. If Changemarks are associated with the document, the **Print Changemarks notes** check box is enabled. When selected the content associated with each Changemarks note will print at the end of the print job as an appended page. Only the Changemarks 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 Changemarks title, author, date and time authored, the note content, and any hyperlink reference.

f. If any redactup entities are contained in the document, the **Print redaction reasons** check box is enabled. When selected, the text of each Redaction Reason (if present) will print at the end of the print job as a separate summary sheet. Each redactup 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.

g. Some older printers, and the PDF Distiller and Writer, may not properly invert printouts and many file types print reversed (black background and white foreground). To correct the printout (white background with black foreground), enable the **Optimize for PDF/Postscript printing** option in the Print Options dialog. When selected, this causes a bitmap of the current image to be sent to the printer resulting in accurate printouts for the problematic printer or print driver. Note that enabling this option results in a slower print time and a larger print spool file. This option is persisted per printer.

5. Adjust the scale of the document from the **Scale** tab - see Print to Scale for details.
6. Observe the **Preview** area of the *Print* dialog to verify the area you wish to print is contained in the printable area of the page (indicated by the dashed blue line).
7. **Note**: If the print preview image does not display what you expect, study the textual output in the print *Preview* panel. It displays the image's dimensions, the current scaling (e.g. "Fit to page," "1/50," etc.), the scaled output size (the image's dimensions multiplied by the scaling), the paper size dimensions, and the printable area size. Pay particular attention to the scaled output size compared to the printable area size; these are depicted, respectively, as the red and blue dashed lines in the preview image. Adjust the paper size or scaling as necessary to obtain the desired output.
8. Click **Print** to print the file.

You can save your print settings (excluding Banner/Watermarks) as the default values to use for subsequent printings. Click **Defaults...** and then click **Save As Defaults**. To clear your previously saved default settings, click **Clear Defaults**. If Save as Defaults is not selected, the print dialog automatically defaults to the values used for the last print job within the current session.

The following settings of the Print dialog box can not be set as default:

1. **Print range: From_To** - if selected, the default setting is **Current page**.
2. **Scale** entry always defaults to **Fit to page**.
3. **Number of copies** to print always defaults to **1**.

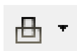
See also:

Print Region

Printing Tips

PRINT REGION

You can select just a region of an image to print using the Print Region command.

1. Click  on the toolbar and select **Print Region** from the submenu.
2. Click the left mouse button on the viewing window and drag a window around the area of the document you wish to print.
3. The selected area displays (according to the current settings) in the *Preview* area of the Print dialog box. **Current region** is automatically selected in the **Print range** area. Click **Print** to print the selected region.

In contrast to printing the Current View option, Print Region only prints the area selected in the dragged rectangle. The printout is cropped and does not try to fill the paper's printable area.

Print Region can also be triggered using the <Ctrl> + <G> hotkey and then selecting the region.

If the Copy to Clipboard Visual Right is disallowed, this feature is disabled

See Also:

Print a File

WATERMARK/BANNERS

The 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 on screen 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/watermark 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 set on a published CSF file will never be editable by end-users.

Print banners and watermarks display on the printed output (paper) and CSF files while *Publish* banners and watermarks display on the published output PDF or TIFF file (electronic).

On-Screen Watermark and Banner

Watermark and banners are printed on the document print-out except for the on screen banner and watermark which can be set independent of the print and publish watermark/banners and are visible only in the Brava viewing window.

You can show the watermark and/or banner values in the Brava viewing window by adding an entry to the *Screen Watermark* or *Screen Banner* lines of the *Watermark/Banners* dialog. The screen watermark value displays diagonally across the viewing window, and the banner value displays on the bar just below the viewing window. These settings are useful for displaying a document's classification to the viewer (e.g., proprietary, draft, etc.).

See Also:

Edit the watermark/banners font

Use Tag values

Add/edit a banner or watermark

ADDING, EDITING WATERMARKS/BANNERS

You can add, edit, or clear print banners or the watermark if they have not already been defined on the Brava! Server or in the html parameters. **Note**: Any banner or watermark strings that have been published to a CSF file will not be editable.

Print banners and the watermark display on the printed output (paper) while *Publish* banners and watermarks display on the (desired format) published output file (electronic).

To access **print** watermark and banners:

Click the print arrow on the toolbar (or click **File**) and select **Watermark/Banners.** The button is also available from the Print dialog and CSF Publishing dialog.

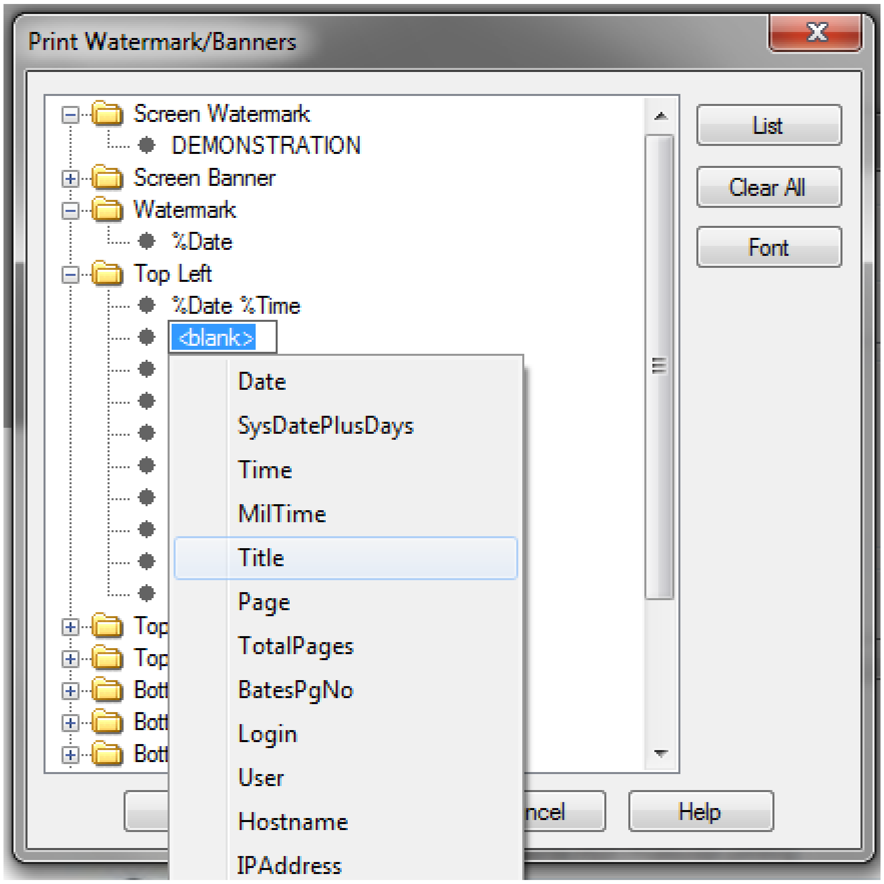
To access **publish** watermark and banners:

Click on the toolbar and select **Watermark/Banners** from the selected format *Publish Options* dialog.

To edit the print/publish banners and watermark:

1. Click on the watermark or one of the banner folders (e.g., Top Left).
2. Type in the desired text string or **%** to access the tag drop down list. You can use multiple tokens in one banner or watermark string (for example: %Date %Time).
3. Click the **Font** button to change the font by selecting a font name, style and size from the *Font* dialog box. **Notes**: Any change in font style and name selection are persisted for all documents in the current session and across sessions and will be applied to all defined watermark and banner settings (you cannot define multiple fonts or styles per document). Watermark font size is not affected by your font size selection. The Screen Banner is not affected by any font setting.

4. You can choose to show a watermark and/or banner value in the viewing window by adding an entry to the **Screen Watermark** or **Screen Banner** lines. These settings are useful for displaying a document's classification to the viewer (e.g., proprietary, draft, etc.) and the values can differ from the values entered in the Watermark and banner location lines. Note that On screen banner fonts are not affected by choices made in the Font dialog box.
5. Click **List** on the Print or Publish Watermark/Banners dialog to view all Watermark/Banner strings that are set for the current document. Click **Edit** to return to the editable list.
6. Click **OK** to apply your changes and close the **Watermark/Banners** dialog box.



NOTE The symbols © and ® are supported for use in the screen or printed banner or watermark text string.

See also:

[Using Tag values]

[Editing Watermark and Banner fonts]

[About Banners and Watermarks]

[Watermarks on CSF files]

TOKENS

To access the Token (or Tag) drop-down list, enter a percent symbol (**%**) in the edit field of a print/publish watermark or banner. Print banners and the watermark can contain text strings or one of the available token values blow. These tokens are also supported when using the Stamp Template and Find and Redact tools.

%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.

%Login (or %User) - Inserts the user name of the person who issued the print.

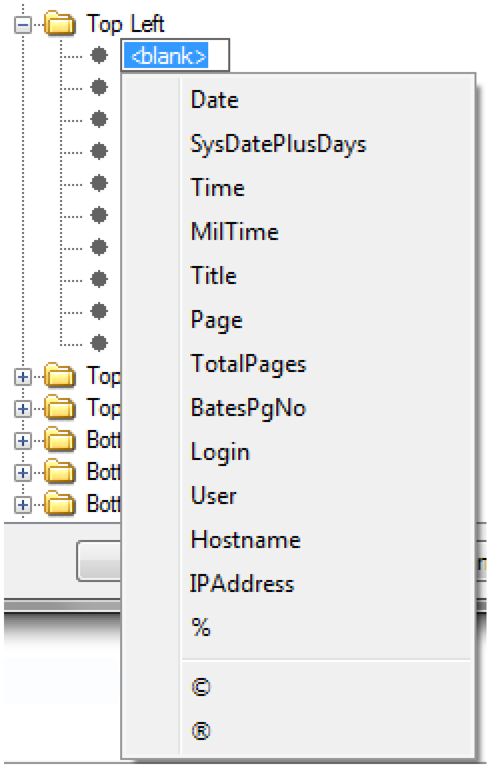
%Hostname - Specifies the hostname of the machine that issued the print.

%IPAddress - Specifies the IP Address of the machine that issued the print.

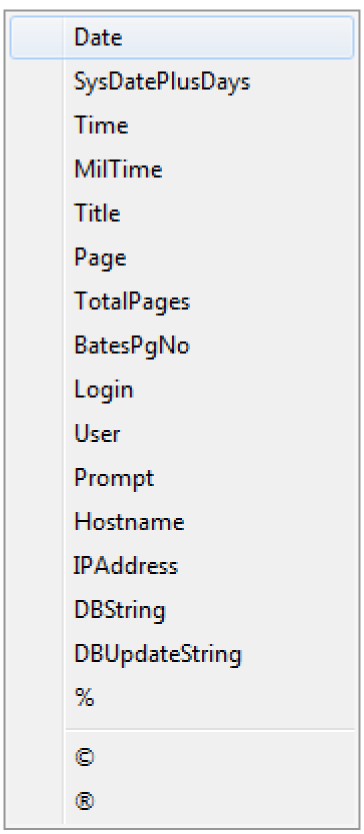
%% - Inserts a single % character.

© - Inserts the copyright symbol.

® - Inserts the registered trademark symbol.



In addition to the tokens above the following stamp Tokens can be used in creating Stamp Templates when a markup text entity is selected:



%prompt("Label_String") - Used in a token expression when creating a stamp template. When set, a prompt dialog displays to the end-user prompting them to manually edit a markup stamp's text string during review process. When this token is used, the prompt dialog displays when a user initially inserts the markup stamp and at any time the stamp is double clicked. The dialog contains a text entry field value which can be updated at any time before the markup is finalized through publishing. Unlike %DBUpdateString, the %prompt tokens will NOT be sent to the integration database for resolution and may not be customized for integrations. A separate dialog will display for each %prompt token set.

Note that a ":" character will be automatically added to the end of LABEL_STRING in %prompt(LABEL_STRING) when displaying the caption to the user. You do not need to add any quotation marks with your label string. For example, *%prompt(Enter amount)* means that the user will see a prompt box with the caption "Enter amount:" and a text entry field to type in the requested information.

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

%DBUpdateString(field label) - Used when creating Stamp Templates to resolve custom integration values during the review process. This tag inserts a corresponding field label value (Priority, Status, etc.) from the integration's database tables when a user either inserts a markup stamp, or double clicks on a markup stamp containing a %DBUpdateString token in the markup text string. The method for resolving these tokens is determined by the integration's needs, and can include using a dialog or a non-interactive method. If %DBUpdateStrings are not resolved, they are given a default answer which is displayed with the resulting markup stamp.

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)** macro 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*

FONT SELECTION FOR WATERMARKS AND BANNERS

The *Font Properties* dialog box is accessed through the Font button of the **Watermark/Banners** dialog box. Here, you can choose the font properties to use for your print and publish watermark and banners and screen watermark.

You can set the font style, size, and name from the Font Properties dialog box, however, note that the screen watermark and *banner* are not affected by your choices.

Select a font name, style, and size from the available choices and click OK. You can review your selection in the *Review* section of the dialog box. The list of available font names is the list that your default printer supports.

If the default font properties have been set in the Brava server parameters (*WatermarkBannerFontSize*, *WatermarkBannerFontStyle*, *BannerFontName*) changes made to these fields in the Font Chooser will not be saved.

PRINT TO SCALE

You can print image files to scale through the **Scale** tab of the **Print** dialog box. You can scale the original image to fit the page, fit document within banners, scale, or scale it to a preset ratio.

In the *Unit* section:

For the *Measurement unit type*, you choose from **US Customary** (inches) or **Metric** (millimeters) and select pre-defined drawing scales to set up image-based Print To Scale operations.

Select the **Use non-paperspace adjusted units** check box to use the document's raw drawing units for scaling instead of normalized units. When selected, one unit is assumed to equal either one millimeter or one inch (depending on the measurement unit type selected). This option is not selected by default and the document's normalized units are used for scaling. Normalized units are the drawing units converted to a real world unit based on a conversion factor of the document type.

In the *Scale* section:

You can choose to use one of four scaling methods available - *Fit to page*, *Fit document within banners*, *Scale*, and *Scale to* (ratio) where you can enter custom values:

Fit to page

Fit to page automatically sizes a document to fit completely on the selected paper size.

Fit document within banners

Select if you would like to shrink the document to fit within the borders of any banners that might exist.

Scale

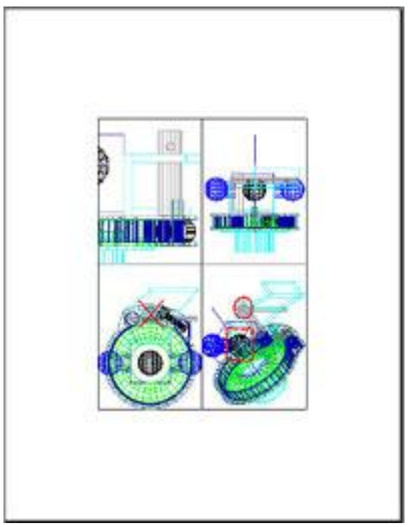
Scale allows you to print a current file to a particular scale, based on the original scale of the image. Select a scale amount from the drop down list. With Full , one inch of the original prints as one inch on paper (1 inch = 1 inch) and with 1/x inch, one foot of the original document prints as a fraction of an inch on paper(1/x inch = 1 foot). It is helpful to know the original scale of the file being printed in order to adjust the printed image accordingly. If unsure, use the Scale To or Fit to Page method, or use trial and error. (If you have Acrobat PDF writer, you can select that option from your printer drop-down name list to print to. You can then preview the file in Acrobat Reader as it will print.)

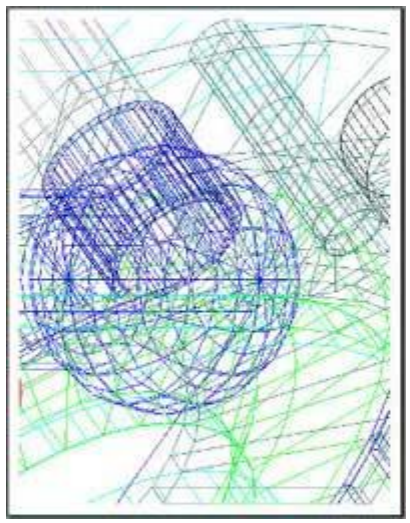
Scale to

Scale to "x to y" also allows you to print a current file to a particular scale, based on the original scale of the image.   Enter a scale ratio in the two text boxes. For example, entering 1 and 100, 1 unit (inch or millimeter) of the printed document is equal to 100 units of the original document. (1/100 or 1%) Or, if entering 5 and 1 for example, 5 units of the printed document represents 1 unit of the original (5/1 or 500%). The image is cropped if the scaled image is larger than the paper size. It is helpful to know the original scale of the file being printed in order to adjust the printed image accordingly.

Examples:

Small scale drawing file where 1 inch = 1 inch:

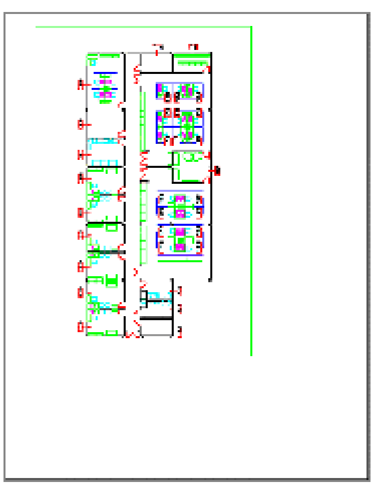


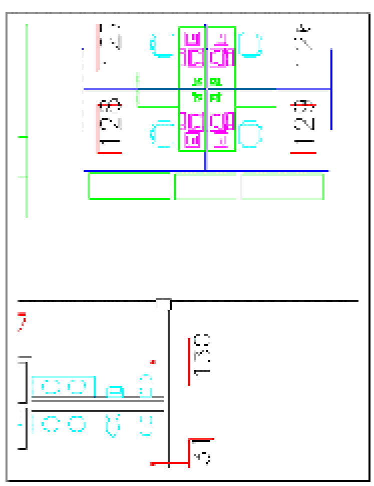


1) Scale to 1:2 (50%)   2) Scale to 6:1 (600%)

Examples:

Large scale drawing file example where ¼ inch = 1 foot:





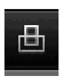
1) Fit to Page 2) Scale to 1:50 (2%)

Image values can vary greatly as you can see a value of 600% in the small scale example set yields roughly the same printed area as a value of only 2% in the large scale example set. Printing with an image size of 100% in the second example would most likely produce a blank sheet of paper.

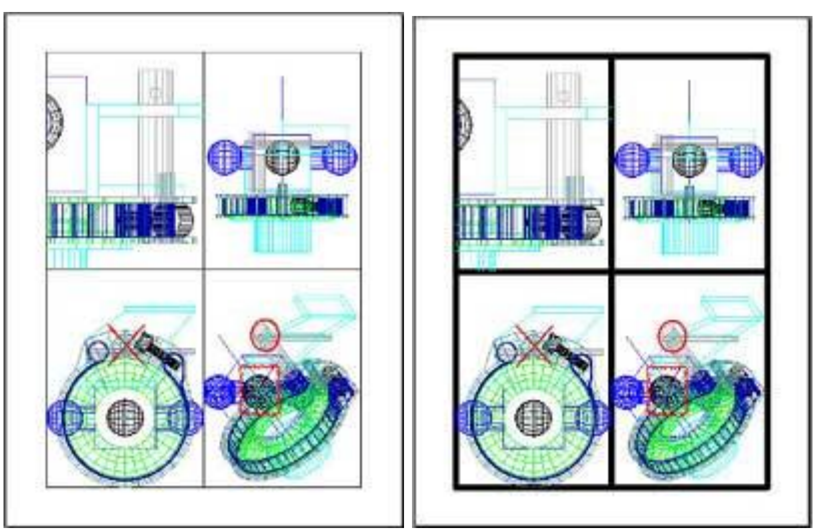
LINE THICKNESS

Brava! Enterprise supports printing line thickness for markup entities and CAD drawings. This feature is only available with high-resolution printing. You can adjust the minimum line thickness for printouts from 0 to 99 dots with 0 (the default) being the thinnest line weight available. A line width of 0 draws a line width of 1 pixel at any zoom level. Only the line thicknesses that have no set value are affected. If a drawing already has line thickness assigned to its pen colors, those values are retained.

To adjust the line thickness value:

1. Click  and click **Print**. Click the *General* tab if needed.
2. In the *Options* section, type a value from 0 to 99 in the *Minimum line thickness* field.
3. Select the numeric value's unit type from the drop down list of either points (1 point = 1/72 inch) or millimeters.
4. Click **OK**.

Example:



The border lines of this DWG file have no preset value. Here, we assigned a value of 40 points as the minimum line thickness in the second image.

PRINT TIPS AND TROUBLESHOOTING

- At this time, It is only possible to preview the page that is currently displayed in the viewer.
- To get the best line resolution on vector images, print using the "Vector Lines as Black" option.
- The rotation of the image displayed in the print preview area depends on the rotation of the image in the viewer, the print range selection, and the "Automatically rotate for best fit" selection. When the "Current View" print range option is selected, the preview image's base rotation (when the option **Automatically rotate for best fit** is NOT selected) will be the same as the rotation in the viewer. When any print range option other than **Current View** is selected, the preview image's base rotation is 0 degrees (no rotation). Selecting the **Automatically rotate for best fit** option rotates the image in the preview 90 degrees from its base rotation if it results in the image fitting better on the target paper area.
- If the print preview image does not display as you expect, study the textual output in the print preview panel. It displays the image's dimensions, the current scaling (e.g. "Fit to page," "1/50," etc.), the scaled output size (the image's dimensions multiplied by the scaling), the paper size dimensions, and the printable area size. Pay particular attention to the scaled output size compared to the printable area size; these are depicted, respectively, as the red and blue dashed lines in the preview image. Adjust the paper size or scaling as necessary to obtain the desired output.
- Some older printers, and the PDF Distiller and Writer, may not properly invert printouts and many file types print reversed (black background and white foreground). To correct the printout (white background with black foreground), enable the **Optimized PDF Postscript Printing** option in the Print Options dialog. When selected, this causes a bitmap of the current image to be sent to the printer resulting in accurate printouts for the problematic printer or print driver. Note that enabling this option results in a slower print time and a larger print spool file.
- If attempting to publish an Office 95 compliant file with Office 2010, print/XPS publishing may fail if the file block protection settings are enabled. This setting may be altered through your Office application file options:

  From your Office application, go to:

  `File->Options->Trust Center->Trust Center Settings->File Block Settings`

  Any file checked as 'open' will fail

SELECT

SELECT TOOL

The select tool is used to pick interactive elements in a document or drawing.

With it, you can select and copy text, view any block attributes (mouse over reveals attribute information) , select and copy any graphic image, and launch hyperlinks contained in the document. The cursor changes to a hand when you move it over a hyperlink. Click to launch.

See Also:

Select Markup/Redactup

COPY TEXT

If allowed by Visual Rights, you can select text contained in a CSF, Microsoft Office document or a drawing file and copy it to the Clipboard.

1. Use the Select tool to click and drag a selection box around the text you want to copy. The selected text appears highlighted. The selection box can include as little as one letter, or as much as all of the text contained in the page.
2. 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.

This feature is not permitted if the publisher of the CSF file has disabled the Visual Right "Copy to Clipboard". If the document has the copy to clipboard right enabled, users can copy a specified portion, or the entire page to the clipboard. If not permitted, Print Screen functionality is also disabled.

See Also:

Capture Changemarks Information

COPY REGION

You can select and copy a region of a document to the Clipboard as an image and paste that region into other applications such as Word, Excel, CAD applications, Image editors, etc.

1. From the right mouse button menu, select **Copy Region**.
2. Click and drag a selection box around the region you want to copy.
3. The region is now copied and you can paste the contents of the Clipboard into another application.

When viewing a CSF file, this feature is not permitted if the publisher of the CSF file has disabled the Visual Right "Copy to Clipboard". If not permitted, Print Screen functionality is also disabled.

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 Changemarks 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.

ADD A HYPERLINK

You can attach a hyperlink to a Changemarks note or to any markup entity. Simply create the Changemarks or markup entity and with the entity selected, click  in the markup properties toolbar. Type a hyperlink URL in the text box.

To edit a Changemarks or entity to add a hyperlink, click  to select the entity and then click  to specify a URL. Only one hyperlink URL can be assigned to each markup object. in the case of Changemarks, any URL entered into the Changemarks text field will automatically become an active hyperlink in the Changemarks panel and can include multiple URLs. In addition, URLs added to the panel in Changemarks Discussion mode will also be active.

LAUNCH A HYPERLINK

To launch a hyperlink from within a Brava! window (while in review mode), 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 Changemarks, open the Changemarks panel and click on any active hyperlink (indicated with underlined blue text). The URL will launch in a separate browser window.

You can specify how hyperlinks launch in Brava! by adjusting the viewer parameter "HyperlinkLaunch".

default launches each document in its own separate window

one launches all documents in a separate window as Brava!

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

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

SEARCH

FIND TEXT, SEARCH WILDCARDS, AND SEARCH MACROS

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

1. Type the word or phrase you want to search for in the search edit field. You may also enter search string commands or macros to find and highlight text.
2. You can specify your search parameters by selecting an option 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.

   Regular Expressions - 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.

   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. Use [F3] or press [Enter] to navigate to and highlight the next search instance.

Multi-term searching:

When the *Regular Expressions* 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.

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

See Also (for advanced search information)**:**

Text Search Modes

Using Search Macros

Conditional Macros

Search Rules and Examples

ADVANCED SEARCHING

USING SEARCH MACROS

The stringing of multiple search patterns together to form an abstracted concept defines a search macro; a concept ideally suited for use in redaction scripts since many related redaction strings can be grouped together and executed as one convenient macro command. You can use any of the following predefined macros in your search strings and scripts when using the Search text, Redact by Script, Find & Redact From/To, and Find & Redact tools.

To see these macros in action, a sample directory of PDF files is included in your web server installation (e.g., C:\Program Files\Apache\Apache Tomcat 6.0\webapps\ROOT\IGC\Samples**Redaction**\). Open any of these test files in Brava! Enterprise and follow the file's directions to run the specific macro against the file's sample data. Explanations are provided for what is and isn't redacted in the results.

Brava! Enterprise uses a powerful searching language that allows most unique patterns to be found and redacted via minor scripts or new macro customizations. To create custom macros that can be added to your search strings and redaction scripts, please contact Informative Graphics for more information: info@infograph.com

AVAILABLE SEARCH MACROS

The commonly used macros below have been predefined and are available for use with any Brava find function. These usable macros are defined in the *search_macros.xml* file and can be customized as needed.

MACRO FORMATTING

[:macro name:] (e.g. [:usphone:], [:ssn:], [:email:])

Note that the old macro formatting style \[macroname] has been deprecated, but still remains functional for backwards compatibility. Search scripts that have previously been written in the old style will continue to work in Brava Enterprise 7.0. Any new scripts should use the new macro syntax.

PREDEFINED MACROS IN BRAVA! ENTERPRISE :

[:usphone:] - Finds all USA style phone number representations.

[:ssn:] - Finds representations of US Social Security numbers patterns, such as 123-45-6789

[:ocr_ssn:] - Similar to [:ssn:] except allows both numbers and characters in the dash pattern string. For example, SSN: l23-45-67B9. This macro is useful on TIFF documents where numbers may have been recognized as letters during the OCR conversion process.

[:email:] - Finds email addresses in standard form (for example, "xzy@mysite.com", "zcy@mysite.co.jp", "name, name [name@name.com]", etc.)

[:usmoney:] - Finds instances of US Currency ($10, $100, $1,000, $10,000, $1B, $1.1B, $1.1T, $1.1M, $1.1K, etc.)

[:dob:] - Finds instances of Date of birth in forms.

[:creditcard:] - Finds instances of Visa, MasterCard, Diner's Club, Discover, American Express, FIGI credit card numbers.

[:name:] - Finds various combinations of a person's name. Use this macro via the Privacy Information tool*.

*Note that the **Name, Email, USPhone, SSN**, and **dob** macros can all be conveniently executed through the Privacy Information tool of Brava! Enterprise.

The following form-based macros redact elements in a standard form.

[:zip:] - Redacts "Zip: xxxxx[-xxxx]"

[:usaddress:] - Redacts "Address: to end of \[Zip:]

[:age:] - Redacts Age: x[x[x]]

[:gender:] - Redacts Sex: [M]|[F]|[Male]|[Female] or Gender [M]|[F]|[Male]|[Female]

[:race:] - Redacts Race: [any single word]|[African American]|[American Indian]|[Alaska Native]|[Pacific Islander]|[Native American]

[:acctno:] - Redacts "Account No: xxxxxx"

[:policyno:] - Redacts "Policy No: xxxxxx"

[:passportno:] - Redacts "Passport ID: xxxxxx"

[:drvlic:] - Redacts "Driver License: xxxxxx"

[:state:] - Redacts "State: XX OR XXXXXX XXXX"

[:date:] - Redacts "Date: xxxxx"

CUSTOM MACRO SYNTAX

If you would like to customize the search macro definitions by adding to or changing the existing search criteria, the file (*search_macros.xml*) can be edited in Notepad. The XML file is downloaded with the client CAB file and can be found in your HOMEPATH (*C:|Documents and Settings|<user>|IGC|x7_0)* directory. Be sure to make a backup copy of the XML file before performing any edits.

The Macro would be executed in a search or redaction script using the following syntax:

```
[:macro_name:]
```

or

`macro:(option codes): macroname (see` command search strings`)`

When creating custom macros, keep in mind that:

- Wildcards and string commands may be used in creating macros.
- Macro names cannot contain spaces or punctuation marks.
- The search string must obey the restrictions of XML which disallows the use of the following characters directly: & " < > (Instead you must use: & " < >)
- The search string can reference other macros, but it may not reference itself or any other macros that reference it. (Would create an infinite loop)

You can put comments anywhere in the file as:

<!-- [some text] -->

Comments are useful for making notes to yourself or to others and "some text" can say anything you want since the comments are ignored by the code that reads the file.

See Also:

Wildcard Quick Tips
Find and Redact
Text Search Modes
Conditional Macros
Search Rules and examples

TEXT SEARCH MODES AND STRINGS

The following search string command behavior is active in the GUI search text box only when the "Regular Expressions" search option is OFF (unchecked). When ON (checked), the text entered in the find box is assumed to be a regular expression (regex) string and can be entered without needing to type the "regex:" prefix. Search string commands can be used in the find text search box, in the find and redact search boxes, and in any redaction script.

THE DIFFERENT MODES OF TEXT SEARCH AND THEIR OPTIONS

phrase:

Find exact text match. This mode works like the "find text" command in most word processors, including Notepad. The string will be converted to a regular expression where spaces may be allowed in-between characters. Spaces may be 0-to-many whitespace characters.

anyof:

Find any of the specified words or quoted phrases. This mode is similar to Google's default behavior regarding spaces and quotes. "Hello there "John Smith"" means to find "Hello" or "there" or "John Smith". Each phrase string will be converted to a regular expression where spaces may be allowed in-between characters and spaces may be 0-to-many whitespace characters.

macro:

Perform a find by looking up the named search string. For example, "email" would fetch the search string associated with the name email in the *search_macros.xml* file. Note that the brackets should not be included. If you want to use the "ssn" macro, then your search string should be "ssn". Not "\[ssn]".

igc:

Perform a raw IGC wildcard search. Macro references, within the string, are specified in the traditional escape format "\[macroname]".

regex:

Perform a Regular Expression search. Macro references, within the string, are specified in the format "[:macroname:]", which works well along side the supported POSIX macro system. For example, in POSIX, "[:alnum:]" represents "[A-Za-z0-9]" (all the alpha and numeric characters). If you make your own macros, be sure to not use the name of one of the following that are already reserved by POSIX: `alnum, word, alpha, blank, cntrl, digit, graph, lower, print, punct, space, upper, xdigit`. **Important**: All custom macros used in regular expressions need to be written in regular expression format. **Do NOT reference an IGC wildcard macro from within a regex string and vice-versa**.

name:

Performs a clean name search. This uses the name macro, but includes additional functionality. Following are the main differences:

- uses simple format, such as "name:a:john david smith" vs. using the equivalent macro command
- not necessary to enter initials
- not necessary to enter periods after prefixes (such as "Mr." or "Mr").
- fewer parameters needed, and always case-independent
- results from the search will not include cases where only 2 or 3 lower case initials were found. For example, a result of "AS" will be considered a valid initials result and allowed. Results of "as", or "As" are not included.

THE SEARCH STRING COMMAND

Search string commands allow you to specify additional options when performing searches.

The search command string that includes options will be formatted as follows:

```
[mode] : [options] : [search string]
```

for example, a term-hit highlight search might look like:

```
anyof:wiab-p-f-:this is the "search string"
```

If there are no options desired, then the command would look like this: (double colons)

```
anyof::this is the "search string"
```

The [**mode**] value can include any of the 5 described above (phrase:, anyof:, macro:, igc:, or regex:)

The [**options**] parameter of the string command can include combinations of the following. Each option character, except s, m, and c should be followed by either a **+** character or a **-** character to indicate whether or not the feature is being enabled or disabled (True or False). If neither is specified, it is assumed that the feature is being enabled (True) :

Option	Description	Default
w	Only find answers on whole **word boundaries**	False
i	**Case insensitive**	False
a	**Highlight all** results on this document	False
b	Look past paragraph boundaries (try to step over headers, footers, and captions)	True
p	Search **from current position**	True
f	Search **Forward**	True
s	**Sub-Expression** index	0
m	**Macro definition**. Allows you to specify the value associated with a macro	see example section
c(r|g|b)	Specify the (default) **highlight color** for this search	Blue
c[#](r|g|b)	Specify **highlight color** to associate with a particular entry in the list of 'OR' phrases in an "anyof" search	Default color*

*[**AnyOf]** has a slightly unique default color behavior. Normally, "highlight all" results are yellow. For AnyOf, only the first term is highlighted yellow. The second term is highlighted cyan. The third is light purple. The fourth is orange. The fifth is green. Any terms beyond the fifth, wrap back around to yellow and repeat the sequence. If you specify a default color in your command string, then that color will be used as default for all terms, instead of these.

This example shows a sample file with the search string:

```
anyof:awi:of and or the is for be
```

The Brava! Desktop search macro "[:usaddress:]" can be used to redact addresses in a document form. The pattern being searched for is the word "address" (required) followed by a colon (required) to the end of a zip code pattern" or the word "street" (required) followed by a colon to the end of a zip code pattern".

Brava! Desktop is looking for this "address/street to zip" pattern, finds it in the document and marks the found text for redaction finalization.

Macro's can be executed in any search operation within Brava! Desktop.

As an example: The [:usaddress:] macro can also be used in the "Find & Redact" function:

Usage Notes

- Some text search modes don't use certain options as can be seen in their descriptions.
- The option character flags can be separated by spaces, but is not a requirement.
- The sub expression index (s) is not a flag; it is an integer value. Therefore, one or more digits is expected to be found after the 's'. Leaving it blank is invalid. The sub expression index parameter is only used for regex searches.
- As with the sub expression option, the color options require further specifications (RGB numeric values).
- If a string command is entered through the UI Search text field, the specified option flag value will override the defined defaults set for any of the Search menu items (Match case, search direction, etc). For example, if you search for "phrase::hello", the state of the Match Case menu command is obeyed. If you search for "phrase:**i**:hello:, then the 'i' in the string is obeyed instead (case insensitive=true).
- By this same logic, when executing a redaction script command with the Find&Redact tool, you can set the value for "Find whole word only" option. If this option is specified in the find string command, the 'w' flag will override the state of the "Find whole word only" check box. For example, if you want the script command to search with find whole word and match case enabled, then you might enter "phrase:wi-:hello" in the Find&Redact search field, or in a redaction script text file.
- If a string passed into Brava's API that does not begin with any of the reserved mode prefixes, then the search is assumed to be an older style search string (pre version 3.0). In this case, the string will be examined to determine intent and will look for IGC wildcard escape sequences.

  If any wildcard escape sequences are found (aside from the '\<' and'\>' begin and end escape sequences), the string will be interpreted as

  `igc:: [their string]`

  Otherwise, if the string starts with a "\[" and ends with a "]", it will be interpreted as

  `macro:: [their string, minus those bits]`

  Otherwise, the string will be interpreted as

  `phrase:: [their string]`

  If the phrase had the '\<' and'\>' begin and end escape sequences, then it will be flagged as wanting whole word boundary matching.

See Also:

Search Rules and examples
Text Search
Using Search Macros
Search Wildcards
Conditional Macros

TEXT SEARCH RULES AND EXAMPLES

The following search string command behavior is active in the GUI search text box only when the "Regular Expressions" search option is OFF (unchecked). When ON (checked), the text entered in the find box is assumed to be a regular expression (regex) string and can be entered without needing to type the "regex:" prefix.

Multi-term searching:

When the *Regular Expressions* 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.

When using the *prefix-style* search string commands (described below), you can highlight and search for multiple terms using the following syntax with the BravaXParams `HighlightTerms` and `SearchTextAtStartup` (see Brava Administrator's guide for parameter usage details):

To highlight multiple terms:

`HighlightTerms=anyof:wi:"poor dog" cupboard`

This example highlights both the phrase "poor dog" and the word cupboard. Each term (i.e. "poor dog") is highlighted in its own color.

To search for multiple terms:

`SearchTextAtStartup=anyof:wi:"poor dog" cupboard`

This example will highlight the first of occurrence of either "poor dog" or cupboard, and will allow the user to go to the next occurrence of either of these terms when they search for the next term.

REGULAR SEARCH EXAMPLES:

Input	Result
`Hello there`	results in searching for the phrase "Hello there"

`\#\*#`	results in searching for one or more digits in a series of digits that are in a contiguous sequence (using IGC wildcard logic)
`\[email]`	results in searching for an email address (using IGC macros) (Note that \[SSN] cannot be used in this manner). (Note that this format has been depricated, but will continue to work the same as [:email:] for backwards compatibility.)

PREFIX-STYLE SEARCH STRING COMMAND EXAMPLES:

If the search string begins with "phrase:", "anyof:", "macro:", "igc:" or "regex:" then the string is read and applied according to the search options specified. **These options will override any check boxes that are set in the Search Options drop down list**.

If the text you typed does NOT begin with any of the 5 "Mode" prefixes, then special handling is not applied to the search command and Brava looks for the specified text phrase to find, including any of the old IGC wildcards and macros.

When using the prefix string commands, you don't have to specify every option. Each has a default value that will be used in the absence of specifying the option in the search string. In addition, not every mode uses every option. For example, the list of result colors c[#] are only used by the "AnyOf" mode, and the "Regex" mode does not use the word boundary option (W).

Usage Rules and String Samples:

Input: PHRASE Mode	Result
`phrase:wi:and the`	1. Searches for the next instance of the phrase "and the" from the current position. (Current position means "from the text that is currently selected" or "the top of the current page) This example doesn't care about case, but does care about only finding results that are on whole word boundaries as opposed to finding part of other words like in "b**and the**y". Notice that the only two parameters used (WI) were ones that were not set the preferred way by default.

`phrase:iw:and the`
 	
`phrase: w i :and the`
	2. The results are exactly the same as example #1. Changing the order of the option parameters or adding spaces between parameters has no effect on the outcome.

`phrase:w+i+:and the`	3. The results are exactly the same as example #1. Using the plus sign is just being verbose. To disable an option, it is required to append a - sign since not doing so assumes enabling the option.
`phrase: w + i + :and the`	4. This would not return any results. Spaces between the option parameter and + or - flag are not allowed. Spaces between the flag and other characters are permitted, however.
`phrase:wic(255|0|0):and`	5. Results are the same as the example #1, only with red colored term

the	results selection rather than the default dark blue.

Input: ANYOF Mode	Result
anyof:awi:and the	6. Returns all instances of either "and" or "the". This example doesn't care about case, but does care about finding results that are on whole word boundaries. The results would all be colored yellow since that is the default color for the results in "highlight all" situations. Note that "AnyOf" and "highlight all" are not connected. You can input a phrase search and specify that you want to highlight all the results. You can also input an "AnyOf" search and specify to see only the next result, rather than all of them (in which case the default color would be dark blue rather than yellow). The "highlight all" flag determines the default color.
anyof:awic(255|0|0):and the	7. Same result as example #6 but with red rather than yellow as the selection color.
anyof:awic[1](255|0|0):and the	8. Same result as example #7 but with all results for "the" being red colored and results for "and" being the default yellow. The [1] indicates to associate the color with any results found for the second term. The index is zero-based, so 0 means the first result while 1 means the second, etc.
anyof:awic[0](0|255|0) c[1](255|0|0):and the	9. Same result as example #7 but with all results for "and" being green colored and results for "the" being red. The default color is never used for a result because colors for the first two result groups (c[0] and c[1]) are specified and the search string only contains two different terms (the default color doesn't have a chance to be used in this scenario).
anyof:awic[1](255|0|0) c[0](0|255|0):and the	10. Results are exactly the same as example #9. Order of defined colors (c[1], c[0]) has no impact and only cares about what index is associated with them.
anyof:awic(0|255|0) c[1](255|0|0):and the	11. Same result as example #7 but with all results for "and" being green colored. Results for "the" are still red. By not including an index on the green color, this string specifies what the default color should be. And, since it doesn't specify what color [0] should use, it used the default color. Had the search string included any additional terms like "and the foo bar", then "foo" and "bar" results would have been green too since green is the default color for this search. If included in example #9, however, "foo" and "bar" would have

	been yellow. In that case, green was tied to the first result group while "foo" would be group [2] and "bar" would be group [3]. The default was still just yellow, so those groups would be yellow.

You can input macros with or without the prefix. This command style macro allows you to specify additional options in your search results. If you don't want to include additional options, you can just type `[:ssn:]` or `[:email:]` etc., to run one of the pre-defined macros.

Input: MACRO Mode	Result
`macro:ai:ssn`	12. Finds all instances of the SSN macro and ignores case. Word boundaries are not applicable since that logic is built into the macros themselves. This search string will work regardless of whether the macro is written in wildcard or regex style.
`macro:i:ssn`	13. Finds the next instance of the SSN macro. Same conditions as example #12 apply. If this command follows the previous example, it will allow you to simulate walking through the results of a "highlight all" collection.

`macro:ai`
`m(prefix=Mr)`
`m(firstname=John)`
`m(middlename=)`
`m(lastname=Smith)`
`m(firstinitial=J)`
`m(middleinitial=)`
`m(lastinitial=S)`
`m(suffix=):name`
	14. This string finds all instances of a given name, using the "name" macro and is case insensitive.
	
	This example makes use of the macro definition parameter. Each 'm' parameter is followed by a macro's *name=value* pair, inside parenthesis. This parameter is only used by the macro and regex command.
	
	Note that some of the macro pairs are missing the right side, as seen in "m(suffix=)". This means that the value is set as an empty string. In this example, the middle name and suffix are not known (the Third?, Junior?, Esquire?). It is known that the person is a "he" so a "Mr" is entered as the prefix. Notice that the Mr doesn't have a period at its end. That's because the name macro will know to look for it anyway. If you include one here, the search could fail to find cases where there isn't a period. Also note that **all** parts of the name are defined. It's better to define unknown parts as empty rather than to not mention them at all (since not mentioning them will result in the macro using only what has been specifically defined).
	
	The value of using this search string is that the `[:name:]` macro used alone is normally difficult to implement since it requires multiple steps. Being able to specify the values in the search string simplifies things by being self-contained. It also provides the ability to paste the string right into the find text input box.
	
	This feature is available to help with the `[:specific_usphone:]` macro and the `[:specific_email:]` macro. Remember, this 'm' parameter only works with regex macros.

Input: IGC Mode	Result
`igc:ai:\<\#\#\#-\#\#-\#\#\#\#\>`	15. This string searches for all instances of a social security number using the old IGC wildcard formatting. Added is the specification to ignore case. Although specifying word boundaries is not permitted, the wildcard sequence includes the requirement for word boundaries within it.

Turning on the Regular expression option of the GUI's search text drop down menu enables this mode. If enabled, do NOT type `regex:` in the search field. When the option is not enabled, you can type a `regex:` command just as with any other prefix mode.

Input: REGEX Mode

```
regex:ai:(\`|(?<=[^[:digit:]]))[[:digit:]]{3}-
[[:digit:]]{2}[[:digit:]]{4}(\'|(?=[^[:digit:]]))
```

16.This string does the same, limited search as the IGC wildcard string in example #15, except that regular expression (regex) formatting is used.

The formatting of the regular expression above breaks down as follows:

<table>
<tr><td><code>(\`|(?<=[^[:digit:]]))</code></td><td>begins after the beginning of the document, or after a non-digit</td></tr>
<tr><td><code>[[:digit:]]{3}</code></td><td>sequence of 3 digits</td></tr>
<tr><td>-</td><td>dash</td></tr>
<tr><td><code>[[:digit:]]{2}</code></td><td>sequence of 2 digits</td></tr>
<tr><td>-</td><td>dash</td></tr>
<tr><td><code>[[:digit:]]{4}</code></td><td>sequence of 4 digits</td></tr>
<tr><td><code>(\'|(?=[^[:digit:]]))</code></td><td>is followed by the end of the document, or a non-digit</td></tr>
</table>

17. This string below provides an example of the "sub expression index" parameter which only applies to regex search strings. In this example, the string finds "foobar", ignoring the case and highlighting every instance of the "bar" portion.

`regex:s2ai:(foo)(bar)`

Here, regex considers "(foo)" to be sub-expression #1 and "(bar)" as sub-expression #2. If you want to only find or select part of your search string, you can use the sub-expression index to do it. The integer '2' following the 's' parameter indicates which sub-expression to give as the search result.

The index numbers are 1-based. Meaning, they start at 1 and go up, rather than starting at 0. 0 is reserved for "return all results" which is the default behavior if the parameter is not included at all.

The value of using this string would be in cases where you don't want to find every instance of "bar", but rather every instance that follows an instance of "foo".

If you include an attribute named regex and set it to true, then your macro must be a regular expression rather than an IGC wildcard string.

Example: `<mymacro regex="true">(\`|(?<![[:alpha:]]))</mymacro>`

If you include an attribute named `simpleonly` and set it to true, then your macro will, by default, not use the complex stepping logic where search tries to find something even if it is interrupted by other text. `Simpleonly` will cause the searched text to only be found when it appears contiguously. Many of the smaller macros, such as the social security macro, use this feature since social security numbers are rarely split by interrupting text. Some spreadsheets and forms will cause lots of false finds because fragments of numbers taken in random order will appear to construct a social security number. The social security macro definition turns off these false finds by including `simpleonly`.

Example: `<mymacro regex="true" simpleonly="true">(\`|(?<![[:alpha:]]))</mymacro>`

If you include an attribute named `sub_expression` and set it to an integer number, then you will be able to capture (select/redact) only a specific part of a term found by a regular expression. This only works with the `regex="true"` attribute set. `Sub_expression` is an advanced regex concept and requires in depth knowledge to be used effectively.

Example: `<mymacro regex="true" sub_expression="2">(\`|(?<![[:alpha:]]))</mymacro>`

Input: NAME Mode	Result
`name:a: mr. mister dr. doctor, john david smith, III. jr. junior "the third" m.d.`	18. This is the name command. The text that follows the command name and parameter list contains the person's name you wish to search for. It works as follows: The command can have up to 3 sections, separated by commas. If there are 3 sections, they are considered to be: `[prefix section], [name parts section], [suffix section]` If there are only 2 sections, they are considered to be `[prefix section], [name parts section]` If there is only 1 section, it is `[name parts section]` Therefore, if you don't know a person's possible suffixes, you can just omit that last section. If you know the suffixes, but not the prefixes, set the prefix section empty, for example: "`name:a: , john david`

	`smith, junior`". If you don't know the suffixes or prefixes, then leave them both off and only create one section, such as: "`name:a:john david smith`". Optional spaces and periods can be included anywhere, except in literal quotes. The command will filter those out. 19. Within a name parts section, there can be up to 3 parts, separated by spaces. If there are 3 parts, they are considered to be `[firstname] [middlename] [lastname]`. If there are only 2 parts, they are considered to be `[firstname] [lastname]`. If there is only 1 part, it is considered to be `[firstname]`. If the full name is not known, the initial can be used in the firstname, middlename or lastname part if known, for example; "`george w. bush`". In both the prefix and suffix sections, variations are separated by spaces. Therefore, "`Mr. Mister Dr.`" Means that any of those 3 terms might be a prefix for this person. If you have a prefix (or a suffix) that needs to have a space in it, then put double quotes around it to indicate that you want it whole. This example: `"III. jr. junior "the third" m.d."` has 5 suffixes in it. Not 6. The space between "the" and "third" is not considered a separator because of the double quotes around it..

See Also:

Find & Redact

Text Search Modes

Conditional Macros

CONDITIONAL MACROS

Typically, macros are used as a "search and replace" type of search command where every instance of [:foobar:] is replaced with the value that is associated with it. Conditional Macros are used a bit differently and are currently used to facilitate the "name" macro which has a lot of variants based on whether or not parts of the name are empty (unspecified) or not. The conditional macro allows the "name" macro to identify the right combination.

The differences between conditional and normal macros are that:

- Conditional macros can make a series of comparisons against the values associated with other macros. Based on these comparisons, the resulting value of the conditional macro can be different, rather than hard-coded.

- Conditional Macros do not have a name. Instead, the section of the string where their name would be is filled with the conditional statements.
- Only regex search strings can use conditional macros.
- Conditional macros can resolve into either raw text or another macro's name. The only characters allowed in a conditional statement are alphanumeric. (You can't put regex strings into the results).

Following is a **normal** macro, mixed in with some other text in a search string:

```
"text [:foo:] text"
```

If the foo macro was defined to be "qwerty", then the string would resolve to:

```
"text qwerty text"
```

Following is a **conditional** macro:

```
"text[:(foo="qwerty"{"hello"})(foo=""bar="wasd"{my_macro})({"default
"}):] text"
```

The parentheses in this string indicate that the macro is conditional, rather than a normal named macro.

In this example, there are three conditionals, each defined within a set of parentheses.

```
( foo="qwerty" {"hello"} )
( foo="" bar="wasd" {my_macro} )
( {"default"} )
```

The formatting of a single conditional statement is defined as:

```
( [0 or more macro value comparisons] { [result if comparisons pass]
} )
```

A conditional statement can have 0 or more comparisons. If all comparisons pass, the macro is replaced with the search result. If there are 0 comparisons, then the statement passes automatically. Because the conditionals are tested left-to-right and will quit as soon as one of them passes, a default should be placed as the last thing in the list of conditionals to serve as catch-all, unless you purposely want the default answer to be empty. In that case, don't put a default statement on the end. If you do this and none of the other conditional tests passed, then the macro will just go away.

COMPARISON AND RESULTS FORMATTING

The **comparisons**, inside a conditional statement, have a simple format. The name of a macro to test, followed by the equals sign, followed by a quoted value. Use empty quotes when you expect the macro's value to be empty.

The **results** can use two formatting options:

In the example of the preceding section, the first condition produced a result of "hello" and the third produced "default". The quotes indicate that you want the result to be exactly what you put in between the quotes (minus the quotes).

Results MUST only have characters that are spaces, alphabetic or numeric characters, and certain punctuation marks (excluding parentheses, brackets, and curly braces) which would not confuse the conditional statement. In the second conditional statement (in the example), the result was my_macro. Note the lack of quotes. This indicates that you want to insert a macro name as the result. This can be useful if you want your result to be a regular expression, which could/would contain parentheses, brackets, and curly braces. This formatting method allows you to place a complex expression in a macro and then place the macro name in the result field.

Here are some possible results from the example:

Result 1: If the foo macro was defined to be "qwerty", then the search string would resolve to the following because the first condition passed:

```
"text hello text"
```

Result 2: If the foo macro was defined to be empty, the bar macro was defined to be "wasd", and the my_macro macro was defined as "this is my macro", then the search string would resolve to:

```
"text this is my macro text"
```

Because the first condition failed, while the second condition passed, the result was a named macro rather than a quoted result.

Result 3: If the foo macro was defined to be "where" and the bar macro was defined to be "what", then the search string would resolve to the following because the first and second condition failed, while the third (default) condition passed automatically:

```
"text default text"
```

Note that spaces are optional in some places of a conditional macro, but they are not required. In this next example, every red underscore represents a spot where you can put spaces, if you prefer (for ease of readability).

```
"[:(_foo_=_"qwerty"_{"hello"}_)_(_foo_=_""_bar_=_"wasd"_{my_macro}_)_(_{
"default"}_):]"
```

"NAME" EXAMPLE

Following is a real-world example of a conditional macro being used and defines the "name" macro. (Carriage returns are added for visual clarity - do not use in actual string):

```
[:
(firstname=""middlename=""lastname=""{""})
(firstinitial=""middlename=""lastname=""{""})
(firstname=""middleinitial=""lastname=""{""})
(firstinitial=""middleinitial=""lastname=""{""})
(firstname=""middlename=""lastinitial=""{""})
(firstinitial=""middlename=""lastinitial=""{""})
(firstname=""middleinitial=""lastinitial=""{""})
(firstinitial=""middleinitial=""lastinitial=""{""})
(firstname=""middlename=""{name-first-middle})
(firstinitial=""middlename=""{name-first-middle})
(firstname=""middleinitial=""{name-first-middle})
(firstinitial=""middleinitial=""{name-first-middle})
(firstname=""lastname=""{name-first-last})
(firstinitial=""lastname=""{name-first-last})
(firstname=""lastinitial=""{name-first-last})
(firstinitial=""lastinitial=""{name-first-last})
(middlename=""lastname=""{name-middle-last})
(middleinitial=""lastname=""{name-middle-last})
(middlename=""lastinitial=""{name-middle-last})
```

```
(middleinitial=""lastinitial=""{name-middle-last})
(firstname=""{name-first})
(firstinitial=""{name-first})
(middlename=""{name-middle})
(middleinitial=""{name-middle})
(lastname=""{name-last})
(lastinitial=""{name-last})
({name-full})
:]
```

Notice that the most discerning conditions are done first. If they were placed in reverse order, then the later conditions would never get tested since the simple checks like "is lastname empty?" were done early, and passed.

As an example, the second condition listed in this macro would never pass:

```
(lastname=""{name-last}) (firstname=""lastname=""{name-first-last})
```

In order for the second condition to be true, the first condition would also need to be true since both conditions check that lastname is empty.

See Also:

Find & Redact
Text Search Modes
Search Rules and examples
Using Search Macros

PATTERN SEARCHING QUICK REFERENCE

Below is a quick reference table of the IGC wildcard values that were previously used in redaction scripts:

Wildcard	Description
\#	1 instance of a digit (0 through 9) character
***#**	0 to many instances of numerics
\%	Numeric including punctuation '.' ',' '+' '-'
***%**	0 to many instances of numeric & punctuation
\a	1 instance of an alphabetic character (a through z and A through Z)

***a**	0 to many instances of alphabetics
\&	1 instance of either alphabetic or numeric
***&**	0 to many instances of alphanumerics
_	1 instance of a space or newline character
***_**	0 to many instances of whitespace
\n	1 instance of a newline character. Commonly found at the end of a line of text
***n**	0 to many instances of newlines
\.	1 instance of any character
***.**	0 to many instances of any characters
\c	1 instance of any character that is not a whitespace character
***c**	0 to many instances of non-whitespace characters
\?	0 or 1 instance of a whitespace character
****	To find a slash "\"
\{	Trim resulting selection Left
\}	Trim resulting selection Right

The above escape sequences can be used in your text search strings and in the igc: prefix commands. Note that this syntax has been deprecated, but remains functional for backwards compatibility and any scripts you have previously written using this syntax will still work as expected. You should, however, use prefix style commands and regex when writing any new redaction scripts.

A wildcard is specified by using an escape character sequence - that is, inserting a backslash '\' character followed by additional characters that indicate how to interpret the escape sequence.

Additional characters can be of several types:

Alphabetic (a-Z)
Numeric (0-9)
Whitespace (including invisible characters such as spaces, new line, and tab characters)
Punctuation (all other special characters)

In wildcard strings, the appropriate character sequence is used to construct search strings based on the specific patterns that you wish to find and/or redact. Note that special characters are used if you are editing a redaction script in an XML editor as opposed to a text editor.

ANNOTATE MODE

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 Brava! Server Administrator and license allows and enables this feature.)

Note: Markup tools remain active until another tool is selected. While using any of the markup tools, you can press the <Esc> key to abort the current entity creation before the last point is set. Escape will delete any portion of the markup entity that is drawn so far.

	Markup Select	Arrow Pointer
	Text	Insert Image
	Changemarks	Text Highlight Changemarks Highlight Changemarks Cloud Changemarks Arrow Changemarks
	Cloud	Polycloud Highlight
	Sketch	Sketch Polygon
	Line	Polyline Arc Crossout

		Scratchout Arrow Pointer
	Solid and Hollow Shapes	Ellipse Polygon Rectangle Rounded Rectangle
	Edit Text	Highlight Underline Strikeout Strike through

COPYING MARKUPS

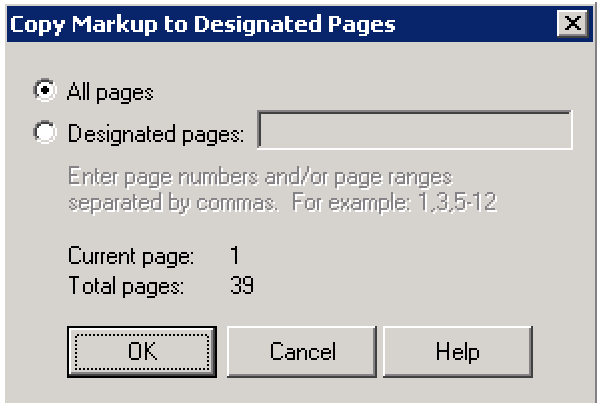
You can select and Copy a markup through the right mouse button menu command. Hold down the <Shift> key to select multiple markup entities and click **Copy**. You can **Paste** the markups into the same page or use the *Copy Markups to All Pages* feature to copy the selected markups to a specified range of pages. You can also copy markups and paste them into pages of any other Brava session window that you have open.

Quick copy - Hold down the <Ctrl> key and click on, then drag an entity. The original entity remains in place, while a copy is created and placed wherever you release the mouse button on the page.

Copy Markups to All Pages

If editing markups on a multi-page document, you can copy selected markups and apply them to a specified range of pages.

1. With the markup select tool active, select one or more markup entities you would like to copy and click .
2. In the *Copy Markup to Designated Pages* dialog, select All pages, or type in a specific page range.



3. Click OK. All copy-able entities are copied to All or Designated pages. Entities that cannot be copied include edit text entities and Changemarks.

Note that a separate undo needs to be performed for each entity copied into each document page if you change your mind. Once copied, all entities behave as individual entities. In other words, changes made to a copied entity on one page have no impact on any of the entities contained in other pages.

CHANGING MARKUP OWNERSHIP

If this feature is enabled by your administrator (via a server parameter), you can take ownership of a markup entity owned by another author.

To change markup ownership:

1. Open a markup for edit that contains markup entities created by other authors.
2. With the Select Markup tool active , hold down the <Shift> key and click on a markup entity.
3. The author information for that entity changes to your information.
4. Edit the entity as desired as you are the new owner.

This feature is only functional on markup entities in markups currently open for edit.

MARKUP ENTITY TOOLS

SELECT MARKUP OR REDACTUP ENTITY

The Select Markup/Redactup tool allows you to grab entities to move, copy, resize, reshape, delete, or change ownership. In Annotate mode, you can also select and edit markup text when this tool is active.

1. Click  on the **Annotate** or **Redact** toolbar.
2. Once the tool is active, click on a markup/redactup entity to select it or press and hold <Ctrl> while clicking to select multiple markups/redactups.
3. To select adjacent markups/redactups, click and hold the left mouse button and drag a box around all the entities you wish to select.
4. Edit the entity as desired.

Note that when the Select Entity tool is active in Annotate mode, double clicking on a Markup Text entity toggles the active tool to the Markup Text tool, allowing you to make changes to the markup (if you are the markup author).

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. (As with any of the markup and measurement tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.)
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.

ARROW WITH CHANGEMARKS NOTE

 Purely for convenience, this tool allows you to create two entities at a time - a super Arrow and a Changemarks note

1. In the markup Properties toolbar, select the color and line options to use for the arrow entity.
2. 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.
3. A Changemarks entity is created at the tail end of the arrow.
4. Enter the Changemarks text as you would do for any independent Changemarks note.
5. Once placed, the two entities behave totally independent of each other, as two separate entities.

The new Changemarks note and Arrow can be moved, resized, or deleted independently, and you can use the select markup tool to select and edit either of the entity's properties.

MARKUP TEXT

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

1. Click the mouse pointer where you want the text to start and drag a rectangle to dictate the with of the text column and the font height to be used. (The gray "<Text>" displayed is to preview how your text will look)
2. **Note**: Single-clicking the text tool causes a new text entity to be created using the last established font properties. The new text has no enforced column width until you hit the return key or manually adjust the column width handles.
3. From the Markup Properties bar, select the desired font properties, then type the desired text. You can adjust the font size by using the hotkeys <Ctrl> + <+ or ->. Use + to increase font size and - to decrease font size.
4. 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.

Note: An Administrator can customize the list of available text heights through the use of the *CustomTextHeights* parameter and can specify increments to as little as one-hundredths. See the *Brava Administration Guide* for information on configuring custom parameters.

5. If the markup is not currently active, use the Select Markup Tool to pick it. Note that markup text can only be selected and adjusted when the Select Markup Tool is active. You can drag the text box to another location, you can adjust the size of the text box by length or height, and you can select and adjust the size of the markup text itself.
   - To rotate the text, select the entity then click and drag the green rotation handle in any direction. For finer tolerance, click and drag the green handle farther away from the center point of the entity and then rotate. The entity will rotate in much smaller increments when the handle length is increased.
   - To adjust the text box length, click and drag one of the circular black handles on the upper right or left corners. The size of the text does not change.
   - To adjust the text box height, click and drag the yellow ball on the lower left section of the text box up or down. The text automatically re-sizes as you adjust the text box height. Note that changing the text box height in this way resets the default font size to use for future markup text entities.
   - To edit the text, with the Markup Text tool active, select (highlight) the characters you want to edit and type. The highlighted characters will be replaced with the newly typed characters.

Language Support Note: If enabled by an administrator, an edit box is presented where text can be entered and edited directly. If the system is using a right-to-left language (such as Arabic or traditional Japanese), the edit box will allow right-to-left input and editing. (Modern Japanese remains left-to-right)

See additional usage details outlined below:

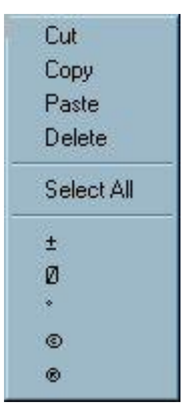
MARKUP TEXT TOOL BEHAVIOR DETAILS:

Tool Behaviors:

- Switching between markup Text/Select Tools: Double-clicking the mouse on a markup text entity, when the current tool is the markup selection tool, causes it to change to the markup text tool. Double-clicking the mouse on a markup text entity, when the current tool is the markup text tool, causes it to change to the markup selection tool.

Editing Behaviors:

- Individual characters of markup text can be edited. They are editable only with markup text tool active.
- Typed or Pasted Text inserted at cursor: When you type (or paste) new characters into a text entity's body of text, they appear at the current cursor position. If there are any text characters currently selected, they are erased. The cursor (and anchor) are then positioned to the right of the new character(s).
- DELETE Key: When you hit the DELETE key, the character to the right of the cursor is deleted, unless some text is selected. In that case, the selected text is deleted and the character to the right of the cursor is unaffected.
- BACKSPACE Key: When you hit the BACKSPACE key, the character to the left of the cursor is deleted, unless some text is selected. In that case, the selected text is deleted and the character to the left of the cursor is unaffected.
- Copy Text to the Clipboard: You can copy selected text to the clipboard, via <Ctrl> + <C> and paste via <Ctrl> + <V>.
- Right Mouse Menu: Cut, Copy, Paste and Insert Unicode character (CAD Symbols: plus/minus, diameter, degree, copyright, and registered) operations are available:



Keyboard Navigating Behaviors:

- <Arrow> Keys: The left and right arrow keys move the cursor left and right 1 character. The up and down arrow keys move the cursor up and down 1 line of text.
- <Ctrl> Key: Holding down the Ctrl key while using the *left* or *right* arrow keys, causes it to move to the beginning of the next/previous word instead of the next/previous character. Holding down the Ctrl key while using the <+> or <-> keys causes the text to increase or decrease in size.
- <HOME> Key: The Home key causes the caret to jump to the beginning (left edge) of the current line of text.
- <END> Key: The End key causes the cursor to jump to the end (right edge) of the current line of text.
- <Ctrl> + <HOME> Key Combination - Holding down the Ctrl key while using the Home key, causes the cursor to jump to the beginning of all the text.
- <Ctrl> + <END> Key Combination: Holding down the Ctrl key while using the End key, causes the cursor to jump to the end of all the text.
- <SHIFT> Key with above Keys: For all of the above commands, the anchor also moves to the new position along with the cursor , unless the SHIFT key is held down. In which case the anchor is left where it was. (anchored) Thus, selecting all characters between the cursor and the anchor.
- Left Mouse Button Click: When you left-click the mouse inside a markup text entity, the cursor (and anchor) is positioned at the location you clicked on.
- Left Mouse Button Drag: When you left-click + drag the mouse inside a markup text entity, the anchor is positioned at the location where the mouse button was pressed. While the cursor is dynamically re-positioned to be under the mouse cursor's location as you drag, until you release the left mouse button.

See Also:

Markup Text Background

Markup Stamp

STAMP TOKENS

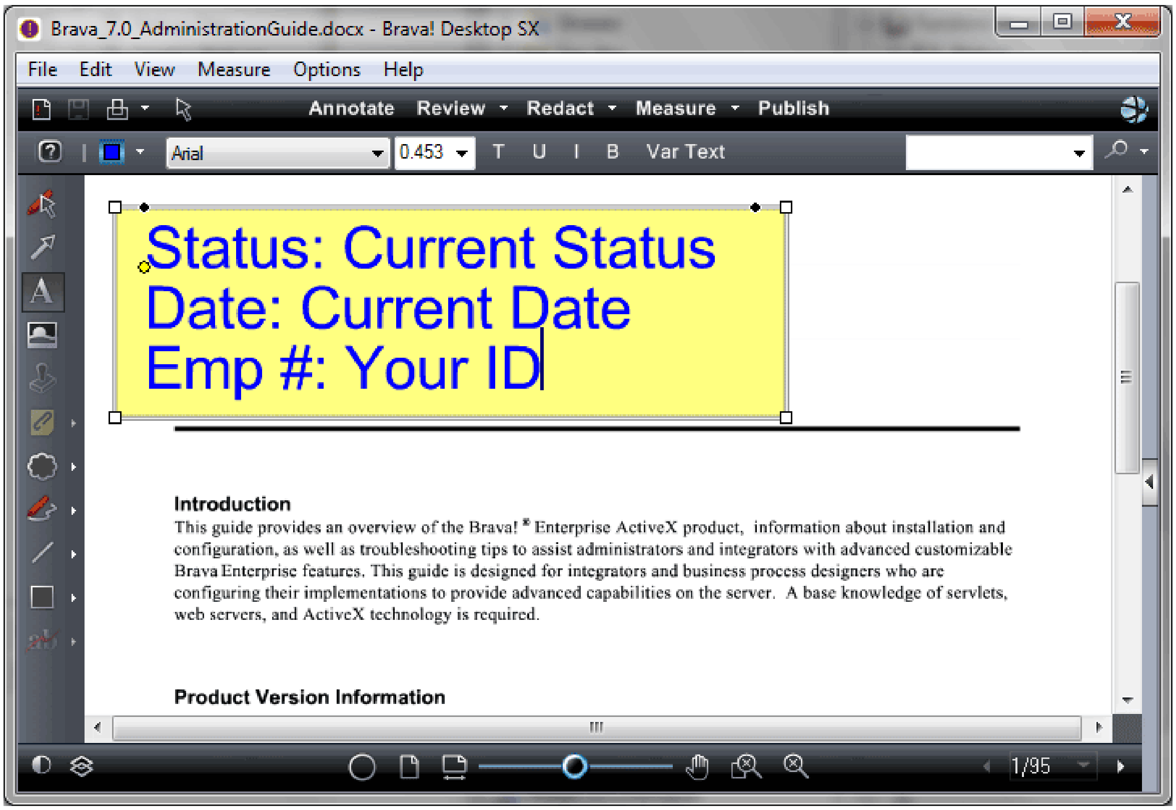
You can use token variables in your markup text strings when creating stamp template. The variable text button 

is only available when in stamp authoring mode when using the markup text tool, or when a single text entity is selected.

To allow reviewers to manually update text contained in a markup stamp, use the %prompt (label string) token. When used in a markup text string of your stamp template, you can set user prompts that allow them to update the string. When the user inserts, or double clicks a markup stamp, a text entry field displays, prompting them to enter the requested information. This text entry field can be edited at any time during the review process until the markup stamp is finalized through publishing.

To add a token to your markup text string:

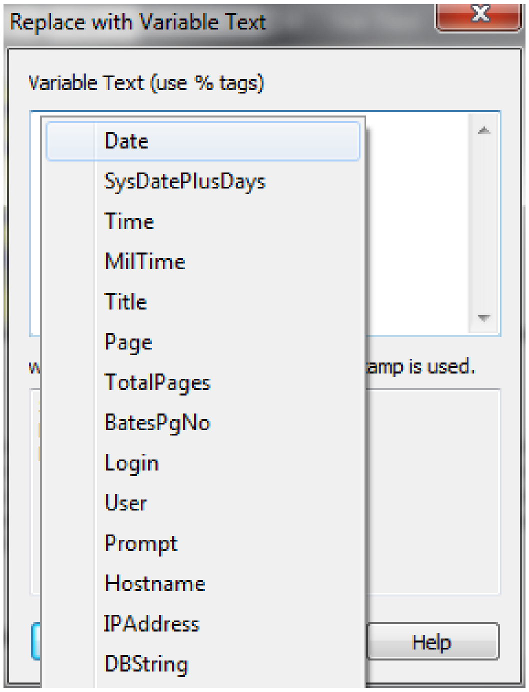
1. Create a new stamp template, or select a text string of an existing stamp template.
2. Use the Markup text tool  to draw out an area for your stamp text and set the font properties (style, size, and color).
3. Type out descriptive text for the entity. This text is your stamp preview text. For example, if you want the stamp to prompt the user for the file's current status and Employee ID number, type in:



   If you want to reserve space for answers to fit multiple lines, you can add blank lines to the preview text.

4. With the text entity selected, click the variable text button 

   to add variable text that will replace the preview text when the token is resolved by a user.
5. In the *Replace with Variable Text* dialog, enter **%** to summon the tags list.

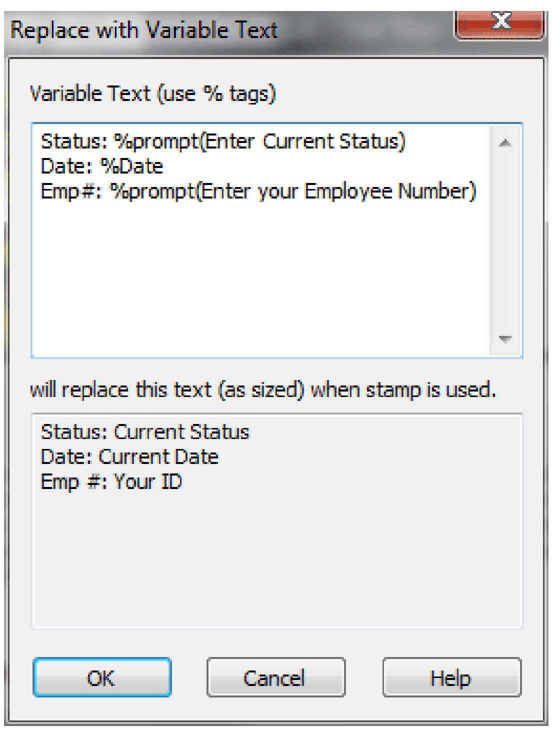


You can use any combination of text and tokens in your variable text strings. Select the **Prompt** token for each prompt that you would like displayed to the user. In the above example, the token expressions might be:

Status: %prompt(Enter Current Status)

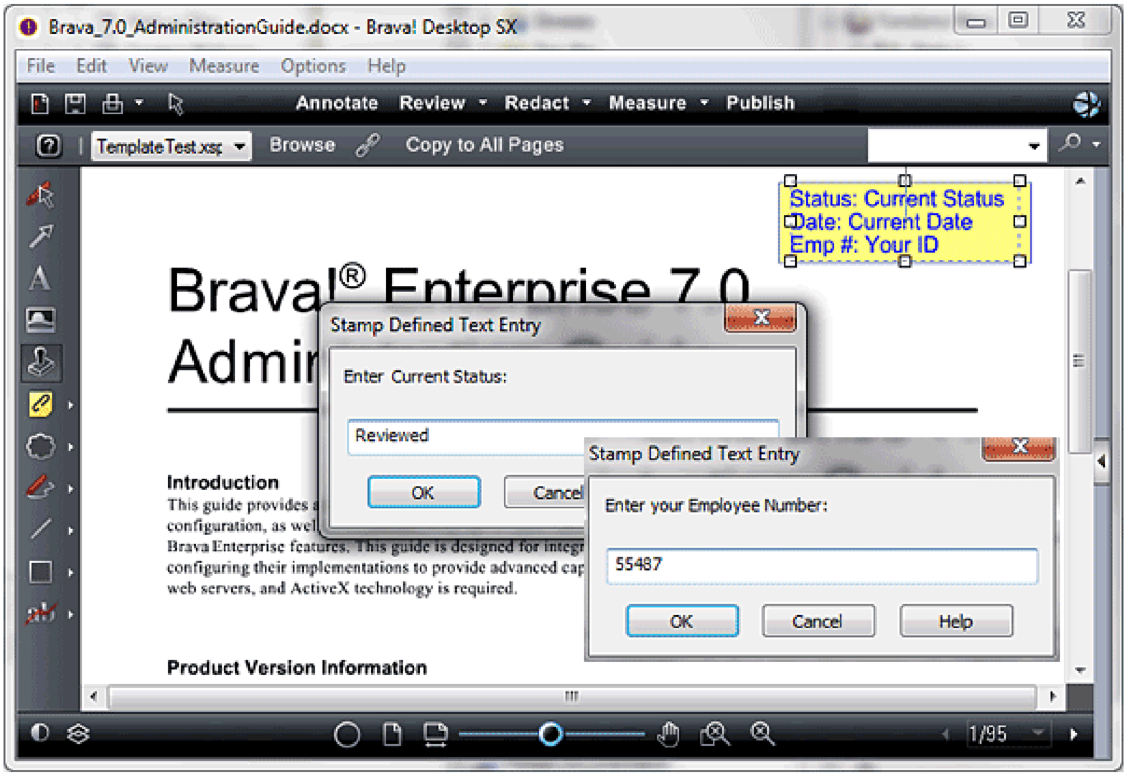
Date: %Date

Emp #: %prompt(Enter your Employee number)

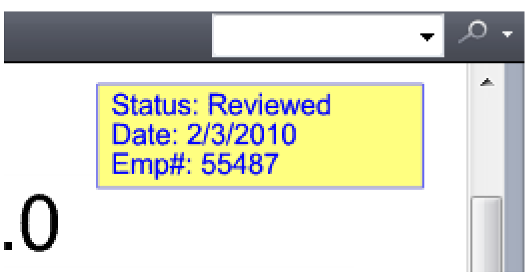


6. Click **OK** on the *Replace with Variable Text* dialog to save the token value and then **Save** the stamp template with a descriptive name such as "Status" in this example. ( - > **Stamp Templates->Save)**

This example would display the prompt dialogs shown below when a user resolves the token by inserting or double clicking this markup stamp.



The text entered by the user replaces the preview text that you set in your stamp template. The non-prompt tags update automatically (in this example, %Date). If the user cancels, the prompt tags are not resolved and are left blank.



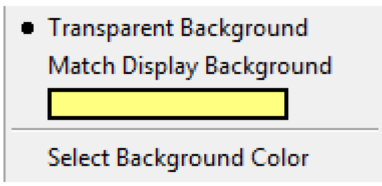
Usage Notes

- If you are updating an existing stamp template's text string with tokens, be sure to update the preview text so that it corresponds with the token expressions that are added.
- You should always test your stamps before assuming that they will be placed and resolved correctly.

- You can type variable text expressions directly into the markup text field, rather than use the Token button, and they will be resolved correctly. The main advantage of using preview text (that is replaced with variable text) is that the preview text can be much shorter in length and more easily understood than variable text.

MARKUP TEXT BACKGROUND

When the Markup Text tool is active, you can select the text box background type through the Markup Text Background tool 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 currently selected 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.

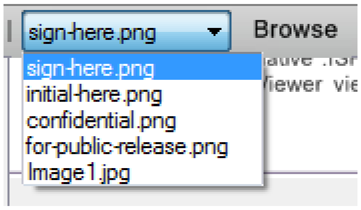
INSERT IMAGE

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

1. Click the button and browse to an existing image that you would like to insert.
2. Click **Open** in the *Select Image* dialog. The mouse cursor changes to a image. You can set the raster image by one of the following methods:
   a. Left-click and hold in the Brava! 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 or use the **Browse** button in the Markup Properties bar to choose another raster image to insert. The properties bar also contains a list of 10 most recently used images which can be individually selected and inserted. The most recently used list and last browse directory used are persisted.



Stamp Images

The insert image feature is useful for inserting raster stamp images into documents. A sample directory of 16 commonly used stamp images (such as "Completed", "Sign here", "Confidential", etc.) is provided in the Brava Client installation, by default as:

%USERPROFILE%\IGC\x7_0\StampImages

For example, C:\Documents and Settings\username\IGC\x7_0\StampImages

Note that an Administrator or Integrator can set the location of the image files for their specific needs. The brava parameter that controls the initial directory that is opened when clicking the **Browse** button is *MarkupRasterDirectory*

Image Special Considerations

Images (JPG, BMP, or PNG files) are created in an image editor for use with Brava's "Insert Image" Markup tool. The images can be inserted when administrators or users are creating stamp templates to be used with the Markup Stamp tool.

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

- The image should be created in the desired size and off set of the image. Brava 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 stamps must be loaded to the server in a location available to the Job Processor.
- Black and white images have special behavior when viewed in Brava:
    - 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? Brava 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 it's 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.

MARKUP STAMP

If Stamp Templates have been authored and saved, the markup stamp button  is available on the Markup Toolbar. When clicked, a list of available stamp templates is shown that can be added to the current markup layer. The stamp template is treated as a group and all elements of the template are resized and moved as a single entity and cannot be edited otherwise. Color, content, and other elements are defined by the author when a stamp template is created and saved.

The markup attribute author name and date is replaced with the name of the current user inserting the stamp and date of insertion (visible on mouse float-over).

When a stamp is inserted, if a dynamic text field (such as %Page, %Date, %dbstring(value), etc.) exists, the field is resolved and results are populated in the stamp. You can insert multiple stamp templates into a markup layer.

To add a Markup Stamp:

1. While a markup layer is open for edit, click  on the Markup Toolbar, if available.
2. From the properties bar, use the **Browse** button to look in the stamp folder located on the Brava! Server or highlight an available stamp in the "**Select Stamp File**" list box and click **OK**. Note that when an administrator creates a new template, or modifies an existing one on the server, the changes are updated to the client only when accessing the stamp through the Browse button. Stamps available in the properties list box may not be the most up to date.
3. To place the stamp at its *default size*, left click on the view window. The location you click is the center point of the stamp.
4. To insert the stamp at a *customized size*, left-click an area of the current window and, while holding down the mouse button, drag a box to position and size the stamp entity. Release the mouse button to set the entity.
5. You can use the resize or rotate handles to change the shape and position of the stamp.
6. Once a stamp is added to a markup layer, the stamp name can be selected from the dropdown list in the stamp tool's properties bar. You can add additional stamps to the drop down by clicking the **Browse** button and selecting another stamp template name from the "Select Stamp File" list box. The active stamp is drawn when you click and drag on the viewing window. Stamps can be created on any page of a multi-page document and can be copied and pasted to any page.
7. If the stamp template creator used the prompt token, a dialog is presented immediately after placement that allows you to edit any field label values that were specified in the stamp. Type in the dialog's text box to update the value and click OK to close the dialog. If you click *Cancel*, the prompts

are not resolved and are left blank. With any markup tool active, you can double click on the markup stamp to summon the dialog and update the value at any time before the stamp is finalized through publishing.

8. Add any additional markup entities (including stamps) you desire and click to save your markup. The stamp entities are saved with the markup layer just as any other entity.

Stamps created in one file format should only be applied to files of the same format type or the scaling of the stamp will be off in relation to the document. It is recommended that when stamps are created, that their name be appended with their file type for identification. For example, a template created on a PDF document might be named *template1_pdf.xsp*.

See Also:

Insert Image Tool

CLOUD AND POLYCLOUD

You can draw clouds using the Cloud and Polycloud tools .

1. Click and hold the left mouse button and drag the mouse pointer on the image to draw a cloud shape.
2. Release the mouse button to set the entity.
3. For the Polycloud, move the mouse pointer to where you want the first vertex to be and click the left mouse button to set the point. Continue to do this until all points are set.
4. Double-click to set the Polycloud.
5. Edit the markup as desired. If the markup is not currently active, use the Select Markup Tool to pick it.

CLOUD WITH CHANGEMARKS NOTE

Purely for convenience, this tool allows you to create two entities at a time - a Cloud rectangle and a Changemarks note.

1. In the markup Properties toolbar, select the color and line options to use for the cloud entity
2. Click and hold the left mouse button and drag the mouse pointer on the image to draw a cloud shape.

3. Release the mouse button to set the entity and a Changemarks entity is created in the upper left corner of the cloud.
4. Enter the Changemarks text as you would do for any independent Changemarks note.
5. Once placed, the two entities behave totally independent of each other, as two separate entities.

When using the single click placement, the existing default size of the Changemarks note will be shrunk to fit inside of the cloud entity if its size is larger than the cloud entity that you set.

The new Changemarks note and cloud can be moved, resized, or deleted independently, and you can use the select markup tool to select and edit either of the entity's properties.

SKETCH AND SKETCH POLYGON

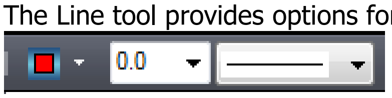
Use the Sketch tool  to draw freehand shapes. Use the Sketch Polygon tool  to create filled freehand shapes.

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.
3. Edit the markup as desired. If the markup entity is not currently active, use the select markup tool to pick it. *Color, Line Style*, and *Line Width* are available options for the Sketch tools. *Fill Style* is also available for the Sketch Polygon tool.

The behavior of these two markup tools is unique in that after placing an entity, the entity is not selected in Markup Select mode, thereby allowing continual use of the tool for freehand drawing.

STRAIGHT LINE AND LINE ARROW

The Line tool  allows you to draw straight lines in any direction. The Line Arrow tool  adds an anchor and end arrowhead style to a straight line entity.

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.
    a. The Line tool provides options for color, line style, and line thickness
    

    b. The Line Arrow tool has a variety of beginning and end styles to choose from in the markup properties drop down selection boxes.

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 do this until all points are set. (As with any of the markup and measurement tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.)
3. Double-click where you want the polyline to end to set the line.
4. Edit the markup as desired. If the markup is not currently active, use the select markup tool to pick it.

ARC

You can place an arc using the Arc tool .

1. Click the mouse button where you want to begin. Click again at the approximate arc center point. Click a third time at the desired end point to set the arc.
2. Edit the markup as desired. If the markup entity is not currently active, use the select markup tool to pick it.

CROSS OUT

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.

SCRATCHOUT

Similar to the Crossout tool, the Scratchout tool is used to place an easily identified zig-zagging line pattern (rather than an X) through a rectangular region of an image or section of text, marking the area as symbolically invalid.

1. Press and hold the left mouse button on a starting point 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.

SOLID AND HOLLOW SHAPES

The Solid Shapes group allows you to draw solid (filled) or hollow (unfilled) Rectangle , Rounded Rectangle , Ellipse , or Poly 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 Unfilled 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 Unfilled Poly,

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 Brava! automatically fills in the last line segment for you (connecting the last vertex point to the first).

As with any of the markup and measurement tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.

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

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. The default color is yellow, but alternate 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.

HIGHLIGHT WITH CHANGEMARKS NOTE

Purely for convenience, this tool allows you to create two entities at a time - a Highlight and a Changemarks note

1. Click on the area you wish to highlight and drag your mouse to the point where you want to stop.
2. When you release the mouse button, a Changemarks entity is created outside the upper left corner of the highlight rectangle.
3. Enter the Changemarks text as you would do for any independent Changemarks note.
4. Once placed, the two entities behave totally independent of each other, as two separate entities.

The new Changemarks note and Highlight can be moved, resized, or deleted independently, and you can use the select markup tool to select and edit either of the entity's properties.

Note that the color selection in the properties bar applies to the Changemarks note only. The default color used for the highlight is yellow, but the entity can be selected and edited to an alternate color, after initial placement.

HIGHLIGHT TEXT WITH CHANGEMARKS NOTE

Purely for convenience, this tool allows you to create two entities at a time - a Highlight Text and a Changemarks note

1. In the markup Properties toolbar, select the color and line options to use for the Highlight Text entity.
2. Click on the text you wish to highlight and drag your mouse to the point where you want to stop.
3. The selected text appears highlighted until you release the mouse button - at which point the text highlight displays and a Changemarks entity is created in the upper left corner of the highlighted text.
4. In the Changemarks dialog, enter the text as you would do for any independent Changemarks note.

   You can use the paste highlighted text button to enter the text that was selected with the text highlight tool.
5. Once placed, the two entities behave totally independent of each other, as two separate entities.

The new Changemarks note and Text Highlight can be moved, resized, or deleted independently, and you can use the select markup tool to select and edit either of the entity's properties.

EDIT TEXT ENTITIES

You can underline, strikeout, strikethrough, and highlight text contained in a document.

1. Select your desired edit text tool from the Markup Toolbar.
2. Select a desired color to use.
3. Click on the text you wish to mark up and drag your mouse to the point where you want to stop. The selected text appears highlighted until you release the mouse button - at which point the underline, highlight, strikeout, or crossout markups display.

Usage Notes

- Markup text edit entities cannot be copied and pasted.
- This tool is not available if the file does not contain selectable text.

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 Changemarks 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.

ADD A HYPERLINK

You can attach a hyperlink to a Changemarks note or to any markup entity. Simply create the Changemarks or markup entity and with the entity selected, click in the markup properties toolbar. Type a hyperlink URL in the text box.

To edit a Changemarks or entity to add a hyperlink, click to select the entity and then click to specify a URL. Only one hyperlink URL can be assigned to each markup object. in the case of Changemarks, any URL entered into the Changemarks text field will automatically become an active hyperlink in the Changemarks panel and can include multiple URLs. In addition, URLs added to the panel in Changemarks Discussion mode will also be active.

LAUNCH A HYPERLINK

To launch a hyperlink from within a Brava! window (while in review mode), 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 Changemarks, open the Changemarks panel and click on any active hyperlink (indicated with underlined blue text). The URL will launch in a separate browser window.

You can specify how hyperlinks launch in Brava! by adjusting the viewer parameter "HyperlinkLaunch".

default launches each document in its own separate window

one launches all documents in a separate window as Brava!

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

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

CHANGEMARKS TOOL

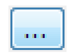
CREATING CHANGEMARKS®

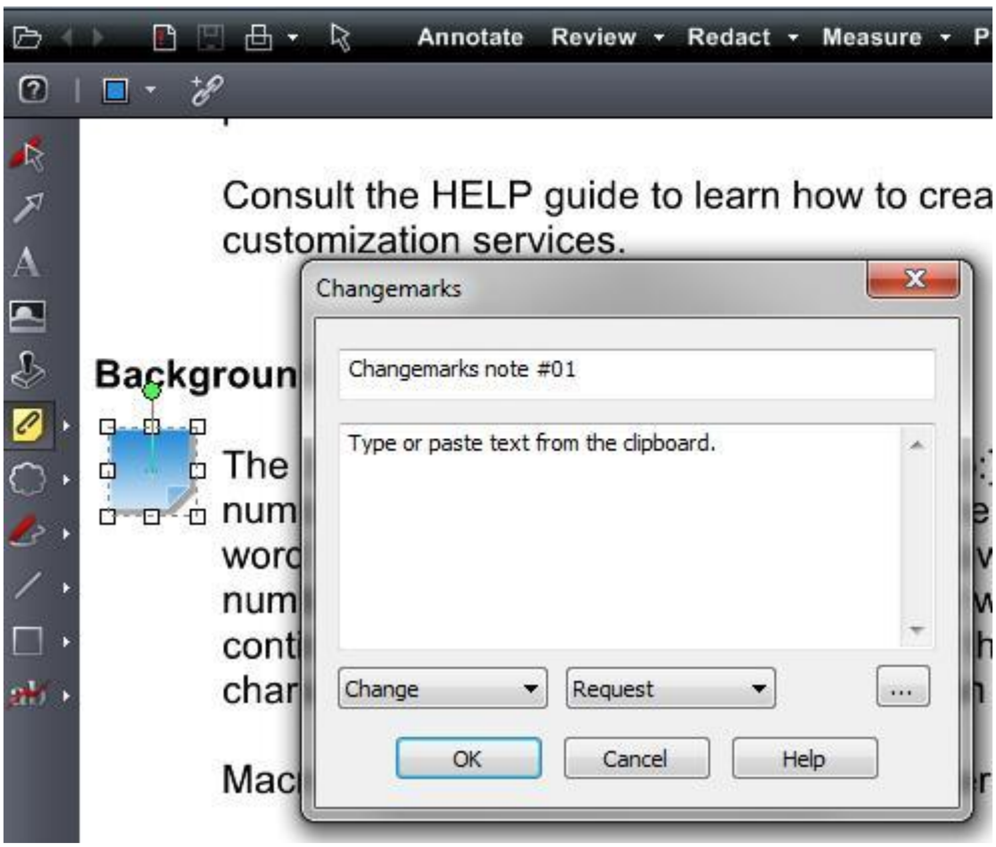
The Changemarks® feature allows authors of markups to assign a placeholder and descriptive text and/or a hyperlink to a particular markup. All Changemarks contained in the opened markup files appear in the Review Changemarks tab. This allows reviewers to step through each Changemarks annotation in all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

From the Changemarks tab, Changemarks can be filtered by content, and sorted by author, title, date, type, state, or by position appearing in the document. The descriptive text contained in the Changemarks note can be reviewed and copied to the Clipboard. Reviewers can enter into discussions by adding their own comments to the Changemarks discussion panel.

1. To enter Annotation mode, click the Annotate button Annotate or click and select New to create a new markup layer.
2. Click on the Markup toolbar to place a single Changemarks note. (Note that additional combined Changemarks note tools are available from the Markup toolbar including Cloud Changemarkl, Arrow Changemarks, Highlight Changemarks, and Highlight Text Changemarks.)
3. Draw the shape on the image by simply clicking on a location. A Changemarks note of default size (50 pixels) is created at that location. Whenever you resize a Changemarks note, that size becomes the new default to use for additional single-click Changemarks note placed on the document. This single-click placement also applies to the combination Changemarks note tools listed in step #2. Note

that the initial size of these Changemarks also depend on the size of the entity with which they are created.

4. Enter the title of the Changemarks 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). Any URLs that are recognized in the Changemarks note text will be active hyperlinks in the Changemarks panel.
6. By default, the Changemarks *Type* is set to **Comment**, and *State* is left blank. You can set different Types and States from the available drop down lists, depending on if and how you are using Changemarks in a discussion workflow. Click **OK** to close the Changemarks text dialog.
7. You can edit the Changemarks size or position if desired. If the Changemarks note is not currently active, use the select markup tool to pick it. Double-click the Changemarks entity with the Select Markup tool to edit its contents. You can click the Paste Text button  to quickly paste in any text that you have copied to the Clipboard. Note that Changemarks entities themselves cannot be copied and pasted.



COMBINATION CHANGEMARKS TOOLS

When you have one of the combination " + Changemarks" tools as your active tool, the behavior is as follows:

- During the time before you create an entity, the markup properties toolbar will show the properties for the soon-to-be markup entity and not the properties of the Changemarks note.
- After you finish creating the markup entity, a Changemarks entity will also be created automatically and selected. The properties in the markup properties toolbar will reflect the Changemark's properties, not the original entity's.
- You will be prompted to fill out the text of the Changemarks note, just as if you had created a single, uncombined Changemarks note.
- Once placed, the original entity and the Changemarks entity are NOT connected to each other in any way. You can move, resize, recolor, and delete them independently without affecting the other.

Hyperlink and Text Format Support Details

- In the Changemarks panel and Changemarks details dialog, the **Author, Date,** and **Timestamp** display in bold, the *Type* and *State* are italicized, and the text is in normal font.
- Hyperlinks appear as underlined hyperlinks and will launch the specified target. Strings beginning with the following extensions will be recognized as hyperlinks:

```
http:
file:
mailto:
ftp:
https:
gopher:
nntp:
prospero:
telnet:
news:
wais:
```

See Also:

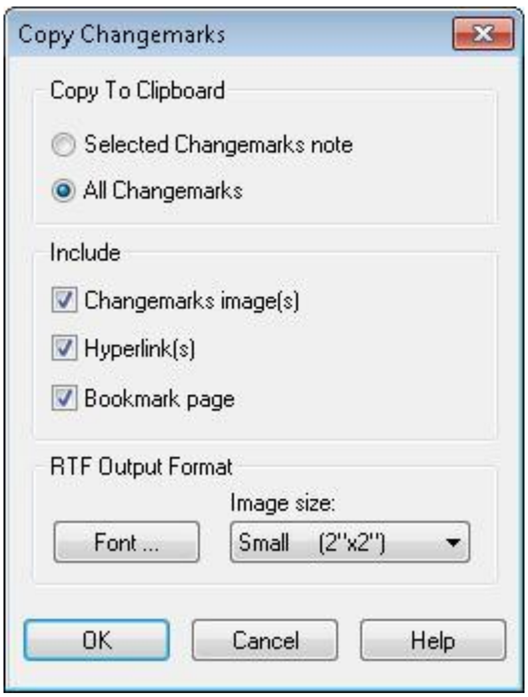
Reviewing Changemarks
Filtering Changemarks
Publishing Changemarks in PDF Files
Changemarks Discussion
Changemarks + Cloud Tool
Changemarks + Highlight Tool
Changemarks + Text Highlight Tool
Changemarks + Arrow Tool
Editing markups and redactups

EXTRACT CHANGEMARKS

From the Changemarks Panel, you can access the Copy Changemarks dialog to copy the selected Changemarks note, or all Changemarks information contained in a document to the Clipboard.

This function captures the Changemarks title, author, date, time, comment (text description), attached hyperlink (as text), and image (WMF bits) to the Clipboard. The resulting RTF stream can be pasted into Microsoft Word. The content can have both a textual and visual summary of the Changemarks note as a backdrop to a report document.

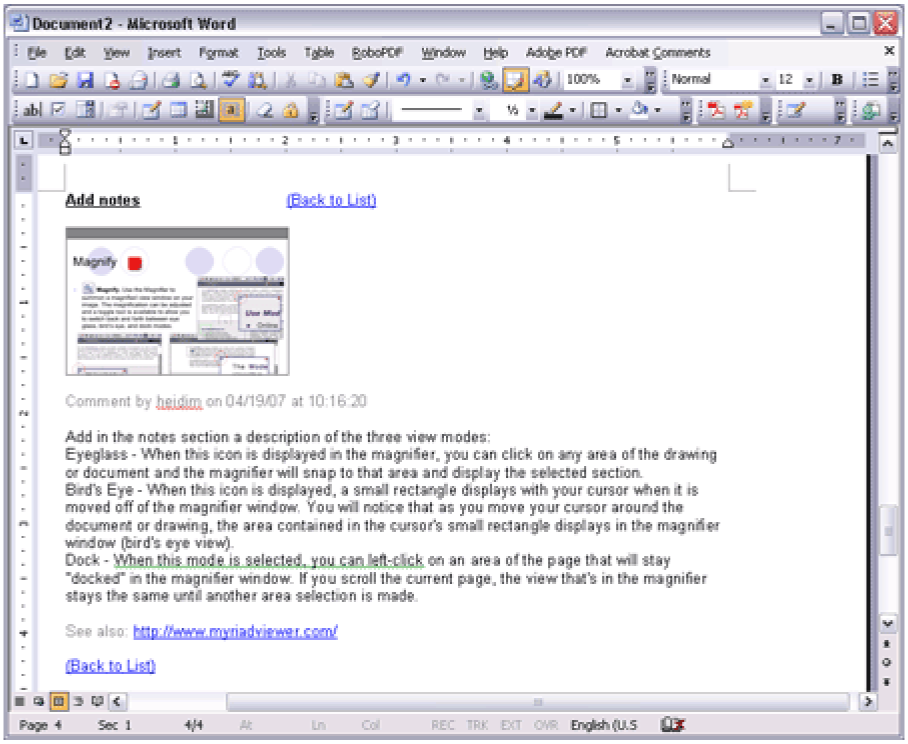
1. From the Changemarks Panel, click .
2. In the *Copy Changemarks* dialog, select your desired options and click OK to close the *Copy Changemarks* dialog and to copy the specified information:



   a. In the *Copy To Clipboard* area, select whether you want to capture information for only the **Selected Changemarks note**, or for **All Changemarks** contained in the document.
   b. In the *Include* section, select **Changemarks Image(s)** if you would like to include an image of each Changemarks note as displayed in the viewing window, along with the text. Select **Hyperlinks** if you would like to include any hyperlink information as a See Also link. If *All Changemarks* is selected in the Copy to Clipboard region, you can select **Bookmark Page** if you would like to create a list of bookmarks linked to each Changemarks title captured in the copy function.
   c. In the *RTF Output Format* section, you can select your desired font style and image size. Click **Font** to access the Font style selection dialog. Choose your options and click OK to close the Font dialog. The selections are persisted across Brava! Enterprise sessions. In the **Image Size**

drop down, select if you would like your images to display small, medium, or large. This option is only available if *Changemarks Image(s)* is selected in the Include section.

The captured information is now ready to be pasted into Microsoft Word. Open a blank document and select **Paste** from the right mouse button menu.



CHANGEMARKS DISCUSSION

The Changemarks Discussion feature adds the ability to respond to someone else's Changemarks comment. When reviewing Changemarks in Edit or Review mode, users can reply to any comment contained in the file and save the reply as a part of a Changemarks 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.

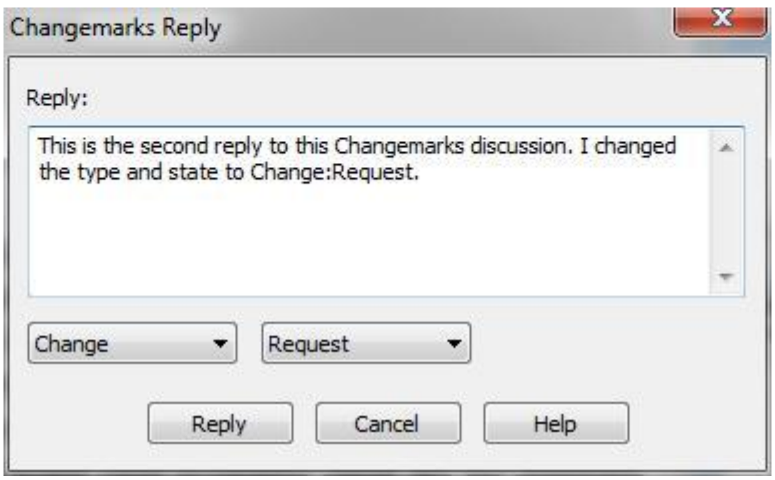
If the markup file being replied to has been opened in **review** mode, Brava will automatically create a new editable markup layer and only the Changemarks reply is saved to that new markup layer, separate from the parent markup. Reviewers will need to open both the parent markup file and all associated 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 Changemarks discussions, the type and state of the last entry is displayed as the current type and state at the bottom of the Changemarks review panel.

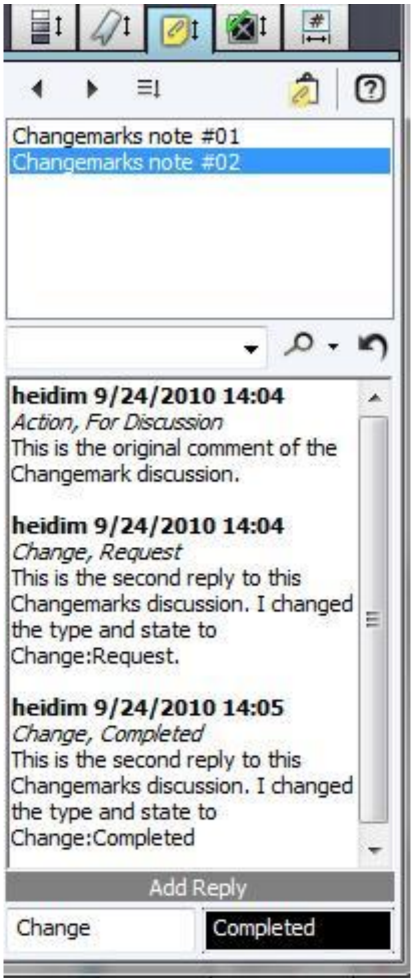
To use the Changemarks Discussion feature in Edit mode (recommended):

1. Open a file in Brava that you would like to start a discussion for, or that has an associated Changemarks discussion already started.
2. If you would like to start a discussion, simply create a new markup file and add a Changemarks note.

   If you would like to view and reply to an existing Changemarks note, click  ->**Open** and select the markup file containing a Changemarks note.
3. Select the Changemarks note from the Changemarks list panel that you would like to reply to and click the **Add Reply** link near the bottom of the panel.
4. In the *Changemarks 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 Changemarks discussion. (The available values set for Type and State are administered through the *ChangemarkConfig.xml* file. Please see the Brava! Enterprise Administration guide for details.) The selected type is persisted during the session, but not between sessions.

5. The discussion displays in the Changemarks 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 Changemarks 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 *Annotations* mode, Click  on the toolbar 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 Changemarks Discussion feature in Review mode:

When a markup file is open for review (or when a CSF file with burned in markups is loaded), that means the markup is read-only and cannot be written to. Therefore, in these situations, any replies made to a review Changemarks 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 Changemarks discussions which is described below.

1. Open a file in Brava that has an associated Changemarks discussion already started, or a CSF file that has markups burned in.
2. Click 

and select the markup file containing the discussion (skip this step if the current file is CSF).
3. Select the Changemarks note from the Changemarks list that you would like to reply to and click the **Add Reply** link near the bottom of the panel.

4. In the *Changemarks 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 Changemarks 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 Changemarks discussion.

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>.xrl

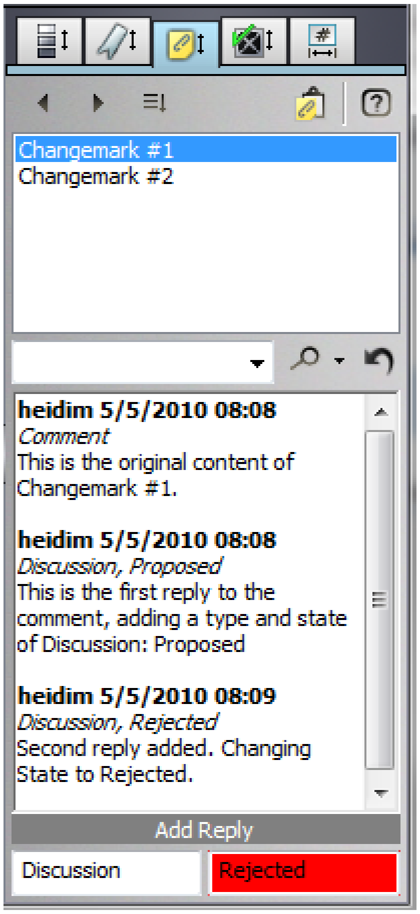
To view the entire discussion, users in your workflow will need to open the parent markup file containing the original Changemarks discussion, as well as all associated reply markup files created by other users in review mode (or replying to a Changemarks note in a published CSF file). If only the associated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

If managing multiple markups is not desirable or replies become too splintered, users can consolidate all of the reply markup files back into the one parent markup file:

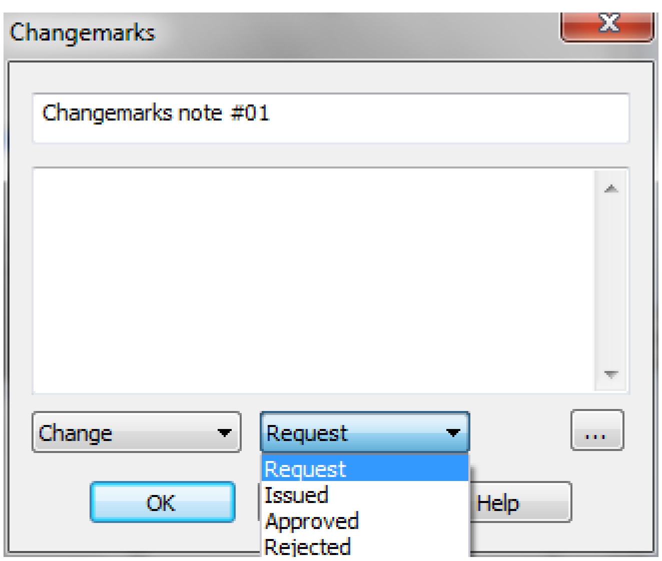
1. Open the parent markup file and all associated reply markup files in review mode.
2. Click  and select **Consolidate Markups**.
3. Save the consolidated markup file.

CHANGEMARKS TYPES AND STATES

Used in the Changemarks Discussion Panel, *Type* and *State* are attributes that can be assigned to the original Changemarks content and to each reply that is added to a discussion. These Types and States are displayed for each Changemarks note contained in the Changemarks List, at the bottom of the panel. In a Changemarks 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 Changemarks note or replying in a Changemarks 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.



By default, **Comment** is the *Type* and *State* is left blank.

The Changemarks 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**, if permitted by your Administrator, by editing the *ChangemarkConfig.xml* file in your installed HOMEPATH "`<user profile>\IGC\x7_0`" directory. In addition, you 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 Changemarks note (or reply to a Changemarks 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
	Confirm	180,140,200	Light purple
	Urgent	255,90,80	Red
Change	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
	Closed	100,200,255	Blue
	Notice	0,0,0	Black
Agreement	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 edit box 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.

MARKUP PROPERTIES

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.

Line Style and Line Width Properties

Arrow Pointer end styles

Color

Text Properties

Hyperlinks

Copy markups to designated pages

Fill Type - The Fill Type properties are only available for the Rectangle, Rounded Rectangle, Ellipse, Polygon, and Sketch Polygon tools

- Solid
- Hollow
- Highlight
- Background Fill (hide)

The Insert Image and Markup Stamp tools provide a drop down list in the Properties toolbar of available image and stamp files. A **Browse** button is included to allow you to locate additional files to add to the list.

MARKUP FONT

Change the font name, style, and size for markup text through the **Markup Text Font** dialog box. To change the markup text font:

1. Use the select markup tool to select and alter existing text or click A to add new text.
2. Select your desired options from the text properties toolbar. You can select the font style, size, and color. Highlight the text and 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.
3. Click **OK**.

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, Rounded Rectangle, Ellipse, Polygon, and Sketch 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 Poly 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 Brava! 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.

BACKGROUND FILLS

Background fills are the same color as the current image background color, however they are 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.

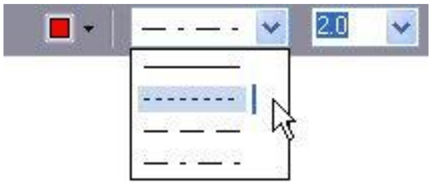
For the Poly Background fill:

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 Brava! 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.

LINE STYLE AND WIDTH

Change the style and width of markup lines by using the Line Style and Line Width tools:



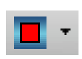
1. Select a new line style and line width from the drop down boxes when available from the Markup properties toolbar.
2. You can change the line width of existing markup lines. If the markup is not currently active, use the select markup tool to pick it.

See also:

Line Thickness

MARKUP COLOR

You can change the color of any markup entity, including redactups, using the16 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.

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 Changemarks 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.

ADD A HYPERLINK

You can attach a hyperlink to a Changemarks note or to any markup entity. Simply create the Changemarks or markup entity and with the entity selected, click  in the markup properties toolbar. Type a hyperlink URL in the text box.

To edit a Changemarks or entity to add a hyperlink, click to select the entity and then click to specify a URL. Only one hyperlink URL can be assigned to each markup object. in the case of Changemarks, any URL entered into the Changemarks text field will automatically become an active hyperlink in the Changemarks panel and can include multiple URLs. In addition, URLs added to the panel in Changemarks Discussion mode will also be active.

LAUNCH A HYPERLINK

To launch a hyperlink from within a Brava! window (while in review mode), 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 Changemarks, open the Changemarks panel and click on any active hyperlink (indicated with underlined blue text). The URL will launch in a separate browser window.

You can specify how hyperlinks launch in Brava! by adjusting the viewer parameter "HyperlinkLaunch".

default launches each document in its own separate window

one launches all documents in a separate window as Brava!

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

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

REVIEW MODE

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 Changemarks notes and discussions, redactups, or takeoff entities) 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 *Markup Open for Review* dialog. Click **OK**. **Changemarks 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 Changemarks discussion and all associated reply markup files will need to be opened for review to view the entire conversation when selecting the original Changemarks note from the list. The replies will live in the original markup file if the user has replied while in edit mode and one Changemarks note can contain multiple replies from multiple authors.

2. To step through each page that contains markups, right click and select **Page->Next Markup page**. To step through each page that contains Changemarks note, right click and select **Marks->Next Changemarks**. If Changemarks are found, the Changemarks panel becomes the active panel of the Brava Task pane, which opens automatically if currently closed.
3. In markup review mode, you can review any takeoff information contained in the Measurement Takeoff tab and review (and reply to) any Changemarks discussions that exist.
4. 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, a *Markup Close Review* dialog displays where you can specify (highlight) which files you wish to close. You can use the <Ctrl> key to select individual markup files, or <Shift> to select a from/to span of files.
5. If you have added replies to a Changemarks 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 Changemarks discussion to be visible.

Usage Notes

- The following keystrokes are available to quickly execute the open markup for review command.

  <Ctrl> + <R> = Open for Review

- Brava supports loading markups created with older product versions, but not markups created with newer product versions. Your Brava installation must be updated to the latest release if you need to view newer markups.

See Also:

Consolidating Markups

Takeoff Results

REVIEW CHANGEMARKS

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

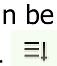
If you are reviewing Changemarks notes that you authored in the active markup file, you can also edit the Changemarks.

1. Open the image with the appropriate markup open or overlaid (Click 

and select an available markup file from the *Markup Open For Review* dialog). **Changemarks 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 Changemarks discussion and all associated reply markup files will need to be opened for review to view the entire conversation when selecting the original Changemarks note from the list. The replies will live in the original markup file if the user has replied while in edit mode and one Changemarks note can contain multiple replies from multiple authors.

2. From the 

drop-down menu, select **Review Changemarks.** The Changemarks panel becomes the active panel of the Brava Task pane, which opens automatically if currently closed. Note that selecting this option will clear any Changemarks filters, if set, and select the first Changemarks note in the list.

3. Existing Changemarks 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 Changemarks note in the order that they appear in the document pages.

4. You can search and filter  Changemarks notes by content and/or title by entering a word or phrase in the search text box. (Click Show All  to return all Changemarks notes to the list.)

5. Click on a resulting Changemarks note that you wish to view. The original Changemarks text displays in the panel's lower frame, including any discussion replies that have been added. The current type and state of the Changemarks note are displayed at the bottom of the panel 

. Note that if you click on a Changemarks note that only contains reply data (because a user had replied in review mode), the Changemarks note will appear to be blank. You must select the original Changemarks note that contains the discussion and all associated replies that exist in the currently overlaid markup files will display in the Changemarks panel.

6. You can progress sequentially through the Changemarks notes by using the **Next** and **Previous** arrow buttons . The <Ctrl>+<Alt>+<C> hotkey combination is available for navigating to the next Changemarks note. You can also step through each page that contains Changemarks notes by right clicking in the viewing window and selecting **Marks** ->**Next Changemarks**

7. The Changemarks entities appear in Brava! at the same magnification level the author created them. To edit the original Changemarks note, you must be the author, have the markup opened in edit (not review) mode. Click the individual Changemarks note you want to edit while in markup selection mode.

8. In markup review or edit mode, you can enter into any active discussion from the Changemarks panel by adding a reply (click *Add Reply*).

   - When a reply is submitted in review mode, a new editable markup layer is created (if one is not currently open) where the reply information is stored.

- You may use the consolidate markups feature if you would like to merge all of the separate reply markups into the original markup file. When reviewing markups in Brava Reader, discussion threads can be reviewed but not replied to as new markups cannot be created with Brava Reader.

9. You can extract information from one or all Changemarks notes contained in a document through the Copy Changemarks dialog. Click to access this dialog.
10. You can launch any hyperlinks present in the Changemarks panel, and Brava! will launch the specified URL in a separate browser window.

Usage Notes

- You can review Changemarks notes information that exists in files that have been published with markups.
- If the published file is PDF format, Changemarks notes appear as PDF comments when viewed in Acrobat.

See also:

Creating Changemarks

Extracting Changemarks Information

Markup Pages

CHANGEMARKS FILTERS

On the Changemarks panel (<Ctrl> + <Shift> + <M>), you can filter Changemarks by content and review the results sorted by title, author, date, type, or state.

Filter by Content

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

To filter Changemarks by text content that appears in either the Changemarks 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). If *Cumulative* is turned on (checked), each subsequent search will just search/filter against the list of entries returned from the previous search/filter. If *Cumulative* is off (unchecked), the search will query all Changemarks in the document.

Changemarks Search Content Options:

Cumulative - if checked, searches only within results of previous search.

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

Whole Word - find 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.

Sort by Attribute

Included in the Changemarks panel is a drop down menu that will sort the current Changemarks results by "Title", "Date", "Author", "Type", "State", or "Position". Selecting one of these commands sorts the currently available Changemarks by that attribute and displays the resulting list in ascending order. Position sorts the Changemarks in the order that they appear in the document pages. When changing the sort selection, the Changemarks panel title list updates to display the attribute information that is currently specified.

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

The Changemarks panel shows the details for the currently selected Changemarks note. If you select a Changemarks note in the viewing window (using the Select tool), the details for that Changemarks note are shown. If there is an active content filter applied which would prevent the Changemarks from being displayed, the filter is cleared so that all Changemarks show in the list (essentially the same as clicking the *Show All* button).

See also:

Reviewing Changemarks

MARKUP PAGES

Use the Markup Pages Tool to quickly navigate through markups on multi-page documents. When navigating the current document using these commands, Brava! ignores pages that don't contain markups.

To review markup pages, either:

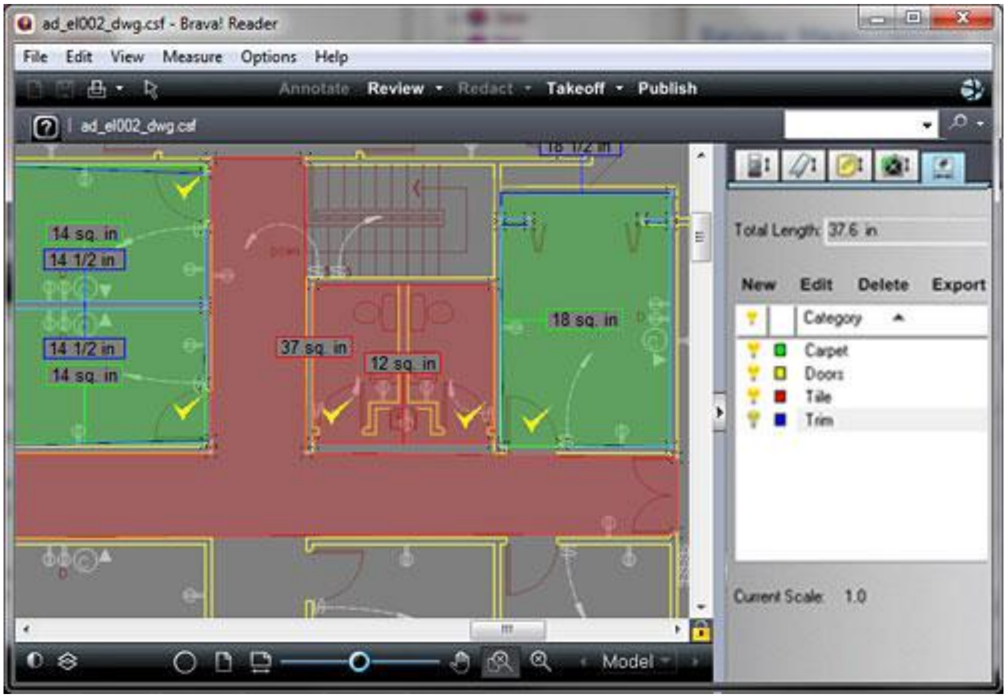
- From the right mouse button menu, select **Page--> Previous Markup Page** or **Next Markup Page** to view the Previous or Next page that contains markups.
- Click and select **Review Markup Pages** --> **Previous Markup Page** or **Next Markup Page**
- From the Thumbnails panel, click on any page that contains a ! icon next to the thumbnail image.

This feature differs from the review Changemarks navigation in which the next and previous buttons step from one Changemarks markup to the next. The Review Markup Pages feature navigates through all pages that contain any markup entities, including Changemarks.

REVIEW MEASUREMENT TAKEOFFS

Measurement takeoffs can be captured in a markup layer and opened for review or burned in to a file along with any other markup entities.

If a markup layer contains takeoff entities, they can be reviewed in the measurement takeoff panel. The takeoff panel will contain a list of categories that have been defined for the drawing along with the accumulated values for those measurements as area, length, or count.



To review takeoffs contained in a markup file:

1. Open a markup file for review that contains takeoff measurements.
2. From the Measure menu drop down arrow Measure, select **Takeoff**, or click the Measurement takeoff tab of the Brava task pane.
3. The takeoff panel displays the categories that were defined in the markup layer. Only one category can be selected at a time to view the accumulated value in the "Total" field at the top of the panel as area, length, or count, depending on the type of measurement.
4. If you do not want to view the categories associated measurement entities, you can choose to **Hide** them on the drawing. To hide a category of entities, click the hide icon next to the category name to toggle between visible and hide. To toggle all categories from visible/hide state, click the icon located in the column heading. Hidden category information will still remain available for export.
5. You can **sort** the categories by name by clicking on the arrow in the category header. The arrow toggles the list in ascending or descending order, alphabetically.
6. You can mouse-over any category in the list to view the markup file name and category type as a tooltip.
7. You can Export the measurement information to the clipboard or to a file.

REDACT MODE

ABOUT REDACTION

About Redaction: Brava! 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 CSF, 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.

Brava! Enterprise uses a powerful searching language that allows most unique pattens to be found and redacted via minor scripts or new macro customizations that can be quickly executed in any search operation. To create custom macros that can be added to your search strings and redaction scripts, please contact Informative Graphics for more information: info@infograph.com

The following redaction tools are available through the Brava! Redaction toolbar which displays when you click 

:

- Redact Area
- Allow Area
- Redact Privacy Information
- Find & Redact
- Find & Redact From/To
- Redact Using Script(s)/List(s)
- Redact Pages
- Image

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. You can also open a previously authored template file containing redactups.
2. Verify your redactups to be finalized.
3. Finalize the file as a redacted PDF, TIFF, or CSF version for distribution.

Exposing Redactions: When publishing to CSF only, the author has the capability to set an optional password that will allow only users who know the correct password to view any text and images that have been concealed. Redactup entities on a published CSF file remain solid unless the password has been set and is correctly entered by the user. In that case, the entities become transparent. A mouse over on a redactup entity reveals the author name and date and can include a reason for the redaction if the author has chosen to include this information.

Redactions can never be exposed on published PDF and TIFF files. However, when viewing a published CSF file, if the author established a redaction password, you are prompted to enter that password. If the correct password is entered, any redactup entities created with the redaction tools are transparent (all other markup entities remain unchanged).

If no password, Cancel, or an incorrect password is given, the file will open, but any redactup entities remain opaque and areas beneath them are hidden from view. If the publisher set no redaction password, no prompt is presented and the redactup entities remain opaque, and cannot be edited. You can not turn off the visibility state of a markup layer that has been published as a redaction.

See Also:

What is CSF?

Viewing CSF Files in Brava!

GLOSSARY OF TERMS

Throughout the redaction portion of this help file, 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 removed.

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 applied the marked areas (Redactups) as Redactions. Redacted content will be removed upon finalize.

Template

A set of Redactups to be placed at exact locations on like-formatted document files.

Script

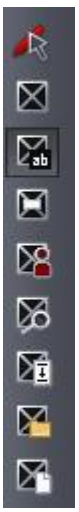
A set of Redact operations (usually Find & Redact searches) to be repeated on a document. A script can optionally contain a set of Redactups to be placed at exact locations on the document.

REDACT TOOLS

REDACTION TOOLBAR

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

From top to bottom, the tools are:

	Redactup Select
	Redact Area
	Redact Text
	Allow Area
	Redact Privacy Info
	Find and Redact
	Find & Redact From/To
	Redact Using Script(s)/List(s)
	Redact Page

Additional menu options available from the 

button include:

Finalize Redactions and Publish (PDF, TIFF, CSF)

Publish Review Draft As (PDF, TIFF)

Open Redactup Template

Run Script

Verify (Redactup, Image Areas, Entire Document)

REDACTION REASONS

When using the redaction tools, you can optionally assign a redaction reason code to each redactup entity (up to 69 characters) 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 persisted in the User Profile *<user application data directory>|IGC|Brava! Client|Reasons.ini* file. For example (Windows 7)

C:\Users\myname\AppData\Roaming\IGC\Brava! Client\Reasons.ini or (Windows XP) *C:\Documents and Settings\myname\Application Data\IGC\Brava! Client\Reasons.ini*.

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>. If a reason is not explicitly assigned to a new redaction, the last reason assigned is used (may be blank). If the user exits the program and returns, the last reason assigned during the preceding session is used.

When verifying the redactups before publishing the file, you can filter redactups by reason code. When the file is published as a redaction, the reason code assigned displays on top of each opaque rectangle of the published file. The codes are permanently visible in both the viewing window and on any printed output. Reason codes contained in a draft do not display on the review draft entities until the file is finalized.

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. 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.

ADJUSTING REDACTION REASON FONT SIZE

On large drawing files, the text on redaction reason codes is scaled to fit the redactup rectangle and therefore may appear too small to read on the final redacted pages. You can control the minimum font size by editing two lines in the *ViewerConfig.xml* file, located in the <user application data directory>\IGC\Brava! Client\ directory. You may need to increase these values when printing any file that is over 20" in size, depending on your requirements. Suggested values might be to set minimum font size, 6 points and maximum font size 100 points:

```
<PublishOptions>
      <RedactionReasonsFontMin keytype="int">6</RedactionReasonsFontMin>
      <RedactionReasonsFontDesired
keytype="int">100</RedactionReasonsFontDesired>
      <RedactionReasonsFont keytype="string">Arial</RedactionReasonsFont>
   </PublishOptions>
```

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 CSF, PDF, or TIFF. If the file being marked up is a CSF file, it must have the markup authoring and burn-in rights enabled and can not already contain a published redaction.

To create a Redact Area entity:

1. Open a document containing text or images that you would like to redact.
2. Click 

from the toolbar to display the Redaction toolbar.
3. Click the *Redact Area* tool  from the 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 Reasons text field, if desired. A list of recently used reasons is available in the Enter Reason drop down.
7. Edit the redactup as desired, including changing its color. If the markup is not currently active, use the Select Markup tool to pick it.
8. You can cut away portions of the redactup entity (before publishing) with the Allow Area tool if you would like to exclude from redaction specific areas within the covered area.
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 to (CSF, 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 choose to Verify the redactups before publishing a finalized redacted version.

Additional redaction tools are available from the expanding menu that allow you to redact specific phrases contained in a document, redact text between specified phrases, redact Privacy Information (such as phone numbers, social security numbers, etc), or run predefined redaction scripts to find and redact various phrases and text patterns.

Additional Reasons.ini files are included in your installation: *USA FOI reasons.ini* and *USA Privacy reasons.ini*. The preset values in these files can be copied to your *BravaEnterpriseClient_Reasons.ini* file located in the /<user profile/IGC/ installation directory as outlined below. Note that any custom reason codes that you enter will also be stored in this new reason ini file:

1. Rename or make a backup copy of your existing *BravaEnterpriseClient_Reasons.ini* file.
2. Copy the sample reason code file that you want to use to the Brava Enterprise install directory.
3. Rename the copied file to *BravaEnterpriseClient_Reasons.ini*.

Note: The redactup entity only blocks information when its markup file has been published to a CSF, TIFF, or PDF file. If the markup with the redactups is saved and reloaded, areas covered by the redactup can be seen, searched, and copied. Also note that the redaction process physically removes text and blanks out raster image information.

See Also:

Publishing Markups

Exposing Blockouts in CSF Files

REDACT TEXT TOOL

The Redact Text tool allows you to manually place a blockout entity 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 or images that you would like to redact.
2. Click the Redact Text tool from the Markup toolbar.
3. 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 curser straight down a page.
    - Double clicking on a single word will select (for redaction) all like terms contained in the document.
4. Release the mouse button to set the entity.
5. Enter a reason for the redaction in the Reasons text field, if desired . A list of recently used reasons is available in the Enter Reason drop-down.
6. Edit the redactup entity as desired, including moving, resizing, deleting, or changing its color. If the redactup is not currently active, use the Select Markup Tool to pick it. You can cut away portions of the redactup entity (before publishing) with the Allow Area tool if you would like to exclude from redaction specific areas within the covered area.
7. Repeat steps 3-6 for all areas in the document that you would like to redact in the published version.
8. To complete the redaction, the redactups must be finalized and published as new PDF, TIFF, or secure CSF 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.
- When the tool is active, you can select redactions / markup entities and manipulate / delete them.

ALLOW AREA TOOL

This tool allows you to cut away areas within an unpublished redactup entity that you would like to reveal (exclude from the published redaction). The Allow Area rectangle, when drawn over an existing redactup entity, cancels the redaction in that area only.

The tool has no affect on any area of the document other than on top of an existing, editable redactup, before the file is published. It has no affect on redactions that have been previously published to TIFF, PDF, or CSF files.

To create an Allow Area rectangle:

1. Open or create a markup file that contains redactup entities (using the Redact Area, Find& Redact, Find & Redact From/To, Redact Privacy Information, or Redact Using Script(s)/List(s) tools).
2. Click 

and then click the Allow Area tool from the Redaction toolbar.
3. Click and hold the left mouse button and drag the mouse pointer to draw one or more rectangular shapes on at least a portion of an existing redacted area. Release the mouse button to set each Allow Area rectangle.
4. Once set, Allow Areas cannot be edited, moved, resized, copied, or deleted. However, they can be removed with the Undo function - or you can place an additional redactup rectangle on top of an Allow Area to re-conceal it.
5. To complete the redaction, publish the file. Select **Finalize Redactions and Publish to (CSF, PDF, or TIFF)** from the 

drop down menu and select your publishing options.

REDACT PRIVACY INFORMATION

Use the Redact Privacy Information tool to quickly find and redact sensitive information commonly found in documents and forms including Social Security numbers, Phone numbers, Email addresses, Date of birth, and names.

This dialog acts as a convenient tool for using the available predefined search macros without needing to format search strings. You can select one or more of the text pattern methods to apply to the current document.

To use the Redact Privacy Information tool:

1. Open a document containing sensitive information that you would like to redact and click  to display the Redaction toolbar.

2. Click the Redact Privacy Info tool  from the toolbar.
3. Select one or more check boxes for the items you would like to redact in the current document.
4. **Exception Lists**: With Phone Numbers and Email addresses, you can choose to build an Exception list.
    a. Click the appropriate *Exception list* link and click **Add** to type in specific phone numbers or email addresses that you do NOT want redacted.
    b. Click **OK** to add the name to the list. You can add one email or phone number to each list at a time, or you can use **Open** to bring in a previously saved exception list into the current list you are creating.
    c. If you want to edit an entry in the list, simply highlight the entry and click **Edit**, then **OK** after you have made your changes.
    d. Once you have created a list, click **Save** to save the list to be used for this and future redactions.

5. **Use List of Names**: With the redact Name option, you can choose to use a list of names. Click the "use list of names" link to enter multiple names in the name list dialog that you DO want redacted. This is not an exception list.

6. Enter a reason for the redaction in the text box, if desired, and select a Color for the redactups. A list of recently used reasons is available in the Enter Reason drop down.

7. Click **Redact**. A dialog informs you of the number of strings that were found and marked for redaction.

8. 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 to (CSF, 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 choose to Verify the redactups before publishing a finalized redacted version.

Usage Notes

- The **Date of birth** macro only finds and redacts strings in the format "Date of birth: <date>" or "DOB: <date>". It does not redact dates either alone or in any other format.
- Do not include periods in the *Prefix* and *Suffix* fields of the **Name** macro. Brava knows to look for the term with or without a period and if you specify one in your search criteria, any instances in the document that don't include periods will not be redacted.
- Note that you can use OR strings in the *Prefix* and *Suffix* fields, meaning that, if you want to declare multiple prefixes for a person, you can type them all in and seperate them with the OR (pipe) character '|'. For example, "`mister|missus|doctor|mrs|dr|mr`" will look for the name pattern using any of those prefixes/suffixes.
- The prefixes in the OR string should be ordered by length; largest to smallest. That way, smaller ones won't trip larger ones. For example, when searching "Mrs. Smith", we don't want to look for "mr" first, because it will pass and then the extra 's' character will invalidate the rest of the name. If

they are ordered “MRS|MR” then it will return the expected result; first searching for MRS, and if not found, will then search for MR.

- In the above example, the following search string can be entered in the Find & Redact field to accomplish the same result:
  `macro:aim(prefix=mister|doctor|mr|dr)m(firstname=John)m(middlename=Luke)m(lastname=Williams)m(firstinitial=J)m(middleinitial=L)m(lastinitial=W)m(suffix= the third|junior|III|m.d|Jr):name`
- This feature may be disabled by your server administrator through a server parameter. Because the dialog options are English specific, administrators of localizations may choose not to show this dialog.

See Also:

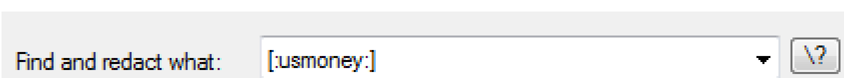
Redact Using Script(s)/List(s) Tool

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 

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. The field is not case-sensitive. The use of search macros and search string commands is supported in the redaction find string. See Wildcard Quick Tips, Using Search Macros, Text Search Modes, and Search Rules and examples for syntax examples and advanced searching options.



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. Select **Match Case** to specify searches for the text exactly as typed with upper and lower case characters.
5. 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.
6. Optionally, you can enter a reason for redaction in the Reasons text field (up to 69 characters). 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 redactup rectangle entity when the file is published to CSF. When users mouse over the redacted area of the document with the Select tool active, the who, when, and *why* information displays.
   - If the file is published to PDF or TIFF, reason codes can be included as a summary page in the published output.

7. Click **Redact** to find and redact all phrases that match the redaction find string.
8. A dialog appears informing you how many instances were found and marked for redaction. Click **OK** to return to the *Find & Redact* dialog.
9. Select **Close** to exit, or adjust the text string and perform another Find & Redact phrase.
10. 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 to (CSF, 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.

Located in your webapp root installation directory (for example C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\ROOT\IGC\Samples\Redaction) is a folder named "Redaction". The sample files included in this folder can be loaded in Brava and each provides instructions for using the various pre-loaded macro scripts, along with the expected results. When you run the specified scripts against the sample files, you'll be able to see what gets marked for redaction and what doesn't.

See Also:

Find & Redact From/To

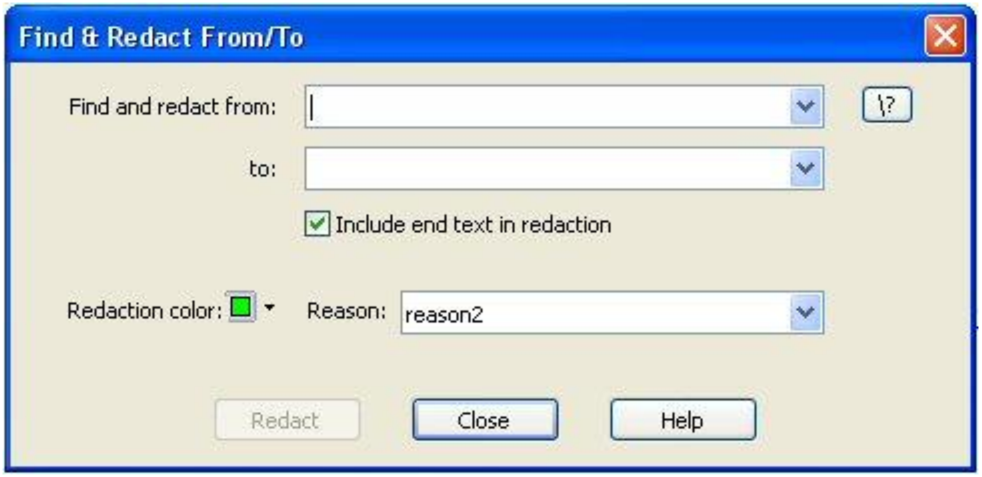
Redact using scripts

FIND & REDACT FROM/TO

This tool lets you run a command, for just the open file, that finds and redacts sections of a document (using rectangular "redactup" entities) between two defined phrases.

1. Click 

and then click the *Find & Redact From/To* tool  from the Redaction toolbar.



2. Enter a starting find phrase in the "Find and redact from:" text field of the dialog. The field is not case-sensitive. Limited use of search commands and macros is supported in the redaction find string. Currently the prefix command strings are not supported with the use of this tool. See Wildcard Quick Tips, Using Search Macros, Text Search Modes, and Search Rules and examples for syntax examples and advanced searching options.
3. Enter an ending find phrase in the "to:" text field of the dialog.
4. Use the **Include end text in redaction** option if you want the phrase entered in the "to" field to be redacted, otherwise, content is redacted to include the first character of the start phrase through to the last character that precedes the first character of the end phrase.
5. 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
6. Optionally, you can enter a reason for redaction in the Reasons text field (up to 69 characters).
7. Click **Redact** to find and redact all content that is located between matching From and To redaction find strings.
8. A dialog appears informing you how many instances were found and redacted. Click **OK** to return to the Find & Redact To/From dialog.
9. Select **Close** to exit, or adjust the text strings and perform another Find & Redact From/To command.
10. To complete the redaction, the file must be published as a redacted version of the current file, otherwise it will just remain a transparent entity. Select **Finalize Redactions and Publish to (CSF, 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 redactions 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.

See Also:

[Find & Redact](#)
[Redact using scripts](#)

REDACT USING SCRIPT(S)/LIST(S)

The *Redact Using Script(s)/List(s)* tool allows you to run a command to find and redact specified phrases and sections of a document in one action, through the use of redaction scripts.

Redaction scripts can be downloaded from a *RedactionScripts.bin* file on the web server. Customers can create new scripts and have an administrator install it on the server, making available to all Brava clients.

The *Redact Using Script(s)/List(s)* dialog can be pre-populated with a default list of redaction scripts (provided by IGC) that can be run on documents (Find and redact social security numbers, email addresses, etc). You can use these sample files if set up by your administrator, or use custom scripts that have been created and made available in the Brava Server Redaction Scripts directory. End users cannot add to, edit, or delete the scripts that appear in the *Find and Redact to Saved List* dialog through the Brava! Client.

1. Click 

to display the Redaction toolbar.
2. Click the *Find & Redact Using Script(s)/List(s)*  button from the toolbar.
3. From the *Redact Using Scripts* dialog, select one or more appropriate list files to use on the current document to find and redact a set of words, phrases, and/or patterns defined in the selected list(s).
4. Click **Redact**. This command loops through each phrase of the source document and applies a Find & Redact (and a reason) to each matching result.
5. When complete, the number of strings found and marked for redaction displays.
6. To complete the redaction, the redactup layer 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 to (CSF, 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 first Verify the redactups that were set before publishing a redacted version.

Usage Notes

- Raster/graphic text is not handled by the find and redact function. 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 command.
- You can edit or remove any redactups before publishing the redaction. Use the Select Entity tool to pick the specific entity and click <delete>.

- The ->**Run Script** tool allows you to run or test a single script (.xrs file that has been previously created) against the current document.

  Redaction script and macro formatting:

  Server Administrators can modify an existing sample script, or create a new Redaction Script (.xrs file) to display to end users in the *Redact Using Scripts* dialog. If downloaded from the web server, the sample scripts display in the dialog list (un-checked). These sample scripts, downloaded to your Brava user profile directory (i.e., C:\Documents and Settings\<username>\IGC\x7_0*RedactionScripts*) and can be edited and used as desired.

  Brava! Enterprise has a powerful searching language that allows most unique patterns to be found and redacted via minor script or new macro customization. Please contact IGC Sales for customization services.

Located in your webapp root installation directory (for example C:\Program Files\Apache Software Foundation\Tomcat 6.0\webapps\ROOT\IGC\Samples\Redaction) is a folder named "Redaction". The sample files included in this folder can be loaded in Brava and each provides instructions for using the various pre-loaded macro scripts, along with the expected results. When you run the specified scripts against the sample files, you'll be able to see what gets marked for redaction and what doesn't.

See also:

Using Search Macros

Find Text

Redact Privacy Information

Text Search Modes

Conditional Macros

Search Rules and examples

REDACT PAGE

This feature of Brava Enterprise allows you to quickly redact entire pages of documents with one command. This tool is useful for redacting documents that contain only certain pages, words, or paragraphs that you want to release in the published rendition. Essentially, it can be used as a reverse redaction tool, in other words, "redact everything on this page except specified areas."

1. Click to display the Redaction toolbar.
2. Click the *Redact Page* button from the toolbar.
3. In the *Redact Page(s)* dialog, select the desired page range to redact. You can select to redact all pages, only the currently displayed page, or a range of pages (type in the start and end page numbers).

4. Enter or select a reason for the redaction, if desired, and a color to use for the block entities.
5. Click **Redact**.
6. After using the Redact Page tool to place redactup entities on one or more entire pages, you can optionally use the Allow Area tool to reveal only certain areas of your document.
7. Select **Finalize Redactions and Publish to (CSF, PDF, or TIFF)** from the 

 drop down menu and select your publishing options. Once you publish the document, all content of the redacted pages, except the areas selected with the Allow Area tool, will be completely unavailable (for view, print, copy, or search) in the redacted rendition.

OPEN REDACTUP TEMPLATE

A redactup template is simply a markup file that may or may not contain redactup entities and the author has likely created it with the intent of using it as a template on multiple documents. This previously authored set of redactups and/or markups can be placed at exact locations and overlaid on like-formatted document files to speed up processing. Redactup templates are best used when you have many like-documents (scanned images) or forms and you know that portions to be redacted are ALWAYS in the same location and page number.

Brava Enterprise can open these templates files for review or edit (if not finalized). Though a file can have only one editable markup/redactup layer associated with it, there can be multiple merged markup files applied as a template.

1. From the redact button 

 select **Open Redactup Template**. The hotkey combination <Ctrl> + <M> is available as a shortcut.
2. Select the markup file or files you wish to overlay (can be a template or previously authored markup or redactup file) and click **OK**. Markup/redactup files can be recognized as having the extension .MRK or .XRL. If you open multiple markup/redactup files, they will be consolidated into one markup/redactup layer with you as the author.

When applying a template to the current file, the following rules must be met:

1. The file and template must contain the same number of pages
2. The template must have been authored against the same file format (TIFF, for example)
3. The file and template must be of the same general layout for the redactup entities to be overlaid in the proper locations.

When you apply a template to an open file, you can edit the redactup as desired and save the template with the same or different name before it is finalized. To save the edited template, simply select **Save** or **Save As** from the Markup button  menu.

Redaction templates can be created in either Annotate or Redact mode simply by creating a markup/redactup layer and saving the file (as MRK or XRL) before any publishing is executed. Redactup entities remain transparent in the overlaid template until the document is finalized.

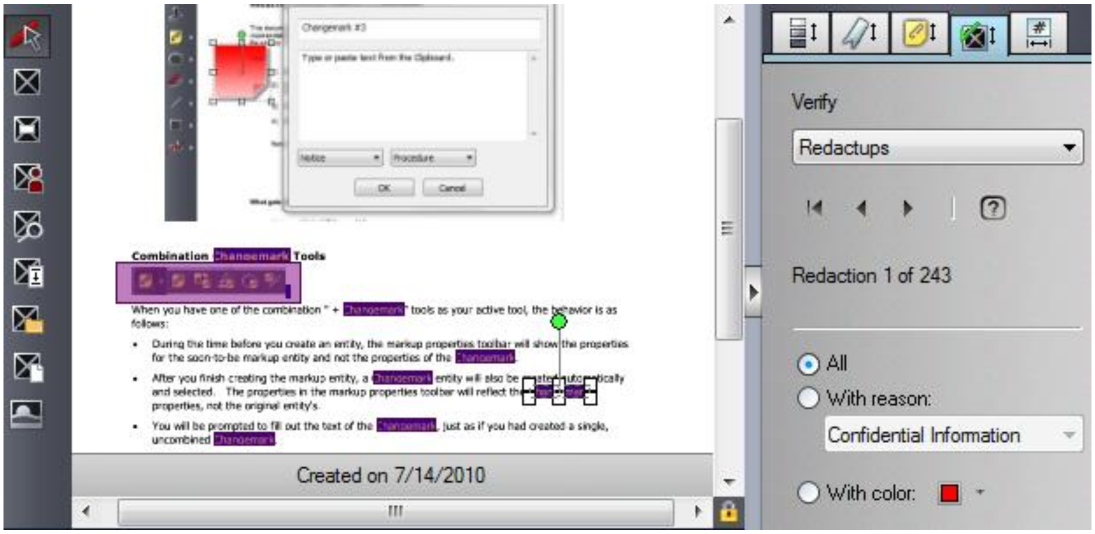
VERIFY REDACTUPS TO BE FINALIZED

Once you have used the redaction tools on a document, you can optionally run the Verify tool to manually check the accuracy of each redactup entity that has been set on the document before it is published as a final redaction.

To Verify redactups:

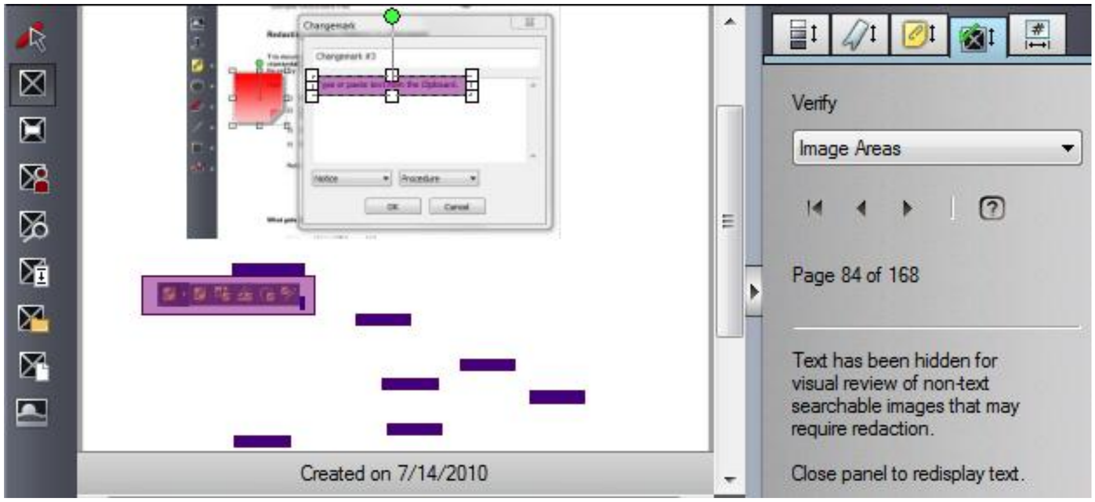
1. Using any of the redaction tools on the current document, create a redactup file.
2. Click the Verify tab from the Brava! Task Pane to reveal the Verify panel. Alternatively, you can access the Verify panel by either:
    - using the hotkey <Ctrl> + <Shift> + <V>
    - from the right mouse button menu, select **Show Pane ->Verify**
    - from the Redact drop-down menu 

 select **Verify -->Redactup, Images,** or **Entire document**
3. If you select **Redactups** from the Verify drop down list, the next and previous buttons scan through each redactup entity with active edit handles that can be selected and dragged to re-size the area. This feature allows you to check that all redactups have had reasons assigned and also allows you to check that if a redaction template was used, that the template properly covers everything it is supposed to and you can make adjustments to the entities if needed, including changing reason codes.



4. If you select **Image Areas** from the drop-down, Brava cycles through each raster/vector image of the document displaying the areas that cannot be redacted through find and redact scripts. Text is hidden from view for the purpose of visual review of the non searchable areas that may require redaction (such as image text). You can use your mouse to drag and size a zone on any

area using the entity's edit handles. If the document is raster only, or vector with no raster objects, then the Verify Image buttons are grayed out (disabled). This feature allows you to check the document to make sure that there is no text in images that cannot be located and redacted through any text search strings. If present, you can zone redact the portion of the image that you want to conceal.



5. **Redactup Filters**: In the lower portion of the Verify panel, a set of options allows you to filter the redactups in the document by color or reason if you don't want to verify **All** redactups contained in the document. Note that every time the filter being applied changes, you are returned to the first entity in the document that meets the new criteria set by the filter.
   - To filter by reason, select the **With reason** option and either type in or select an existing reason from the drop down list.
   - To filter by color, select the **Color** option, then click the color menu arrow to choose a color from the selection palette. For a specific color, choose **More** to display the full custom color dialog.
6. Use the next and previous arrows to review each redactup contained in the file until you have verified all of them. Redactups are cycled through by order of their time stamp and not by order of location in the document. A redaction counter displays your current progress.

7. Edit any redactups as needed and then finalize the file for distribution (as a redacted PDF, TIFF, or CSF rendition of the file).

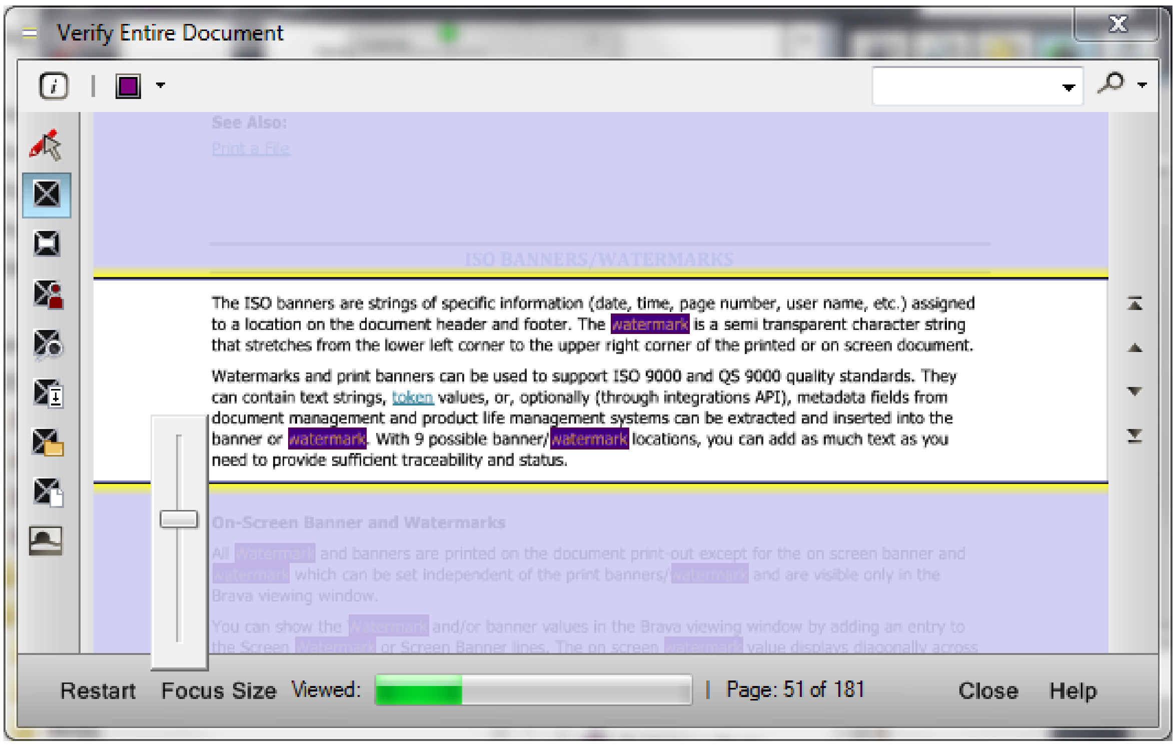
VERIFY ENTIRE DOCUMENT

If you select **Entire Document** from the Verify menu, the document is presented in a strip panel in a separate viewing window. This feature allows you to focus on and review every inch of the document in a strip wise fashion and at the same time a log is recorded of how much of the document has been reviewed. Navigate through the document pages until the entire document has been reviewed.

Page review navigation control options:

- Use the single side bar arrows, keyboard <up> and <down> arrows, or use your mouse wheel to scroll up and down.
- Use the space bar, <PageDown> key, or side bar arrow to advance the document one full review area forward.
- Use the <PageUp> key or side bar arrow to reverse the document one full review area backward.

You can click the side bar arrows for single line/section advancement, or hold down the arrows for continuous advancement backward or forward. Release the mouse button to stop movement. Holding down the single arrows advances slowly, holding the PageUp and PageDown arrows advances quickly.



While in *View Entire Document* mode, you can:

- Review the document - The "**Viewed**" status bar is an indicator of what percentage of the document has been reviewed. Note that if you back up to previously viewed paged, the bar indicator DOESN'T back up. This review state is remembered for the session, but not upon exit. For example, if you close the panel half way through review and then enter Verify Entire Document again – you will continue where you left off .
- **Add** or edit Redactups - using any of the tools from the redactup toolbar. Redactups can be drawn in the transparent areas and once drawn, they will appear under the transparent area.
- Restart - A **Restart** button is provided to allow you to start over. This will put the document at the top and reset the bar indicator and document review position to start.

- Adjust the size of the viewing area with the **Focus size** slider. The intent of the viewing area is to make it easier to concentrate vision on a portion of the page to permit faster skimming of the content.
- Access this **Help** file.
- **Close** (exit the mode).

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 (not redacted)** or **TIFF (not redacted)**.
4. Select your PDF or TIFF Draft publishing options and click **Publish**.
5. Type a name for the file, or accept the default format as <File Name>-draft.<ext> (for example, *myfile-draft.pdf*) and click **Save**.

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 Brava, the redactups contained in the draft cannot be selected, edited or finalized. They are now part of the PDF file.
- The original redactup 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 in order to publish a draft.
- Save View as JPG can also be used to distribute "review draft" images. From the *Publish* menu, select Save Current View as JPG and any unpublished redactup entities in the current view will appear transparent in the resulting snapshot JPG file.

REDACT MOUSE TOOL

An interactive mouse tool is active when using the Redact Area tool and Allow Area tool that allows you to place redactup entities and Allow Area rectangles on the current image. When the Redact Text tool is active, the mouse cursor is placed at the beginning of the text and dragged to select desired text.

The five accompanying markup tools, Find & Redact, Redact Privacy Info, Redact Using Script(s)/List(s), Redact Page, and Find and Redact From/To are command tools and do not have any mouse functions themselves.

After invoking either of these commands, the active tool is set to the default redaction tool (Redact Area).

MEASURE MODE

MEASUREMENT TOOLS

There are various Measure tools available for drawing and image files while in Measurement mode Measure. You should first set a standard measurement scale or calibrate a baseline distance to use as scale. Brava! uses an interval of 0 to 360 degrees for all angular measurement.

Select one of the following measurement tools from the measure toolbar:

- Distance (line)
- Polygon
- Polyline
- Rectangle
- Circle
- Measure Count

- Calibrate
- Measurement Settings
- Measure Magnification Tool
- Measure Results Accumulators

MEASUREMENT SETTINGS

Available from the Measurement drop down menu, the Measurement Settings dialog allows you to select the scale factor to use, and precision units for measurement value display results when using the measurement tools (distance, area, angle, xz value, and perimeter).

You can select a different scale factor to use for each drawing, or, if your shop uses a standardized scale, you can set the default drawing scale to use for all drawings in the current and future Brava! sessions. To set the default to use for all sessions, choose your Scale factor from the drop down and click **Save as Default**.

1. Click the Measure drop down arrow 

 and select **Settings**.
2. Select a *Measuring System* from the drop down list.

   English displays all values in decimals only

   English Architectural includes a precision setting for distance in fractions and can be calibrated in miles, inches, feet, or yards

   Metric systems displays decimal values in meters, centimeters, and millimeters

   Unitless allows you to set raw measurement values that are unitless (ul), with no scale factor applied. Conversion in this case is 1/1 and no other settings will be available in the dialog

English and English Arch	Metric	Unitless
in	mm	<none>
ft	cm	
yd	m	
mi	km	

3. In the *Display Results* section, select a **Unit** value from the unit drop down box, then select the degree of **Precision** desired. You can select to display your measurement precision values from the nearest 1.0 to 0.00001 decimal value.

Values are rounded up or down to the nearest **precision distance** value. For example, if you are measuring a line that is 6 1/3 inches and you have 1/2 selected in the precision distance drop down, the value will round up to and read as 6 1/2 in the distance value text box. If the value is exactly in the middle, such as 6 1/4, the displayed value will round down to the nearest 1/2 which would be 6.

4. In the *Page Scale* section, select a scale factor from the drop down list. The available choices for standard CAD Metric and English scale are:

Metric	English and English Architectural
1:1 (Full Size)	Full Size (1:1)
1:2 (Half Size)	Half Size (1:2)
1:5	3"= 1'-0"
1:10	1 1/2"=1'-0"
1:20	3/4"=1'-0"
1:25	1/2"=1'-0"
1:50	1/4"=1'-0"
1:100	1/8"=1'-0"
1:200	1/16"=1'-0"
Calibrated	Calibrated

English/English Architectural units are formatted as <Xunit>=<Xfeet>'-<Xinches>"

If you have used the Calibrate tool to define a custom scale to use, *Calibrated* displays in the drop down field.

5. The out of the box default setting for the paperspace view scale factor is FULL (1:1). You can select a different scale factor to use for each drawing, or, if your shop uses a standardized scale, you can set the default drawing scale to use for all drawings in the current and future Brava! sessions. To set the default to use for all sessions, choose your Scale factor from the drop down and click **Save as Default**.
6. Click **OK** to activate your settings. Measurement settings are saved across Brava! Enterprise sessions. Note that the selected scale only applies to the current page. If you explicitly change the default (see step #4), that default scale will be reflected across all pages.

CALIBRATION

When measuring distances on 2D files, you should identify units with the distance using the calibration tool. This will enable Brava to determine the correct scale at calibrate time. For example, if the image contains a component with a marked dimension of 1.5 m, you can use the Calibrate tool to measure the dimension line and enter *1.5* as the distance (scale) and *m* as the Unit of measure. The Measure tools will now give measurements in meters.

You can select a standard CAD scale to use for this session, or all future sessions, by selecting a scale factor and Unit of measure in the Measurement Settings dialog. If you choose to Calibrate a scale, Calibrated is displayed in the "Current is:" drop down of the Settings dialog.

1. From the Measure drop-down Measure select **Calibrate...**.
2. Click the left mouse button on the first then last point in the distance you will be using as the baseline.
3. Set the Calibration Units value first (*Select units:*), and then enter the distance. The Units value is controlled by the Measure System set in the Measurement Settings dialog.
4. Edit the calibration distance value to use as the scale (the unit that all future measured distances will be based on) and click **OK**.

Usage Notes

- English Architectural formatting is calibrated as <XDistance>=<Xmiles>-<Xyards>, <XDistance>=<Xyards>-<Xfeet>, or <XDistance>=<Xfeet>'-<Xinches>"
- Values can be entered as whole numbers, decimal values, or fractions (5, 5.125, or 5 1/8 for example)
- The default precision for the Calibrate tool is four (4) decimal places. You can change the unit types and precision calculations through the Measurement Settings dialog.
- Calibration only applies to the current page. If you want to change the scale across all pages, change the default in the Measurement Settings dialog.

See also:

Measurement Tools

Measurement Settings

Measure Magnification Tool

Measurement Takeoff

MEASURE LINE

Measures the line (distance) between two selected points based on the calibrated baseline. The length of the new line, in terms of the calibrated baseline, will appear in the properties bar above the Brava! viewer window, along with the angle of the new line and the offset difference in y-axis position of the new line.

1. Click Measure to enter measure mode.
2. Select the **Line** (distance) tool from the Measurement toolbar.

3. Select the **Snap** check box if you would like your measurement points to snap to the nearest picking point or to the midpoint of segments, arcs, and circles. **Note:** Only CAD-like formats support snap. Raster images and text documents do not perform snap.
4. Click and release the left mouse button where you want to start measuring. An X will appear to mark the first point.
5. Click the left mouse button where you want to finish measuring. An X will appear to mark the first point.
6. Click the left mouse button where you want to finish measuring. Another X marks the end of the line. Distance, angle, and X:Y coordinate information displays in the properties fields:

Usage Notes

- For certain formats, you can use the Measurement Magnification Tool to assist in accurate placement of the points.
- Creating a new line removes the existing measurements from the properties bar and clears the old line from the image window.

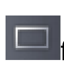
As with any of the measurement and markup tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.

See also:

Measurement

MEASURE RECTANGLE

Allows you to measure a rectangular area. The width, height, and area of the rectangle display on the properties bar, respectively.

1. Click  to enter measure mode.
2. Select the **Rectangle** tool  from the Measurement toolbar.
3. Select the **Snap** check box if you would like your measurement points to snap to the nearest picking point or to the midpoint of segments, arcs, and circles. **Note:** Only CAD-like formats support snap. Raster images and text documents do not perform snap.
4. Click and release the left mouse button where you want the rectangle to start.

5. Click again where you want to place the opposite rectangle corner to set the shape. Width, height, area, and X:Y coordinate information displays in the properties fields:

Usage Notes

- For certain formats, you can use the Measurement Magnification Tool to assist in accurate placement of the points.
- Creating a new rectangle clears the old measurement and removes the old rectangle from the image window.

As with any of the measurement and markup tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.

MEASURE POLYGON

Allows you to measure a polygonal shape. The length of the line between the last point set and the current mouse position, the total perimeter of the polygon (including the current mouse position) and the area of the polygon (including the current mouse position) appear in the properties bar, respectively.

1. Click 

to enter measure mode.
2. Select the **Polygon** tool  from the Measurement toolbar.
3. Select the **Snap** check box if you would like your measurement points to snap to the nearest picking point or to the midpoint of segments, arcs, and circles. **Note:** Only CAD-like formats support snap. Raster images and text documents do not perform snap.
4. Click the left mouse button where you want the first point of the polygon. As soon as you move the mouse pointer away from the first point, the measurement information changes in the properties bar.
5. Click the left mouse button where you want the second point, and continue to set the points of the polygon. Notice that the measurement information continues to update. **Note:** For certain formats, you can use the Measure Magnification Tool to assist in accurate placement of the points.
6. Double-click the left mouse button to set the last point. You will not see accurate measurement information if you have bisected the polygon, creating two or more shapes (the normally blue polygon will turn red when this happens).

7. Creating a new polygon clears the old measurement and removes the old polygon from the image window.

The properties bar reveals:

- the length of the current segment (distance)
- the combined length of each segment (perimeter)
- the total area of the polygon (area)
- the current cursor location (X:Y coordinates)

As with any of the measurement and markup tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.

See also:

Measurement

MEASURE POLYLINE

Allows you to measure a multi segment line. While using this tool, each successive left mouse click will append a line segment to the polyline.

1. Click  to enter measure mode.
2. Select the **Polyline** tool  from the Measurement toolbar.
3. Select the **Snap** check box if you would like your measurement points to snap to the nearest picking point or to the midpoint of segments, arcs, and circles. **Note:** Only CAD-like formats support snap. Raster images and text documents do not perform snap.
4. Click the left mouse button where you want the first point of the polygon. As soon as you move the mouse pointer away from the first point, the measurement information changes in the properties bar.
5. Click the left mouse button where you want the second point, and continue to set the points of the polyline. Notice that the measurement information continues to update. **Note:** For certain formats, you can use the Measure Magnification Tool to assist in accurate placement of the points.
6. Double-click the left mouse button to set the last point.

7. Creating a new polyline clears the old measurement and removes the old polyline from the image window.

The properties bar reveals:

- the length of the current line segment (distance)
- the combined length of each segment (perimeter)
- the current cursor location (X:Y coordinates)

As with any of the measurement and markup tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.

See also:

Measurement

MEASURE CIRCLE

Allows you to measure the radius, circumference, and area of a circle as the values display on the properties bar, respectively.

1. Click  to enter measure mode.

2. Select the **Circle** tool  from the Measurement toolbar.
3. Select the **Snap** check box if you would like your measurement points to snap to the nearest picking point or to the midpoint of segments, arcs, and circles. **Note:** Only CAD-like formats support snap. Raster images and text documents do not perform snap.
4. Click and release the left mouse button where you want to place the center point of the circle.
5. Click again where you want to place the outside edge to set the size of the circle. Radius, circumference, area, and X:Y coordinate information displays in the properties fields:

Usage Notes

- For certain formats, you can use the Measurement Magnification Tool to assist in accurate placement of the points.
- Creating a new circle clears the old measurement and removes the old circle from the image window.

As with any of the measurement and markup tools, you can press <Esc> to abort the current entity creation before it is set. Escape will reset the tool and delete any unfinished portions created while clicking or dragging.

See also:

Measurement

MEASURE COUNT

The Measure Count tool allows you to easily count items in a drawing - such as fixtures in a floor plan, screws on a design, etc. A marker is placed on the counted item to serve as a placeholder.

1. Click Measure to enter measure mode.
2. Select the **Count** tool from the Measurement toolbar.
3. Click and release the left mouse button on items you want to count. A marker appears at the selected location indicating the item is included in the total value displayed in the count text box (indicated by). To zoom into an area of the drawing to count items, click and hold the mouse button to summon a magnifier window. You can then drag the cursor to an exact location and release the mouse button to set the marker and close the magnifier window.
4. The markers remain on the drawing until cleared, but are hidden from view when another Brava! measurement tool is being used. Click **Clear All** to remove all counts, click **Remove Last** to undo only your last selected count.

MEASURE MAGNIFICATION TOOL

Calibrate and Measure with the Magnification Tool

For certain formats (BMP, PRT, PDF, and CMG) and when using the Set Alignment Points tool, when you select a point on the image, a magnification window automatically pops up under your mouse cursor.

This zoom window allows you more accurate placement of the selection point for measuring, counting, and aligning.

As long as the left mouse button is held down, you can adjust the position of the point under the magnifier. When you release the left mouse button, the point is committed and the magnifier goes away so that you can drag your measure tool to the next point location.

If you release the left mouse button while it is outside the magnifier rectangle, you are indicating that you want to cancel the attempt to place the point.

The magnification level used depends on the file type. If it is entirely raster, then the magnification level is 1 source pixel per screen pixel. Otherwise the magnification level is 1 drawing inch = 1 screen inch.

If the current view is already zoomed in beyond the above magnification levels (100% zoom or greater), the magnifier does not display.

The magnification tool used in measure does not contain all of the features of the Brava magnifier tool located on the main toolbar.

Using the Auto-Zoom Window:

When selecting picking points for calibration, measurement type,s and measurement count, an Auto-Zoom window will appear when the drawing/document is zoomed out. This allows for exact placement of your start and end points for precision accuracy.

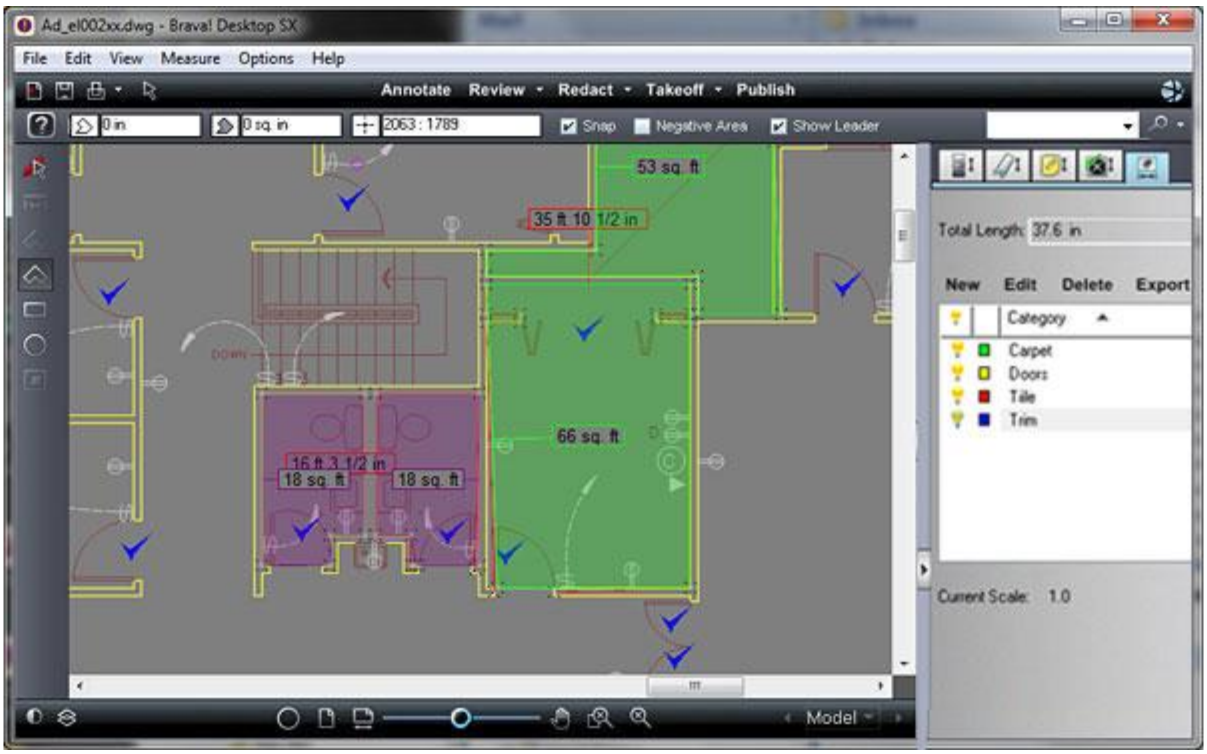
- An Auto-Zoom window appears when you pick a point by depressing the left mouse button.
- The Auto-Zoom window remains open until you let up on the left mouse button.
- You can place the measurement point more accurately while the Auto-Zoom window is active.
- While in Auto-Zoom mode, you can move the mouse wheel up and down or hit the +/- keys on the numeric keyboard to zoom in and out.
- If the area inside the Auto-Zoom window does not include the spot you intended, you can abort the placement of the point. Abort by moving your mouse outside the Auto-Zoom window and then release the left mouse button.
- The Auto-Zoom window shows you the drawing at a 1 to 1 ratio with the screen, meaning, 1 inch of drawing is drawn at 1 inch of your monitor.
- If you are zoomed in to the image far enough that the 1 to 1 ratio is the same (100% or closer) between the current view and the Auto-Zoom window view, then the Auto-Zoom window does not appear.

MEASUREMENT TAKEOFF

MEASURE TAKEOFF

Measure takeoff is a feature that allows Brava Enterprise users to make multiple measurements on a document and save them to a markup file (along with annotations and redact-ups). Takeoffs can be grouped together into categories. This feature is useful if you are working with drawings and want to estimate totals needed of specified categories. For example (shown below), the total area of carpet and tile, the lineage of trim, and the number of doors that are needed for a specific plan.

The Brava Task Pane displays a Measurement Panel containing the accumulated value of measurements from takeoffs that belong to the defined categories. For example, if the document shows the floor plan for a collection of rooms and a category called Carpet is made, and takeoffs (polygons / rectangles / circles) are drawn to represent all the area that will have carpet laid down, the Measurement Panel will display the total area (e.g., square footage) of carpet that will be required for the rooms. Measurement data (categories and total of measurements) can be exported to a file or saved to the clipboard.



To use the Measure Takeoff feature:

1. Open a drawing file for which you would like to accumulate measurements.
2. From the 

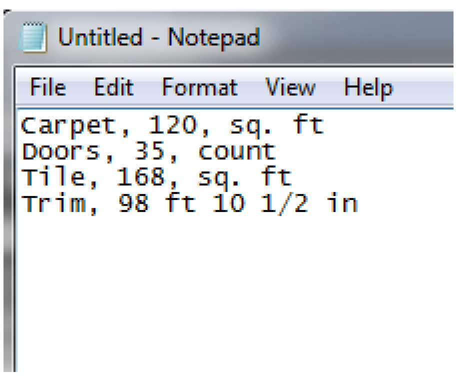
button, select **Takeoff** from the drop down arrow. The Brava Task Pane displays the Measure Takeoff Panel and the measure takeoff toolbar displays on the left side of the Brava window.
3. Create the Categories that you would like to use for this drawing.
4. To place your measurements, select the category from the list that you want to measure. Depending on the measurement type, the appropriate measurement tools become available in the measurement takeoff toolbar allowing you to place one or multiple entities. The measurement information for each entity you create is added to the currently selected category results. The accumulated results display

at the top of the panel. The entities on the drawing will be color coded according to which category they belong to.

5. If **Show Leader** is selected, a text box (with category color border) will display each individual measurement result on the entities you place. You can move the position of the text box by clicking the *Select* button, clicking on the entity, then pressing on the text box and dragging it to a new location. Release the mouse button to set the new text box location.
6. The **Negative Area** check box allows you to place a negative entity for that category. As long as the check box is selected, any entity you place on the drawing will **subtract** from the accumulated results. The measurement entities text box displays a negative number if Show Leader is selected. Negative areas are typically drawn inside of a larger, positive area to exclude certain sections from the total.

No intelligence is applied to decide if a negative area is logical (overlaps another 'positive' area takeoff). If you choose to designate an area as negative, its value is subtracted from the accumulation

7. To remove any of the measurement entities on the drawing, click the measure *Select* button, click on the entity you wish to delete, and hit <**Delete**> on your keyboard. The measurement value for that entity is subtracted from the accumulated results. You can select several entities at once by holding down the <Ctrl> key while clicking on the individual entities you wish to delete.
8. You may also select and **edit** any of the measurement entities to resize them. After selecting the measurement, resize handles appear on the entity that can be grabbed and moved (dragged) to a new location. You cannot move the entity, but can reshape it if needed.
9. Once you have defined your categories and placed all your measurements, you can **Export** the results to the Clipboard (for cut and paste into other applications, such as Excel), or export to a CSV file and save it on your computer.



10. As with any other markup layer, when you close the file you will be asked if you want to save the current markup. If you select **Yes**, the category list, along with all of the current measurement entities, will be saved as an XRL file and can be opened for edit or review along with its source file.

Usage Notes

- If you would like the takeoff information to be able to be reviewed in Brava Free DWG Viewer 7.0, then publish the file to CSF to burn in the markup layer, making it a permanent part of the published (distributed) file.

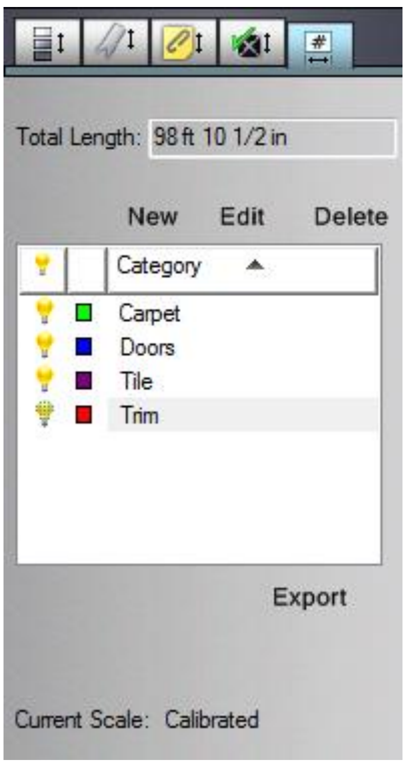
- Brava Flash viewer 2.0 does not currently support viewing of takeoff information, regardless of whether the markup is published with the file.

See Also:

Reviewing Measurement Takeoffs

TAKEOFF CATEGORIES

The purpose of a category is to allow you to group multiple measurements of the same type together. You can create multiple categories of all things that are being measured. Creating categories is only permitted when the user has markup editing permissions.



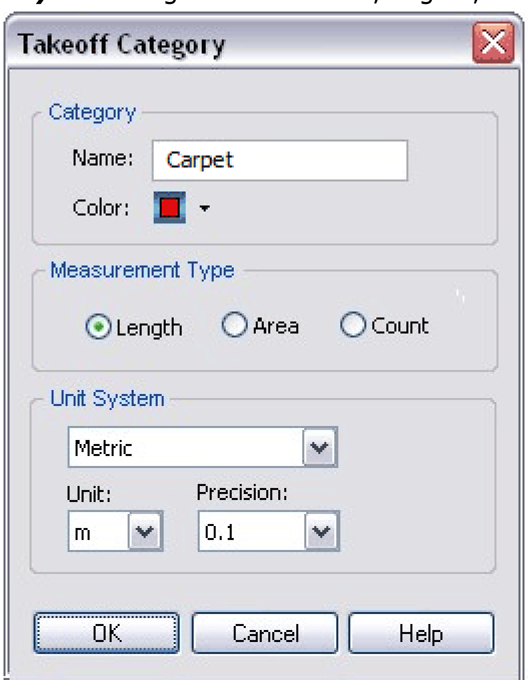
A takeoff is a geometry element (line, polyline, rectangle, polygon, circle, count check-mark) that has an associated measurement or count value. A takeoff belongs to a category, which determines its measurement type (length, area, or count). When you create a category, then all measurements accumulate in the measurement panel by type.

All the takeoffs belonging to a category can be accumulated (sum of measurements) as they have the same system, units and precision. Accumulations are done across document pages. In other words, all takeoffs belonging to a category, no matter what page they are made on, contribute to the total value.

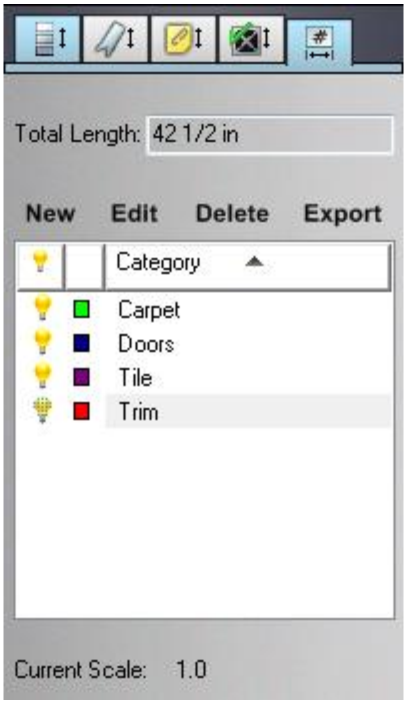
To create a category list:

1. From the Measurement Takeoff panel, click **New** to create a new category. Note that if a markup file is currently open, the new category will be added to the markup layer. If no markup is open, creating a new category opens a new markup file.
   - If a markup file is currently open, the new category will be added to the markup layer.
   - If no markup is open, creating a new category opens a new markup file.
   - If the file being viewed is a CSF file with burned in categories, those categories will not be editable and new categories cannot be created.
2. Select your measurement options from the following category attributes:

   Name: Unique descriptive name. A category name can only be used once per markup file.
   Type: One of Length, Area, or Count
   Color: Measurement entities will be drawn in selected color
   Units: Depends on system (similar to Measurement Settings). Ex: meters, inches, feet, etc.
   Precision: Accuracy in terms of decimal places. Depends on system (similar to Measurement Settings)
   System: English Architectural, English, Metric, Unitless

   Note that if previous categories have been defined for this file, the values will be pre-populated with the attributes of the currently selected category. Attributes are persisted from session to session. The default category attributes are stored in the *ViewerConfig.xml* file.
3. Click **OK** to save this category. (The OK button is not enabled until you assign a category *Name*.) The category now displays in the Category list, in sorted order, and set to be the current category.



4. Only one category can be selected at a time. You can click **Edit** at any time to update a selected category. Editing the **Color** selection will update all of the existing entities on the drawing to the new color. *Measurement Type* cannot be edited once the category is created (as this would make previous measurements invalid).

If you edit a category's Units or Precision, the text for any entities already place on the drawing (if Show Leader is selected) will not be updated to reflect the new settings. The total value on the takeoff panel will be updated, however. For example, if you change Unit from inches to feet, existing entities will display the text value in inches, while additional entities will display the text value in feet.

5. You may create up to 25 categories per file. You may delete a category from the category list by selecting that category and clicking the **Delete** button. If you have placed any entities on the drawing for that category, those entities are deleted at the same time.

6. If you do not want to view the measurement entities associated with a category, you can choose to **Hide** them instead. To hide a category, click the hide icon next to the category name to toggle between visible and hide. To toggle all categories from visible/hide state, click the icon located in the column heading. Hidden category information will still remain available for export. Note that if you select a hidden category and place a measurement entity on the drawing, the category state will automatically change to visible until you turn it off again.

7. You can **sort** the categories by name by clicking on the arrow in the category header . The arrow toggles the list in ascending or descending order, alphabetically.

8. You can mouse-over any category in the list to view the markup file name and category type as a tooltip.

Create, Edit, and Delete Measure Category can be undone via the right mouse button **Undo** menu command.

Once you have created your categories, you can start accumulating takeoff measurements on the currently loaded file. Depending on the type of category selected for the takeoff, different measurement tools will be available from the toolbar as follows:

Length: Measure Line, Measure Polyline, Measure Circle

Area: Measure Polygon, Measure Rectangle, Measure Circle (note that these tools will fill with highlight color)

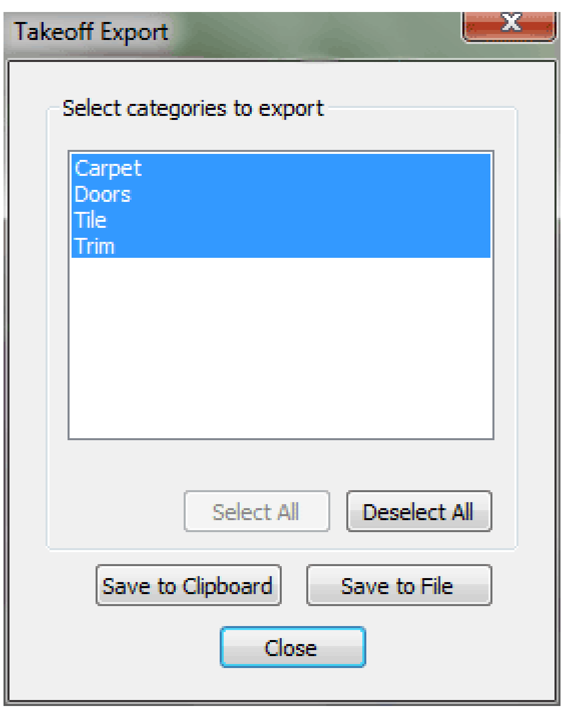
Count: Measure Count

ACCUMULATION RESULTS

The **Total** value displayed at the top of the Measure Takeoff panel denotes the accumulated value for the currently selected category. The text "Total" is appended by either "Length", "Area", or "Count" depending upon the category type. The tabulation is accumulated for all pages of the file, not just the current.

The measurement "Total" value at the top of the Measurement Takeoff panel can be individually selected and copied to the clipboard for each category.

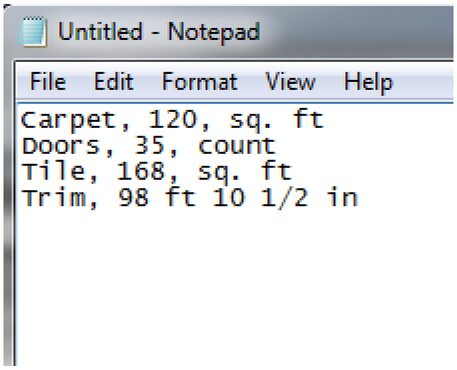
Use the **Export** button to create a table or CSV file that contains all of the category results. The categories are listed in the Export table in order that they were created. You can hold the <Shift> key to select a range or categories, or hold the <Ctrl> key to select individual categories to include in your export:



1. In the *Takeoff Export* dialog, select the categories that you would like to export data from. Only the highlighted categories will be included in the export. If you are dealing with a lot of categories, you can use the Select All and Deselect All buttons to hasten your selections. Multiple select can be achieved by holding down the <Ctrl> key and clicking on individual categories.
2. The **Save to Clipboard** button creates a table in the following format, that can be pasted in other applications, such as Notepad or Excel:

   Category name, total value, units

   For example:

3. Use **Save to File** to export the data to a comma separated value (CSV) file that can be saved to your computer. A *Save As* dialog prompts you for a directory location to save the file. (.csv files can be opened in Excel and the data viewed in columns by setting File type : Delimited and Delimiter: Comma)
4. Use **Close** to exit the dialog with or without having exported the data.

PUBLISH MODE

PUBLISHING MARKUPS/REDACTUPS

You can publish markups (including redactups) with any native files (or CSF files that have the markup burn-in right enabled) and output to CSF, TIFF, or PDF format. This means that when the publishing action completes, the markups 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.

If the file you are publishing markups into is a CSF file, the newly created CSF file with published markups will retain all of the Visual Rights security settings of the original CSF file, including expiration date if set.

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 publish markups and 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 (through the use of redaction scripts, or redaction tools), you should use the Verify tool to check your redactups before publishing the file as a redaction.
3. Click **Publish** on the toolbar and select a publishing output format: **CSF, PDF, or TIFF.** When publishing redactions, you can select **Finalize Redactions and Publish to CSF, PDF, 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 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. The user can view and review any Changemarks note contained in the published markup.

Publishing of Markup Entities

Markups that don't contain redactup entities can be published with the current file to a CSF, 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 CSF, PDF, or TIFF file for the purpose of redaction. A redaction processes these entities to disallow viewing, copying, or searching on concealed text.

If the view contains redactup entities, note that selecting *Save Current View as JPG* from the Publish menu does **not** finalize the redactions. The entities will appear transparent in the resulting snapshot JPG.

When initially publishing a markup that has redactup entities into a CSF file, you have the option of setting an expose key (password). A correctly entered expose key (by the end user) will cause any redactup entities to become transparent, revealing the hidden portions of text and graphics. If no expose key is set, the redactup entities remain as solid entities (finalized redactions) and viewers cannot remove or edit them, nor can they copy or search on the text they conceal.

Once a redactup contained in a markup layer has been published as a redaction, no mechanism exists for you, as the author, to edit or remove that redaction (with the exception of CSF documents with an expose key set).

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 Changemarks note can be navigated as they normally would.

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:

Publishing markups to PDF files

Redaction

Publishing Review Drafts

PUBLISHING MARKUPS IN PDF FILES

When publishing a PDF file that contains markups, there are two ways those markups can be represented in the resulting PDF file. Select your desired options from the PDF Options dialog:

Insert Markup as PDF Comment

The default behavior is for markups to be saved as PDF Comments, meaning that they can be altered from Acrobat Professional. Note that the markup redactup entity does not have a corresponding Acrobat comment, and therefore, the redacted text is actually removed from the published PDF file.

Burn-In Current Markup

Alternately, you can select to publish the markups on the PDF file meaning that they are a permanent part of the document image and are not PDF comments. Changemarks are always transferred over as PDF Comments to allow the Changemarks details to be reviewed with other PDF viewers..

A file that contains markups with redactup entities loaded and that is published to PDF will always have those areas redacted in the output PDF file.

An Administrator can choose the method that you will use to apply markups to published PDF files, or he can choose to let you select the method you prefer. If this is the case, a choice dialog displays when using the Publish to PDF feature on a file containing markups.

Output Changemarks Information

If Changemarks exist in the markup and this option is selected, additional pages are appended to the PDF file containing the Changemarks summary pages, which will include discussions if present. The Changemarks entities will be numbered to correspond to the summary sheet.

If the option is not selected, the Changemarks summary pages are not included in the published PDF file.

Output Redaction Reasons

If redactup entities exist in the current document, you can choose to Output redaction reasons (if any have been set). When the published PDF file is viewed, a second image containing the redaction reasons (as text with numbered references corresponding to each redactup entity) also displays. If the option is not selected, or no reasons exist, the Reasons summary pages are not included in the published PDF file.

See Also:

Publishing Files to PDF

Publishing Markups

PUBLISHING TO CSF

PUBLISHING FILES TO CSF

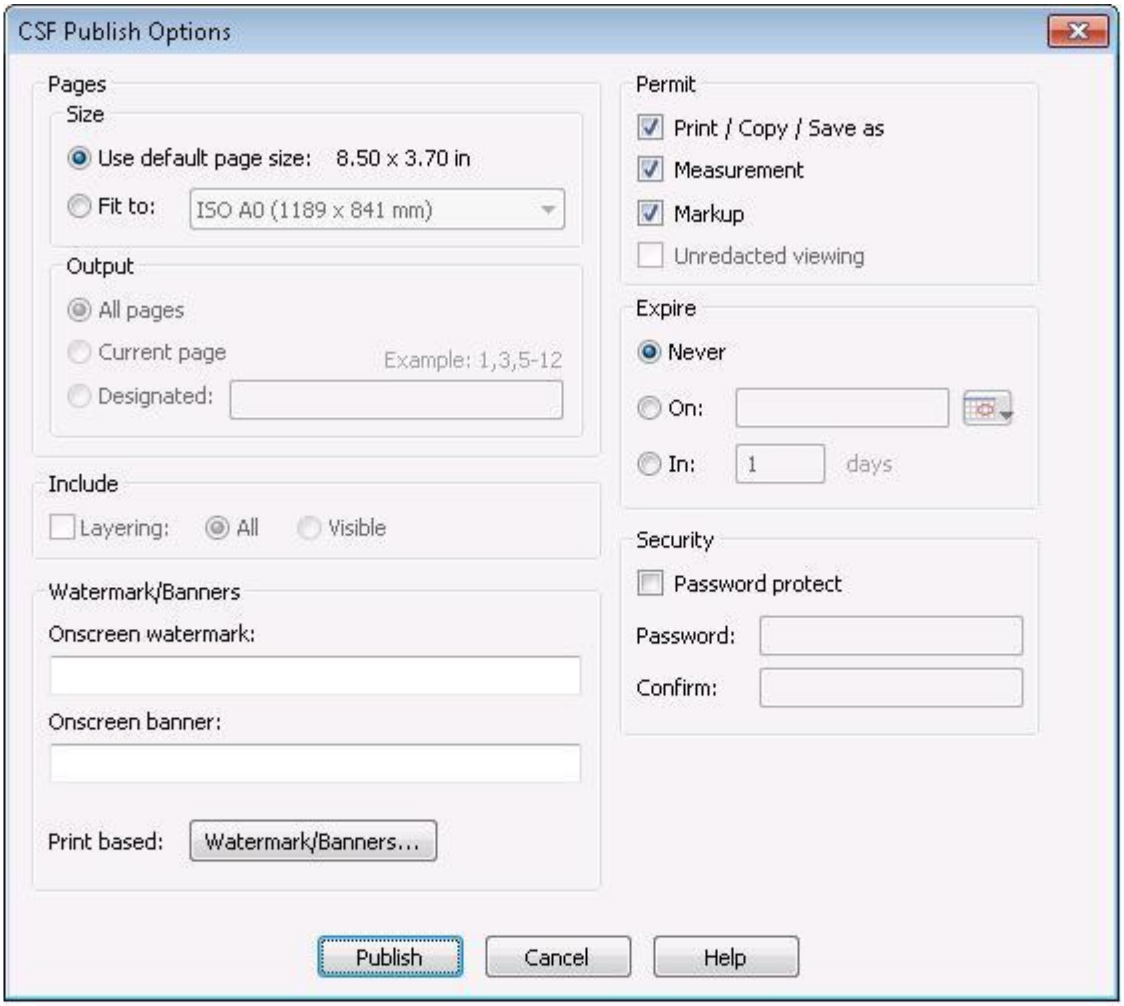
Brava! Enterprise allows you to securely publish files to Informative Graphics Corporation's proprietary portable format (CSF) from any native application. CSF is a neutral 2D format that is a replica of the source file, including images, graphics, layout, and more. Markup layers can be optionally burned into the published CSF file. Secure CSF files published with Brava! Enterprise can be opened with any of the Informative Graphics products.

In order to publish Office and Outlook (MSG) formats with the IGC Writer Printer driver, you will need to have WRITE access to the System TEMP folder (typically C:\Windows\Temp) for the creation of temporary published files.

Publishing Options - Through a true/false server parameter (*SecurityOptionsFromServer*), your Brava! Enterprise server administrator determines whether the CSF file's security options are automatically pulled from the server, or whether you, as the publisher can set the rights visually. In the latter case, an options dialog appears (for all but CSF files that are loaded for the purpose of burning in markups) allowing you to specify certain publishing and security controls.

1. Open a file you would like to publish to CSF.
2. Click 

-> **Publish To CSF**. The current document must be saved before publishing.
3. If markups are opened (for edit or review) they are permanently published in the CSF output. If redactup entities exist, you are prompted to set a redaction password (optional). Any Changemarks, takeoff information, and redactions contained in the markup layer are burned in to the CSF rendition.
4. The file prepares for publishing and the Secure CSF Publish Options dialog appears (if enabled by your administrator) allowing you to specify certain publishing and security controls. If this dialog is disabled, skip to step #3 below.



5. On the **CSF Publish Options** dialog, select your desired publishing options (described below).
   a. In the *Pages: Size* section, select to use the document's default page size, or you can pick a size from the **Fit To:** drop down box to force the PDF output to fit a particular paper size.
   b. In the *Pages: Output* section, select whether to publish **All pages**, **Current Page**, or you can enter **Designated pages** as page numbers or ranges separated by commas. For example 2,5,6,10-14,18 publishes only the 9 pages specified, in the order entered.
   c. In the *Include* section, you can choose which existing elements of the current file to include in your published CSF file. If *Layering* is selected, you must choose whether to include **All** layers, or only the layers that are currently **Visible** in the viewing window.
   d. In the *Watermark/Banners* section, you can also choose to include *Print* watermarks and banners in your published CSF file by setting these through the **Watermark/Banners** button. If you enter text into the ***Onscreen** banner and watermark* fields, those banners and watermarks will permanently display on the end-user's view of the published CSF file and will take precedence over any *Onscreen* print or publish string that may have been set on the file. Note that if you are *republishing* a CSF file to CSF, you may only add banners and a watermark to fields that have not already been set and locked in the current CSF file.

e. The *Permit* section allows you to specify user rights for the sealed document. When the published document is viewed in a CSF reader (Brava! Desktop, Brava! Reader, Brava! Enterprise), users will be able to click on the "Visual Rights® " icon on the user interface to display the rights that are available for that document.

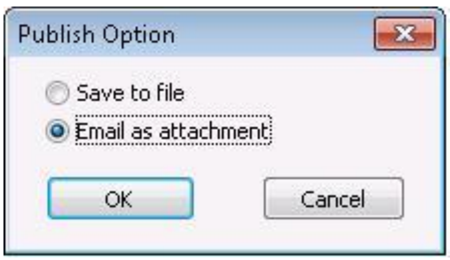
f. The *Expire* section lets you set expiration dates on the published document.

g. In the *Security* section, select "Password Protected" to grant viewing rights to select individuals. If selected, enter a password and confirmation in the text box. Users will be prompted for the correct password before they will be allowed to view the published file in any CSF Viewer.

6. When you have chosen your desired options, click **Publish**.

7. In the *Publish Option* dialog, select how you would like to handle the published CSF file:

   - **File Only** if you only want to create and publish a file as CSF. If this option is selected, a file browser dialog prompts you to select a file location to place the published file.
   - **Email** if you would like to send the published CSF file as an email attachment. If this option is selected, you are presented with an outgoing email message with the CSF file attached.



8. You will need to indicate a destination where the published CSF files should be contributed to (e.g., file system, mail, etc.). If you are contributing to a document management system, you may be prompted to enter additional meta data to be associated with the file.

9. When Brava! Enterprise finishes publishing, it will collect security information for the published document, convert it to CSF, and ask you where to save the generated CSF document. Browse to a directory and click **Save.**

10. Click **OK** to close the successful publish message, or you can select to preview the CSF document. Click **Preview** to launch the published document in your default CSF viewer (Brava Desktop, Brava Reader, MYRIAD, MYRIAD Reader, etc.)

Usage Notes

- **Line weights** in the document will be exported according to your preferences set in the Brava Enterprise Line Weight options (*Show Line Weight* and *Show AutoCAD Line Weights)*. See Display Options.
- Informative Graphics also provides integrations to various third party Content Management Systems where the CSF file can be contributed/published.

Rights embedded in the new CSF file

If the source file is a CSF file, the rights (including the watermarks and banners) in the original CSF file are applied to the new CSF. For non-CSF files, the Brava! Enterprise application administrator establishes whether default rights defined by the administrator are applied to newly published CSF files, or whether you, as the end-user, can interactively set rights. If you can interactively select rights, the Watermark and Banner settings currently displayed in the Brava! Enterprise viewer are embedded in the CSF file.

Note that if any Visual Rights have been set on a published CSF file, the protected file can only be viewed in the Brava ActiveX viewers and are **not permitted to load in the Brava Flash viewer**.

Restrictions on Re-publishing CSF files

Protected CSF files cannot be republished to any other format except to CSF, and only then if the Markup right was enabled in the CSF Publishing Options dialog when the original file was created. A protected (with Visual Rights) CSF file is created if any permission listed in the "Permit" section is NOT checked, if a CSF file contains redactions, or if a password, expiration date, or Banner/Watermark is set. In order to be able to re-publish a CSF file to other formats, no Visual Rights can be set when the original (unprotected) CSF file is created.

If the CSF file allows Markup permissions, you can add markup entities and publish to a new CSF file. The file retains its original Visual Rights and a CSF Publish Options dialog is not presented.

See Also:

Watermark on CSF

USER PERMISSIONS

The CSF Publish Options, *Permit* section allows you to specify user rights for the sealed document. When the published document is viewed in a CSF reader (Brava! Desktop, Brava! Reader, Brava! Enterprise), users will be able to click on the "Visual Rights® " icon on the user interface to display the rights that are available for that document.

Rights that you can control include:

User permissions:

Print/Copy/SaveAs - enables the following:

Print - enables printing of the secure document.

Copy to Clipboard - enables text content to be copied to the Clipboard and pasted into another application.

Save As (JPEG) - enables turning on and off the "Save Current View as JPG" command in the CSF reader.

Note that If a loaded CSF file has *Print/Copy/SaveAs* disabled, the Print Screen function will be disabled. Attempting to use the Print Screen key places a Visual Rights tiled image over the Brava viewing area, obscuring the screen.

Measurement - enables the measurement tools in the CSF reader.

Markup/Redaction permissions:

Markup - enables markup review and authoring (create and edit) of markup files associated with the published document. Also enables markup burn-in (publishing of markups to the output document).

When the end-user loads a file, this permission allows the user to publish markups that are currently open into a new CSF, PDF, or TIFF file. If the loaded file is a CSF file, the new CSF file with published markups has the same permissions as the loaded CSF file, the only difference being that the markups are now part of the CSF file.

Unredacted view - This setting is disabled if redactions are not applied or redactions have been finalized in a previous step.

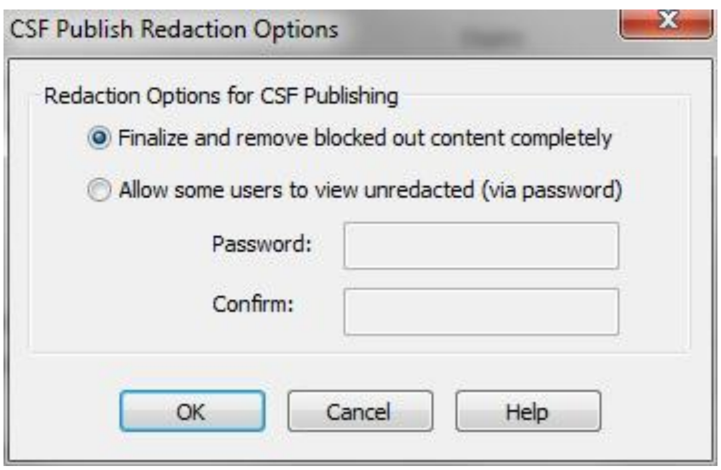
When enabled and checked, the following dialog displays after you click **Publish**.

If you always want to finalize your redactions, do not select "Unredacted View" to set additional options (the dialog will not display).

The dialog provides you the option of allowing only certain users an unredacted view of the file by entering a redaction password.

If "*Finalize and remove blocked out content completely*" is unselected, you will need to supply a password ("*Allow some users to view unredacted (via password)*" option will automatically be selected). The redactions are not finalized in the published CSF file, and only users who know the redaction password can open the file with the text visible under the transparent redactups.

Note that only one option or the other can be selected in this dialog, not both.



EXPIRATION DATES

You can set expiration dates for your published CSF documents. The CSF reader checks the date settings and will not allow usage if the user's system date is past the set expiration date.

No Date: Select "Never" as an expiration date if you do not want the published document to expire.

Select an absolute or relative date for access rights to expire on the published document.

Absolute Date: You can select a specific date for the document to expire by selecting "On" and then selecting a date from the calendar control.

Relative Date: You can select an expiration date relative to the date the document is published. Simply choose "In" and use the spin box to input a specified number of days that the document will be usable. If the "In" option button is selected, the expiration absolute date field will update to reflect the entered number of relative days. The expiration date must be at least one day later than the publish date.

WATERMARKS ON CSF FILES

If you can interactively set rights (see Publishing files to CSF), you can choose to set on-screen or printed banners and watermarks to your documents that will be saved with the published files. Any banners and watermarks that are set in the secured published file take priority over any banner and watermark settings that exist in the Brava! HTML parameters or in Brava! Reader, and cannot be edited by the end-users. Secure HTML parameters for banners and watermarks will only be valid for the length that the CSF document is open.

The watermark stretches from the lower left corner to the upper right corner of the viewing window. These settings are useful for displaying a document's classification to the viewer (e.g., proprietary, draft, etc.) and the values can differ from the values entered in the printed Watermark and banner location lines.

You can choose to show the Watermark and/or banner values in the viewing window by adding an entry to the **Onscreen Watermark** or **Onscreen Banner** lines of the CSF Publish Options dialog. Type in banner or watermark text to display on screen or click the "Set Print Banners" button to summon the print banner dialog. You can specify a watermark and define banners at any of the 12 document locations available (top center, bottom right, etc.). If a screen banner or screen watermark is set in the CSF Publish Options dialog, it applies only to the current rendering.

Print banners and watermarks can contain text strings or one of the available tag values.

You can set the font style and size of the Watermark through the **Font** button of the *Watermark/Banners* dialog box. The font point size is restricted to a numeric value between 8 (minimum) and 300 (maximum). Note that On screen banner fonts are not affected by choices made in the Font dialog box. A tiled watermark feature is also available for printed watermarks and can be set by an administrator via the *WatermarkTileSize* optional parameter.

Banners and Watermarks are persisted across similar product Brava ActiveX sessions. For example, Banners and Watermarks changed in Brava! Desktop will not be persisted in Brava! Reader and vice-versa.

Note that CSF Publishing uses only Print based Watermarks/Banners. The other Publish formats (PDF and TIFF) use Publish Watermark/Banners. This is because the banners embedded in a CSF do not render on screen (except for the screen banner and screen watermark) and are only evident when the CSF is published.

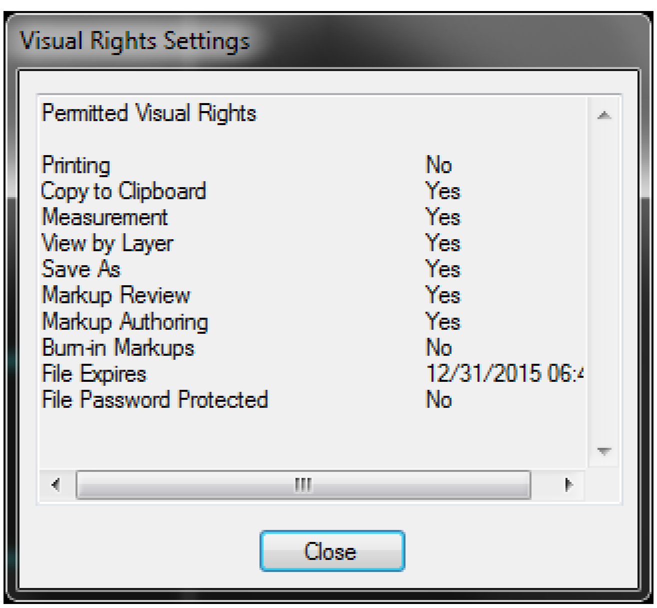
CSF PUBLISHING & VISUAL RIGHTS®

Documents can be published as a CSF rendition of the file through various Informative Graphics Software applications, including Brava! Enterprise, Net-It Enterprise, Redact-It Enterprise, Brava! Desktop, Myriad, and Net-It Now. Net-It Now uses the document's native application on a client's machine to print and then capture and convert the output. Brava! Enterprise publishes to CSF through its Job Processor component.

Visual Rights® can be set per document and are assigned by the user doing the publishing. A CSF Publishing Options dialog allows the publisher to control permissions on document content and on the availability of specific features within the viewer when viewing the published CSF rendition. Permissions are not limited by users except in the case of password protecting a document and providing the password to selected users only. With CSF publishing, the publisher can control the following document attributes:

- set expiration dates for viewing
- set printed banners and watermarks that override the ones set in Brava! Enterprise
- whether the document is password protected
- Visual Rights® permissions determine whether the viewer can:
    - view and manipulate layers
    - copy to the Clipboard
    - print
    - save as JPG
    - use the measurement tools
    - review markups
    - author markups
    - burn in markups
    - view unredacted versions

Visual Rights are static and once a document is published, the set of rights cannot be changed.



Benefits of client side publishing:

- In the case of publishing through printing, the author of the document or drawing already has the native application on his system and therefore, that application does not need to be installed on the server.
- Necessary fonts and cross references will be present on the client machine.
- Scalability is high since the processing is distributed among many client machines.
- The original native file never leaves the client machine.

In relation to other IGC products, CSF files can be:

- contributed to a Net-It Central site.
- viewed with the freely distributed Brava! Reader.
- placed on the local file system for uploading to an Application Service Provider (ASP) page.

See Also:

Viewing CSF Files

Publishing to CSF

About Redaction

Publishing Markups/Redactups

VIEWING CSF FILES IN BRAVA

Documents can be published to Informative Graphic's content sealed format (What is CSF?) using the document's native application on a client's machine. CSF publishing is accomplished in one of several ways, including using Brava! Enterprise, Net-It® Now, Brava! Desktop, Redact-It Enterprise or Net-It Enterprise software which all use the document's native application printing feature to capture and convert the output. The Net-It macros can be run inside of native applications such as Microsoft Word, Excel, PowerPoint, Visio, and Project to produce the CSF output files.

To view a secure CSF document, simply select a published document to view through a CSF Viewer (Brava! Desktop, Brava! Reader, Brava! Enterprise, Redact-It Desktop, Myriad, or Myriad Reader).

CSF Readers exhibit the following behaviors only when viewing a CSF file:

- The document's file rights (Visual Rights®) are read before displaying a document page. If the file's expiration date has been set, the current date is checked and an error message displays not within the set time frame.
- If the file is password protected, a password prompt displays. If these checks pass, and the CSF file contains a redaction with a password set, the user is prompted for a redaction password, and the file displays in your viewing window.
- Menu options are disabled in the viewer if the file has a corresponding right disabled. Note: If the Brava! HTML parameter has been set to disable a function, the function's menu option will not display at all, regardless of the rights of the CSF file.

- The viewer interface contains a lock icon in the status bar . When you click this icon, a Visual Rights® dialog box displays revealing the Visual Rights® the document has enabled or disabled. For example:

  Visual Rights Settings:

  Printing : No
  Copy to Clipboard : No
  Measurement : No
  View by Layer : No
  Save as : No
  Markup Review : No
  Markup Authoring : No
  Burn-in Markups : No
  File Expires : Never
  File Password Protected : Yes

- If the CSF file has the Markup Burn-in right enabled, you can publish files with the markups you currently have opened to the available publishing formats. When published, you are prompted to save the file to a directory, or to send it as an email attachment. A new file is then created with the open markups burned in and permanently display on the published file.

Markups that are being edited do not have to be saved for the burn-in markups feature to work.

- When a CSF file is opened that contains published markups, the markups are opened in the viewer. The user can view and review any Changemarks note contained in the markup, but he cannot close or edit the markups. The markup file may be saved as DXF.
- The current image displayed in Brava! Enterprise can be saved as a JPG file.
- If a loaded CSF file has *Print/Copy/SaveAs* disabled, the Print Screen function will be disabled. Attempting to use the Print Screen key places a Visual Rights tiled image over the Brava viewing area, obscuring the screen.

Restrictions on Re-publishing CSF files

Protected CSF files cannot be republished to any other format except to CSF, and only then if the Markup right was enabled in the CSF Publishing Options dialog when the original file was created. A protected (with Visual Rights) CSF file is created if any permission listed in the "Permit" section is NOT checked, if a CSF file contains redactions, or if a password, expiration date, or Banner/Watermark is set. In order to be able to re-publish a CSF file to other formats, no Visual Rights can be set when the original (unprotected) CSF file is created.

If the CSF file allows Markup permissions, you can add markup entities and publish to a new CSF file. The file retains its original Visual Rights and a CSF Publish Options dialog is not presented.

Additional notes:

- If the document has the copy text right enabled, users can copy the entire page to the clipboard (excluding any areas concealed by a redactup entity).
- Banners and watermarks set in the CSF file take priority over any set in the HTML pages.

Exposing Blockouts in CSF files: If the author who published the CSF file established a redaction password, then you are prompted to enter that password when opening the CSF file. If the correct password is entered, any redactup entities are transparent while all other markup entities remain unchanged.

If no or an incorrect password is entered, the redactups remain opaque and areas beneath them are hidden from the viewer. If the publisher set no password for the redaction, no prompt is presented and the redactup entities remain opaque, and cannot be edited. Users can never turn off the visibility state of a redaction markup layer and any text hidden by the redactup entity cannot be copied or searched.

PUBLISHING FILES TO PDF

Brava! Enterprise allows you to publish the currently viewed file (with or without open markups) in PDF format. (Note that CSF files that have had Visual Rights set cannot be republished to PDF.)

In order to publish Office and Outlook (MSG) formats with the IGC Writer Printer driver, you will need to have WRITE access to the System TEMP folder (typically C:\Windows\Temp) for the creation of temporary published files.

1. Open a file you would like to publish to PDF.
2. Click 

-> **Publish To PDF**.
3. On the **PDF Publish Options** dialog, select your desired publishing options (described below).
   a. In the *Pages: Size* section, select to use the document's **default page size**, or you can pick a size from the **Fit To** drop down box to force the PDF output to fit a particular paper size.
   b. In the *Pages: Output* section, select whether to publish **All pages**, **Current Page**, or you can enter **Designated pages** as page numbers or ranges separated by commas. For example 2,5,6,10-14,18 publishes only the 9 pages specified, in the order entered.
   c. In the *Pages: Rotation* section, you can select to publish the document with the currently rotated view as opposed to the default rotation of the original file.
   d. In the *Markup* section, select how you would like to handle processing markups on the file:
      - Select **Burn-In Current Markups** to permanently burn in any open markups into the published output
      - Select **Insert Markup as PDF Comments** to save any open markups as PDF comments.
      - If Changemarks exist in the current markup file, you can choose to append Changemarks summary pages by selecting **Append Changemarks notes**. See Publishing Markups in PDF Files.

  - If redactup entities exist in the current document, you can choose to **Append redaction reasons** (if any have been set). When the published PDF file is viewed, a second image containing the redaction reasons (as text with numbered references corresponding to each redactup entity) also displays.

e. In the *Watermark/Banners* section, you can also choose to include *Publish* watermarks and banners in your published PDF file by setting these through the **Watermark/Banners** button. Select the **Fit document within banners** option if you would like to squeeze the page to fit within the borders of any banners that might exist.

f. In the *Include* section, you can choose which existing elements of the current file to include in your published PDF file: **Bookmarks, Block attributes, Layering, PDF/A-1b compatible,** and/or **Hyperlink**. If *Layering* is selected, you must choose whether to include **All** layers, or only the layers that are currently **Visible** in the viewing window.

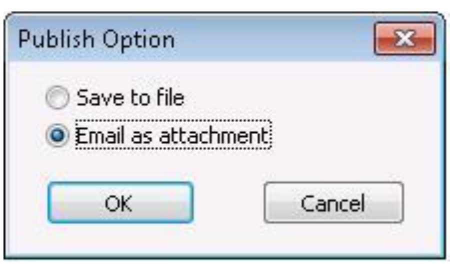
g. In the *Remove* section, select if you would like to remove all hidden text from your published PDF file.

h. In the *Coloring* section, select how you would like to handle publishing colors in the file for both the Document and Layer:

  - "Original Colors" -prints with original colors
  - "As Grayscale" - prints in shades of black to white
  - "Lines As Black" - prints all lines black

i. In the *Security* section, you can choose to **Password protect** a published PDF document. Enter the same password in the **Password** and **Confirm** fields. Users will be prompted to enter the password before they can view the file in any PDF viewer (Acrobat, MYRIAD, Brava Desktop, etc.)

4. When you have chosen your desired options, click **Publish**.
5. In the *Publish Option* dialog, select how you would like to handle the published PDFfile:
  - **File Only** if you only want to create and publish a file as PDF. If this option is selected, a file browser dialog prompts you to select a file location to place the published file.
  - **Email** if you would like to send the published PDF file as an email attachment. If this option is selected, you are presented with an outgoing email message with the CSF file attached.



6. You will need to indicate a destination where the published PDF files should be contributed to (e.g., file system, mail, etc.). If you are contributing to a document management system, you may be prompted to enter additional meta data to be associated with the file.

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

Usage Notes

- The entire document, including any open markup layers, is published to PDF- not just the current view. Additionally, any banners or watermarks that are set will be burned into the output PDF file.
- If the markup file contains redactups, the Publish to PDF dialog title will also display "Finalize" indicating that any redactions set on the current document will be finalized as redacted output.
- Any of the banners or watermarks may be defined (added) by an administrator or by you. Any strings that have been set by an administrator (specified on the server in the *Security.xml* file) will not be editable if this restriction has been set. Banners and watermarks set on a published CSF file will never be editable by end-users.

Restrictions on Re-publishing CSF files

Protected CSF files cannot be republished to any other format except to CSF, and only then if the Markup right was enabled in the CSF Publishing Options dialog when the original file was created. A protected (with Visual Rights) CSF file is created if any permission listed in the "Permit" section is NOT checked, if a CSF file contains redactions, or if a password, expiration date, or Banner/Watermark is set. In order to be able to re-publish a CSF file to other formats, no Visual Rights can be set when the original (unprotected) CSF file is created.

If the CSF file allows Markup permissions, you can add markup entities and publish to a new CSF file. The file retains its original Visual Rights and a CSF Publish Options dialog is not presented.

See Also:

Publishing Markups in PDF Files

PUBLISHING FILES TO TIFF

Brava! Enterprise allows you to publish the currently viewed file (with or without markups) as a raster file in TIFF (monochrome or color) format. Note that CSF files that have had Visual Rights set cannot be republished to TIFF.

In order to publish Office and Outlook (MSG) formats with the IGC Writer Printer driver, you will need to have WRITE access to the System TEMP folder (typically C:\Windows\Temp) for the creation of temporary published files.

1. Open a file you would like to publish to TIFF.
2. Click Publish -> **Publish To TIFF**.
3. On the **TIFF Publish Options** dialog, select your desired publishing options and then click **Publish**.
    a. In the *Pages: Size* section, select to use the document's **default page size**, or you can pick a size from the **Fit To** drop down box to force the TIFF output to fit a particular paper size.

b. In the *Pages: Output* section, select whether to publish **All pages**, **Current Page**, or you can enter **Designated pages** as page numbers or ranges separated by commas. For example 2,5,6,10-14,18 publishes only the 9 pages specified, in the order entered.

c. In the *Pages: Rotation* section, you can select to publish the document with the currently rotated view as opposed to the default rotation of the original file.

d. In the *Markup* section, you can select to **Append redaction reasons** that have been assigned to any redactup entities contained in the file. When the published TIFF file is viewed, a second image containing the redaction reasons (as text with numbered references corresponding to each redactup entity) also displays. If Changemarks exist in the current markup file, you can choose to append Changemarks summary pages by selecting **Append Changemarks notes.**

e. In the *Resolution* section, enter an output resolution **dots per inch** (DPI). The default is 300. You can also select a preferred **Compression** type from the drop down list.

f. In the *Coloring* section, select how you would like to handle publishing colors in the file for both the **Document** and **Markup** layers:

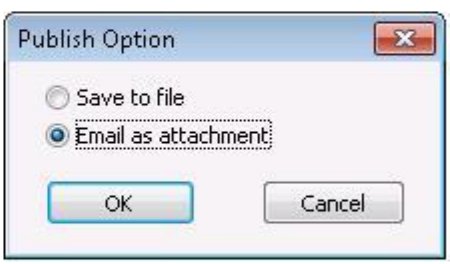
- "Original Colors" -prints with original colors
- "As Grayscale" - prints in shades of black to white
- "Lines As Black" - prints all lines black

g. You can choose to include *Publish* watermarks and banners in your published TIFF file by setting these through the **Watermark/Banners** button. Select the **Fit document within banners** option if you would like to squeeze the page to fit within the borders of any banners that might exist.

4. When you have chosen your desired options, click **Publish.**

5. In the *Publish Option* dialog, select how you would like to handle the published TIFF file:

   - **File Only** if you only want to create and publish a file as TIFF. If this option is selected, a file browser dialog prompts you to select a file location to place the published file.
   - **Email** if you would like to send the published TIFF file as an email attachment. If this option is selected, you are presented with an outgoing email message with the CSF file attached.



6. You will need to indicate a destination where the published TIFF files should be contributed to (e.g., file system, mail, etc.). If you are contributing to a document management system, you may be prompted to enter additional meta data to be associated with the file.

Usage Notes

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

- If the markup file contains redactups, the Publish to TIFF dialog title will also display "Finalize" indicating that any redactions set on the current document will be finalized as redacted output.
- Any of the banners or watermarks may be defined (added) by an administrator or by you. Any strings that have been set by an administrator (specified on the server in the *Security.xml* file) will not be editable if this restriction has been set. Banners and watermarks set on a published CSF file will never be editable by end-users.

Restrictions on Re-publishing CSF files

Protected CSF files cannot be republished to any other format except to CSF, and only then if the Markup right was enabled in the CSF Publishing Options dialog when the original file was created. A protected (with Visual Rights) CSF file is created if any permission listed in the "Permit" section is NOT checked, if a CSF file contains redactions, or if a password, expiration date, or Banner/Watermark is set. In order to be able to re-publish a CSF file to other formats, no Visual Rights can be set when the original (unprotected) CSF file is created.

If the CSF file allows Markup permissions, you can add markup entities and publish to a new CSF file. The file retains its original Visual Rights and a CSF Publish Options dialog is not presented.

SAVE VIEW AS JPG

You can save the current view displayed in the Brava! Enterprise window as a JPG file. This feature captures the image window as a screen capture and will include all visible elements (e.g., markup entities, magnifier window, measurement indications, etc.).

1. Click 

on the toolbar and select **Save Current View as JPG** from the submenu. (Or press <Ctrl> + <shift> + <J>)
2. Browse to and select a location on your file system to save the JPG file.
3. Click **Save**.

Usage Notes

- If the Save as JPG Visual Right is disallowed on a CSF document, this menu option is disabled. Also, Print Screen functionality is disabled.
- Executing a "Save As" command clears the Undo/Redo event history.
- If the view contains unfinalized redactup entities, *Save View as JPG* does **not** finalize the redactions. The entities will appear transparent in the resulting snapshot JPG.

HOT KEYS

Various tools and commands can be accessed through these shortcut keys (accelerators):

<Ctrl> + <A> = Help About

<Ctrl> + <B> = Show Bookmarks Panel

<Ctrl> + <Alt> + <B> = Go to Next Bookmark

<Ctrl> + <Alt> + <C> = Go to Next Changemarks

<Ctrl> + <Alt> + <T> = Show Takeoff Panel

<Ctrl> + <C> = Copy to Clipboard

<Ctrl> + <E> = Fit All

<Ctrl> + <F> = Mirror (Flip)

<Ctrl> + <G> = Print Region

<Ctrl> + <H> = Help Contents

<Ctrl> + <K> = Add PlaceKeeper

<Ctrl> + <Alt> + <K> = Go to Next PlaceKeeper

<Ctrl> + <L> = Show Layers

<Ctrl> + <M> = Open Markup

<Ctrl> + <N> = New Markup

<Ctrl> + <P> = Print

<Ctrl> + <R> = Open for Review

<Ctrl> + <S> = Save Markup

<Ctrl> + <T> = Show Thumbnail Panel

<Ctrl> + <V> = Paste

<Ctrl> + <W> = Fit Width

<Ctrl> + <X> = Delete

<Ctrl> + <Y> = Redo

<Ctrl> + <Z> = Undo

<Ctrl> + <Shift> + <A> = Change mouse tool to pan

<Ctrl> + <Shift> + <B> = Burn-in Markup

<Ctrl> + <Shift> + <C> = Close Markup

<Ctrl> + <shift> + <D> = Publish to PDF

<Ctrl> + <shift> + <J> = Save View As JPG

<Ctrl> + <shift> + <K> = Publish to CSF

<Ctrl> + <shift> + <M> = Show Changemarks Panel

<Ctrl> + <Shift> + <R> = Close Review

<Ctrl> + <Shift> + <S> = Save As Markup

<Ctrl> + <Shift> + <T> = Publish to TIFF

<Ctrl> + <shift> + <V> = Show Verify Panel

<Ctrl> + <Shift> + <X> = Change mouse tool to zoom window

<Ctrl> + <Shift> + <Z> = Change mouse tool to magnifier

<Ctrl> + <Space> = Rotate 90 Degrees

<Ctrl> + <Shift> + <Space> = Rotate 90 degrees counter-clockwise

<F3> = Find next search string instance

<+> = Zoom in, <-> = zoom out (when in Num Lock mode)

<Page Up> = moves to previous page

<Page Down> = moves to next page

<Ctrl> + <Home> = go to first page

<Ctrl> + <End> = go to last page

<Ctrl> + <Page Down> = Next Markup Page

<Ctrl> + <Page Up> = Previous Markup Page

<Ctrl> + <+> = increase the size of the markup text font when in edit mode

<Ctrl> + <-> = decrease the size of the markup text font when in edit mode

<End> = Last page

<Home> = First page

See also specific key combinations used when the Markup Text tool is active.

The following hotkeys can be used while in Compare mode to nudge the overlaid "older version" in the desired direction:

<Ctrl> + <Left arrow> = nudge position left

<Ctrl> + <Right arrow> = nudge position right

<Ctrl> + <Up arrow> = nudge position up

<Ctrl> + <Down arrow> = nudge position down

<Ctrl> + <+> = nudge scale up

<Ctrl> + <-> = nudge scale down

The following hotkeys are available for navigating CAMCAD (*.cc) files with the Brava! Viewer (when Select tool is active):

[mouse click] = "select entire geometry assembly and display it's attributes" [mouse click] + [CTRL] = "select specific geometry and display it's attributes"

[mouse click] + [SHIFT] = "select a specific piece of a geometry and display it's attributes"

KEYBOARD ACCESSIBILITY

Brava provides the following keystroke focus combinations for users to navigate through the viewer interface using the keyboard only.

Ctrl Key Sequences

Ctrl + 1 = Set focus to the main document drawing area. A light blue transparent rectangle will appear around the area until the next draw.

Ctrl + 2 = Set focus to the Taskbar. Tab order for the Taskbar will be left to right, with the left-most control receiving initial focus.

Ctrl + 3 = Set focus to the Navbar. The NextPage button will receive initial focus, followed by the Page Combo, followed by the PreviousPage button. From there, focus will be tabbed through the remaining controls in left to right order.

Ctrl + 4 = Set focus to right-side tabs. Individual tabs will be focused using left and right arrow keys. Tabbing will cause focus to shift to the current active panel.

Ctrl + 5 = Set focus to the Infobar. Tab order for the Infobar will be left to right, with the left-most control receiving initial focus.

Ctrl + 6 = Set focus to the markup/measurement tools left-side vertical tool bar. Tab order for the left-side vertical toolbar will be top to bottom, with the top-most control receiving initial focus.

Ctrl + 7 = Set focus to the right-side tabs toggle bar. The Open/Close Panels button receives focus.

Ctrl + 8 = Set focus to the Comparebar. Tab order for the Comparebar will be left to right, with the left-most control receiving initial focus.

Ctrl + 8 – Set focus to the Comparebar. Tab order for the Comparebar will be left to right, with the left-most control receiving initial focus.

Ctrl + 9 = - Set focus to the Text Compare top review pane.

Ctrl + F = Set focus to the Find Combo box.

Alt + F = Close the help or other external dialog.

F2 = Used in Watermark/Banners dialog to enter data into text field.

F6 Traversal

F6 key toggles the focus between each panel/bar area of the viewer. The order of focus is:

1. Main document/drawing view area
2. Taskbar

3. Infobar
4. Navbar
5. Right-side panels toggle bar
6. Right-side panels tab control
7. Markup/measurement tools left-side vertical tool bar
8. Comparebar

Modal Dialogs

All modal dialogs (e.g. Print, PDF Publish) will be fully accessible via keyboard. The tabbing order in the modal dialogs should be logical and consistent.

CONTACT INFORMATION

If you need information on integrating and customizing Brava!® Enterprise or if you experience any problems or have any general inquiries, please feel free to contact us.

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