



BLACKOUT

automated redaction tool

User Guide

v3.0 (revised July 2019)

Milyli Inc.
415 N Sangamon St.
Chicago, IL 60642

support@milyli.com
312.265.0136
milyli.com/blackout

© 2019 Milyli, Inc. All Rights Reserved

1. Installing Blackout	5
2. Upgrading Blackout	5
Upgrading from 1.9 or lower	5
Upgrading from 2.0 or later	5
3. Agent configuration	5
4. Metrics and usage	6
Export metrics for Milyli billing	6
Reviewing usage metrics across the Relativity environment	7
5. Product walkthrough and terms	8
6. Blackout workspace permissions	9
Manual markup permissions	9
What can be secured	9
Permission details	10
Mass action permissions	11
Blackout tab	11
7. Redacting Excels	13
Excel version support	13
Native markup sets	13
Manually marking up documents	14
The preparation step	14
Manual markups - redactions and highlights	14
Manual markups - text redactions	17
Manual markups - configuring text redaction options	19
Manual markups - sheet names	20
Manual markups - reverting markups	21
Manual markups - redacting charts	21
Manual markups - redacting comments	23
Manual markups - redacting headers and footers	24
Manual markups - redacting objects	25
Manual markups - audits	26
Mass marking up Excel documents	26
Creating a Spreadsheet project	26
Uploading rules from CSV	29
Running a Spreadsheet project	30

Reverting a Spreadsheet project	32
Quality control review of Spreadsheet markups	33
Accepting and rejecting markups	33
Preparing natives for production	35
Setting native markup set	36
Process redacted extracted text	37
Propagating markups to duplicate Excels	38
Defining source documents saved search	38
Defining destination documents saved search	39
Creating and running a Spreadsheet Propagation project	39
External markup workflow	41
Preparing for external markup	42
Identifying documents	42
Prior to review	42
During review	44
Reviewing documents	44
Auditing	45
Tips and tricks	46
8. Redacting images	47
Mass marking up Relativity images	47
Creating an image project	47
Uploading rules from CSV	49
Running an image project	50
Reverting an image project	53
Quality control review of marked-up images	54
Viewing the Blackout Markup Navigator	54
Using the markup navigator	55
Accepting / Rejecting Markups	56
Blackout Has Unresolved Markups document field	57
Reviewing documents flagged for review	57
Navigating to documents that need review	57
Image template projects	59
Setting up an image template project	59
Running image template projects	61
Multi-language image markup support	62
Installing additional language packages	63
Enabling language support for image projects	64

Running non-English language projects	65
9. Blackout workspace reports	67
Creating reports	67
Markup report	67
Document report	67
Available report fields	67
Blackout specific fields	68
Download the report	70

1. Installing Blackout

A separate installation guide is provided for installing Blackout for the first time..

[First Time Blackout 3.0+ Installation Guide](#)

2. Upgrading Blackout

Upgrading from 1.9 or lower

If upgrading to Blackout 3.0+ from Blackout 1.9 or lower, please contact support@milyli.com.

Upgrading from 2.0 or later

If upgrading to Blackout 3.0+ from Blackout 2.xx or higher, please follow the Blackout Upgrade guide.

[Upgrading Blackout 2.xx to Blackout 3.0](#)

3. Agent configuration

Configuring the Blackout Worker Agents is an important step in scaling the throughput of Blackout projects. Please review the following guide to learn more about configuring Blackout agents.

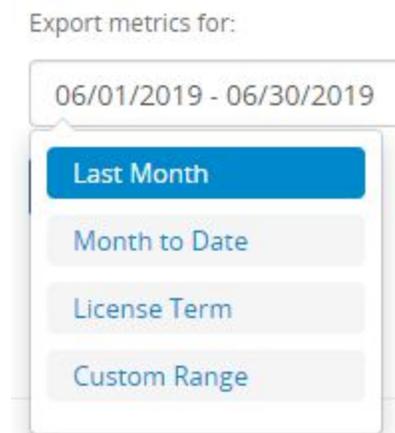
[Blackout 3.0 Agent Configuration & Set-up](#)

4. Metrics and usage

Export metrics for Milyli billing

Most installation of Blackout will report their usage automatically, however, in some cases, there may be legal or environmental reasons why usage metrics cannot be automatically communicated to Milyli. Milyli provides a manual export process for these cases.

1. Log into the Relativity environment as a **System Administrator**
2. Navigate to the Blackout Configuration tab
 - a. [Blackout] > [Configuration]
3. On the right half of the screen, click the date range and select the month to export



4. Click the **Download Metrics** button
5. Deliver the downloaded zip file to Milyli via support@milyli.com

Reviewing usage metrics across the Relativity environment

Whether data needs to be reviewed for billing, usage tracking, or other reasons, the usage metrics report provides details for each client that has used Blackout. The report processes metrics for the date range selected using the same logic that is used for billing.



Understanding markup counts

Placed markups are calculated by taking the total number of markups placed within the selected date range and subtracting the number of markups both created and reverted within that date range. Milyli always calculates usage using the beginning and end of a given month.

1. Log into the Relativity environment as a **System Administrator**
2. Navigate to the Blackout Configuration tab **Blackout > Client Usage Report**
3. Input an email address
4. Select the date range that needs to be reviewed

Request Usage Metrics Report

Email Address:

tim@milyli.com

Report Date Range:

06/01/2019 - 06/30/2019

Request Usage Metrics Report

5. Click **Request Usage Metrics Report**
6. An email will be delivered to the email address with an attached CSV of usage data

5. Product walkthrough and terms

Coming soon! This section will provide a high-level overview of Blackout functionality and language we use to describe the product.

6. Blackout workspace permissions

After pushing Blackout to a workspace, access to the various functions available in the application can be modified on a per-group basis. This section outlines providing access to work with Excels manually, run mass operations, and manage Blackout projects.



System administrators

By default, no workspace groups have access to Blackout permissions other than System Administrators.

Manual markup permissions

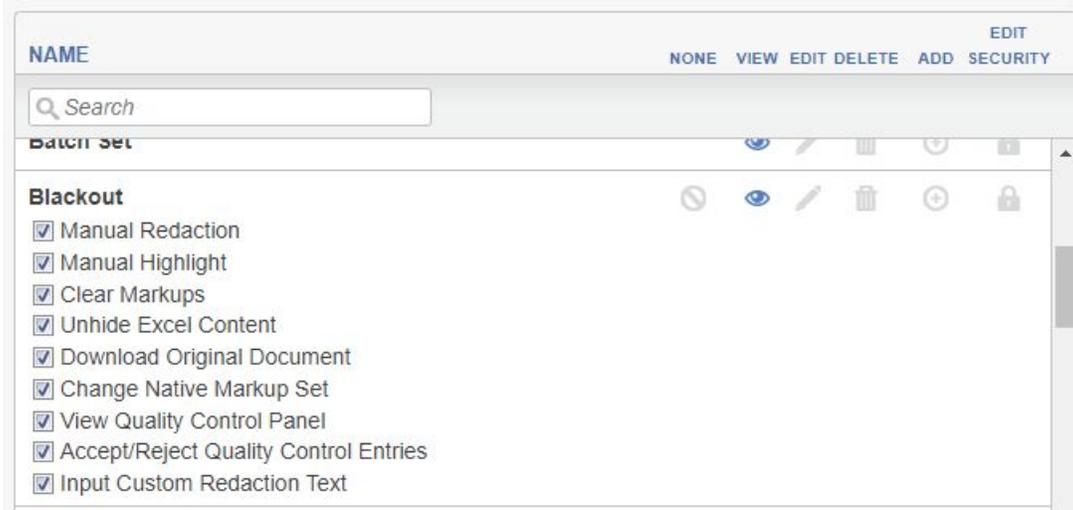
Manual markups utilize a set of permissions that tailor how users can interact with Excel documents through the Relativity viewer. By default, no group in a workspace will have permission to do so.

What can be secured

- The options on the right-click menu
- The Blackout toolbar buttons
- The content on the Blackout associated Panes

To secure these values, follow these steps.

1. Log into Relativity as a System Administrator
2. Navigate to the workspace where permissions should be defined
3. Navigate to **Workspace Admin > Workspace Details**
4. Click **Manage Workspace Permissions** under **System Settings**
5. Click the **Edit Permissions** button next to the group that requires manual markup permission to
6. Scroll to the section labeled **Blackout**



Permission details

Manual Redaction	Grants access to the Redact right-click menu option, the Redact Current Sheet Name button on the Blackout toolbar at the bottom of the viewer, and the ability to redact charts, comments, headers, footers, and objects using the Blackout Native Redaction Assistant associated items pane.
Manual Highlight	Grants access to the Highlight right-click menu option.
Clear Markups	Grants access to the Clear Markup Set button on the Blackout toolbar at the bottom of the viewer.
Unhide Excel Content	Grants access to the Unhide Excel Content button on the Blackout toolbar at the bottom of the viewer.
Download Original Document	Grants access to the Download Original button on the Blackout toolbar at the bottom of the viewer.
Change Native Markup Set	Grants access to the Native Markup Sets dropdown on the Blackout toolbar at the bottom of the viewer.
View Quality Control Panel	Grants access to view the content of the Blackout Quality Control associated items pane.
Accept/Reject Quality Control Entries	Grants access to the ability to use the Accept and Reject buttons on the Blackout Quality Control associated items pane.

Input Custom Redaction Text	Grants the end-user the ability to supply their own custom text when placing a Text Redaction
------------------------------------	--

Mass action permissions

Blackout includes three separate mass actions that provide various functions that help either prepare Excel documents for redaction or prepare them for production. To secure them, follow these steps.

1. Log into Relativity as a System Administrator
2. Navigate to the workspace where permissions should be defined
3. Navigate to [Workspace Admin] > [Workspace Details]
4. Click on **Other Settings**
5. Select a group from the **Select a Group** dropdown
6. Grant access to the Blackout mass actions detailed below

Process Excel Text	Grants the user access to generate extracted text for an Excel document. If the Excel file has been redacted with Blackout and is on an actively redacted markup set, the redacted content will not be included.
Revert Native Redactions	Grants the user access to revert marked-up documents back to the original pristine native. Reverts all markup sets.
Update Native Markup Set	Grants the user access to swap the current markup set for an Excel file to a different one.

Blackout tab

Access to the Blackout tab and sub-tabs may also be configured for different groups. To secure them, follow these steps.

1. Log into Relativity as a System Administrator
2. Navigate to the workspace where permissions should be defined
3. Navigate to [Workspace Admin] > [Workspace Details]
4. Click on **Tab Visibility**
5. Select a group from the **Select a Group** dropdown
6. Select the tabs group should have access to

NAME	
<input type="text" value="Search"/>	
Blackout	<input checked="" type="checkbox"/>
<ul style="list-style-type: none"> ▪▪ Image Projects ▪▪ Image Template Projects ▪▪ Spreadsheet Projects ▪▪ Spreadsheet Propagation ▪▪ External Markups ▪▪ Audits ▪▪ Reports ▪▪ Settings 	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

7. Redacting Excels

Excel version support

The following Excel versions and file types are support.

- All XLS, XLSX, XLSM, and XLSB files created with Office 97 and newer

The following Excel versions and file type are not supported.

- Office 95 Excel files and earlier
- CSV files

Native markup sets

Blackout utilizes a custom choice field to allow for Excel files to be redacted in different ways or by different parties.



Similar but different

While Native Markup Sets are designed to be as similar as possible to image markup sets, their behavior is not exactly the same in all instances. It is important to review this section to understand those differences.

Native Markup Sets are added by adding choice to the **Native Markup Set** document field. This field is added to the document object upon install.

1. Log into Relativity as a System or Case Administrator
2. Navigate to the workspace where markup sets should be defined
3. Navigate to [Workspace Admin] > [Choices]
4. Select **Object Type: Document**
5. Select **Field Name: Native Markup Set**
6. New choices added on this form will appear as Native Markup Sets for manual and automated markups
7. To learn more about managing choices, please review [Relativity's documentation](#)

Manually marking up documents

When a reviewer is required to decide the scope of redaction or information with hard to determine patterns needs to be redacted, manual Excel markups provide a mechanism to work with Excel documents in a familiar manner similar to image markups.

The preparation step

When the first markup is placed on an Excel, Blackout will automatically prepare the Excel file so that it can safely marked-up in a way that prevents historical information from being restored. Several important operations are performed.

- All calculated fields are replaced with their original calculated values
- All pivot tables are replaced with their original calculated values
- All change-history is removed from documents
- All hidden and very-hidden rows, columns, and sheets are unhidden
- All merged cells are unmerged

These actions allow us to ensure that there is no lost data after content is removed from the worksheet, that all data is visible to reviewers, and that content can't inadvertently be restored after markup.

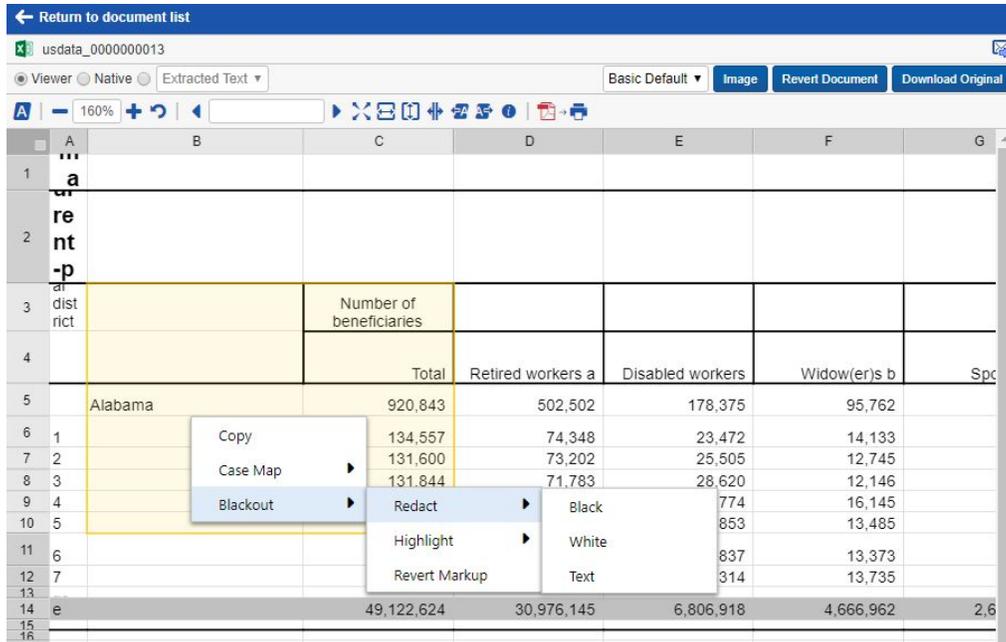


File size limitations

Additionally, the Relativity viewer can only display documents that are 10 MB or less by default in the Relativity viewer in Relativity 10.0 and lower. In newer versions of Relativity, this limit is increased to 40.0 MB.

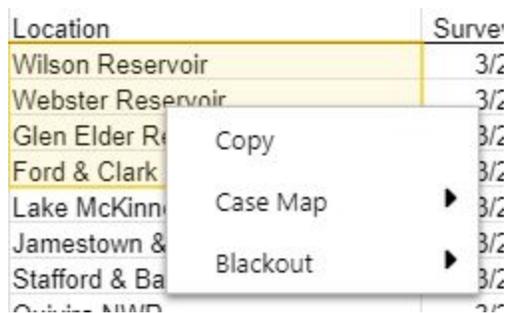
Manual markups - redactions and highlights

Blackout adds new functionality to the Relativity Document Viewer that enables users to markup documents directly without taking the file out of Relativity. These updates are performed live to allow quick review and markup of excel documents while maintaining audits of all actions taken.



To get started redacting cells in the document viewer, navigate to an excel document that has been loaded into Relativity.

1. Navigate to the Excel document in the Relativity viewer
2. Switch the **Native Markup Set** to Primary or one that was created earlier
3. Select the cells, column, or row that will be marked up
4. Right-click to bring up the options menu



5. Hover over the **Blackout** menu

Location	Survey dates	Aircraft	vehicles
Wilson Reservoir	3/25/2014		1
Webster Reservoir	3/25/2014		1
Glen Elder Reservoir		4	1
Ford & Clark County		4	1
Lake McKinney		4	1
Jamestown & Lovewell			
Stafford & Barton Cou			
Quivira NWR	3/25/2014		
Cheyenne Bottoms Wildlife Area	3/25/2014		
Cheyenne Bottoms TNC Preserve	3/25/2014		
Kirwin NWR	3/25/2014		

- Copy
- Case Map ▶
- Blackout ▶
 - Redact ▶
 - Highlight ▶
 - Revert Markup

6. Hover over the **Redact** menu
7. Choose to place a **Black, White, or Text** redaction

If this is the first markup being placed on the document and the **Unhide Excel Content** mass operation or button has not been clicked, Blackout will automatically prepare the document. This can take a few seconds so a friendly message is displayed while the viewer reloads.

Location	Survey dates	Aircraft	vehicles	Air	Ground
	3/25/2014		1		
	3/25/2014		1		
	3/25/2014		1		
	3/25/2014		1		
	3/25/2014		1		
	3/25/2014		2		
	3/25/2014		1		
	3/25/2014		1		
Cheyenne Bottoms Wildlife Area	3/25/2014		1		
Cheyenne Bottoms TNC Preserve	3/25/2014		1		
Kirwin NWR					

Preparing Document ...

Blackout is applying the first markup to this document, this may take a moment to prepare your file.

The viewer will refresh once your document is ready.

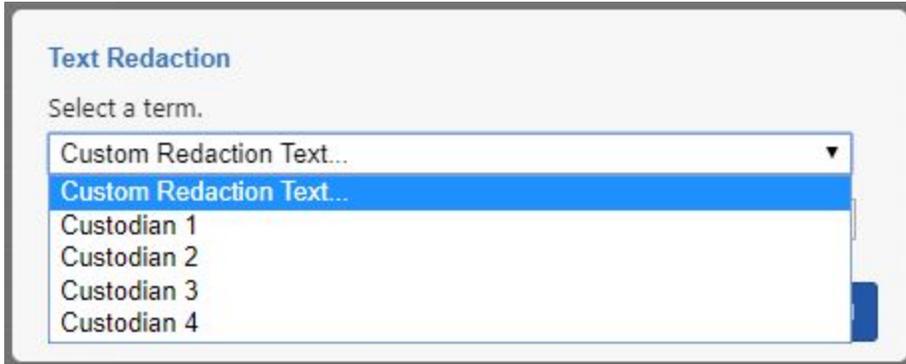
Manual markups - text redactions

Blackout provides two methods for placing text redactions. Replacing the entire cell content with different text, or, replacing just specific words inside a selected cell. Depending on how the workspace has been configured, several different options may be available. The following items may differ.

- The default text is set by the case administrator and may not be Redacted
- Additional options may be available in a dropdown defined by the case administrator
- If a user does not have permission to input custom text, only the default text and dropdown will be available



The screenshot shows a dialog box titled "Text Redaction". Below the title is the instruction "Select a term." followed by a dropdown menu. The dropdown menu is open, showing "Custom Redaction Text..." as the selected option. Below the dropdown is a text input field containing the text "[REDACTED]". At the bottom right of the dialog box are two buttons: "Save" and "Cancel".



The screenshot shows the same "Text Redaction" dialog box. The dropdown menu is open, showing a list of options: "Custom Redaction Text...", "Custodian 1", "Custodian 2", "Custodian 3", and "Custodian 4". The "Custom Redaction Text..." option is highlighted in blue. The text input field is empty.

After placing the redaction, a placeholder will be displayed to ensure that the page doesn't constantly get refreshed. When the viewer is refreshed, the redaction will be displayed within the cell. If inputting custom text, the custom text that is input is stored for each user individually so that it can quickly be used again.

9/17/01 7:55	9/17/01 7:55
9/17/01 7:55	9/17/01 7:55
[REDACTED]	[REDACTED]
9/17/01 7:55	9/17/01 7:55

Before Refresh *After Refresh*

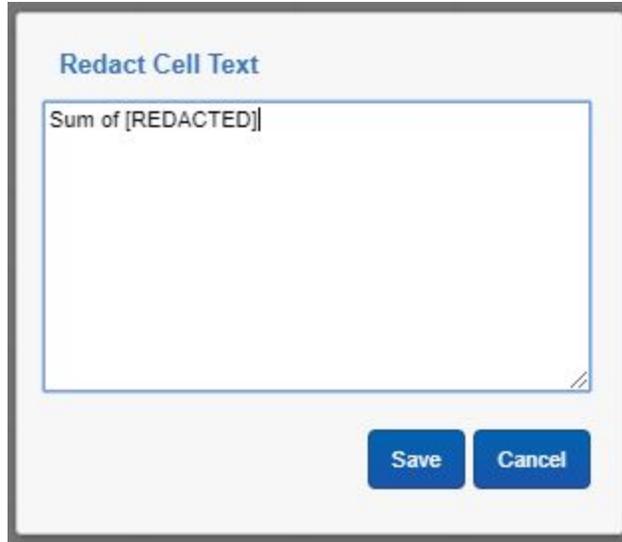
If redacting multiple cells in this fashion, the off-white highlight will be displayed in the corners of the selected area.

	STRIKE	STR BID	STR ASK	B V
	[REDACTED]	[REDACTED]	[REDACTED]	
	[REDACTED]	[REDACTED]	[REDACTED]	
	[REDACTED]	[REDACTED]	[REDACTED]	
	[REDACTED]	[REDACTED]	[REDACTED]	
	325	97	101	
	315	83	87	

Before Refresh *After Refresh*

In addition to placing text redactions over the whole cell, specific cell content can also be redacted.

1. Select the cell which has the content that will be redacted
2. Select the cell content option in the markup right-click menu
3. A text editor will be displayed for editing the content - add the language required for redaction



4. Click **Save**
5. The page will briefly refresh, similar to placing the first markup, and the updated content will be displayed in the cell

Manual markups - configuring text redaction options

Blackout Administrator will have access to a settings tab under the Blackout tab within the workspace. This page allows an administrator to define a set of specific terms that a reviewer can select from when placing a text redaction as well as define the default text that appears.

1. Log into the workspace as a System Administrator or user with access to the Blackout tab
2. Navigate to **Blackout > Settings**
3. To change the default text for the workspace, simply update the Default Redaction Text field
4. The new value will be saved automatically, represented by a small green checkbox



5. To add new custom values that will display in the dropdown for reviewers, type in a new value and click **Add**

Predefined Redaction Text

Add new manual text option		Add
Custodian 1		✘
Custodian 2		✘
Custodian 3		✘
Custodian 4		✘

6. To remove an option, simply click the red x

These custom options are a great way to ensure that users utilize the values needed for the case without typing them in every time.



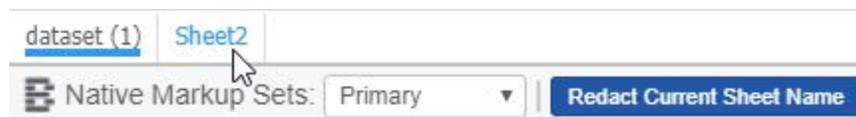
Restricting to just custom options

Custom options can be combined with removing the **Input Custom Redaction Text** for a group. When doing so, the user will only be able to select the custom text options. This is a great way to simplify text redactions for end users.

Manual markups - sheet names

Redacting sheet names is quick and easy using the **Redact Current Sheet Name** button.

1. Click on the sheet with the name to redact



2. Click the **Redact Current Sheet Name** button on the Blackout toolbar at the bottom of the viewer
3. Update the text with the redacted text required
4. Click the **Save** button



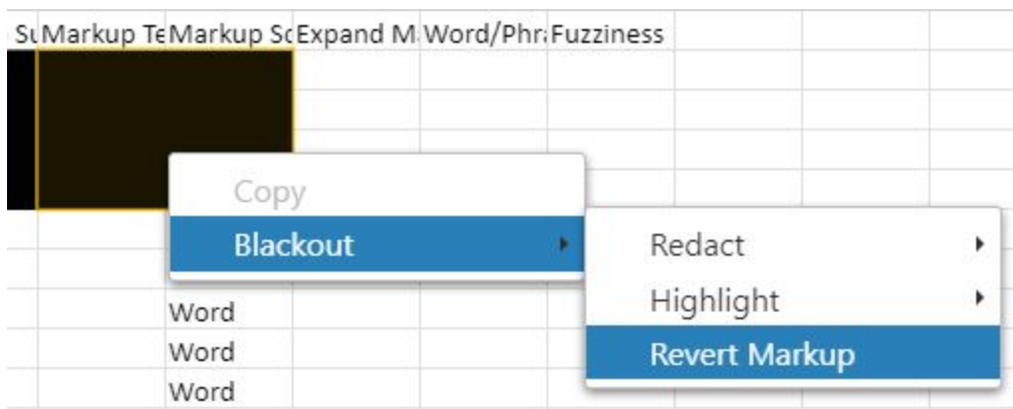
Sheet name restrictions

Sheet names have a few restrictions to keep in mind. Two sheets may not have the same name. The name may not exceed 31 characters. The name may not have the special characters \, /, *, ?, ;, [, and]. And the sheet name may not be word 'History.'

Manual markups - reverting markups

Redacting documents with Blackout directly manipulate a copy of the original document and place those markups directly on the document. As a result, reverting markups manually is a critical component of both reviewing markups made by automated jobs and correcting mistakes made when redacting a document.

1. Select the cells that will be unmarked-up
2. Navigate the Blackout menu and select **Revert Markup**



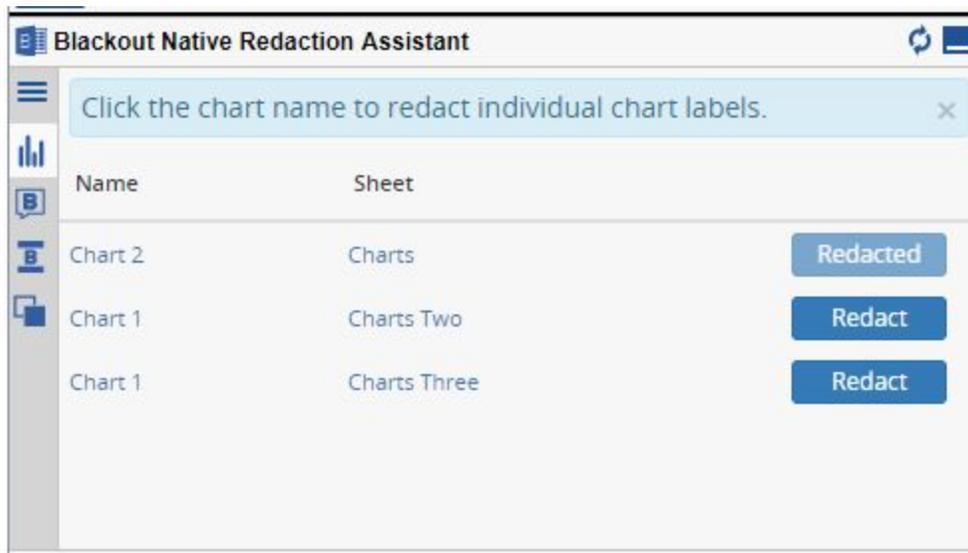
3. A message will display letting the user know that the markup is being reverted
4. After a brief delay, the document will reload and markups will be reverted to the original data

Manual markups - redacting charts

There are two different ways to redact charts with Blackout. We can replace the full chart with a black box redaction or we can redact the static text labels.

1. In the related item panes in the lower right corner, locate the **Blackout Native Redaction Assistant** pane
2. Click the **Chart** menu item
3. To redact full charts, click the **Redact** button to the right of the chart name

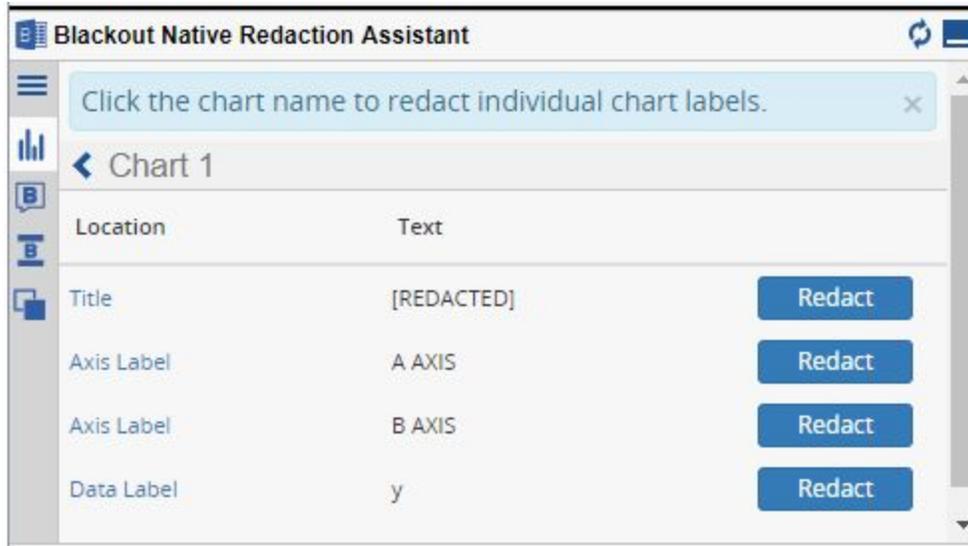
4. To ensure the correct chart is being redacted, clicking on the sheet name will navigate to the sheet where the chart resides



5. To reduce the amount of reloading, the redaction won't appear on the document right away
6. A friendly message will be displayed that can be clicked to reload the document



To redact chart labels, simply click the name of the chart and choose the values to redact.



Manual markups - redacting comments

Comments can be redacted quickly across the entire document. Redactions placed on comments will display in the hidden items comment viewer after the document is reloaded.

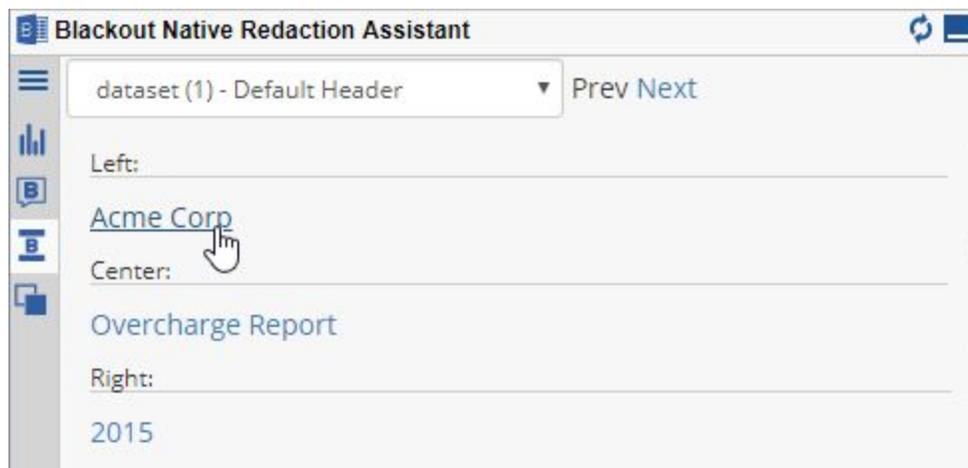
1. In the related item panes in the lower right corner, locate the **Blackout Native Redaction Assistant** pane
2. Click the **Comments** menu item
3. Click on the cell location to quickly navigate to the cell where the comment is located
4. Click the comment text to manipulate the text of the comment
5. Replace the sensitive information with the redaction language for the case



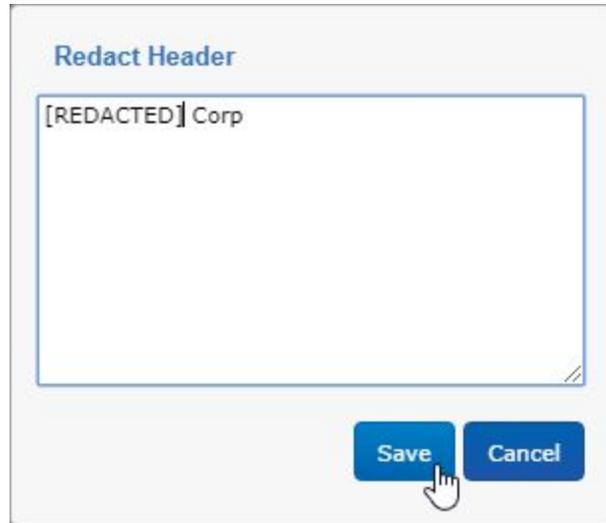
Manual markups - redacting headers and footers

Headers and footers can appear in 3 different locations including the **default** header and footer, **even page** headers and footers, and **odd page** headers and footers. There are no ways to view the content on the Relativity document viewer without Blackout. A message will be displayed on documents that have header and footer content by a message displayed in the top right of the viewer.

1. In the related item panes in the lower right corner, locate the **Blackout Native Redaction Assistant** pane
2. Click the **Headers and Footers** menu item
3. Use the dropdown to navigate between the different header and footer locations
4. Click the link for the content that should be redacted



5. Type in the updated redaction text

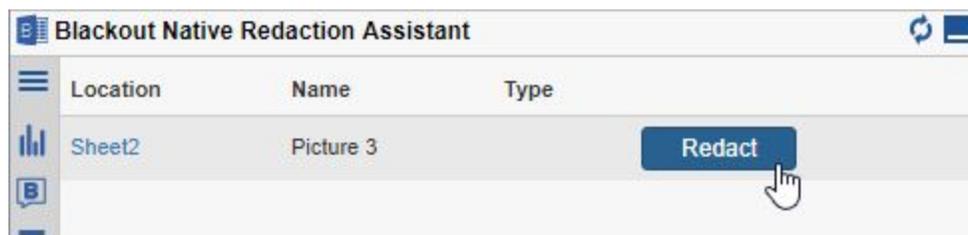


6. The text on the document will be redacted but not reflected in the viewer

Manual markups - redacting objects

Excel documents may contain a variety of objects from embedded objects to WordArt. Some of the most common types of objects include WordArt, SmartArt, embedded documents (Email, PowerPoint), images, equations, text boxes, and shapes.

1. In the related item panes in the lower right corner, locate the **Blackout Native Redaction Assistant** pane
2. Click the **Objects** menu item
3. Click on the sheet name to view the sheet where the object resides
4. Click the redact button to redact any object in the list



5. A friendly message will be displayed indicating that the document has changed; click it to refresh the viewer and see the redacted object

Manual markups - audits

All of the aforementioned manual markup actions are audited. As Relativity does not have a concept of manual native markups, these audits are created and stored in Blackout.

To review and download the audit trail follow these steps.

1. Log into Relativity as a System Administrator or a user who has access to the Blackout tab
2. Navigate to **Blackout > Audits**
3. To get a quick view, page through the results
4. To filter and search for specific results, click the **Download Audit CSV** button

Audits

[Download Audit CSV](#)

31 - 40 of 106



Details	Created On	Created By	Document	Action
E11:E11	7/12/19 2:32 PM	Randall, Tim	TA103095_0050926	Markup - Native - Created
E34:E36	6/25/19 5:16 PM	Sery, Cameron	trand_0000000003	Markup - Native - Created
A34:A34	6/25/19 5:14 PM	Sery, Cameron	trand_0000000003	Markup - Native - Created
A43:A43	6/25/19 5:12 PM	Sery, Cameron	trand_0000000003	Markup - Native - Created
A35:A35	6/25/19 5:11 PM	Sery, Cameron	trand_0000000003	Markup - Native - Created
B27:G31	6/25/19 5:11 PM	Sery, Cameron	trand_0000000003	Markup - Native - Created
C11:C23	6/25/19 5:07 PM	Randall, Tim	trand_0000000001	Markup - Native - Created
Document reverted using mass action.	6/25/19 5:04 PM	Admin, Relativity	trand_0000001101	Markup - Native - Document Reverted
Document reverted using mass action.	6/25/19 5:04 PM	Admin, Relativity	trand_0000001102	Markup - Native - Document Reverted
Document reverted using mass action.	6/25/19 5:04 PM	Admin, Relativity	kpmguzipperandy_0000000001	Markup - Native - Document Reverted

Mass marking up Excel documents

Blackout provides the ability to redact and highlight Excel documents en masse utilizing terms, phrases, and regular expressions. Excel projects are a flexible way to target specific documents and locate content that must be marked up for a case. There is a wide range of workflows that can be utilized to accomplish many different goals, however, for this guide, we will focus on the basic tooling.

Creating a Spreadsheet project

1. Log into Relativity as a System Administrator or a user who has access to the Blackout tab
2. Navigate to **Blackout > Spreadsheet Projects**
3. Click **New Spreadsheet Project**

4. Fill out the project form using the details below
5. Click create

A form will be displayed that is used to define how the project will function when running. The following fields make up the form.

Job Name	An identifier for the project making it easy to refer to or for others to find.
Saved Search	The document source. All actions will be performed against these documents.
Markup Set	The markup set that the markups will be associated with.
Redact all headers and footers	Selecting this option will replace all content in all headers and footers with the default redaction text. This option is useful when redacting a set of documents that have sensitive information in the header and footer that must be redacted on every document.
Redact all Excel objects	Selecting this option will place a black box redaction in front of all objects on the document set.
Ignore certain rows or columns	When selecting this option two additional fields are displayed where a comma-separated list of rows and columns can be identified that will remain unredacted throughout the job, even if there are matches or a rule that would include those locations. This is the easiest way to ensure that headers of columns or rows remain visible.
Rules	<p>The rules are what drives the project. How they are configured will determine how the content will be located in a document. There are three different kinds of rule groups--Redaction, Highlight, and Inverse.</p> <p>Every time the fields are filled out for a rule group, another section will appear below it allowing the creation of multiple rule groups. Each of these can be independently configured targeting different sets of content.</p>
Redact	Redaction rules will result in removing the content from the document and replacing it with a black, white, or text redaction.
Highlight	Highlight rules will result in changing the foreground color of the matched content with a selected color.

Inverse	Inverse rules are like redaction rules. They search the content from the document like a redaction rule, however, instead of redacting it, it will redact all content not matched by that rule. When creating a project that will require inverse redactions, only a single inverse rule can be included.
Markup Reason	A simple message that can be associated with the markups made by the rule group. It can be reviewed using the Blackout reports.
Markup Scope	<p>Defines the behavior of the project when placing a redaction, highlight, or inverse redaction.</p> <ul style="list-style-type: none"> ● Cell - will place the markup on the specific cell match, replacing all the content in the cell ● Row - will place the markup on the entire row where a match is found ● Column - will place the markup on the entire column where a match is found ● Sheet - will redact the entire sheet where a match is found ● Word - will replace only the exact matched text inside the cell where a match is found--not available in highlight and inverse rule groups
Markup SubType	Specifies whether to place a Black , White , or Text markup. If text is selected, custom text can be input for the markup, otherwise, the default text markup language will be used. If the highlight is selected, this option will be replaced with choices for yellow, blue, green, orange, pink, and purple .
Word/Phrase	Word/phrase are the words, phrases, and text that will be marked up across the document set. Multiple words or phrases can be added to a single rule group. These rules are case insensitive.
Regex	<p>Regular expressions can be used to identify important patterns like email addresses, social security numbers, credit card numbers, and any other content that may appear regularly throughout the document set that constitutes sensitive information. Regular expressed require a name and an expression. After saving the project, these regular expressions will be available to be selected by name on other projects within the same case.</p> <p>Rules do not need to be added to create a project. Rules may</p>

be uploaded afterward, or, the project can be edited later.

Blackout uses the PCRE flavor of regular expression and runs with the global flag (/g), multi-line flag (/m), and case insensitive flag (/i) enabled by default. The case-insensitive flag can be modified inline by adding (?-i) to turn off and (?i) to enable.

A sample project that looks for and redacts ‘Tim Randall’ and any social security number would look like this.

The screenshot shows the Blackout application interface. At the top, there are three input fields: 'Job Name' with the value 'Sample job name', 'Saved Search' with a dropdown menu showing 'Large Excel Documents', and 'Markup Set' with a dropdown menu showing 'Primary'. Below these are three checkboxes: 'Redact all headers and footers' (checked), 'Redact all Excel objects' (unchecked), and 'ignore certain rows or columns' (checked). A section titled 'Rows and columns to be excluded from markup' contains two input fields: 'Ignored Rows' with the value '1' and 'Ignored Columns' with the value 'A,B'. Below this is a 'Rules' section with three tabs: 'Redaction' (selected), 'Highlight', and 'Inverse'. There is a red 'X' icon in the top right of the Rules section. Under the 'Redaction' tab, there are three dropdown menus: 'Markup Reason' with 'PII', 'Markup Scope' with 'Cell', and 'Markup SubType' with 'Black'. Below these are two rows of rule definitions. The first row has 'Word/Phrase' with 'Tim Randall' and an 'x' icon. The second row has 'Name' with 'SSN' and 'Regex' with the pattern '(\\d{3}-?\\d{2}-?\\d{4})|XXX-XX-XXXX'.

Uploading rules from CSV

After successfully creating the spreadsheet project, rules can be added via uploading a template CSV.

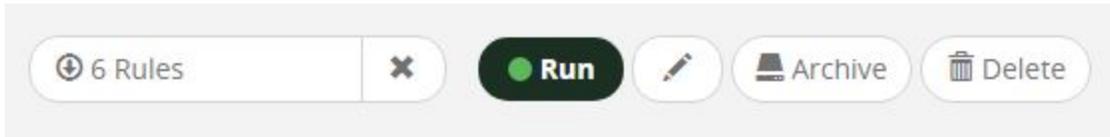
The CSV template and explanation of the columns can be downloaded from the [Milyli help center](#).



Thousands of rules

Blackout can support up to 100,000 rules being created via CSV. It is important to note that extra rules mean each doc takes a little bit longer to process as the Excel content needs to be checked for each rule!

1. From the project view screen, click the **Upload rules CSV** button
2. Navigate to the completed CSV
3. Click the upload icon
4. If the CSV file is valid, the rules will be created and the button will display how many



Running a Spreadsheet project

When a project is in a valid state to run, with a name, saved search, markup set, and rules, the status message of the project view screen will display that is ready to run.



To begin the project, click the **Run** button. Once the project begins running, the project will be queued and then start being processed by the Blackout Worker Agent.

Project queued	The project enters the queued state letting the Blackout Worker Agents know to start working on the documents
Documents prepared	The number of documents that have been distributed to the system as tasks for markup review
Documents completed	The number of documents that have completed markup review which can result in markups being placed if there are rules matches
Progress bar	Displays the number of actions completed for preparation and review. The light blue color represents document preparation and the dark blue represents markup review.

Time elapsed	The total time the project has processed
Current activity	The current activities that the Blackout Worker Agents are performing which include preparation, reviewing, and marking up. The most recent action is shown at the top along with when it began. Clicking the down arrow will display the currently active tasks and when the task began.
Stop	Begins the stop operation which will cancel all unfinished work for the project. Work completed to that point will remain and can be reverted

Sample job name 6 Rules Stop

Documents prepared: 42/42 Documents completed: 12/42 Time elapsed: 0:00:12

Marking up document 1042609 a few seconds ago

After the project completes, a results page displays information about the completed work and provides a launchpad for further quality review.

Search for and redact Tim 50 Rules Run Revert Archive

Documents Marked Up: 297

Markups Placed: 23,144

5 Documents with Warnings

History					
Run Date	Run Duration	Run Type	Docs Processed	Docs Marked Up	Executed By
Jul 18, 2019	27 min 46 sec	Markup	1,171	297	Randall, Tim

Documents marked up	<p>The total number of documents that have had markups placed on them by Blackout using the rules from this run.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Markups placed	<p>The total number of markups that have been placed, both redaction and highlight, by Blackout using the rules from this run.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Documents with warnings	<p>The number of documents the encountered a non-project breaking warning.</p> <p>Clicking this button will download a CSV of the document warnings that includes information about what happened and any error messages. Providing this CSV to Milyli can greatly assist in diagnosing any issues that may have been encountered.</p> <p>Typical reasons for warnings include password-protected documents without a password in the password bank, corrupt files, and Excel 95 and earlier Excels.</p>
History	<p>Projects are, by design, incremental. After the project has run, clicking the Run button again will queue the project up again and process any new documents in the document source. As a result, the history section will show the work that the project has performed and the results of said work.</p>

Reverting a Spreadsheet project

Occasionally the markups created by a spreadsheet project may need to be reverted. This need may arise when rules need to be modified or a case settles.

1. From the project view screen, click the **Revert** button
2. A dialogue will appear; confirm reverting the project
3. The project will be queued
4. The Blackout Worker Agents will pick it up and begin reverting the documents marked up by the project

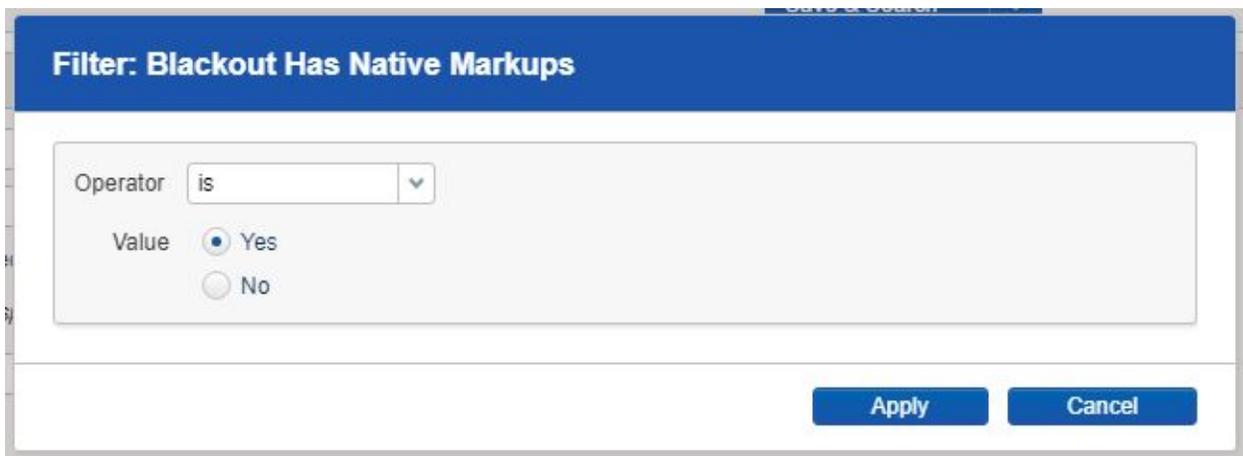
5. A progress bar will display how many documents have been reverted



Quality control review of Spreadsheet markups

Whether performing manual markup or mass markup, Blackout will tag documents using the **Blackout Has Native Markups** yes/no document field.

Creating a Relativity search using field will result in a list of Excel documents that have markups on them.

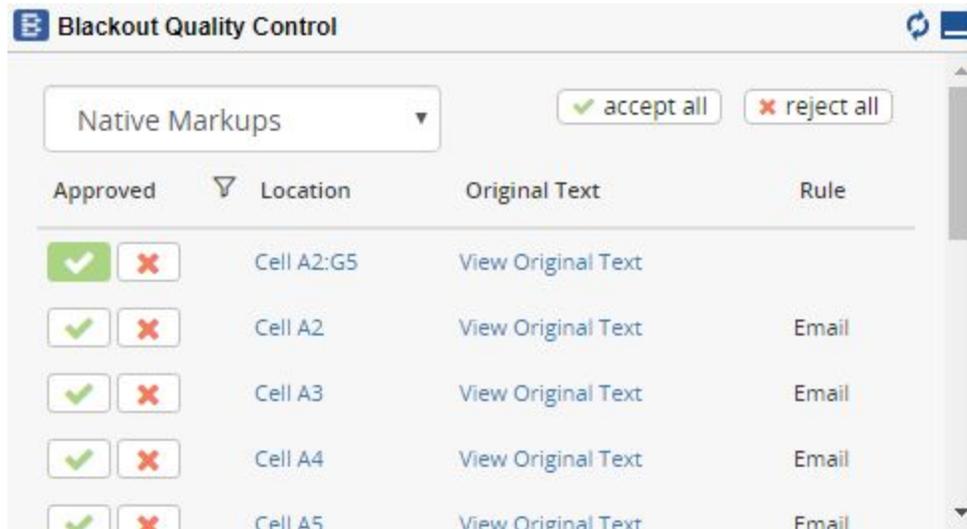


Accepting and rejecting markups

After creating the saved search, or accessing the projects saved search from the project complete view, reviewing documents can be performed using a built-in quality control tool through the related items pane. From the related item panes, click the leftmost **Blackout B** button.



After opening the Blackout Quality Control pane select the native markup set that needs review.



<p>Approved</p>	<p>The approved column exists in three states. Not selected, approved, or rejected.</p> <p>If neither is selected, then the markup will persist and not be impacted.</p> <p>If approved is selected, then the markup will persist. If approved is selected when the markup is in a rejected state, it will replace the markup on the document.</p> <p>If rejected is selected, then the markup will be removed from the document.</p>
<p>Location</p>	<p>Indicates the location that the markup exists including cell, comment, header & footer, chart, or object. Clicking on the link when a cell or cell range is present will navigate the viewer to that location.</p>
<p>Original Text</p>	<p>Clicking this link will display the information that exists under the markups.</p>

Rule	If a regular expression rule was used to place this markup the name of that rule is displayed here.
-------------	---



Approval is optional

Markups do not require approval to produce or export the marked-up native. The approval process exists to provide a richer experience for review teams should they want to take advantage of it, but is not required to successfully complete the review.

Blackout also includes another document field, **Blackout Has Unresolved Markups** which will select all documents where there is a markup that has not been marked as either approved or rejected.

Filter: Blackout Has Unresolved Markups

Operator ▼

Value Yes
 No

Preparing natives for production

Documents that are marked up by Blackout are ready to produce immediately after placing markups on them. However, depending on the requirements of the case, there are other steps to consider before utilizing Relativity productions to export the marked-up documents.

By default, a native production in Relativity will always pull the active file associated with a document. Blackout manipulates the active file of the document based on the native markup set selected.

For example, if the native markup set is **None** then Relativity will produce the unmarked-up version of the document. If the document has markups, and the native markup set is **Primary**, then Relativity will produce the marked-up version of the document.

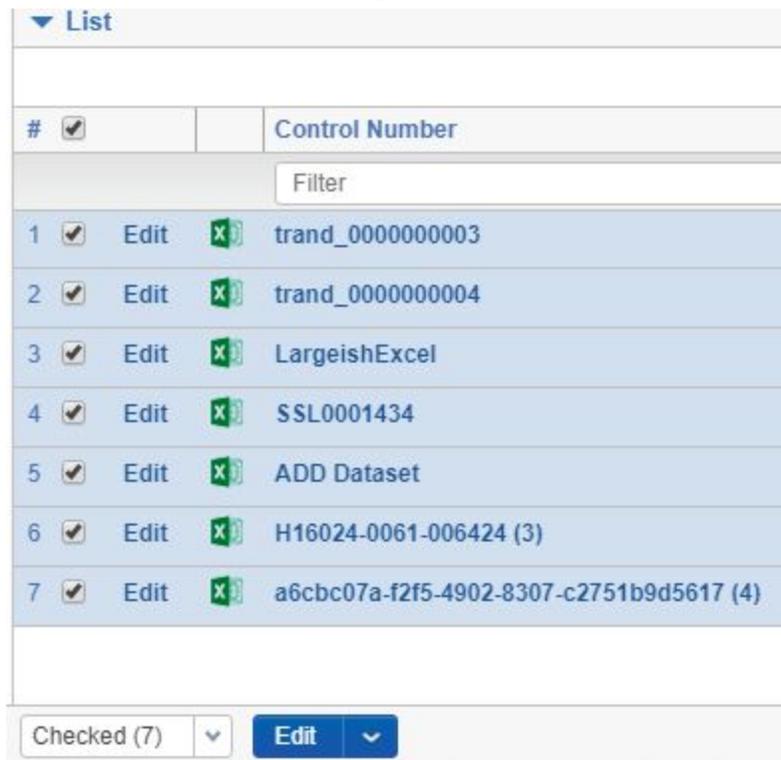
It is also important to understand that Relativity does not provide redacted extracted text creation for native files.

Blackout provides a workflow for accomplishing both of these requirements.

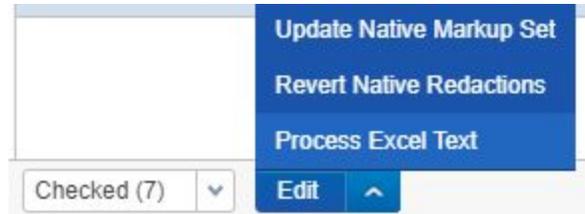
Setting native markup set

Updating the native markup set via mass action allows for multiple documents to have their primary file prepped for production at once.

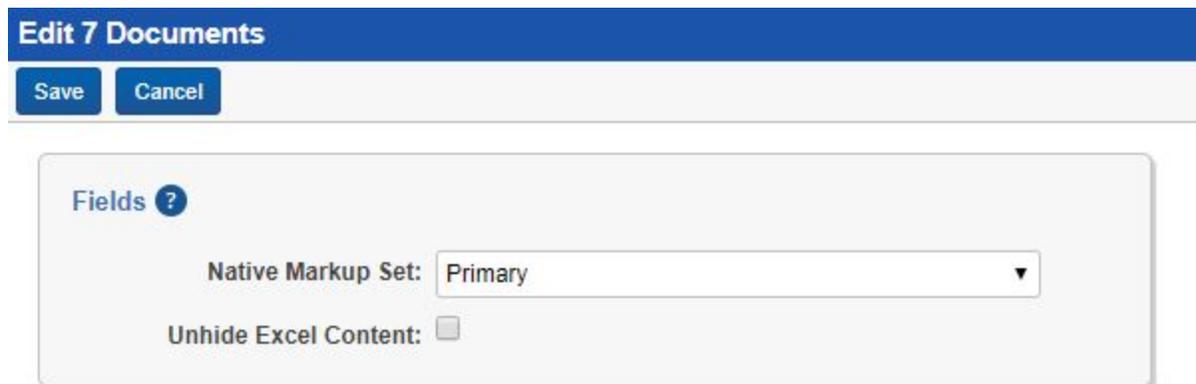
1. Log into Relativity as a system administrator or user who has access to the mass action
2. Navigate to the saved search with the Excel files that will be produced
3. Select the documents on the Relativity list



4. From the mass action dropdown, select **Update Native Markup Set**



5. A dialogue will appear
6. Select the native markup set that contains the markups that will be produced



7. Click **Save**

After a brief period of processing, all of the documents will be updated to the selected markup set.



Always use the mass action!

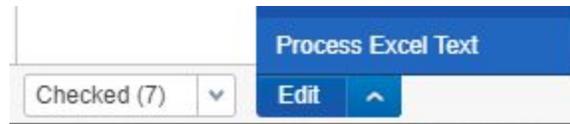
Do not update the native markup set with a mass edit or document edit. While this will change the native markup set field, the primary file will not be changed.

Process redacted extracted text

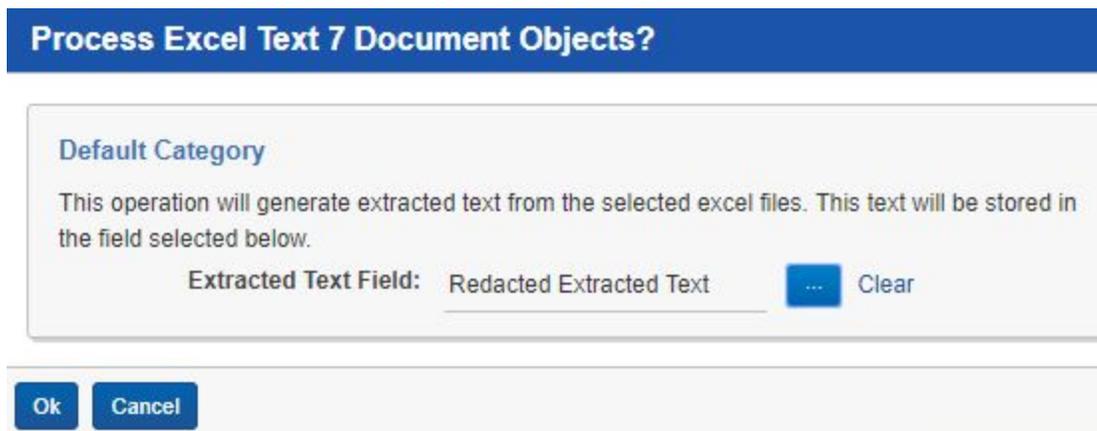
In order to generate redacted extracted text for the production, another mass action, **Process Excel Text** can be run. Before running this mass action a new **Long Text** field should be created. In this example we created one called **Redacted Extracted Text**.

1. Log into Relativity as a system administrator or user who has access to the mass action

2. Navigate to the saved search with the Excel files that will be produced
3. Select the documents on the Relativity list
4. From the mass action dropdown, select **Process Excel Text**



5. A dialogue will appear
6. Click the ... button to select the a long text field



7. Click **Ok**

After a brief processing period the redacted version of the extracted text will be generated for each document and stored in the selected **Long Text Field**.

Propagating markups to duplicate Excels

Blackout provides tooling for taking the markup made on spreadsheets with Blackout and propagating them to duplicate documents across the workspace. This is accomplished by defining a saved search source set with markups and a destination set of documents that share a duplicate identifier, which, by default, is set to the MD5 Hash document field.

Defining source documents saved search

The source documents saved search defines the marked up documents that Blackout will use to propagate. There are a few requirements when defining the source documents.

- Limit the source documents saved search to only Excels with Blackout markups

- All source documents must have an entry for the duplicate identifier field
- The source document saved search cannot contain duplicate documents

Defining destination documents saved search

The destination documents saved search defines the unmarked-up documents where Blackout will apply markups from their duplicate counterparts in the source documents saved search. There are a few requirements when defining the destination documents.

- Do not include any documents from the source document saved search in the destination documents save search
- Any document in the destination saved search that already has markups will be skipped
- Duplicates are identified solely by the selected duplicate identifier field

Creating and running a Spreadsheet Propagation project

1. Log in to the environment as a system administrator or an account that has access to the Blackout tab
2. Navigate to **Blackout > Spreadsheet Propagation**
3. Click **New Excel Propagation Job**
4. Input the **Job Name**
5. Select the **Duplicate Identifier** document field
6. By default, the MD5 Hash field will be selected if it exists
7. Select the source documents **Saved Search**
8. Select the source documents **Markup Set**
9. Select the destination documents **Saved Search**
10. Select the destination documents **Markup Set**

Create a new Excel Propagation job

Job Name

Duplicate Identifier

Source Documents[?]

Saved Search

Markup Set

Destination Documents[?]

Saved Search

Markup Set

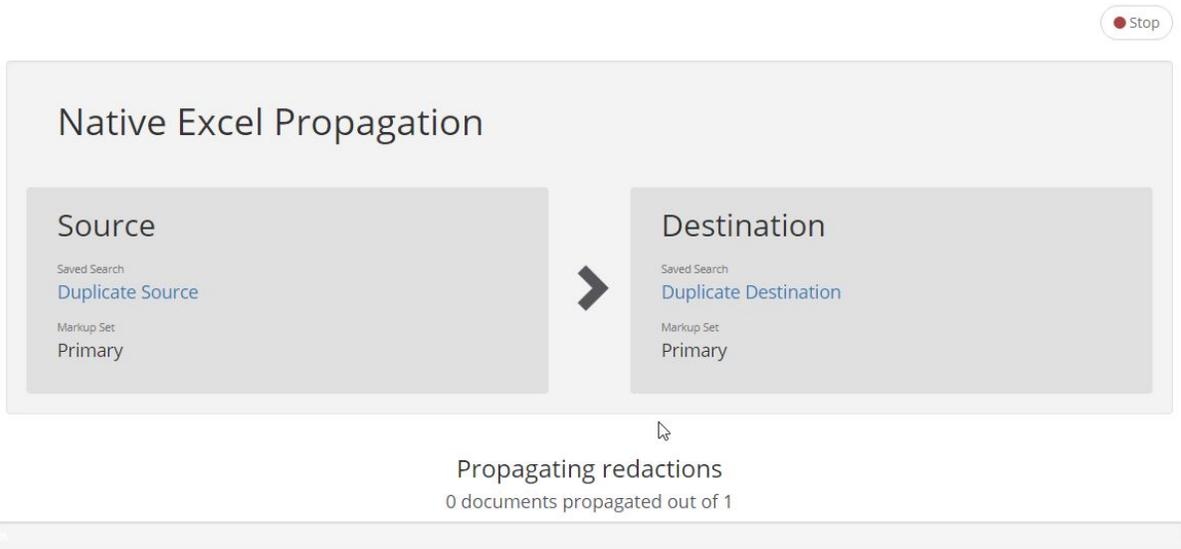
11. Click **Create**



The same but different

Both the source saved search and destination saved search can be the same as long as a different markup is selected for the destination. This is a great way to propagate starting markups to a different markup set for another group to review or to prep a production for a different party.

12. Click **Run**
13. The job will begin processing documents
14. While it is running a progress bar will be displayed



15. After propagation completes, a results page will be displayed

1 source documents propagated to 21 destination documents

<1m	0
Total Run Time	Documents Skipped

16. Clicking on the propagation results link will present a table of the results

External markup workflow

There are several instances where marking up an Excel is not feasible through the Relativity viewer or an automated job. For example, Relativity limits the size of documents that may be displayed in the Relativity viewer. Or it may be a complex document that is hard to navigate in the Relativity viewer. For these situations, this would normally result in a document outlier where most of the documents in the case are associated with a native markup set except these few.

The external markup tool allows for the download and upload of Excel documents marked up using Microsoft Excel. The result is an Excel in Relativity that was marked outside of Relativity but is still associated with the markup set allowing for propagation or production.

Preparing for external markup

External markups can be accessed by navigating to **Blackout > External Markups**.

Consider the following sample workflow to better understand external redactions:

- The case team identifies Excels that will be redacted natively
- A search is created to separate the documents that are too big to display in the Relativity viewer
- The case team adds the Blackout Document Warnings document field to an admin layout
- The case team runs a mass edit to modify the Blackout Document Warnings document field and selects the choice "Cannot be Redacted in Native Viewer"
- The case team grants access to a group of reviewers to the External Redaction tab
- The reviewer navigates to the External Redaction tab
- The reviewer sets the markup set they are working with
- The reviewer downloads a native from the External Redaction page, places redactions on the document using Excel, and then uploads the native using the External Redaction page, automatically associating it with the markup set ready for production

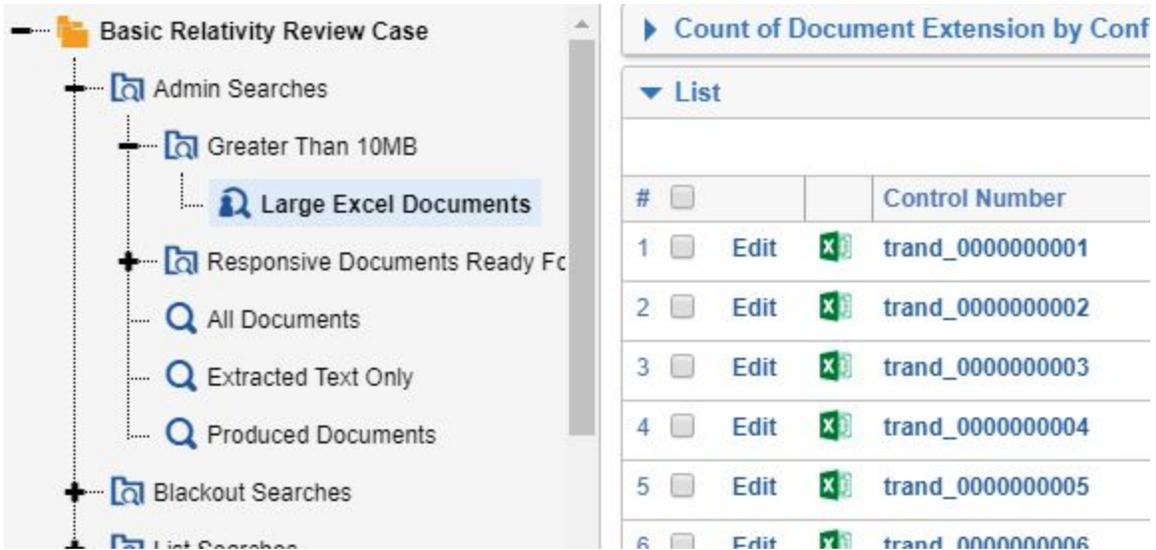
This workflow provides a great way to prevent reviewers from being disrupted while performing manual redaction using Blackout on the Relativity reviewer.

Identifying documents

Typically documents that cannot be loaded by the Relativity reviewer or are so large and complex that they can't easily be navigated in the viewer result in the need for an alternative workflow. These documents present a lot of problems for reviewers as the documents either can't be loaded or significantly impact the reviewer's ability to maintain the needed pace of review.

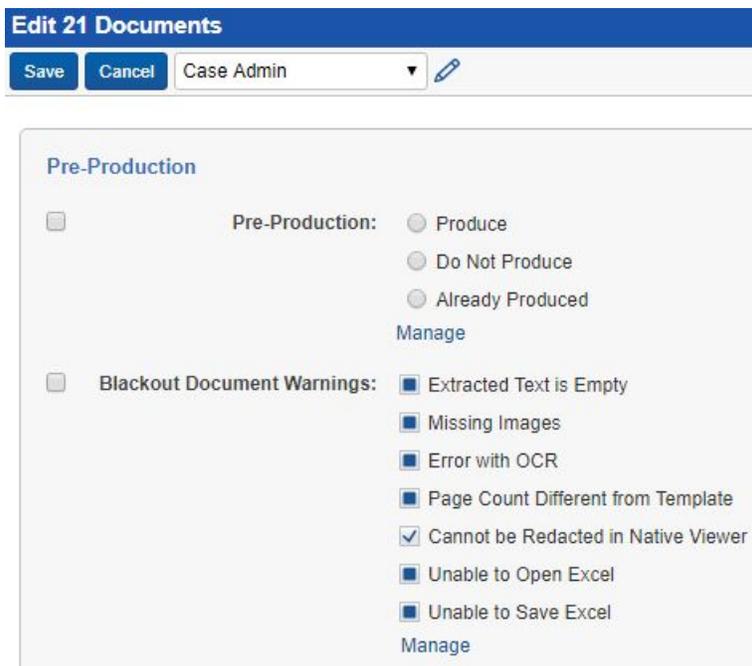
Prior to review

The easiest way to set these documents aside is to create a search based on file size.



Using this search we can then flag the documents for external review with a mass action.

To do this, select the document and use the edit mass action. Add the Blackout Document Warnings field to a layout. The specific field that needs to be checked is the "Cannot Be Redacted in Native Viewer" field.



During review

During active reviews, it is also possible that users will have specific instructions to code this field as they work through documents. This provides an opportunity for them to separate these documents from the bunch without getting caught up.

Add this document field to the appropriate coding layout and ensure that the reviewer workflow covers the scenarios in which they should tag a document as un-redactable.

Reviewing documents

Once documents have been tagged as un-redactable, they will automatically show up on the External Redactions tab.



Control Number ↑	File Name	Externally Redacted	Download	Upload
trand_0000000010	trand_0000000010.XLS	No	Download	Upload...
trand_0000000009	TestChartWorkbook.xlsx	No	Download	Upload...
trand_0000000008	TestChartWorkbook.xlsx	No	Download	Upload...

The external redactions page consists of the following columns:

- Control Number - the default sorting is by control number alphabetically. Clicking on the control number allows quick access to the document viewer.
- File Name - the name of the document file; can be clicked to download the file
- Externally Redacted - indicates if the document has already been externally redacted
- Download - An easy to identify download button
- Upload - A two-stage upload process; click upload to select a file, click the up arrow to upload the file

Depending on the number of documents there are a couple of efficient ways to work through this list. If the number is a bit higher than the reviewer can set the "Externally Redacted" filter to "No." This will filter out everything that has already been externally redacted and the reviewers can quickly work down the list.

File trand_0000000010.XLS successfully uploaded.

Externally Redacted

Yes
Download

 Upload...

Auditing

Each download and upload action is logged as manual native markup entry. To review the audits of who has downloaded and uploaded documents, navigate to the Blackout tab and click on the "Review Manual Native Markups" button at the top of the page.

Once the page has loaded, click on the Audits tab. Entries for the download and upload actions will display respectively:

- External Redaction - Downloaded
- External Redaction - Uploaded

Job Overview
Advanced Stats
Run Log
Audits

Cell Range	Created On	Created By	Document	Action
DOCUMENT	5/16/18 3:26 PM	Randall, Tim	trand_0000000010	External Redaction - Uploaded
DOCUMENT	5/16/18 3:26 PM	Randall, Tim	trand_0000000010	External Redaction - Uploaded
DOCUMENT	5/16/18 3:25 PM	Randall, Tim	trand_0000000010	External Redaction - Downloaded

Each document that is externally redacted will also appear on the Blackout Quality Control list for that document.

Blackout Quality Control

Native Markups

accept all

 reject all

Approved	Location	Original Text	Rule
 	External Redaction		

Tips and tricks

The following is a list of tips and tricks aimed at further optimizing the external redaction experience.

Documents maintain history

The primary reason for setting the markup set at the top of the page is that the External Redaction workflow takes into account any redaction work that was previously done. Already have redactions from an automated job? No problem. Make sure the same markup set is selected and the download will ensure that all of those redactions are on the downloaded document.

External redactions are maintained sequentially in history after these, so both the external redaction or the automated job can be reverted independent of one another.

Documents don't need to be downloaded using the External Markup tab

While the External Redaction tab helps maintain state and history by making it foolproof, documents can also be exported in bulk using the RDC. Keeping the document history in mind as described above, use the mass action to set the primary native markup set for the saved search and then export the document. Distribute the documents accordingly.

Multiple documents can be uploaded simultaneously

If downloading multiple documents, reviewing them and externally redacting them, they can be uploaded one after another. The external redaction page will maintain separate uploads for each document and keep track of the upload. Each one will let the user know when the upload has finished. Please note that there is not a mass upload at this time.

8. Redacting images

Mass marking up Relativity images

Blackout provides the ability to redact and highlight images in Relativity en masse utilizing terms, phrases, and regular expressions. Image projects are a flexible way to target specific documents and locate content that must be marked up for the case. There is a wide range of workflows that can be utilized to accomplish many different goals, however, for this guide, we will focus on the basic tooling.

Creating an image project

1. Log into Relativity as a System Administrator or a user who has access to the Blackout tab
2. Navigate to **Blackout > Image Projects**
3. Click **New Image Project**
4. Fill out the project form using the details below
5. Click create

A form will be displayed that is used to define how the project will function when running. The following fields make up the form.

Job Name	An identifier for the project making it easy to refer to or for others to find.
Language Code	Code for specifying which languages should be used for OCR. Not required to be changed away from eng unless other language packs are installed.
Saved Search	The document source. All actions will be performed against these documents.
Markup Set	The markup set that the markups will be associated with.
Rules	<p>The rules are what drives the project. How they are configured will determine how the content will be located on each image. There are two different kinds of rule groups--Redaction and Highlight.</p> <p>Every time the fields are filled out for a rule group, another section will appear below it allowing the creation of multiple rule groups. Each of these can be independently configured targeting different sets of content.</p>

Redact	Redaction rules will result in removing the content from the document and replacing it with a black, white, text, cross, or inverse redaction.
Highlight	Highlight rules will result in changing the foreground color of the matched content with the selected color.
Markup Reason	A simple message that can be associated with the markups made by the rule group. It can be reviewed using the Blackout reports.
Markup Scope	<p>Defines the behavior of the project when placing a redaction or highlight.</p> <ul style="list-style-type: none"> ● Word - Will place the markup of the entire word where the match is located ● Line - Will place the markup on the entire line of text ● Paragraph - Will place the markup between the most recent previous carriage return and the next carriage return ● Page - Will place a markup on the entire page ● Document - Will place a full-page markup on the entire document
Gear Button	Clicking the gear button will expand another option called Expand Markup to Full Width of Page . Checking this box will take any markup that is made for the rules and extend it from the left margin of the image to the right margin of the image.
Markup SubType	Specified whether to place a Black, White, or Text markup. If text is selected custom text can be input for the markup, otherwise, the default text markup language will be used. If the highlight is selected, this option will be replaced with choices for yellow, blue, green, orange, pink, and purple .
Word/Phrase	Word/phrase are the words, phrases, and text that needs to be redacted across the document set. Multiple words or phrases can be added to a single rule group. These rules are case insensitive.
Regex	Regular expressions can be used to identify important patterns like email addresses, social security numbers, credit card numbers, and any other content that may appear regularly throughout the document set that constitutes sensitive information. Regular expressions require a name and an expression. After saving the project, these regular expressions

	<p>will be available to be selected by name on other projects within the same case.</p> <p>Rules do not need to be added to create a project. Rules may be uploaded afterward, or, the project can be edited and add them later.</p> <p>Blackout uses the PCRE flavor of regular expression and runs with the global flag (/g), multi-line flag (/m), and case insensitive flag (/i) enabled by default. The case-insensitive flag can be modified inline by adding (?-i) to turn off and (?i) to enable.</p>
--	---

A sample project that looks for and redacts ‘Tim Randall’ and any social security number would look like this.

The screenshot shows the Blackout configuration interface. At the top, there are four fields: 'Job Name' (Sample job name), 'Language Code' (eng), 'Saved Search' (Blackout and Image Test), and 'Markup Set' (Primary). Below this is the 'Rules' section, which includes a 'Redaction' button, 'Markup Reason' (PII), 'Markup Scope' (Word), and 'Markup SubType' (Black). There is also an 'Expand Markup to Full Width of Page' checkbox. At the bottom, a table lists rules:

Word/Phrase		
×	Tim Randall	
Name		
Name	Regex	
×	SSN	(\d{3}-\d{2}-\d{4} XXX-XX-XXXX)

Uploading rules from CSV

After successfully creating the image project, rules can be added via uploading a template CSV.

The CSV template and explanation of the columns can be downloaded from the [Milyli help center](#).



Thousands of rules

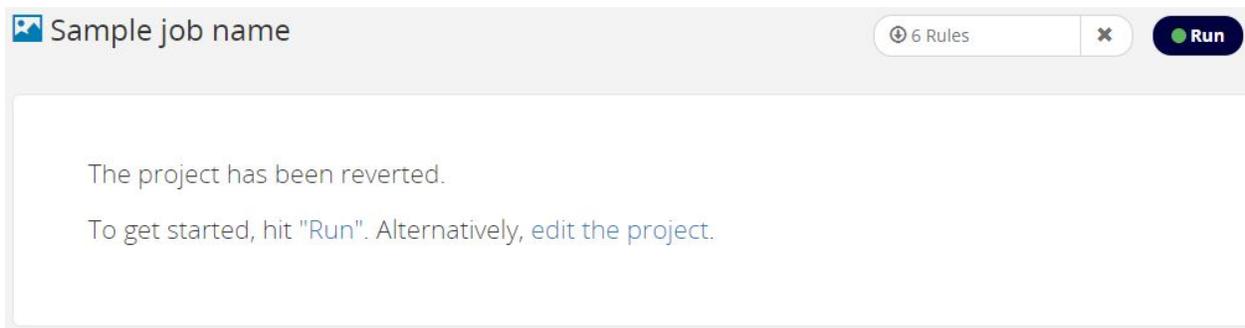
Blackout can support up to 100,000 rules being created via CSV. It is important to note that extra rules mean each doc takes a little bit longer to process as the Excel content needs to be checked for each rule!

1. From the project view screen, click the **Upload rules CSV** button
2. Navigate to the completed CSV
3. Click the upload icon
4. If the CSV file is valid, the rules will be created and the button will display how many



Running an image project

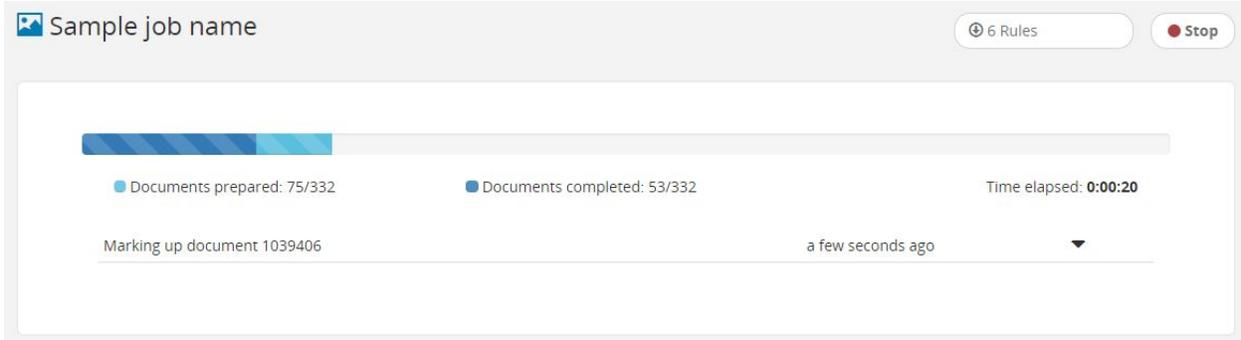
When a project is in a valid state to run, with a name, saved search, markup set, and rules, the status message of the project view screen will display that is ready to run.



To begin the project, click the **Run** button. Once the project begins running, the project will be queued and then start being processed by the Blackout Worker Agent.

Project queued	The project enters the queued state letting the Blackout Worker Agents know to start working on the documents
Documents prepared	The number of documents that have been distributed to the system as tasks for markup review
Documents completed	The number of documents that have completed markup review which can result in markups being placed if there are rules

	matches
Progress bar	Displays the number of actions completed for preparation and review. The light blue color represents document preparation and the dark blue represents markup review.
Time elapsed	The total time the project has processed
Current activity	The current activities that the Blackout Worker Agents are performing which include preparation, reviewing, and marking up. The most recent action is shown at the top along with when it began. Clicking the down arrow will display the currently active tasks and when the task began.
Stop	Begins the stop operation which will cancel all unfinished work for the project. Work completed to that point will remain and can be reverted



After the project completes, a results page displays information about the completed work and provides a launchpad for further quality review.

Sample job name 6 Rules Run Revert Archive

Documents Marked Up

106

Pages Marked Up

1,136

Markups Placed

13,039

↶ 4 Documents to Review

⬇ 0 Documents with Warnings

History

Run Date	Run Duration	Run Type	Docs Processed	Docs Marked Up	Executed By
Jul 24, 2019	2 min 20 sec	Markup	332	106	Randall, Tim

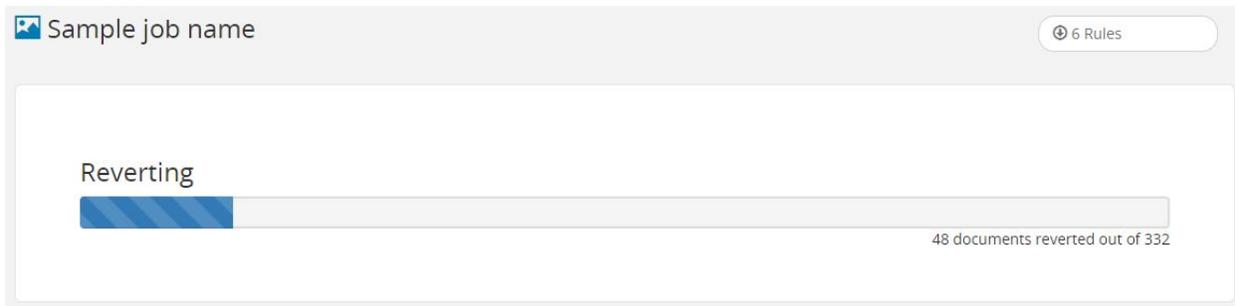
Documents marked up	<p>The total number of documents that have had markups placed on them by Blackout using the rules from this run.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Pages marked up	<p>The total number of pages for each marked up documents that have had markups placed on them.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Markups placed	<p>The total number of markups that have been placed, both redaction and highlight, by Blackout using the rules from this run.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Documents to review	<p>While Blackout does not require extracted text to review an image and place markups on, whenever extracted text is available it will perform an automated quality review on the placed markups.</p> <p>This happens by looking at the number of matches that the project terms have in the extracted text and comparing them to the number of placed markups. If a rule has less placed markups than there are matches in the extracted text, the rule is flagged and the document is marked for review.</p>

	<p>A full detailed walkthrough of the document review process is covered later in this document.</p> <p>Clicking this button will navigate to a saved search of the documents requiring review.</p>
Documents with warnings	<p>The number of documents that encountered a non-project breaking warning.</p> <p>Clicking this button will download a CSV of the document warnings that includes information about what happened and any error messages. Providing this CSV to Milyli can greatly assist in diagnosing any issues that may have been encountered.</p> <p>Typical reasons for warnings include missing images or failed OCR.</p>
History	<p>Projects are, by design, incremental. After the project has run, clicking the Run button again will queue the project up again and process any new documents in the document source. As a result, the history section will show the work that the project has performed and the results of said work.</p>

Reverting an image project

Occasionally the markups created by a spreadsheet project may need to be reverted. This need may arise when rules need to be modified or a case settles.

1. From the project view screen, click the **Revert** button
2. A dialogue will appear; confirm reverting the project
3. The project will be queued
4. The Blackout Worker Agents will pick it up and begin reverting the documents marked up by the project
5. A progress bar will display how many documents have been reverted

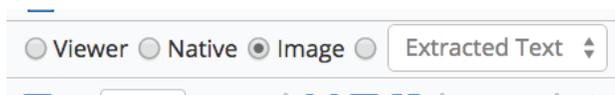


Quality control review of marked-up images

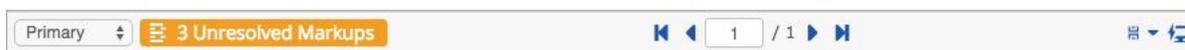
Once Blackout processes a set of documents, the reviewer can then use the Blackout Markup Navigator to review the applied redactions and highlights from within the Relativity viewer.

Viewing the Blackout Markup Navigator

Markups are applied only to the image of a document, so to review redactions and highlights, open the document and select the Image view.



Once the document viewer is in Image view, a document navigation bar will appear below the viewer with a Blackout button.



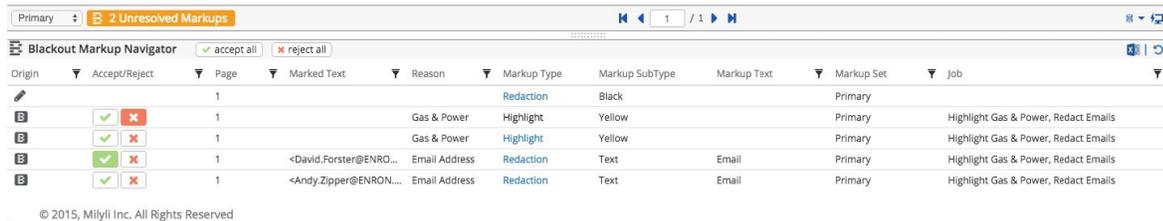
The Blackout button will appear in one of two states. If there are Blackout markups that have not been reviewed, the button will be highlighted orange and indicate the number of markups that are “unresolved,” i.e. have not been reviewed.



When there are no markups to review or all markups have already been reviewed, the button will not be highlighted and will not display any number of unresolved markups.



In either state, clicking the Blackout button will expand the Blackout Markup Navigator, which is where markups can be accepted and rejected.



Using the markup navigator

The Blackout Markup Navigator will show all markups on this document, including those created both by Blackout or manually. Markups from all markup sets will appear in the Blackout Markup Navigator.

Choose which markup set should be reviewed from the dropdown in the Blackout Markup Navigator.



The columns in the Blackout Markup Navigator will show the following information about each markup.

<p>Origin</p>	<p>This column shows how the markup was created and its history. There are three possible icons that can appear in this column</p> <ul style="list-style-type: none">  This icon indicates that the markup was generated by a Blackout job  This icon indicates that the markup was originally generated by a Blackout job, but has since been manually edited  This icon means that the markup was created manually (not using Blackout)
<p>Accept / Reject</p>	<p>For all markups created by Blackout, there will be an Accept</p>

	button () and a Reject button ()
Page	This column indicates on which page the markup appears
Redacted/Highlighted Text	This column shows the text that is hidden by the markup
Reason	This column indicates the reason for the Blackout markup. Markups that were generated by Word/Phrase Rules will default to a truncated version of the word or phrase. Markups that were generated by RegEx Rules will default to the regex name.
Markup Type	This column indicates the type of markup applied - redaction or highlight
Markup SubType	This column indicates the subtype - such as black box, cross, text, or the highlight color
Markup Text	If the Markup SubType was set to “Text,” this column will show the text within the markup
Markup Set	This column indicates the markup set to which the redaction or highlight belongs
Job	This column indicates the name of Blackout job that generated this redaction

Accepting / Rejecting Markups

After a Blackout job processes the document set, all of the generated markups will appear within the document as “unresolved markups,” that is, markups requiring action from the reviewer to accept or reject them. Accepting and rejecting markups is done within the Blackout Markup Navigator, using the accept or reject buttons.

If the reviewer accepts a markup, that markup is kept within the document. If the reviewer rejects the markup, the markup is removed from the document. Either way, the markup will no longer be considered “unresolved,” and the markup will remain in the Blackout Markup Navigator where the reviewer can change the resolution as needed.

If a Blackout markup is manually edited before it is rejected or deleted, and is subsequently accepted, the markup will return to the state it was in before it was manually edited.

Blackout Has Unresolved Markups document field

Blackout creates a “Blackout Has Unresolved Markups” document field upon install of the application. Any document that has been processed by Blackout will have a “Yes” or “No” value for this field. Documents that have not been processed by Blackout will have a value of “Unset”. This field can be very useful in determining which documents have been processed by Blackout, as well as which documents have unresolved redactions or highlights.

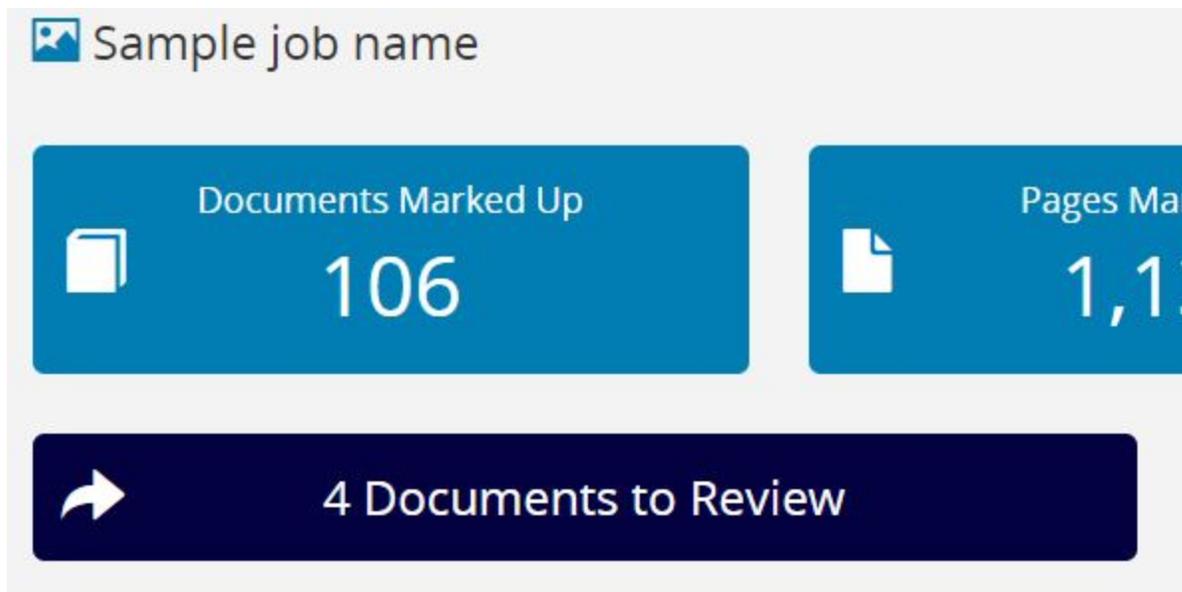
Reviewing documents flagged for review

While Blackout is running and redacting images, if the document has extracted text, Blackout will automatically compare the rules to the extracted text and cross-check it with the markups placed for each rule.

In the event that the number of markups placed by a rule is less than the number of matches in the extracted text, the document will be flagged for review and indicated in the project results. A Relativity document field, **Blackout Needs Quality Review**, will be marked as yes.

Navigating to documents that need review

From the project complete page, the number of documents that need review will be indicated on the dashboard.



1. Click on the **# Documents to Review** button
2. This will navigate to a saved search containing these documents
3. Click on a document in the document list
4. Switch to the image viewer
5. In the related item panes, click on the leftmost Blackout B icon



6. For each rule where the markups expected are less than the markup are placed, the numbers will be displayed letting the user know how many redactions will need to be added for each rule

Blackout Quality Control

Image Quality Review Reviewed:

Rule	Placed	Expected
Word/Phrase Tim	3	6
Word/Phrase Jacob	2	4
Word/Phrase Tim	3	6
Word/Phrase Tim Randall	0	1

7. After the markups have been adequately placed, click the **Reviewed** checkbox
8. This updates the **Blackout Needs Quality Review** flag for the document to **False**
9. After reviewing a document, the project page will automatically update as well as the document to review saved search



Image template projects

Blackout provides a simple to use tool that allows taking image markups placed on the images of a document and propagating them to all of the documents in a saved search. This is an effective way of marking up, for example, a form that contains personally identifiable information in the same spot on all of the subsequent forms once, and then propagating those markups across all of the remainders.

Setting up an image template project

Creating a template project is similar to creating image and spreadsheet projects.

1. Navigate to the **Blackout > Image Template Project** tab
2. Click the **New Image Template Project** button
3. A form will be displayed to set up the project

Project Name:

Saved Search:

Markup Set:

Template Document Control Number:

4. Input the project name to quickly identify the template project
5. Select the saved search that contains the documents that should have the template markups propagated from
6. Select the markup set that the markups will be created on
7. Input the control number that contains the markups that should be propagated to the documents in the saved search
8. Click the **Create** button
9. The project run page will be displayed

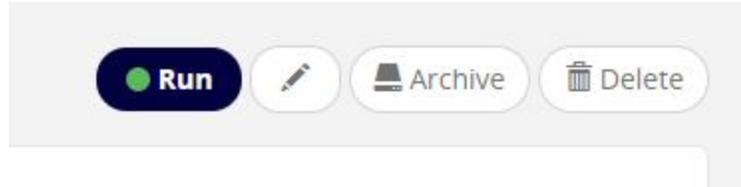
 A sample template project

To get started, hit "Run". Alternatively, [edit the project](#).

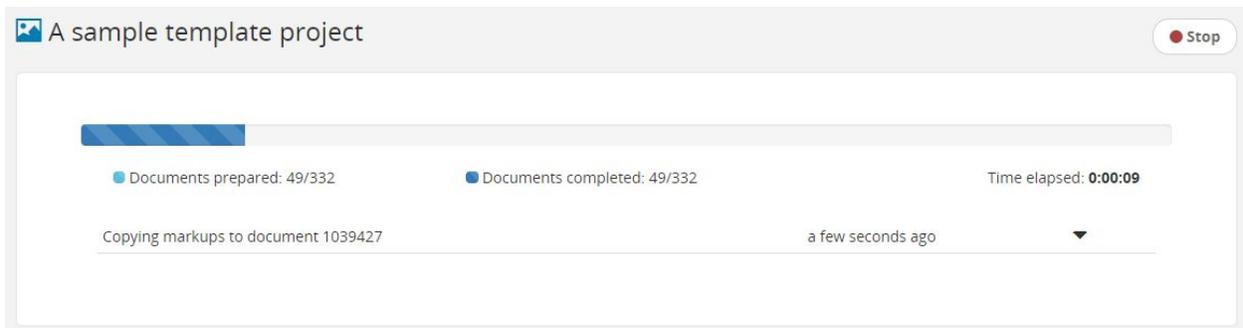
Details		
Saved Search	Markup Set	Template Document Name
Documents with Images	Primary	trand_0000000001

Running image template projects

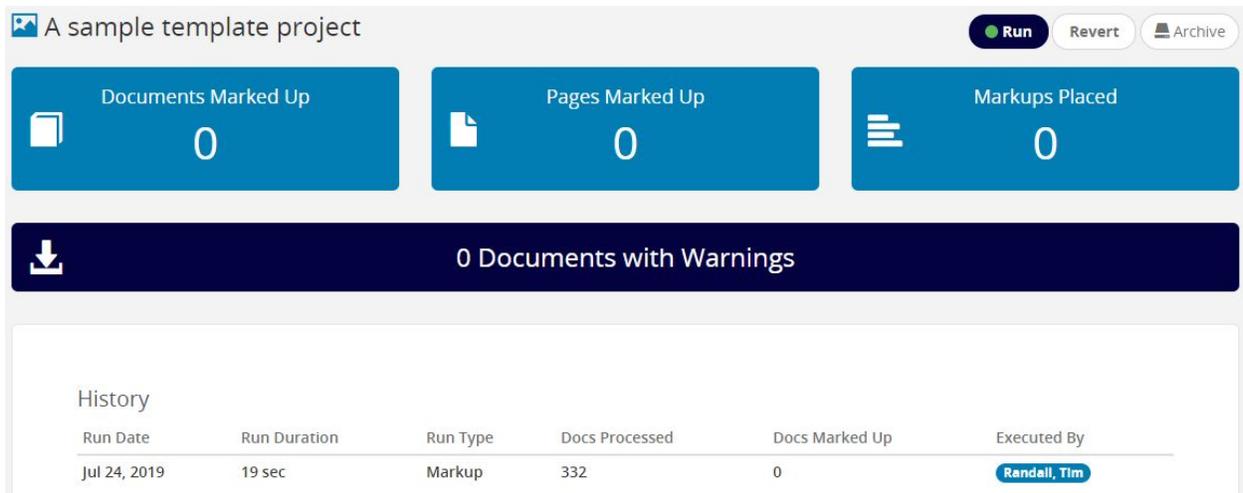
After the project has been successfully created, propagating the markups to the saved search by clicking Run.



The project will be queued similar to other project types. While the project is running, details about progress will be displayed.



After the project completes, results will be displayed with details about the completed project.



Documents marked up	<p>The total number of documents that have had markups placed on them by Blackout using the rules from this run.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Pages marked up	<p>The total number of pages for each marked up documents that have had markups placed on them.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Markups placed	<p>The total number of markups that have been placed, both redaction and highlight, by Blackout using the rules from this run.</p> <p>Clicking this button will navigate to a saved search of all of the documents that have been marked up.</p>
Documents with warnings	<p>The number of documents that encountered a non-project breaking warning.</p> <p>Clicking this button will download a CSV of the document warnings that includes information about what happened and any error messages. Providing this CSV to Milyli can greatly assist in diagnosing any issues that may have been encountered.</p> <p>Typical reasons for warnings include missing images.</p>

Multi-language image markup support

Blackout 3 adds support for over 100 new language packs including multiple levels of training quality. These languages packs can be mixed and run together in a single image project or excluded from use in a project altogether. The higher level of accuracy of a language pack the slower it will run.

The most accurate language packs are available for download from the tessdata GitHub page.

[Tessdata language packages](#)

A version that processes more quickly, but is less accurate can also be used if the time on a project is tight.

[Fast tessdata language packages](#)

Packages from the more accurate language packages will be used for this guide.



Understanding language codes

Blackout and Tesseract use the alpha-3 code for the representation of names of languages. To understand which code corresponds to which language, please refer to ISO 639.2.

http://www.loc.gov/standards/iso639-2/php/code_list.php

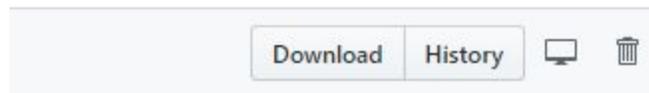
Installing additional language packages

Installing new language packs has been streamlined for Blackout 3.

1. Navigate to the Tesseract Language page
2. Locate the language that will be used in the case using the 3 letter code from ISO 639.2.

snd.traineddata	remove legacy model from indic and arabic script languages	last year
spa.traineddata	Remove cube components from traineddata and update version component	last year
spa_old.traineddata	Update LSTM Models to integerized tessdata_best for files < 25mb	last year

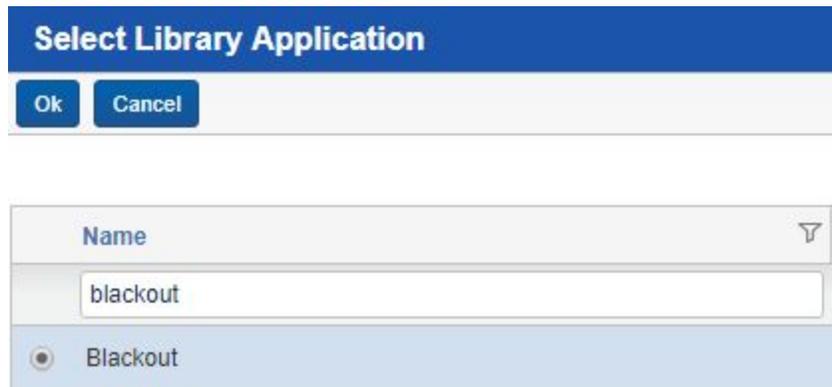
3. Click on the link for the trained data
4. Click the download button to download the trained data



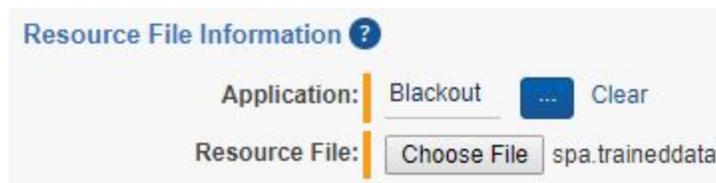
ght now.)

5. Log into the Relativity environment as a System Administrator
6. Navigate to **Application & Scripts > Resource Files**
7. Click **New Resource File**

8. Click the ... button next to **Application**
9. Search for and select **Blackout**



10. Click the **Ok** button
11. Click the **Choose File** button for the **Resource File** field
12. Navigate to and select the trained data file that was downloaded



13. Click the **Save** button to add the resource to Blackout

Blackout will automatically load the file and it will be available for use in image projects. English is loaded by default so there is no need to upload the traineddata for it.

	Name	Application	Company Name	Imported On	Imported By
	Filter	blackout	Filter	(All)	Filter
<input type="checkbox"/> Edit	Milyli.Blackout.Package.dll	Blackout	Milyli	01/31/2018 4:17 PM C...	Service Account, Relativity
<input type="checkbox"/> Edit	TesseractData.zip	Blackout		01/31/2018 4:17 PM C...	Service Account, Relativity
<input type="checkbox"/> Edit	jpn.traineddata	Blackout		05/31/2019 10:50 AM ...	Admin, Relativity
<input type="checkbox"/> Edit	spa.traineddata	Blackout		07/24/2019 12:41 PM ...	Randall, Tim

Enabling language support for image projects

By default, Blackout will not be in multi-language mode. To enable multi-language mode a new instance setting will need to be added and set to true.

1. Log into the Relativity environment as a System Administrator
2. Navigate to the **Instance Settings** tab
3. Search for **MultiLanguageMode** for instance setting name and confirm it does not exist
4. If it does exist, change the value to **True**
5. If it does not exist, click the **New Instance Setting** button
6. Input the following values

Name	MultiLanguageMode
Value Type	True/False
Value	True
Initial Value	True
Section	Milyli.Blackout
Encrypt	No
Description	Enable the ability to specify a language for image markup jobs.

7. After creating or updating this instance setting, a language field will now be visible on the image project create and edit page.

The screenshot shows a form for creating or editing an image project. At the top right, there are two blue buttons: "Cancel" and "Create". Below the buttons, there are three input fields. The first field is labeled "Job Name:" and is empty. The second field is labeled "Language Code:" and contains the text "eng". The third field is labeled "Saved Sea" and is empty. There is a small icon to the right of the "Job Name" field.

Running non-English language projects

By default, all image projects will run with the language code eng. Running projects for other languages is straightforward. To determine the language code that should be used, refer to the trained data file. The letters that appear before the decimal will be used as the language code in the project.

A screenshot of a web form with three input fields and two buttons. The 'Job Name' field contains 'Spanish language only' with a lock icon. The 'Language Code' field contains 'spa'. The 'Saved Search' dropdown menu is set to 'Spanish Docs'. At the top right are 'Cancel' and 'Create' buttons.

In this sample, the Spanish language trained data will be used to OCR and review the documents in the saved search.

In order to get the best results, there are a few very important things to note.

Multiple languages are supported

Whenever there is a chance that the language being used will be combined with another language, such as English, both sets of trained data can be used at once. To do so, simply concatenate the language codes with the plus symbol.

A screenshot of a web form similar to the first one. The 'Job Name' field contains 'Spanish and English' with a lock icon. The 'Language Code' field contains 'spa+eng'. The 'Saved Search' dropdown menu is partially visible, showing 'Spanis'. At the top right are 'Cancel' and 'Create' buttons.

The languages will be prioritized from left to right. In this sample, Spanish matches will be prioritized first and then English matches.

Documents should be loaded into Relativity with the proper language settings

This is an important component of interacting with images for non-English languages and a critical requirement for non-Romance languages. For example, if documents with Japanese text are being run through Blackout, they will need to be loaded from a processing engine that supports processing Japanese documents with the appropriate language settings.

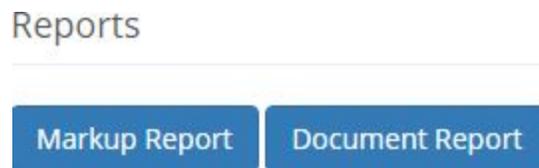
If using Relativity processing, this is as simple as selecting the Japanese language in either the processing set or processing profile.

9. Blackout workspace reports

Blackout reporting provides an open-ended experience that gives users the ability to export custom reports based on any field on the document object and combine that with a wide range of Blackout and redaction data. There are two types of customizable reports that allow for exporting a complete set of information for each redaction or condense this down to the document level.

Creating reports

To get started, navigate to the **Blackout > Reports** workspace tab. After navigating to the page you will be prompted to select a Markup Report or Document Report.



Markup report

The markup report will generate a report of all of the selected fields for each markup placed on the documents in the saved search. Information that this report can provide includes:

- Relativity Manual Markups
- Relativity Viewer Manual Excel Markups
- Blackout Automated Markups
- Blackout Automated Native Excel Markups

Document report

The document report will generate a report of all the selected fields for each individual document in the saved search. If a document field has multiple tags selected for it, they will be aggregated and displayed with semicolon separators. For example, if there are both automated and manual markups on the document, the markup automated column will display both true and false. If a multiple-choice document field is selected, the values will be displayed comma-separated.

Available report fields

Blackout provides the ability to report on any field that is currently associated with the document object, Blackout specific fields, and fields from the Relativity redaction table. This flexibility allows the creation of many different types of reports based on the organization's needs.



Avoid long text!

Attempting to include long text such as extracted text will pull all of the extracted text of the document into a single cell. This may result in a broken CSV.

Saved Search
Sent Mail Paul Allen

Available Report Fields

- Markup Text
- Markup Set
- Markup Cell
- Markup Sheet
- All Paths/Locations
- Artifact ID
- Attachment Document IDs
- Attachment List
- BCC
- BCC (SMTP Address)
- CC (SMTP Address)
- Child MD5 Hash Values
- Child SHA1 Hash Values
- Child SHA256 Hash Values
- Comments

Fields Included in Report

- Markup Automated
- Markup Type
- Markup Scope
- Markup SubType
- Markup Created By
- Markup Page Number
- Author
- Subject
- To
- Markup Reason

Generate & Download Report

After choosing the fields for the report they can re-ordered. The first field selected will be the leftmost column in the report, while the bottom will be the rightmost column.

Blackout specific fields

The following fields are populated by Blackout or the Relativity Redaction table. In some cases, the data may be collected from both systems simultaneously such as Markup scope which can be provided by Blackout for excel redactions but the Relativity redaction table for image redactions. It is important to note that this report is not restricted to just getting redaction information from Blackout created redactions. It is possible to also pull data from redactions created entirely through Relativity!

Field	Description	Additional Results
Markup Type	The type of redaction placed	Redaction or highlight
Markup Scope	The markup scope selected when placing the markup. This value is provided for both Blackout created and Relativity created markups.	Images: Word / Line / Paragraph / Page / Document / Native Excel: Cell / Sheet / Row / Column
Markup SubType	The markup subtype selected when placing the markup. This value is provided for both Blackout created and Relativity created markups.	Redaction: Black / Text / White / Cross / Inverse Highlights: Yellow / Green / Blue / Orange / Pink / Purple
Markup Text	The text entered when placing a redaction. This value is provided for both Blackout created and Relativity created text redactions.	
Markup Set	The markup set a redaction is associated with. This value is provided for both Blackout created and Relativity created redactions.	
Markup Reason	The reason that was specified when creating the Blackout rule groups. This field is exclusive to Blackout.	
Markup Page Number	The page number where the markup is placed.	
Markup Cell	The cell location where a native excel markup is placed.	
Markup Sheet	The Excel sheet that was redacted during a native excel automated job.	

Markup Automated	Displays if the markup was created by a Blackout automated job or not. This field can display both True and False when generating the privilege log report type.	True - Yes False - No
Markup Created By	Displays the user who created the markup. If the markup was the result of a Blackout job, it will display the name of the user who executed the job.	

Download the report

When all of the fields required for the report have been selected click the Generate & Download Report button.





BLACKOUT

automated redaction tool

About Milyli

Milyli is an eDiscovery software development firm with a broad range of experience developing products from the ground up, as well as creating custom solutions both inside and outside of the Relativity eDiscovery platform. To learn more about Milyli, take a look at our website!

<https://www.milyli.com/ediscovery-technology-experts>

Milyli Customer Advocacy

The Milyli Customer Advocacy team is our team dedicated to supporting you, our customer! We are here to help you make the best of the software. Whether you need help with developing a new workflow, discuss an upcoming case, or just have a question about the product, we are here to help.

Support Hours

Support is available Monday through Friday from 7:30 AM CST to 6:00 PM CST.

Support Contacts

support@milyli.com
312.265.0136

a **milyli** product