BLACKOUT
automated redaction tool

USER GUIDE

Blackout 4.8

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Table of Contents

What's new in Blackout 4.8 ..... **6**
New Features 6
Mass upload of externally redacted documents 6
Markup review pane available for locked documents 7
SQL version support 7
Changelog 8
Performance Improvements 8
Bugfixes 8
What's changed in the user guide **8**
First-time installation **9**
Requirements 9
What to expect 9
Installing Blackout 9
Configuration 10
Verify the agent status 11
Adding a Blackout server to a resource pool 11
What to know 11
How to do it 12
Upgrading Blackout **12**
Requirements 12
Upgrading from 3.3 or earlier 12
Upgrading from 3.4 13
Workspace tabs **13**
Blackout Analyze **14**
Creating an Analysis 14
Running an Analysis 15
Reviewing Analysis Results 16
Exporting Results 16
Generate a Saved Search of Documents with Matches 16
Cost Calculator 16
Redacting images **17**
Automated image projects 17
Creating an image project 17
Uploading rules from a CSV 20
Running an image project 21

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Reverting an image project 24
Find & Redact 24
Executing Find & Redact 24
Find & Redact Markup Review 25
Image quality control 26
The Blackout Markup Review Pane 26
Using the Blackout Markup Review Pane 26
View Text and View hocr Buttons 27
Accepting & rejecting markups 27
The Blackout - Has Unresolved Markups field 28
Reviewing images flagged for redaction 28
Reviewing images 28
Image template projects 30
Setting up an image template project 30
Running image template projects 30
Foreign language support 31
Multi-language support 31
Installing additional language packs 32
Enabling language support for image projects 33
Running non-English language projects 34
Native redaction preparation 35
Blackout Permissions 35
Securing manual markups 35
How to secure markups 35
Securing mass actions 37
Mass actions 37
How to do it 37
Native markup sets 38
What to know 38
Adding new markup sets 38
Switching markup sets 38
Multiple markup sets 39
Securing markup sets 39
Deleting markup sets 39
Marked up file download 40
Redacting Excel 40
Excel version support 40

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Manually marking up documents 41
Document preparation 41
Redactions and highlights 41
CSV Redactions 43
Text Redactions 44
Cell content redactions 45
Reverting markups 46
Using the Blackout Markup Review Pane 46
What to know 46
Redacting Charts 46
Redacting Comments 47
Redacting headers and footers 48
Redacting objects 48
Redacting sheet names 49
Audits 49
Automated Excel projects 50
Mass markups of Excel documents 50
Uploading rules from a CSV 54
Running a Spreadsheet project 55
Reverting a spreadsheet project 57
Excel quality control 57
The Blackout Markup Review Pane 57
Manual Excel troubleshooting 61
Email Notifications 61
What reviewers see on failed markups 61
Manual Failures Tab 62
Download errors 63
Propagating to Duplicates 63
Defining the source documents saved search 64
Defining the destination documents saved search 64
Creating and running a Spreadsheet Propagation project 64
Converting Spreadsheet Markups 65
The Convert Spreadsheet Markups mass action 65
Quality control and re-running projects 67
Redacting PDFs 67
Manual PDF markups 67
Before you begin 67

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Redactions and highlights 68
Manually removing markups 70
Automated PDF markups 71
Before you begin 71
Creating a PDF project 71
Uploading rules from a CSV 74
Running a PDF project 74
Reverting a PDF project 77
PDF quality control 77
Before you begin 77
Using the Blackout Markup Review Pane 77
Reviewing quality control entries 77
Accepting/Rejecting markups 78
Redacting annotations 79
Annotation redactions 79
Redacting attachments 81
External redactions 82
External redaction workflow 82
Tips for identifying documents 84
Mass uploading externally redacted documents 84
Reviewing Documents 85
Auditing external markups 86
Tips and Tricks 86
Preparing for production 87
Creating a Production Preparation project 87
Recommended workflow 88
Running the project 89
Searching for locked documents 90
Document warnings 90
Markup Review Pane 90
Unlocking Documents 91
Accessing retained copies of the document 92
Searching 92
Searching for documents using Blackout fields 92
Tools and reporting 94
Exporting System Logs 94
Reviewing usage metrics for an instance 95

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Client usage metrics 95
Understanding markup counts 96
Exporting metrics 96
Exporting metrics for monthly billing 96
Review instance projects 96
Blackout Queue Priority 97
High Priority Queue 97
Workspace reports 98
The markup report 99
The document report 99
Available report fields 99
Blackout specific fields 100
About Milyli 102
Milyli Customer Advocacy 102

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What's new in Blackout 4.8

Please Note: With this update Blackout will now require SQL Server 2016 with compatibility mode set to at least 130. Steps to check this are noted below in the following SQL Version Support section.

Blackout 4.8 includes the following product improvements and bug fixes.

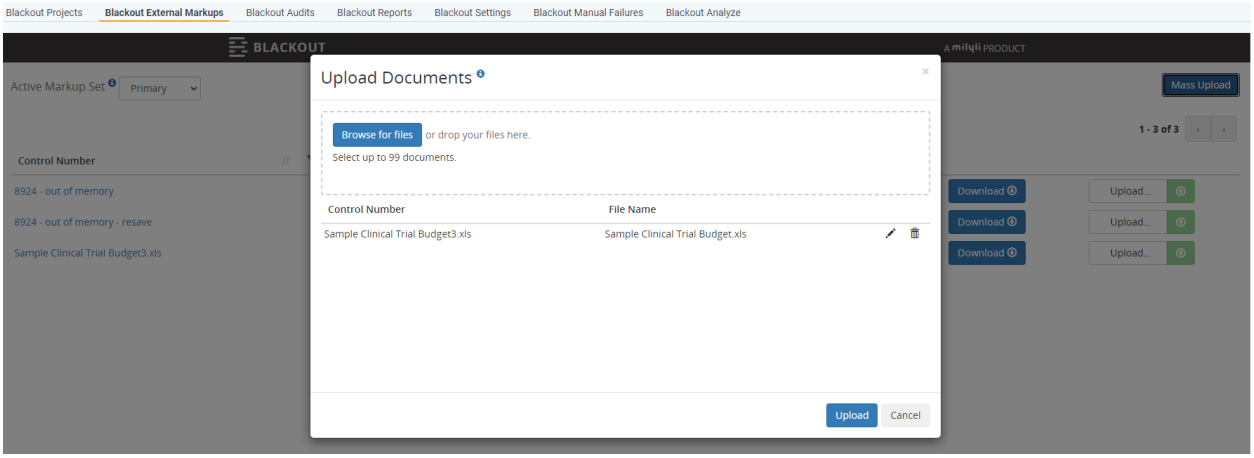
New Features

Mass upload of externally redacted documents

With this release, users can now upload up to 100 documents with External Markups at a time, reducing the need for multiple uploads.

Blackout will attempt to automatically map these files when uploaded to their control numbers, further streamlining the upload process. If necessary, users can still modify the mappings manually.

To improve upload accuracy, Files are still uploaded one at a time. This reduces the risk of incomplete uploads and ensures that each file is uploaded accurately. If a file fails to upload, the upload operation will move on to the next document in the set.



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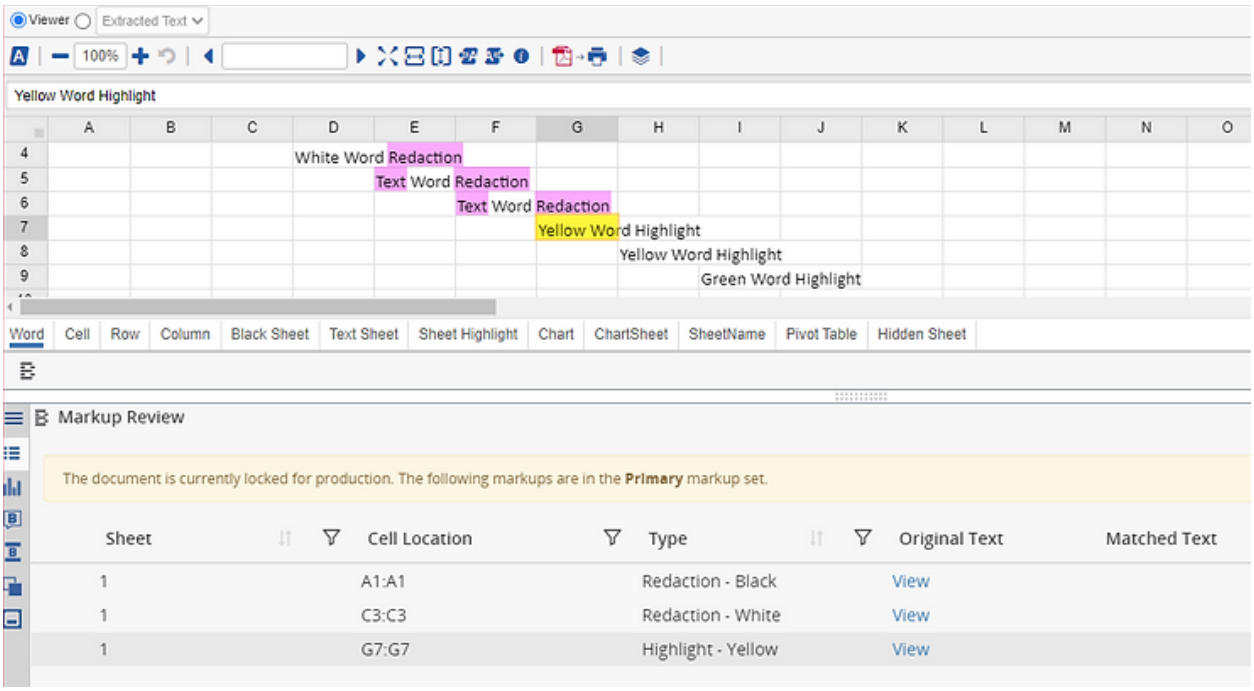
Markup review pane available for locked documents

For documents locked for production, users can now access a read-only version of the Markup Review pane. This allows users to jump to the location of redactions and view original text even with the document in a locked state.



SQL version support

We want to inform you of an important requirement for this update:

SQL Server 2016 Compatibility Mode: This update requires SQL Server 2016 with compatibility mode set to at least 130. To check the compatibility mode level of your SQL Server, you can run the following query:

SELECT name, compatibility level FROM sys.databases WHERE [name] = 'EDDS';

To update the compatibility mode level, please follow these steps:

1. Connect to your SQL Server using SQL Server Management Studio.
2. Right-click on the EDDS database and select Properties.
3. In the Select a page pane, click Options.
4. In the Compatibility level drop-down list, select the desired compatibility level.
5. Click OK to save the changes.

Alternatively, the compatibility mode can be updated using the following SQL script:

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ALTER DATABASE [EDDS] SET COMPATIBILITY_LEVEL = 130;

Changelog

Performance Improvements

- Improved viewer load times by reducing the size of Blackout's javascript files.

Bugfixes

- Fixed an issue where documents that did not have a native file would be missing from the Analyze Project export file.
- Unhide Excel Content mass action progress bar reflects actual progress.
- Fixed an issue where the Blackout PDF and Find & Redact toolbars would overlap with other application icons.
- Fixed an issue where Character scope was reported as "1" instead of "Character" in markup reports.
- Fixed an issue where Tesseract resource files were sometimes unavailable.
- Blackout object fields now filter successfully with any number of markup sets.
- Refactored the matching logic for dtSearch rules with Word and Character scope.
- Fixed an issue where the External markups column was missing in the Client Usage Report.
- Updated the Revert Native Markups mass action window to display the number of Failed reverts.

What's changed in the user guide

The following updates have been made to the user guide as of **May 18th, 2023.**

Markup review pane for locked documents

- Added new section overviewing the markup review pane for locked documents.

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Mass uploading externally redacted documents

- Added new section for Mass Uploading of externally redacted documents.

Adding a Blackout server to a resource pool

- Added new section for adding a Blackout agent server to a resource pool.

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First-time installation

Requirements

- **Important!** - Blackout 4 **requires** Relativity 10.0 or newer
- All browsers supported by Relativity 10.0 and newer
- **Must** be installed from the **Relativity system admin application library**

What to expect

What you'll see

1. Installation should take just a few minutes
2. A new tab named **"Blackout"** has been added to the Relativity admin section
3. A new schema will be added to EDDS called Blackout
    - Blackout tables will be created using this schema in EDDS
4. Several configurations will be added to the Relativity configuration table under the section **Milyli.Blackout**

Installing Blackout

Before you begin

1. Ensure that you have received the Blackout RAP file shared with you from Milyli's secure file sharing platform.
    - If you have not received the RAP, please contact support@milyli.com.
    - The file will be delivered by Milyli's instance of Citrix ShareFile.
2. Blackout **must** be installed through the **Relativity application library**.
    - Ensure that you have access before beginning

How to install Blackout

1. Navigate to the **Application & Scripts** | **Application Library** tab in the Relativity Admin section.
2. Click **Upload Application**.
3. Click **Choose File**.
4. Select the Blackout RAP and click the **Open** button.
5. After the file uploads, click the **Save** button.
6. Next to **Workspaces installed** click the **Install** button.
7. Click the **...** button next to Workspaces.
8. Check any workspaces where Blackout may need to be installed.
9. Click **Ok**.
10. Click the **Save** button.

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Submitting a license request

After successfully installing Blackout, a license request must be generated to retrieve a valid license from Milyli.

1. Navigate to the **Blackout** | **Configuration** tab in the Relativity admin section.
2. Click on **Generate License Request**.
3. Click **Copy License Request**.
4. Submit the license request body to support@milyli.com.
5. Milyli will supply a license key in response.
6. Click on **Apply License**.
7. Paste the license key in the box.
8. Click **Apply Blackout License**.

Pushing Blackout to a workspace

After applying the license Blackout can be installed into any workspace that you require.

Note: It is required to push Blackout to workspaces via the Application Library.

1. Navigate to the **Application & Scripts** | **Application Library** tab in the Relativity Admin section.
2. Filter for the Blackout Application and select it.
3. Next to **Workspaces installed** click the **Install** button.
4. Click the **...** button next to Workspaces.
5. Check any workspaces that Blackout needs to be installed on.
6. Click **Ok**.
7. Click the **Save** button.

Configuration

What to know

- To begin using Blackout after a fresh installation, Blackout will need to be configured with at least one Blackout Relativity agent that is available for **'High Resource'** processing, which includes OCR-ing images and redacting Excel documents.
- The following steps will set up a minimally viable configuration that will ensuring Blackout will continue running.

Note: Full details on configuring and setting up your agents for Blackout is covered in separate section, **Agent Configuration & Set up**.

How to do it

1. Navigate to the **Blackout > Agent Configuration** tab.

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    - This will display a page that has all of the registered and available agent servers on the instance
2. Identify the agent server that you wish to install the Blackout agent to.
3. Select the **'Enabled'** checkbox.
4. Ensure that the **'Is High Resource'** checkbox **is enabled**.
    - Blackout requires at least one agent server to be marked as high resource
    - High resource agent servers will, in addition to all other actions, also perform OCR and Native Spreadsheet markups
5. Click the **'Save Configurations'** button.
6. The 'Blackout Agent' will be deployed to that server and configure it with the default worker threads for that agent.

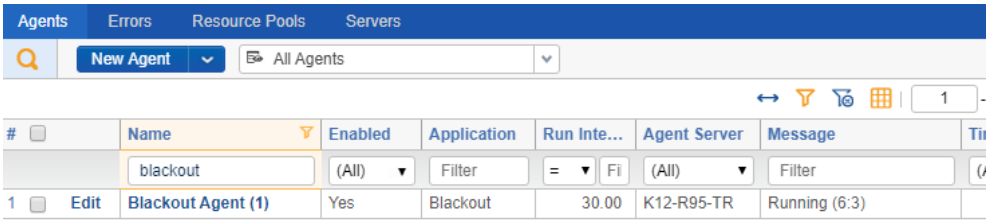
Verify the agent status

What to know

- The low priority worker count will be calculated as (# of CPU threads * 2) and the high priority worker count will be calculated as (# of CPU threads / 2) with a minimum of 1.
- You can validate the status of the agent, confirm its installation, and view the default worker counts it was installed by:

How to do it

1. Navigate to the **Server & Agent Management > Agents** tab.
2. Filter the application column to **'Blackout'**.
3. The Enabled column will be set to **'Yes'** and the Message column will read **'Running (#:#)'**.
    - The first number represents the **low priority workers,** and the second number represents the **high priority workers.**



4. After verification, Blackout will be ready to use.

Adding a Blackout server to a resource pool

What to know

Resource pool aware agents allow system administrators to create dedicated agents for individual clients and workspaces, isolating their Blackout capacity from the rest of the system.

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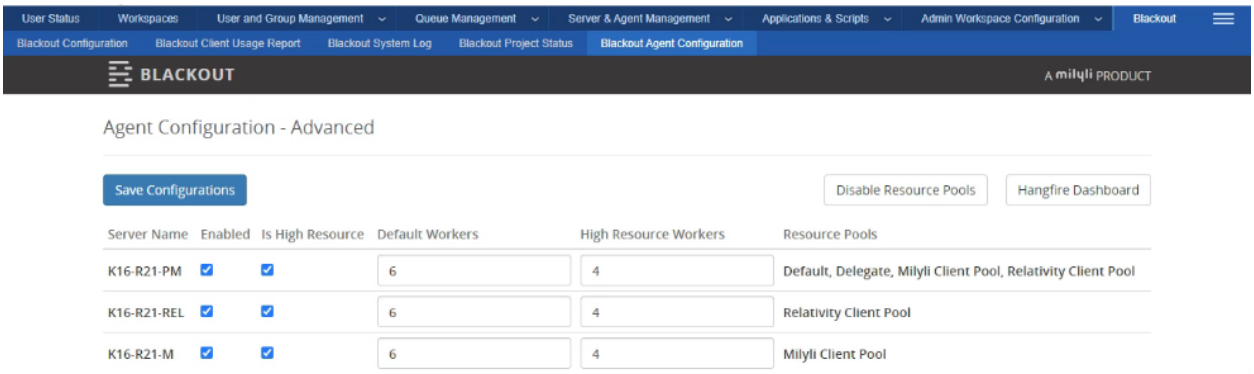
System administrators can easily control this behavior from the Blackout Agent Configuration administrator tab. When the setting is enabled, the tab displays which Resource Pools a server is assigned to. In addition, Blackout Administrators can now view which resource pool a project is running in from the Blackout Project Status tab.

How to do it

1. Navigate to the **Blackout** → **Blackout Agent Configuration** tab.
2. Click on **Enable Resource Pools**.

A new column will appear showing the resource pool the agent is assigned to.



Upgrading Blackout

Requirements

- **Important!** - Blackout 4.0+ requires Relativity 10.0 or newer
- All browsers supported by Relativity 10.0 and newer are supported
- All existing Blackout jobs must be completed, reverted, or stopped prior to beginning the upgrade
- Updates must be performed from the Relativity Application Library

Upgrading from 3.3 or earlier

Blackout 4 will be a major upgrade for Blackout and will introduce system changes upon upgrade. In addition to introducing new functionality, the upgrade will make changes to your existing installation and additional steps may need to be taken immediately after the upgrade.

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If upgrading to Blackout 4+ from Blackout 3.3 or lower, please contact **support@milyli.com**. To learn more about specific changes, please refer to previous versions of this documentation and our release notes.

Upgrading from 3.4

If upgrading from Blackout 3.4, Blackout 4 introduces minimal changes to your system. There are no data migrations or schema changes between Blackout 3.4 and 4.

Workspace tabs

What to know

Adding Blackout to a workspace introduces the Blackout tab and several sub tabs. These tabs provide tools to client admins for working with documents at scale within the workspace.

Tab	Description
Blackout Projects	Create automation projects for working with large numbers of documents.
Blackout External Markups	Download and upload Excel and PDFs that can't easily be worked with in Relativity.
Blackout Audits	Download a CSV of manual actions taken with Blackout against documents in the workspace.
Blackout Reports	Generate CSVs of Relativity document fields at the document or markup scope for a saved search
Blackout Settings	Manage custom words and phrases for use with manual text redactions on spreadsheets
Blackout Manual Failures	View documents with failed markups. If needed, this section may also be used to download a CSV of the failures.
Blackout Analyze	Create a redaction-less project to analyze rules and see what documents may have markups placed

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Who has access?

By default, workspace and system administrators have access to all Blackout sub tabs. When a user has access to a Blackout tab, they can perform all actions available within that tab.

If access is needed for a single user, tab permissions can be granted per tab. For example, when a case admin wants to give a reviewer the ability to work with external markups, they can grant access to just the external markup tab.

Granting tab access

1. In the workspace, navigate to **Workspace Admin** → **Workspace Details**
2. Select **Manage Workspace Permissions**
3. Select **Tab Visibility**
4. Select a group from the dropdown
5. Look for the Blackout tab and grant the group access to the tab

Blackout Analyze

Creating an Analysis

What to know

- Blackout Analyze can be used to Analyze a set of rules against extracted text and provide information on document matches without having to revert redactions.
- Blackout Analyze is supported for Relativity Versions 10.3, Relativity Server 2021 and Relativity Server 2022.

How to do it

1. Navigate to the Blackout Analyze Tab in your Blackout Workspace
2. Click **New Analysis**
3. Enter a **Name** For your Analysis
4. Choose a **Saved Search** of documents for the Analysis to be ran Against
5. **Upload Rules Via CSV File** or Click on the **Add Rule** Button.

Rules Table Fields

Field	Description
Rule Type	A dropdown field to choose Regular Expression, Word/Phrase, or dtSearch

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Label	Name of the Rule
Pattern	• If Word/Phrase was chosen this will be the word or phrase and text that will be searched for across the document set • If Regex is chosen you can enter a Regular Expression to search for patterns such as email addresses, social security numbers, credit card numbers, and any other content that may appear regularly throughout the document • If dtSearch is chosen you can enter the dtSearch syntax to search for patterns based off a dtSearch index created by Blackout.
Rule Source	• Manual will display if rule was created by the Add Rule button. • Name of uploaded CSV file displays if rule was uploaded via CSV.

6. After Entering your rules click **Save** to save the Analysis

Running an Analysis

What to Know

- Re-running a previously ran analysis will override past executions and you will not be able to recover previously ran jobs.

1. After the analysis has been saved click the **Run** button
2. Once the analysis begins running, the analysis will be queued and then start being processed by the Blackout Agent.
3. After the analysis completes, a results page displays information about the completed work and provides a launchpad for further review.

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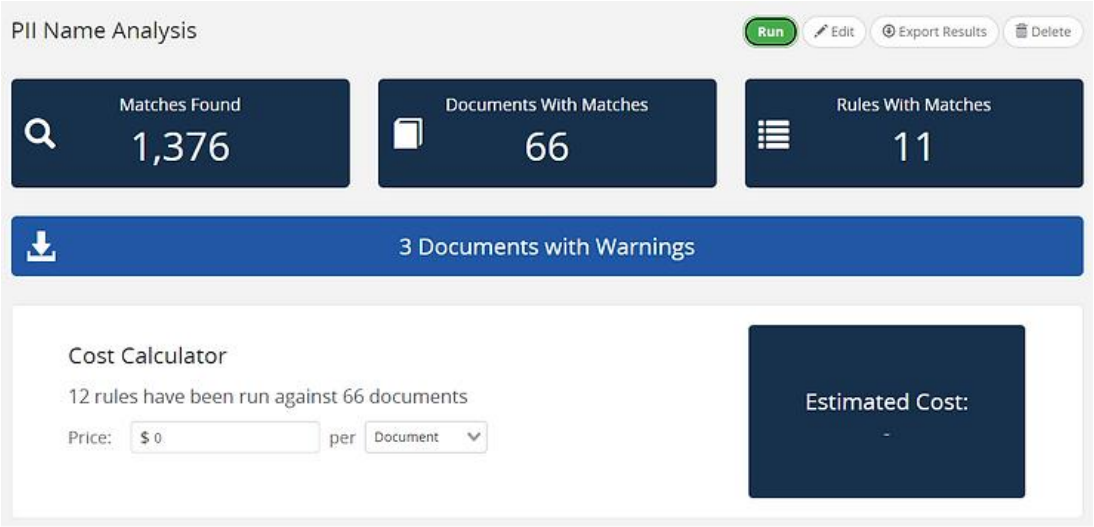
Reviewing Analysis Results



Exporting Results

Clicking **Export Results** with export a CSV of the results providing the following information for every match:

- Document ID
- Rule Type
- Rule Label
- Rule Pattern
- Rule Source
- Document Name
- Document Extension
- Document Size (KB)
- Matched Text
- Match Index

Generate a Saved Search of Documents with Matches

Clicking on the **Documents with Matches** card will create a persistent list and a saved search you can use to review the documents further or create a future Blackout Project.

Cost Calculator

The integrated Cost Calculator lets you calculate an estimate on using blackout on the results of the project by entering a price per document.

Note: The calculator can be hidden by setting the 'ShowAnalyzeCostCalculator' instance setting to False. This Setting can be manually created from the instance setting tab with the below values:

- **Section:** Milyli.Blackout
- **Name:** ShowAnalyzeCostCalculator
- **Value Type:** True/False
- **Default:** true

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Redacting images

Automated image projects

Creating an image project

What to know

- Blackout can redact and highlight images in Relativity in bulk 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.
- Foreign language support is not enabled by default. To enable this setting, review the steps **here**.

How to do it

1. Log into Relativity as a System Administrator or a user who has access to the Blackout tab
2. Navigate to **Blackout > Projects**
3. Click **Create New Project**
4. Select **Image**
5. Fill out the project form using the details below
6. Click **Create**
7. A form will be displayed that is used to define how the project will function when running.

The following fields make up the form:

Field	Description
Project 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.

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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.
Pre OCR and prepare documents for Find & Redact	Generate OCR for a set of images without running rules. This is required for Find & Redact to prepare documents larger than 2 pages. This can also be used for larger image projects to pre-OCR images before running rule-based projects.
Rules	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. ● 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.
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	Defines the behavior of the project when placing a redaction or highlight. ● 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

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	• Character - Will place a markup on selected characters where a match is located
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 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.

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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 will be available to be selected by name on other projects within the same case.
	● Rules do not need to be added to create a project. Rules may be uploaded afterward, or the project can be edited and rules can be added later.
	● Blackout uses the PCRE flavor of regular expression
	  ● 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.

dtSearch	dtSearch includes special characters and other operators that you can use to define search criteria. ● Noise words are not supported in Blackout Projects. Use the W/N operator for proximity matches in these instances. ● By default, all terms in a dtSearch rule will be redacted. The terms should be surrounded with (?<redact>{term}) to redact part of a dtSearch rule. ● To redact more than one term, multiple named groups must be defined.

Uploading rules from a CSV

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

What to know

- Blackout can support up to 100,000 rules being created via CSV.

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- Extra rules mean each doc takes a little longer to process as the image content needs to be checked for each rule.

The CSV template and explanation of the columns can be downloaded from the **Milyli Support Center**.

How to do it

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 rules have been uploaded.

Running an image project

What to know

- 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 it is ready to run.

How to do it

1. After creating the project, click the **Run** button.
2. Once the project begins running, the project will be queued and then start being processed by the Blackout Agent.

While the project is running

While the project is running, the items below will be displayed.

Message	Description
Documents prepared	The number of documents that have been distributed to the system as tasks for markup review

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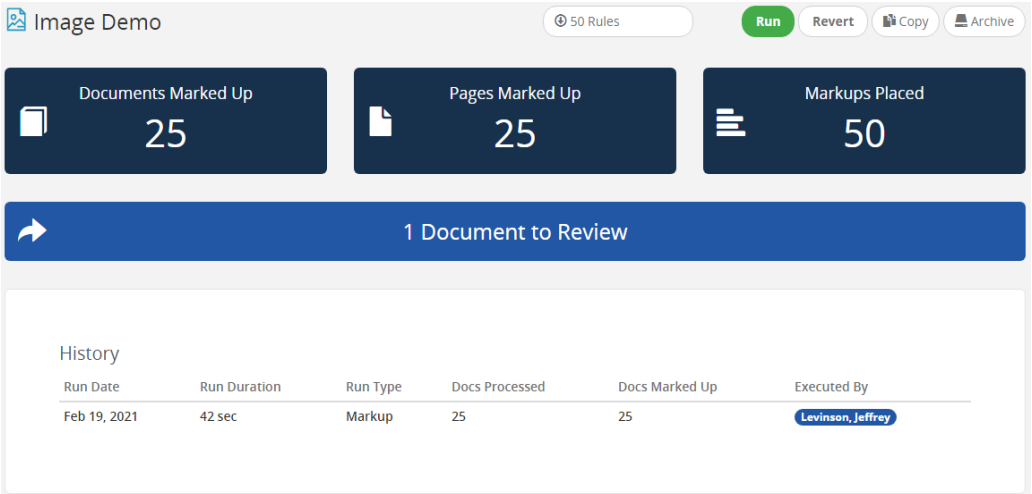
Documents completed	The number of documents that have completed markup review, which can result in markups being placed if there are rules matches
Progress bar	Displays the number of actions completed for preparation and review. ● The light blue color represents document preparation, and the dark blue 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.



When the project is completed

When the project completes, the items below will be displayed.

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Message	Description
Documents marked up	The total number of documents that have had markups placed on them by Blackout using the rules from this run. ● Clicking this button will navigate to a saved search of all the documents that have been marked up.
Pages marked up	The total number of pages for each marked up document that have had markups placed on them. ● Clicking this button will navigate to a saved search of all the documents that have been marked up.
Markups placed	The total number of markups that have been placed, both redaction and highlight, by Blackout using the rules from this run. ● Clicking this button will navigate to a saved search of all the documents that have been marked up.
Documents to review	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. ● 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. ● Clicking this button will navigate to a saved search of the documents requiring review.
Documents with warnings	The number of documents that encounter a non-project breaking warning. ● Clicking this button will download a CSV of the document warnings that include 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. Typical reasons for warnings include missing images or failed OCR.
History	● Projects are 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.

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Reverting an image project

What to know

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

How to do it

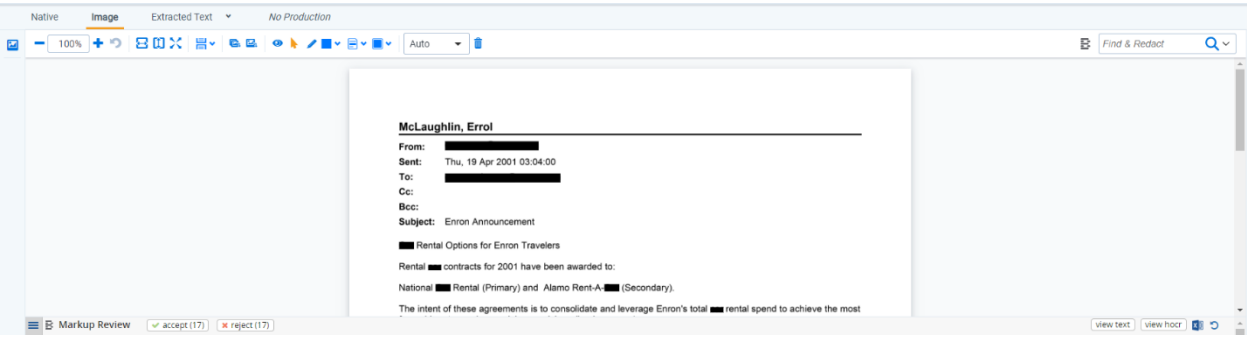
1. From the project view screen, click the Revert button
2. A dialogue will appear; confirm reverting the project
3. The project will be queued
4. The Blackout Agents will pick it up and begin reverting the documents marked up by the project
5. A progress bar will display how many documents have been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

Find & Redact

Executing Find & Redact

What to know

- Images now contain a Blackout Find & Redact search box in the top right corner in Blackout 4.7 and above.
- Find & Redact respects existing Relativity Redaction privileges and can place any type of image redaction.
- Images over 2 pages must be OCR'd via a Blackout Image Project before Find and Redact is available to reviewers.



How to do it

1. Open an imaged document.
2. Select the redaction type or highlight to place.

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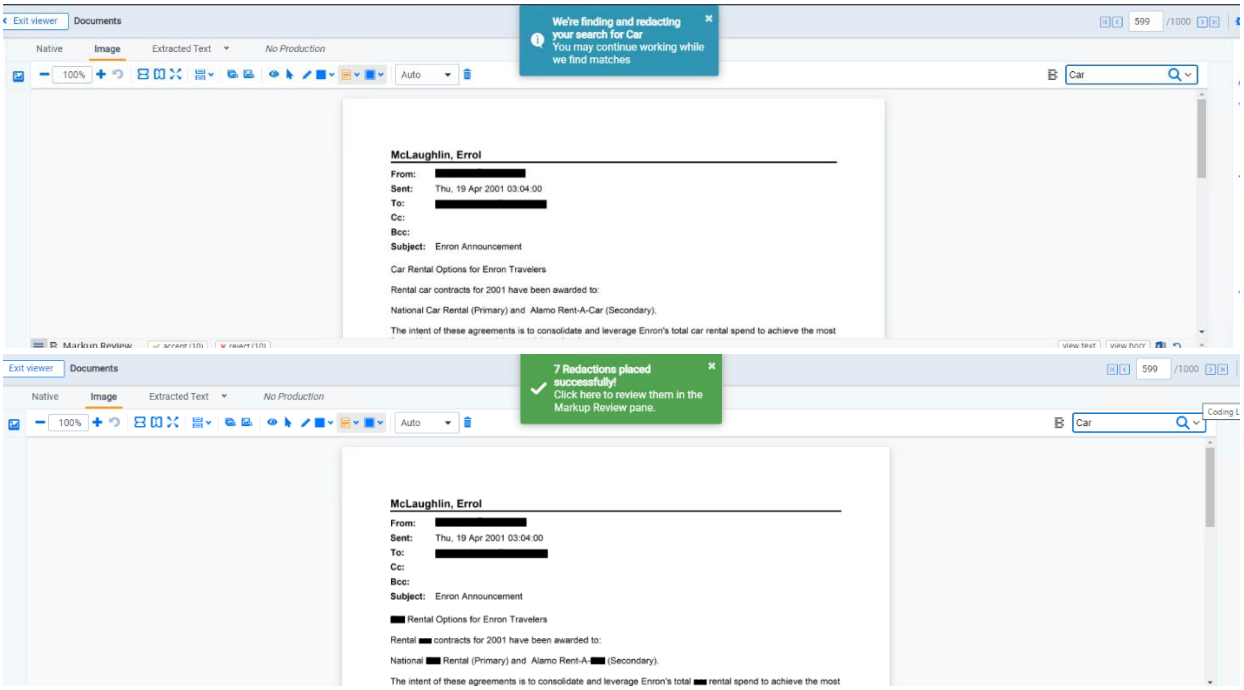
3. In the Find & Redact search bar, type the term or choose a Preconfigured Search Rule from the drop down to redact the document.
4. A message will appear while the redaction is processing. A green success message will appear when the redactions have been placed



Find & Redact Markup Review

Once redactions have been placed, they can be accepted or rejected through the Markup Review pane. The rule column will populate with the term or Preconfigured Search Rule that was selected in the Find and Redact search bar.

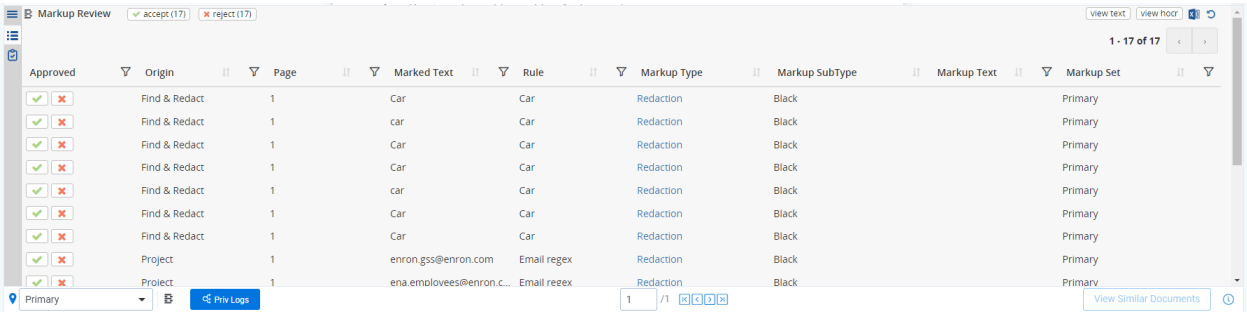


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Image quality control

The Blackout Markup Review Pane

What to know

- Once Blackout processes a set of documents, the reviewer can then use the Blackout Markup Review Pane button to review the applied redactions and highlights from within the Relativity viewer.
- 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, and a document has markups, the document navigation bar will appear below the viewer with the Blackout Markup Review Pane button now visible.

Using the Blackout Markup Review Pane

What to know

- The Blackout Markup Review Pane will show all markups on the document, including those created both by Blackout and those that were placed manually.
- Markups from all markup sets will appear in the Blackout Markup Review Pane.

How to do it

1. Choose which markup set should be reviewed from the dropdown in the Blackout Markup Review Pane.
2. The columns in the Blackout Markup Review Pane will show the information below about each markup.

Column Name	Description
Approved	For all markups created by Blackout, there will be an Accept button and a Reject button
Origin	This column shows how the markup was created
Page	This column indicates on which page the markup appears

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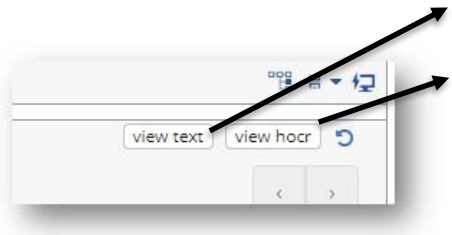
Marked Text	This column shows the text that is hidden by the markup
Rule	This column shows the rule used to create the markup
Markup Type	This column indicates the type of markup applied - redaction or highlight
Markup Subtype	This column indicates the subtype – such as black box, cross, text, or the 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

View Text and View hocr Buttons



View text: shows the data for the current images extracted text
View hocr: shows the data that was collected on the current documents last OCR

These buttons can be used to observe both and see why there may be mismatches between the HOCR and Extracted Text, as the processes/systems that create both are different.

Accepting & rejecting markups

What to know

- After a Blackout job processes the document set, all 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 Review Pane, using the Accept or Reject buttons.

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What to consider

- If a markup is accepted, that markup is kept within the document.
- If a markup is rejected, 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 Review Pane 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.

The Blackout - Has Unresolved Markups field

What to know

- 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 is useful in determining which documents have been processed by Blackout, as well as which documents have unresolved redactions or highlights.

Reviewing images flagged for redaction

Reviewing images

What to know

- If a 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.
- If 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.

How to do it

1. From the project complete page, the number of documents that need review will be indicated on the dashboard.
2. Click on the **Documents to Review** button.

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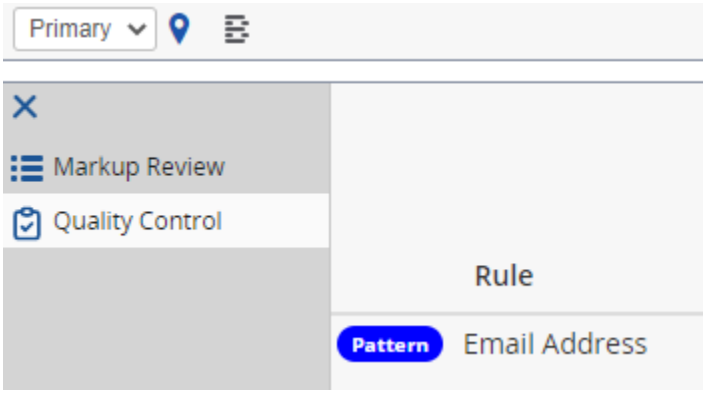
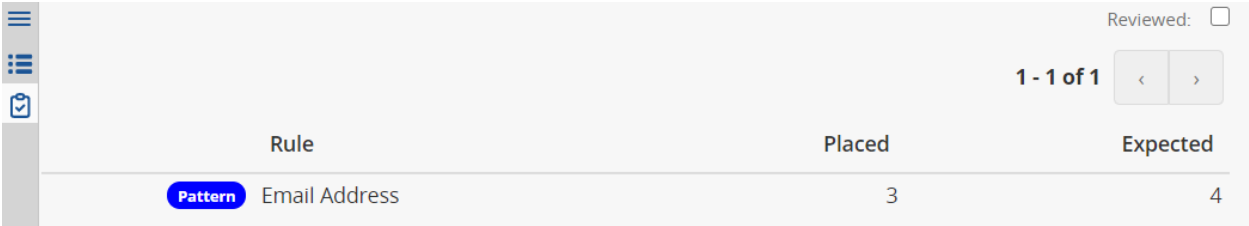
3. This will navigate to a saved search containing the documents that need to be reviewed.
4. Click on a document in the document list.
5. Switch to the **image viewer.**
6. In the bottom left of the viewer, next to the markup set selection, click on the Blackout Markup Review Pane button.

7. Open the Markup Review Card sub-menu by clicking the button. Then choose **Quality Control.**



What else to consider

- 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.



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

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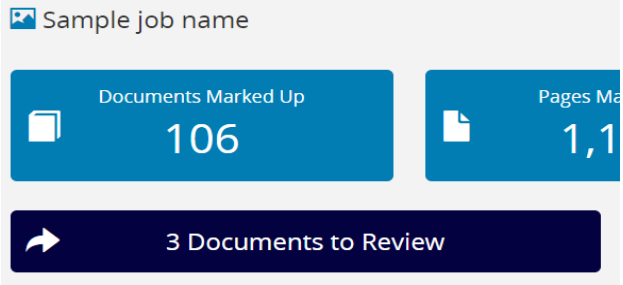

Image template projects

Setting up an image template project

What to know

- An image template project can be used to propagate all the markups from the images of a document to all 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 each document.
- Creating a template project is like creating image and spreadsheet projects.

How to do it

1. Navigate to the **Blackout > Projects** tab.
2. Click the **Create New Project** button.
3. Choose **Image Template Project**.
4. A form will be displayed to set up the project.
5. Input the project name to quickly identify the template project.
6. Select the saved search that contains the documents that should have the template markups propagated from.
7. Select the markup set that the markups will be created on.
8. Input the control number that contains the markups that should be propagated to the documents in the saved search.
9. Click the **Create** button.
10. The project run page will be displayed.

Running image template projects

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

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2. The project will be queued, like other project types. While the project is running, details about progress will be displayed.
3. After the project completes, results will be displayed with details about the completed project.

Results described

Name	Description
Documents marked up	The total number of documents that have had markups placed on them by Blackout using the rules from this run. ● Clicking this button will navigate to a saved search of all of the documents that have been marked up.
Pages marked up	The total number of pages for each marked up document that have had markups placed on them. ● Clicking this button will navigate to a saved search of all of the documents that have been marked up.
Markups placed	The total number of markups that have been placed, both redaction and highlight, by Blackout using the rules from this run. ● Clicking this button will navigate to a saved search of all of the documents that have been marked up.
Documents with warnings	The number of documents that encountered a non-project breaking warning. ● Clicking this button will download a CSV of the document warnings that include 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. Typical reasons for warnings include missing images.

Foreign language support

Multi-language support

What to know

- Blackout supports over 100 language packs.
- These language 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.

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- 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.**

Language packs

- 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

What else to consider

- Milyli **does not** provide support for the accuracy of a language pack.
- In some cases, you may have better results running a language pack in isolation, even if English exists on the documents.
- Always test a sample set of documents before running the full set.

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.**

Installing additional language packs

How to do it

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 link above.

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.
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.**

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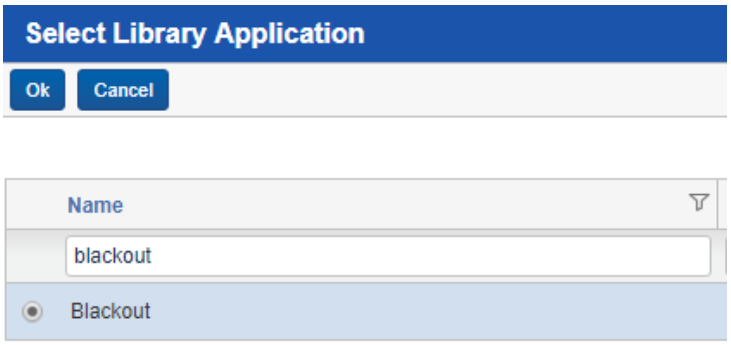
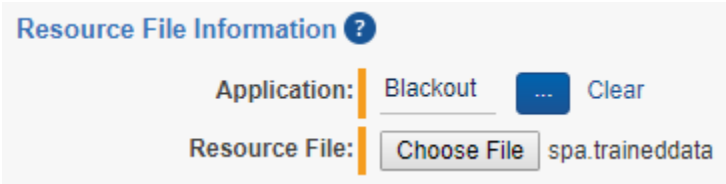


10. Click the **Ok** button.
11. Click the **Choose File** button for the **Resource File** field.
12. Navigate to and select the trained data file that was downloaded.



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

Note: 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 trained data for it.

Enabling language support for image projects

What to know

- 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.

How to do it

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:

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Setting	Description
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 projects.

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

Running non-English language projects

What to know

- 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.

Project example

- In this example, the Spanish language trained data will be used to OCR and review the documents in the saved search.
- 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 join the language codes with the plus (+) symbol.
    - The languages will be prioritized from left to right.
    - In this sample, Spanish matches will be prioritized first, and then English matches.

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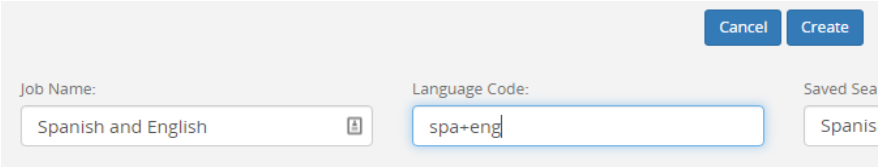

Document language setting in Relativity

- 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.
- This ensures that the extracted text is encoded correctly and can be used for comparison when determining how much QC is needed.

Native redaction preparation

Blackout Permissions

Securing manual markups

- The Manual Redactions experience can be secured by setting workspace permissions
- By default, only system administrators have permission to perform manual redactions, highlights, and other actions on PDFs, Spreadsheets, and Images

How to secure markups

1. Log into Relativity as a System Administrator
2. Navigate to the workspace where permissions need to be secured
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 you want to modify
6. Scroll to the section labeled Blackout
7. Pick the required permissions

Permission details

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Permission	Description
Place/Edit Manual Spreadsheet Redaction	Grants the group access to perform the following options on spreadsheets: ● The redaction sub right-click menu ● Ability to redact charts, comments, headers, footers, objects, and sheet names.
Place/Edit Spreadsheet Manual Highlight	Grants the group access to the highlight options in the right-click menu on spreadsheets
Clear Spreadsheet Markups	Grants the group access to the Clear Markup Set button on the Blackout toolbar at the bottom of the viewer
View Image Quality Control Panel	Grants the group access to view the image Quality Control Menu
Accept/Reject Spreadsheet Quality Control Entries	Grants the group access to the Accept and Reject buttons on the Blackout Quality Control associated items pane for spreadsheets
Input Custom Spreadsheet Redaction Text	Grants the group access to the option for supplying their own custom text when placing a Text Redaction in spreadsheets
Place/Edit Manual PDF Redaction	Grants the group access to perform the following actions on PDFs: • Drawing redactions with the top Blackout toolbar • Redacting annotations and attachments with the PDF markup reviewer bottom pane • Toggle visibility on the top redaction toolbar • Accept and reject markups on the PDF markup reviewer bottom pane
Place/Edit Manual PDF Highlight	Grants the group access to draw highlights in PDFs with the top Blackout toolbar
Clear PDF Markups	Grants the group access to the Clear Markup Set button on the Blackout toolbar at the bottom of the viewer in PDFs

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Accept/Reject PDF Quality Control Entries	Grants the group access to the Accept and Reject buttons on the Blackout Quality Control associated items pane for PDFs
Accept/Reject Image Quality Control Entries	Grants the group access to the Accept and Reject buttons on the Blackout Quality Control associated items pane for Images
Blackout Analyze	Hide or show the Blackout Analyze tab

Securing mass actions

Mass actions

- Several mass actions exist to help streamline or prepare documents for review.
- These can be secured using the built-in Relativity permission tooling.

Mass action	Description
Unhide Excel Content	Grants the user access to unhide hidden content on multiple documents at a time. This will also perform the Blackout document preparation step on the documents, allowing the documents to be marked-up immediately, without the need to designate the markup set first.
Revert Native Redactions	Grants the user access to revert marked-up documents back to the original pristine native. Reverts markups on the selected markup set.
Convert Spreadsheet Markups	Provides tooling for converting markups on excel documents from one type to another across a set of documents.

How to do it

1. Log into Relativity as a System Administrator.
2. Navigate to the workspace where permissions need to be set.
3. Navigate to **Workspace Admin** → **Workspace Details.**
4. Click on **Other Settings**.

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5. Select a group from the **Select a Group** dropdown.
6. Grant access to the Blackout mass actions detailed above.

Native markup sets

What to know

- Blackout shares the Relativity Markup Set for the current workspace
- Each new markup set that is added to the workspace will be available for use with Blackout native redactions
- Files may be marked up in different ways or by different parties using markup sets, just like with Relativity image markups
- When creating an automated spreadsheet or PDF project, all markup sets are displayed

Adding new markup sets

To make a new markup set available for use in Blackout, follow these steps.

1. Log into Relativity as a System or Case Administrator
2. Navigate to the workspace where multiple markup sets are needed
3. Navigate to **Case Admin** → **Markup Sets**
4. Select **New Markup Set**
5. Input a Name, Order, and Redaction Text
    - Redaction text will serve as the default text for all manual PDF text redactions
6. Click **Save**
    - New markup sets will be immediately available for use with Blackout

Switching markup sets

- Blackout displays markups based on the selected markup set at the bottom left of the viewer
- When navigating between documents, the active markup set is remembered on a user-by-user basis and selected automatically
- The 'None' markup set will always display the original document and cannot have markups added to it
- Picking another markup set from the dropdown will swap the displayed markups to the selected markup set
- If there is only one markup set in the workspace, then only None and that markup set will be available for selection
- Only the markup sets that the user has permission to will be displayed

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Multiple markup sets

- Each user can view the markups for any markup set simultaneously
- If multiple users navigate to the same document and pick different markup sets, they will both be presented with a copy of the document and can place redactions and highlights.
- Both sets of user markups will be saved and retained automatically.

Securing markup sets

- Blackout automatically respects the security of a markup set.
- If a user is restricted from a markup set, Blackout will prevent them from viewing the markup set, placing new markups, or modifying existing markups for that markup set.

How to secure markup sets

1. Log into Relativity as a System or Case Administrator
2. Navigate to the workspace where multiple markup sets are needed
3. Navigate to **Case Admin** → **Markup Sets**
4. **Click the Lock icon** to the left of the markup set to be secured
5. Click **Overwrite Inherited Security** to switch it to 'On'
6. Click **Add/Remove Groups** button
    - By default, all groups that have access to the workspace will be displayed here
7. Remove the group that should not have access to the markup set
8. Click the **Save** button
9. Click the **Close** button
    - The Lock icon will become locked
    - After making this change, members of the group will no longer see the option to select that markup set.

Deleting markup sets

- After a markup has been placed on a markup set for a PDF document, the markup set becomes associated with several Blackout multi-object fields based on the type of markup.
- This includes the fields that can be used to search for external markups, manual markups, and automated markups by markup set.
- Attempting to delete the markup set will result in an error message, letting the user know the action can't be completed.
- In order to delete the markup set, all markups placed on PDF documents associated with the markup set to be deleted must be removed

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    - This can be accomplished by using the revert markup mass actions on all documents associated with that markup set.

Marked up file download

- Downloading the PDF from Relativity will always download the original native
- To download a redacted copy of the native, the user must click the Download Marked Up File button
- For larger PDFs, the file may take a few moments to download as markups are being burned-in on the fly

How to download the file

1. Navigate to the document in the Relativity viewer
2. Select the markup set to preview
3. Click the **Download Marked Up File** button

Redacting Excel

Excel version support

Blackout supports the following Excel 95 file types and newer: Excel 95, Excel 95/97, Excel 97, and Excel 2003. These have a different file structure compared to modern Excel files but are supported by Blackout.

- All XLS
- XLSX
- XLSM
- XLSB
- CSV files
- TSV files

Blackout does not support the following versions and file types:

- Excel 5.0 and Excels created in earlier versions of Excel

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Manually marking up documents

Document preparation

Before you begin

- Prior to review, we suggest executing the Unhide Excel Content mass action on the documents set for review.
- If skipped, Blackout will still prepare the Excel file when a reviewer places the first markup. The **Unhide Excel Content** button has been removed from the Document Viewer as this will now be an automatic action if the document is not prepared beforehand.
- Doing this will identify document preparation issues prior to review and avoid reviewers running into preparation errors.

The document preparation step will:

- Replace all calculated fields with their original calculated values
- Replace all pivot tables with their original calculated values
- Remove all change-history from documents
- Unhide all hidden and very-hidden rows, columns, and sheets
- Unmerge all merged cells

This step ensures that:

- Data is not lost after content is removed from document
- That all data is visible to reviewers
- That content can't be restored after markups are placed

What to know

- When the first markup is placed on an Excel, Blackout will automatically prepare the Excel file for markups if not completed prior to review.
- Document preparation is now done behind the scenes and users no longer see or must wait for the document preparation message.
- This is done so documents can be safely marked up to prevent historical information from being restored.

Redactions and highlights

What to know

- Enables users to markup documents directly without taking the file out of Relativity
- Updates are performed live allowing quick review and markup of Excel documents

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- Blackout maintains audits of all actions taken

How to do it

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

Repeat Last Action

- After a Redaction has been placed you may repeat the same redaction in a new cell by opening the right click menu again. You will see a new option appear that will have the name of the previous redaction placed. Clicking this option will place the same type of redaction you did previously in the new cell.
- You can also complete this action with a Keyboard short cut by hitting CTRL+B.

Document Status

- The document status will display in the bottom right corner of the viewer.

- When placing markups, they are queued behind the scenes. The user can continue working as Blackout saves the applied markups without interrupting the end user.

Document Status Descriptions

Status	Description
Applied	When all markups are successfully applied on the document. The Last Saved Time will be displayed.
Processing	Displayed when new markups are drawn on a document and Blackout is applying the markup.
Failed	When Blackout is unable to draw a markup on a document. Additional markups cannot be applied once the document is in a failed state. Reviewers can move to the next document to continue the review. Failed markups will be saved and can be retried or deleted.

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	Refer to the Manual Excel troubleshooting page regarding details for troubleshooting and resolving failed markups.

What else to consider

- 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.

CSV Redactions

As CSV files are text files, they are restricted to having only text redaction placed on them. CSVs can be included in spreadsheet projects either alone or alongside Excel files.

Support for manual text redaction has been added but is limited to Relativity Server 2022. Prior to Relativity Server 2022, CSV files are not displayed in the viewer with table styling limiting the ability to identify where the user is clicking within the CSV. As a result, manual redaction is not available for Relativity 10.3 and Relativity Server 2021.

While manual redaction for CSV is not available on the viewer in Relativity 10.3 and Relativity Server 2021, you can redact CSV using Blackout Spreadsheet Projects. CSV redactions will display in the Markup Review Pane when viewing redacted CSVs on the viewer in these versions and can be accepted and rejected.

In addition to project and manual support, we have also added CSV support for external redactions, and propagation projects. All manual failure workflows behave identically to existing spreadsheet workflows for CSVs.

Handling CSV Delimiters and CSV Qualifiers

Blackout provides support for double quote and single quote qualifier characters.

The following delimiters are supported (presented in order of detection priority):

- Comma
- Tab
- Semicolon
- Colon
- Space

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In the event none of the above delimiters are detected, Blackout treats the CSV as a single column CSV. Blackout will provide document warnings indicating which CSVs failed to match on a delimiter to assist with identifying which documents may require manual review.

Text Redactions

What to know

Blackout provides two methods for placing text redactions:

1. Replacing the entire cell content with different text
2. 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 case administrator sets the default text
    - 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
- After placing a text redaction, a placeholder will be displayed so the page does not refresh
- When the viewer is refreshed, the redaction will be displayed within the cell
- When inputting custom text, it is saved for each user individually so it can be used again
- When redacting multiple cells, an off-white highlight will be displayed in the corners of the selected area
- Specific cell content can also be redacted

Changing text redaction options

Blackout Administrators have access to the Blackout settings within the workspace.

- On the **Blackout Settings** tab, additional terms that a reviewer can select from when placing a text redaction, and the default redaction text, can be defined.

How to do it

1. Log into the workspace as a System Administrator or a user with access to the Blackout Settings tab.
2. Navigate to **Blackout** → **Settings.**
3. To change the default text for the workspace, update the **Default Redaction Text** field.

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4. The new default text will be saved automatically.
    - This is represented by a small green checkbox
5. To add new custom text that will display in the dropdown for reviewers, type in the new text and click **'Add'.**
6. To **remove** an option, **click the red X**.

What else to consider

- Custom options are a great way to ensure that users utilize the redaction text needed for a case without typing them in every time.
- 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 simplifies text redactions for end users.

Cell content redactions

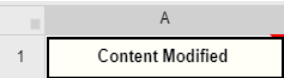
What to know

Cell Content may alter the styling of the cell. Alterations are determined by multiple factors:

- Background colors, patterns and borders will be maintained
- Font, size, and font color will be maintained, however, only the very first font and color can be kept
    - For example, a cell has the first word as [Arial, Bold, 12px, and Red] and the second word as [Courier, Italic, 14px, and Blue], the [Arial, Bold, 12px, and Red] style will be kept for all text inside the cell
    - Both styles can't currently be kept after modification, so the first style is retained

How to redact cell content

1. Select the cell with 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.
4. Add the desired redaction text.
5. Click Save.
6. After placing a cell content redaction, a placeholder will be displayed so the page does not refresh:



Note: The placeholder is added to increase performance and reduce the number of refreshes occurring during the redaction process as refreshing can cause increased resource usage.

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Reverting markups

What to know

- Redacting documents with Blackout directly manipulates a copy of the original document and places those markups directly on the document.
- Reverting markups manually is a critical component of both reviewing markups made by automated projects and correcting mistakes made when redacting a document.

How to do it

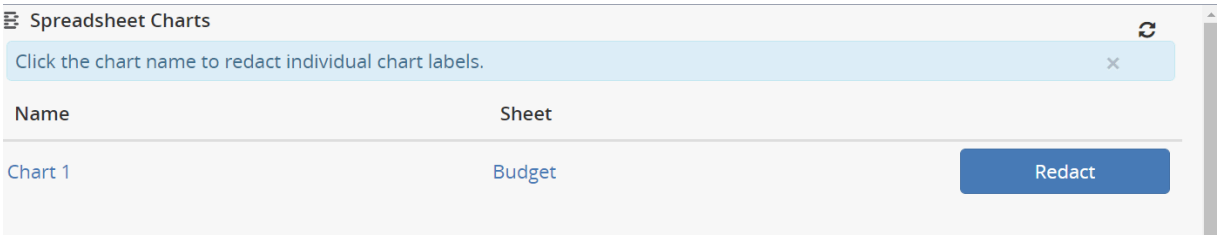
1. Select the cells that will be reverted.
2. **Right-click** to open the Blackout menu and select **Revert Markup**.
3. A message will be displayed that the markup is being reverted.
4. After a brief delay, the document will reload, and markups will be reverted to the original data.

Using the Blackout Markup Review Pane

What to know

- **As of Blackout 4.1, the Blackout Native Redaction Assistant has been moved into the Blackout Markup Review Pane.**
- All options for redacting charts, comments, headers & footers, objects, and sheet names are now located within the Blackout Markup Review Pane, as shown below.
- The Blackout Markup Review Pane remembers the state the user was on and will automatically display if the user had the card open. For example, if a user is redacting comments and navigates to the next document, the Blackout Markup Review Pane will still be open to the comments menu.
- When using the Blackout Markup Review Pane to redact charts and objects, **only the Black markup type is available.**

Redacting Charts



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What to know

There are two different ways to redact charts with Blackout:

1. Replace the full chart with a black box redaction
2. Redact the static text labels

How to do it

1. In the lower left corner of the viewer, locate and open the **Blackout Markup Review Pane** using the button.
2. Click the button to open the sub-menu.
3. Click the **Charts** menu item.
4. To redact full charts, click **Redact.**
   - Clicking on the sheet name will navigate to the sheet where the chart resides
   - To reduce the amount of reloading, the redaction won't appear on the document right away
   - Click **Unredact** to remove the full chart redaction.
5. To redact chart labels, simply click the name of the chart and choose the values to redact.

Redacting Comments

What to know

- 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**.
- Comments can be redacted en-masse using **Spreadsheet Projects.**
- Blackout does not currently support the redaction of threaded comments.

How to do it

1. In the lower left corner of the viewer, locate and open t**he Blackout Markup Review Pane** using the button.
2. Click the button to open the sub-menu.
3. Click the **Comments** menu item.
   - Clicking on the cell location will 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 desired redaction text.

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Note: Reject the markup entry from the Markup Review menu item to remove the redaction.

Redacting headers and footers

What to know

- Headers and footers are displayed in a single list including additional details like Sheet Name, Location, Original Text, and Redacted Text.
- Headers and footers can appear in 3 different locations:
    a. The default header and footer
    b. Even page headers and footers
    c. Odd page headers and footers
- The only way to identify headers and footers within Relativity is with Blackout.

How to do it

1. In the lower left corner of the viewer, locate and open the **Blackout Markup Review Pane** using the button.
2. Click the button to open the sub-menu.
3. Click the **Headers and Footers** menu item.
4. Click **Redact** to redact a header or footer in the list.
5. Add the desired redaction text in the text editor.
6. The text on the document will be redacted but **will not be** reflected in the viewer. To view the redaction, the marked-up version of the document must be downloaded.

    Note: Reject the markup entry from the Markup Review menu item to remove the redaction.

Redacting objects

What to know

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
- Objects that are redacted **can only be redacted with the Black markup type**

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How to do it

1. In the lower left corner of the viewer, locate and open the **Blackout Markup Review Pane** using the button.
2. Click the button to open the sub-menu.
3. Click the **Objects** menu item.
4. Click on the sheet name to view the sheet where the object is located.
5. Click **Redact** to redact any object in the list.

Redacting sheet names

What to know

Sheet names have the following restrictions:

- Two sheets may not have the same name
- The name may not exceed 31 characters
- The name may not have the special characters: , /, *, ?, :, [, and]
- The sheet name may not be word 'History'
- Blackout will prepend non-unique redactions with the sheet index (e.g., 2_Redacted).

How to do it

1. In the lower left corner of the viewer, locate and open the **Blackout Markup Review Pane** using the button.
2. Click the button to open the sub-menu.
3. Click the **Sheet Names** menu item.
4. Click **Redact** in the row of the sheet name to redact.
5. Type in the desired redaction text.
6. Click **Redact Sheet Name** to save. Refresh the viewer to see the newly redacted sheet name(s).

Note: Reject the markup entry from the Markup Review menu item to remove the redaction.

Audits

What to know

- Only certain manual markup actions are audited.

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- Relativity does not have a concept of manual native markups; as such, these audits are created and stored in Blackout.

How to do it

1. Log into Relativity as a System Administrator or a user who has access to the Blackout Audits 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.

Automated Excel projects

Mass markups of Excel documents

What to know

- Blackout provides the ability to redact and highlight Excel documents in bulk, utilizing terms, phrases, and regular expressions.
- Excel projects are a configurable way to target specific documents and locate content that must be marked up based on case needs.
- When setting the Word/Phrase rules for the project, either in the project itself or through a CSV template, Wildcards and dtSearch **are not** supported.
- If redact all headers and footers, redact all objects, or redact all comments is selected, no other rules are needed to run the project. Additionally, when these options are selected, every document in the saved search will be checked and redacted for the selected markup set.
- CSV Support
    - CSVs included in a saved search will be processed by Spreadsheet projects using this saved search.
    - Any rules with unsupported markup styles (e.g., white redactions, black redactions) will use the configured fallback text to place a text redaction on the CSV. The fallback text can be modified when creating or editing a project.
    - CSV files do not support native highlights. If a Blackout Spreadsheet Project rule has a markup type of highlight and hits on content within a CSV, the CSV will appear in the document warnings, and remain unmodified.

How to do it

1. Log into Relativity as a System Administrator or a user who has access to the Blackout Projects tab.

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2. Navigate to **Blackout → Projects.**
3. Click **Create New Project.**
4. Select **Spreadsheet.**
5. Fill out the project form using the details below.
6. 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:

Field	Description
Project 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 within a document set. This option is run across all documents within the selected markup set. ● This option is useful when redacting a set of documents with sensitive information in the header and footer that must be redacted on every document. **Note:** This option can be selected and run without the need to add any other rules to the project.
Redact all Excel objects	Selecting this option will place a black box redaction in front of all objects on the document set. This option is run across all documents within the selected markup set. **Note:** This option can be selected and run without the need to add any other rules to the project.
Redact all Comments	Selecting this option will remove all comments in full or, if 'Replace comment text' is selected, will replace the comments with desired redaction text. This option is run across all documents within the selected markup set.

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	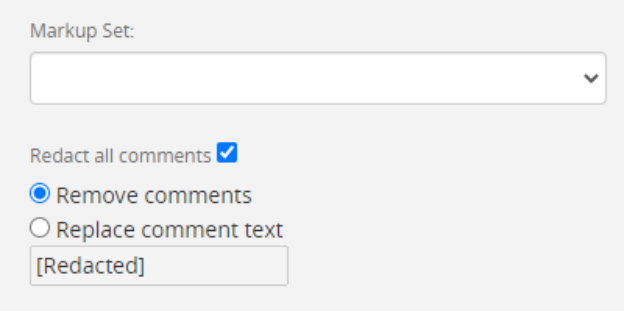 **Note:** This option can be selected and run without the need to add any other rules to the project.
Ignore certain rows or columns	When selecting this option, two additional fields are displayed where a comma-separated list of rows and columns can be identified that will remain unredacted throughout the project, 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	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. ● 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.
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.

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Markup Scope	Defines the behavior of the project when placing a redaction, highlight, or inverse redaction. ● 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 ● Character - Will place a markup on selected characters where a match is located ○ The Character scope option is not available for Inverse redaction types.
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	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 will be available to be selected by name on other projects within the same case. ● Rules do not need to be added to create a project. Rules may 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.

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dtSearch	dtSearch includes special characters and other operators that you can use to define search criteria. • Noise words are not supported in Blackout Projects. Use the W/N operator for proximity matches in these instances. • By default, all terms in a dtSearch rule will be redacted. The terms should be surrounded with (?<redact>{term}) to redact part of a dtSearch rule. • To redact more than one term, multiple named groups must be defined. • dtSearch rules automatically use cross-cell matching when identifying terms. If a rule has text that would span multiple cells, it will redact all cells containing parts of the matched term. Word/Phrase and regex rules continue to ignore cross-cell matches.

Uploading rules from a CSV

What to know

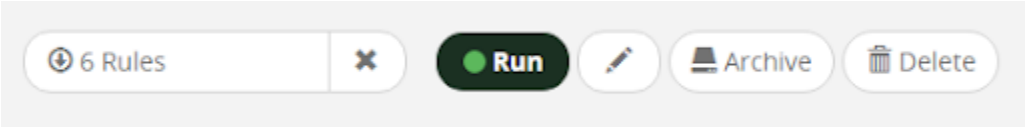
- After successfully creating the spreadsheet project, rules can be added via uploading a CSV template.
- Blackout can support up to 100,000 rules being created via CSV.
- Extra rules mean each doc takes a little longer to process as the Excel content needs to be checked for each rule.

The CSV template and explanation of the columns can be downloaded from the **Milyli Support Center.**

How to do it

1. From the project view screen, click the **Upload rules CSV** button.
2. Navigate to the completed CSV.
3. Click the upload icon.

Note: If the CSV file is valid, the rules will be created, and the button will display how many rules are in the project.



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Running a Spreadsheet project

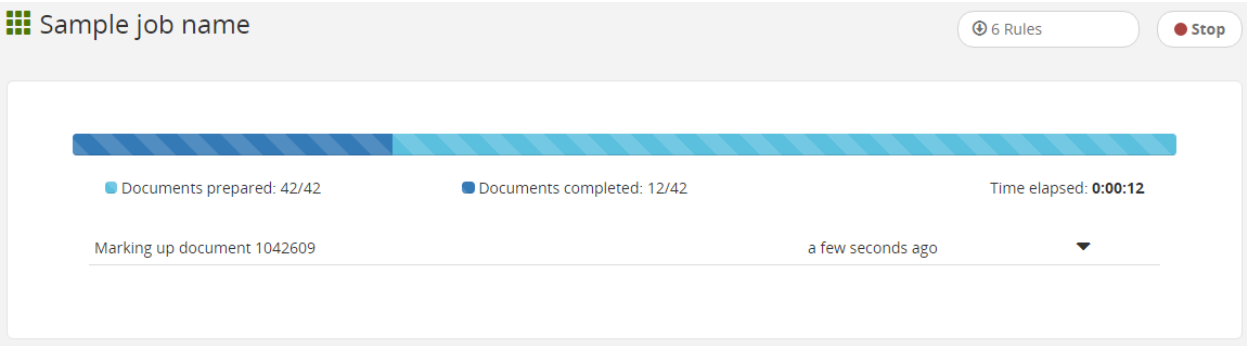
What to know

- 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 it is ready to run.

How to do it

1. After creating the project, click the **Run** button.
2. Once the project begins running, the project will be queued and then start being processed by Blackout.
3. After the project completes, a results page displays information about the completed work and provides a launchpad for further quality review.

While the project is running:



Status	Description
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.

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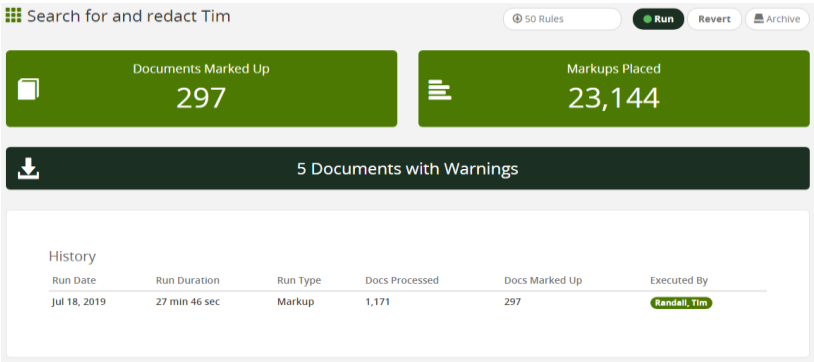
	• The light blue color represents document preparation, and the dark blue represents markup review.
Time elapsed	The total time the project has processed
Current activity	The current activities that the Blackout Worker Agents are performing which include preparation, reviewing, and marking up. • The 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.

When the project is completed:



Title	Description
Documents marked up	The total number of documents that have had markups placed on them by Blackout using the rules from this run. • Clicking this button will navigate to a saved search of all the documents that have been marked up.
Markups placed	The total number of markups that have been placed, both redaction and highlight, by Blackout using the rules from this run. • Clicking this button will navigate to a saved search of all the documents that have been marked up.

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Documents with warnings	The number of documents that encountered a non-project breaking warning. ● 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. ● Typical reasons for warnings include password-protected documents without a password in the password bank, corrupt files, and Excel 95 and earlier Excels.
History	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.

Reverting a spreadsheet project

What to know

- 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.

How to do it

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 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.

Excel quality control

The Blackout Markup Review Pane

What to know

- After an Excel has been marked up with Blackout, it will tag the Blackout document yes/no field, **Blackout - Has Native Markups.**

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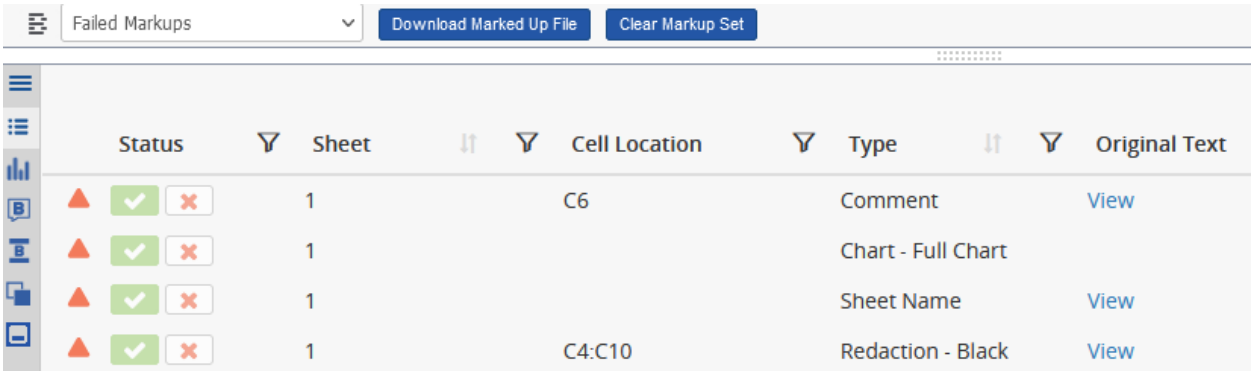
- Documents can also be identified with the other Blackout fields and by a specific markup set. This is covered in further detail under the **Search** section.
- Creating a Relativity search using the field will result in a list of Excel documents that have markups.
- The Blackout Markup Review Pane will show all markups on the document, including those created by Blackout or placed manually.
- Markups shown within the Markup Review will only be those applicable to the selected markup set.

What to know with failed markups

- The document cannot be modified further when a failed markup occurs. Failed markups must be resolved or deleted to continue QC or applying new markups to a document. A warning message will appear if trying to apply new markups when in a failed state.
- Markups cannot be approved or rejected if the document is in a failed state.
- Failed markups will display in the QC pane with a warning icon.
- Administrators will be alerted when a markup fails.
- Refer to the **Manual Excel troubleshooting** page for additional information regarding troubleshooting manual Excel errors.



How to do it

1. 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 Markup Review card located at the bottom left of the viewer.

2. From the bottom left of the viewer, click the **Blackout Markup Review** button.

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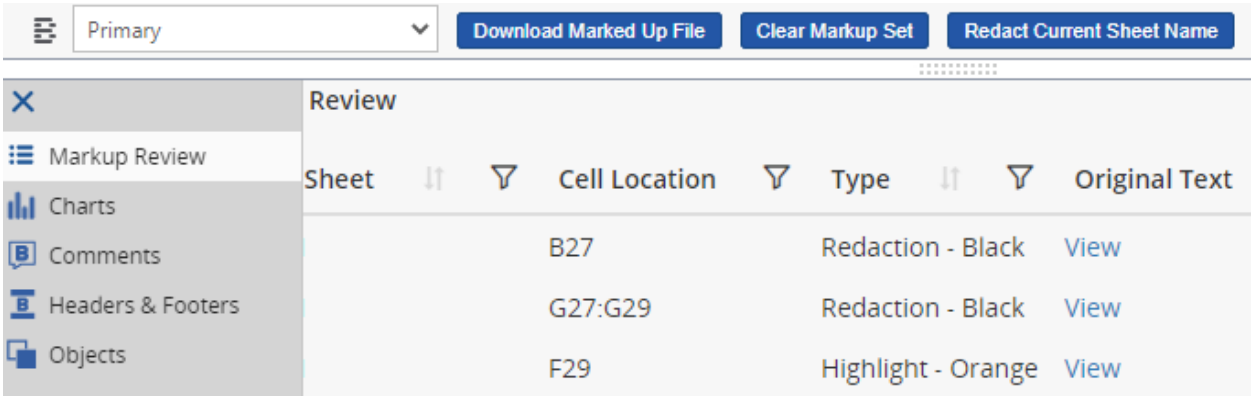
3. After opening the Blackout Markup Review Pane, ensure the native markup set that needs review has been selected.

4. Click the icon and choose **'Markup Review'.**



The Markup Review section will now be opened allowing for quality control of the document.

Blackout Markup Review Pane descriptions:

Title	Description
Approved	The approved column exists in three states. Not selected, approved, or rejected. • If neither is selected, then the markup will persist and not be impacted. • 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. • If rejected is selected, then the markup will be removed from the document.
Sheet	Indicates the sheet name where a markup is located.
Type	Indicates the type of markup where a markup that was placed.
Cell Location	Indicates the location that the markup exists, including cell, comment, header & footer, chart, or object. • Clicking on the row will navigate the viewer to the cell location.
Original Text	Clicking this link will display the information that exists under the markups.

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Matched Text	Indicates the text that was matched causing the markup to be placed.
Rule	If a regular expression rule was used to place this markup, the name of that rule is displayed here.

Filtering

The columns within the Markup Review section of the Blackout Markup Review Pane can be filtered allowing for more advanced quality control capabilities. Filtering could be especially useful if, for example, there was a need to accept/reject all a specific markup type or accept/reject all matches on specific matched text.

The columns below can be filtered:

- Approved
- Sheet index
- Cell location
- Markup Type
- Matched Text
- Rule

Additionally, sorting on the sheet, type, matched text, and rule columns is also possible.

What to know

- Each page within the card can hold up to 50 records at a time
- When using the 'accept all' and 'reject all' buttons only the filtered entries will be affected
- The 'Sheet' column can only be filtered using the sheet index at this time
- The 'Type' column can only be filtered by the options in the dropdown (you cannot filter on highlight color for example)
- The Blackout Markup Review Pane remembers the state the user was in and will automatically display if the user had the card open and on the quality control panel.

What else to consider

- **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 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.

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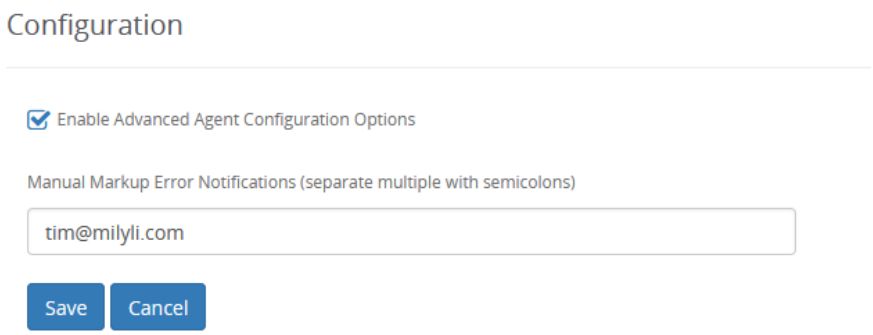
Manual Excel troubleshooting

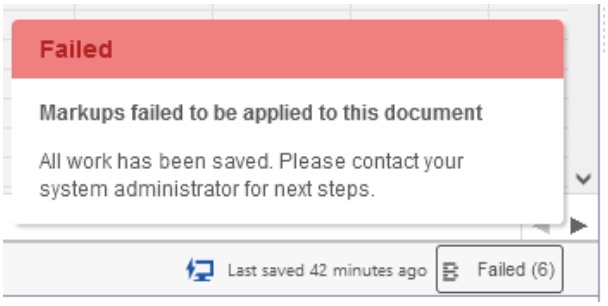
Email Notifications

- Configure an email to receive failure notifications from the Blackout Configuration tab.
- Blackout will send an email to the configured email when manual failures occur during Excel review from any workspace where Blackout is installed. We suggest configuring this with an IT or Lit Support distribution email.
- The Relativity SMTP settings must be properly configured for Blackout to send the email notification.

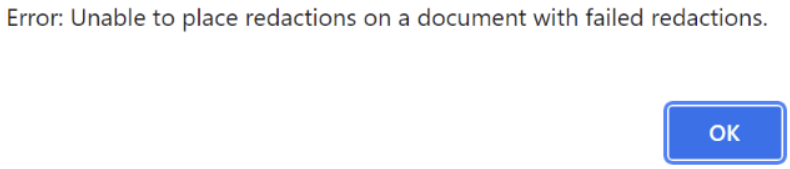


What reviewers see on failed markups

- Blackout displays the current document state in the bottom right corner of the viewer. If a markup fails to apply the user will see a Failed status message.



- A message will display to the user when applying new markups to a document in a failed state.



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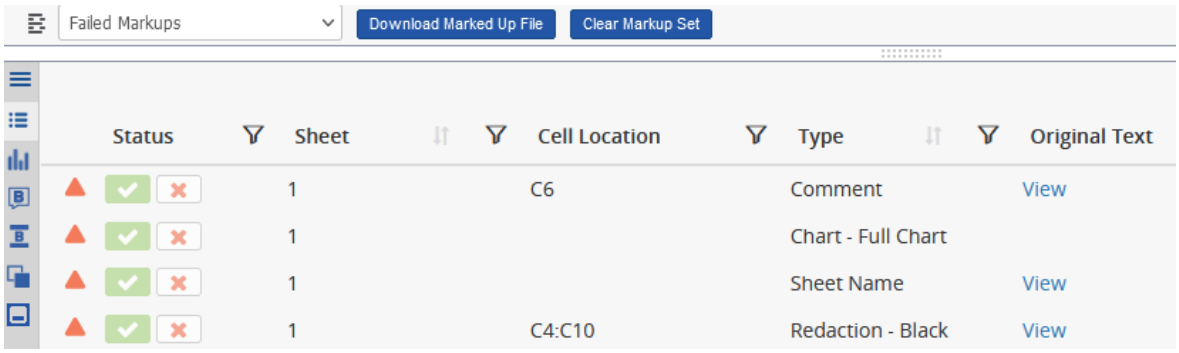
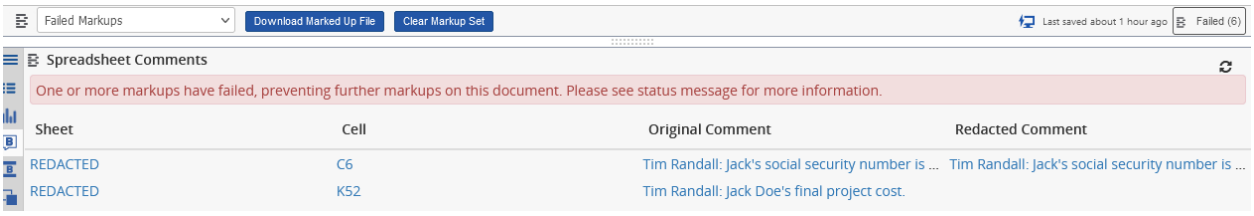
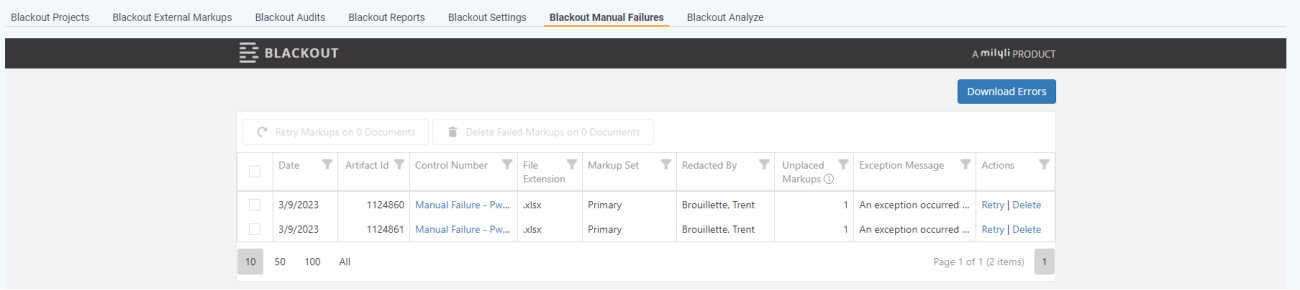
- Reviewers will see a warning icon next to each failed markup in the Markup Review menu item of the Blackout Markup Review Pane.



- A markup failure message will display on the additional menu items in the Blackout Markup Review Pane that the document contains failed markups and is unable to be modified further until the failed markups are resolved.



Manual Failures Tab



Retry or delete failed markups

- Manual failures tab will display a list of all documents with at least one failed markup.
- Click the **Retry** button to try re-applying the failed markups without requiring the reviewer to re-do that work.
- Click the checkbox next to each document record and click the **Retry Markups on Documents** to retry multiple documents at once.

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Retry Markups on 1 Document | Delete Failed Markups on 1 Document

Date	Artifact Id	Control Number	File Extension	Markup Set	Redacted By	Unplaced Markups	Exception Message	Actions
3/9/2023	1124860	Manual Failure - Pw...	.xlsx	Primary	Brouillette, Trent	1	An exception occurred ...	Retry | Delete
3/9/2023	1124861	Manual Failure - Pw...	.xlsx	Primary	Brouillette, Trent	1	An exception occurred ...	Retry | Delete

10 50 100 All Page 1 of 1 (2 items) 1

- Click **Delete** button to delete the failed markups. This is useful to allow the reviewer to continue applying other markups on the document while diagnosing the cause of the failed markup.
- Click the checkbox next to each document record and then click **Delete Failed Markups** on Document button to delete the failed markups on multiple documents at once.
- Markup failures are specific to each markup set per document.
- Retry can be used even with resolutions such as replacing the native or if a Blackout update is required.

Download errors

- Use the **Download Errors** button to export a list of each failed Manual Excel markup.
- The Markup Id with the earliest timestamp should identify the main markup failure to address. Failures after the earliest timestamp are the additional markups submitted by the reviewer after the initial markup failure occurred.
- Refer to the Markup Type column to determine what type of redactions caused the failure. ie: Sheet Name, Object, or Chart.
- Send this export to Milyli Support. Use this instead of exporting the Blackout System Log unless requested from the support team.

Markup Id	Timestamp	Name	Artifact Id	Control Number	File Extension	Markup Set Id	Markup Type	Redacted By	Exception
5338	3/9/2023 16:24	1124860_1034197	1124860	Manual Failure - Pwd Protected	.xlsx	1034197	DocumentPreparation	Brouillette, Trent	Hangfire.
5339	3/9/2023 16:24	1124861_1034197	1124861	Manual Failure - Pwd Protected Doc 2	.xlsx	1034197	DocumentPreparation	Brouillette, Trent	Hangfire.

Propagating to Duplicates

Blackout can be used to propagate markups on an Excel made with Blackout to duplicate documents across the workspace. This project takes source and destination saved searches and propagates markups based on a duplicate identifier such as MD5 Hash.

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Defining the source documents saved search

What to know

- 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 the destination documents saved search

What to know

- 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.

What else to consider

- If a source document contains a failed markup, the document will be skipped and added to the job errors.
- Rerunning the job after the failed markup is resolved will retry propagation for those documents.

Creating and running a Spreadsheet Propagation project

How to do it

1. Log in to the environment as a system administrator or an account with access to the Blackout tab.
2. Navigate to **Blackout** → **Projects**.

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3. Click **Create New Project**.
4. Click **Spreadsheet Propagation**.
5. Input the **Project Name**.
6. Select the **Duplicate Identifier** document field.
    - 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**.
11. Click **Create**.

Note:
Both the source saved search and destination saved search can be the same if 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**.
    - The project will begin processing documents.
    - While it is running, a progress bar will be displayed.
13. After propagation completes, a results page will be displayed.
14. Clicking on the propagation results link will present a table of the results.

Converting Spreadsheet Markups

The Convert Spreadsheet Markups mass action

What to know

- The **Convert Spreadsheet Markups** mass action can be used to convert markups on Excel documents from one markup type to another.
- Redactions can be converted to highlights or vice versa.
- The source of the markup can be either manual placement or automated projects.
- The Convert Spreadsheet Markups mass action **will only work on Excel documents.**
- Markups in a failed state will still be converted. Retrying failed markups after converting will be applied as the new, converted markup type.
- Character scoped markups cannot be converted to other markup types.

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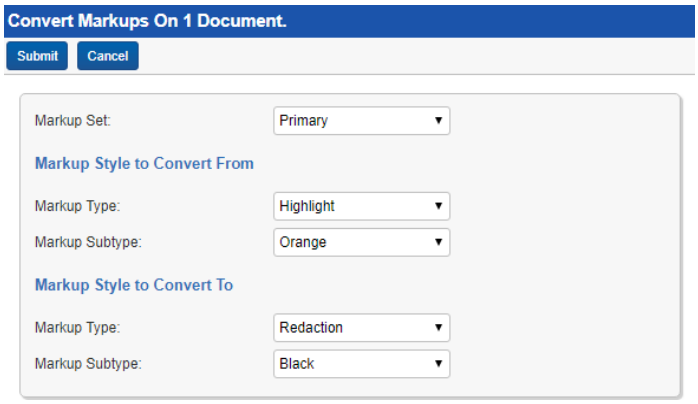
How to do it

- In this example, a document has been highlighted with orange highlights and will be converted to black redactions.

	A	B	C	D	E	F	G
1		Stuff	Things				
2		1	44				
3		2	42				
4		3	40				
5		4	38				
6		5	36				
7		6	34			Sum of Stuff	Sum of Things
8		7	32			351	510

1. From a document list, select the document or documents that the orange highlights should be converted to redactions.
2. Select the Convert Spreadsheet Markups mass action.
3. A mass action form will display requesting information about where and how to perform the operation.



4. Submit the form after selecting the markup types that should be replaced.
    - A message will be displayed, and the run length will depend on the number of documents that are selected for conversion.
    - After successfully running, the document cache will be updated automatically, and the modified document(s) will be displayed.

	A	B	C	D	E	F	G
1		[redacted]					
2		1	44				
3		2	42				
4		3	40				
5		4	38				
6		5	36				
7		6	34			[redacted]	
8		7	32			351	510

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Quality control and re-running projects

What else to consider

The **Convert Spreadsheet Markups** mass action changes the type of the markup in the Blackout database as well as refreshes the document cache with Relativity to ensure the file is properly modified. As a result, **some Blackout behaviors will be modified as well.**

- For Blackout quality control, accepting and rejecting the modified values will **remove and reapply** the converted markup types.
- If reverting a spreadsheet project and re-running it, the style from the project's rules will be reapplied. For example, if a project placed orange highlights, if that project is reverted, running it again will place orange highlights again.

Redacting PDFs

Manual PDF markups

Blackout adds functionality for manually redacting PDFs in the Relativity viewer. The Relativity viewer is extended with new tools for drawing redactions, removing attachments, and eliminating annotations. The redaction experience has been loosely tailored to be similar to redacting images in Relativity through a familiar toolset and workflow.

Before you begin

- If you are a first-time reviewer or new to redacting documents manually with blackout, make sure that you have been granted permissions to do so. Look at our **PDF permissions documentation** to learn more.
- Marking up PDFs is like marking up images within Relativity. Redactions are not immediately burned into the PDF when drawn on the viewer. To 'burn-in' the markups that have been placed a **Production Preparation** project is required. The PDF can be sampled using the Download Marked Up Document button on the toolbar at the bottom of the viewer.
- Two new buttons, located at the top of the viewer, are introduced for native PDF markups. Locate the Blackout 'B' icon to get started.

The Blackout toolbar

The Blackout B icon represents where the tools for marking up PDFs will be located. Within this toolbar you will see the following options:

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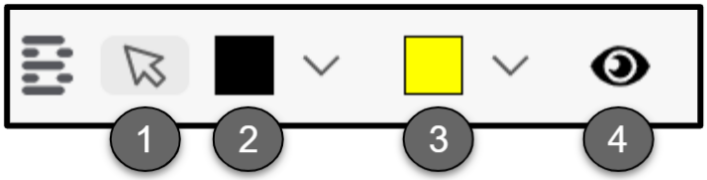

1. **Selection Mode:** allows for selecting, moving, and resizing of markups.
2. **Redaction Mode:** enables redaction and allows the selection of redaction styles.
3. **Highlight Mode:** enables highlight mode and allows the selection of highlight colors.
4. **Blackout Visibility Toggle:** toggles between visibility modes.

- The active selection on the toolbar is indicated by a gray filled outline around the selected mode.
- The active redaction or highlight style is indicated by bold text within the selected mode.

The Blackout visibility toggle

Clicking the visibility toggle will cycle through multiple stages of visibility for reviewing the content under markups.

The following icons represent each visibility state:

Icon	Description
	All markups are visible
	All markups are transparent
	All markups are no longer visible

Redactions and highlights

What to know

- Users with permissions can use the Redaction and Highlight toolbar menus to markup documents directly without taking the file out of Relativity.
- Markups are drawn without writing immediately to the PDF to allow for quick review and navigation.

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- Blackout, PDF specific, audits are written for placing and deleting (reverting) markups and are available in the Audit sub-tab of the Blackout tab. Audits are not available for moving or resizing markups.

Black and white redactions

1. Navigate to the PDF document in the Relativity viewer
2. **Switch the markup set** to the required one for the case
3. **Click the redaction mode** button and select your desired redaction style. A drop down will be displayed showing Black, White, or Text options. Black is selected by default.
    - **Black:** creates a solid black box, like using a black marker.
    - **White:** creates a solid white box with a gray border for tracking. The gray border won't be on the burned-in document.
    - **Text:** creates a white redaction box with horizontally and vertically centered black text.
4. **Click and drag** over the area where the redaction will be placed.

Text redactions

1. Navigate to the PDF document in the Relativity viewer
2. **Switch the markup set** to the required one for the case
3. **Click the redaction mode** button at the top of the viewer and select text.
4. **Click and drag** over the area where the text redaction will be placed.

Redaction text

The default text of the text redaction is based on the value of the markup set. Text redactions on PDF behave exactly as they do on Relativity images.

Case admins can modify the default value by following the steps below.

1. Navigate to the **Case Admin** tab.
2. Select **Markup Sets.**
3. Click the **Edit** button to edit the markup set information.
4. Change the **Redaction Text field** to the desired default text.
5. Click **Save**.

Text redactions can also be changed directly on the document on a redaction-by-redaction basis. After changing the text, subsequent text redactions will automatically use the newly input value. The default value will remain available in the right-click menu to go back to at any time.

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1. Navigate to and select the text redaction that will be changed.
2. **Right-click** the redaction that will be edited.
3. A menu will be displayed. Select **Edit.**
4. A new menu will be displayed. Enter the desired text for the markup.
5. Click **Save.**
6. The text will be modified to match the input text.

Highlights

1. **Navigate** to the PDF document in the Relativity viewer
2. **Switch the Native Markup Set** to the required one for the case
3. **Click the highlight mode button** and choose the desired highlight color.
4. Click and drag over the area where the highlight will be placed.

Manually removing markups

How to do it

Removing markups can be accomplished through two quickly accessible means. Depending on the source of the markup these options will have slightly different behaviors. If the markup was placed manually, both operations below will completely remove the markup. If the markup was placed with an automated project, the delete operation below will be the same as rejecting the markup from the quality control interface.

1. **Right-clicking**
    1. On the document, find the markup that will be removed.
    2. Left-click to select the markup.
    3. Right-click the markup.
    4. Select the Delete Markup button.
    5. A message will appear to confirm the deletion. Select, Delete Markup to confirm.
    6. After a brief delay, the markup will be removed.

2. **The delete key shortcut**
    1. On the document, find the markup that will be removed.
    2. Click on the markup to select it.
    3. Press the delete key on your keyboard.
    4. A message will appear to confirm the deletion. Select, Delete Markup to confirm.
    5. After a brief delay, the markup will be removed.

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Automated PDF markups

Before you begin

How it works

Blackout provides the ability to scan many PDFs for sensitive information based on a provided set of words, terms, phrases, or regular expressions. Users will select a saved search, a markup set, input or upload rules, and Blackout will scan all the searchable text content in each PDF.

Any area of the PDF that is composed of text searchable blocks or properties will be scanned and subsequently redacted or highlighted based on the configured rules. This includes page text, headers, footers, text-based annotations, form data, field properties and more.

What else to consider

- Blackout can only automatically mark-up text searchable blocks in a PDF. It will not scan images for text in automated projects.
- Images and multimedia content can be manually redacted during QC. To learn more, see the **manual markup documentation**.
- Headers, footers, and form data are a part of a PDFs text body and do not require additional options to be scanned

Creating a PDF project

Getting started

- Separate out the PDFs to be redacted into their own saved search
- Ensure that the required markup set for the case has been created in Relativity
- Validate that you have access to the Blackout tab for the case
- There is a wide range of workflows that can be utilized to accomplish different markup goals. However, we will focus on the basic tooling and how to create and run the project for this guide.
- Rules are not required to create a project

PDF project setup

1. Navigate to **Blackout** → **Projects**
2. Click **Create New Project**
3. Select **PDF**

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4. Fill out the project form using the details below
5. Click **Create**
6. A form will be displayed that is used to define how the project will run:

Field	Description
Project Name	An identifier for the project, making it easy to refer to or for others to find.
Saved Search	The document source. This should comprise the documents that will be scanned for sensitive information.
Markup Set	The markup set that markups created by the project will be associated with.
Redact All Attachments	Checking this option will result in all attachments from being removed from each document in the set.
Rules	Rules are what instruct a project in which information should be marked up. How they are configured will provide instruction to the project on how to place markups on matched content. There are two different kinds of rules, redaction, and highlight. Rules are separated by groups where each group will contain a set of instructions for the specified terms, phrases, or regular expression. A project can be composed of multiple groups, each with different instructions. Every time the fields are filled out for a rule group, another section will appear below it. Rules are not required to create the project. This is especially useful for uploading rules via CSV.
Redact	Redaction rules remove the underlying content from the document and place a black, white, or text redaction where the removed content was.
Highlight	Highlight rules create a rectangle in the foreground 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.

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Markup Scope	Defines the markup behavior when the project matches a rule. • **Character** - Places the markup on the exact match even if the match is a part of a word. For example, the rule tim.randall will match the name part of tim.randall@milyli.com and only redact the match leaving @milyli.com unredacted. • **Word** - Places the markup on the entire word, even if only part of the word is matched. In the previous example, the entire email address would be redacted given the rule tim.randall. • **Line** - Create a redaction that spans the entire horizontal line for the given match.
Markup SubType	The style of markup to place whether to place. For redactions, the available options are black, white, or text markup. For highlights, the options are 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. **(dtSearch and Wildcards are not supported)**
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 in a regular pattern throughout the document set. Regular expressions require a name and the expression to be valid. After saving the project, these regular expressions will be available to be selected by name on other projects within the same case.
dtSearch	dtSearch includes special characters and other operators that you can use to define search criteria. • Noise words are not supported in Blackout Projects. Use the W/N operator for proximity matches in these instances. • By default, all terms in a dtSearch rule will be redacted. The terms should be surrounded with (?<redact>{term}) to redact part of a dtSearch rule. • To redact more than one term, multiple named groups must be defined.

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Uploading rules from a CSV

After successfully creating the PDF project, rules can be created by uploading a filled-out CSV template.

What to know

- Only a valid project name, saved search, and markup set are required to create a project before uploading rules via CSV
- Blackout can support up to 100,000 rules via CSV.
- More rules mean more processing time so take this into when preparing the project
- Rules loaded through CSV behave exactly as rules input on the create project screen
- Rules loaded through CSV do not appear in the rules list due to the number of rules supported
- To review CSV rules, the CSV that is loaded into the project can be downloaded and reviewed

The CSV template and explanation of the columns can be viewed and downloaded from the **Milyli Support Center.**

How to do it

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 rules have been uploaded.

Running a PDF project

What to know

- 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 it is ready to run.
- PDF projects share the first come first serve queue with other Blackout projects
- After clicking the run button, the project will be queued immediately
- If there are other projects in queue, they will be completed before the project starts running
- Once the project is next, it will begin processing
- While the project is running, PDFs will be distributed to high resource workers across all available Blackout agents that have high resource enabled

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- Similar to Excel projects, the PDF project will keep track of any document that it cannot successfully redact and will provide a report after it completes the project

While the project is running

While the project is running, information about the project will be displayed.

Message	Description
Documents prepared	The number of documents that have been successfully added to the system for markup review
Documents completed	The number of documents that have been marked up successfully
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.

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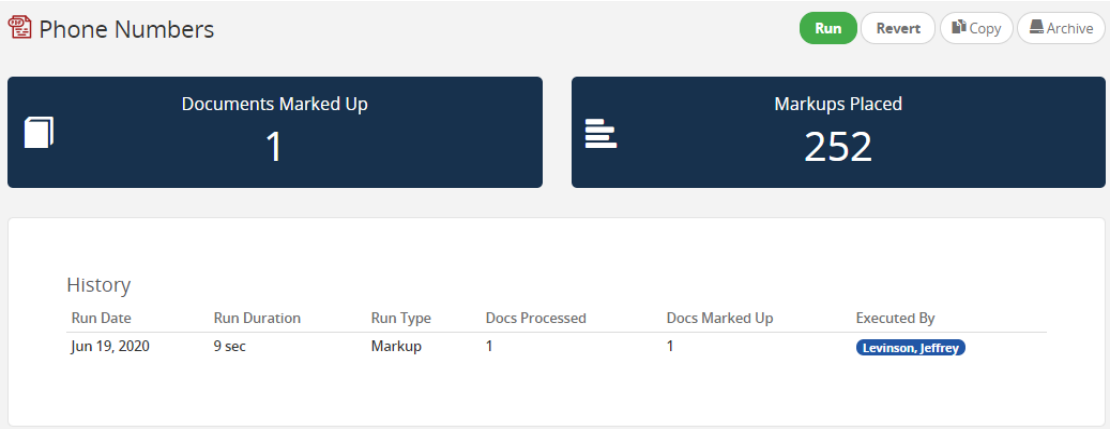

Project Results

When the project completes, information about the most recent and previous project runs will be available. The following table provides an overview of the different data.

Message	Description
Documents marked up	The total number of documents that have had markups placed on them by Blackout using the rules from this run. • Clicking this button will navigate to a saved search of all of the documents that have been marked up.
Markups placed	The total number of markups that have been placed, both redaction and highlight, by Blackout using the rules from this run. • Clicking this button will navigate to a saved search of all of the documents that have been marked up.
Documents with warnings	The number of documents that encounter a non-project breaking warning. • 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 will assist in diagnosing any issues that may have been encountered.
History	• Projects are incremental. • After the project has run, clicking the Run button again will queue the project up again and process any new documents in the saved search only. • As a result, the history section will show the work that the project has performed and its results.

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Reverting a PDF project

What to know

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

Reverting the project

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 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

PDF quality control

Before you begin

PDF quality control is facilitated through the Blackout Markup Review Pane at the bottom of the page.

- The reviewer must be on a markup set other than 'None' to utilize the Blackout Markup Review Pane
- The Blackout Markup Review Pane is also used for redacting annotations and attachments on PDFs
    - To learn more, see the **annotations** and **attachments** sections

Using the Blackout Markup Review Pane

- The **Blackout Markup Review Pane** will show all markups on the document, including those created through automation or manual markup
- All markups will be displayed regardless of active markup set, like Relativity image markups
- The selected menu option will be saved for the current user
- There are three tools available through the Markup Review Card
    - This section details the Markup Review Card

Reviewing quality control entries

1. Open the **Blackout Markup Review Pane**
2. Choose the **Markup Review** sub menu

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3. All records will be displayed for each QC entry
4. The following table defines each column:

Column Name	Description
Source	This column will display either a Blackout B icon or a pencil icon. The Blackout B icon indicates a markup created via automation. The pencil icon indicates a markup created via manual markup.
Approved	Provides approval and rejection action items.
Page	The page number the markup was placed on.
Markup Type	Indicates if the markup was a redaction or a highlight.
Match Text	For each automated project, the specific text that was matched by the provided rule.
Rule	The rule that resulted in the match from the Blackout PDF project.

Each column can be filtered by clicking on the filter button to the right of the column header.

Accepting/Rejecting markups

To quickly review quality control entries, clicking on a row will navigate to and select the corresponding markup. The selected markup will be indicated in the document viewer while the row in the quality control entry will be highlighted.

- If a markup is accepted from an unset state, the record is simply updated to indicate it was accepted
- If a markup is rejected from either an unset or accepted state, the markup will be removed from the viewer
- 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.
- The Accept All and Reject All buttons will always reflect the filtered quality control entries providing an effective way of approving or rejecting subsets of entries
- When a record is accepted or rejected it is flagged as resolved
    - When all records for a document are flagged as resolved, the document field Has Unresolved Markups will be coded as false

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Has unresolved markups document field

- Blackout adds a **"Blackout Has Unresolved Markups"** field to the document object upon adding Blackout to the workspace
- A document is only tagged as true when marked up via an automated PDF project
- This field is useful in determining which documents have been run through a Blackout PDF project but may not have been reviewed yet

Redacting annotations

Annotation redactions

What to know

- Annotations inside of PDFs are split into 2 groups: **markup annotations** and **non-markup annotations.**
    - **Markup annotations** are primarily used to mark up the content of a PDF document.
    - **Non-markup annotations** are used for other purposes, including interactive forms and multimedia.
- There are 2 primary types of annotations, **Markup** and **Non-Markup**, as well as various subtypes.
- Many annotation types are defined as markup annotations because they are used primarily to markup PDF documents. These annotations have text that appears as part of the annotation and may be displayed in other ways by a viewer application, such as in a comments pane.
- Each column within the Annotation Redaction Tool can be filtered using the button.

Markup annotations

Markup annotations can be separated into 3 main types:

1. **Free text annotations:** Text is displayed directly on the page.
2. **Pop-up associated markup annotations:** these include Text, Line, Square, Circle, Highlight, Underline, Strikeout, RubberStamp, Caret, Ink, and File Attachments.
    - Text Markup annotations are a subtype of pop-up associated annotations and contain one or more words in a document upon which the pop-up is associated with. They also include markup annotations such as Underline, Strikeout, Caret, Squiggly, etc.
    - Not all pop-up associated annotations are text markup annotations.

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3. **Sounds annotations:** do not have a pop-up window but may have associated text specified by the Contents entry.

Types of markup annotations

Caret	CommonFigure	FileAttachment	FreeText	Ink	Line	Poly
Sound	Stamp	Text	Highlight	Squiggly	Strikeout	Underline

Non-markup annotations

What to know

- Pop-up annotations typically do not appear by themselves and have a parent property which is associated with a markup annotation.
- If no parent association is defined for Popup annotation, the viewer application may use the Popup's Contents as the text for the annotation.

Types of non-markup annotations

Link	Movie	PDF3D
Popup	Redaction	RichMedia
Screen	Watermark	Widget

How to do it

1. Open the **Blackout Markup Review Pane** by clicking the button at the bottom left of the viewer.
2. Choose the **Annotation Redaction Tool** by clicking the button.
3. Navigate to the annotation that will be redacted. Then, click the Redact button. After a brief delay, the annotation will be redacted and the 'Redact' button will be grayed out and replaced with the Unredact button.
    - If the redaction needs to be undone, the Unredact button can be selected. This will undo the redaction of the selected annotation.

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What else to consider

Redacting annotations manually

- Annotations visible on the document (typically only markup annotations) can be redacted by placing a manual redaction on top of them.
- Any redaction which overlaps with an annotation will remove it completely. The ability to partially remove an annotation is not available.

PDF document review pane

- All the annotations are also listed in the pane below the document, known as the Blackout Document Review Card.
- From here, you will be able to filter on content, apply redactions to each annotation individually, or redact them all using the "redact all" button within that pane.
- Annotations that are redacted will be removed completely from the document. There is currently no ability to remove only selected text.
- Even though the annotation will be marked as redacted, it will not actually be removed from the Relativity document viewer due to a limitation in the Relativity viewer which does not give Blackout the ability to remove those annotations from the list.
    - To see the document with the annotation removed, the user would need to click the "Download Marked Up File" button or run the document through the production preparation project.

Redacting attachments

What to know

- Some PDF files allow for other files to be embedded into a PDF document itself.
- These may be used for multimedia content in the document, or as a means of retaining an external file reference when the file is archived or transmitted. In some cases, it may be required to redact these attachments.
- While some of the attached files may be listed through a Relativity supplied tab in the viewer, the only means Blackout provides for their redaction is through the use of the Blackout Document Review Tool.
- Each column within the Attachment Redaction Tool can be filtered using the button.
- Any redactions to files made by the automated process will show up here as a redacted file. They will not appear in the quality control panel.

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How to do it

1. Open the **Blackout Document Review Tool** by clicking the button at the bottom left of the viewer.
2. Choose the **Attachment Redaction Tool** by clicking the button.
3. Navigate to the attachment that will be redacted. Then, click the Redact button. After a brief delay, the attachment will be redacted and the 'Redact' button will be grayed out and replaced with the Unredact button.
    - If the redaction needs to be undone, the Unredact button can be selected. This will undo the redaction of the selected attachment.

What else to consider

- Attachments can also be redacted from an **Automated PDF Project** using a checkmark option on the project setup page.
- Attachments that are redacted will be removed completely from the document. To examine the file with the attachment removed, the user would need to click on the "Download Redacted File" button or run the document through the production preparation project.

External redactions

External redaction workflow

Before you begin

Occasionally reviewers encounter documents that can't be redacted with Blackout or are too large to be displayed for the Relativity viewer. Blackout allows Excel and PDFs that are redacted outside of Relativity to be associated with the native markup set in Blackout and subsequently produced alongside all the work product created with Blackout.

Preparing for external markups

- External markups can be found by navigating to **Blackout > External Markups** within the workspace.
- Refer to the **Workspace tabs** page for granting access to this tab.

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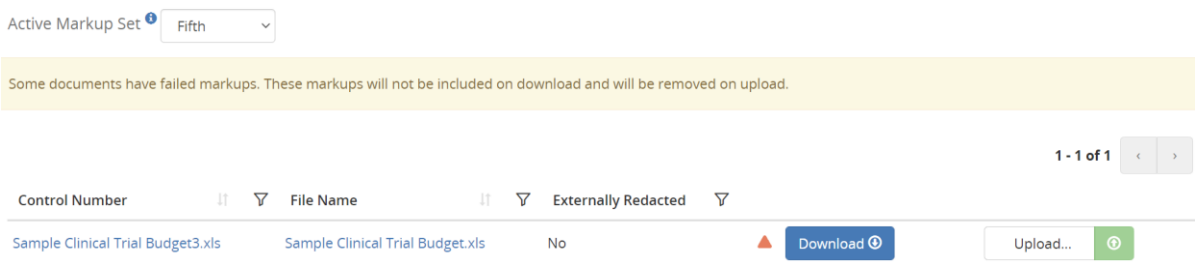
- To tag a document for use with the external markups tab, the Blackout Document Warnings field needs to be edited
- The external markups give users the ability to download and upload Excel and PDF documents.
- The uploaded file will be added to Relativity and associated with the markup set
- Externally redacted documents can be included in production preparation projects and native productions as if they were redacted with Blackout
- Uploading an externally redacted document will clear failed markups from the document.



Example workflow

A sample real-world workflow could look something like this:

1. The case team identifies a set of PDFs and Excels that are too big to display in the Relativity viewer
2. These documents are separated with a Relativity search
3. The Blackout Document Warnings document field is added to an admin layout
4. A mass edit is run to set this field to have "Cannot be Redacted in Native Viewer" checked
5. Reviewers are granted access to the External Redaction page
6. Reviewers pick the markup set they are working with
7. Reviewers download documents to redact externally
8. Redactions are placed using the tool of choice such as Microsoft Excel or Adobe Acrobat
9. The redacted document is uploaded back to Relativity using the upload button

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

Note: The Active Markup Set selection within the **Blackout** → **External Markups** subtab indicates the markup set where documents will be downloaded from and uploaded to upon document re-upload.

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Tips for identifying documents

Before review begins

The Relativity viewer, depending on the version of Relativity, instance settings, and infrastructure, has a maximum file size that it can display in the viewer. These documents are candidates for external markups.

- Identify and set aside these documents for external markups by creating a saved search to filter on file size
- Using this search, the documents can be flagged for external review using the 'Edit' mass action.

Tagging documents for external redaction

1. Run the saved search from the previous step
2. Select the documents and pick **Edit** from the mass action menu
3. Add the **Blackout Document Warnings** field to a layout.
4. The specific field that needs to be checked is the **"Cannot Be Redacted in Native Viewer"** field.

During review

While a review is taking place, some users may have the ability to update the Blackout Document Warnings field. They may identify documents as they progress that can't be redacted via the viewer. By providing access to update the Blackout Document Warnings field in a coding layout in Relativity, reviewers can tag these documents for external redaction and continue to the next document.

Mass uploading externally redacted documents

Mass upload will only work for documents already visible in the Blackout External Markups tab. The file extensions of the file you are uploading and the file on the document must match. Mass upload uses the following cascading rule set to map uploaded documents to control numbers:

What to know

1. File name exactly matches the control number.
2. File name exactly matches file name.
3. File name starts with control number.
4. File name starts with file name.

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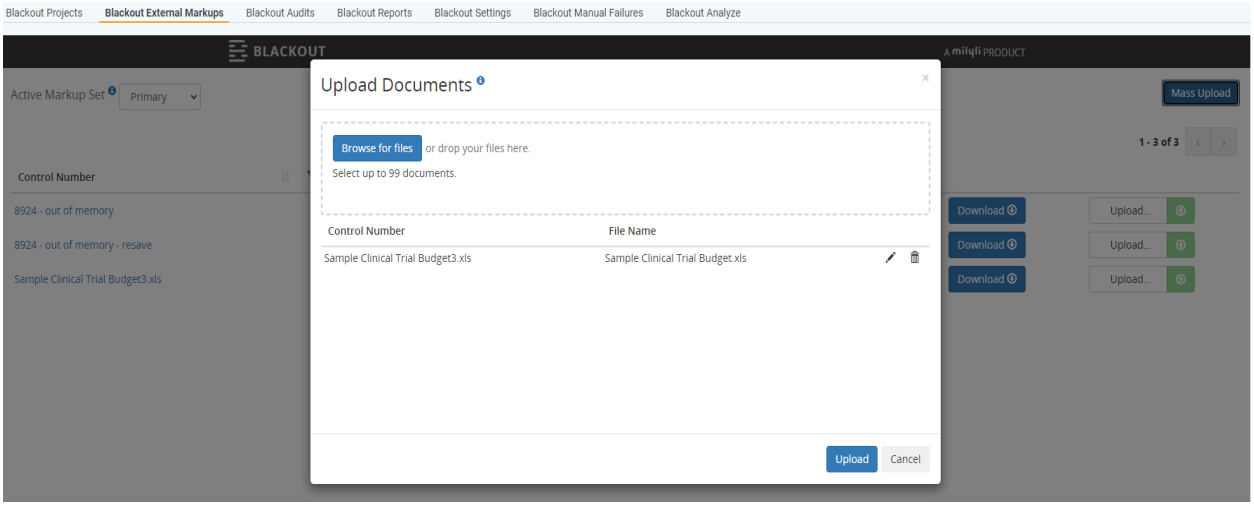
How to do it

1. Navigate to the **Blackout → Blackout External Markups** tab.
2. Click the **Mass Upload** button.
3. Choose the redacted files you want to upload and click **Open**.
    a. Blackout will automatically attempt to match each file to an existing control number using the cascading rule set.
4. Review the results and make any necessary adjustments.
5. Click the **Upload** button to complete the process.



Reviewing Documents

What to know

- Once documents have been tagged as un-redactable, they will automatically show up on the **External Redactions** tab.
- If the number of documents is high, the reviewer can set the **'Externally Redacted'** filter to **"No"** to filter out documents that have had a redacted copy uploaded
- The external redactions page consists of the following columns:

Column	Description
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

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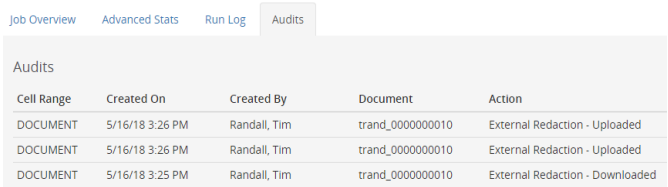
Externally Redacted	Indicates if the document has already been externally redacted
Download	An easy to identify the download button
Upload	A two-stage upload process; click upload to select a file, click the up arrow to upload the file

Auditing external markups

Each download and upload action are logged as manual native markup action automatically. Additionally, each document that is externally redacted will also appear on the **Blackout Quality Control** panel as a single markup.

Use the following steps to view the audit entries.

1. Navigate to the Blackout tab and click on the **"Review Manual Native Markups"** button at the top of the page.
2. Click on the **Audits** tab. Entries for the download and upload actions will display respectively:
    - External Redaction - Downloaded
    - External Redaction - Uploaded



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

Tips and Tricks

Documents maintain history

- The primary reason for setting the markup set at the top of the page is that the External Redaction workflow considers any redaction work that was previously done.
- Already have redactions from an automated project? No problem. Make sure the same markup set is selected. The download will show all those redactions on the downloaded document.
- External redactions are maintained sequentially in history, so both the external redaction or the automated project can be reverted independently.

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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, 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.**

Preparing for production

Creating a Production Preparation project

What to know

- Redacting and highlighting Excels and PDFs with Blackout results in new files that Relativity does not have the functionality to include in a production.
- When creating a native production in Relativity, Relativity will always use the current file associated with the document object.
- Relativity must be instructed to switch the current file for each redacted or highlighted document in the production to the proper marked-up file. Blackout provides the Production Preparation project type to perform this update.
- When run, the production preparation project will swap the current file for each document in the saved search to the marked-up file for the selected saved search.
- The project will lock these documents from being modified further by Blackout so that the document can be safely produced with Relativity without risk of modification by another user.
- Relativity **does not** provide redacted extracted text creation for native files. Utilizing this project type will provide the capability of generating this text.

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How to do it

After completing redaction and before running the Relativity production, a production preparation project can be started from the Blackout Project tab.

1. Click **Create New Project.**
2. Select **Production Preparation**.
3. The Production Preparation project creation form will be displayed.

The production preparation project performs four key functions.

1. **Update documents to Markup set:** Updates each document in the saved search to the selected markup set and ensures that the associated file is the active file.
2. **(Optional) Long Text Field for Native Extracted Text:** Displays long text fields in the workspaces on the document object. The selected field will have extracted text generated for each document in the saved search taking all markups into consideration.
3. **(Optional) Retain a copy of the redacted document:** Will generate a point in time copy of the marked-up document and store it in the document field 'Blackout - Produced Document'. Each run of the production project will generate a file. Useful for documents that may be marked-up differently on a single markup set to multiple parties.
4. **Lock documents:** Each document in the saved search will be locked for modification by Blackout until unlocked. This ensures that the file exported by the RDC will be the correct file.

What else to consider

- Both the name and saved search are required fields of the create form.
- After filling out the form and selecting the operations for the project, the ready to run page will be displayed.

Recommended workflow

How the production workflow is implemented will vary based on case requirements, number of markup sets, and number of concurrent reviews taking place. However, the most common critical path workflow would look like this.

1. Identify a subset of Excels or PDFs to be redacted
2. Redact documents through one of or a combination of manual and automated projects
3. Quality review the markups

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4. Use Relativity search to create a saved search of marked-up documents to produce natively.
5. Create and run a production preparation project that includes setting the markup set and creating the redacted extracted text
6. Create a Relativity Native production and choose the same saved search
7. Export the production with the RDC
8. Navigate to the production preparation project and unlock the documents

Running the project

What to know

Run time will vary depending on the number of documents and options selected. The following factors all contribute to run time:

- **Updating the markup set** will increase run-length based on the number of documents. This process takes longer for PDFs as it also burns in the PDF at this time.
- **Processing redacted text** will increase run-length based on the number and size of Excels and PDFs.
- **Retaining a copy of the redacted file** will increase run-length based on the number of documents.
- **Locking documents** will increase run-length based on the number of documents.

How to do it

1. After the project is complete, navigate to the Production Preparation project.
2. Click **Run** to start the project. Run time will vary depending on the number of documents and options selected.
3. The running project will be queued into the Blackout agent. Detailed information will be sent back, like an image or spreadsheet project.
4. PDFs included in the project will be burned-in during production preparation run.
5. After the project completes, a status page will be displayed.

What else to consider

- If any non-Excel or PDF documents are included, they will be automatically skipped and included in the **Documents Skipped** count.
    - Clicking on this box will bring the user to a saved search of the skipped documents for additional verification.
- Clicking the **Documents Prepared** button will navigate to a saved search of all the documents that have successfully run through the production preparation project.

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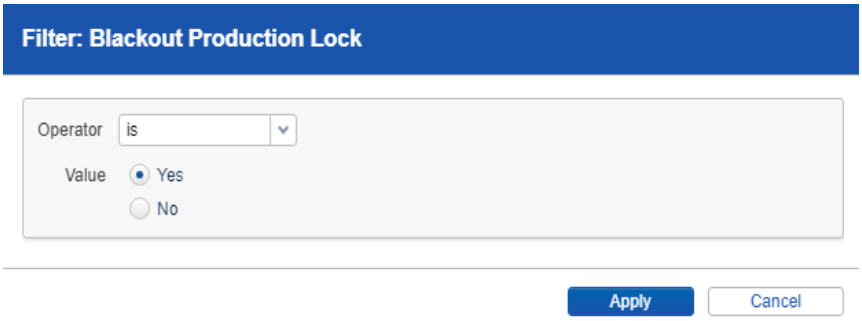
Searching for locked documents

Documents that have been locked for production can be searched by adding the **Blackout Production Lock** field to a saved search and setting the value to **is: Yes.**



Document warnings

What to know

- If any document fails for any reason, they will be included in a count of Documents with Warnings.
- Clicking this button will download a CSV that contains information on which documents triggered the warning.
- This process ensures that most of the work will be completed, and any problematic documents can be addressed individually.

Common failures may include:

- Document issues preventing the processing of text
- RSAPI failing or being overloaded in the environment
- Object manager failing or being overloaded in the environment.

Markup Review Pane

When a prepared document is locked for production review, you can still access the Blackout Markup Review Pane to view redactions and original text. Simply click on the corresponding row to jump to the location of a redaction, or click "View" in the "Original Text" column to view the original text.

Note: The locked version of the Markup Review Pane only displays Markup Review items and not content from other tabs.

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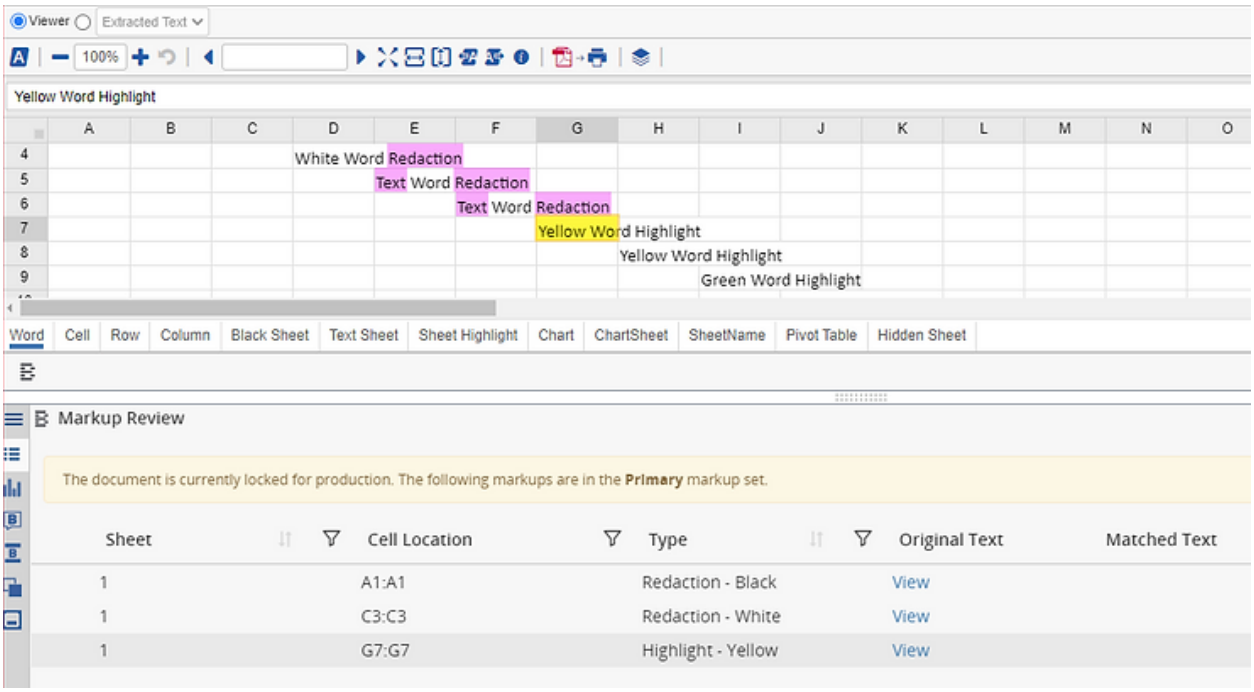

Unlocking Documents

What to know

- Documents that are prepared for production are locked to prevent additional changes to that document until they are unlocked. This ensures that when the Relativity RDC exports the production, the proper file is selected for export.
- This protection is in place as the production export always pulls the active file, even if that is not the file that was active at the time of running the Relativity production.
- Once the production has been exported, there may be many reasons to continue working on the documents such as needing to provide additional markups before producing for another party.

How to do it

1. Navigate back to the Production Preparation project.
2. Click the **Unlock Documents** button.
3. A dialogue will display to confirm unlocking the documents. The unlock project will be queued into the Blackout project queue and a loading indicator will be displayed. The operation could take several minutes depending on the number of documents.
4. Once the documents have been successfully unlocked, a message will be displayed along with a historical record.

Re-running the project will re-lock the documents in the saved search.

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Note: Extracted text and copy retention
Running the project, a second time will regenerate the extracted text over whatever was added to the field in the first run. If retaining a copy of the document was selected, an additional copy will be created.

Accessing retained copies of the document

How to do it

1. Using the Relativity viewer, navigate to a document that was prepared.
2. **Edit a layout** and add the **Blackout - Produced Documents** field to the layout.
    - All copies that have been created of the file will be contained in this field.
3. Click on the desired file. The **Blackout Produced Document Layout** for that file will be displayed.
    - From this layout, click on the produced file link to download the file. Clicking on the **Open in Viewer** link will open the file in the Relativity Viewer.
    - Clicking on one of these files will display the **Blackout Produced Document Layout** for that file. From this layout, click on the produced file link to download the file or click on the Open in Viewer link to open the file in the Relativity Viewer.
    - Choosing this option will open the file in a pop-out viewer.

Searching

Searching for documents using Blackout fields

Blackout field descriptions

Field	Description
Blackout - Has Native Redactions	A multi-object field associated with the Markup Set Relativity field. Can be used to determine if one or many markup sets have Excel or PDF redactions.
Blackout - Has Native Highlights	A multi-object field associated with the Markup Set Relativity field. Can be used to determine if one or many markup sets have Excel or PDF highlights.
Blackout - Has External Markups	A multi-object field associated with the Markup Set Relativity field. Can be used to determine if a document was externally redacted and associated with one or many markup sets.

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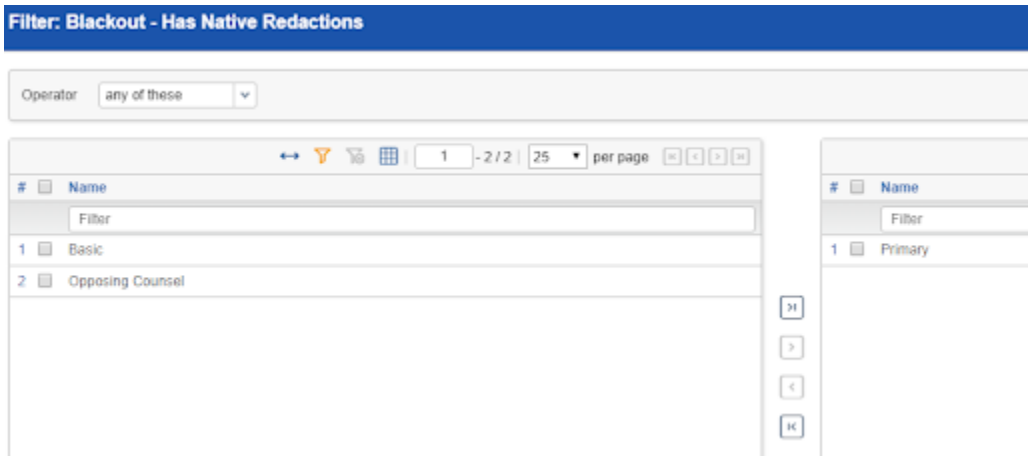
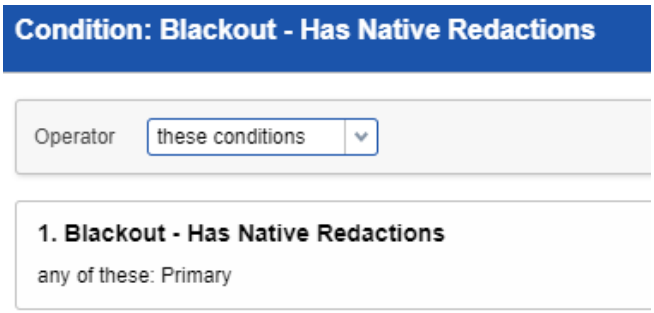
Blackout - Has Manual Native Markups	A multi-object field associated with the Markup Set Relativity field. Can be used to determine if one or many markup sets have documents with manually placed markups.

How to do it

1. Log into the Relativity environment as a System or Case Administrator with permission to create Relativity searches.
2. Navigate to the search page and click **New Search.**
3. Click **Add Condition.**
4. In the field list, select **Blackout - Has Native Redactions.**
5. Click the dropdown for **Add Condition** and select **Blackout - Has Native Redactions.**
6. Another menu will display with the list of markup sets in the workspace.
7. Check the markup sets that will be searched and move them to the right column.



8. Click the **Apply** button.
9. The condition will be added to the multi-object condition page.



10. Click the **Apply** button.
11. The full condition will be added to the search as a parameter.
12. Combine this with other Blackout and Document fields to find the specific documents are looking for.

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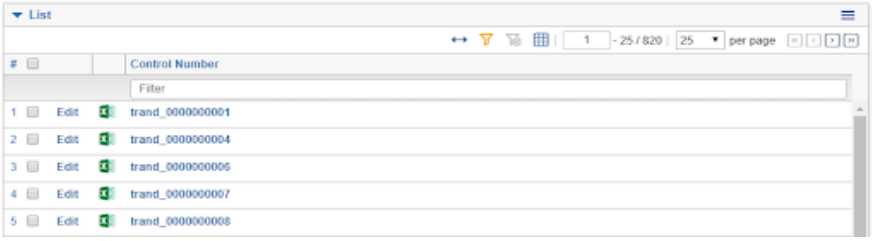
13. Click **Save & Search** after setting other required fields.

What else to consider

- The resulting set will be all the documents, in this example, that have Blackout native markups associated with the Primary markup set.



- This process can easily be repeated with the other Blackout markup set fields.
- Allow Pivot and Allow Group By is Enabled for these Fields

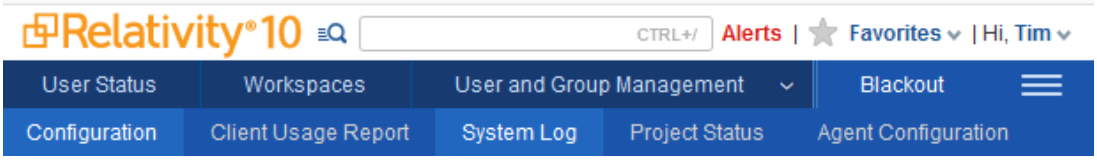
Tools and reporting

Exporting System Logs

Occasionally Milyli support will ask you to export the Blackout system logs. Doing so is simple but requires Relativity Administrator permissions. If you do not have access to Relativity Admin tabs, please refer this article to someone on your team to help!

To export the system logs, follow these simple steps:

1. Navigate to the **Blackout tab** in the System Admin tabs
2. Pick the **System Log** sub-tab



3. Filter the system logs for errors

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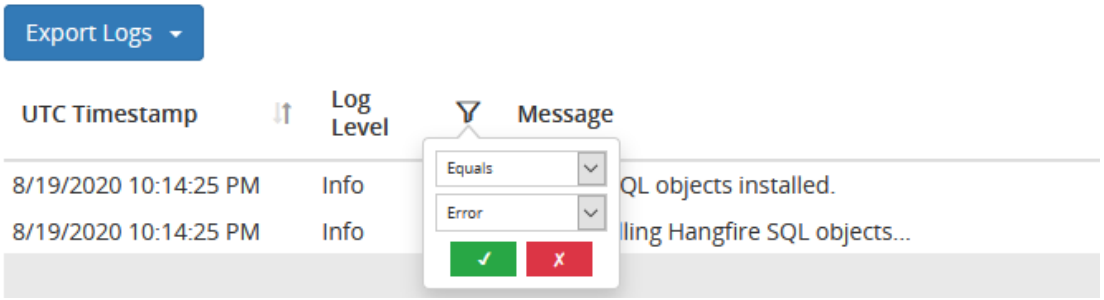
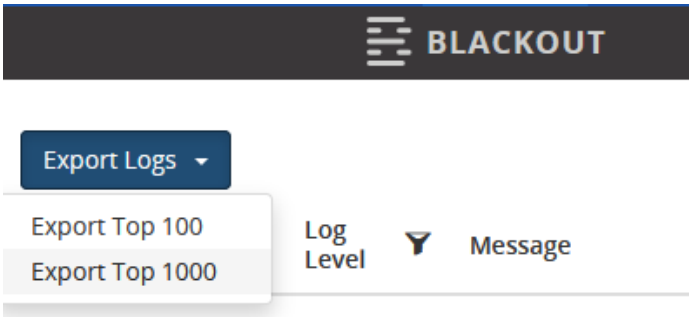


4. Click the **export logs** button and select **Export top 100 or Export top 1000**



5. Share the downloaded CSV with Milyli

Note: The system logging level can be configured with an Instance Setting.

- Name: SystemLoggingLevel
- Section: Milyli.Blackout
- Value Type: Text
- Value: Can be set to Fatal, Error, Warn, Info, Debug, or Trace

Reviewing usage metrics for an instance

Client usage metrics

What to know

- Usage data may occasionally need to be reviewed for billing or usage tracking.
- The client usage metrics report provides details for each client, matter, and workspace with Blackout usage.
- The report processes metrics for the date range selected using the same logic that is used for billing.

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How to do it

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

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.

Exporting metrics

Exporting metrics for monthly billing

What to know

- Most installations of Blackout will be configured to report their usage automatically. In some cases, however, 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.

How to do it

1. Log into the Relativity environment as a System Administrator
2. Navigate to the **Blackout Configuration tab, 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

Review instance projects

Occasionally other projects may be using Blackout resources resulting in your new project sitting in the queued state. To understand what other work is taking place, Blackout provides a tool to check on what other Blackout projects are running across the instance. Doing so is simple but requires Relativity Administrator permissions. If you do not have access to Relativity Admin tabs, please refer this article to someone on your team to help.

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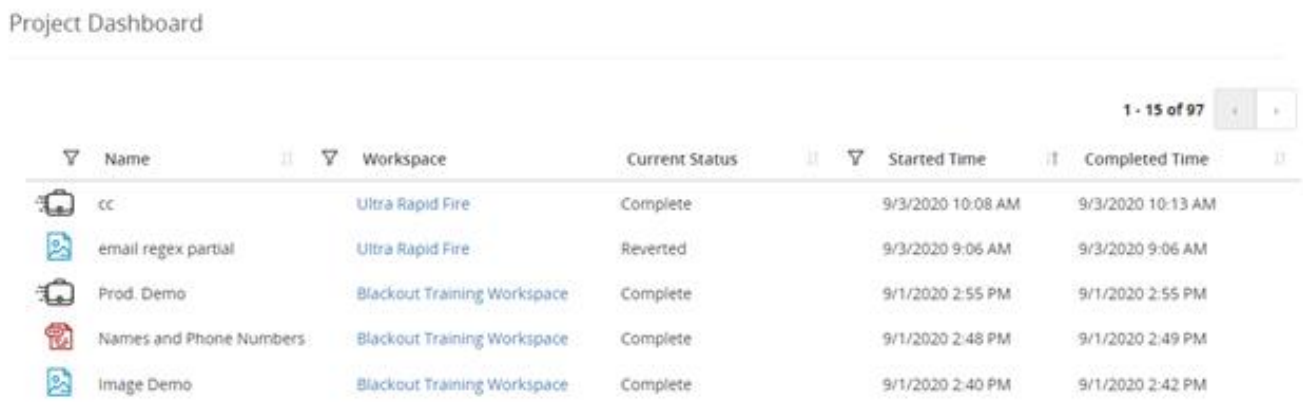
To review instance projects, follow these steps.

1. Navigate to the Blackout tab in the System Admin tabs
2. Pick the **Project Status** sub-tab
3. All active and completed projects will be displayed sorted by date descending with running projects at the top



Once here there are other things you can do such as filter the projects by name, workspace, status, started time, and completed time. You can also click into specific workspaces to alter the projects themselves.

Blackout Queue Priority

Blackout projects are ordered first come first serve based on when the **Run** button is clicked. Hitting stop on a Blackout project will pause the project until it is restarted. Using this pause feature will then move the next queued project to the top of the list. Once a project is restarted, it will be moved to the end of the priority queue.

High Priority Queue

Admins may adjust which project is a higher priority by clicking the Change Queue Button in the Project Status Tab. This will allow a smaller project to take precedent over larger projects so they may finish sooner.

What to know

- Only projects that are already running can change queues
- Projects moved to the priority queue will process in front of projects in the default queue
- If multiple projects are moved to the priority queue, they will process in order of their start time

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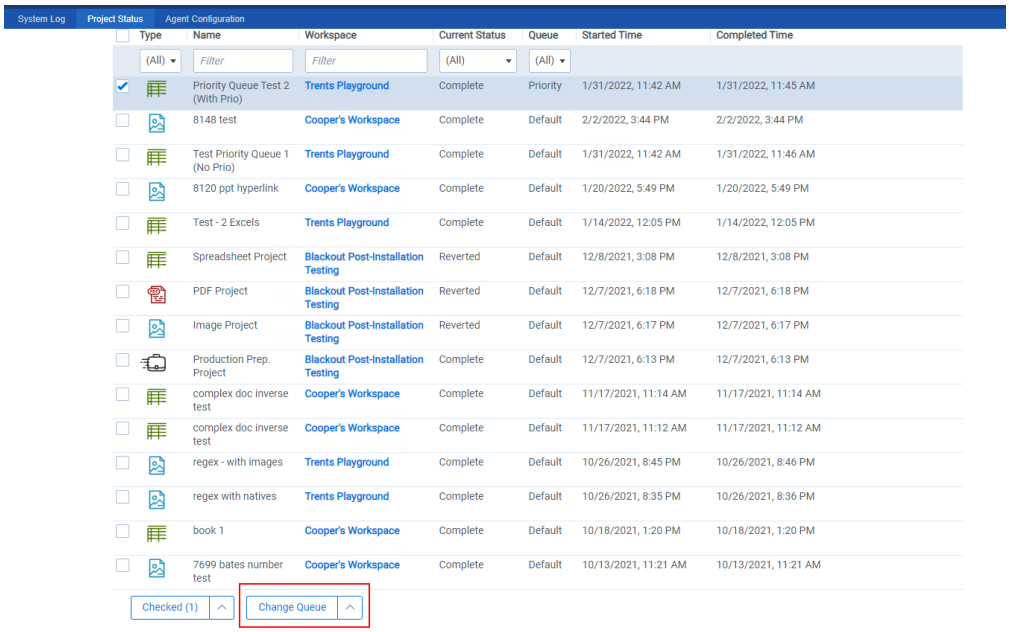
- After removing a project from the priority queue, the next project in the priority queue will begin processing immediately

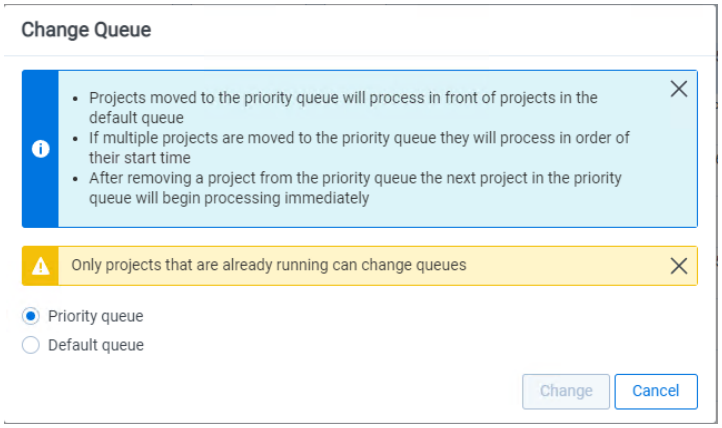
How to do it

1. Click the checkbox next to a currently running project
2. Click on the Change Queue Button at the bottom of the Project List



Type	Name	Workspace	Current Status	Queue	Started Time	Completed Time
(All)	Filter	Filter	(All)	(All)		
	Priority Queue Test 2 (With Prio)	Trents Playground	Complete	Priority	1/31/2022, 11:42 AM	1/31/2022, 11:45 AM
	8148 test	Cooper's Workspace	Complete	Default	2/2/2022, 3:44 PM	2/2/2022, 3:44 PM
	Test Priority Queue 1 (No Prio)	Trents Playground	Complete	Default	1/31/2022, 11:42 AM	1/31/2022, 11:46 AM
	8120 ppt hyperlink	Cooper's Workspace	Complete	Default	1/20/2022, 5:49 PM	1/20/2022, 5:49 PM
	Test - 2 Excels	Trents Playground	Complete	Default	1/14/2022, 12:05 PM	1/14/2022, 12:05 PM
	Spreadsheet Project	Blackout Post-Installation Testing	Reverted	Default	12/8/2021, 3:08 PM	12/8/2021, 3:08 PM
	PDF Project	Blackout Post-Installation Testing	Reverted	Default	12/7/2021, 6:18 PM	12/7/2021, 6:18 PM
	Image Project	Blackout Post-Installation Testing	Reverted	Default	12/7/2021, 6:17 PM	12/7/2021, 6:17 PM
	Production Prep. Project	Blackout Post-Installation Testing	Complete	Default	12/7/2021, 6:13 PM	12/7/2021, 6:13 PM
	complex doc inverse test	Cooper's Workspace	Complete	Default	11/17/2021, 11:14 AM	11/17/2021, 11:14 AM
	complex doc inverse test	Cooper's Workspace	Complete	Default	11/17/2021, 11:12 AM	11/17/2021, 11:12 AM
	regex - with images	Trents Playground	Complete	Default	10/26/2021, 8:45 PM	10/26/2021, 8:46 PM
	regex with natives	Trents Playground	Complete	Default	10/26/2021, 8:35 PM	10/26/2021, 8:36 PM
	book 1	Cooper's Workspace	Complete	Default	10/18/2021, 1:20 PM	10/18/2021, 1:20 PM
	7699 bates number test	Cooper's Workspace	Complete	Default	10/13/2021, 11:21 AM	10/13/2021, 11:21 AM

3. In the new window you may choose to move a project to the High Priority Queue so it will be prioritized above other Blackout projects.



Note: You may also Deprioritize a project that has been given high priority as well using these steps.

Workspace reports

Reporting can be used to export custom reports based on any field on the document object and combine that with a wide range of Blackout specific data. There are two types of

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customizable reports that allow for exporting a complete set of information for each redaction or condense this down to the document level.

The markup report

What to know

- The markup report will generate a report of all 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

The document report

What to know

- The document report will generate a report of all the selected fields for each document in the saved search.
- If a document field has multiple tags selected for it, it 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

What to know

- 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.

Note: Avoid long text

- Attempting to include long text such as extracted text will pull all the extracted text of the document into a single cell. This may result in a broken CSV.
- After choosing the fields for the report, they can be re-ordered. The first field selected will be the leftmost column in the report, while the bottom will be the rightmost column.

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Blackout specific fields

What to know

- 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.	

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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 user's name who executed the job.	

Downloading the reports

1. When all the fields required for the report have been selected, click the **Generate & Download Report** button.
2. A CSV containing the desired information will be generated and downloaded.

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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, 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 Contacts
Support is available Monday through Friday from 8:00 AM CST to 6:00 PM CST.	support@milyli.com 312.265.0136

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