



BlackLight Portable Case

How to Open and Review Portable Case Data

How to Open a BlackLight Portable Case

With a BlackLight portable case file (<Case Name>.PortableCase), you should receive one or more zip file(s) containing the BlackLight Portable Case Reader.

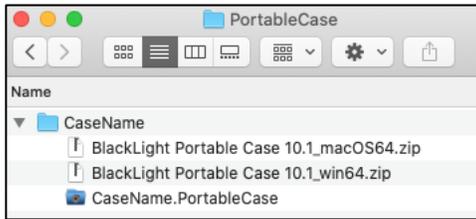


Figure 1: Portable Case and Readers in macOS

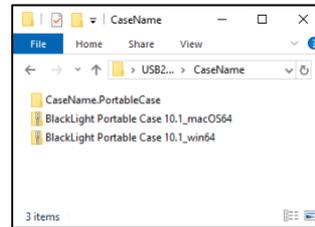


Figure 2: Portable Case and Readers in Windows

There are two versions of the portable case reader, one for macOS (BlackLight Portable Case 10.1_macOS64.zip) and one for Windows (BlackLight Portable Case 10.1_win64.zip). If both versions are available, unzip (expand or extract) the version for the system you are using to review the portable case.

Note: If you received .PortableCase file but you did not receive the BlackLight Portable Case Reader, or you did not receive the correct version, contact the case sender. Request the version needed for the review system.

When file is expanded (or extracted), a folder will be created named **BlackLight Portable Case 10.1**. In macOS, this folder contains **BlackLight Portable Case.app**.

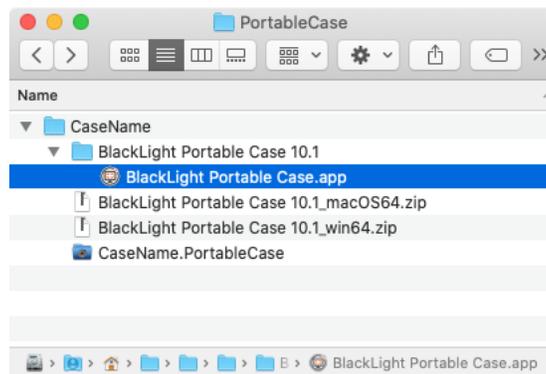


Figure 3: Expanded BlackLight Portable Case Reader in macOS

In Windows, this folder contains another folder **BlackLight Portable Case**. Inside this folder is the portable case reader named **BlackLight.exe**.

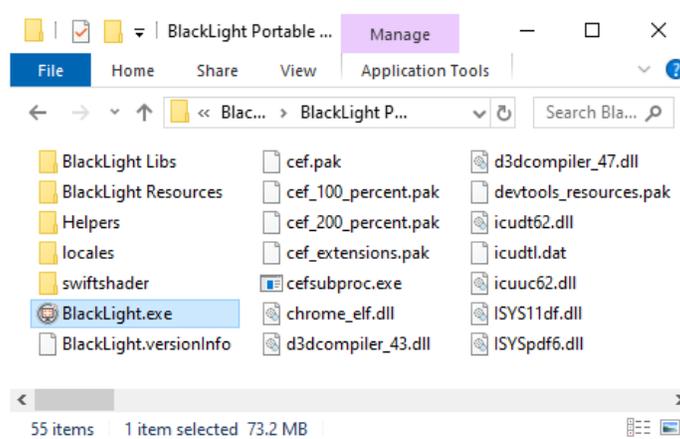


Figure 4: Expanded BlackLight Portable Case Reader in Windows

Notes on Windows:

- Do **NOT** just double click on **BlackLight Portable Case 10.1_win64.zip**. Right-click on the file and choose **Extract All....** A window will appear to select the destination folder. Once the desired destination is selected, click **Extract**.
- **Windows typically limits path lengths to 260 characters. This can cause issues when extracting the application within the case directory. If you run into an error stating “Error 0x80010135: Path too long” attempt to extract the application to a location with a shorter path.**

Open **BlackLight Portable Case.app** (macOS) or **BlackLight.exe** (Windows). The **Portable Case License** window opens. This window will open each time the portable case reader is opened. Click **Accept**.

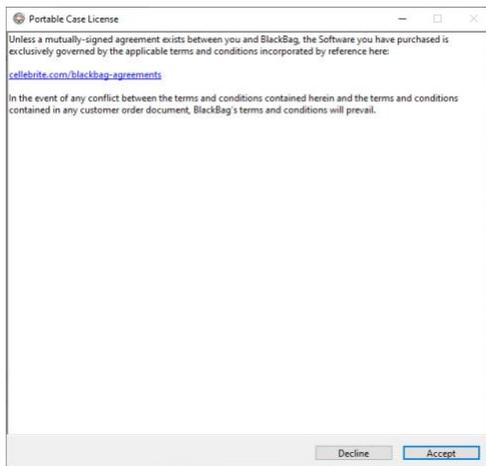


Figure 5: Portable Case License Window (Windows)

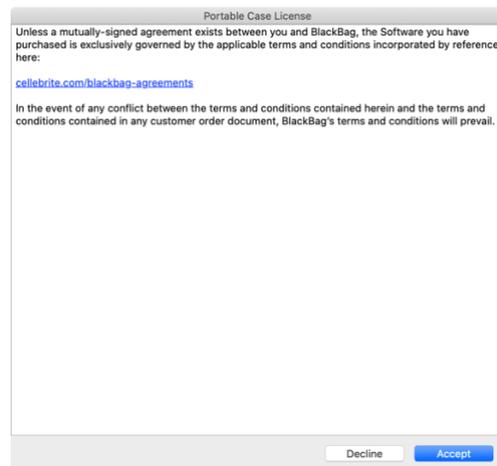


Figure 6: Portable Case License Window (macOS)

The **BlackLight Case Manager** window appears. Click **Open Other...**

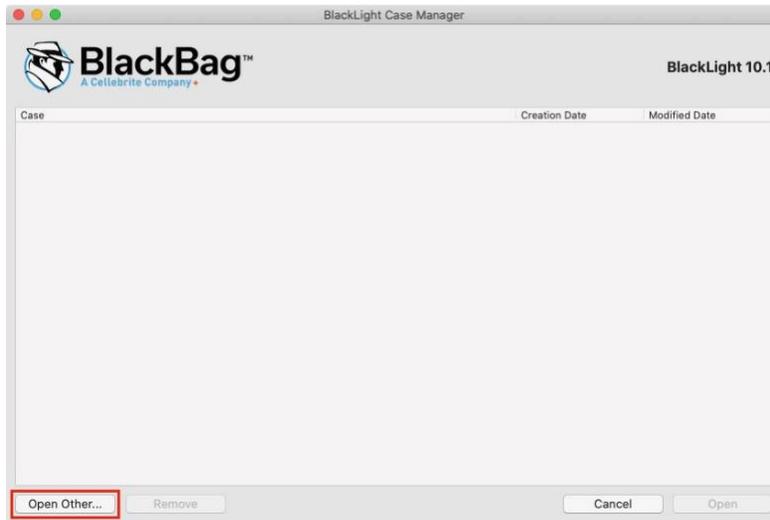


Figure 7: BlackLight Case Manager Window

Navigate to the `<Case Name>.PortableCase` file.

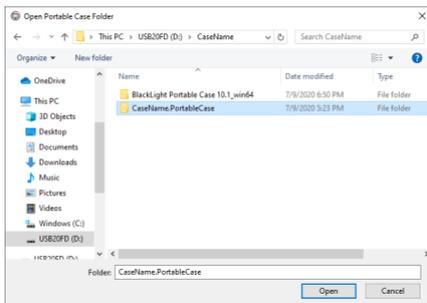


Figure 8: Select .PortableCase folder in Windows

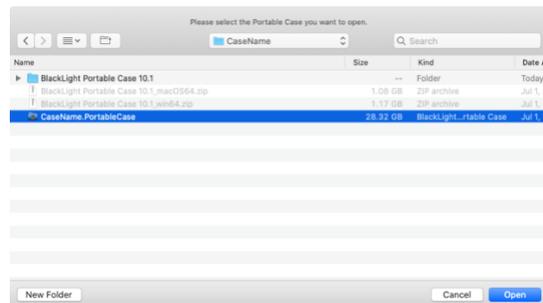


Figure 9: Select .PortableCase File in macOS

BlackLight Portable Case opens the `.PortableCase` file/folder and the data is ready for review.

Note: On Mac the case file is stored inside a bundle as you see in Figure 9. On Windows the equivalent is a Folder as you see in Figure 8. Please take care to choose the correct File/Folder when opening the case.

Portable Case Interface

The **BlackLight Portable Case Reader** contains a reduced BlackLight interface. If you are unfamiliar with BlackLight, below you will find information about how to access and review case data.

BlackLight Menu Bar

In the BlackLight Menu Bar you are able to: open and close cases, save file listings, export selected rows (tab delimited or csv format), and perform tagging functions.

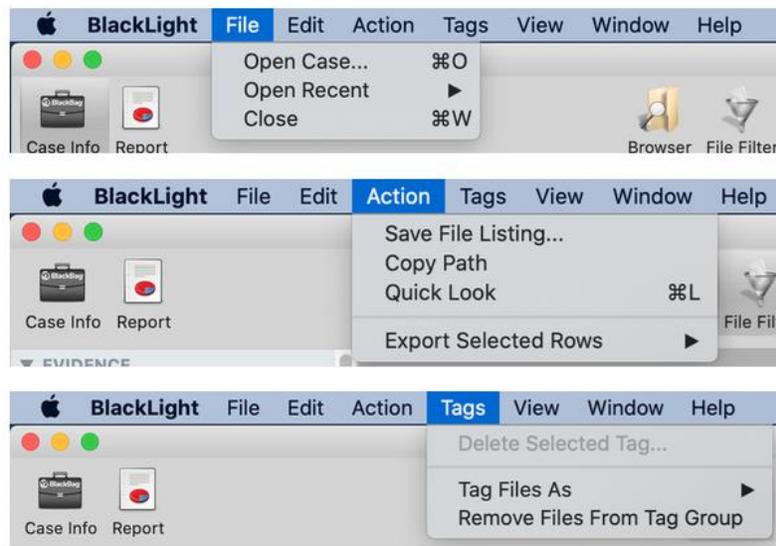


Figure 10: BlackLight Menu Bar Options

Note: In Windows, the BlackLight Menu Bar is at the top of the application. **[File]**, **[Edit]**, **[Action]**, **[Tags]**, **[View]**, **[Window]**, and **[Help]** are available.

The Case Window

The 'Case Window' provides access to the data stored in the portable case. It contains six panes:

1. The Command Bar
2. The Component List
3. The Content Pane
4. The File Information Pane (metadata)
5. The File Content Viewer
6. The Status Bar

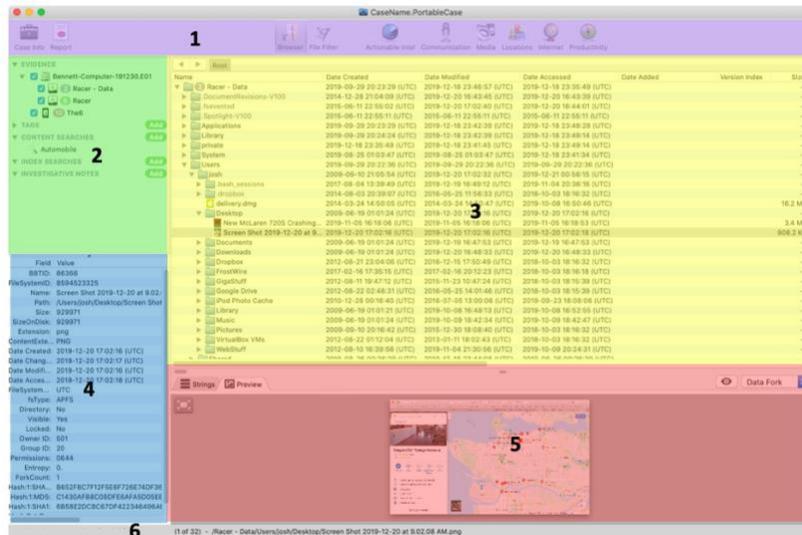


Figure 11: Sections of the Case Window

Command Bar

The 'Command Bar,' used to select the different views that display data in the 'Content Pane,' is customized to provide access only to the views containing data in the portable case. The left side of the 'Command Bar' provides access to 'Case Info' and 'Report' sections. The 'Case Info' displays the information entered into the BlackLight case file and with the exception of the **Case Time Zone Display**, cannot be edited in a portable case. The **Report** button provides access to reporting features. The same reporting options available in a BlackLight case are available in a portable case. As you review a portable case, you can generate new reports containing information identified during the review process. The **Case Info** and **Report** buttons are on the 'Command Bar' in all portable cases.

The **Browser** and **File Filter** views, also accessible via the 'Command Bar,' are available in all portable cases. The other icons on the 'Command Bar' depend on the data selected when the portable case was generated. The views that may be visible in the portable case include: **Actionable Intel, Communication, Media, Locations, Internet, and Productivity**. All of these views may be visible, some of them may be visible, or the portable case may only contain **Browser** and **File Filter** views. Below are some samples of how the 'Command Bar' appears in different portable cases.



Figure 12: Possible Command Bar Views

Tagged media (pictures and videos) does not populate the **Media** view in a portable case.

Component List

The 'Component List' includes five sections:

1. Evidence
2. Content Searches
3. Index Searches
4. Tags
5. Investigative Notes

Just as in a BlackLight case, the 'Evidence' section of the 'Component List' contains a hierarchical device list. Only evidence items selected when the portable case file was created are listed. The original badge numbering from the BlackLight case file transfers to the portable case. In a portable case, evidence items can be reordered by highlighting a specific item and dragging it up and down in the list. New evidence items cannot be added to the portable case. To review the data in the devices or device partitions they must be selected in the 'Evidence' section.

The 'Tags' section of the 'Component List' provides access to **Tag** data included in the portable case. Tags exported during portable case generation cannot be altered. As you review data in the portable case, you can create, edit, and delete new tags.

The 'Content Searches' section of the 'Component List' allows you to create Content Searches and displays Content Searches exported into the portable case. New Content Searches created are saved in the portable case file. Click the green **Add** button to create a new Content Search. Content searches search for information based on keyword.

The 'Index Searches' section of the 'Component List' provides access to the Smart Index. If the data exported was indexed in the BlackLight case the portable case was generated from, the portable

case will contain a Smart Index. Queries of the Smart Index created are saved in the portable case file. Click the green **Add** button to create a new Index Search.

Investigative Notes, accessible in the 'Component List', provide an area for you to copy and paste or type in information they wish to note during the case review. Click the green **Add** button to create a new Investigative Note.

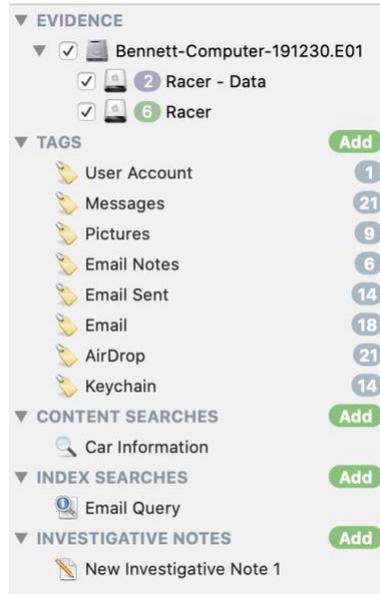


Figure 13: The Component List

Content Pane

Information displayed in the 'Content Pane' is dependent on the view selected in the 'Command Bar' and the devices selected in the 'Evidence' section of the 'Component List'. The 'Browser' and 'File Filter' view are including in all portable cases.

The 'Browser' view provides access to the files included in the portable case, stored in the original file system structure. Use the 'Browser' view to navigate through the file structure containing the exported files. The 'Browser' view displays file timestamps, sizes, extensions, and hash values. Select a column heading to sort files by the column attribute.

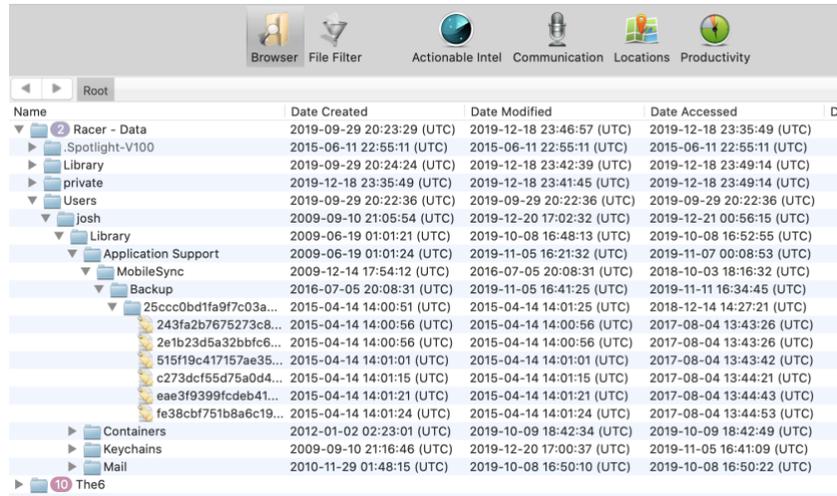


Figure 14: Content Pane Browser View

'File Filter' view provides access to BlackLight's file filters. File Filters are accessible in all portable cases. While all file filters are listed, they do not all work. Portable cases maintain limited metadata. For example, geolocation metadata is not stored in portable case. The built-in saved filter 'Geo Location' is still available in portable cases but running it will return no results. Refer to the 'File Information Pane' section below which lists available metadata.

When 'Actionable Intel' items are included in the export, via **Extracted Data** or **Tag**, the items are available in the 'Actionable Intel' view. The 'Actionable Intel' view stores various types of data points that can mostly be attributed to a user's actions in a tree style menu with subview menus of the following items: Device Backups, Device Connections, Account Usage, Downloads, File Knowledge, Passwords, Program Execution, and Search.

The 'Communication' view includes data from various forms of communication, to include phone calls, messaging, social media, and email.

The 'Media' tab displays the **Pictures**, **Videos**, **Thumbnails**, or the **Combined** tab to view all three types together, and **Audio**. The 4 x 4 mosaics comprised of sixteen frame-sequence slices are included in portable case files when **Videos** are exported.

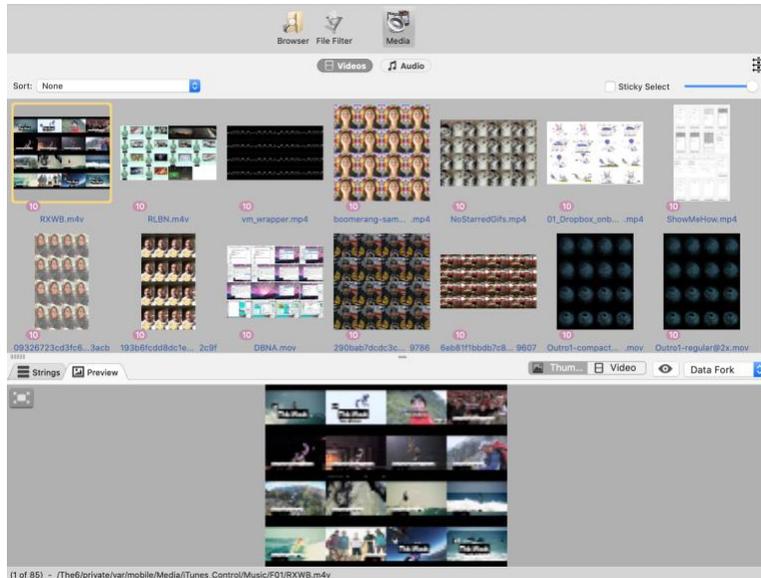


Figure 15: Videos Displayed in the Media View

'Locations' provides access to data included in the portable case file containing the following: Google and Apple Maps usage; geolocation data from media files, calendar and social media apps; Wi-Fi network information; and additional Location Services data. The 'Internet' view displays exported information associated with Safari, Firefox, Google Chrome™, Internet Explorer, and Edge web browsers. 'Productivity' contains 'Calendar' and 'Notes'.

'Actionable Intel', 'Communication', 'Media', 'Locations', 'Internet', and 'Productivity' views have a file filter built into the view itself. To view or hide the file filter, select the **Show/Hide Filter** button (i.e., three arrows) at the top right of the 'Content Pane'. When the **Show/Hide Filter** button is black, no filter is applied. While one or more filters are applied, the button is green.

File Content Viewer

With a file selected in the 'Content Pane,' the 'File Content Viewer' provides two options to view the selected item: **Strings** or **Preview**. Select the **Strings** button to display ASCII printable strings of three (3) characters or more. Select the **Preview** button to view a file as it would appear in its native application. If the selected file is a text file, an examiner can perform a keyword search within the displayed text strings in both the 'Strings' view and 'Preview' views. In the 'Content Pane', select a file and press the spacebar, or select the **eye** button in the 'File Content Viewer', to view the file using Quick Look (Mac only). Quick Look displays native Apple application files (and some third-party application files) the same way a user sees them. Audio and video files play within the Quick Look view as well.

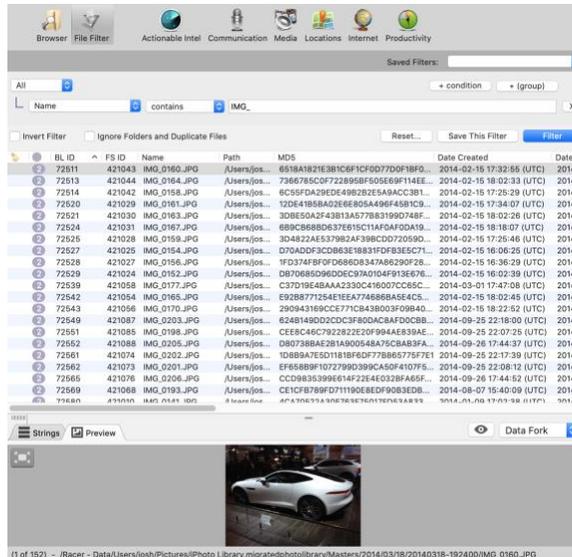


Figure 16: Preview of a Picture File in File Content Viewer

Note: The Quick Look feature works only when a Quick Look plug-in for the selected file type, or an application that supports the selected file type is installed on the forensic examiner's analysis machine.

File Information Pane

The 'File Information Pane' displays metadata associated with a file selected in the 'Content Pane'. In a portable case file, the metadata displayed is limited. The common file system metadata is displayed, some filesystem metadata unique to APFS and HFS+, and some metadata stored for the file from BlackLight processing. The following fields are available for files in the 'File Information Pane'.

- BBTID - The reference ID of a given file or folder within BlackLight's casefile database
- FileSystemID - The filesystem ID parsed from the file record
- Name
- Path
- Size - Logical size
- SizeOnDisk
- Extension - File extension stored in file system
- Content Extension - Displays the extension based on content header (file signature)
- Date Created
- Date Changed
- Date Modified
- Date Accessed
- FileSystemOffset
- fsType
- Directory
- Visible - Displays hidden/visible status
- Locked - Displays locked/unlocked status (e.g., read-only)

- Owner ID (macOS, iOS)
- Group ID (macOS, iOS)
- Permissions (macOS, iOS)
- Entropy
- ForkCount
- MD5
- SHA1
- SHA256

Note: Metadata for directories differs from file metadata.

Status Bar

The 'Status Bar' displays selected data information such as 'Content Pane' file counts and selected files' pathnames.